State Department of Geology and Mineral Industries

702 Woodlark Building Portland 5, Oregon

BLUE BELL GROUP (Copper, gold) Eagle Creek District

Baker County

Local name: Daddy Lode.

Owners: D. W. French, E. B. Cochran, D. W. C. Nelson, all of Baker.

Location: Located in the  $NW_4^{\perp}$  sec. 23, T. 7 S., R. 43 W., on a branch of Goose Creek. About 5 miles north of the "Mother Lode", and  $W_2^{\perp}$  of  $NS_4^{\perp}$  of  $NW_4^{\perp}$  sec. 22, T. 7 S., R. 3 W.

Area: 10 unpatented lode claims.

<u>History</u>: First located about 1908. Never shipped any ore. Shaft 210 feet deep was sunk, together with 1,300 feet of tunnel and crosscut. C. C. Cox was owner for some time.

Equipment: None, except 2 cabins. Shaft house destroyed, shaft caved.

<u>Development</u>: Underground work mentioned above inaccessible. Four tunnels totaling over 1,000 feet were visited. Apparently no stoping had been done anywhere in them.

<u>Geology</u>: The country rock is siliceous argillite and chert, and a consolidated greenstone tuff. The chert bands strike on an average north and south and dip to the west. They are much faulted and offset; the variations in texture and lack of phenocrysts prove the sedimentary origin of this highly altered greenstone. Mineralization is widespread in the form of disseminated chalcopyrite and some small sized radiating patches of solid sulphide. The greenstone is cut by numerous dikes of whitish intrusive which itself is impregnated with arsenopyrite. Some barite lies on the dump near the shaft.

The property is relatively inaccessible but reached by a forest road nearly 10 miles north of Keating. Timber and water are abundant.

Informant: D. C. W. Nelson through J. S. Allen

NAME: Blue Bell Group. (Daddy Lode) Eagle Ch Bahr

OWNERS: D. W. French, E. B. Cochran, D. W. C. Nelson, All of Baker.

- LOCATION: Located in the northwest quarter of section 23, township 7 south, range 43 east, on a branch of Goose Creek. about 5 miles N. of the "Mother Lode".
- AREA: 10 Unpatented load claims.
- HISTORY: First located about 1908. Never shipped any ore. Shaft 210 ft. deep was sunk together with 1300 ft. of tunnel and cross cut. C.C. Cox was owner for some time.

EQUIPMENT: None, except 2 cabins. Atime Shaft house destroyed, shaft caved.

- DEVELOPMENT: Underground work mentioned above inaccessible. 4 tunnels totaling over 1000 ft. were visited. Apparantly no stoping had been done anywhere in them.
- GEOLOGY: The country rock is siliceous, arguitte and chert and a consolidated green stone tuff. The chert bands strike on an average north and south and dip to the west. They are much faulted and offset; the variations in texture and lack of phenocrysts prove the sedimentary origin of this highly altered green stone. Mineralization is wide spread in the form of disseminated chalcopyrite and some small sized radiating patches of solid sulphide. The green stone is cut by numerous dykes of whitish intrusive which itself is impregnated with arsenopyrite. Some borite lies on the dump near the shaft.
- MISCELLANEOUS: The property is relatively inaccessible but reached by a poor forest road nearly 10 miles north of Keating. Timber and water are abuncant.
- INFORMANT: D.C.W. Nelson.

DATED: June 24, 1938

JE allen

# DEPORT ON THE BLUE BELL GROUP OF TEN CLAIME ON GOSE CREEK, BAKER COUNTY, OREGON. BY D.W.C.NELSON, MINING ENGINEER, DEC. 28, 1986.

The Blue Bell quartz mining claims, ten full claims in number covering an area of 3000 feet square of ground, and called Blue Bell NO's 1.3.3.4.5.6.7.8.9. and 10. taking in both sides of Goose Creek.

### BUILDINOS.

There is one building one and one half story formerly used for a boarding and bunk house sufficient for a crew of ten men. one smaller building used for four men. Stable for four horses and ten tons of hay baled. No other buildings on the claims.

### TIMBER AND WATER

There is ample timber for these claims for working for forty years or more and plenty of saw timber. Goose Greek runs through the property the full length of the claims, and for three months of the year is ample for the development of one hundred horse power and could be increases by the expenditure of approximately five thousand dollars to ample water for two hundred horse power for the year round. There are several springs on the property and one spring that could be run in to all the buildings necessary for domestic use and is just like ice water the year round.

