

680274
Sinbad Property

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REPORT ON THE SINBAD PROPERTY
MOUNT McCLENNAN AREA
KAMLOOPS MINING DIVISION OF B. C.

INTRODUCTION

This report covers the examination of the groups of claims known as the Sinbad Property located on Mount McClellan in the Kamloops Mining Division of B.C.

The writer made the examination on July 23rd, 1966 accompanied by Mr. H.C.B. Leitch, P.Eng., who has made a comprehensive geological study of the property and whose reports have been used for reference.

This report was written at the request of Crowpat Minerals Ltd., Suite 906, 217 Bay Street, Toronto 1, Ontario.

LOCATION AND ACCESS

The property is located on Mount McClellan about 90 miles north of Kamloops via Highway No. 5. A logging road leads off from the highway about one mile east of the village of Vavenby and goes up to the plateau on Mount McClellan which is at an elevation of about 5100 feet above sea level. Bulldozer roads have been built from the logging road to cover the principal mineral showings. The distance from the highway to the center of the property would be about 9 miles. The main line of the C.N. Railway follows the highway, and there is a station at Vavenby.

A location plan accompanies this report.

TOPOGRAPHY, CLIMATE, TIMBER, ETC.

The claim area covers most of the plateau on Mount McClennan which slopes gently to the south with some hills 200 to 400 feet in elevation. The average elevation of the property would be around 5100 feet.

The area is relatively dry in the summer months and averages about 5 feet of snow during the winter. Road maintenance for winter operations should not present any problems.

There is adequate timber on the property for all purposes. Sufficient water for exploration work could be obtained from the small streams and swampy areas.

PROPERTIES

The Sinbad properties consist of 102 located claims. The following names and record numbers were provided by Mr. Leitch and are believed to be correct.

<u>Name</u>	<u>Record No.</u>
Sinbad # 1 to # 4 incl.	33843 to 33846 incl.
Sinbad #11 to #14 incl.	33853 to 33856 incl.
Sinbad #19	33861
Pine # 1 to #12 incl.	55347 to 55358 incl.
Pine #13 to #33 incl.	Not yet received
Lucky Star #1 to #13 incl.	43158 to 43170 incl.
Craig # 1 to #12 incl.	55605 to 55616 incl.
Craig #13 to #32 incl.	Not yet received
Roc #21 to #29	Not yet received

EARLY HISTORY

The claim area covers several old prospects which date from the

early 1920's, among them being the Sunrise Group or Naomi, the Snow Group, and the Red Top Group. The Naomi covered what is now known as the Eastern Showings, while the Snow group would fall in the present Central Showings.

There are brief mentions of the above named prospects in the B.C. Minister of Mines Reports for 1922, 1923, and 1924, and they are described in the G.S.C. Summary Report, 1930 Part 'A' under "Clearwater River and Foghorn Creek Map Area, Kamloops District, B.C." by Dr. J.F. Walker.

A description of the property is quoted from this report:-

"RED TOP

The Red Top group owned by W.E. Noble of Birch Island and J. Beaton of Vavunby is situated on the western end of the summit of Mount McClellan at an elevation of 4,900 feet. The property is reached by way of the Mount McClellan forestry trail to a cabin at an elevation of 4,650 feet and then by a branch trail $2\frac{1}{2}$ miles long.

This group has been prospected by a number of open-cuts. The most westerly cut is 15 feet long across quartzites dipping 40 degrees north and is barren. Seventy feet due east is the north end of a cut that follows a lamprophyre dyke for 75 feet along a direction of 160 degrees. A little quartz carrying galena, sphalerite, and pyrite is exposed at one point along the side of the dyke and at this point there is also some sphalerite and pyrite in the quartzose sediments. Sixty feet east is the principal showing in a cut 50 feet long and exposing quartzites that strike 278 degrees and dip 42 degrees north. At 12 feet from the south end of the cut, sphalerite, galena, quartz, and pyrite are present in a zone that follows the bedding of the quartzite and is about 3 feet thick. Most of the mineralization is a very fine intergrowth of sphalerite and galena, for the most part replacing the quartzites.

