

Report on an inspection of some recently discovered of Silver Lead and other ores in this neighborhood of Beltana, and Mount Serles and Mount Freeling etc.

WINNOWIE LINES

Locality: From one to four miles north of Randall's Lookout and between this point and Mt. James, Randall's Lookout is $1\frac{3}{4}$ miles north west of Winnowie Station.

BELTANA BROKEN HILL

The workings consist of a tunnel driven some 60 feet into soft kaolinised shales and sandstone with interbedded masses and pockets of Carbonate of Lead stained in places with Carbonate of Copper. This deposit is not a lode but a segregation of ore interbedded with the rock.

The soft shales in which it occurs are overlaid by a crystalline limestone. Gypsum is associated with the ore outcrop and Manganese, Iron ore and jaspery quartzite masses or blows, occur in the same soft argillaceous rocks.

Although no lode has yet been found there is a likelihood of larger masses of ore being discovered and the present deposits when followed up may be traced to a lode.

The amount of ore shewing in the tunnel and along the outcrop of the soft shales in the neighborhood offers sufficient inducement to a thorough prospecting of the locality. The quantity of silver contained in the ore, - as indicated by the assays which have been made - is small; two average samples taken from the tunnel yielding silver at the rate per ton of 2 oz. 18 dwts. 19 grms and with 41 and $32\frac{1}{2}\%$ of lead respectively.

Another sample obtained from the Manager, yielded on assay 3oz. 15 dwts. 3 grs. of silver and 47 per cent, of lead with a trace of gold.

No work was being done at the time of my visit. The workings of the old Beltana Copper Mine are situated in close proximity to the tunnel.

Carbonate of lead and copper occur here in the soft kaolinised shales.

The escarpment formed by the outcrop of soft kaolinised slates and sandstones extended north west - from the Beltana Broken Hill tunnel, north westerly and northerly through the Great Central Winnowie and Wheel Tyrrel claims, and easterly through Doigs.

MICROFILMED

It is along this escarpment and in these rocks that the lead and copper ore outcrops.

The ground being soft there will be no difficulty in driving, sinking or following up the various streaks of ore with which the rocks are impregnated in order to ascertain whether they are connected with some lode at a deeper level or are merely bedded deposits.

WHEAL TYRREL CLAIMS

Prospecting is being carried on here and two shafts are being sunk near an iron ore blow, and a quartz and iron ore blow in the soft slates and sandstones near the boundary of the crystalline limestone. These shafts are being sunk on the chance of silver being found in the iron ore below the surface, although so far as I am informed no metallic ores have yet been found, or any discoveries made to lend to the belief, that silver is present. With regard to the outcrops or blows of iron Manganese Quartzite and other siliceous rocks, there is a general impression that they are all lode outcrops or from the back of a lode.

In many cases however, this is not the case and the outcrops will be found, as they are sunk or to gradually disappear or thin out into numerous small veins in the bed rock.

MABEL EXTENDED

Ediacara Blocks.

Prospecting here is being carried on at three places. In the most northern excavation Galena is disseminated through a bed of crystalline limestone from one to two feet thick lying between other beds of limestone and inclining at a low angle to the Eastward,

A sample yielded an assay at the rate of 8ozs. 19 dwts. 16 grs. per ton and $4\frac{3}{8}\%$ of lead.

In another excavation further south there is a similar deposit showing a less percentage of galena.

The main workings are in a creek further southward where black carbonate of lead with show of copper carbonate is being obtained from the crystalline limestone and from the joints and cracks in the same rock.

An average sample of the ore yielded an assay at the rate per ton of 48ozs. 10 dwts. 4 grs. of silver and $6\frac{2}{3}\%$ per cent of lead.

The ore in this locality occurs in limestone and in its joints in patches. It is possible that large deposits of this sort

exists though from the nature of the bed rock they may be expected to be uncertain in their occurrence and extent.

It would be well to ascertain by striking through the limestone at this place into the underlying shales, whether the ore continued from one rock formation into the other or not.

NORTH BELTANA

Costeening is being done to a small extent in hard crystalline limestone in which a few specks of galena are occasionally seen.

MAYBELL

A tunnel in horizontal kaolinized shales and sandstones has been put in for a distance of 50 to 60 feet but no ore has been found.

GREAT NORTHERN

Prospecting has been done here to a small extent on iron ore and manganese blows. There are stains of carbonate of copper in several places but nothing has been found to encourage anyone to do more than prospect to a limited extent.

In addition to these claims there are numerous others. The Great Winnowie Central and Doigs blocks adjoin the Beltana Broken Hill on the west and east respectively. On the former no work has yet been done and on the latter there are shafts and tunnels. Great carbonates and other copper ores have been found to a small extent but so far not in payable quantities.

