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— See MOLLIE MAC

Group for Letters.

See also Mollie Mack letter
to & from Thornloe & Curry

Property File

004321

082KSW043

REPORT OF EXAMINATION

OF THE

CONTACT GROUP

KASLO, B.C.

By Charles C. Starr,
September 1, 1928.

INTRODUCTION: About three days were spent on the property and a map was made showing the approximate position of the claims and workings, and the geology; no samples were taken.

LOCATION: The property is situated 14 miles north west of Kaslo, B. C., on the south bank of Kaslo Creek about a mile below the flag-station of Blaylock on the Kaslo-Nakusp branch of the Canadian Pacific Railway.

PROPERTY: There are seven claims in the group, of which five are located in a general NW-SE direction along the strike of the limestone beds, and two are located on either side opposite the main showing. They are held by location, and owned by A. J. Curle, of Kaslo.

HISTORY: The central part of the group was located a number of years ago, and the tunnels driven. The property then lay idle until last autumn when Mr. Curle started more careful prospecting; most of the surface work has been done this spring. Recently the property has been visited by a good many mining men and engineers and has gained the reputation of a very promising prospect.

TRANSPORTATION: The railway runs parallel with the property and is within a few hundred yards of the principal workings, and below them. An auto road, running from Kaslo to Sandon, is on the opposite bank of the creek and close to the railroad.

WOOD, WATER & POWER: There is a considerable amount of good timber on the property, although part of it has been killed by fire, but is still standing.

Water is handy and plentiful. Sufficient water power for all development purposed is available within a half mile of the workings. Johnson Creek which crosses the east end of the Tact claim has a flow of probably more than five Cu. Ft. per second at low water, and a fall of over 30° for a considerable distance. A hundred horsepower should be developed at a minimum of expense.

TOPOGRAPHY: The property is on the south bank of Kaslo Creek and 300 to 500 feet above it. There is a flat 100 to 200 feet wide at the bottom, and above this the slopes rise at an angle of about 40° for some distance; these slopes are comparatively smooth and uniform. The elevation of the mine workings is approximately 3300 feet. There are no snowslides near the mine.

GEOLOGY: The property lies in the limestones, argillites, and slates of the Slocan Series and is $\frac{3}{4}$ mile southwest of the Kaslo Volcanic belt.

The sedimentaries strike N 75° W (Magnetic) and are rather strikingly uniform throughout the center of the property. The dip varies from 35° to 55° southward, with an average of about 50°. They consist of a central belt of limestone, thin to medium bedded, with slates and schists on the foot (NE), and with slaty argillites, impure quartzites, and schists with occasional beds of impure limestone on the hanging side. The thinner-bedded limestones and inter-bedded schists of the limestone belt, are somewhat contorted and crushed. The schist belt lying on the hanging side (SW) has been much more crushed and contorted.

The main limestone bed appears to be the same bed in which the orebodies of the Whitewater Mine occur.

A light colored porphyritic igneous sill outcrops near the northeast part of the Contact claim, about fifty feet from the footwall of the limestone belt.

About 70 feet above the hangingwall of the limestone belt, which is 260 feet thick, there is a brownish rock which resembles quartzite, but which from its relations to the surrounding rocks is indicated to be an igneous sill. It is accompanied by irregular stringers and lenses of quartz, and is exposed above the main open cuts, in Johnson Creek, and in the gulch at the west end of the Con claim. At both of these points some former owner of the property has driven short tunnels on it. There is no evidence that it carries any values.

The main limestone belt outcrops plainly in the gulches at either end of the Contact claim, but over most of the property its position can only be approximately determined by float, and trenches must be dug to expose it in place.

A noteworthy feature of the topography is the presence of ridges with hollows above them which pass across the hillside for hundreds of feet. One such ridge very plainly marks the course of the vein through the limestone belt and extends some 250 feet into the footwall schists. At the hanging of the limestones it turns and follows the contact for several hundred feet before it dies out.

A second ridge occurs 160 feet above the hangingwall of the limestones and extends for nearly a thousand feet, running horizontally across a steep hillside. The trench above it is sometimes 20 feet wide by six or eight feet deep. The cause of this trench is not evident and two shallow cuts indicate there is no mineralization along it as in the case of the first mentioned trench.