Three hundred and eight feet easterly along the strike of the quartzites, a 45-foot cut exposes a lens of quartz carrying some sphalerite and galena. The lens conforms with the attitudes of the quartzites, striking 285 degrees and dipping 43 degrees to the north. Sixty feet farther east, an 18-foot cut across quartzites, striking 295 degrees and dipping 45 degrees north, exposes a thin stringer of bedded quartz carrying very little sulphide. The next and last cut is 220 feet easterly, is 18 feet long, and exposes a little pyrite in the quartzites.

SNOW GROUP

The Snow group owned by W.E. Noble and J. Beaton is situated about 1 mile east of the Red Top workings at an elevation of 5,000 feet and immediately to the south of the Red Top trail.

An open-cut 115 feet long exposes an 18-inch lens of quartz and calcite with pyrite, sphalerite, and galena. The lens lies in and conforms with the bedding of quartzites and schistose platy quartzites which strike approximately 300 degrees and dip 14 degrees north-east. In the trench, a section, measuring 20 feet across the strike of the rocks, shows considerable oxidation apparently from the decomposition of pyrite. North of the long cut, a pit in drift and two open-cuts in quartzite are barren. Surface stripping just east of the northerly cut, or 80 feet from the north end of the long cut, exposes an irregular quartz vein up to 2 feet in width and containing pyrite, galena, and sphalerite. It dips flatly to the north in rough conformity with the bedding of the country rock. A number of trenches and pits occur easterly from the long cut at intervals for 2,500 feet, but show little or no mineralization. The easternmost pits are beside the Red Top trail and one of them on the south side of the trail exposes a small, bedded quartz vein carrying pyrite.

SUNRISE

The Sunrise group includes the old Nacmi claim and lies east of the Snow group. The workings are at an elevation of 4,870 feet on the side of the Forestry trail where it starts to climb to the summit of Mount McClellan. They consist of three large open-cuts, a shaft, and two adits, all in quartzites. Massive pyrrhotite and pyrite occur in the form of a large, lenticular sheet or mass dipping slightly more steeply to the north than the almost flat-lying sediments.

The following quotations from reports by the Resident Engineer, A.W. Davis, in Annual Reports, Minister of Mines, British Columbia, for the years 1922 and 1924, indicate clearly the values found in the deposits. The present writer did not find the high-grade streak referred to in the 1924 report and it is possible that it has been taken out.

"The ore is siliceous, iron material lying in streaks conforming with the schist.... The following samples were taken from open-cuts 150 feet above tunnel:

1. Upper 4.5 feet: gold, trace; silver, 1 ounce.
2. Lower 5 feet: gold, trace; silver, 2.4 ounces.
3. Picked sample from same cut showing streaks of black material: gold, 2.9 ounces; silver, 2 ounces.
4. Along outcrops 600 feet east of tunnel: gold, trace; silver, 15 ounces.

At the camp and near where the main workings are located a high-grade streak is exposed carrying grey copper, from which good values can

be obtained. A sample taken last summer assayed: 4.6 ounces gold and 2.2 ounces silver, to the ton. This streak is very small and erratic; but following up and tracing it would appear to be the best method of developing the property. " "

It should be noted that these earlier prospectors were searching for high grade direct shipping gold-silver ore. Mill grade lead-zinc deposits were of little interest to them in those days.

REGIONAL GEOLOGY

The geology of the Mount McClellan area consists of a complex series of sedimentary and intrusive rocks ranging in age from possibly Precambrian through to Tertiary or later. The region was mapped by R.B. Campbell in 1962 and 1963. (G.S.G. Map 48-1963, Adams Lake)

The oldest rocks consist of metamorphosed sedimentary and flow rocks and include phyllites, crystalline limestones, quartzites, greenstones and argillites, and their corresponding schists.

These older rocks have been cut by granitic intrusives of probable Jurassic or Cretaceous age. The latest rocks are olivine basalt flows of probable Tertiary origin which have been noted to the northwest of Mount McClellan.

Where rocks are exposed in the claim area the strike of the formation is generally east-west with dips to the north varying from 0° to 25-30°, with rolls producing flat dips to the south in some areas.