### TOPOORAPHY

Goose Greek which is a tributary of Powder River, which in turn is a tributary of the Snake River.flows through the property in a deep canyon, more than 700 feet deep, this canyon has been recently out (in a Geologically sense ) through an old plateau, this plateau slopes gently from the foot of the Wallows Hountains to Powder River. The emayor slopes on Goose Greek is much more abrupt than the old plateau which forms the summit of the ridge, consequently the sulphide minerals are encountered much closer to the surface of the canyon than on the hill-side above where the oxidation appears on account of this much older surface, the releif is moderate, the maximum difference in elevation on this property being 700 to 800 feet.

(1)

#### GE LOGY

The comparative gentle slopes of the old plateau are covered by a depth of soil which in a good many places effectively conceals the rock structure, and newly out canyons and sumit of the flat ridgesare about the only places where rock exposures are numerous enough to aid in determining the structure.

The rooks on this property belong to what hight be termed the Sneke River series which are of premo-carboniferous and triasic ago. This series of rocks covers a considerable area on both sides of the Snake River. These rocks are largely igneous in origin though commonly stratified and consists of agglomerates and finer tuffs interbedded with rooks of purely sedimentary origin such as limestons.

The apt but unscientific name of greenstone is NEW often used when naming these desplex ignous rooks, they are often out by dykes of heavily altered trap or fine grained diorite. At this property the geological structure is pronounced, the stratified tuffs show an east and wast strike and a dip of from 36 to 30 degrees to the North. All the evidence seems to point to this taking the general divection of the structure. The so-called green stone rocks exposed in the workings and on the hill-sideConsists mainly of two distinct types, one of these being a fine textured rhyolite rock which is light colored and extremely dense and is locally called porphyry, while the other is a dark and courser texture rock that can be classified definitely as andesitio apploarates of a coarse tuff. In places a fine crystaline rock, which might be classified as a diorite and apparently intrudes the other scoks.

On the summit of the redge northwest of the camp, lumestone overlide the series, the same bed of lines tone is exposed in the narrow canyon of Clear Greek, where it forms a prominent bluff, it being several hundred feet thick at this point, and the position of the outprop indicates an east-west strike, and somewhat flat northerly dip. This coencides closely with the strike and dip of the stratified rocks on Goose Greek and is an indication that the limestone lies conformably upon the other rocks just as it does in other parts of the region, This limestone extends through the

(2)

COUNTRY FOR AT LEAST ONE HUP RED MILES AND THE SAME IS DOUBTLESS THE SAME AS GLASSIFIED BY Waldemer Lindgren the eminent Geologist from fossil evidence tribusic

### MINERALISATION.

The mineralization is displayed on the surface by a series of ironstained outcrops that extends in a northeasterly direction through the claims outting the formation at an average angle of 30 to 30 degrees, and are presumably fissure veins, these gesenized or iron stained zones which ecour in this same series of rocks in the Snake River section of Eastern Oregon and are accompanied by an appreciable gold and silver content, as well as copper, sing and lead. We find in the workings a considerable barite, which is one of the distinguishing features of this particular type of deposit, chalcopyrite in a hard quartz gangue accompanied, assounts of barite and calcite occur along or near these well defined lodes or veins.

The series of tunnels along side of Goose Oreak have proven very definitely the occurance at that depth of some low grade copper ore with pyrites, this can be taken as a good indication that there will be found paying gold-copper ore with depth and this has been proven in the crossout from the bottom of the two hundred foot level in the shaft. Indications all point to large bodies of one with greater depth. This shaft is only down two hundred and ten feet and should be driven at least to the one thousand foot level. The face of the eight hundred grossout on the two hundred foot level should be driven through the vein at its face where it was not driven into but chalcopyrite showed on the face when struck

# VALUES.

From the grosseut at the bottom of the shaft which has been driven to the west eight hundred feet from the shaft and one hundred and fifty feet to the east, there has been at least one hundred samples taken and beaught u under my direction, the record of which was taken by the then owners over into Washington and at this writing I do not know where to find them, but they were of sufficient values to prove the mine as a worthy one. These assays ran from one to seven percent copper and from two to ten doliars in gold per ton, two or three samples ran some thirty and forty dollars in gold one of the ledges cut in the eight hundred foot crossout thirteen

