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GENERAL PROGRAM

From a discovery standpoint, the General Program has not met with spectacular success. The Management still believes that there are mines to be found in the Babine Lake area but that discoveries will probably only be made when some company recognizes something much more significant than the generally accepted nostrum that the biotite feldspar porphyry (BFP) is a favourable host rock for copper. The overburden situation has been discussed ad nauseam, as has the applicability of geochemistry to the area.

No further reconnaissance work is planned for the Babine area. Proposals for further work on specific properties will be introduced at the Annual Meeting.

A camp-by-camp description of the work accomplished during the Third Quarter has been prepared by our Exploration Superintendent, Mr. J.C. Stephen. (See also Camp Index Map)

CAMP 1 - HOL GROUP

A copy of the HOL Assessment Report filed with the Department of Mines was mailed to each of the Parties on September 5th.

The HOL camp was re-occupied to conduct additional IP work. In addition, mapping of talus, rubble and float south of the IP anomaly indicates a possible non-magnetic phase of the intrusive and suggests that the IP results may be largely from a source within an intrusive complex. Mapping to the northwest of the HOL group revealed another phase of intrusive rock containing prominent quartz phenocrysts and indicating another larger extension of the intrusive area.

CAMP 5 - BREE GROUP

The BREE claim group was carefully examined. The geological and geochemical data were disappointing and no further work is recommended. This group should be dropped.

CAMP 6 - ROJO GROUP

An IP survey covering the 24 claims was conducted on lines 800' apart. Two strongly anomalous areas were indicated. The first along the northwest boundary of the property is on strike with graphitic sediments to the north on the surrounding Amoco claims. IP results indicate high frequency effects and low resistivities consistent with a strong band of graphitic sediments.

In the southwestern portion of the property, a strong IP anomaly showed somewhat different characteristics. J.C. Stephen investigated rock outcrops in the vicinity and ran magnetometer profiles.

Total lack of mineralization or favourable alteration led to the assumption that this anomaly was also caused by graphitic sediments.

Diamond drilling by Cities Service Minerals on similar IP results, on strike south of Fulton Lake, cut graphitic sediments and chert with considerable disseminated pyrite. This group should be dropped if it cannot be optioned to Amoco.

CAMP 12A - CHEK GROUP

Follow-up work in the vicinity of the TAC claims staked in 1972 led to the establishment of two areas within an intrusive complex which are anomalous for copper, zinc, molybdenum, lead, silver and cadmium. During the 1973 program, silt samples from this region were run for copper, molybdenum, zinc and silver. Further check work on the other elements might be desirable.

The CHEK group of claims was staked to cover more accurately the anomalous area and the TAC claims are being allowed to run open. Crew problems on this project led to termination of the work long before the desired objectives were reached.

A program of geophysics (EM-16?) and trenching may be worthwhile on this group. Source of the anomalies is presumed to be vein structures, possibly containing significant gold as the anomalies appear to indicate mineralization similar to the Topley Richfield and other properties a few miles to the west.

CAMP 13

Altered sediments and pyrite mineralization were found in this area and the 18 claim KITI group was staked adjoining the DOROTHY and DA-NAK claim blocks held by Ducanex and Noranda. Geochemical results were poor and it has been concluded that the alteration is probably associated with the previously known showings. The claims should be allowed to lapse.

CAMP 14 - FORT GROUP

A program of soil sampling was undertaken on a tape and compass grid. Geological mapping was done at 1" = 400' and a grid of picket lines was cut in what appeared to be the most favourable area.

I thought there was Cu float?

Considerable pyrite and pyrrhotite mineralization was found, both in intrusive rocks and surrounding altered sediments. Chalcopyrite occurs in a few BFP dykes but in very minor quantities. A sample from one of these dykes ran only 0.04% Cu.

IP surveying was hampered by bad weather. Strongly anomalous results over extensive areas were encountered but lines are too widely spaced to be conclusive. Compilation of data and checking of rock specimens still continues but it is suspected that some of the sediments are conductive and may contribute much of the IP effect. There are some locations, however, that may require more surveying.