Mr. Leitch, who has spent considerable time in the mapping and correlation of the visible structures within the claim area suggests that the main part of the area covers the crest of an anticline. Mapping by Campbell shows the intrusive granites to be in contact with the older

sedimentaries and metamorphics in a generally east-west line along the crest of the mountain.

DESCRIPTION OF THE MINERALIZATION

As the greater part of the claim area is covered with overburden, mineral showings are confined to a number of old pits and trenches dating from the early exploration work (See Early History), plus some recent trenches cut by the present owners of the property. These old workings are in three distinct areas generally along the same line of strike but separated by several thousand feet. Their approximate positions have been shown on the location map which accompanies this report.

The three principal areas of mineralization have been designated the Eastern Showings (Sinbad #1 claim), Central Showings (Sinbad #13 & 11 claims) and Western Showings (Sinbad #19 and Lucky Star #1 claims). These will be discussed separately.

1. Eastern Showings - These cover between 600 and 700 feet along strike and include several old cuts and pits, a shaft, and a short adit. The mineralization exposed in these workings consists of bands of massive pyrite and pyrrhotite with sphalerite, galena and chalcopyrite, interspersed with highly silicified limestone, phyllite, and greenstone schist. The mineralization conforms to the bedding of the rocks which dip flatly to the north. The bands vary in thickness from an inch to over 4 feet, and appear thickest on the noses of rolls in the bedding.

2. Central Showings - Old trenches cover 600 feet in an east-west direction along strike and approximately 4000 feet west of the Eastern showings. The trenches show bedrock of siliceous limestone with epidote as

an alteration mineral and containing bands of mineralization consisting of pyrite, chalcopyrite, galena, sphalerite and some magnetite. Some pyrrhotite was noted in dump material.

3. Western Showings - These are in the extreme northwestern part of the claim area and are not on the direct line of strike with the Eastern and Central Showings, but appear to be offset to the north and west by faulting.

The rocks in this sector as exposed in a number of old trenches and pits covering about 900 feet are a highly silicified limestone. Mineralization of a replacement type consisting of galena, sphalerite, pyrite and minor chalcopyrite occurs as bands in the silicified rock and follows the dip of the bedding which in this area averages about 30°N.

SAMPLING

Accurate channel sampling of the mineral exposures in the various pits and trenches on the property is almost impossible due to the extreme hardness of the material, and the flat-lying formations. Mr. Leitch has taken a number of samples from different exposures during his examination and mapping of the property but the results of these cannot be considered representative of the whole mineralized zone but serve to indicate mineral relationships. Three character samples of mineral from different areas were taken by the writer for the same purpose. The results of various samples are tabulated in Appendix 'A'.

GEOPHYSICAL EXPLORATION

Some preliminary dip needle survey work has been done by Mr. Leitch over the eastern section of the property. This survey indicated an anomalous trend to the east, and was later confirmed by a magnetometer survey over the same ground. As very little magnetite has been noted in the Eastern Showings Mr. Leitch attributes the anomaly to the presence of pyrrhotite which has been found to be associated with lead, zinc, copper, and silver mineralization. The trend of the anomalous readings suggested concentrations of pyrrhotite mineralization between folds.

Some random dip needle work by the owners over the area of the Central Showings is reported to have indicated anomalous conditions, but this has not been confirmed by a magnetometer.

SUMMARY AND CONCLUSIONS

The Sinbad property consisting of 102 claims is located on Mount McClellan and is underlain by a complex series of metamorphosed sediments and flow rocks which have been intruded by granodiorite of Jurassic ? age. Regional mapping of the claim area indicates that it covers the crest of a major anticlinal structure.

Mineralization has been exposed in a number of old pits and trenches for over 12,000 feet in an east-west direction. The occurrences consist of replacement type bands of sulphides in siliceous limestones and schists and conforming to the bedding of the host rocks. The principal sulphides are pyrrhotite, pyrite, sphalerite, galena and chalcopyrite carrying gold and silver values. Minor amounts of magnetite are also present. The

individual bands vary in width from an inch to over four feet.

