093F/03

821337

MINNOVA INC.

DATE: March 18, 1991

TO: Ian Pirie

COPIES TO: NTS File: 93F/3W

FROM: Dave Heberlein.

SUBJECT: **WOLF EPITHERMAL Au PROPERTY.**

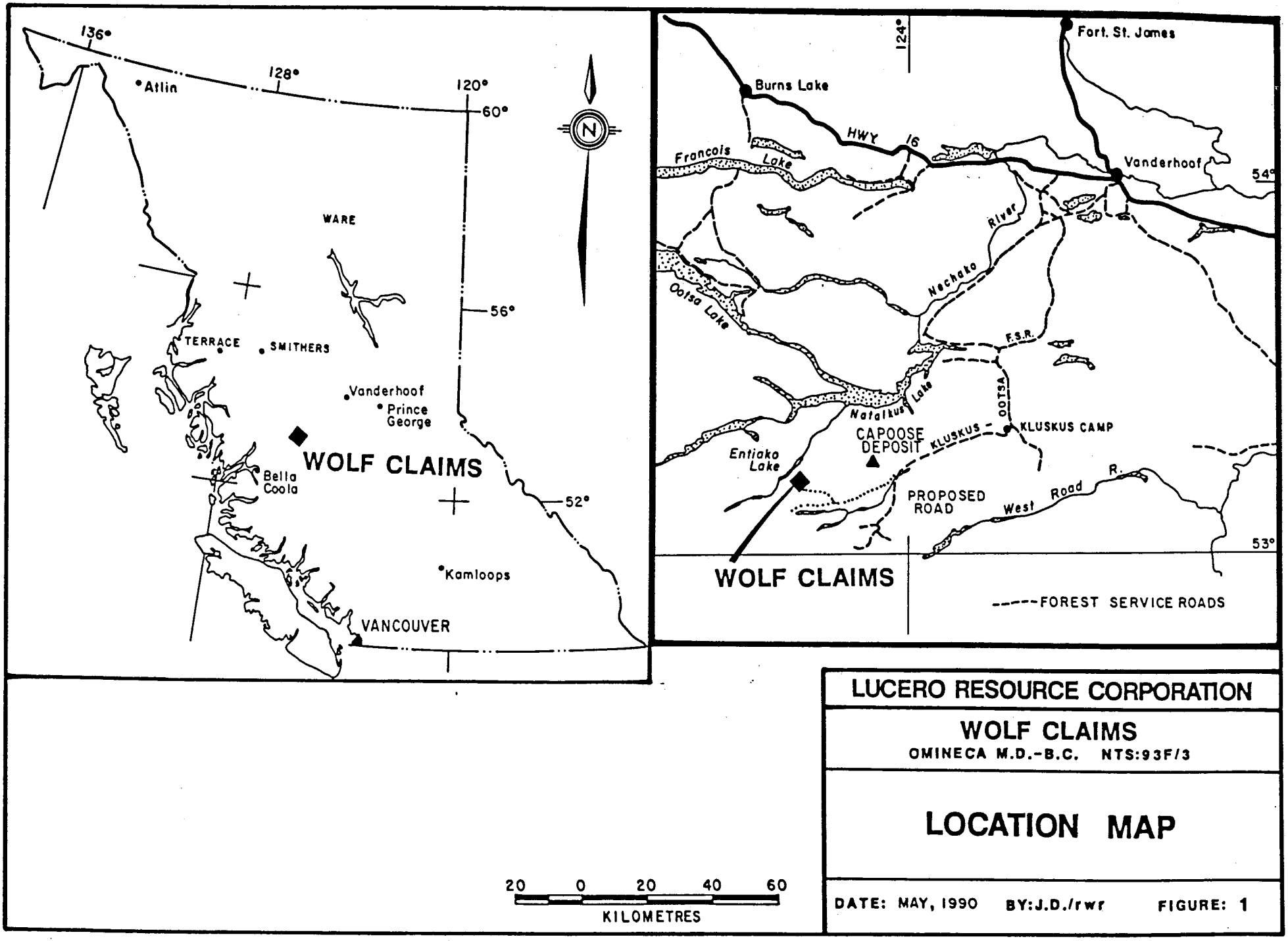
Introduction:

