

# Property File 082 FSWO 24 

## REPORT OF INSPECTION <br> OF THE <br>  <br> ON <br> REND OREIJLE RIVER BC.

## To

Frank Elchelberger, Trustee, Field, B. C.

IHTHODUCTION: This report is based on a one day inspection of the mine. No samples were triken.

LOCATIOR:
The property is aituated on the south side of the Pend d" Oreille River about fifteen miles east from Waneta on a branch of the Great Northern Kailway. It is Just across the river from the lower workings of the ReevesMcDonsid mine.

PROPEFTY:
There are seven Crown Granted claims in
the Group, the Lead Pot, Lead Cup, Red Bird, Royal, Edna, Annie, Betty, as mell as a number of claims that are held by location. The property is owned by the ked Bird Mining Co., a Mashington corporation, of which Beeson Bros. of Spokane are the heaviest atockholders. Arthur Campell of Nelson was the locator of the property and owns 180,000 shares.

TIMBEF, WATER, \& POWER: There is a large amount of very good timber on the property. Weter is scarce and only sufficient for comastic use, except at the river which is muoh lower. It is understood that ghectric power will be furnished to the feeves-McDonald mine within the next two years, and it will undoubtedly be possible to obtain power from the same transmission line.

TKANSPORTATION: The bridge at the river is fourteen miles from waneta and 24 from Salmo, but the road to the latter place is much the best: both of the towns are on the SporaneHelson branch of the Great Northern fisilway. The river is crossed on a suspensil on bridge which will be covered With water when the dan of the Feat Kootenay Power Co. is completed. From this bridge a fair trail of good grade
leads to the mine a mile and a quarter distant. TOPOGRAPHY: The mine workings are aituated in a steep shallow gulch from 900 to 2000 feet vertically above the river, and from a half mile upwards distant. The vein outcrops along the guloh and on its north side. The slopes are steep but fairly smooth. The elevation at the lower tunnel is approximately 2600 feet.

BqUIPMEAT: The equipment is quite limited and consista of a cook-house, bunk house, blacksmith shop, ore-car, track, and a few hand mining tools.

HISTORY:
The property was purchased from the original
locator in 1924; the Red Bira Company was organized in 1925 and most of the work was done between then and 1927. For the past year the mine has been under option to the Boundary Basin mining Co. who have defalted in their payments, after digging some surfice outs and doing some diamond drilling. GEOLOGY: The rocks on the property belong to the Pend $d^{\prime}$ Oreille series and consiat of argillaceous schists and limestones striking northeast and southwest and dip from $55^{\circ}$ to $70^{\circ}$ southeast. While there are some local variations, the strike and dips observed are unusually uniform although some of the sohists are much crumpled. There are occasional small dikes of lamprophyre.

There is some faulting of post-mineral age nearly at right angles to the strata; the throw has not been positively determined.

VEIE:
The Red Bird vein conforms with the strata in dip and strike; the former varies from $50^{\circ}$ to 703 southeast
and the latter from $S 50^{\circ}$ to $70^{\circ}$ W. The width of the vein is not definitely known. In the surface workings it varies from five feet to nearly forty in some places; In the main tannel three crosscuts expose a widh averaging about twenty feet.

The vein filling consists of limonite and oxidised lead and zine minerals in a gangue composed of sand and clay residual from the decomposition of the limestone which evidently formed the body of the vein as well as both its walls. There $1 s$ practically no quartz, calcite, or sulphides of any kind to be found in the present workings. The vein is comparatively dry and very soft, but usually stands without timbering, if theopening is arched.

Very little metallic mineral of any kind enn be distinguished by the naked eye, and, to a stranger at least, there is little to differentiate ore from waste except the weight.
DETAILS OF WOERIKGS:
1st Cut west of Main Tunnel Portal - This is the most easterly point the vein has been found on the surface. Sandy limonitie material shows over a width of 35 feet. The average of four samples, width not given, is 0.9 oz . silver, $4.85 \%$ lead, $12.7 \%$ zinc. (NOTE: This and all following assays were furnished by the Company, and have not been oheoked by the writer).
Yo. 2 Tunnel and Shaft above: A rather indeterminate width of mineralization shows just above the ghaft perhaps 25 feet. The shaft is closely timbered but is said to have shown high lead values. However, the
samples do not show exceptionally high lead: - (average) 0.9 Oz . silver, $5.3 \%$ lead, $15.5 \%$ zinc.

Near the portal of the tunnel a ten foot vein shows, and further in there $i s$ scattered straks of mineralization.

Six feet of the ten foot vein is reported to assay, $2.0 \%$ lead, $15.2 \%$ zinc.