DEVELOPMENT: Development consists of two 180 foot tunnels, about 50 feet apart vertically, from the upper of which a 60 foot drift has been run to the eastward along the hangingwall of the main limestone.

There are also a number of open cuts outlining with more or less accuracy two zones of strong mineralization and several points of lesser mineralization. The diagram accompanying this report indicates the general relationships of this work.

MINERALIZATION: With the exception of a small part of the exposures in the tunnel, the mineralized areas thus far exposed are in the nature of an oxidised capping in the limestone. This capping is a fairly typical iron gossan except that it carries a considerable percentage of manganese; in it occur isolated chunks of sphalerite and galena, as well as pieces of unaltered limestone. A large sample that appears to have been carefully taken is reported to show 0.09 Oz. gold, 0.4 Oz. silver, 45.5% iron, 19.0% manganese, 2.0% zinc, and very low lime, sulphur, and phosphorous. Mr. Curle has been informed by the Consolidated Mining & Smelting Co. that they can use this material for its iron and manganese content if their plans for making iron materialize.

The principal mineralization is confined to two areas, (1) a replacement vein, or No. 1 body, is from fifteen to twenty

feet wide with definite walls striking N 55° W and dipping 80° south. It cuts diagonally through the limestone belt for 500 feet, and its continuation into both the footwall and hanging-wall schists is indicated by the continuation of the "ridge" for a distance of several hundred feet beyond the limestones. Three cuts have been made on this vein, at the foot and hanging sides of the lime belt, and in the middle. Occasional nodules of zinc were found, and a little quartz along the walls.

(2) a straight replacement of the more massive parts of the limestone. Both plan and section indicate that it is quite irregular; it lies along the hangingwall of the main limestone zone and is from six feet wide at the east end, to ninety feet at the west end. Sufficient cuts have been made on this body to indicate its surface extent fairly well. Nothing in the structure of the limestones was noted that might explain the localization of the gossan; in several places small mineralized cross fractures were noted that may have acted as feeders, although there is no proof that they are not secondary.

The upper tunnel passes under the east end of the (2) orebody and shows from seven to twenty feet of semi-oxidised material with apparently sufficient blende remaining to make part of it a low grade milling ore; this shows both in the cross-cut and in the drift. Toward the portal from this is a weaker and thoroughly oxidised gossan.

The lower tunnel starts in on thirty or forty feet of fairly mineralized gossan, then passes through fifty or sixty feet of thin-bedded shaley limestone, or slate, which shows little mineralization, and then again enters a gossan zone which extends to the face; the last twenty feet shows the most intense mineralization, and contains some blende, though not enough to make it commercial. This tunnel does not extend quite to the hanging-wall of the main limestone beds.

Both tunnels show considerable siderite in lenses, irregular stringers, and pockets in less altered parts of the mineralized zone, and it is from this mineral that the iron of the gossan is evidently derived. The occasional nodules of blende and galena are always accompanied by this mineral.

In the No. 2 orebody there is evidence of increased mineralization on and near numerous small cross fractures which cut into it from both hanging and foot walls. The No. 1 orebody, or vein, is not yet sufficiently opened up to show much of its structure.

At several other points small veinlets, or feeders, have been opened in the limestone, usually standing vertical and standing at right angles to the limestones. These feeders generally show some lead carbonates around nodules of galena, and seldom show blende.

PROPOSED DEVELOPMENT: For preliminary development further trenching of the vein appears advisable. Also more trenching around the margins of No. 2 body, as well as trenching across the upper ridge and its valley to determine its significance.

For exploration below the gossan diamond drilling will be the quickest and cheapest method and should indicate within a short time whether the unaltered ores are sufficiently good to justify their opening by tunnels.

CONCLUSION: The location of the property is exceptionally good for cheap working except that it cannot be tunneled deeper than 400 feet below the apex of the outcrop.

The limestones appear to be favorable to replacement, and siderite is one of the most usual gangue minerals in the Slocan lead-zinc deposits; this with the occasional presence of lead and zinc in the gossan strongly indicated the presence of lead-zinc ores at further depth.

Oxidation is already proven to extend deeper than is usual in the district. The surface work shows a fairly large area of mineralization, and the tunnels rather suggest that it may enlarge downward. It is also probable that there are other surface areas that have not been found, since the property has not been carefully prospected except in the immediate vicinity of the workings.