Another yein twelve feet thick assayed twenty per cent zing, three per cent copper and ten dollars in gold per ton. And one vein seventy feet thick gave from four feet on the footwall seven per cent copper with some Gold and silver and lead, drifted on this ledge some one hundred and fifty feet south and recovered in several assays above thirty dollars in gold, all the rock cut carries some values. we cit at least two other veins in the crossout twelve and thirtee feet thick that gave ten dollars in gold and one of them thirteen feet thick gave twenty three per cent sinc. The face of the sight hundred foot level is up against the wall of what I beleive to be the largest vein on the property as it crops on the surface two hundred feet wide. the water at this joint was so encessive when struck that we had to get another bump in addition to what we had to keep out the water. Just at this time there was a payment of twenty thousand dollars due on the property and the owner would not extend the time for even a few days, and the members of the company that had bought the mine being all farmers or apple raisers in the Yakima Valley had a failure of their apple crops and were in debt for the years expenses could not make the payment and deeded the property back to the man from whom they bought it. Surface Tunnels

The NO.1. Tunnelis in sever hundred and seventeen feet, at two hundred feet they struck a vein seventy feet thick, that carries values the full width, with twelve feet on the hanging wall that ran twelve dollars in gold. and five per cent copper. the remainder of this tunnel is well mineralized, and has cross ledges at very small intervals. The vein that was struck in the face carries a high percent of sinc, with some copper and gold. at two hundred feet in from the mouth of this funnel where the seventy foot ledge was struck there was a tunnel run to the right eleven hundred feet in a serpentine and lime porphyry, that an expert from los Angeles Cal. sampled and he reported that from trenching the full length it ran better than three dollars per ton.

(1) 4 4

The ledge that they started on was left in the west wall of the tunnel and never was driven into. Now the red oxide of copper and iron water is cosing from the ledge into the tunnel and forsing a jelly substance on the rock on the side of the tunnel. The other tunnelson the property have all struck the first ledge that was struck in tunnel NO.1 and the values are good several samples from one of these tunnels ran better than twenty dollars in gold. A short distance up the hill from the south of these tunnelsis a large outgrop some fifty feet thick that a part of it rises above the surface of the ground some fifteen feet showing chalcopyrite. Above this near the top of the mountainthers is a large gossen outgrop some two hundred feet thick that extends the full length of the claims, this to my mind is the mother vein on the property, and I think is the same vein struck in the face of the long crossout at the bottom of the shaft, and if so there is over nine hundred feet of backs above the level

I have exclaimed this property from every angle and did a good part of the development as superintendent there and beleive it to be a worthy low grade property by working the while mountain with steam shovels and a large milling plant.

### OPHOEUSION

The shaft is now full of water and running over the top. this shaft is a double-compartment four and one half feet in the clear well timbered with eight by eight sawed timbers and hung on iron rods to the bottom.with ladders to the bottom well made. There is ample showing in the workings from the surface and on the hill to warrant any company in pumping out the shaft and making an examination of the workings at its bottom, and in driving the tunnel at the bottom through the ledge struck in the face, and ample time will be given for this, then if found worthy one year from the time the work is started pumping out the shaft pay one third and in one year more pay another third and one year more pay the other one third the full price of the property.full price seventy five thousand dollars.

Signed D.W.C.Melson Mining engineer and part owner.

DWG Tieson

(5)

DaddyLode

This report must be properly executed and filed with the Corporation Commissioner on or before July 1, 1930, in order to entitle a corporation mining for any of the precious metals, coal, or prospecting or operating for oil, or operating an oil well, to pay a license fee of only \$10. If not so filed, such corporation must pay the same license fees as are required to be paid by other corporations for gain.—Section 6890, Oregon Laws.

# Annual Report to the Corporation Department FOR THE YEAR ENDING JUNE 30, 1937

Of DADDY LODE COPPER COMPANY	
(Give legal name in full)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
a corporation organized and existing under and pursuant to the laws of the State of Oregon.	
The location of its principal office is at No.	reet,
in the city of .Baker, in the state ofOregon	
The names and addresses of principal officers, with the postoffice address of each, are as follo	ows:

NAMES	OFFICE	BUSINESS ADDRESS
K. A. Olsen-	President	Zillah, Wash. R.F.D.#1
L. A. Libby	<b>Secr</b> etary	Wapato, Wash. R.F.D.#2
L. A. Libby	Treasurer	do

	Common With Par Value	Common <u>No Par Value</u>	Preferred
Amount of authorized capital stock	\$1,000.000.0	0Shares	\$
Number of shares of authorized capital stock .	1,000,000		·
Par value of each share	\$100	xxxxx	\$
Amount of capital stock subscribed	\$1,000,000.0	QShares	\$
Amount of capital stock issued	\$1,000.000.0	QShares	\$
Amount of capital stock paid up	\$1,000,000.0	QShares	\$
Price at which no par value stock issued	xxxxxx	\$	XXXXXX

State amount of capital, represented by stock of no par value, with which

The amount of work done thereon and improvements made thereon since the time of filing last report <u>None</u> The amount of output or products of the mines or wells of such corporation from January 1.

