

- Island Copper - Mahatta
92 L

826849

Spent ~ \$150,000 over 2 yrs
has 50%; Then 50:50 JV
(option to earn more?)

NORTHERN VANCOUVER ISLAND RECONNAISSANCE PROGRAM

PROPOSED PROGRAM

In 1991, Stow Resources Ltd. carried out a reconnaissance exploration program over the northern part of the Mahatta-Kashutl porphyry copper-gold belt on Vancouver Island. The geological setting and the metallogenic environment (Figure 1) of this belt are very similar to the Island Copper Belt which hosts the Island Copper Mine (280 million tons @ 0.52% Cu, 0.017% Mo) and several significant undeveloped deposits (i.e. Red Dog, Hushamu). Both belts exhibit numerous Cu-Au-Mo occurrences and alteration zones which are associated with high level sub-volcanic porphyries intruding lower Jurassic basic volcanics belonging to the Bonanza Supergroup. Very little recent exploration work has been carried out in the Mahatta-Kashutl Belt and most of the area is not staked as opposed to the Island Copper Belt which is heavily staked and has experienced recent intensive exploration activity. The progressive extension of logging activity into the Mahatta-Kashutl Belt has resulted in improved access and increased outcrop exposure.

The initial research phase of the program involved the following components:

- 1) A review of the Island Copper Mine and the Island Copper Belt to determine parameters which would guide an exploration program.
- 2) An interpretation of the airborne magnetic data.
- 3) A compilation of the available regional geochemical data.
- 4) Research of the Minfile, assessment and private company reports as well as publications by the Ministry of Energy, Mines and Petroleum Resources.
- 5) The acquisition of all forestry and road maps of the area.

Upon completion of the initial compilation and research phase, a limited exploration program, an orientation geochemical program and property examinations were done. This led to the acquisition of four properties by Stow Resources Limited and confirmed that numerous additional targets were worthy of investigation. The orientation work also showed that a program of moss mat

sampling and geological mapping concentrated in areas of good logging access would provide the most cost effective exploration benefits.

A reconnaissance exploration program was carried out between June 15 and September 15 within the belt defined by the preliminary research. A three to five man crew engaged in prospecting, geological mapping, stream sediment (moss mat and silt) sampling, and lithochemical sampling. The total expenditures during 1991 on the Northern Vancouver Island Project were approximately \$165,000.

The 1991 reconnaissance program showed that the geological setting of the Mahatta-Kashutl Belt is very similar to the Island Copper Belt. Both belts exhibit widespread Cu-Au-Mo mineralization and stream geochemical anomalies which are associated with high level sub-volcanic porphyries intruding Bonanza Supergroup basic subaerial volcanics. This program has identified a number of exploration targets worthy of additional investigation. These target areas are described below:

Port Alice Area

- 1) Teeta Creek - numerous Cu, Au, Pb, Zn moss mat geochemical anomalies and Cu showings - more detailed prospecting, mapping and sampling recommended for Teeta Creek headwaters. Expanding the area over the height of land into the headwaters of Kloochlimmis Creek is also recommended. Of particular importance is the prospecting of new logging roads currently being built in this active logging area. The headwaters of Teeta Creek represents a possible staking target if exploration activity by competing companies appears imminent in the area.
- 2) Cayuse Creek - numerous Cu, Au, Mo, Zn moss mat geochemical anomalies - additional detailed prospecting, mapping and sampling are recommended. High priority targets will be following up on any new logging road construction in the active logging areas. This area also represents a potential staking target.
- 3) Minfile #186 Rossland Occurrence - Lead, Cu, showing - attempt to locate showing which appears to be on open ground south of Teck's Wolfenden claims. Evaluation and potential staking of the prospect should be considered.