Some preliminary dip needle and magnetometer survey work on the property has indicated some definite anomalous trends which are considered to be due to concentrations of pyrrhotite and associated sulphides within folds in the structures.

The widespread indications of metallic mineralization and the structural features of the property suggest the possibility of large replacement type bodies of sulphides within the crown of the major structure. The property lends itself to a geological and geophysical approach to delineate specific areas where more detailed exploration and diamond drilling would be justified.

The proposed phases and sequence of the preliminary exploration are outlined below under "Recommendations".

RECOMMENDATIONS

1. Grid lines should be cut and picketed over selected sections for subsequent mapping and survey. (This work is already in progress.)
2. Geological and mineralogical features should be accurately mapped.
3. A magnetometer survey should be conducted section by section starting with the eastern part of the property.
4. Anomalous trends resulting from (3.) should be confirmed by other geophysical methods, probably E.M.
5. Confirmed anomalies should be tested by diamond drilling, and bulldozer stripping if feasible.

ESTIMATE OF COSTS

The following estimate of costs may be used for budgeting purposes. Actual expenditures will depend on the results obtained from each stage of the program.

Line cutting and picketing (say initially 30 miles @ \$100.00 per mile)	\$ 3,000.00
Prospecting and geological mapping	2,500.00
Magnetometer survey	3,000.00
Follow-up geophysics as required, allow	5,000.00
Establishment of camp, supplies, transportation etc., allow	3,500.00
Engineering and administration	1,500.00
Reserve for stripping and/or diamond drilling as justified, allow	<u>30,000.00</u>
Total	\$48,500.00

August 2, 1966

J.P. Elwell, P.Eng.
Consulting Mining Engineer.

References

B.C. Minister of Mines Reports for 1922, 1923, 1924.

G.S.C. Summary Report Part 'A', "Clearwater River and Foghorn Creek Map Area, Kamloops District, B.C." by Dr. J.F. Walker.

Reports on Sinbad Property by H.C.B. Leitch, P.Eng., 1962 and 1966.

APPENDIX 'A'

SAMPLING RESULTS

Sample No.	Width	Taken By	Oz. Au	Oz. Ag	% Pb	% Zn	% Cu	Location & Remarks
8526 B	6'	Leitch	0.01	2.15	0.20	1.35	0.05	Eastern Showings - massive sulphides, interbanded schist.
8528 B	3	Leitch	0.005	1.35	0.65	2.05	0.15	Eastern Showings - massive pyrrhotite
--	grab	Leitch	0.005	0.95	2.40	3.75	0.70	Sulphides in crystalline limestone - Eastern Showings
--	2'	Property Owner			8.25	2.57	1.70	Central Showings - bottom of new trench
8131 B	5	Leitch	0.005	0.55	2.75	3.15	0.08	Western Showings - mineral in silicified LS
--	5'6"	Leitch	Tr	0.55	0.55	0.12	0.05	Western Showings - mainly pyrite
1769		Silver Standard Mines	0.02	6.50	5.54	3.62	0.10	Claim area - exact location not known
1770		Silver Standard Mines	Tr	4.0	2.43	0.75	0.96	Claim area - exact location not known

CERTIFICATE

I, JAMES PAUL ELWELL, of 4744 Caulfeild Drive, West Vancouver, B.C., do hereby certify that:-

1. I am a Consulting Mining Engineer residing at 4744 Caulfeild Drive, West Vancouver, B.C. and with an office at 929 - 510 West Hastings Street, Vancouver, B.C.
2. I am a graduate in Mining Engineering from the University of Alberta in 1940, and am a Registered Professional Engineer in the Province of British Columbia.
3. I have no personal interest, directly or indirectly in the properties examined or in Crowpat Minerals Ltd.
4. The findings in the report are the result of a personal examination of the property made by me on July 23rd, 1966, from information obtained from various Government publications, and from reports and information supplied by Mr. H.C.B. Leitch, P.Eng., Consulting Geologist.

DATED at Vancouver, B.C., this 3rd day of August, 1966.

James Paul Elwell, P.Eng.