1936 **December 31, 1936** inclusive, .....noné.... The value of output or products of the mines or wells of such corporation from January 1, 1936 1935 Jo December 31, 1928 Mothing......

IN WITNESS WHEREOF, I, .....L. A. Libby, Secretary

[CORPORATE SEAL]

(signed) L. A. Libby, Sec.

-----

STATE OF OREGON,

.....

WALLOWA RANGE DEPOSITS	C.C. COX (of Baker) He has two groups of claims in this region.
GREENSTONE CU BELT	One group is located about three miles south of Sanger on Goose Creek and the other three miles still farther south on Sawmill gulch, a
n an	tributary of Goose Greek. The country rock in both places is a dense greenstone. At the
"Daddy Look"	upper claims there are small lenticular veins which contain chalcopyrite. At the lower claims
Vuites 6/26/38	the country rock is cut by #/small gash veins
рие	of quartz and pyrite. They also contain some epidote and chalcopyrite. There has been in previous years a great deal
	of activity in this greenstone area in pros-
	work has almost entirely been confined to the
	required assessment work and much ground has been abandoned.

. a ,

1 e + 5

# SUMMARY

The Daddy Lode shows on the surface as a broad iron stained or gossanized zone or lode cutting a series of stratified rocks of igneos origin. It extends northwestward from Goose Creek to Clear Creek and varies in width from about 15 or 20 feet to several hundred on the northwest end. It cannot be directly traced the full distance on account of soil covering but it is a fairly safe assumption that this gossan is continuous. The surface appearance and geological conditions are similar to that of other deposits in this region in which auriferous copper ore of good grade has been developed in underground exploration.

All the work has been confined to the south end of the lode at Goose Creek. This work has proved the occurence of copper bearing minerals along slips or fractures in the main lode for a distance of 600 or 700 feet. These mineral bodies however, as disclosed in these workings, are somewhat small and irregular and can scarcely be considered as workable ore.

The widest part of the lode on Clear Creek is practically unexplored.

If the shaft which is now being sunk fails to develop any larger ore bodies than those exposed in the tunnels within 300 feet it would seem wise to consider exploring the northern end of the property.

EASTE DE DES

## SITUATION AND HOLDINGS

The Daddy Lode Copper Company owns 23 mining claims and 160 acres of deeded land situated in sections 22 and 23, township 7S range 43 EWM. The property is situated some 20 miles from Baker, in an air line, and about 35 miles by road. The state highway extends to within 14 miles of the camp. The remainder of the distance is by a country road, which is rather rough in spots but has no excessive grades. It is about the same distance to Robinette on the Snake river, which is the nearest railroad point on an all down grade from the property.

The camp is located in the narrow valley of Goose Creek. The surounding country is forested with yellow pine, fir, and tamarack timber. Goose Creek, which flows through the property, carries a minimum of 500 miner inches of water throughout the year.

Frei ht cost \$10.00 per ton from Baker, and mine timbers and common lumber are delivered at the workings from a nearby sawmill for \$24.00 a thousand board feet.

The elevation of the camp is approximately 3500 feet above sea level.

# EQUIPMENT AND WORKINGS

The property is well equiped with up-to-date and efficient machinery to carry out an extensive program of development. There are also sufficient buildings to house a crew of men sufficient for development work. There has been repently installed a 120-horse power Diesel-type Fairbanks-Morse engine, and an Ingersoll-Rand 2-stage compressor with 610 cubic feet capacity at sea level. Fuel for this engine costs 18¢ per gallon delivered at the mine, and about 25 gallons is used per shift, which makes a very cheap power. There is also a small Sullivan hoist which has a capacity of 2000 pounds, and a speed of 100 feet per minute and capable of working to a depth of 1000 feet. There is also a Sullivan drill sharpener and a 4-horse power Fairbanks-Morse gas engine for running the

#2

righting dynamo and the lan.

The **pr**incipal workings, most of which were driven several years ago, consists of a series of tunnels, which were driven from the west side of Goose Creek to intercept a mineralized lode which outcrops on the hill above. These tunnels were evidently run in accordance with some definite plan as they are spaced at regular intervals of either 100 or 200 feet apart. The longest of these is known as the No. 1 tunnel and extends into the mountain as a crosscut, a distance of about 800 feet. Some drifting north and south has also been done from this tunnel. The other tunnels are of varying length and have all intersected the mineralized lode at different distances from their portals.

