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SUMMARY

- Mount Hope Resources Corp. has optioned 90 units, in 7 modified grid claims, which cover a precious and base metal prospect in the Sloquet Creek area of the south-western British Columbia. The property is situated 95 kilometres north-east of Vancouver and is accessible by logging road from either Pemberton or Harrison Mills.
- 2) Cominco Ltd staked the ground in 1944 and again in 1979 (now covered by the Hot Spring claims) and discovered several moderate to high base-metal soil anomalies. The anomalous zones received only limited follow-up evaluation.
- 3) Aranlee Resources Ltd. carried out a program of geological mapping and geochemical sampling in 1987. This program was successful in extending the largest and most intense soil anomalies located by the previous operators. A grab sample of altered volcanics exposed on the south side of Simpson Creek returned 2560 ppb gold (McClaren and Hill, 1987)
- 4) The property is underlain by a sequence of pyritic, felsic tuff and coarse fragmental rocks capped by ferruginous chert which totals more than 400 m thick. This lithological assemblage is correlative with the Gambier Group hosting the Britannia Copper Deposits, suggesting a favourable environment for exhalative massive sulphide deposits and related precious metal enriched stockworks and breccias. The Britannia Deposits are located 70 km to the west of the Hot Spring Claims (Payne et. al. 1980).
- 5) The area is characterised by north-westerly trending Tertiary age faults associated with gold mineralization. The Doctors Point and the RN gold deposit at the south-end of Harrison Lake are the most important nearby gold zones.
- 6) Follow-up geochemical and geological investigations were carried out in 1988 on the anomalous zones, as well as checking the more eastern and largely untested areas of the claims (Shearer, 1988). Two new showings containing galena and sphalerite mineralization were discovered. The 1988 work located soil anomalies that carried up to 180 ppb Au and 15.5 ppm Ag. Rock chip samples returned values up to 0.238 oz/ton gold and 15.73 oz/ton silver.
- 7) One of the most important mineralized area found in 1988, called Dan's Showing, is hosted by very altered cherty tuffite. This zone outcrops over a horizontal area of 55 metres by 35 metres and is covered on all sides. Vertically it is exposed through a height of 25 metres on the steep hillside. Hand trenching gave values of up to 0.238 oz/ton Au over 1 metre and 0.174 oz/ton over 2 metres. In a different area, one part of a trench gave 8 metres averaging 0.052 oz/ton Au. Narrow galena-sphalerite filled fault zones give up to 15 oz/ton Ag and 25% combined Pb/Zn over 1 metre (Shearer, 1988).
- 8) Aranlee optioned the property to Noranda in 1989. Work in 1990 consisted of 7 NQ diamond drillholes totalling 1251.9 metres of drilling on the southridge part of the Property. Hole NQ90-2 collared at 30+012N and 30+886E intersected 119m averaging 584 ppb Au. NQ90-4 intersected 615 ppb Au over 66.0 metres (Wilson, 1991). Only one hole (NQ90-7) tested the possible down dip extension of the mineralized zone but if encountered an up-faulted block of lower andesite. Airborne geophysics (EM & Magnetics) and follow-up soil geochemistry were also completed (Wilson and Wong, 1990).

- 9) After reviewing the Expenditures and work programs on the property, a conservative value of the property is \$333,715.00 based on the cost of work conducted since 1990. A program of detail geological mapping in 1997 has added to the understanding of the general geological environment.
- A large low-grade gold-bearing hydrothermal system is hosted by highly altered felsic volcanics on the Hot Spring Property. Anomalous values in gold in rock and soil have been found concentrated on the southridge area, and other zones throughout the Property. A systematic exploration program of geological mapping, excavator trenching, geochemistry and contingent diamond drill program is recommended at a cost of: Phase I, \$40,000, Phase II of \$300,000 and Phase III of \$220,000 for a total of \$560,000.

Respectfully submitted, ONCH J.T. Shearer, M.Sc., P.Geo. July 15, 1997

The Hot Spring Property

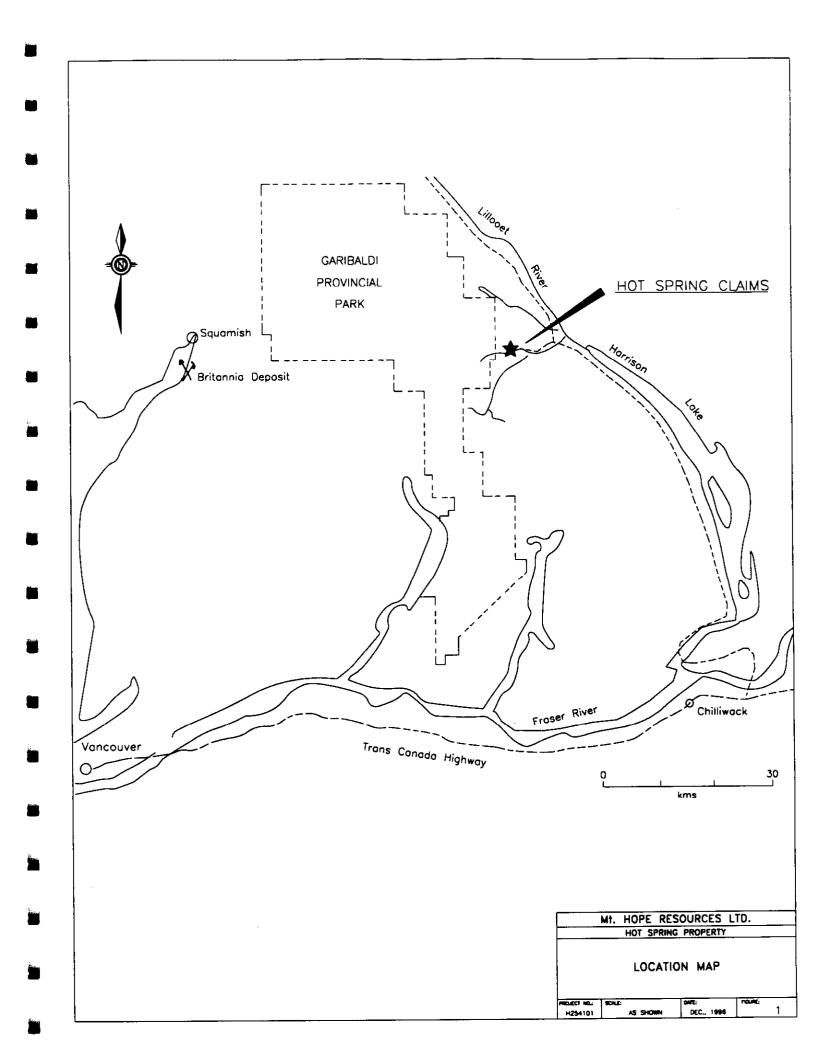
INTRODUCTION

This report has been commissioned by S. E. Angus, President of Mount Hope Resources Ltd. to summarize all available data on the Hot Spring Mineral Claims and propose an exploration program to further assess the base and precious metal potential of the property. A large amount of previous work has been carried out in the past by various operators. This report also documents a geological mapping, trail cutting and minor trenching program conducted in 1997.

The large volcanogenic copper-gold deposits of the Britannia Camp which produced 55 million tons grading 1.1% Copper and 0.02 oz/ton gold (Payne et al, 1980) are hosted in Gambier group rocks 70 km directly west of the Hot Spring Property. The Hot Spring area is underlain by altered volcanics and metasediments of the Gambier Group.

The claim area has been explored for precious metal (MacKay, 1944) and base metal potential (Wojdak, 1980a), since the early 1940's. Detailed panning during 1944 demonstrated that Sloquet Creek contains plentiful coarse, angular placer gold and that 75% of the placer gold can be traced to Simpson Creek (Mackay, 1944). Stream sediment, soil and rock sampling led to the discovery of several gold, lead, copper and zinc soil anomalies by Cominco (Freeze, A. C., 1986). A field program by Aranlee Resources Ltd. conducted in 1987 relocated those anomalies and was successful in extending the most intense anomaly previously located by Cominco Ltd. Prospecting in 1988 discovered two new important pyrite-sphalerite alteration zones high in gold values south of the previous work on Southridge. Subsequent trenching in November 1988 on this showing south of North Sloquet Creek (Dan's Showing) revealed an extensive area carrying important gold values (up to 0.276 oz/ton) in a wide area extending over 1000 metres to the east. Detailed mapping and sampling suggests a possible stratabound nature to the mineralization. Limited shallow diamond drilling conducted in 1990 by Noranda intersected 119m averaging 584 ppb gold in Hole NQ90-2 and NQ90-4 averaged 615 ppb gold over 66m., demonstrating that the zone enriched in gold is between 70 to 100 metres in true thickness. Only one hole (NQ90-7) tested the possible downdip extension of this low-grade mineralized zone but an up faulted section of the lower andesite was encountered in this hole.

Gold mineralization is related to Tertiary-age major faulting along the Harrison Lake Fracture Zone similar to the RN gold deposit at the south end of Harrison Lake and Doctors Point gold deposit.



LOCATION AND ACCESS

The Hot Spring claims are located at 122° 21'W longitude and 49° 45'N latitude in the New Westminster Mining Division, approximately 95 air kilometres northeast of Vancouver and 15 kilometres west of the northern end of Harrison Lake (Figure 1). Garibaldi Provincial Park borders the property to the west.

The property is accessible by logging roads via either Pemberton and south along the Lillooet River Valley Road, or by road up the west side of Harrison Lake from Harrison Mills (at the Sasquatch Inn turn-off). A 9 kilometer two-wheel drive road accesses the east central boundary of the property by traveling from the Lillooet River westward along the north side of Sloquet Creek Valley. Access to the claims, from this point is by 4x4 truck on the logging road. Helicopter services are available at Agassiz or Pemberton.

Elevations on the property range from 1,500 to 4,500 feet above mean sea level (460m to 1,480m a.s.l.) (Figure 2). Slopes are steep with avalanche chutes and hazardous steep cliff areas. Thick growth of alder, devils club and alpine fir occur below altitudes of 4,500 feet (1,372m). Above this elevation the vegetation thins, and where the terrain flattens, ponds and swampy areas have developed.

The access road is currently variably maintained up to the bridge over Simpson Creek. Active logging and road building was taking place during 1995 on the lower southwest side of Sloquet Creek. Harvesting plans call for a new road up to the general area of the mineralized showings in preparation of helicopter logging in late 1997-1998.

Locals refer to Sloquet Creek as "Spring Creek" since high temperature hotsprings occur south of the claims on South Sloquet Creek which attracts determined visitors throughout the year. A major new bridge across Sloquet Creek giving access to the hotsprings was completed by Forestry in July 1997.

CLAIM STATUS

The property consists of seven contiguous Modified Grid System mineral claims held by location by the Shearer-Angus Joint Venture as tabulated in Table I and illustrated on Figure 3.

TABLE I							
List of Claims							
Claim Name	Tenure Number	Number of Units	Size of Units	Location Date	Current Expiry Date	Registered Owner	
Hot Springs 1	336395	6	3Nx2W	May 22, 1995	May 22, 1998*	S. E. Angus	
Hot Springs 2	338135	12	3Sx4W	July 28, 1995	July 28, 1998*	S. E. Angus	
Hot Springs 3	338136	15	3Sx5W	July 28, 1995	July 28, 1998*	J. T. Shearer	
Hot Springs 4	347137	18	3Sx6W	May 22, 1996	May 22, 1998*	J. T. Shearer	
Hot Springs 5	346138	18	3Nx6W	May 22, 1996	May 22, 1998*	S. E. Angus	
Hot Springs 6	346139	12	2Sx6W	May 23, 1996	May 23, 1998*	S. E. Angus	
Hot Springs 7	349209	9	4Sx4W	Aug. 7, 1996	Aug. 7, 1998*	S. E. Angus	
	Total	90 units					

* with assessment work documented in this report.

Mineral title in British Columbia is acquired by locating claims in the proscribed manner as outlined in the MINERAL ACT and regulations. Title is maintained by filing appropriate assessment work in the amount of \$100 per unit for the first 3 years and \$200 per unit thereafter.

The Hot Spring Property was staked over a period of 2 years since the previous claims (Quet Claims) lapsed at differing times.

