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ATLAS EXPLORATIONS LIMITED

REPORT ON CASTOR-POLLUX PROJECTS

1966 FIELD SEASON

by

SELWYN SYNDICATE

## REPORT ON CASTOR-POLLUX PROJECTS

1966 FIELD SEASON

### 1. SUMMARY

Two projects were undertaken by Selwyn Syndicate during 1966; the Castor project based at Ennadai Lake in the Northwest Territories and the Pollux project based at Keele Lake in the Yukon.

One examination was carried out in Northeastern Alberta where a copper showing owned by Al Plamondon of Fort Smith was examined on the return trip from Ennadai Lake.

The Castor project did not reveal anything of interest. In the Pollux area, a number of gossan areas were found and checked by soil samples. In one area, five soil samples showed values between 430 and 950 ppm Zn. In view of the remoteness of the area this anomaly was considered too weak to be staked.

Purple quartzite-float with minor disseminated chalcopyrite was found in several locations in the Pollux area, but assays proved too low to warrant follow up. (best sample 0.25 Cu; 3.96 oz/t Ag) The high silver content is notable.

Some prospecting was done in the Vancouver area in September and October by S. Lothrop.

### 2. CASTOR PROJECT, NTS 65-C-13

#### (a) Location

S. Lothrop, prospector, had noted the presence of high grade chalcopyrite occurrences along the NW shore of the Southern part of Ennadai Lake, lying in shallow water just off the shore, while prospecting for gold a number of years ago.

The particular location lies near a fold indicated by the magnetics on G.S.C. geophysics maps 3178G and 3179G and adjoining sheets, along the contact of an Archean volcanic belt trending in a NE direction with Proterozoic sediments.

The occurrence of two large, partly serpentinized, ultrabasic bodies is characteristic of the area.

Attention was originally drawn to the area by gold discoveries made by S. Lothrop for the Keewatin Syndicate (Don Cameron) in the late nineteen forties. One of these occurrences, associated with a granite, has been drilled, about 10 miles North of the reported copper occurrences, without success.

Some 10 miles to the WNW of the latter, Hudson Bay Mining & Smelting has drilled a pyrite-copper occurrence on Rochon Lake.

The reported occurrence was said to cover an area of possibly 40' x 40' in about three to four feet of water near the shore of the lake.

As the geological environment is favorable, and as copper-bearing pyrite is known to occur nearby on Rochon Lake, it was felt that the reported occurrence could be part of a body of significant size and warranted detailed prospecting, especially so as copper-bearing float was said to occur up to about 5 miles to the NE.

The area lies about 250 miles from Uranium City to the SSW, Lynn Lake to the South and Churchill to the ESE, at the edge of the barren lands. The Ennadai D.O.T. station lies 30 miles to the NE.

#### (b) Airborne Survey

The area was flown by Waterton Aeronautics and Explorations Ltd. on July 15th, 1966, using a magnetometer, a one-channel Input instrument and a scintillometer, covering 140 line miles oriented at a small angle to the strike.

This survey yielded a number of conductive areas, some on land, some under water, and the best Input readings were obtained near the area where large slabs of chalcopyrite-bearing material were said to occur under shallow water.

#### (c) Ground Investigation

The occurrences were investigated on the ground by a party consisting of S. Lothrop and M. Cloutier between July 28th, 1966 and August 19th, 1966. The writer visited the area on the latter date.

The party was equipped with a canoe and the early part of August was selected as the period most likely to have little wind. A good sheltered camp site in timber was found on the shore of Ennadai Lake.

Only minor chalcopyrite float was found and the lake bottom occurrence could not be pinpointed.

(d) Conclusion

It is felt that the field party did not exhaust all possibilities, as one of its members was not sufficiently conversant with prospecting by canoe, and the weather was in general too windy for an exhaustive investigation.

It is believed that the area still warrants a good investigation by a party consisting of a geologist and a prospector fully conversant with canoe operations, for a period of at least four to six weeks in the field.

3. NE ALBERTA EXAMINATION, NTS 74-M-16

On his return from Ennadai Lake via Fort Smith, the writer examined on August 20th, 1966 the showings on the Rex and Bart claims held by Mr. Al Plamondon, General Delivery, Fort Smith.

These showings occur in metamorphic thin-bedded quartzites within a gneiss series.

On the Rex claims, pyrite, pyrrhotite and minor chalcopyrite occur in N-S vertical bedding where it is cut by strong E-W fractures.

Sample 8121 across 4' assayed:

.28 Ag, .01 Cu, .01 Mn

On the Bart claims, a patch of sulphides is related to some folding, with 65° West dips instead of a vertical dip. The wall rock is a thin bedded (1" - 3" beds) gneiss obviously derived from a series of thin bedded quartzites and argillites.