Fo. 3 Tunnel and Cut The width of the vein at this point is rather indeterninate, but probably more than twenty feet. The values claimed for the cut, in coherent sandy meterial, is 1.0 Oz silver, $2.5 \%$ lead, zine $15.9 \%$ over a width of about fifteen feet. The tunnel is ghort one, driven along the hanging wall side of the vein which appears very strong. The fault in the main tunnel projects Just southwest of the face of this tumel, but is not visible on the surfice.

Ho. 4 Tunnel and Cut This work is approximately 1200 foet southwest from No. 3 tumel, and 2100 feet southwest from the portel of the main tunnel; it is far beyond the fault. In the cut there is eight feet of strongly mineralized material plus a further twenty feet of weaker mineralization.

The only sample given showed no lead and $25 \%$ zine acoss $16^{\prime \prime}$ in the face of the tunnel.

Hork beyond No. 4 Tunnel at perhaps a thousand feet southwest of No. 4 Tunnel, and 400 feet higher, there is a cut showing twenty five feet of mineralized sandy material which 18 said to carry lead and zinc values, and may be the main vein, although it is uncertain on account of the aistance from other exposures.

Yain Tunnel The total footage of work in the tunnel is 1550 feet, exclusive of a winge, of which 500 feet is on the vein, and an acditional 140 feet may or may not be on the main vein. The vein was first cut about 50 feet from the portal in an app rently low grade and narrow place.

A crosscut wrs then oriven back cutting the vein in 65 feet and it was then followed for 500 feet until out off by a northwest-southeast fanlt dipping $45^{\circ}$ eastward.

There are three orosscuts to the southeast in this section of the vein which indicate an average width of about 20 feet.

There are no crosscuts to the northwest and it is possible there is more vein on that side also. The values through this section, based on eighteen sarples, are given as 1.20 m ailver. $6.0 \%$ lead, $18.5 \%$ zinc. It is atated that no specimen assays were included, it is however probable that the full width of the vein is not represented.

At the winze, 27 feet deep, some especially good lead assays are given.

Beyond the fault low grade vein-matter four or five feet wide was encountered and followed for 140 feet When it was again lost and was not again picked up. There $1 s$ some doubt as to whether this is a segment of the main vein or not.

GMELAL NOTES: The vain is large and strong, but the surface openings are so far apart that it cannot be assumed that the vein width and character is maintained between them. or that all of them are neeessarily on the same vein.

The ralues, as quoted, are not known to be correct
and it is probable that they do not represent the full width of the vein, - it is certain that in the tunnel they seldom represent more than the width of the drift.

Some diamond drilling has been cone within the last year but the records were not arailable at the time of the examination. It is reported locally that the deepest point at which the vein was cut was two hunderd feet below the tunnel, or at a vertical depth below the outcrop of not more than 500 feet; the oxidised condition is reported to be unchanged at that depth. Holes were started to cut the vein at a greater depth but some of them had to be abandoned and none are reported to have reached its position.

The position of the vein is not known below the Kain Tunnel, except that there is strong mineralization reported at the river on heeves-McDonald property which is thought to be its faulted continuation. There is about nine hundred feet of ked Eird property along the course of the vein to the northeast of the Main Punnel; the drop in elevation in this distance is around 350 feet.

Oxidation of the rein is complete to the greatest depth it has been opened, - about 500 feet -, and there is nothing to indicate at what depth sulphides may be expected, except that they should come in at the level of the river which is 900 feet lower.

So far as I am aware, no commercial treatment for ores of this type has yet been evolved, and until one is found the mine is of value only for the sulphide ores which are supposed to occur below the zone of oxidation.
and from which the oxides and carbonates were undoubtedly derived. This being the case it seems futile to go to the expense of a more thorough study of the property, and sampling of the vein, at the present time. CONCLDSION: The vein is large and strong and the metal content apparently good, except that zinc predominates, but the oxidised condition of the ore makes it of little or no present commercial value.

It is probable that there is a body of sulphide ore which is of commercial grade, below the zone of oxidation, but it is to be presumed that the sulphides would be high in zinc and at a very considerable distance below the present workings. Apparently diamond drilling in the hanging wall of the rein has been attended With a groat deal of difficulty, and expense. Underground work to open the sulphide zone would probably be quite extensive and costly, therefore I do not recommend that the development of the property be undertaken.

Respectfully submitted.


No. 4 Tunnel \& Cut Elev. 3200

EDNA M. C.

ROYAL. M. C.
LEAD CUP MO.
$\xrightarrow{\text { North }}$

LEAD POT M. C.

RED BIRD NINE
Main Tunnel

Scale; $1^{\prime \prime}-200^{*}$