The principal development work at the present time is the sinking of a two compartment 10 by 6 vertical shaft at a point some 60 feet north of the No. 2 tunnel. At the time of writing this shaft is down about 50 feet from the collar.

# TOPOGRAPHY

Goose Creek which is a tributary of Powder river, which is in turn a tributary of Snake river, flows through the property in a somewhat shallow canyon, which is not over 200 or 300 feet deep. This canyon has been recently cut ( in a geological sense) through an old plateau. This plateau slopes gradually from the foot of the Wallowa mountains to Powder river. The canyon slopes on Goose Creek and Clear Creek are much more abrupt than are the slopes of the old plateau which forms the summit of the ridges. Chonsequently sulphide minerals are encountered much closer to the surface in the canyon than on the hill slopes above, where the oxidation is no doubt quite deep on account of this much older surface. The relief of the country is moderate. The maximum difference in elevation on the property is considerably less than 1000 feet and probably does not exceed 600 feet.

# GEOLOGY

The comparatively gentle slopes of the old plateau are covered by a depth of soil which in most places effectually conceals the rock structure. The newly cut canyons and the summits of the flat ridges are about the only places where rock exposures are numerous enough to aid in determining the structure. To work out the geology in detail over the compnay's entire holding would involve a close study extending over several weeks. As only four days were spent upon the ground the interpretation of the geological conditions is naturally rather sketchy and should not be considered in any sense as final. The geological map accompanying this report was constructed from a claim map furnished by Mr. Nelson and from a barometric base.

The rocks at the Daddy Lode property belong to what might be termed the Snake river series which are of Permo-Cerboniferous and Triassic age. This series of rocks covers a considerable area on both sides of the Snake river for a distance ceast and west exceeding over 200 miles. These rocks are largely igneos in origin though commonly stratified and consist of a series of agglomerates and finer tuffs, interbedded with rocks of purely sedimentary origin such as limestone. The apt but unscientific name of greenstones is often used when naming these complex igneos rocks. They are often cut by dykes of highly altered trap or finegra ned diorite.

At the Daddy Lode the geological structure is obscure, but at one place the stratified tuffs showed and east-west strike and a dip of 30 degrees to the north. This cannot be regarded as conclusive in regard to the general trend of the formations in the camp, but all the evidence seems to point to this being the general direction of the structure.

#4

The so-called greenstone rocks exposed in the workings and on the hillside consist mainly of two distinct types. On e of these is a fine-textured rhyolitic or trachytic rock which is light colored and extremely dense and is locally termed porphyry, while the other is a dark and coarser textured rock containing in some places recognizable fragments. The latter can be classified pretty definitely as an andesitic ag lomerate or a coarse tuff while the former a more acidic and much finer grained flow or tuff. In places a finely crystalline greenish colored rock, which might be roughly classified as a diorite occurs, and apparently intrudes the other rocks.

On the summit of the ridge northwest of the camp, limestone overlies this igneos series. The same bed of limestone is well exposed in the narrow canyon of Clear Cfeek where it forms a prominent bluff. It is several hundred for the several bundred for the several bundred for the several flat of its outcrops in icates an east-west strike and a so ewhat flat mortherly dip. This coincides pretty closely with the strike and dip of the stratified rocks on Goose Creek and is an indication that the limestone lies conformably upon the other rocks just as it does in other parts of the region. This limestone bed is reported to extend through the country for m les and is doubtless the same as that classified by Lindgren from fossil evidence as Triassic. No further exploration was made to the north and this limestone was the highest rock in the series which was mapped.

These stratified rocks have been cut by a large basalt dyke which outcrops on the ridge north of the camp, extends across Goose Creek, immediately above the camp, and is doubtless the cause of the spring from which the water supply is derived for the camp. Its width was undetermined but it appears to have an irregular outline and extends almost to Clear Creek. Small tongues extend from the main mass cutting through other rocks in several places. This dyke has no important economic significance as it

#5

outcrops at the surface at such a distance from the zone of mineralization as to have no effect upon the latter.

In summing up the geological conditions it can be stated in a broad way that the formation consists of a series of complex and occasionally stratified rocks of igneos origin overlain conformably by limestone with a general east-west strike and a rather flat northerly dip. This series of rocks in the northeastern part of the property has been intruded by a basalt dyke of irregular outline.