In general, the rock structure appears to be a local, west-plunging syncline intruded by several small diorite stocks and porphyritic dykes. A zone of hornfelsed sediments surrounds these intrusives and contains some pyrite pyrrhotite mineralization.

Very little oxidation of sulphide minerals has taken place which might, in part, account for the low geochemical values. However, results of soil sampling did not prove encouraging.

CAMP 15

Prospecting along the northwest contact of the intrusives containing the WOLF showing revealed nothing of economic interest.

CAMP 16

An isolated monzonitic intrusive, represented by a low order magnetic anomaly and a topographic high, proved to be barren.

CAMP 17

This camp more or less repeated Camp 14 of the 1972 season and was occupied to check for possible fracturing, etc., in light of experience on the HOL group.

CAMP 18

Further investigation of the geochemical anomaly and geology on the 1972 TOR group returned negative results.

CAMP 19

Several quartz feldspar porphyry intrusives occur on this ridge. Minor copper and extensive pyrite mineralization was found. Results were not sufficiently encouraging to warrant further work.

CAMP 20

Prospecting around an intrusive in this area revealed nothing of significance.

CAMPS 21-24

These camps investigated the region surrounding French Peak. Copper mineralization discovered in the 1960's by Mastodon-Highland Bell is now held by Silver Standard. Extensive pyrite mineralization surrounds this area. On the north slope of the ridge north of Camp 22, a large pyrite gossan is held by Canadian Superior.

Geology of the area is extremely complex and has not been satisfactorily mapped. Geochemical and assay results were disappointing.

CAMPS 25-27

Aeromagnetic anomalies outline volcanics in a sequence of possibly Lower Cretaceous age, surrounded by sediments of Upper Cretaceous age. Only one small granitic intrusive was found and no significant geochemical results were obtained.

CAMP 28

This camp was located midway between three areas of porphyritic intrusives. To the south, Trail Peak contains an interesting copper prospect.

Fractured and altered sediments, highly pyritized, were found which appear similar to strong pyritic halos around deposits such as DA-NAK and DOROTHY to the south. However, silt and soil sampling failed to show any sign of copper or molybdenum mineralization.

CAMPS 29, 30

These camps served to investigate several biotite feldspar porphyry intrusives. Some of these are small bodies but one appears to be a large sill or stock some four miles in length. Within this 'sill' an extensive zone of alteration occurs which contains much pyrite. No sign of economic mineralization was found.

Canadian Superior had previously conducted a large exploration program on similar intrusives in the area extending north from Camp 29.

CAMP 31

This camp served to help explore the BFP 'sill' looked at from Camp 30 but also served to investigate Jurassic volcanics which contain occurrences of chalcocite, bornite and chalcopyrite. These copper occurrences are generally very small and are found in flow tops or similar structures, or are associated with fracture controlled, epidote-rich zones up to 6' wide and 300' long.

No prospects of economic size were found but the rock types, type of mineralization, and abundance of epidote indicate formations and conditions somewhat similar to those found on Sustut Peak, where Falconbridge is carrying out extensive drilling of a copper deposit.

CAMP 32-39

further work.

Investigation of the volcanic-sedimentary sequence north of Takla Lake resulted in finding three copper showings over a distance of about 1½ miles. These showings consist of chalcopyrite and pyrite

mineralization on fractures in volcanic rocks and occur on the steep east side of a ridge, at about the 4500 foot elevation.

A grab sample from the narrow No. 1 showing on the creek assayed 3.21% Cu, 0.55 oz. Ag, Tr. Au.

Chip sampling of No. 2 showing for 130' parallel to the talus slope averaged 0.17%/30', 0.08%/40' and 0.17%/60'. Highest assay was 0.29%/10'.

Showing No. 3 was located by prospecting the lower slopes and is represented by several rather spectacular specimens of malachite and chalcopyrite. The showing is on a steep face and is inaccessible without ropes.