The Wolf Property contains an extensive and well documented epithermal Au occurrence. In 1982, Rio Algom Exploration Inc. discovered epithermal-style mineralization in Wolf Lake area following a regional lake sediment survey. Follow up prospecting, mapping and trenching, in 1984 and 1985 resulted in the identification of three distinct zones of epithermal alteration. Two of these, the Ridge and Pond Zones, were found to contain significant gold and silver values over widths of up to 25m. Late in 1985, Rio drilled six holes, totalling 593.6m under the best trench exposures. Results of this program were disappointing.

Subsequent work by Lornex Mining Corp. (1986) and more recently by Lucero Resource Corp. (1987-88) extended the mapping and sampling coverage over most of the property. The Rio Algom trenches were resampled and additional trenches were dug on the Ridge and Pond occurrences to confirm the gold values and to assess the size of the zones.

Claims and Ownership:

The property consists of nine contiguous MGS mineral claims, totalling 136 units. They are currently held by:



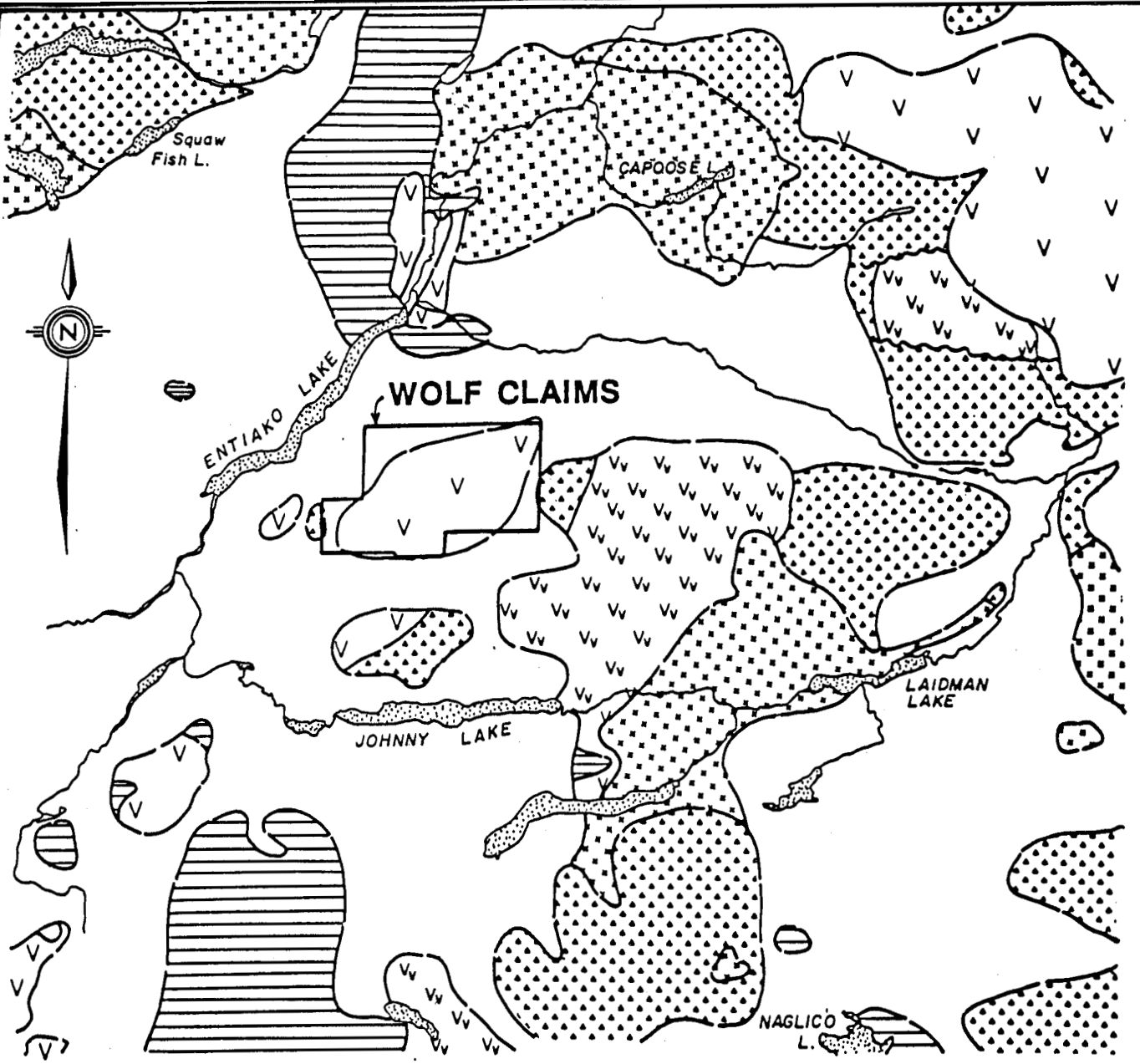
LUCERO RESOURCE CORPORATION

WOLF CLAIMS

OMINECA M.D.-B.C. NTS:93F/3

LOCATION MAP

DATE: MAY, 1990 BY:J.D./rwr FIGURE: 1



SIMPLIFIED AFTER TIPPER (1963)

LEGEND

PLEISTOCENE & RECENT

Till, gravel, sand and silt.

MIOCENE & LATER (ENDAKO GROUP)

Mainly subaerial Basalt