### MINERALIZATION

The mineralization is displayed on the surface by an iron stained outcrop (or possibly more than one) that extends in a northwesterly direction through the claims, cutting the formations at an average angle of probably 45 degrees. In this way it might be considered as a fissure type of deposit. This cossanized or iron stained zone is essentially similar in its general appearance to several others which occur in this same series of rocks in the Snake river region of eastern Oregon and western Idaho. These evidently belong to a certain metallogenic province which extends from northern California to Vancouver Island, B.C. The deposits of this type are usually in the form of wide zones of impregnation but occasionally occur as more distinct fissure veins. Their relationship is proved by similarity in structure, age of rock in which they occur, and, more particularly, in their mineral content. The universal red color of these zones on the surface is aue to the presence of pyrite which is the predominating sulphide mineral that they contain. In certain places where concentration of the sulphides has taken place chalcopyrite, which is always accompanied by an appreciable amount of gold and silver, occurs. These zones are seldom mineralized sufficiently to be workable over their entire extent, but contain areas of mineral concentration which in some cases is rich enough to be mined. These

70

areas of concentration are usually ue to the presence of slips or planes of weakness running through the zones. A universally prevalent gangue mineral is barite, which is one of the distinguishing features of this paticular type of deposit.

The Daddy Lode deposit is of this type and consists of a crushed and brecciated zone which extends from Goose Creek northwest to Clear Creek and possibly considerably further. It is more pronounced and wider on Clear Creek than on Goose  $C_{\rm r}$ eek being several hundred feet wide (close to 600 feet) at this point. The Daddy Lode, therefor, is well named as it is an excellent example of what many economic geologists would consider a lode.

Chalcopyrite, in a hard guartz gangue, accompanied by varying amounts of barite and a little calcite, occurs either along or near to well-defined slips in this crushed zone or lode. The occurence of the Chalcopyrite in the tunnels, driven from Goose the baries of nee Creek is doubtless due to the presence of slips near which it generally occurs and which have been termed weins. In other words the most valuable concentration of copper bearing mineral (which is either chalcopyrite or the rather indefinite mineral known as cubanite) occurs in the vicinity of slips or planes of movement which intersect this broad but poorly defined zone of mineralization.

The series of tunnels along the west side of Goose Creek have proved very definitely the occurence of some rather small low grade bodies of copper bearing pyrite along a certain set of slips. These do not a pear to be sufficiently extensive or rich to be regarded as copper ore. They do, however, show concentration of values along fracture planes in the lode and are valuable as an indication of possibilities.'

<del>#</del>7

It is not possible to trace the gossan outcrop from Goose Creek to Clear Creek for the whole distance on account of the depth of soil which overlies the rock in many places. It is a fairly assumption however to say that the two gossan outcrops are a part of one continuous zone.

One can therefor say that there is a lode or zone of crushing which extends for a distance of over 3000 feet through the property and which is similar on the surface and in its mineral contents to other deposits in this region in which workable ore has been disclosed by underground development. The old workings, which consist of the series of tunnels previously mentioned, have proven the character and extent of the mineralization at one particular horizon for a distance of 600 or 700 feet along the lode. These tunnels have disclosed some copper but no large artensive bodies of the series of the money particular horizon for a distance of some copper but no large ar-

The largest iron stained area occurs half a mile to the northwest of this particular place and except for one short tunnel on Clear Creek and a few open cuts on the ridge has not been explored at all. If ore bodies of any size occur in this fractured zone as they do in other places in this particular belt it would seem that the chance of finding them would be stronger in this particular place than in the canyon of Goose Creek where the gossan outcrop is not nearly so strong or wide as it is to the northwest.

It is of course possible that the mineralized bodies exposed in these tunnels may increase in size and value as depth is gained. The shaft which is now being sunk should intersect one of the principal fissures which show in two of the tunnels in considerably less than a hundred feet. At the time of the visit to the property the bottom of the shaft was in a highly altered rock which was doubtless derived by a process known as propylitization of the

#8

and the second secon

Sandran and the state

andesitic agglomerate. This lengthy term means in simple language that certain dark colored minerals in the original rock were changed by heated waters from below to chlorite and pyrite. The rock in the long tunnel contains pyrite throughout its entire length and in the face of the drift to the north a similar rock occurs to that in the shaft. The whole zone indicates considerable activity in the circulation of heated waters. The problem is to find as quickly as possible some place or places where concentration of the copper bearing minerals is sufficiently strong to constitute ore. The surface indications point to the northwestern part of the property as more favorable for the occurence of ore than on Goose Creek where the tunnels have been criven.