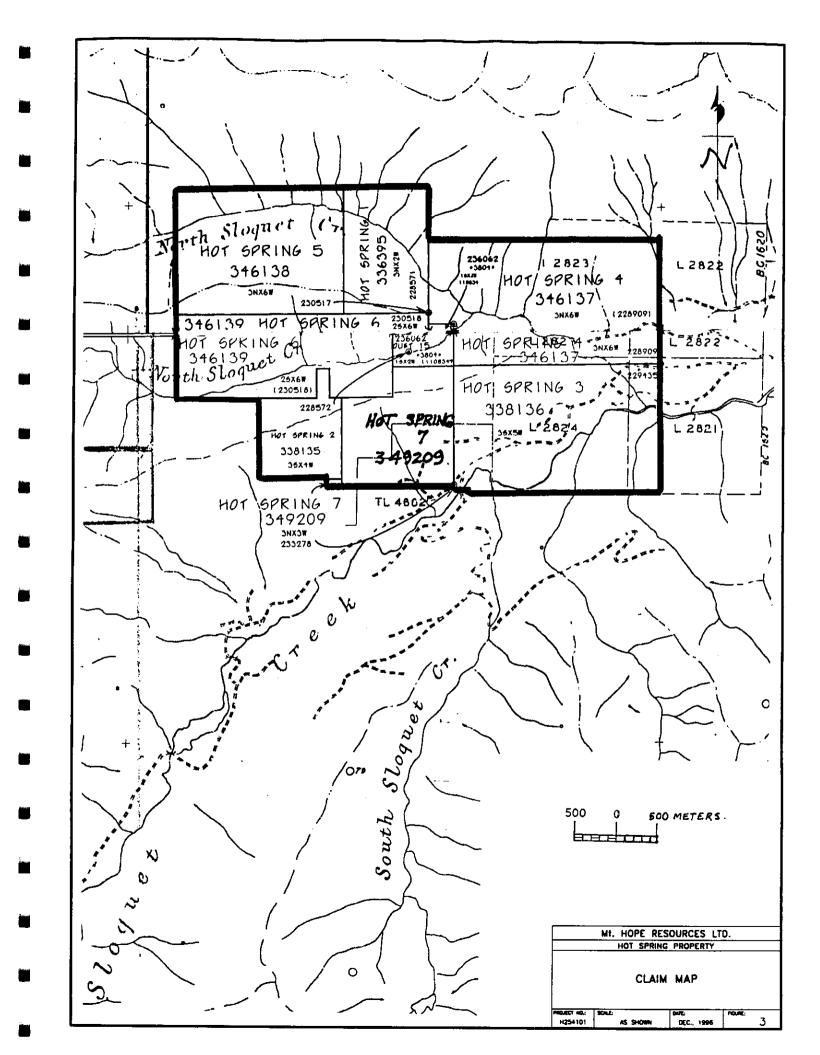
The main logging road along South Sloquet Creek is scheduled to be re-constructed in 1997 by the B.C. Forest Service. This will open access to the southern part of the claim block and may allow access to the ridge top from the south. Logging in the past has taken place right up to the park boundary west of the Southridge showings.

The lower reaches of Sloquet Creek are Salmon-bearing, however, sampling by Wildlife officials in 1996 failed to indicate any salmon upstream from the eastern claim boundary.

FIELD PROCEDURES

Prospecting was carried out over a part of the central ridge area with one day spent south of North Sloquet Creek. Several May days were spent building trails through slide and whashed out sections of the road. Traverses were completed along the 4,000' and 4,500' contours on the southern portion of the central ridge, while in the north, in the Simpson Creek area, prospecting was carried out up individual gullies draining the gossanous ridge area. While work generally confirmed the previous interpretation of the bulk stratigraphy of the area, the interbedding of markedly different lithologies, such as rhyolites and andesites, and possible repetition of cyclicity in deposition creates considerable difficulty in assigning outcrops to particular units.

The Hot Spring Property



EXPLORATION HISTORY

Exploration activity within the immediate area has been conducted intermittently since the mid 1940's. North of Sloquet Creek in the Fire Lake Area, small scale gold production occurred in the 1920's and 1930's.

In 1944, the area was staked by prospectors working for Cominco Ltd. (MacKay, J. M., 1944). Their attention was focused towards this area after obtaining good gold indications from pannings of Sloquet Creek gravels. Over 75% of the gold was determined to be from gossanous cliffs in the Simpson Creek area. Prospecting in this area produced a chip sample of pyrite, galena and sphalerite bearing tuff that contained 0.16 oz/ton gold over six feet (1.8 metres) and also yielded a float rock sample containing quartz-sulphide stringers which assayed 0.94 oz/ton gold (MacKay, J. M., 1944). No further work was done at that time.

In 1975, the CL claim was located in the area north of Simpson Creek and was geologically mapped and sampled by Mr. M. McClaren. This work was performed for the Cyprus Anvil Corporation during 1976. The purpose of the exploration program was to assess the massive sulphide potential of the area. A pencil manuscript map at a scale of 1:1200 was constructed and was also used in the 1988 program.

In 1979, Cominco Ltd. staked the SLO claim group in the area now occupied by the Hot Spring claim group. Silt samples from this area gave anomalous precious and base metal values (Wojdak, P. J., 1980a). Cominco Ltd. completed a soil sampling survey in 1981 and located several precious and base metal soil anomalies. The best developed anomaly yielded values of up to 488 ppm Cu, 3600 ppm Pb, 3300 ppm Zn and extended 500 metres in length being open towards the west (Wojdak, P. J., 1980b).

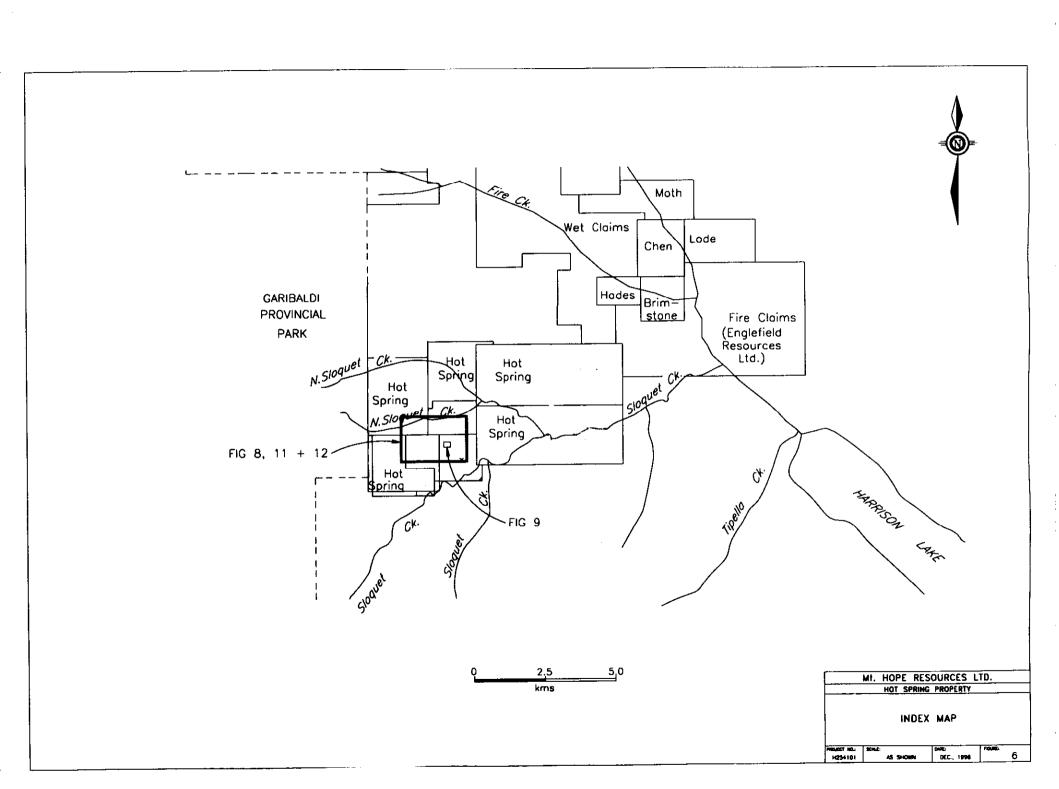
In 1985, Cominco Ltd. attempted chip sampling traverses across a portion of cliffs located above and to the south of the best developed soil anomaly on the south side of Simpson Creek. This program employed experienced rock climbers and had a duration of three days. Thirty-five rock chip samples were collected; at least eight samples were anomalous in either copper, lead or zinc. Fourteen samples yielded silver values exceeding 7 ppm. Five samples yielded gold values exceeding 100 ppb. Best results were received from sample S-85-3 (155 ppm Cu, 12800 ppm Pb, 8440 ppm Zn, 162 ppm Ag, 392 ppb Au) and S857 (244 ppm Cu, 1186 ppm Pb, 578 ppm Zn, 17.6 ppm Ag, and 856 ppb Au)(Freeze, A. C., 1986).

The SLO claim group was allowed to lapse in October 1986. The area was partially restaked as the Quet 1 and 2 mineral claims on May, 1987 by W. Chase. Aranlee Resources Ltd. optioned the Quet 1 and 2 mineral claims in October, 1987 and staked the contiguous Quet 3 and 4 mineral claims in November, 1987. A small exploration program was conducted during November of 1987 by Aranlee Resources. This work confirmed the presence of the Cominco soil anomalies and extended some of the more significant ones (McClaren and Hill, 1987). In 1988, follow-up sampling, prospecting and geological mapping was completed. Cobra drilling and blasting was used to trench the most promising showings (Shearer, 1988).

The claim situation was complicated with overlaps in the area since some previous claims were removed from the Government maps while they were still in good standing.

Aranlee Resources Ltd. optioned the property to Noranda in 1989. Work in 1990 consisted of 7 NQ diamond drillholes totalling 1251.9 metres on the Southridge part of the property. Hole NQ90-2 intersected 119m averaging 584 ppb Au, NQ90-4 intersected 615 ppb Au (Wilson, 1991). Only one hole (NQ90-7) tested the possible down drop extension of the mineralized zones but it encountered an up-faulted block of lower andesite. Airborne geophysics and follow-up soil geochemistry were also completed (Wilson and Wong, 1990).

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REGIONAL GEOLOGY

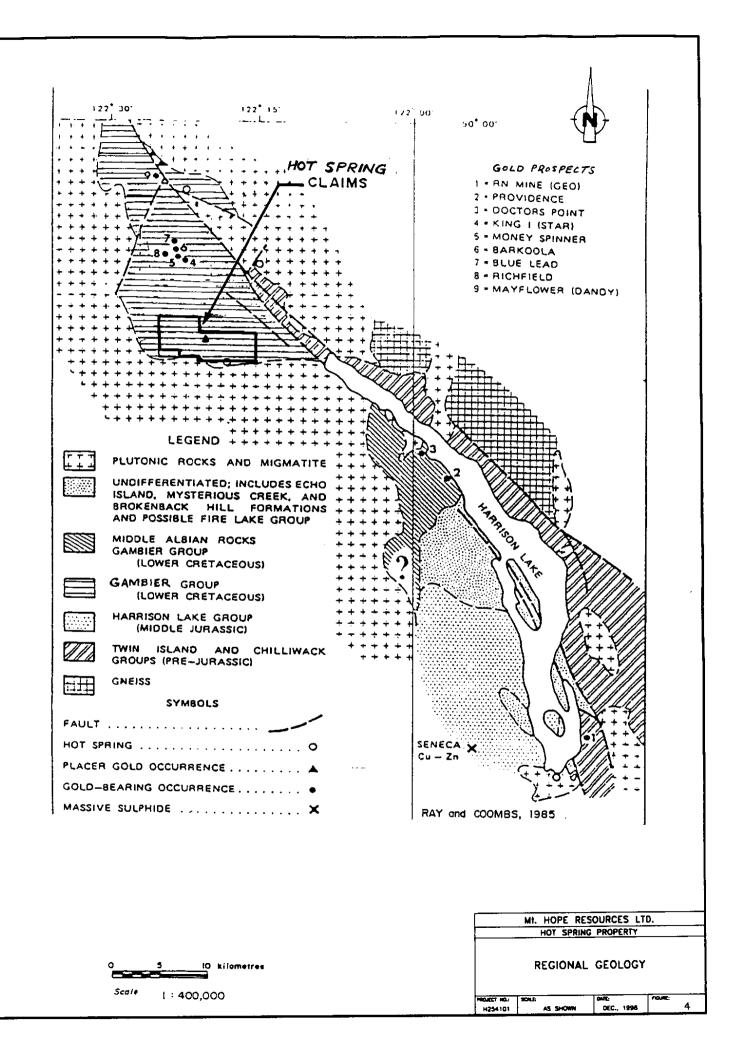
The earliest reported geological mapping of the North Harrison Lake area was of the Vancouver North Map Area by J. E. Armstrong and J. A. Roddick contained in G.S.C. Memoir 335: Vancouver North, Coquitlam, and Pitt Lake Map Areas, B.C., (Figure 4). More recent mappings by J. M. Journeay, L. Csontos and J.V.G. Lynch from 1988 to 1989 have detailed the geology of North Harrison Lake area which includes the Hot Spring Property. A recently published Open File (O.F. #2203) by the B.C. Department of Mines summarizes the results of that mapping, (Figure 5).