The LION group of claims was staked and a rapid tape and compass, soil sample survey was undertaken. Soil horizons are poorly and erratically developed; hence, results are at best indicative only. Fairly extensive anomalies occur on the ridge above the No. 2 and 3 showings and over the pyrite gossan on the east slope of the ridge. In addition, an intermittent trend of copper highs extends to the northwest to a creek where some fine mineralization has been observed and silt samples are anomalous.

A preliminary geological map was completed.

A limited IP survey was done. Two short lines at right angles on the ridge above No. 2 showing indicate anomalous conditions at depth consistent with the appearance of No. 2 showing which, incidentally, does not persist upward to the ridge. These lines were limited in length by rugged topography.

A base line along the trend of the geochemical anomalies to the northwest was run together with three short lines across the trend. Results are somewhat inconclusive. The best IP anomaly occurs over pyrite mineralization indicated in limited outcrop. This is at 50NE on line 00NW. Geochemical results are upstream at about 38NE to 40NE. At 8NW on base line 38NE, a significant, narrow IP anomaly occurs. This is within the general trend of geochemical anomalies. On line 44NW, anomalous IP results occur in the vicinity of geochemical results and minor mineralization. On line 52NW, north of the anomalous creek, no significant IP response was found and these results appear to correspond to the geochemical results.

Although results have not been exciting, there is sufficient encouragement on this property to warrant establishment of an extensive grid to facilitate a detailed program of mapping and geophysics.

CAMP 40

The MOR group was staked in 1972 and initial prospecting that year was not sufficiently encouraging to recommend further work. However, during the winter of 1972-73, Cities Service Minerals staked a much larger block surrounding MOR.

A program of linecutting, minor geological mapping and an IP survey was conducted by LUC to hold the claims pending developments. Results of this work were uniformly discouraging and information concerning the Cities Service work indicates that their results are much the same.

The MOR group has been allowed to drop.

Although results are kept up to date as much as possible during the summer, much remains to be done. This is true particularly on the LION group where the IP crew came out September 14th and much of the geochemical data was not received until September 24th.

In summary, work in the Third Quarter has outlined the following:

(1) A possible drill target on the HOL group. ?

(2) Basis for a detailed mapping and geophysical program on the LION group. ✓

(3) Basis for further geophysical work (and possibly drilling) on the FORT group.

(4) Some basis for geophysical surveying and trenching on the CHEK group, provided a vein-type deposit is acceptable to LUC.

LEMHAC LAKE

Copies of the Amax report on the drilling accomplished on this property should be available for distribution to the Parties in time for consideration before the Annual Meeting.

Present information is that Amax will definitely be proposing more drilling.

W.R. Bacon,
Manager - LUC Syndicate


LUC SYNDICATE
INDEX MAP TO
CAMP LOCATIONS
1973
BRITISH COLUMBIA
Scale 1 : 250,000
1 Inch to 4 Miles Approximately
DRIFTWOOD RANGE
SKUTSIL KNOB
CENTRE PEAK
MOUNT HORETZKY
MOUNT LOVELL
MOUNT TEEGEE
FRYPAN PEAK
TRAIL PEAK
MOUNT THOEN
FRENCH PEAK
NETALZUL MOUNTAIN
SCORCHED HILL
HEARNE HILL
WEDGE MOUNTAIN
OLD FORT MOUNTAIN
BABINE LAKE
CASSIAR DISTRICT
COAST DISTRICT
MT CRONIN
LAGOPUS MTN
MT HYLAND
MT MCKENDRICK
DOME MTN
Driftwood Creek
Topley
LUC BASE 1973
LENNAC LAKE
TACHEK MTN
MT MCCREA
Babine
Nilkitkwa Lake
Fulton Lake
Hubert
Quick
CANADIAN
TORO 18
HOL 12
ROJO
KITI
BREE
MAR

inches
centimetres
This reference scale bar has been added to the original image. It will scale at the same rate as the image; therefore it can be used as a reference for the original size.