UPPER CRETACEOUS TO OLIGOCENE (OOTSA LK. GROUP)

Basalt to Rhyolite, minor sediments

UPPER JURASSIC & / OR CRETACEOUS

Granitoids

MIDDLE & LOWER JURASSIC (HAZELTON GROUP)

Andesitic rocks, clastic sediments.

UPPER TRIASSIC & LOWER JURASSIC (TAKLA GROUP)

Mafic flows, tuffs, breccias; Argillite and minor Limestone

5 0 5 10 kilometres

LUCERO RESOURCE CORPORATION

WOLF CLAIMS

OMINECA M.D.-B.C. NTS:93F/3

WOLF PROPERTY REGIONAL GEOLOGY

DATE: MAY, 1990 BY:J.D./rwr FIGURE: 3A

Lucero Resource Corp.
2380-555 West Hastings St,
Vancouver, B.C.
V6B 4N6

Claim information is as follows:

CLAIM	REC NO	UNITS	EXPIRY DATE
WOLF	5565	20	07-18-1992
WOLF 2	5566	9	07-18-1992
WOLF 3	5567	12	07-18-1992
WOLF 5	6676	20	09-26-1992
WOLF 6	6677	8	09-26-1992
WOLF 7	6678	15	09-26-1992
WOLF 8	6679	12	09-26-1992
WOLF 9	6680	20	09-26-1992
WOLF 10	6681	20	09-26-1992

Geology:

Paleocene Ootsa Lake Fm. volcanics and sediments underlie the claims. These consist of felsic volcanic and volcaniclastic lithologies and associated intrusions. Regionally, the Ootsa Lake Fm. rests unconformably on Middle Jurassic Hazelton Gp. volcanics.

Numerous northeasterly trending high angle faults cross the claim area. These structures pre and postdate the mineralization. Near the showings, a low angle thrust fault has emplaced altered Ootsa Fm. rhyolitic tuffs over unaltered middle Miocene sediments. This fault truncates the mineralized system at depth.