The Coast Belt of Southern British Columbia records a complex history of deformation, metamorphism and igneous activity that can be linked, in part, to progressive shortening and transcurrent displacements along the continental margin of North America since Early Cretaceous time that may be associated with eastward subduction of oceanic lithosphere.

Gambier Group rocks underlie the Hot Spring property and occupy an island arc setting. Included is the Peninsula Formation, a basal, fining upward sedimentary sequence of subaqueous autoclastic and epiclastic rocks which are mainly intermediate in composition (Roddick, J. A., 1965). These rocks are correlative on a lithological basis with the Gambier Group that lies 40 air miles (70 kilometres) to the west of the Hot Spring property. The argillaceous middle member along Harrison Lake is equivalent to the Britannia Formation of the Gambier Group (Roddick, J. A., 1965, pg. 42). The Britannia Formation hosts the Britannia Mine, a copper-zinc-gold felsic volcanogenic massive sulphide deposit of the Kuroko-type (55 million tons grading 1.1% Cu, 0.65% Zn, 0.2 oz/ton Ag and 0.02 oz/ton Au) (Payne et. al., 1980).

Two phases of the thrusting related to Late Cretaceous oblique convergence along the continental margin and Tertiary Aged dextral and normal dip-slip faulting are the major structural events. Metamorphism to greenschist grade or lower has also occurred within the Gambier Group rocks. The metamorphic grade of the Gambier Group rocks seldom exceeds lower greenschist facies, except in the vicinity of intrusions, where migmatization occurs.

The Harrison Lake Shear Zone is recognized (Journeay, 1989) (Ray, 1986) to be an important structure in localizing economic gold deposits within Southwest British Columbia. This gold belt, which includes the Hot Spring property is associated primarily with brittle fault systems along the western margin of the Shear zone, and is offset to the north by younger northeast-striking transcurrent faults. These northeast-striking transcurrent faults may also be important structures in controlling the emplacement of epizonal Late Tertiary plutons and in tapping associated hydrothermal systems. These transcurrent faults may be providing the necessary structural control for localizing economic concentrations of both base and precious metals within the region.



PROPERTY GEOLOGY and MINERALIZATION

The geology of the central portion of the Hot Spring property is shown on Figure 6. The area is predominantly underlain by a mixed assemblage of felsic tuffaceous and fragmental rocks which display evidence of explosive felsic volcanism and contain clasts of laminated pyrite. These rocks interfinger with andesite flows and dykes.

Past geological mapping at the scales of 1:1,000 for the detailed grid and 1:2,500 for the reconnaissance grid was completed on the area referred to as the "Southridge Zone". The following is a summary of the lithological units noted during the course of prospecting and mapping in 1997.

Unit 6: Biotite-Hornblende Diorite

An unaltered, medium to fine grained, equigranular rock containing 10-15% biotitehornblende crystals, 57-80% plagioclase crystals and 10% quartz crystals. The rock has a light grey salt and pepper appearance and often has xenoliths of andesite near it's contacts.

This intrusive is seen extensively in the southwest of the Southridge map area (Figure 8) together with a small stock mapped in the area 31+100E to 31+400E from 29+600N to 29+800N. Airborne magnetometer surveying shows a larger near surface component to the stock than that mapped on surface.

Unit 5A: Andesite Dykes/Sills?

A dark green to greenish black rock, variably porphyritic with feldspar phenocrysts, massive, undifferentiated with extensive chlorite alteration and lesser epidote alteration. The dykes cut all lithologies (except diorite) at a north to north-west direction with gradational to sharp contacts.

Pyrite is ubiquitous, occurring as fine disseminations from 1 to 15%, and often coats fracture surfaces. The rock is moderately to strongly magnetic.

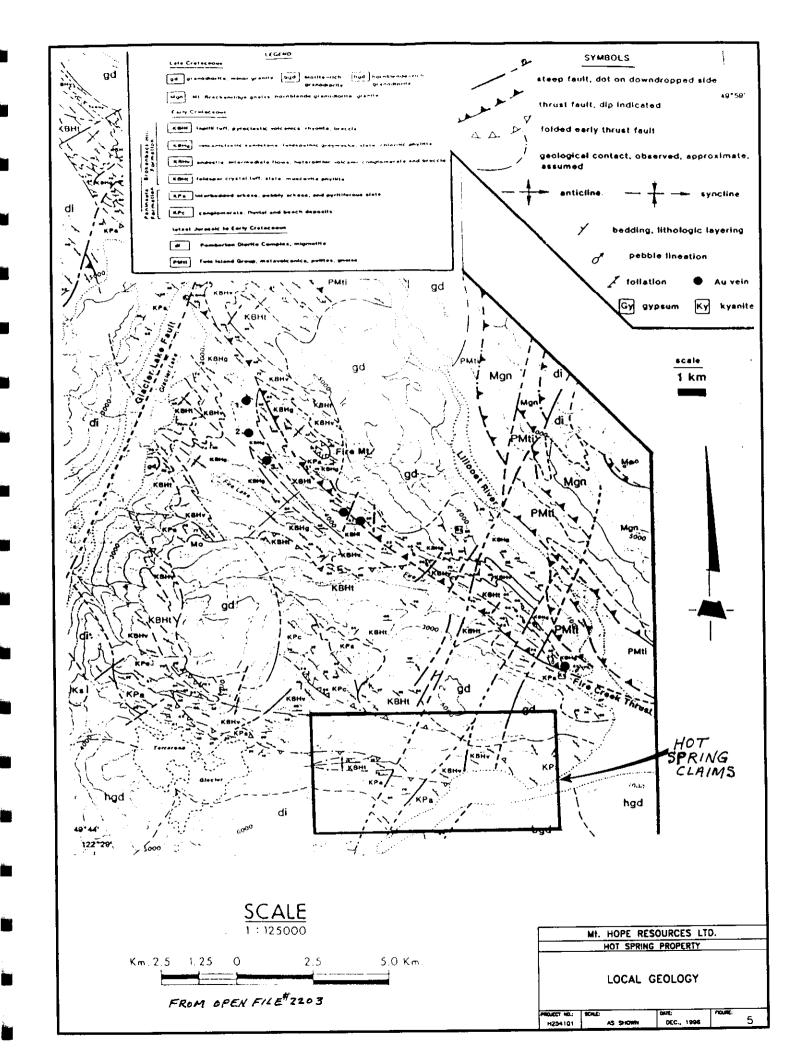
At some locations it is suggested that these andesites (or intermediate tuffs) are conformable to bedding and may be sills. This unit is seen commonly throughout the property.

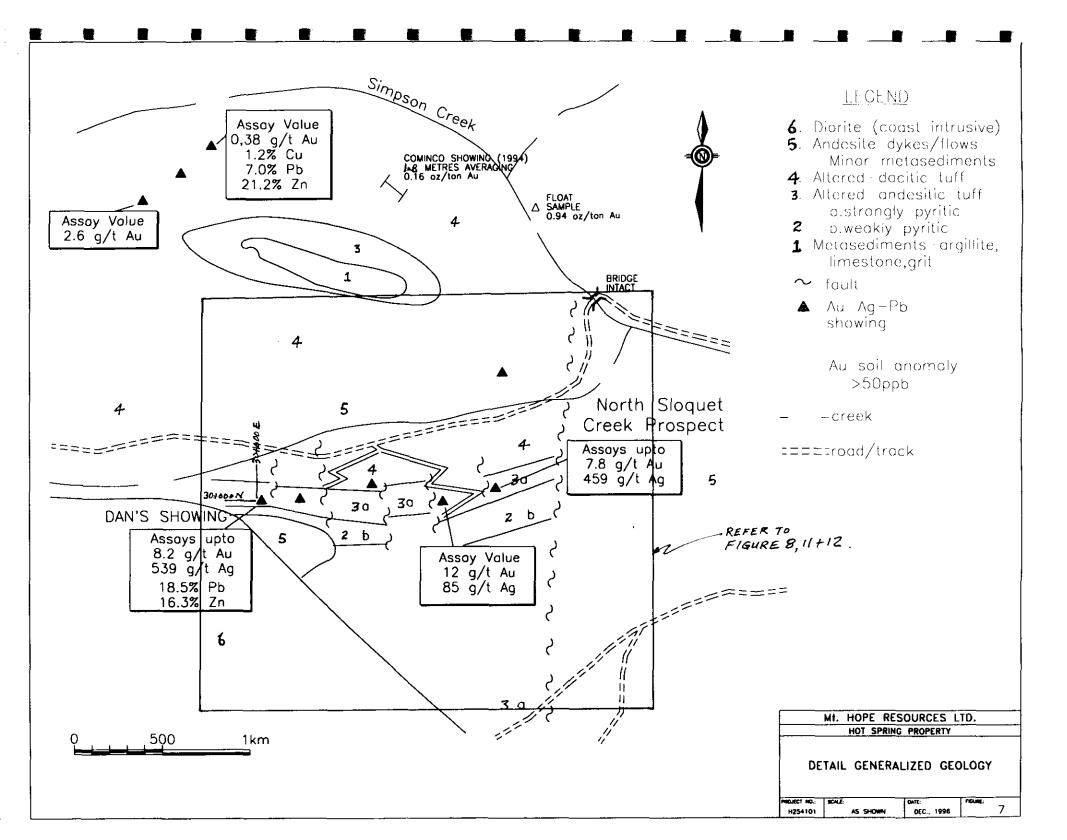
Unit 5B consists of andesitic flows and tuffs and is thought to belong to the Peninsula Formation. It occurs east of L31+500E and forms the easterly extent of the ridge between the North Sloquet and Sloquet Creek.

Unit 4: Dacitic to Andesitic Lapilli (Nodular) Tuffs

A dark grey to brown matrix of secondary biotite with subangular to subrounded 1 mm to 1 cm fragments (nodules) of light green (felsic) fine grained fragments. This unit is partly pervasively silicified and has been shown in petrographic studies to be altered by potassium feldspar.

This unit is common along the northern border of the detailed grid over a slope distance of 300m.







