

018291

UNITED EMPIRE

Gold & Silver Mining Company

NAME: UNITED EMPIRE GROUP

Claims:

Gold Cliff No. 1
Gold Cliff No. 2
Gold Cliff No. 3
Gold Cliff No. 4
Gold Cliff No. 5
Gold Cliff No. 6
Gold Cliff Fraction No. 1
Gold Cliff Fraction No. 2
Gold Cliff Fraction No. 3
Gold Fraction
Tom Fraction
No. 1 Fraction
Cliff Fraction
Lucille No. 1
Beth
Tom
Barney
Margaret
Jerry Dog
"B-D" Fraction
NM No. 1
NM NO. 2
NM No. 3
NM No. 4
NM Fraction

(See Map No. 1)

OWNERS: The United Empire Gold & Silver
Mining Company, Vancouver, B. C.

Capital: 4,000,000 shares par value 50¢

Shares allotted for property	1,706,425
Shares sold for cash	2,056,295
In Treasury	237,380
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	4,000,000
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LOCATION:

British Columbia - Cassiar Mining District - Portland Canal Section - three miles north of the town of Stewart and on the easterly slope of Mount Dolly.

The property is reached by a motor road from Stewart to the Lower Terminal of the aerial tramway, thence either by a steep horse trail or by means of a bucket on the tramway. The trip by trail takes between three and four hours and by tramway fifteen minutes.

The elevation of the lower terminal of the tramway - i.e. the valley of The Bear River - is 180 feet, whilst the portal of the main cross-cut is at an elevation of 2,900 feet above sea-level.

EXAMINATION:

Of the total area contained in the Group, only a part of that portion covered by the "Lucille No. 1", the "Gold Cliff No. 2 Fraction" and the "Gold Cliff No. 4", was examined. (See Map No. 2). No outcrops were seen on the ground outside of these claims.

The mountain side is rather steep - the slope being between twenty-five and thirty degrees - with numerous bluffs and precipices. It is bare of timber, and subject to severe snowslides during

the winter months.

Care had to be taken in the location of the main entry in order to prospect the showings during the stormy period.

GEOLOGY:

The particular area is underlain by granodiorite of the Coast Range Batholith and volcanics and sediments of the Bear River formation. The latter consists of tuffs, breccias and lava flows with beds of argillites and limestones. The base of the formation consists of interbanded tuffs and sediments with breccias and flows overlying, the whole being classed as "greenstones".

Tongues of granite porphyry cut the greenstones and evidence of these were noticed on the ground, but were not traced.

As mentioned by Dr. Hanson of The Canadian Geological Survey, the Bear River formation is a favourable one for mineral deposits and it is in this formation that the showings under consideration occur.

The contact between the granodiorite and the greenstones crosses the lower part of the "Lucille No. 1" claim and the deposits occur in the greenstones with a trend practically at right angles to the contact. It is considered the area is well situated from a geological point of view.

ORE DEPOSITS: The deposits are of the replacement type. The greenstones - mainly tuffs - have been fractured and fissured in zones with a general strike of about north 40° west, or at nearly a right angle to the line of the main contact.

Along this fissuring ascending solutions have silicified the adjacent country rock and in places replaced the original rock minerals with metallic minerals - pyrite mainly - followed by arsenopyrite, sphalerite galena with subordinate amounts of tetrahedrite; comparatively little vein quartz is shown.

From the surface exposures it is deduced that there were two and possibly three main channels of mineralization, locally called veins, as follows:

1. The Brindle vein exposed by an open cut near the "Brindle" tunnel.
2. The Thompson vein exposed by an open cut above the "Trites" tunnel.
3. The Empire vein, just west of and above the Thompson open cut.

The mineralization shown in the "Dann" tunnel and the open cuts above may be a continuation of the "Brindle" showing but as these exposures are 900 feet apart with only one unimportant exposure between, it is rather stretching the imagina-

tion to connect the two.

It is quite possible that the Empire vein may be a section of the Thompson vein offset by a fault and this was considered, but there was no definite evidence noticed on the surface which would decide the point, and it is assumed these showings are on separate channels.

WORKINGS:

1. The "Brindle" cut. (See Map 2)

Here is shown 5 feet of tuff impregnated with iron, zinc and lead sulphides in bunches up to six inches in diameter. A fracture in the rock with a strike with 35 degrees west and dip south east forms the hanging of this showing. The iron and zinc predominate here, the lead being in minor quantity.

From the cut 31.5 tons of ore were shipped assaying 0.065 oz. Gold and 49.95 oz. silver.

A crosscut tunnel was started thirty feet below to cut the south east extension of this showing but did not expose anything. A raise was driven to reach the open cut but has not been continued far enough to break through. The sketch on Map 2 is taken from the Company's maps and may not be particularly accurate. While it is quite possible that the dip shown on the hanging side may throw the con-

tinuation of the ore exposed on the surface more to the East and outside of the ground cut by the tunnel, the fact is that no continuation of the showing was cut in depth and the inference is that the ore pinches below the open cut.