Blocks of land for general prospecting have been taken up for a few miles north and south of the principal claims, no doubt chiefly as a speculation.

Many of these have names and good reputations, but as it is impossible to find where they are, owing to their position, being known to a few only, and it being difficult to ascertain whose these are, I have not been able to inspect them.

BELTANA

In this neighbourhood numerous places are being prospected for silver, and the following is a list of those which I visited. As a rule the veins which are chiefly copper ore, are small, and beyond the merest surface prospecting, have not been tried.

In some cases blocks have been taken up on iron ore, manganese or quartzite blows, only on the chance of useful or precious metals being found.

GREAT AJAX

Copper - Here a small vein of rich ore has been found but has not

yet been sunk on.

PUTTAPA GAP - Copper. Thin veins in limestone.

JOHN BULL - Copper. This is an old mine the workings of which have fallen in.

BELTANA EDITH

A Shaft is being sunk in soft slates and sandstones near an iron ore outcrop, and near an old shaft shewing stains of copper ore, which it is intended to prospect for silver.

GREAT BELTA

Outcrops of iron ore and manganese ore. Stains of carbonate of copper and copper ore occur in two or three places and are being prospected or type ore met with at other localities but was not sufficient importance to encourage prospecting except at a

MOUNT SERLE DISTRICT

ROYAL MINT

Locality 3 miles N.E. of Fink Springs. A shaft is being sunk alongside a large iron outcrop for the purpose of prospecting for silver.

No ores or lead or silver have been seen in this outcrop. It is intended after reaching a depth of 100 feet crosscut with the iron ore and the chance of finding a centiperoid.

GREAT BELTANA COMSTOCK

On the surface here there is an outcrop of galena about 2ft.6ins. long and 1ft. 6ins. wide. with calcareous slates. There are other galena lodes in the neighborhood.

In my report of 16.1.4 is made and assays given of silver lead discovered in this location; little if anything appears to have been done to develop the mine that time.

It is probable that all these Claims have been taken up under new names.

No one is working them and information cannot therefore be obtained; in nearly all cases there is information obtainable on the ground as to the position of the claims that can be where shares in the claims are bought and sold. This is owing principally to no one being ing or to their being temporarily abandoned. The Imperial Mint and the Wolseley are in this locality.

PATSEY'S SPRINGS.

One mile west of Patsey's Springs a prospecting party have discovered a lode comprised of Galena and Carbonate of lead, Calc. slate and quartz. An assay of the ore gives Silver 77oz. 2 dwt. 11 grs. and Lead 57 per cent to the ton.

LEIGH'S CREEK.

New discoveries have been made at White Cliff and Iron Hill and are now being inspected. Up to the present fragments of copper ore only have been found at White Cliff on the surface and in the soft rock, but no defined lode has been discovered.

At the Iron Hill^a shaft is being sunk 75ft; it would probably be better to costeen here to find the lode before sinking much deeper.

layout, a mile from Leigh Creek Railway Station they are prospecting a large brown iron ore outcrop but do not appear to have found any other ore.

GREAT GLADSTONE MINE.

Locality 6 miles north easterly of Yerelina Station. Here there is a lode formation consisting of iron ore and gossan containing fragments of the surrounding slate rocks and striking north and south through the horizontal and slightly inclined clay and calcareous slates.

Several shafts and tunnels have been sunk and driven along the course of the lode, and galena obtained in two or three places at no great depth and near the south end ~~in~~ of the workings, galena has been raised from a shaft and is found to assay well for silver. It would be well to follow down this galena shaft for the purpose of ascertaining whether or not it increases in quantity at depth, as the lode is well defined and well worth testing.

A sample of the galena and gossan gave an assay Silver 88oz. 7 dwts. 6grs. and 46% of lead; that of gossan alone 1oz. 15dwts. 22grs. of Silver, to the ton.

BIG HILL.

Locality $2\frac{1}{2}$ miles from the Great Gladstone Mine. This is a brecciated gossan and iron ore lode of considerable width cutting across horizontal clay and calcareous slates.

The prospectors report that they have had good results by assay, but no silver or gold was found in the samples which were assayed.

EMILY.

Locality near Big Hill. Galena occurs here in a brecciated limestone with gossan striking north and south through slates and limestone.

A sample of the ore containing galens yielded on assay 12 oz. 18 dwts. 1gr. of silver and 32 per cent of lead per ton. The gossan yielded nothing on assay. This place is worth a further trial.

GREAT NORTHERN.