		LEGEND
		ANDESITE TUFFS - MEDIUM GREEN FINE GRAINED SILICIFIED MATRIX - ABUNDANT FELOSPAR TUFFACEOUS FRAGMENTS 0-535 FINE GRAINED MATCH THEFACEOUS FRAGMENTS
		– 0-5% FINE GRAINED MARIC TUFFACEOUS FRAGMENTS PALE GREEN TUFF
		- PALE GREEN AND HIGHLY SILICEOUS - YERY FINE GRAINED WITH GHOST FELDSPAR TUFFACEOUS FRAGMENTS - MAY BE BANDED
		- NOT WAPPED IN SURFACE EXPOSURE
	6	BIOTITE - HORNBLENDE DIORITE UNALTERED, MEDIUM TO FINE GRAINED CONTAINS
	5	XENDLITHIC BLOCKS OF ANDESITE NEAR CONTACT. A - ANDESITE FLOWS / HIGH LEVEL INTRUSIVES
		- MASSIVE UNDIFFERENTIATED MULTI-JOINTED - GREY BLACK TO GREENISH BLACK IN COLOUR. - VARIABLY PORPHYRITIC - EXTENSIVE CHLORITE ALTERATION, LESSER EPIDOTE ALTERATION - PYRITE ALMOST UNIVERSALLY PRESENT, 1-15X DISSEMINATED AND LOCALLY RICHER ON FRACTURE SURFACES.
		B - ANDESITE DYKES - SAME LITHOLOGY AS "54"
		- COMMONLY PORPHYRITIC - "FELDSPAR PORPHYRYS" - CONTACT VARY BETWEEN DIFFUSE GRADATIONAL TO SHARP AND OFTEN SHEARED - CUTS ALL OTHER LITHOLOGIES (EXCEPT DIORITE?)
		- MOST TREND NORTH-NORTHWEST DACITIC - ANDESITIC LAPILLI TUFFS
		- COARSE DARK GREY TO PURPLISH IN COLOUR - NODULAR FORM COMMON IN DRILL CORE,
		OFTEN LOGGED AS NODULAR TUFF - SECONDARY BIOTITE COMMON, GIVING WELL DEVELOPED FABRICS - GENERALLY SHOW PERVASSIVE SILICIFICATION, PYRITIZATION AND LESSER KFELDSPAR ALTERATION
	3	SILICEOUS FELSIC TUFFS - FRE GRAINED, LIGHT-BLUE - GREY IN COLOUR
		- MAY INCLUDE MINOR HIGHLY ALTERED SEDIMENTS? - GENERALLY PERVASSIVE SILICIFICATION, PYRITIZATION
90.		- OLDANLET FEMALSTRE ENANSING AND K FELDSPAR ALTERATION - STRONGLY BLEACHED, LEACHED, WITH DISTINCTIVE YELLDW BROWN GOSSANOUS WEATHERED SKIN IN STRONGLY ALTERED AREAS
	2	SILICEOUS (SUGARY TEXTURED) FELSIC TUFFS
		- VERY SILICEOUS, WHITE SUGARY TEXTURED - MINOR PYRITE < 1%
		- SERICITE COMMON - PINK Fe-OXIDE STAIN DISTINCTIVE ON WEATHERED SURFACE - GRADATIONAL WITH (3) IN SOME AREAS
		- GRADATIONAL WITH (3) IN SOME AREAS BOULDER CONGLOMERATE
	_	- WELL ROUNDED GRANITIC BOULDERS FLOATING IN DARK CHLORITIZED ANDESITIC MATRIX
		SYMBOLS
	\sim	
	≥== 	CUFFS/CERAGS
		SNOW CHUTE / TOPOGRAPHIC DEPRESSION = ROAD
		- LITHOLOGIC CONTACT - FAULT
		ALTERATION
	a	MINOR PYRITE, 1% MINOR TO MODERATE SILICIFICATION
	ь	MODERATE PYRITE 1-4%, MINOR TO MODERATE SILICIFICATION
	c	
		MINERALIZED OUTCROP AREAS
	•	- ABUNDANT SPHALERITE AND/OR GALENA - PYRITE > 10%
		- STRONG SILICIFICATION, OFTEN WITH QUARTZ-VEINLET FLOODING
		– STRONG K-FELDSPAR ALTERATION WINOR SPHALERITE AND/OR GALENA
		B FUCHITE a BARITE
		g BARTE P CHALCOPYRITE
		Mt. HOPE RESOURCES LTD.
		HOT SPRING PROPERTY
		DETAIL GEOLOGY SOUTHRIDGE AREA
		SUUTIRIDGE AKEA

PROJECT NO.: SCALE: DATE: FIGURE: H254101 AS SHOWN DEC., 1996 8

Unit 3: Siliceous Felsic Tuff

A light blue grey, fine grained to very fine grained highly silicified and massive rock. The rock appears to have been bleached and weathered surfaces have a distinctive yellow-brown gossanous appearance due to oxidation of finely disseminated pyrite.

This unit is often mineralized with sphalerite \pm galena and lesser chalcopyrite and produced the bulk of the gold and silver rock sample anomalies during Aranlee's 1989 field program. It is situated immediately south of Unit 4 in an east-west band on the detailed grid and occurs over a slope distance of 200m.

A similar lithological unit occurs on the south facing slope of Southridge which may, in part, be the down-dip extension of Unit 3. It occurs over a much wider slope distance, however, and a steepening dip would be required to account for the additional area of the outcrop. The unit is fairly massive and dip measurements can not be made. More detailed mapping from closer spaced lines would be necessary to more fully understand the geometry of Unit 3.

Unit 2: Siliceous (Sugary Textured) Felsic Tuff

A white, fine to medium grained sugary textured, very siliceous felsic tuff. As with Unit 3, into which this unit is gradational, the protolith is not clear but is thought to be a dacite or rhyolite. Quartz eyes have not been recognized in hand specimens. Silicification has obliterated most original texture and the unit appears as a massive, non-bedded volcanic. Ghosted white tuff fragments (feldspar?) are sometimes observed.

A distinctive red (hematite?) colouration on weathered surfaces is common within this unit. The pyrite content is very low (<<1%) and the rock appears to have been bleached.

This unit outcrops in an east-west band south of Unit 3 just on the south facing slope from the ridge forming the topographic high on the detailed and reconnaissance grids.

Unit 1: Boulder Conglomerate

Well rounded granitic boulders occur within a (matrix supported) dark green, chloritized andesitic matrix. This unit is only seen on the reconnaissance grid on the east and north-east sides and likely represents a lower portion of the Peninsula Formation within the gridded area.

Alteration

The volcanic package consisting of Units 2, 3 and 4 display the strongest alteration of all rocks mapped. Unit 5 displays strong orthoclase alteration while Unit 3 contains both orthoclase and silica alteration. The silicification becomes stronger and orthoclase weaker towards the south (up stratigraphy) until in Unit 2 the rock is totally silicified and most of original textures destroyed. Silicification, as with orthoclase alteration, is pervasive with gradational contacts.

The origin of the alteration may, in part, be related to the intrusion of the Coast Plutonic diorites with the gradational change from one alteration type to the next related to the contact aureoles. Other volcanics on the property show minor to moderate silicification but nowhere near the intensity of Unit 2, 3 and 4.

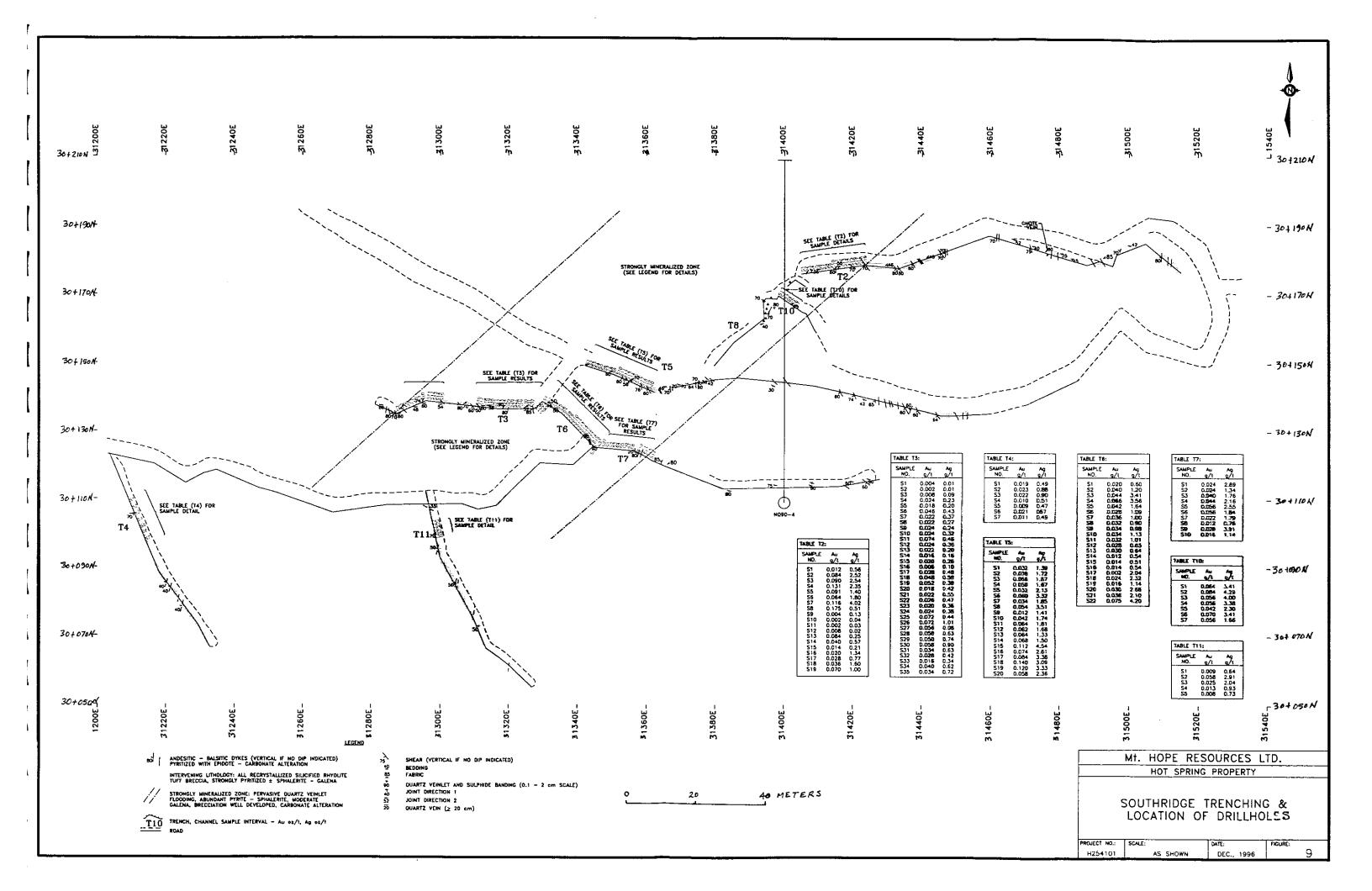
STRUCTURE

The volcano-sedimentary sequence has been metamorphosed to biotite metamorphic grade with variable development of a tectonic fabric. Where recognizable, bedding is sub-parallel to or shallower than the fabric, dipping at 30-50° to the SSW or SSE. There is no evidence of major fold repetition within the area.

Late-stage faulting is important, probably largely of post-plutonic, Tertiary age. Gold mineralization elsewhere in the Harrison Lake Area is related to this Tertiary Event. A major dextral northeast-trending fault controls the orientation of Sloquet Creek and cuts the nose of the ridge between North Sloquet and Simpson Creeks. Hot springs in Sloquet Creek are related to this fault. Several sub-Parallel northeast to north-trending faults may control the line of snow chutes to the west. One such structure exposed by trenching near 30+125N and 30+305E is strongly altered and mineralized. Several southwest dipping structures have also been recognized in the area and bear a close relationship to mineralized zones.

The Southridge Zone west of Line 31+500E is underlain by an east-west striking, moderately south dipping sequence of intermediate to felsic volcanic tuffs to lapilli tuffs. These volcanics have been pervasively silicified and orthoclase altered and are cut by numerous andesitic porphyry dykes trending north to northwest. Steeply dipping North-South trending faults have displaced some lithologies by a few tens of metres. A blue-grey silicified felsic tuff unit (Unit 3) has been shown by past surveys to contain sphalerite-galena showings. Present mapping assigns the gold showings to this unit and defines it to be the most potentially economic horizon on the Southridge.

East of Line 31+500E and separated by a major north - south gulley is a massive andesitic flow/tuff unit which is underlain by a boulder conglomerate. No structural measurements were recovered from these units. This area represents a significant faulted uplift within the Gambier Group with subsequent erosion of the Brokenback Hill Formation and exposing the underlying Peninsula Formation. These rocks are not as altered as those west of Line 31+500E indicating the uplift and erosion to be a late stage event. No mineralization except minor pyrite was seen within this package of rocks.



TRENCHING

Mineralization and Lithogeochemistry

A high proportion of the volcanic rocks in the claim area are pyritic with low level enrichment in base and precious metals. The property geology indicates major potential for volcanogenic massive sulphide or stockwork base metal-gold mineralization (comparable to some of the zones at the Britannia Mine) and for structurally controlled mesothermal or epithermal gold mineralization related to the Late Cretaceous or Tertiary structures.

Exploration by Cominco and Aranlee prior to 1989 identified widespread base and precious metal enrichment in the pyritic felsic volcanics on the ridge between Simpson and North Sloquet Creeks. Several sphalerite-galena showings were located on this ridge and north of Simpson Creek, some with significant gold values (max. 392 ppb Au). Higher gold values in Dan's Showing south of North Sloquet Creek focused follow-up work in this area. This led in 1989 and 1990 to the outlining of an extensive, discontinuous, mineralized zone extending at least 1.5 km east-west along strike and up to 100m across strike. This area is referred to as the North Sloquet Creek Prospect.