APPENDIX 'A'

(Addenda)

SAMPLING RESULTS

Sample No.	Width	Taken By	Gs. Au.	Oz. Ag.	% Pb.	% Zn.	% Cu.	Location and Remarks
811	Grab	J.P.E.	0.02	0.30	7.70	0.11	0.23	Character sample, sulphides Central showing.
812	Grab	J.P.E.	Tr.	Tr.	2.13	2.46	0.04	Mineralized material, Western showings.
813	Grab	J.P.E.	Tr.	Tr.	8.70	26.80	0.12	Character sample, sulphides Eastern showing.

*13

SINBAD #11

SINBAD #11 WORKINGS
 SINBAD-ROC GROUP
 VAVENBY

Scale 1" = 50'

POSTS

1300'

Location

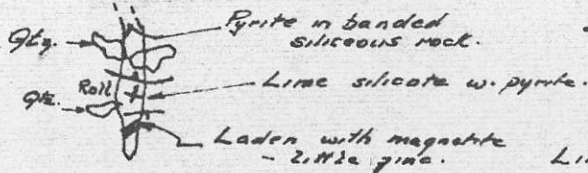
1200'

Line

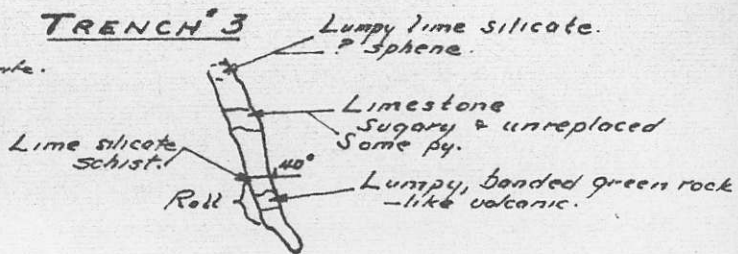
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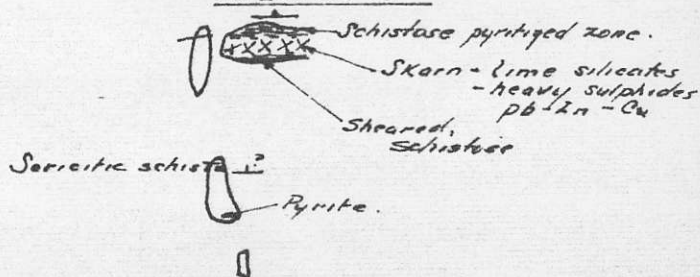
TRENCH 4



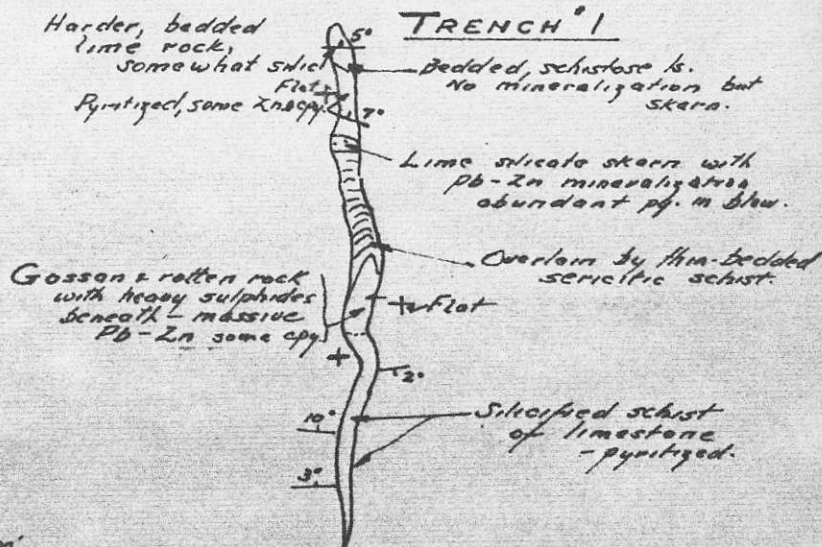
TRENCH 3



TRENCH 2



TRENCH 1



with 1/61