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REPORT
ON THE
ELWIN CLAIM GROUP

SOMERSET ISLAND
CANADIAN ARCTIC ARCHIPELAGO
LAT. 73° 32' N, LONG. 91° 10' W.

0920

INCLUDING: GEOPHYSICS, GEOLOGY, SAMPLING, DRILLING
CARRIED OUT DURING: JUNE & JULY 1993

FOR

WESTPINE METALS LIMITED
AND
ALPINE EXPLORATION CORPORATION

BY

ROBERT POTTER, P. ENG

NOVEMBER 1993

1. SUMMARY AND RECOMMENDATION

PROPERTY: 14 claims, 29,545 acres.

LOCATION: Somerset Island, N.W.T.

EXPLORATION OBJECTIVES:

Locate and evaluate the diamond potential of kimberlite intrusions within L.Palaeozoic carbonates.

1993 PROGRAM ELEMENTS:

a. AIRBORNE MAGNETIC SURVEY

Covers all of the claim block plus surrounding area. Results show the previously known Elwin anomaly plus new anomaly on the coast at the southern end of the claim block (Nikos).

b. GROUND MAGNETIC SURVEY

Ground level anomaly at Elwin defined by data collected on 4.0 km. of lines.
Nikos anomaly partly defined by 1.1 km. of data.
Anomaly open seaward.

c. MAPPING AND SAMPLING

Elwin pipe: surface area 2.8 ha, well exposed. Four kimberlite phases recognized. Garnets plentiful, some mantle xenoliths. Four - 15 kg. samples taken for analysis.
Nikos area: four new pipes found (Nikos, JP - 1, 2, 3)
Nikos pipe: surface area 1.0 ha, within ground mag. anomaly, f g kimberlite.
JP diatremes (JP - 1, 1.0 ha; JP - 2, 0.2 ha; JP - 3, 0.1 ha.)
Spectacular exposures of fresh kimberlite with numerous mantle xenoliths and garnets. Open seaward under shallow water.

d. DIAMOND DRILLING

DDH - Elwin 1. 25 m. Abandoned in carbonate breccia near kimberlite contact. No samples.

DDH - Elwin 2. 163 m. Intersected phase 1 and 2 of Elwin pipe. Numerous garnets and mantle xenoliths.

Ten samples, each representing 12 m. of hole.

High costs of drilling due to: air transport, salt requirement for drilling fluid, short season and unpredictable weather.

RECOMMENDATIONS:

Tentative, pending receipt of lab. analyses.

Elwin pipe: Bulk sampling if lab. results are encouraging.

Nikos pipes: Surface magnetometer survey to define the limits of these diatremes. This would best be carried out in

April when predictably clear weather, 24 hour daylight, and sound ice conditions permit access to both the shoreline exposures and to possible seaward extensions.

Detailed mapping and sampling (July).

Bulk sampling of the exposures could be economically effected by use of equipment barged from Resolute in August or September.

Any further drilling should be carried out by a self-propelled rotary system.

REPORT
ON THE
HAM CLAIM GROUP

SOMERSET ISLAND
CANADIAN ARCTIC ARCHIPELAGO
LAT. 73° 33' N, LONG. 92° 11' W.

INCLUDING: GEOPHYSICS, GEOLOGY, SAMPLING, DRILLING
CARRIED OUT DURING: JUNE & JULY 1993

FOR

WESTPINE METALS LIMITED
AND
ALPINE EXPLORATION CORPORATION

BY

ROBERT POTTER, P. ENG

NOVEMBER 1993

1. SUMMARY AND RECOMMENDATIONS

PROPERTY: Five claims, 12,810 acres.

LOCATION: Somerset Island, N.W.T.

EXPLORATION OBJECTIVES:

Locate and evaluate the diamond potential of kimberlite intrusions within L.Palaeozoic carbonates.

1993 PROGRAM ELEMENTS:

a. AIRBORNE MAGNETIC SURVEY

Covers all of the claim block plus surrounding area. Results show previously known anomaly (Ham 1) plus new anomaly to the east (Ham 2).

b. GROUND MAGNETIC SURVEY

Data recorded along 1.7 km. of grid lines, has defined the limits and character of the Ham 1 anomaly.

Magnetic source area 1.3 ha.

