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STUMP LAKE
SUMMARY REPORT
OF
SPRING 1988 PROGRAM

STUMP LAKE PROGRAM SUMMARY

Phase 1 of the Stump Lake property has been completed except the detailed report which will follow on completion of the Phase 2 work at the end of 1988.

Grid Work

52.65 kilometers of grid was established by the end of January.

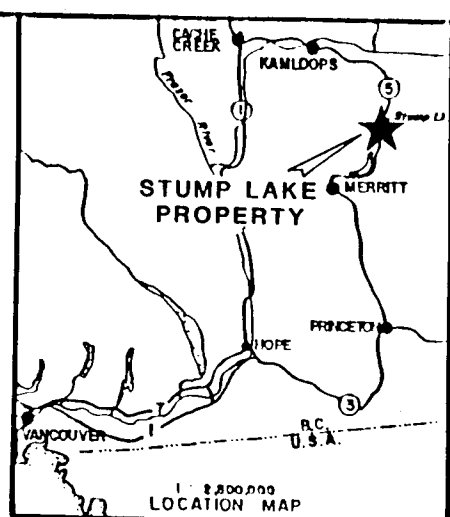
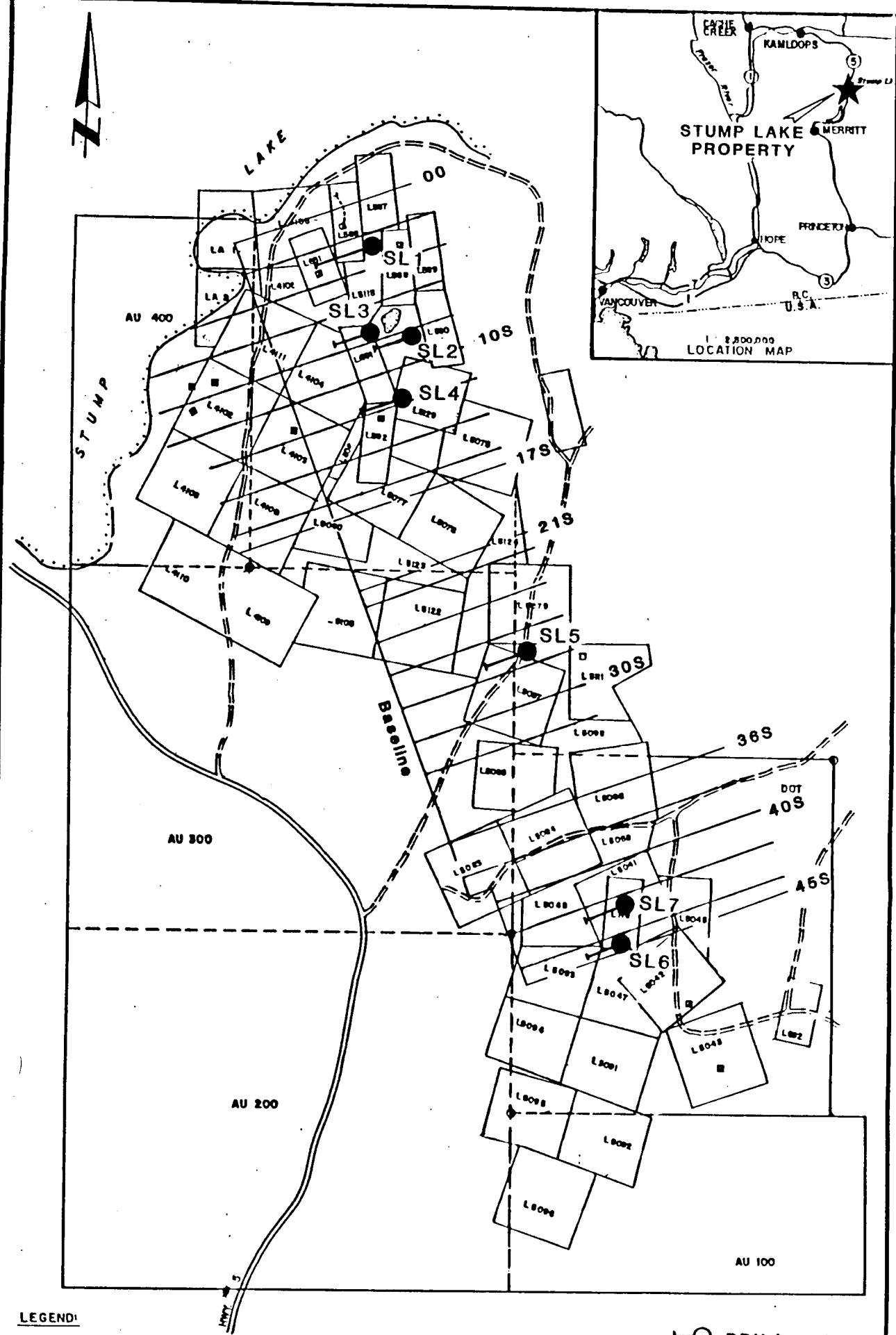
Mag & VLF

48.15 kilometers of a Proton Magnetometer survey crossed the structures with the Quartz veins on lines with a 250° bearing, over a strike length of 4.5 kilometers. The magnetic survey defined several strong anomalies along ore-bearing structures and the Stump Lake fault. Drilling has revealed these are Tertiary Basalt Dykes which have a close affinity to the vein systems.