Epithermal silicification and argillic alteration zones form areas of positive relief on the property. These zones are highlighted in red on the attached geology map. Silicification varies from patchy areas of pervasive replacement to chalcedonic breccia matrices and quartz veins. Bladed varieties indicate replacement of earlier calcite or barite crystals (Andrew, 1988).

Argillic zones are typified by pervasive kaolinization of the wall rock. There is strong evidence for repeated episodes of explosive brecciation and stockwork veining in the system.

Mineralization is of the low sulphur, quartz-adularia type. Total sulphide content typically averages less than 1%. Gold and silver occur as the native metals and electrum. Naumannite and acanthite are also documented by Andrew (1988). Most of the precious metals occur as finely disseminated grains in the 5 to 10 micron size range. Traces of chalcopyrite, and galena are also present (Dawson, 1990).

Ridge Zone: This area of alteration and gold mineralization is traceable along a north-south trend for a distance of 75m. Widths vary from a few metres to almost 35m. Trenches cutting the zone have exposed good grade material over minable widths. Some of the better intervals are as follows:

Trench	Width	Au g/t
88-10	26.5m	2.69
85-6	6.0m	1.55
85-4	7.5m	7.73
85-1	12.0m	2.90
88-11	8.3m	2.67
85-5	6.0m	1.15

Unfortunately holes drilled directly beneath these higher grade zones ~~failed to failed to~~ did not detect any significant mineralization. This implies that the system bottoms out at less than 50m below surface. Values from the trenches **have** been duplicated by Jim Dawson's resampling.

Geological evidence reported by Dawson (1990) suggests that the silicification forms a shallow dipping semi-stratabound sheet bounded by the (thrusted ?) contact between rhyolitic crystal tuff and underlying sediments. Alteration is truncated to the west by

a post mineral fault. It also ends abruptly to the north and shows a steady attenuation to the south.

Pond Zone: This is a zone of extensive silicification approximately 250m long by up to 80m wide. It has not been closed off to the north or south along strike. A continuous chip sample across this zone averaged 0.51 g/t Au over a true width of 50m. This interval included narrow zones that ran up to 5.2 g/t Au. Silicification was encountered in two holes (DDH 4 and 6) drilled beneath the trenches to the fault contact with the Miocene sediments. The altered interval assayed approximately 0.35 g/t over about 80m true thickness in both holes. Like the Ridge Zone, the Pond Zone is bounded to the west by a steeply dipping post mineral fault.

Other Targets: Extensive areas of silicification have been identified at several other locations. These include the Grid 2 Zone, the Lookout Zone and Chopper Pad Zone. In addition, epithermal boulders, some mineralized (0.94 g/t, 1.1 g/t, and 5.1 g/t Au), have been located to the northeast of the Ridge Zone, indicating potentially more epithermal targets.