North Sloquet Creek Prospect, Figure 8 & 8a

Dan's Showing (30+000N + 30+050E)

Five trenches were blasted across the showing in 1988. This zone outcrops over a horizontal area of 55 by 35 metres and is covered on all sides. Vertically it is exposed through a height of 25 metres on the steep hillside. Hand trenching gave values of up to 0.238 oz/ton Au over 1m (0.174 oz/ton over 2m). In a different area, one part of a trench gave 8 metres averaging 0.052 oz/ton Au. Narrow galena-sphalerite fault zones give up to 15 oz/ton Ag and 25% combined Pb/Zn over 1 metre (Shearer, 1988). The host rock is Unit 3a altered rhyolitic tuff cut by an intense millimetre scale quartz veining network. Sulfides occur as disseminations and within veins, averaging 5-10% but with local zones of up to 40-60% sulfide. The richest mineralization occurs in a shallow (35°) south-dipping 0.2 to 1m breccia zone.

The extent of the mineralized area is uncertain. Disseminated sphalerite-galena mineralization occurs in outcrop along strike to the east for 130m, with grab samples assaying up to 3.37 g/t Au (0.098 oz/ton Au). Mineralized float occurs 150m west of the showing, where outcrop is absent. Exposure is also absent downhill to the north. To the south, the zone passes up into unmineralized andesite.

The evidence suggests a primary stratabound metal enrichment concentrated into later structurally controlled zones. The disposition of higher grade samples within the trenched area may reflect a 150-160° mineralized zone strike related to 140-150° shear zones exposed in the trenches. The relative importance of structural and stratigraphic controls requires additional investigation.

Lower Zone (30+100N + 30+035E)

The 'Lower Showing' lies 100m north-northwest and downhill from Dan's Showing. Abundant pyrite, galena and sphalerite occur as disseminations and in irregular massive zones and veins in silicified dacitic tuff. Grab samples assay up to 1.26 g/tAu (0.037 oz/ton). A strike of 160-170° would link the zone with Dan's Showing through intervening soil anomalies (up to 155 ppb Au).

The Hot Spring Property

Prospecting along strike to the east from the lower showing has established an extensive stratabound zone (250 x 50m) of variably silicified tuffs with widespread pyrite-galena-sphalerite mineralization, concentrated in northwest-trending shear zones. Grab samples assay up to 0.7 g/t Au (0.02 oz/ton).

The Lower Zone continues east into the 350 E showing and probably continues along strike through the 600 E, 900 E, 1150 E and 1400 E Showings (below).

<u>350 E Showing</u> (30+125N + 30+350E)

Excavator trenching of a northwest-trending Au soil anomaly (to a maximum of 420 ppb Au) revealed a fault zone of intensely sericitic and argillic altered pyritic tuff at least 13m across. Maximum gold values in 1 metre channel samples were 0.068 g/t (0.002 oz/ton). This passes east into 9m of silicified tuff with up to 30% pyrite-chalcopyrite-sphalerite. Maximum 1 metre channel sample assays from the zone were 0.48 g/t Au (0.014 oz/ton), 26.7 g/t Ag (0.78 oz/ton), 1.04% Cu, 1.35% Zn and 0.14% Pb, A 4m zone assayed at 0.39 oz/ton Au, 18.3 g/t Ag, 0.62% Cu, 0.64% Zn, 0.11% Pb.

A 30 metre section of variably silicified sphalerite-bearing pyritic tuffs was exposed east of this Cu-Zn zone. This mineralization represents the eastward extension of the Lower Zone, with up to 20 metres dextral offset across the fault. Maximum values from 1 metre channel samples were 0.206 g/t Au (0.006 oz/ton) with 22.7 g/t Ag (0.66 oz/ton) and 2.0% Zn.

600 E Showing (30+170N + 30+600E)

This showing occurs on the eastward extension of the Lower Zone and marks the start of richer gold mineralization within the zone. Grab samples of pyrite-galena-sphalerite mineralization in silicified dacitic tuffs assay up to 4.2 g/t Au (0.122 oz/ton). Recent channel sampling across the zone indicated 7 metres assaying 2.4 g/t Au (0.07 oz/ton) with 2 metres at 4.56 g/t (0.134 oz/ton). Trenching is required to establish the continuity of the mineralization.

<u>900 E Showing</u> (30+110N + 30+905E)

The main mineralized zone at 900 E is 3-5m across and exposed over 15m of strike at about 145° Az. It contains abundant (10-40%) pyrite, galena and sphalerite, disseminated within quartz vein networks hosted by silicified dacitic tuff. Mineralization is extensive but its continuity is uncertain due to deep oxidation and leaching.

Twelve grab samples from the 15 x 20 metre outcrop area average 2.45 g/t Au (0.071 oz/ton) and 33.16 g/t Ag (0.967 oz/ton). The maximum assay was 6..88 g/t Au (0.201 oz/ton) with 68 g/t Ag (1.983 oz/ton) and more than 1% Pb. Limited channel samples have been taken across the main zone. The best intersections were 1 metre at 6.38 a/t Au (0.186 oz/ton) and 2 metres at 2.76 g/t Au (0.805 oz/ton). Eight samples across the zone average 2.74 g/t Au (0.080 oz/ton) and 60.7 g/t Ag (1.769 oz/ton), excluding samples of an unmineralized 0.5m andesitic dyke cutting the zone.

The area is presently inaccessible to the excavator so that blast trenching and channel sampling are required to establish continuity and grade mineralization. The outcrop is deeply leached and grades may increase in fresh rock as was the case at Dan's Showing.

Exposure is absent along strike from the main zone. Its projected extension to the northwest is marked by a strong topographic break in craggy outcrops to the southwest. These comprise variably silicified pyritic tuff with common galena-sphalerite mineralization, forming part of the stratabound Lower Zone extending west to the 600 E Showing. Preliminary grab samples assay up to 2.9 g/t Au (0.08 oz/ton). Continuity of mineralization is difficult to establish due to deep oxidation and leaching. None of this area is accessible to tracked excavator and should be further explored by hand trenching, channel sampling and drilling.

1300 - 1500 E Showing Figure 9 (30+150N and 31+300E to 31+500E)

Mineralization in the eastern grid area was discovered as a follow-up to highly anomalous soil geochemistry on the 30+000N line from 30+750E to 31+500E. Chip samples from sub-outcrop at 31+500E assayed 3840 ppb Au. Follow-up prospecting revealed pyritic silicified tuff with extensive sphalerite-galena. Mineralization in the vicinity at 1100 and 1400E returned values of 4.35 g/t (0.127 oz/ton) and 12.59 g/t (0.367 oz/ton) Au. Five grab samples from the 20 x 30m outcrop area at 1400E averaged 5.71 g/t (0.149 oz/ton) Au.

A tote road was constructed to the ridge top at 31+400E by tracked excavator and the area between 31+100E and 31+500E was trenched at this level. In total, 550m of trenching was completed with channel chip samples taken at 1 m intervals (in most cases). The trenching successfully delineated an apparently northeast trending zone, 40 m x 150 m, of intensely silicified pyritized rhyolitic tuff breccia with pervasive quartz veinlet flooding and alteration and disseminated and veinlet sphalerite-galena. Assay results (Table 2, Figure 9) were in the general range 0.02 to 0.1 oz/ton Au, 0.1 - 2 oz/ton Ag and 0.01 - 1% Pb and Zn through the zone.

The western and southern extensions of this mineralized area were not accessible to the excavator and will require blast trenching. Grab samples from the area west of 1300 E have assayed up to 12.07 g/t (0.352 oz/ton) Au with broad coincident soil geochemical anomalies.

A trench was dug further west on the ridge between 30+750E and 30+920E south of the main mineralized zone (900 E Showing), along the soil anomaly on the 30+000N line (up to a maximum of 750 ppb Au). This exposed a continuous zone of silicified pyritized tuffs with local minor sphalerite-galena. Grab samples assay up to 0.82 g/t (0.024 oz/ton) Au with chip samples up to 0.48 g/t (0.014 oz/ton) Au over 3 metres.

Controls on Mineralization in the Sloquet Area

Exploration to date has established an apparently stratabound zone of gold and base metal mineralization in intensely altered volcanic rocks south of North Sloquet Creek. North to northwest-trending structures within the zone are associated with higher grade mineralization. Some of these structures are obviously late, such as the fault zone at 350 E, but some may be significantly earlier and could be synvolcanic.

The mineralization observed to date is not volcanogenic-exhalative but is of replacement stockwork type. If the mineralization is related to submarine volcanism, the observed enrichment may be peripheral to higher grade massive sulphide zones which may be amenable to geophysical detection. Recent soil and lithogeochemistry show increasing gold enrichment east of the 900 E Showing, indicating a higher grade section of the stratabound zone.

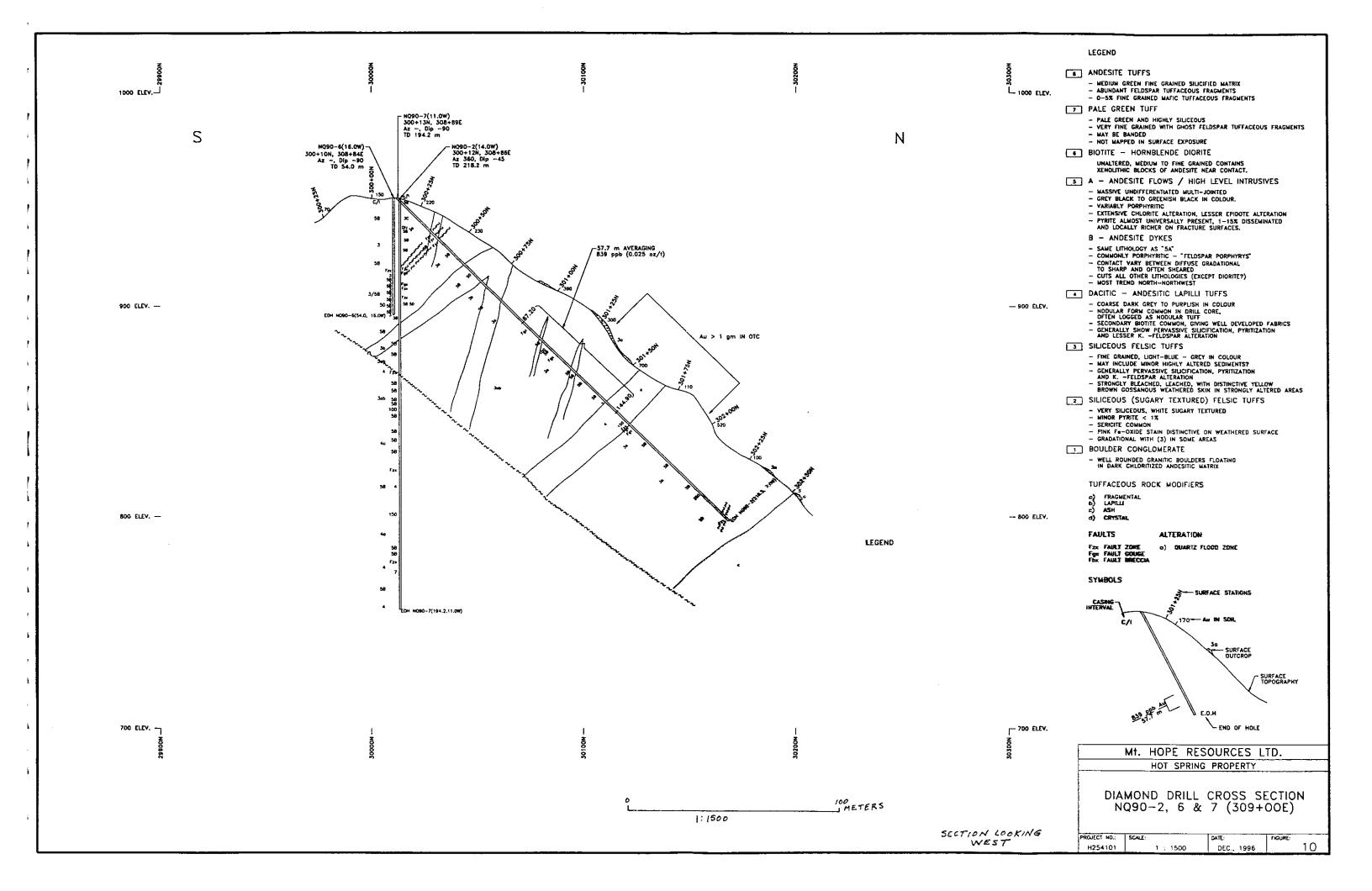
			TABLE 2
3	1 + 300 to 31 + 5	00 E S	howing Au/Ag Trench Intersections
Trench	Intersection		
Г2	19m	(a)	0.046 oz/ton (1.57g/t) Au
		U	1.132 oz/ton (38.8 g/t) Ag
			includes: $6m \text{ at}$ 0.096 oz/ton (3.29 g/t) Au
			2.48 oz/ton (85.35 g/t) Ag
ГЗ	12m	@	0.023 oz/ton (0.78 g/t) Au
		-	0.257 oz/ton (8.80 g/t) Ag
	19m	<i>(a)</i>	0.039 oz/ton (1.33 g/t) Au
*		-	0.543 oz/ton (18.30 g/t) Ag
			includes: $4m$ at 0.065 oz/ton (2.2 g/t) Au
			0.541 oz/ton (18.56 g/t) Ag
Г4	7m	(â)	0.016 oz/ton (0.54 g/t) Au
		Ŭ	0.629 oz/ton (21.56 g/t) Ag
r5	20m	(a)	0.063 oz/ton (2.16 g/t) Au
	·	0	2.31 oz/ton (79.18 g/t) Ag
			includes: $5m$ at 0.106 oz/ton (3.63 g/t) Au
			3.430 oz/ton (116.5 g/t) Ag
Гб	20m	(a)	0.029 oz/ton (0.99 g/t) Au
		Ŭ	1.37 oz/ton (46.96 g/t) Ag
			includes: 13m @ 0.035 oz/ton (1.2 g/t) Au
			1.37 oz/ton (46.96 g/t) Ag
<u>г</u> 7	15m	<i>(a)</i>	0.032 oz/ton (1.09 g/t) Au
		0	1.9 oz/ton (65.1 g/t) Ag
Γ8	Grab samples		0.092 oz/ton (3.15 g/t) Au) over
	*		6.57 oz/ton (225.2 g/t) Ag = 90 cm
			0.142 oz/ton (4.867 g/t) Au) over
			13.4 oz/ton (459.3 g/t) Ag) 75 cm
			0.230 oz/ton (7.88 g/t) Au) over
			8.96 oz/ton (307.4 g/t) Ag) 65 cm
19	7m	(a)	0.061 oz/ton (2.09 g/t) Au
		9	3.207 oz/ton (45.9 g/t) Ag
T10	Grab sample		0.048 oz/ton (7.88 g/t) Au
			1.34 oz/ton (45.9 g/t) Ag
T11	4m	(<i>a</i>)	0.026 oz/ton (0.891 g/t) Au
		e	1.632 oz/ton (55.94 g/t) Ag