The mineralization consists of about 10% pyrrhotite across 4' in an 8' deep and 8' wide pit.

Sample 8122 across 5' assayed:

.04 Ag, tr Cu, tr Mn

The showings have no economic potential.

4. POLLUX PROJECT, NTS 105-0-E/2

(a) Location

A gas cache of 50 barrels was established by DC-3 on Keele Lake on March 27th and April 12th, 1966.

Camp was set up by a prospecting party consisting of Dale Duncan and Don Forsyth on July 1st, 1966 and this party was joined on July 5th by Merl Cloutier and Stan Lothrop and on July 6th by the writer and geologist, Gus Koster.

The latter was moved to another project on July 19th, 1966 and on July 25th, Cloutier and Lothrop were moved to project Castor.

The Duncan-Forsyth party spent the remainder of the season in the area, with occasional moves by helicopter or fixed wing, as indicated, and were moved out from Boundary Lake on September 26th, 1966.

(b) Transportation

It had originally been planned to use a helicopter for a month of intensive field work. However, no contract for this duration could be arranged and consequently only one party was left permanently in the field, with visits by the writer about every two weeks.

This also led to much reduced wide range reconnaissance and more detailed prospecting out of suitable locations, including one trip out of Wilson Lake in the 2nd half of September. In the latter case, abundant barren pyrite was located in a creek flowing into Wilson Lake from the North.

(c) Objectives

The objective of this project was to investigate the rumoured occurrence of a large copper showing of the disseminated

type in the area East of Keele Peak and the rumoured occurrence of large blocks of lead-zinc float in one of the passes across the divide between N.W.T. and Y.T.

Quartzite with minor disseminated chalcopyrite was found on the East side of Keele Peak and near Boundary Lake, but the outcrop said to occur between these locations was not located and grades were too low and float too scattered to recommend further work in the area. (best assay, sample 8115: 3.96 Ag, 0.25 Cu)

No float of any significance was found in any of the passes between the MacMillan Pass and the pass 10 miles North of Boundary Lake, i.e. over a total distance of 40 miles in straight line.

Due to lack of a helicopter, the reconnaissance could not be carried beyond the above described area.

#### (d) Results

A number of gossan areas were found in several valley bottoms. These were of the transported type and usually associated with a light-grey weathering black slate horizon in the overlying ridges.

These various gossans were sampled but only one, near Boundary Lake, gave significant values, and some more detailed silt and soil sampling was done in this area in late September.

The following samples would be of interest in a more accessible area:

<u>Sample No.</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>
SS10	58	17	500
11	54	22	430
12	7	45	950
13	37	17	600
14	46	14	850

Boundary Lake is accessible by Beaver, but shallows in the lake render take-off risky with more than a half load.

The area is very well suited to an investigation by an experienced prospecting party and a geochemical-geological reconnaissance party working by helicopter. Most of rivers and main

creeks have little timber and are accessible by helicopter and at higher elevations, the grassy drainage basins are ideal for reconnaissance by stream silt sampling.

5. VANCOUVER AREA

S. Lothrop examined various occurrences NE of Vancouver but due to sickness at home was unable to complete a planned investigation of molybdenite occurrences at the head of Pitt Lake, staked shortly thereafter by Flagstone Mines Ltd.

6. FINANCIAL

Costs have been submitted separately.

Respectfully submitted,

SELWYN SYNDICATE

A handwritten signature in dark ink, appearing to read "P.H. Sevensma", is written over a horizontal line.

P.H. Sevensma, Ph.D., P. Eng.

PHS/lz

June 12, 1967

Drawings will be submitted at a later date.