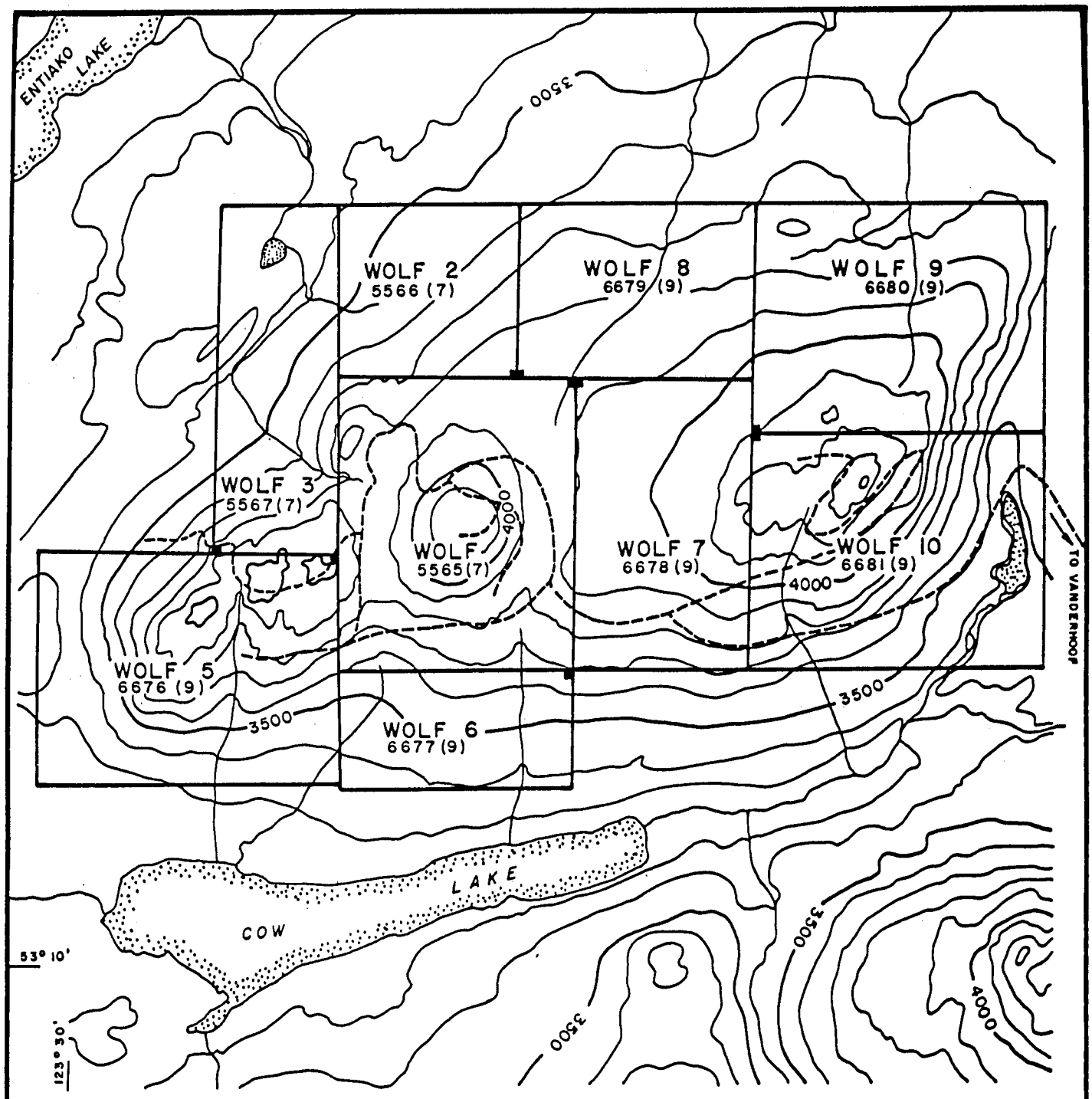
Conclusions and Recommendation:

The Wolf property hosts several epithermal alteration zones of which two contain significant gold values over appreciable widths. Both the Pond and Ridge Zones are truncated at depth by a shallow angle fault, suggesting that the source structures are obscured by the overlying Ootsa Lake Fm. Dawson's interpretation is that the visible parts of the system are analogous to a high level, low grade silica cap similar to those seen at Round Mtn. and Borealis in Nevada. There is also a close resemblance to the Clisbako epithermal system.

The key to this prospect is in locating the source structure and the deeper levels of the system where high grade Bonanza-style mineralization may be expected. The known mineralized areas are too low grade and too small to be of interest at the present time. Nevertheless, the presence of mineralized epithermal boulders elsewhere on the claims indicates that the there is a good possibility to find new and perhaps larger zones.

At the present time, the property is not recommended for option. However, a site visit during the summer would be very worthwhile. We should, nevertheless, monitor progress on the property and reevaluate the submittal periodically.

DAVE HEBERLEIN



LUCERO RESOURCE CORPORATION

WOLF CLAIMS

OMINECA M.D.-B.C. NTS:93F/3

CLAIM MAP

DATE: MAY, 1990 BY:J.D./rwr FIGURE: 2