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DIAMOND DRILLING

TABLE 3 Drill Hole Co-ordinates						
NQ90-1	30+335N	31+083E	746 m	360°	-85°	160.6
NQ90-2	30+012N	30 +886 E	950 m	360°	-45°	218.2
NQ90-3	30+038N	31+101E	882 m	360°	-50°	276.5
NQ90-4	30+106N	31+400E	833 m	360°	-52°	133.2
NQ90-5	29+971N	30+809E	970 m	360°	-60°	215.2
NQ90-6	30+010N	30+884E	950 m	-	-90°	54.0
NQ90-7	30+013N	30+889E	950 m	-	-90°	194.2
					Total	1251.9

Table 3 lists the drill collar co-ordinates and final hole depths for the 1990 drilling:

Drill collar locations and surface projections are shown on Figure 8 and 9.

<u>NQ90-1:</u>

DDH NQ90-1 was drilled from the access road at 30+335N on Section 31+100E (Figure 8). The target was a combined I.P. and Zn-Au soil geochemical anomaly. No outcrop had been mapped in this area.

The drill hole intersected a sequence of intermediate lapilli (nodular) tuffs crosscut by several large andesitic dykes. The lapilli tuffs are highly pyritic (5 - 12%) and correlate well with the I.P. responses. The soil geochemical anomaly could not be explained by results of NQ90-1 hence a larger downslope dispersion pattern than previously believed is suggested, with the source of the anomalous Zn-Au response uphill of NQ90-1.

<u>NQ90-2</u>

DDH NQ90-2 was drilled from the spine of Southridge at 30+012N on Section 30+900E (Figure 8 and 10) to test rock and soil geochemical anomalies coincident with I.P. highs. It intersected a sequence of highly siliceous, felsic, tuffs cross-cut by numerous andesitic dykes and an andesitic nodular tuff (Figure 10). Alteration is intense, pervasive silicification and is common to all holes. Mineralization consists of disseminated pyrite throughout and sphalerite and galena contained within pervasive quartz and veinlet zones. Au and Ag values are generally coincident with the Zn and Pb. Highest values (in separate samples) were 5.06% Zn over 1.5m, 0.92% Pb over 1.5m, 131.0 g Ag over 1.5m and 3.6 g Au over 1.5m. The best sustained intersection was 839 ppb Au over 57.7m within a 119m section averaging 584 ppb Au. The hole was stopped short of it's planned depth due to continuous losses of downhole water pressure and a broken bit at the bottom of the hole (Wilson, 1991).

<u>NQ90-3</u>

DDH NQ90-3 was also drilled from the spine of Southridge at 30+038N on Section 31+100E (Figure 8). It tested coincident soil and rock geochemical anomalies with I.P. chargeability highs. It was extended to test a second I.P. anomaly with coincident Pb-Zn soil geochemical highs.

The drill hole intersected a sequence of siliceous felsic tiffs, andesitic dykes and "upper" andesitic nodular tuffs. The drill hole bottomed in andesitic lapilli (nodular) tuff not seen in NQ90-2.

Mineralization in this hole is principally sphalerite-galena in pervasive quartz and vein zones seen mainly at the top of the hole. Best results in a single sample ran 2.32% Zn, 0.41% Pb, 0.47% Cu, 46.2 g Ag and 2.25 g Au over 1.5m. The best sustained intersection was 776 ppb Au over 25.2m.

The target I.P. anomalies were explained by this hole as was the upper soil and rock geochemical anomaly. The lower soil anomaly centred on 30+325N was not explained by drilling and is now thought to be caused by down slope movement.

<u>NQ90-4</u>

DDH NQ90-4 was drilled at 30+106N on Section 31+400E (Figure 9) from the widest part of the Southridge spine under the 31+500E trenched area to test highly anomalous trench rock results in the 1989 work program. Also tested was a coincident I.P. chargeability zone flanking the area of known mineralization.

The drill hole intersected similar lithology to Holes NQ90-2 and 3 with a siliceous felsic tuff intruded by andesitic dykes and interbedded with an andesitic lapilli (nodular) tuff. Sphalerite and galena are present from trace to 1% over 1.5m lengths occurring mainly within quartz flood/veinlet zones, especially from 78.3m to 91.2m. Gold values are associated with the quartz zones as are silver values. Best results for individual elements are 2.65% Zn over 0.3m, 0.45% Pb over 0.3m, 0.25% Cu over 0.3m, 161.8 g Ag over 0.3m (Zn, Pb, Cu and Ag from same sample) and 1.55 g Au over 1.5m. The best sustained result for gold was 615 ppb Au over 66 m.

All I.P. and geochemical targets were explained by this hole, however, the stratigraphic similarities in Holes NQ90-2, 3 and 4 indicate that a second lesser mineralized horizon would have been potentially intersected by an extension of NQ90-4 to 200 m depth.

<u>NQ90-5</u>

DDH NQ90-5 was drilled at 29+971N on Section 30+800N (Figure 8), to undercut anomalous soil geochemistry on strike with a favourable intersection in NQ90-2. No I.P. surveying was completed on this section.

The drill hole intersected uphole sections of fine grained siliceous felsic tuffs which were finer grained than in NQ90-2. Below are sections of siliceous, felsic tuff cross-cut by post mineral andesitic dykes and interbedded with an andesitic lapilli (nodular) tuff.

Pyrite is ubiquitous from 1 to 5% and sphalerite (± galena) is present in quartz vein and flood zones from trace to 3% over sample widths to 1.5m. Best results for individual elements (in separate samples) are 1.83% Zn over 1.5m, 0.83% Pb over 1.5m, 0.17% Cu over 1.5m, 22.1 g Ag over 1.5m and 870 ppb Au over 1.5m. The best sustained Au results are 343 ppb Au over 13.5m.

The mineralized zone in NQ90-5 is weak in comparison to NQ90-2 but does occur at the same physical (downdip) location as Hole #2. By comparing Au results in these two holes it is apparent that the potential mineralized horizon should continue in NQ90-5 to approximately 245m down hole, another 30m beyond the present end of hole.

<u>NQ90-6</u>

DDH NQ90-6 was drilled vertically beneath NQ90-2 at 30+010N on Section 30+900E (Figure 8 and 10) to test the downdip extension of Hole #2's mineralized horizon. The hole was abandoned at 54 m after a fault zone at 34 m caused excessive squeezing on the rods. Several attempts to wash the hole were unsuccessful and two bits were destroyed trying to re-penetrate the fault zone.

The hole was drilled along the contact of siliceous felsic tuffs with a near vertically dipping andesite dyke. No mineralization was encountered throughout it's length.

<u>NQ90-7</u>

DDH NQ90-7 was a re-drill of NQ90-6 at 30+013N on Section 30+900E (Figure 8 and 10) in an attempt to penetrate the fault zone in order to test NQ90-2's downdip extension of mineralization. Although the fault zone was intersected no problems were encountered coring through it.

The drill hole intersected similar lithology as the top of NQ90-2, of siliceous, felsic tuff down as far as 105m. At 105m a quartz-carbonate fracture fault zone separates felsic lithology from andesitic lapilli (nodular) tuff just above the anticipated intersection of the mineralized horizon. No mineralization was found and it is felt that a block of the basal tuff was faulted in, disrupting the mineralized sequence (Figure 10).

The hole was terminated once the projected downdip extension of the mineralized horizon had been penetrated. In other holes the mineralized horizon cross-cut several lithologies (except andesite dykes) hence it was anticipated that the horizon would be cored in Hole #7. A fault disruption is therefore suspected for the absence of the expected mineralization.