The fissure shown in the open cut appears in the bluff across the small stream but no mineralization was noticed.

A general sample of the ore went 0.03 oz. gold, 19.2 oz. silver.

2. The "Thompson" Cut. (See Map 2)

This cut was made 520 feet north west of the "Brindle" cut and about 270 feet above. The cut is $3\frac{1}{2}$ feet in width and at the present shows iron, zinc and lead sulphides in a tuff rock, the average width of mineralization being about two feet. On the east side of the cut a smaller cut shows considerable galena.

At the upper end of the cut the fissuring apparently turns north easterly with very little mineral showing, and although several open crosscuts have been made above no continuation of the mineral was uncovered.

From this point 20.7 tons were shipped, assaying 0.10 oz. gold and 59.10 oz. silver, most of which

went to Selby.

A 3 foot sample from this cut assayed 0.10 oz. gold, 11.9 oz. silver, 0.6% lead, 0.9% zinc. A sample of galena from the side cut went 0.14 oz. gold, 164.0 oz. silver.

The "Trites" tunnel cuts under this showing but does not develop anything like the ore exposed in the cut.

3. The "Empire" Cut.

North west of the "Thompson" cut a distance of 40 feet, a cut has been made exposing iron lead and zinc sulphides in the tuff country rock. The cut is 3 feet wide, follows a series of seams in the country for a length of about 50 feet and shows a high mineralization. At both ends the seams tighten and no sulphides are apparent. From here was shipped 4.5 tons, assaying 0.10 oz. gold and 59.10 oz. silver.

A sample cut 1.5 feet in width went 0.17 oz. gold, 5.9 oz. silver, 0.1% lead, 0.2% zinc.

A number of open cuts were made farther up the mountain side exposing mineralization along fracturing in the country rock almost continuously for 460 feet in length. In one cut called the

"High Grade" cut, the silver content is high, a sample over 2 feet assaying 0.05 oz. gold, 121.2 oz. silver, 5.4% lead, 5.4% zinc. Samples from the other cuts were low.

The "Dann" tunnel was started at an elevation of 3200 feet to cut under these showings. It was driven for a distance of 200 feet following a soft streak averaging 6 inches in width and which is more or less mineralized. Occasional widths of 3 feet of ore were cut which are reported as having given results from 20 oz. to 50 oz. silver per ton. The present sampling only gave from six to seven ounces per ton.

As mentioned, the "Brindle" Tunnel did not cut any ore. It is thought the drift should have been continued farther to the north to cut directly under the surface showing and prove or disprove the downward continuation of the ore.

In the "Trites" tunnel, three small showings have been exposed. The one near the face is the most promising, assaying 0.06 oz. gold, 12.5 oz. silver, 1.4% lead and 1.1% zinc. The tunnel has been driven in an erratic manner but in general follows the trend of the fracturing in the country rock.

The portal of the main cross at an elevation of 2900 feet above sea-level was located at a point considered safe from the effects of the snow slides which occur every winter in the area. It was well laid out and the work of driving credibly done. The first leg is on a course south 86 degrees west for a distance of 474 feet at which point the course changes to south 27 degrees west for a distance of 1057 feet where the zone of mineralization is reached; the cross-cut continues on for a distance of about 60 feet.

From the portal in for a distance of about 500 feet the cross-cut is in the argillites of the Bear River formation. At a point 380 feet in it crosses a major fault, evidence of which may be seen on the surface. At 500 feet the tuffs appear and from this point to the face only very minor bands of argillites occur. A number of open fault fissures are crossed, which are more or less parallel to the contour of the hillside. Several highly silicified bands carrying pyritic mineralization are cut and at a point about 950 feet from the turn a silicified zone carrying pyrite was reached. This is said to line up in strike with the "Brindle" cut. However a sample only assayed 0.6 oz. silver.

At the point 1057 feet from the turn drifts to the south east and north west were driven. The south east drift was continued until it broke on the surface as shown on Map 2.

In this drift 12 feet from the turn galena mineralization appears and continues to a point 35 feet in. Assays from 22 oz. to 92 oz. being obtained from five feet cuts across the back, the average being 52 oz. From the 35 feet point to 110 feet, the results are low and from 110 feet to 148 feet the average is 11 oz. per ton. From the 200 feet point to 205 feet point the average is 9 oz. per ton.

From the 205 feet point to where the drift holed out only very sparse mineralization is shown.

In the north west drift the sampling for 45 feet gave low results, while the faces of this drift assayed less than one ounce silver per ton.

DISCUSSION:

The values shown by the sampling are mainly in silver. As the tenor of gold, lead and zinc is low, in the following discussion these are not referred to.

The ore exposed on the surface, namely, at the "Brindle" cut, the "Thompson" cut, the "Empire" cut and the "High Grade" cut, are quite a distance apart. The distance between the "Brindle" cut and the "Thompson" cut being about 500 feet. From the "Thompson" cut to the "High Grade" cut the distance is 650 feet. There are no surface showings of any account between these points.