If sinking the shaft and exploring the mineralized zone from levels below does not open up ore, the best plan would seem to be to explore the country to the northwest.

The most extensive underground work in the mineralized zone is the No. 1 tunnel which has been driven a distance of about 800 feet. This tunnel has not been surveyed, but its general direction is northwest. In this sense therefor it can hardly be considered as a true crosscut. Beyond the first slip where copper ore shows in the tunnel, which is about 300 feet from the mouth, the tunnel passes through a mineralized zone which consists almost entirely of pyrite disseminated through the rock. The dark andesites are encountered some distance from the face but no copper ore shows in the tunnel beyond the first drift, although zinc is reported in an assay of a sample taken from the face.

The drift running north from this tunnel has apparently left the mineral on the west side and does not show anything further of value up to the face which is in the crushed and altered rock similar to that in the bottom of the shaft. The probabilities are that it will be necessary to crosscut some distance to the west to pick up the mineralized slip encountered in the main tunnel. The other tunnels which were driven some years ago have all of them cut the same mineralized slip at varying distances from the mouth. Beyond this one mineralized slip or zone they show little value.

### RECOMMENDATIONS

With the excellent equipment for sinking which has been placed on the property it would seem wise to continue the present plan of development, at least to a depth of 300 feet. Crosscuts might be driven from the 100 and 200 foot levels and suitable stations should be erected in the shaft for this purpose.

If no ore of consequence is disclosed in this work I would recommend exploring the north end of the propertyon the Clear Creek side where the wide gossan outcrop occurs.

It would not seem necessary however to outline the plan for development at the Clear Creek end until the shaft has proved the presence or absence of ore bodies on Goose Creek.

The No. 1 tunnel should be driven at least 100 feet further or until unmineralized country rock has been reached.

D. C. Livingston

Baker, Oregon August 18, 1926

Blue Bell Group	Daddy Lode	Gold - Conner	
NAME	OLD NAMES	PRINCIPAL ORE	MINOR MINERALS
	- -		
T78 R43E	NW2 Sec.23	PUBLISHED REFERENCES	
T R	S	· · · ·	
	Or	egon Metal Mines Ha <b>dd</b> book 14 <b>4</b> pg.45	
Baker	County		
	AREA		
	ELEVATION	MISCELLANEOUS RECORDS	
	ROAD OR HICHWAY		
about. 27. mi	Baker DISTANCE TO SHIPPING POINT		
v -			
PRESENT LEGAL OWNER (S	5)	Address Baker, Ore.	•••••••••
•	E.B.Cochran	<b>H H</b>	• • • • • • • • • • • • • • • • • • • •
• •	D.W.C.Nelson	<b>H e</b> • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
		•••••••••••••••••••••••••••••••••••••••	• • • • • • • • • • • • • • • • • • • •
PERATOR	• • • • • • • • • • • • • • • • • • • •	•••	• • • • • • • • • • • • • • • • • • • •
ame of claims	Area Pat. Unpat.	Name of claims	Area Pat. Unpat.
10 claims	<b>X</b>	<u>-</u>	
	***************************************		٠
	·		
WINDOW NO PROPERTION			•
COMPANYING ON TROTANTI	,	<u></u>	

6/46

DEPARTMENTAL RECORDS on file in

.

,

EPORTS D.W.C. Nelson M.E. 1936 Blue Bell Group of Ten Quartz Claims on Goose Creek, Baker Co	×		I
Blue Bell Mine ( Daddy Lode ) J.E.A. ? June 24, 1938			r
Daddy Lode Copper Co,m Geological Report by D.C. Livingston, Aug.18, 19	26		x
Report on Blue Bell by D.W.C. Nelson , Dec. 28, 1936			I
٢	•		
		1	
HIPMENT AND ASSAY RECORDS			
			-
		<b> </b>	
		<u> </u>	
			· · · · · · · · · · · · · · · · · · ·
		-	
APS			
			. <u> </u>
			· · · · · · · · · · · · · · · · · · ·