Ham 2 data was collected on 2.6 km. of lines. Source area 0.2 ha.

c. MAPPING AND SAMPLING

Surface showings at Ham 1 comprise sparse kimberlite rubble within area of dark soils. Two kimberlite phases recognized. Fourteen grab samples of rock collected for analysis.

Showing at Ham 2 is a very sparse kimberlite over small area. One grab sample of rock taken.

d. DIAMOND DRILLING

DDH - Ham 1: 106 m., kimberlite. 8 core samples taken each representing 12 m. of hole.

RECOMMENDATIONS

Tentative, pending receipt of lab. analysis.
No further work anticipated.

REPORT
ON THE
NORD CLAIM GROUP

SOMERSET ISLAND
CANADIAN ARCTIC ARCHIPELAGO
LAT. 73° 27' N, LONG. 92° 18' W.

INCLUDING: GEOPHYSICS, GEOLOGY, SAMPLING, DRILLING
CARRIED OUT DURING: JUNE & JULY 1993

FOR

WESTPINE METALS LIMITED
AND
ALPINE EXPLORATION CORPORATION

BY

ROBERT POTTER, P. ENG

NOVEMBER 1993

1. SUMMARY AND RECOMMENDATIONS

PROPERTY: Eleven claims, 27,738 acres.

LOCATION: Somerset Island, N.W.T.

EXPLORATION OBJECTIVES:

Locate and evaluate the diamond potential of kimberlite intrusions within L.Palaeozoic carbonates.

1993 PROGRAM ELEMENTS:

a. AIRBORNE MAGNETIC SURVEY

Covers the entire claim block, plus surrounding area. Results show the previously known anomaly (Nord 1) plus three new magnetic features (Nord 2, 3, 4).

b. GROUND MAGNETIC SURVEY

Data from 5.1, 5.0, 4.5, and 3.5 km. of lines of Nord 1 to 4 respectively, has defined surface magnetic anomalies. Interpreted source areas are 2.0, 1.6, 0.1 and 0.1 ha. res.

c. MAPPING AND SAMPLING

Nord 1: Kimberlite rubble poorly exposed within an area of dark soils. Three phases recognized. Few garnets and mantle xenoliths. Five rock samples taken.
 Nord 2: No exposure. Twenty four soils collected.
 Garnets, chrome diopside and chromite in concentrates.
 Nord 3: No exposure (riverbed). No samples.
 Nord 4: Three small areas of kimberlite rubble within mag. anomaly. Five soil samples.

d. DIAMOND DRILLING

DDH - Nord 1: 133 m. Numerous garnets and some mantle xenoliths. Ten core samples, each representing 12 m. of hole.

High drilling costs due to: air support, salt requirement for drilling fluid, short season and unpredictable weather.

RECOMMENDATIONS

Tentative, pending receipt of laboratory results.
Nord 2 pipe should be drilled. Any further drilling should be carried out by a self-propelled rotary system.
Favourable lab. results from Nord 1 samples should be followed up by bulk sampling.

REPORT
ON THE
PACO CLAIM GROUP

SOMERSET ISLAND
CANADIAN ARCTIC ARCHIPELAGO
LAT. 73° 27' N, LONG. 92° 38' W.

INCLUDING: GEOPHYSICS, GEOLOGY, SAMPLING, DRILLING
CARRIED OUT DURING: JUNE & JULY 1993

FOR

SOMERSET SYNDICATE

BY

ROBERT POTTER, P. ENG

NOVEMBER 1993

1. SUMMARY AND RECOMMENDATIONS

PROPERTY: Two claims. 5,062 acres.

LOCATION: Somerset Island, N.W.T.

EXPLORATION OBJECTIVES:

Locate and evaluate the diamond potential of kimberlite intrusions within L.Palaeozoic carbonates.

1993 PROGRAM ELEMENTS:

a. AIRBORNE MAGNETIC SURVEY

Covers all of the Paco claims, plus surrounding area. The Paco anomaly was found as a result of this work.

b. GROUND MAGNETIC SURVEY

Data gathered over 4.95 km. of grid lines defined two dyke-like bodies having areas of 0.4 and 0.5 ha.

c. MAPPING AND SAMPLING

Sparse kimberlite rubble found within the magnetic anomalies. Rocks are fg, moderately magnetic, with rare chrome diopside and no garnet. Eight rock samples were collected.

This property would have been drilled but no water was available in the area.

RECOMMENDATIONS:

Tentative, pending receipt of sample results.
Possible drilling and bulk sampling.