Indications seem very good for the development of fairly large bodies of low grade milling ore, with the possibility of finding some higher grade ore. Low silver values are to be expected with the lead and zinc. The value of the property as a manganese producer is entirely dependent on the possible market some time in the future at the Trail smelter, or elsewhere.

What must be determined by deeper work, either by diamond drilling or tunneling and sinking, is primarily the grade of the lead, zinc, and silver in the unaltered ore, and secondarily the size of the bodies.

It is my opinion that oxidation may be found to extend as deep as 200 feet in places, and that the ore will be found to be essentially zinc with a little silver and possibly some lead, and that its value will not be high.

The property as it now stands justifies a preliminary testing by at least a half dozen drill-holes.

Respectfully submitted,

Chas. C. Starr



C o p y

(A few important sentences omitted)

Kaslo, B. C.
February 29, 1936.

Mr. Charles C. Starr,
P. O. Box 514,
Vancouver, B. C.

Dear Mr. Starr:

On coming into town yesterday I have your letter of Feb. 22nd in my mail.

I think I could not do better than to enclose with this reply a general statement that I have prepared on the "Contact" Group of claims. You may remember that at the time of your visit to the property about six years ago, I had only workings on the hillside directly opposite the cabin, across the creek. Further exploration on the surface along the strike of the lime bed has proved extension of the mineralization for a considerable distance beyond that which was showing when you were at the property. I have now what I call for convenient description "Western" and "Eastern" workings. The workings that you looked over are the western workings, and the eastern workings are about 1200 feet easterly along the strike from the western workings. The statement should give you some idea of these distinctions. For instance: Open cut No. 1 with some trenches and strippings, is in the Eastern workings, open cut No. 3 is intermediate, and about 500 feet easterly from the Western workings; and open cut No. 2 is on the hillside above the portal of No. 2 tunnel in the Western workings. There is about a thousand feet along the strike of unexplored ground between the Eastern and Western workings. I shall try to make a plan showing approximately the location of the surface exposures, within a week or two. All the work has been done on "Contact" mining claim and "Con" M. C.

Charles Lind and his sons have three claims immediately joining mine on the east. They made a discovery of a promising surface exposure of lead-zinc ore almost at the creek level, and about 150 feet from the railway. They are working on this discovery. It is in a wide lime bed, apparently paralleling the one in which my workings are situated, and about a thousand feet down the hill from my Eastern workings. They have crosscut the lime bed about 60 feet by a shallow tunnel, have drifted about 40 feet, sunk about 30 feet, and drifted along the hanging of the lime bed from the bottom of the shaft about ten feet. This work shows a strong mineralization of lead-zinc ore through nearly all the ground explored.

I would be willing to give you an option on the property about the time the snow goes for a sufficient time to allow of a thorough examination. If you decide to come here later I will give you my price and terms.

Yours truly,

A. J. Curle

GENERAL STATEMENT ON THE "CONTACT" GROUP
of mineral claims by the owner A. J. Curle,
Kaslo, B. C.

(Jan. 1936)

SITUATION: The group consists of eight claims, five along the strike of the main lime bed, two along the strike of a parallel lime bed, and one to the south of these claims. The ore bodies lie chiefly in these lime beds. The group is 14 miles westerly from Kaslo.

TRANSPORTATION: The Canadian Pacific Railway passes through the claims within 500 feet from the portal of the lowest tunnel on the property, and the government maintained highway passes within 800 feet of this tunnel.

TOPOGRAPHY: The land rises with a slope of about 50 degrees southerly from the north fork of the Kaslo river, and from the railway to the south boundary of the claims. As the dip of the formation is southwesterly, and the dip of the cross-fracturing southeasterly at angles of from 50 to 75 degrees, the topography of the country lends itself conveniently to diamond drilling in the future development of the property.

GEOLOGY: The claims are situated in the Slocan Series of limestones, slates, shales, and schists, with numerous intrusions of granite porphyry, such as are commonly associated with the ore bodies of the Slocan. The contact of the Slocan sediments with what is known as the Kaslo Volcanics, or Greenstones, cuts through Contact No. 2 mineral claim. The orebodies occur in the Slocan sedimentaries in the contact zone. Folded structures of the Slocan Series, with some metallic mineralization, indicate important prospecting possibilities above the present workings.