The fact that there was 56 tons of sorted ore averaging 0.07 oz. gold and 54.0 oz. silver from the "Brindle", "Thompson" and "Empire" cuts was an indication of what might be expected at depth, and fully warranted further prospecting.

The underground development has not borne out the natural expectations, as while the work in the "Brindle" tunnel was not well conceived, the inference is the ore shown in the cut does not go down.

The exposures in the "Trites" tunnel are also unsatisfactory as what mineralization is cut does not approach anything like the ore from the "Thompson" cut.

The south west drift of the main level has exposed a shoot 23 feet in length with an average width of 5 feet, which is of commercial value. Assuming this is an extension downward of the "Thompson" cut the most one can estimate is 2800 tons. ((See Map 3 (section)))

In consequence, there is no tonnage so far developed to warrant any consideration whatever of the installation of a mill.

The development so far underground, in any of the workings, has not disclosed any shoots of ore which can compare with the surface showings, and in this regard the work has been disappointing.

There is no geological reason why the values should not extend to depth, but what will have to be taken into consideration as to future work, is the distance apart of shoots of ore of economic value. The work in the North west and south east drifts shows a zone of mineralization 260 feet in length. While only 23 feet of this carries economic values the balance invariably shows silver content. The amount of this content, while low, is greater than would be expected from the appearance of the rock, and, to the eye, the absence of galena and zinc mineralization leads to the inference that the silver content is in the form of one of the silver sulphides, fairly widely distributed. The question being whether there are concentrations of values sufficiently close together to pay for the

mining of such bodies.

This can only be proved by further work, which brings up the question as to whether such further work is justified. If the property was to be purchased a negative answer would be given. As it is, all the dead work to reach the mineralized area has been finished and the opinion is that further work along the north west drift is worth while.

RECOMMENDATIONS: As mentioned, the maps submitted with this report, particularly Map No. 2, are compiled from compass surveys and maps submitted by the Company. These are not sufficiently accurate and an instrumental survey should be made, tying the "Brindle" workings, the "Thompson" and "Empire" cuts, the "Dann" tunnel and the "High-Grade" cut with the main level workings.

The north west drift should be continued in as straight a course as possible and cross-cuts 30 feet or 40 feet long made at every 100 feet distance along the main drift. As there is a diamond drill on the property, holes from this machine would do as well as the crosscutting. Several down holes might be driven to catch the downward extension of the zone of mineralization.

If after driving the north west drift another 200 feet favourable results were not obtained, the underground work should be discontinued, and when weather conditions permit an intensive prospecting of the surface of the balance of the ground covered by the group, be undertaken.

The cost of extending this drift 200 feet with the crosscuts should not exceed \$6,000.

When the extension is completed, the zone will have been thoroughly explored for a distance of 700 feet. If other shoots of ore of a reasonable size are cut, further work may be considered, but if not, the chances are too great against the development of sufficient ore to make a profitable operation, and underground work should be discontinued.



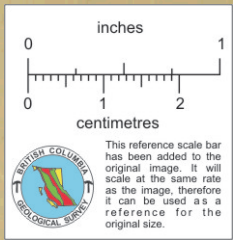
Vancouver, B. C.

November 16, 1934

T. W. GUERNSEY

ANALYSES OF ALL ASSAYS

From	Taken by	Width	Gold Oz	Silver Oz.	Lead %	Zinc %
Brindle Cut	Shipped	31 tons	0.065	49.95	17.1	15.1
	Coates	2 ft.	0.03	24.90		
	Kett	5	0.08	30.90	9.90	
	Guernsey	3	0.03	19.20		
Thompson cut	Shipped	21 tns.	0.10	59.10	15.4	13.8
	Coates			12.7		
	Kett	8 ft.	0.10	66.5	11.0	9.0
	Guernsey	3	0.10	11.9	0.6	0.9
Side cut	"	Galena	0.14	164.0		
Empire Cut	Shipped	5 tons	0.10	59.10	15.	13.
	Coates		0.03	27.5		
	Guernsey	1.5 ft.	0.17	5.9		
	"	1.0	0.16	29.0		
Dann Tunnel	Kett	4.6 ft.	0.05	56.0	6.0	8.0
	James	2.5	0.06	51.		
	Mandy	5.0	0.02	27.	T.	1.6
	Guernsey	4	0.01	7.6		
	"	2	0.03	6.2		
High Grade Cut	Kett	1.8	0.104	169.3		
	Carter			128.8		
	Guernsey	2.0	0.05	121.2		
Main Level SE	Mine	5.	0.03	15.0		
	Guernsey	5	0.05	14.0	1.5	2.0
NW	Mine	5	0.03	9.3		
	Kett	6	0.125	19.05		
	Guernsey	6	0.027	3.1	1.5	2.0



International Boundary



- Legend -

Greenstone	
Granodiorite	

- UNITED EMPIRE -
- GOLD & SILVER MINING Co -

Group of Claims
Scale 1" = 1000'