Locality 2 miles west of the Great Gladstone. Here there are well defined lodes of Ferrocaltite, calcite iron ore, and gossan striking north and south through horizontal slates. Prospecting shafts were being sunk in two places.

I do not know of any encouragement to sink which has been met with beyond the lack of there being well defined lodes. I saw no lead, copper or other useful metal in the stuff used.

FREELING WATER ETC.

Gilead P. Beck. Locality Duck Ponds between road from Mount Lyndhurst to Blanchewater.

Here there is a lode of massive galena from $1\frac{1}{2}$ to 2 feet wide at the surface on which two holes 4 and 6 feet deep have been sunk exposing a well defined lode formation of galena and gossan with quartz; along the surface it is exposed for about 20 feet. The lode strikes east and west through green clay slate, and it should be well prospected, the stone at the surface being good enough to warrant a shaft being sunk to a considerable depth.

A sample assayed gave 12 oz. 18dwts. 1 gr. of silver per ton and 62 per cent lead.

Galena has also lately been found at Wildman's Bluff, one mile north of Mount Freeling, and near the old Freeling: in the latter case it is in a thin vein with quartz. The other localities I did not see; Near Walters' Well traces of galena have been found in ferrocaltite and quartz?

THE QUORN COMSTOCK.

Locality 12 or 14 miles north of Quorn near Mount Arden Mine. At this place there are large massive outcrops of iron ore and manganese.

On one of the latter a shaft is being sunk and is now down some 25 feet in brown iron ore.

No assays appear to have been made of the surface outcrops nor had any prospecting been carried on previously. Before going to the expense of sinking shafts it is advisable that some indication of the presence of valuable metals

should be obtained at or near the surface either by assay or otherwise. If such be obtained there will be something to warrant the sinking of a shaft.

The presence of an "Iron blow" must not be regarded as a sure indication of the presence of silver any more than a quartz reef is bound to indicate payable gold.

MOUNT BRYAN RANGES.

Locality Sections Nos 12148/50. Ulcooloo Gold Field.

An iron ore and gossan vein is being followed down by an underlay shaft to a depth of about 70 feet at an angle of about 40° . The lode is small but strong and well defined and varies in width from a few inches to a foot.

A sample from the bottom of the shaft assayed 1oz. 2 dwts. 20 grs. and from a cross cut above 6dwts. 12grs. of silver per ton. A shaft is also being sunk to cut a thin vein of ferrocalsite containing galena.

At another place a vein containing copper worked and a sample on assay gave 3oz. 7dwts. of a

There are numerous other veins in the neighborhood, but as a rule they are very narrow, and unless rich would not pay to work nor is it advisable to spend much money in prospecting them.

Anyone who has the opportunity of travelling amongst prospectors cannot fail to see that the Mineral Regulations as at present constituted, are an injustice to and retard progress in the development, of new discoveries,

Under the present regulations the bona-fide prospector is an outcast from his fellows, and must keep any discovery he may make a secret until such time as he is able to do so himself, or send someone to the Adelaide Land Office to take up a block for him, he is often watched by prospectors who are not bona-fide prospectors and who are prepared to take advantage of his discoveries, if, unhappily for him, they find them out in time.

As it is competent for any person to take up Mineral blocks at the Land office without pegging out or even visiting the which is freely exercised speculative

ground and in the neighborhood of any mine discovery - generally several miles - is taken and so locked up for a period of one year by other prospectors.

The effect of this is that the bona-fide prospector perhaps finding that his first discovery is not is obliged to leave the district altogether, although at the same time he may know of a better place on one of the adjoining absentees blocks which suspects, it is eventually forgotten, and the forever.

After the ground has been taken up on paper by absentee, it is useless for anyone to prospect anywhere in the neighborhood as it is almost a certainty that the ground belongs to some other person although there are marks to indicate this on the ground.

This manner of taking up Claims seem to me to be a direct incentive to gambling and is certainly a great check on prospecting; one result is, that for one person engaged in actually searching for minerals, there are others ready if opportunity offers, to take up the claim over his head and dozens prepared to surround it with blocks pegged out on the map which are held entirely as a speculation and not for Mining purposes.

It is not to be wondered at therefore, that, discoveries of ore when made are sometimes carefully covered up, and that little or no work is done on them by the first finder, who even after he has applied at the office, may still ultimately see his claim become the property of someone else.

I believe that regulations insisting on the pegging out of claims and the performance of a certain amount of work whilst the ground is held under lease or miner's right, would do much in developing mineral discoveries encouraging men to search for and sink on lodes and prevent much bogus mining and consequent loss of money to the general public.

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