- 4) Teck claims - Mount Wolfenden area - Au stream geochem anomaly - monitor tenure of ground and consider staking if any claims are allowed to lapse.
- 5) Colonial Creek - Au anomalies and Cu float occurrences - more detailed sampling upslope of Au anomalies is recommended and prospecting up drainage from chalcopyrite float occurrences is warranted to find the possible source.
- 6) Minfile #182 Elk Occurrence - Cu, Mo, As fracture controlled mineralization. The occurrence should be examined. Prospecting and sampling is also warranted on the new logging roads currently being built in the area.
- 7) Minfile #205 - disseminated Cu occurrence - attempt to locate and evaluate.
- 8) Utluh Creek - Cu, Au stream geochemical anomalies - further sampling on upper logging road system to headwaters is recommended.
- 9) Cayeghle Creek - first pass target - sample to headwaters along logging road system.
- 10) East of the Neroutsos Inlet - first pass target - possible sampling where Bonanza volcanics are intruded by Island Intrusions or where possible volcanogenic massive sulfide targets occur in Parson's Bay formation.

Mahatta River Area

- 1) Mahatta River Creek Headwaters - numerous Au, Mo, As, Cu stream geochemical anomalies - detailed geochem sampling and prospecting required to locate source of anomalies. This work incorporates prospecting in areas of active logging road construction.
- 2) Kewquodie Creek (East Fork) - Au anomalies - further detailed sampling required to delineate stream geochemical anomalies.
- 3) Kewquodie Creek (West Fork) - Mo, Zn, Cu anomalies - sample to headwaters upslope and upstream from geochem anomalies.

- 4) O'Connell Lake - Kewquodie Creek - Cu, Mo anomalies - additional detailed sampling and prospecting to locate source.
- 5) O'Connell Lake West - First Pass - sampling recommended along periphery of intrusive porphyry stock.
- 6) Klootchlimmis Creek West - First Pass - detailed sampling recommended along logging road access area.
- 7) Minfile #85 Iron Queen Occurrence - First Pass - sample peripheral to intrusive stock and area northwest to Mahatta claims.

LeMare Lake Area

1. Klaskino Inlet - numerous Zn, Cu, Au anomalies - examine area peripheral to Pan Orvana claims for potential massive sulfide targets.
2. Side Bay Area - Zn, Pb, Mo anomalies, semi-massive pyrite at road borrow pit in Parson's Bay sediments - more detailed sampling required. Evaluation of sharp contrast magnetic airborne gradient anomalies for porphyry Cu potential is required.
3. Buck Creek - Red Stripe Mountain - Cu, Zn anomalies - additional geochem and prospecting coverage with focus on active logging areas and new roads.
4. Restless Main - lower order Au anomalies - continue sampling program along logging roads.
5. Buck Creek - North Main - Cu, Au anomalies - detailed sampling required.

Kwois Creek Area

1. Headwaters of Kwois Creek - numerous Au, Cu, moss mat anomalies - more detailed sampling and prospecting required in the area draining Snowsaddle Mountain and along the eastern margin of the Kauwinch Pluton. Sampling is also recommended on the east side of Kwois Creek to determine if Cu and Au anomalies have eastern strike extent.

2. Chamiss Bay Area - First Pass - locate and evaluate Minfile #204 BW and #256 Tiny porphyry Cu prospects. Also locate #107 Caledonia skarn Cu, Fe prospect. Monitor tenure of Sin claims (Taywin Resources) and staking of any ground that lapses particularly in the eastern portion of the claim group along Kashutl Inlet may be warranted.

Quatsino Sound Area

1. Nordstrom Cove - Cu anomaly - more detailed sampling required.
2. Cliff Point - Cu anomaly - more detailed sampling required.
3. Western Extension of Quatsino Sound Area - First Pass - initial prospecting and moss mat geochem sampling program recommended along logging road and boat access areas for a possible northwest extension of the Mahatta-Kashutl Belt. Location and examination of the Minfile #11 Kains Cu occurrence is recommended.

The proposed follow-up program should incorporate the following components:

1. Moss mat and soil sampling upstream and upslope from geochemical anomalies delineated in 1991.
2. Geochemical sampling of prospective geological settings identified in 1991.
3. Investigate showings not evaluated in 1991.
4. Reconnaissance prospecting and geochemical sampling of aeromagnetic targets.