	OLD NAMES					-
TOOLS .			PRINCIPAL OR	5 M.	INOR MINERALS	
<u>79</u> <u>43</u>	NE1 323	PUBLISE	IED REFERENCES			
r n			•			
Baker Co	COUNTY					
Eagle Creek	AREA			•		
• • • • • • • • • • • • • • • • • • • •	ELEVATION	MISCELI	ANEOUS RECORDS			
	ROAD OR HIGHWAY				~	
	DISTANCE TO SHIPPING POINT				,	
RESENT LEGAL OWNER (S)	• • • • • • • • • • • • • • • • • • • •	Address	••••••	• • • • • • • • • • • • •	•••••	•
;	• • • • • • • • • • • • • • • • • • • •		•••••••••••••••••••••	• • • • • • • • • • • • •	••••••	. •
••••	•••••••		•••••	••••••	••••••	•
•••	• • • • • • • • • • • • • • • • • • • •			•••••••••••	••••••	
PERATOR	• • • • • • • • • • • • • • • • • • • •		· · · · · · · · · · · · · · · · · · ·	•••••	•••••	. •
	Area Pat Unnat		Name of claims	Area Pa	t. Unpat.	
ame of claims	nica lav. onpav.					
ame of claims				·····		
ame of claims						
ame of claims					· · · · · · · · · · · · · · · · · · ·	
ame of claims					· · · · · · · · · · · · · · · · · · ·	
ume of claims						 
ame of claims						/

THEME  OLD REALS  PHINCIPAL ORE  MINOR MINERALS    7.3  43.2	TOPAL  OLD MARKS  PLINCIPAL ORE  MINOR MINORALS    7 S  43 2	NAME NAME	OLD MANES		
7.3    43.8    FUBLISHED REFERENCES      Baker    COUNTY      Baker    COUNTY      Baker    AREA      Baker    AREA      Baker    AREA      Baker    Biscellaneous reports      Biscellaneous reports    Biscellaneous reports	7.3    43.4    PUBLISHED REFERENCES      Review    COUNTY      AREA    MISCELLANEOUS RECORDS	NAME	ULL MANES	PRINCIPAL ORE	MINOR MINERALS
	Acker    COUNTY      Acket Creek    AREA      ELEVATION    MISOELLANEOUS RECORDS      ROAD OR HICHWAY    DISTANCE TO      SHIPPING POINT    Address      RESENT LEGAL OWNER (S)    Address      PERATOR	<u>75</u> 43E T R	<u> </u>	PUBLISHED REFERENCES	
A MISCELLANEOUS RECORDS MISCELLANEOUS RECORDS MISCELLANEOUS RECORDS MISCELLANEOUS RECORDS MISCELLANEOUS RECORDS MISCELLANEOUS RECORDS MISCELLANEOUS RECORDS MISCELLANEOUS RECORDS Address MISCELLANEOUS RECORDS Address MISCELLANEOUS RECORDS Address MISCELLANEOUS RECORDS Address MISCELLANEOUS RECORDS MISCELLANEOUS RECORDS MISCELL	AREA    MISCELLANEOUS RECORDS      ROAD OR HIGHWAY    DISTANCE TO SHIPPING POINT      RESENT LEGAL OWNER (S)    Address	Baker	County		
ELEVATION  MISCELLANEOUS RECORDS    ROAD OR HIGHWAY  DISTANCE TO SHIPPING POINT    RESENT LEGAL OWNER (S)  Address	ELEVATION    MISCELLANEOUS RECORDS      ROAD OR HIGHWAY    DISTANCE TO SHIPPING POINT      RESENT LEGAL OWNER (S)    Address	Eagle Creek	AREA		
RESENT LEGAL OWNER (S) Address	RESENT LEGAL OWNER (S) Address	•••••	ELEVATION	MISCELLANEOUS RECORDS	
DISTANCE TO SHIPPING POINT RESENT LEGAL OWNER (S)	DISTANCE TO SHIPPING POINT RESENT LEGAL OWNER (S)	••••••	ROAD OR HIGHWAY		
RESENT LEGAL OWNER (S)    Address	RESENT LEGAL OWNER (S)    Address	•••••••••••	DISTANCE TO SHIPPING POINT		
PERATOR	PERATOR	ESENT LEGAL OWNER (	s)	Address	• • • • • • • • • • • • • • • • • • • •
PERATOR	PERATOR		•••••	•••••••••••••••••••••••••	
PERATOR	PERATOR		•••••		
PERATOR	PERATOR		•••••••	•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••
ame of claims Area Pat. Unpat. Name of claims Area Pat. Unpat.	ame of claims Area Pat. Unpat. Name of claims Area Pat. Unpat.	ERATOR	• • • • • • • • • • • • • • • • • • • •	•••••••••••••••••••••••••••••••	•••••••••
		me of claims	Area Pat. Unpat.	Name of claims	Area Pat. Unpat.
	OTTEMENT ON PROPERTY	WINNING ON PROPROTIN			· · · · · · · · · · · · · · · · · · ·

~

.