VLF was carried out over the same lines using two stations (Seattle and Cutler, Maine). Seattle worked particularly well defining the Stump Lake Fault and a parallel fault close to the East Side of Stump Lake. VLF also outlined several weaker trending structures striking 150 - 180° which correlate with ore-bearing structures.

Drilling

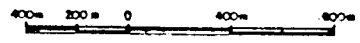
From January 29th to February 18th Frontier Drilling completed seven NQ diamond drill holes for a total of 1097.6 m. The holes tested various zones over a strike length of 4.3 kilometers and 39 samples were sent for Assay for Cu, Pb, Zn, Ag, Au and WO₃ and another 98 samples were sent for Lithochemical analysis.



LEGEND:
 --- ROAD
 - - - LAKE SHORE
 □ MINE SHAFT
 ≡≡≡ SURVEY GRID

⊙ DDH location

— STUMP LAKE PROPERTY —
 LOCATION AND CLAIMS MAP



MINNOVA

The drilling supports the surface evidence of large areas of mineralization and alteration over the whole grid area. A surprising relationship is that mineralization occurred at the same time as the formation of the Tertiary Basalt Dykes. This is interesting since a high level Tertiary Epithermal system (Cindy) is known at the North end of Stump Lake and the Stump Lake property may be a deeper base metal rich part of this Epithermal system.

Summary logs are attached but an outline of targets and results are as follows:

SL1 was planned to intersect a triple junction of the Tubal Cain, the King William and the Enterprise vein. The intersection was not hit but the Tubal Cain system was intersected as well as a large unknown parallel structure near the top of the hole.

Some better results:	103.7 - 105.5m (1.8m)	.033% Cu, .68% Zn,
	Altered Zone	.68% Pb, 15.8g Ag, .61g Au
	155.4 - 156.6m (1.2m)	.053% Cu, .48% Zn,
	Altered Zone	.65% Pb, 51.8g Ag, 1.92g Au
	284.0 - 286.6m (2.6m)	.051% Cu, .18% Zn,
	Tubal Cain Zone	.15% Pb, 31.0g Ag, .41g Au

While values are not economic, it is encouraging that >15% of the hole was in alteration.

SL2 tested the junction of the Joshua and Tubal Cain system which was found to lie farther to the South yet. A large amount of parallel Tertiary Basalt Dykes parallel the vein systems and account for the magnetic high. Both vein systems were encountered but values are low.

Joshua Zone	50.7 - 56.9m (6.2m)	.014% Cu, .01% Zn, .01% Pb, 4.4g Ag, .05g Au, .023% WO ₃
Tubal Cain	76.5 - 78.2m (1.7m)	.018% Cu, .12% Zn, .10% Pb, 11.7g Ag, .20g Au, .014% WO ₃

SL3 tested the extension of the King William vein near a large N - S trending alteration zone.

Results were disappointing with only a thin alteration zone and a parallel Basalt Tertiary Dyke.

Results are:	62.5 - 64.3m (1.8m)	91ppm Cu, 79ppm Zn,
	Altered Zone	50ppm Pb, 14ppm Ag, 85ppb Au
	65.7 - 66.0m (.3m)	95ppm Cu, 1384ppm Zn
	Quartz Vein	303ppm Pb, 53ppm Ag, 320ppb Au

SL4 tested the King William Vein North of the shaft. It intersected 3 subparallel alteration zones over the length of the hole, including the King William vein.

Results (SL4):	20.2 - 21.4m (1.2m)	.02% Cu, .10% Zn,
	Altered Zone	.09% Pb, 4.2g Ag, 1.52g Au
	70.0 - 70.4m (.4m)	.037% Cu, .59% Zn,
	King William Vein	.50% Pb, 284.0g Ag, 7.24g Au

SL5 tested vein continuity near the Stump Lake Fault area and many zones of alteration were encountered. The best value was in a quartz vein.

49.6 - 50.1m (0.5m)	.098% Cu, .76% Zn, .13% Pb, 58.7g Ag, .62g Au
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SL6 tested the Jenny Long vein at a multiple intersection to the North of the Shaft. Large zones of alteration were encountered with a higher sulphide content, over a majority of the hole. The alteration is unusual in that it is intense chlorite-epidote alteration rather than the normal bleached clay-silica alteration. The Jenny Long Vein was intersected in the core of this alteration.

64.5 - 65.4m (0.9m)	.403% Cu, 1.60% Zn, 1.36% Pb, 167g/T Ag, 4.31g/T Au
96.5 - 98.0m (1.5m)	.047% Cu, .02% Zn, .02% Pb, 33.7g/T Ag, .73g/T Au

SL7 tested the North extension of the Jenny Long Vein system. The hole was bounded by Tertiary Dyke swarms at either end with pyrite veinlets in strong chlorite-epidote alteration in the middle of the hole. This zone likely correlates to the Jenny Long vein and indicates its termination.

No significant assays.

Alteration

A brief examination indicates the altered zones are not as silicified as previously thought, but are bleached-clay altered zones with enhanced SiO_2 , K_2O , MgO and depleted Na_2O and Ba. These zones often contain 5 - 10% disseminated pyrite and I.P. may work effectively defining these zones. Also, a few samples will be sent for XRD analysis in Phase 2.