Location and Field Kit Results

SOIL SAMPLES

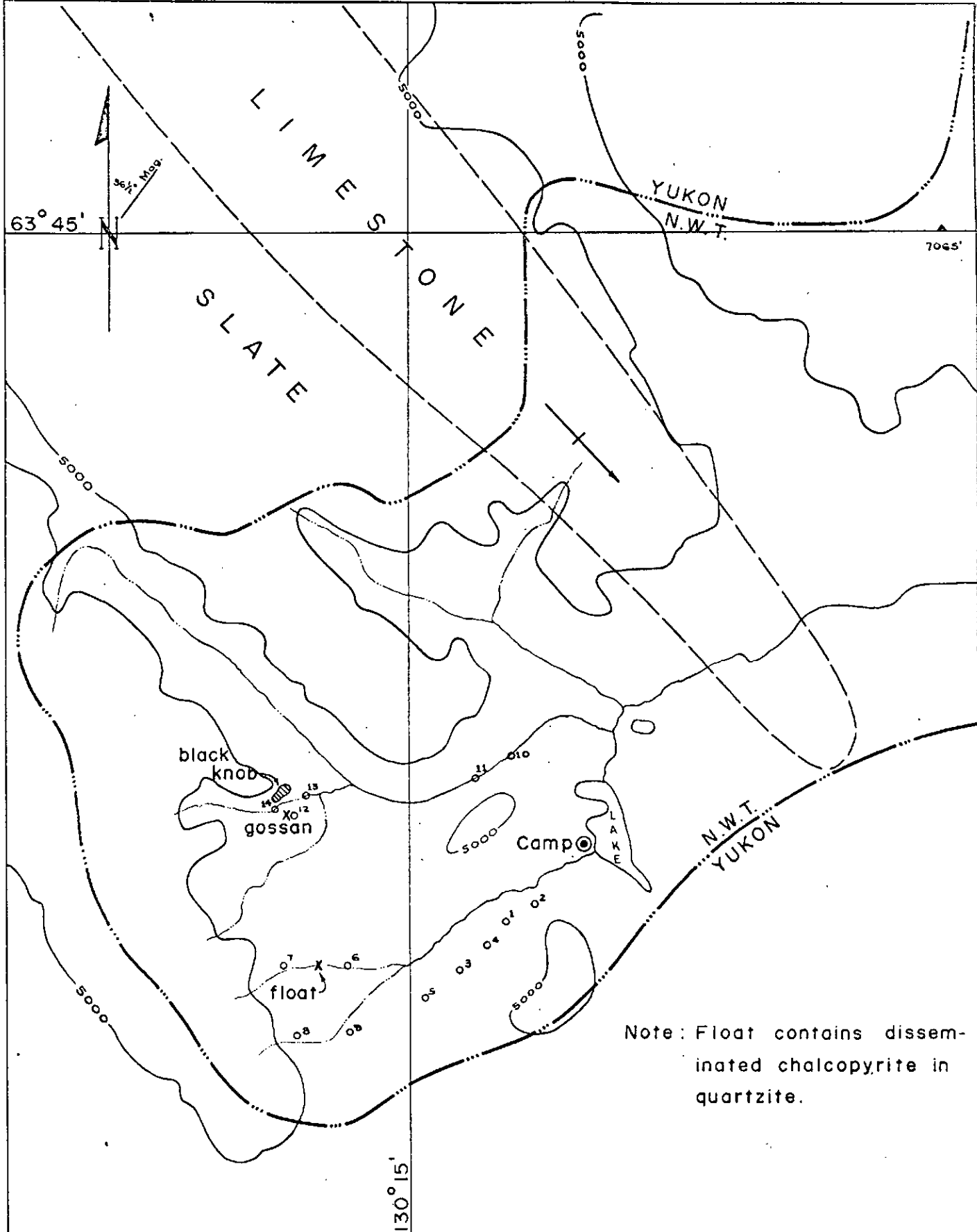
BOUNDARY LAKE AREA

105-0-9

- SS-1 Sept. 20, SW of camp, SE slope, midway between Knob and Saddle  
Result: low positive
- SS-2 Sept. 20, SW of camp, SE slope opposite 1st Knobb  
Result: medium positive
- SS-3 Sept. 20, SW of camp, SW slope, opposite 2nd Knobb  
Result: low positive
- SS-4 Sept. 20, SW of camp, opposite Gulley, SE ridge  
Result:
- SS-5 Sept. 20, #6 SW of camp, SE ridge  
Result: medium positive
- SS-6 Sept. 21, NW ridge, SW of camp  
Result: low positive
- SS-7 Sept. 21, SW of camp, NW ~~xx~~ ridge  
Result: low positive
- SS-8 Turn off SW, traverse to NW direction, foot of ridge, end of  
valley, creek ridge centre  
Result: medium positive
- SS-9 Sept. 20, SW of camp, SE ridge, SW of Knobb  
Result: medium positive
- SS-10 Valley of NW camp  
Result: high positive
- SS-11 Foot of valley, NW of camp  
Result: high positive
- SS-12 Gossan Sample, Sept. 21  
Result: High positive
- SS-13 Sept. 21, sample of creek, NE of Gossan  
Result: high positive
- SS-14 Sept. 21, soil above Gossan in creek  
Result: low positive

Sampled by Dale Duncan

Note: See T.S.L. report No. V0999  
See Boundary Lake map for location plot.



Note: Float contains disseminated chalcopyrite in quartzite.

FOR:	SELWYN SYNDICATE	
	BOUNDARY LAKE	YUKON - N.W.T. BOUNDARY
		105 0-9
	P. H. SEVENSMA CONSULTANTS LTD.	
VANCOUVER, B.C.	scale 1/2 1 mile 2	
NOVEMBER 1966		