Drill Summary

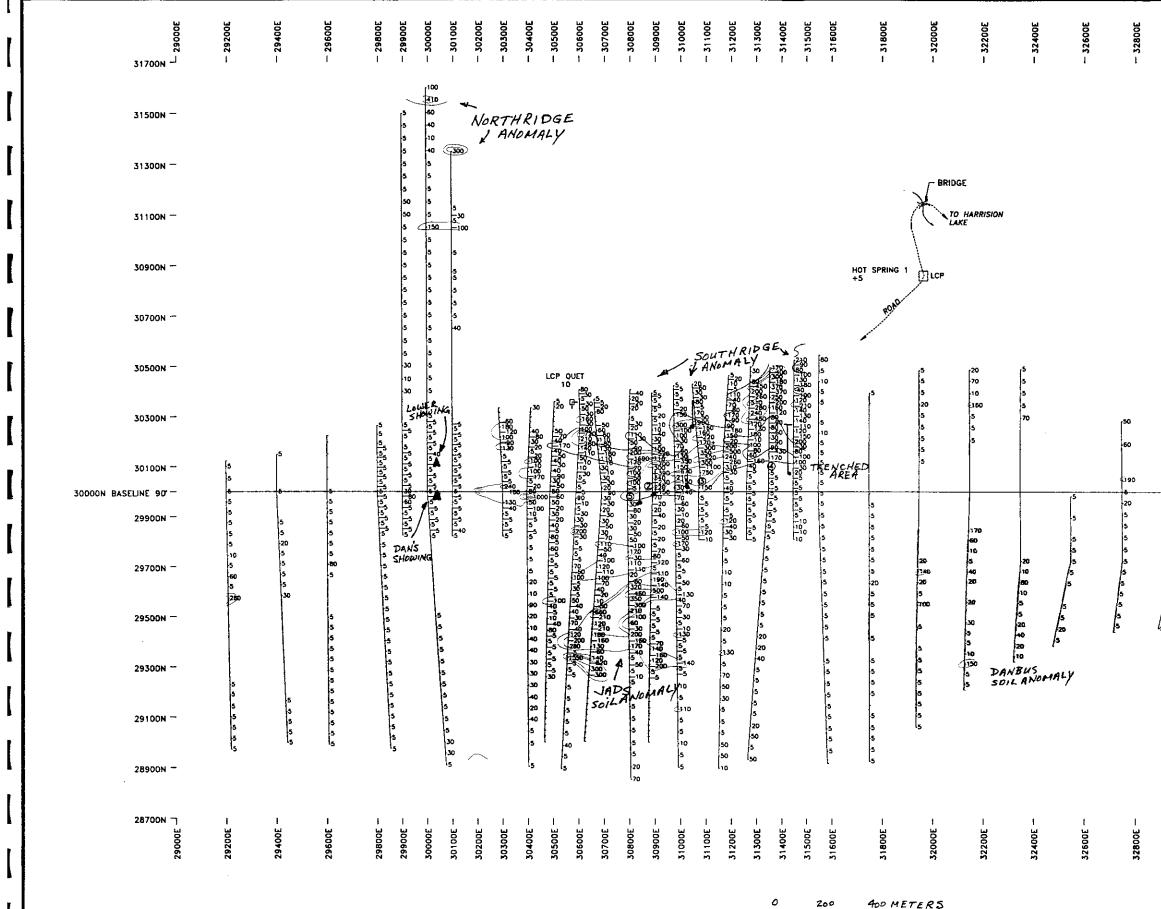
Drill hole NQ90-4, 3, 2 and 5 (east to west) showed similar stratigraphic sequences of silicified felsic tuffs of probable dacitic to rhyolitic origin, interbedded with and floored by an andesitic lapilli (nodular) tuff. All rocks are cut by numerous andesitic dykes. A few intervals of andesitic tuff are recognized but it is not a common rock type. All rocks are moderately to highly silicified, and fracturing/faulting is relatively common. Frequent open spaces not easily evident in drill core was noted due to downhole losses of water pressure during drilling. All significant mineralization is found in these four holes.

Drill hole NQ90-1 tested down-stratigraphy from Holes #2 to 5 and found andesitic lapilli (nodular) tuffs with large andesitic dyke intervals. No economic mineralization was encountered. Drill holes NQ90-6 and 7 tested downdip of Hole #2 and cored a top section of felsic tuffs and a faulted in section of nodular tuffs which displaces the expected mineralized horizon.

The diamond drill program tested downdip projections of coincident soil geochemical anomalies/mineralized outcrop exposures and I.P. chargeability anomalies between Sections 30+800E and 31+400E. The best Au results were obtained in Holes NQ90-2 (839 ppb Au over 57.5m), NQ90-3 (776 ppb Au over 25.2m) and NQ90-4 (615 ppb Au over 66m) on Sections 30+900E, 31+100E and 31+400E respectively. Gold mineralized zones, recognized by the presence of sphalerite and galena, are found within quartz flooded and veined drill core. This quartz alteration is seen in both siliceous felsic tuffs and andesitic lapilli (nodular) tuffs but is not seen in the numerous andesitic dykes. The mineralization is not diminished by the extensive, pervasive silicification hence is felt to be contemporaneous with or post silicic alteration, and pre-volcanic dyking. The source area of the mineralization, however, was not discovered in drill core.

Mineralization was thought by Wilson (1991) to be related to hydrothermal activity associated with the igneous intrusions. His model envisioned circulating hydrothermal fluids peripheral to igneous bodies producing pervasive silica \pm potassium feldspar alteration. Additional silica infusion caused quartz veinlets and quarts flood zones to form specific zones which are more common within the felsic tuffs. Numerous fracture zones were noted in drill core which may be related to mineralization although no specific relations could be drawn from this initial drill program. Future drilling should concentrate on structural logging of the core.

Drill targeting of north to northwest trending structural zones is also recommended to ascertain if smaller zones of higher grade mineralization exists within these major plumbing systems. These structural zones may be a late stage feature. Correlating the relative timing of these features should be a priority in future geological mapping.



400 METERS

- 33000E	₩ 25 1 1700N
	- 31500N
	-31300N LEGEND
	-31100N -31100N Fize GOLD IN SOIL RESULT in PPb.
	-30900N (C Geochemical contour line >100 ppb Au
	-30700N (5) Location of Diamond Drill holes Location of Showing
5 10 5 5 5	- 30500N
50 5	- 30300N
160	- 30100N
- 4 Ú	-30000N BASELINE 90
50 5 5	- 29900N
-5 -10 5	- 2970DN
	- 29500N
	- 29300N
	- 29100N
	28900N
L	☐ 28700N
33000E	Mt. HOPE RESOURCES LTD.
Ε.	Mt. HOPE RESOURCES LTD.
	GEOCHEMICAL RESULTS GOLD - IN - SOIL
	PROJECT NO.: SCALE: DATE: FIGURE: H254101 1 : 15000 DEC., 1996 11
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SOIL GEOCHEMISTRY (Figure 11)

Soil samples were taken on east-west grid lines initially at 10m intervals and later at 20m intervals (Figure 11). Samples were taken on lines 30+300N, 30+250N, 30+200N, 30+150N, 30+100N, 30+000N from 30+000E to 32+000E. Difficult access, poor soil development and other logistical problems prevented complete sampling on these lines. Samples were also taken on a diagonal line from near 30+000N at 30+550E to 30+180N at 31+500E; and along the old logging roads and from 30+000E to 29+500E along line 30+100N.

Samples were analyzed for Au, Ag, Pb, and Zn. Extensive Au anomalies showing close correlation with Ag and Pb, Zn values, define a stratabound mineralized zone. This zone is approximately bounded by the 30+200N to 30+100 N lines and runs from 30+000E to 31+500E. Frequent north to northeasterly trending Au anomaly "tongues" are also well developed and suggest similar trending structurally controlled potential mineralized zones. The best anomalies are developed over the eastern half of the grid with some values greater than 1000 ppb Au.

During May 1990, a soil geochemical survey was completed on both the detailed and reconnaissance grids at 25 and 50m station spacings respectively. Fill-in sampling on the anomalous reconnaissance lines during early June 1990 followed up the earlier sampling.

Results of sampling together with contoured interpretation are presented on Figures 11 for Au. Determination of threshold levels for contouring were by inspection. Very high backgrounds in specific areas of the entire grid masked the centres of mineralization if thresholds are based on the entire population. Selection of a subset of geochemical data is recommended for additional geostatistical study. ICP 30 element analysis was completed on all samples and this data should be acquired for additional study.

Four areas are recognized as anomalous and worthy of follow-up study. They are the (1) Southridge Anomaly, (2) the J.A.D.S. Anomaly, (3) the Danbus Anomaly, and (4) the Northridge Anomaly as shown on Figure 11.

Southridge Anomaly

The east end of the Southridge Anomaly was trenched by Aranlee Resources and a limited amount of diamond drilling was conducted by Noranda. It is a combined Au, Ag, Pb, An, Cu anomaly occurring in an east-west direction from Line 30+100E to 31+500E between 30+000N and 30+500N. The Anomaly is most broadly seen as a Pb anomaly and most narrowly as a Cu anomaly. Pb values reach a high of 3390 ppm with seven other stations above 1000 ppm Pb. Ag values show the second strongest anomaly and closely track high Pb values. Results to 102.5 ppm Ag are seen with eighteen other results above 10 ppm. Although there is a suggestion of downslope dispersion with some of the highest Ag results, the strongest trend is across slope on an E-W direction.

Gold has the third strongest response with highest values of 1690 and 1100 ppb Au. The bulk of the anomaly which extends from 30+500E to 31+500E is above 100 ppb Au with large areas above 200 ppb Au. The anomaly has two centres defined by:

1) 30+900E to 31+200E from 30+000N to 30+250N and in an east - west direction; and

2) 31+200E to 31+400E from 30+300N to 30+600N with a northeast azimuth. The later centre is also seen as a Ag anomaly but not in Pb, Zn, Cu values. Zinc and Cu results, while anomalous, form much narrower bands than Pb, Ag, and Au. Zinc values to 1589 ppm and 1949 ppm are seen along a 100m wide ENE belt from 30+100E, 30+200N to 30+300N to 31+200E, 30+500N to 30+600N and open to the north across the creek. Cu results follow the familiar east-west band from 30+100N to 31+000N from 30+100E to 30+300E but is more sinuous and erratic. It does, however, follow the highs of all other elements.

The best values generally track Unit 3: blue-grey siliceous felsic tuff. This unit also has the highest number of sphalerite-galena-chalcopyrite showings with corresponding anomalous gold-silver rock sample results from the 1989 Aranlee survey.

Some of the anomalies are seen within Unit 4: purple and esitic lapilli tuff, however, downslope dispersion on the 30-50° hillside may tend to extend the anomaly beyond the source area. This area also corresponds to a quiet ground magnetometer response and a high background I.P. response.

The geochemical survey has shown that Unit 3 is the primary unit of interest and that attention should be directed to the area between 30+100E and 31+500E from 30+000N to 30+300N. The second gold anomaly in the 31+200N to 31+400N area is within a no outcrop zone in deep overburden. Detailed studies will be required in this thickly treed area to determine if this is a transported anomaly.

J.A.D.S. Anomaly

The J.A.D.S. Anomaly is roughly situated between 30+600E and 31+000E from 29+350N to 29+700N and is a Au, Ag, Pb, Zn anomaly with spotty Cu values. Au highs to 1550 ppb, Ag highs to 30.9 ppm, Pb highs to 816 ppm and Zn highs to 701 ppm define a northeast trending anomaly centred within felsic tuffs showing minor pyrite. This area has been assigned a Unit 3 rock unit although further mapping is required to determine it's relation to the Southridge Unit 3.

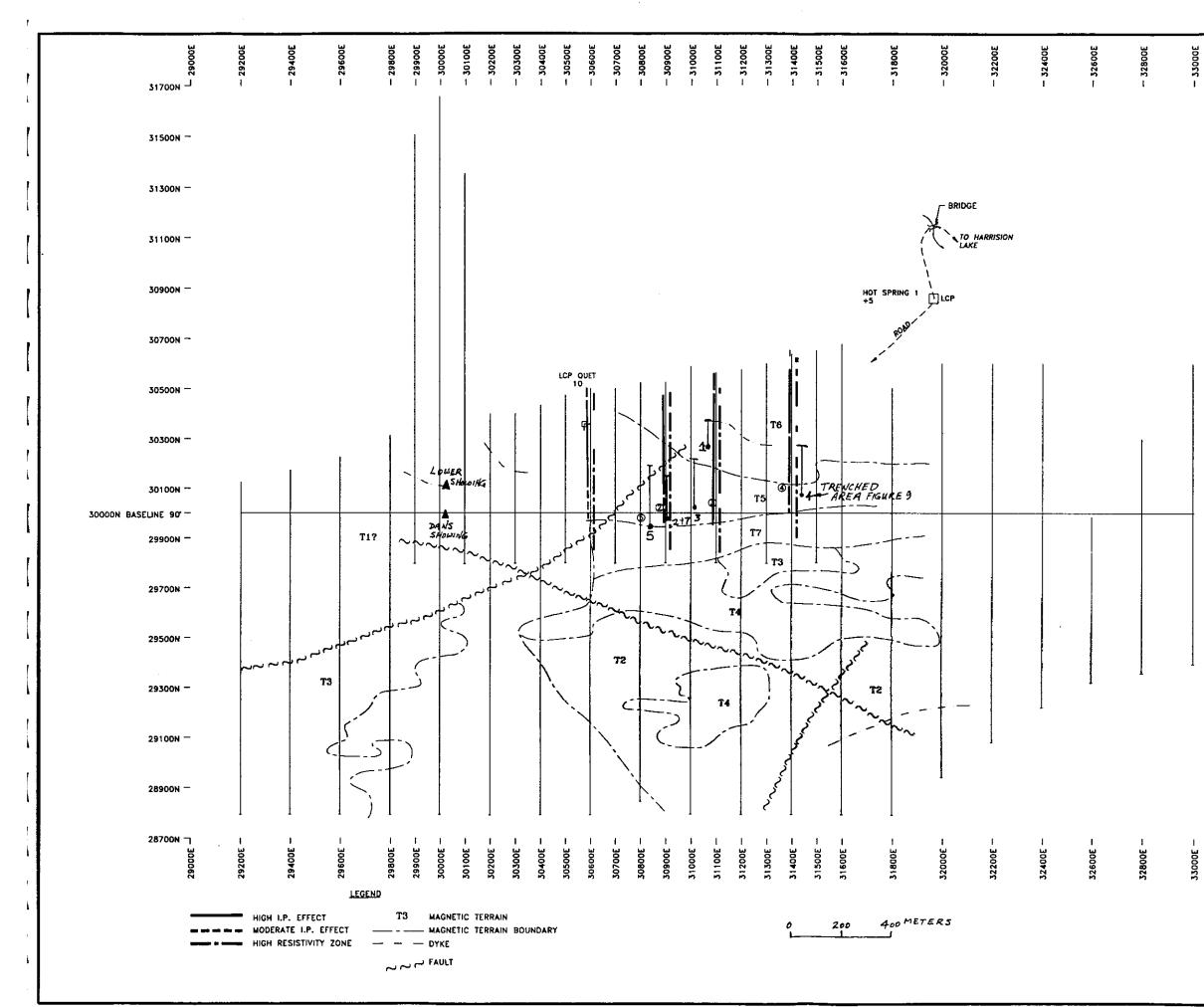
Geological mapping to date has only been on the even numbered 200m spaced lines. Additional detailed mapping and prospecting are required over this zone which shows a quiet magnetometer signature similar to Unit 3 on the Southridge Anomaly.