MINERALIZATION: The main orebodies so far uncovered occur as replacements in lime beds striking easterly and westerly and dipping to the south, the main beds being 275 to 300 feet wide, with here and there some interbedded shales, measured along the slope of the hillside. Extensive cappings have been exposed by surface workings, as strippings, trenches, and open cuts, and two prospecting tunnels, containing lead and zinc carbonates and sulphides associated with a manganosiderite matrix. In the workings a considerable amount of oxidised material containing remnants of galena and sphalerite is exposed, and they indicate a mineralized zone for about 2750 feet along the strike, and a width in places of from 300 to 400 feet in the ground so far explored. In the weathered cappings of the orebodies the manganosiderite weathers to brown, black, and bluish-black; the remnants of lead and zinc weather to iron rust, and in some places have been colored black or brown by manganese.

FRACTURING: In numerous places cross fractures cut the formations with a northeasterly strike, and dipping from 45 to 50 degrees southeasterly. Where these fractures junction or intersect the lime beds surface workings indicate large orebodies have been formed by replacement in the lime.

DEVELOPMENT: A large amount of surface work has been done, consisting of surface stripping, trenches and open cuts, and

two crosscut tunnels. Each tunnel is driven across the formations for a length of 180 feet, and in No. 1 tunnel a drift of 40 feet. Near the portal, No. 1 tunnel cuts across the orebody a width of about 60 feet, close to the hanging wall of the lime bed, and the drift exposes about 13 by 7 feet of zinc ore.

No. 2 tunnel is 55 feet lower in elevation than No. 1 tunnel and the portal is about 275 feet above the railway. At the portal, this tunnel cuts across a mineralized area a distance of about 70 feet, largely quartz filled, much leached, and containing lead and zinc sulphides and carbonates in sufficient amount to make a low grade ore. The end of this tunnel cuts through about 60 feet of manganosiderite, with this material still in the face, at a depth of about a hundred feet on the dip from the surface exposure of about 18 feet, and contains on this level some lead and zinc sulphides and a small amount of oxidized ore. There are about 35 surface strippings, trenches and open cuts on the length and breadth of the surface so far explored. A few are barren; in a number the cappings are exposed, and the others have float capping mixed in the surface material. In one trench the capping is exposed over a width of 90 feet on the cross cut. The elevation of the most easterly workings is 575 feet vertically above the railway.

ASSAYS: General sample from No. 3 open cut across 22 x 10 feet: Gold 0.10, Silver 30.6 Oz., Lead 16.8%, Zinc 8.2%.
General sample, exclusive of clean galena, from No. 2 open cut, surface exposure 25 x 8 feet: Gold 0.02, Silver 12.4 Oz., Lead 3.1%, Zinc 5.30%. Selected sample from this open cut: Gold Trace, Silver 69.2 Oz., Lead 64.0%, Zinc 10.0%.
General sample from No. 1 open cut, 30 x 60 feet, exclusive of clean galena, Silver 3.0 oz., Lead 4.9%, Zinc 6.8%. Hand sample of clean galena from this open cut: Silver 53.5 Oz., Lead 70.3%.
Hand sample of clean galena from No. 3 open cut: Silver 69.1 Oz., Lead 80.2%.
Piece of clean galena float ore 250 feet east along strike from No. 1 open cut: Silver 188.2 Oz., Lead 69.1%.

CLIMATE: Winters moderate, seldom zero weather, snow 2 to 3 feet. Summer moderate heat and rain.

TIMBER: Abundance of suitable timber on the ground for all mining purposes.

WATER: Abundance of waterpower for a large operation, conveniently available.

MILLING: Good sites on the ground adjoining the railway, from which short spurs or sidings could be built.

POSSIBILITIES: The manganosiderite could be improved by calcining if so required. Its possible use is for making ochre, manganese, pig, spiegeleisen, etc.

With regard to actual mining, the property is most conveniently situated, and development would be of the simplest character. Two or three crosscut tunnels 100 to 300 feet long to get under the surface exposures of ore would probably produce ore almost from the commencement of operations. The conditions are excellent for bringing this property into production with comparatively small expenditure and in a short time.

See also B. C. Minister of Mines Report, 1931.