Danbus Anomaly

The Danbus Anomaly occurs between 32+000E and 32+400E from 29+500N to 29+700N and is primarily a Zn anomaly with spotty, low level Au values. It occurs within intermediate volcanics believed to be related to the Peninsula Formation. The area is of secondary importance and is mentioned only for completeness.

Northridge Anomaly

Three lines extending north across North Sloquet Creek to near the crest of the Northridge encountered spotty but anomalous Au results to 400 ppb. It occurs within a pyritic felsic tuff which should be investigated further. No additional sampling occurred over these lines which were sampled as part of a preliminary follow-up to the airborne geophysics survey.



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1 33000E The soil geochemical survey has shown that a fine grained blue-grey coloured felsic tuff occurring within a low magnetic susceptibility zone is the primary geochemical target on both the Southridge and J.A.D.S. Anomalies. Multi-element signatures demonstrate the target to be 100 to 300 metres wide along the slope and parallel to stratigraphy. The boundaries of the zone(s) for follow-up have been well defined by soil geochemistry.

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GEOPHYSICS (Figure 12)

VLF-EM and magnetic surveys were carried out over the Southridge grid area. Readings were taken at 25m intervals on lines 30+000N and 30+050 N from 30+000E to 31+800E, on 30+100N and 30+200N from 30+000E - 32+000E, and on line 30+000N from 30+000E - 30+500E. Readings were also taken along the main logging road.

Anomalies correlate well with both the geology and the geochemical anomalies. Mapped north-south structures show strong EM signatures in many instances with coincident magnetic highs. Of particular interest is a very strong EM anomaly 50m south of the 900E showing, indicating a potentially well mineralized extension to this area.

During June, 1990, geophysical surveys consisting of Total Field Magnetics, Electromagnetics, and Induced Polarization were carried out on the area now covered by the Hot Spring Property. The purpose of the surveys was to aid in mapping of the local geology as well as the identification of potential economic mineral deposits.

The magnetometer and electromagnetic surveys were carried out by Peter E. Walcott and Associates Ltd. of Coquitlam, B.C. while the I.P. survey was contracted to Pacific Geophysical of Vancouver, B.C.

The magnetometer survey utilized EDA Omni 4 magnetometers with readings corrected for diurnal drift by the use of a recording magnetic base station. The EDA system records the Total Magnetic Field with an accuracy of within 1 nanoTesla. Readings were taken every 12.5m.

Horizontal Loop Electromagnetic System

The HLEM survey, performed on selected lines, utilized the Scintrex SE-88 frequency EM system. This system is similar to conventional HLEM systems such as the MaxMin II except that the per-cent ration response of a transmitted and a reference frequency as compared to the usual in-phase and out-phase components is measured. Three transmitted frequencies, 337 Hz., 1012 Hz., and 3037 Hz., were used with a reference frequency of 112 Hz. To maximize the signal level the ratio response is integrated over a time period (usually less than 20 seconds), depending upon local noise levels. Coil spacing between receiver and transmitter was kept at 100m with a station interval of 25m.

Induced Polarization System

The time-domain I.P. survey utilized a Phoenix IPT-1 powered by a Phoenix MG-1 motor generator capable of producing 1.2 kW of power. The receiver unit was an EDA IP-6 unit. The transmitted signal had a period of 8 seconds, 50% duty. The double dipole electrode array was used with dipole spacing of 25m and n=1 to n=6 being recorded. Chargeability was measured in units of mV/V.

Total Field Magnetics

The total field magnetics survey has delineated 7 magnetic terrains, T.1 - T.7. The boundaries of these magnetic lithologies matches the inferred geologic boundaries to a fair degree.

Two rock units of high magnetic susceptibility are found on the grid. Unit T.3, corresponding to a biotite-hornblende diorite unit, is more active and intense than the other high terrain, T.4, which is interpreted to be an andesite unit. A diorite plug feature is found within T.4.

Unit T.1 exhibits a quiet and low magnetic susceptibility and is speculated to represent either a felsic volcanic or sedimentary unit. T.1 appears to sandwich the diorite unit at the grid's east side. A unit of slightly higher susceptibility, T.2, interpreted to represent rhyolite lies on the east flank of T.1.

The contact between T.5 and T.7 is well defined by the southern extent of the anomalous I.P. zone. Both these units are mapped as felsic tuffs with T.7 more siliceous than T.5. The I.P. pseudo-sections show Unit T.7 to be highly resistive (as expected) and overlying less resistive bedrock. The north flank of T.5 is interpreted to be in contact with another distinct unit, T.6, which corresponds to a mapped dacite-andesite unit.

Two long conjugate faults have been interpreted from the magnetics, with the SW - NE fault defining the western extent of Unit T.5. A short NW - SE fault appears to cut Unit T.4 on its east side.

A N-S trending fault has been interpreted at the grid's south and corroborates better with a mapped fault than the short north - south faults inferred from geology found near the baseline at L. 30+000E and L. 30+200E.

Several interpreted dykes are shown on the basis of the known geology.

SURVEY RESULTS

HLEM Survey

The HLEM survey profiles show a resistive subsurface with no significant variations in conductance with the possible exception of the south end of L30+800E which has a slight increase in sub-surface conductance.

I.P. Survey

The I.P. survey was performed on four lines: L. 30+600E, L. 30+900E, L. 31+100E, and L. 31+400E and the interpretation is shown on the geophysical compilation map (Figure 12). Background chargeability values are considered to be 20 mV/V and less. All four lines yield significant responses over a wide extent within magnetic units T.5 and T.6. Good continuity from line to line of the anomalies is exhibited with sharp termination of the anomalous responses at the contact between Units T.4 and T.5.

The most attractive response is found at near surface on L 31+400E/30+450N. Other attractive targets appear at: L 31+100E/30+262.5N, d= $60m.^1$, L. 30+900E/30+350N, d=10m., and L. 30+600E/30+150N, d=25m.

 $^{^{1}}$ d=60m represents the depth to the top of the target in a direction perpendicular to average topographic slope.

Conclusions

The ground magnetics survey show good corroboration with the known geology. The HLEM survey has been shown ineffective in delineating conductive zones within bedrock which may host mineralization. Structures control the extent of the lithologic units to a certain degree. More magnetics and I.P. surveys may be done to better define the extent of magnetics units T.5 and T.6 which appear to host the significant I.P. responses.

CONCLUSIONS AND RECOMMENDATIONS

Work to date has resulted in several areas being discovered with gold values greater than 2 g/t (0.06 oz/ton) over significant widths. Grades and continuity of mineralization increase toward the eastern grid area on the Southridge part of the property. Diamond drilling indicates that the true thickness of the gold enriched altered volcanics is up to 100 metres in thickness.

Base metal mineralization with significant gold grades occurs throughout the stratabound Lower Zone from 30+600E to 31+500E and from 50 to 100 metres across strike. The continuity of mineralization is yet to be outlined but there are strong indications of a persistent mineralized area carrying potentially economic gold grades. The extension of the zone south of 29+700N has not been investigated to date but there are deeply oxidized outcrops of silicified tuffs at least as far as 29+650N. The 30°S dip of the stratabound zone projects southward down the south slope of the ridge to Sloquet Creek close to the topographic surface.

Given the extent of the mineralized zone on surface (up to 70,000 square metres from 30+600E to 31+500E) there is major potential for establishment of a high tonnage, low grade gold deposit. The steepness of the terrain and the deep oxidation and leaching widespread in surface outcrops mean that surface trenching is difficult over much of the area and the extent and grade of the zone will only be established by drilling. The limited diamond drilling conducted in 1990 intersected low-grade mineralization over true thicknesses of up to 100 metres. However, only one hole (#7) tested the potential down dip extent of this major mineralized zone and it intersected a fault block of lower andesite

The rest of the claim area also holds considerable untested potential. In particular, several mineralized showings in Simpson Creek remain to be followed up by trenching and diamond drilling.

An airborne magnetometer and HLEM survey flown over the entire property showed the Southridge Zone to be a highly resistive rock package containing two highly magnetic areas representing the eastern edge of the Pemberton Diorite and a nearby related stock. The airborne magnetometer survey further showed the magnetic intrusives to be more extensive than ground mapping indicated, perhaps due to a thin veneer of volcanic rock with intrusive rock below. The airborne survey further indicated that zones of low resistivity, roughly correlatable with creek beds are present over much of the property. There are some locations though where low resistive zones are not directly related to known creeks and these areas should be followed up further with prospecting, geological mapping and sampling and I.P. geophysics.

A geological mapping project on one portion of the property, the Southridge Zone, indicated the area to be a moderately south dipping package of silicified, felsic, fine to lapilli tuffs, overlying intermediate lapilli tuffs. Au, Ag, Zn and Pb mineralization is seen to be confined to the blue-grey, silicified felsic tuffs. Soil geochemical surveying further indicated this unit to be the most anomalous unit geochemically while I.P. geophysics demonstrated that the unit has a high sulfide background but does not generate the highest I.P. responses. The Southridge Zone represents a prime drilling target and was tested in 1990 by seven short holes on sections between L30+800E and L31+400E. Hole NQ90-1 was collared too low in the sequence to test the mineralized horizon. Hole NQ90-4 intersected 615 ppb Au over 66 metres and NQ90-2 returned a 57.7 metre interval averaging 839 ppb Au. The drilling campaign by Noranda did not adequately test the western targets that were identified.

After additional trenching and geological mapping to the west of 30+800E, additional drilling may be required to adequately test the area around Dan's Showing and the Lower Showing. Additional drilling is required to test the possible down dip extension of the thick mineralized package identified by the shallow 1990 drilling. There is the possibility of higher grader mineralization down dip which is presently untested.

Three soil geochemically anomalous areas, the J.A.D.S., Danbus and Northridge Zones should be followed up with additional ground surveys including detailed geological mapping, rock sampling and I.P. geophysics.

Ground HLEM geophysical surveying was seen to be an ineffective exploration tool and should be avoided in other parts of the property.

Additional detailed geological mapping and trenching are warranted before further drilling is undertaken to continue exploring this promising prospect. As access is opened by new logging roads along South Sloquet Creek scheduled for early 1997, the J.A.D.S. and Danbus gold-in-soil anomalies should be mapped and trenched. A three phase budget for future exploration is recommended in the next section for a total of \$560,000.00.

Respecté v submitted. J. T. Shearer, M.Sc., P.Geo. July 15, 1997

PROPOSED BUDGET 1997 HOT SPRINGS CLAIMS

Phase I: open access road, continued geological mapping and prospecting, excavator trenching.

Excavator trenching	\$ 1,200
Road engineering	15,000
Contract Excavator trenching & road construction	4,000
Trucking of road material	4,000
Mapping and prospecting	9,000
Total Phase I	\$ 40,000

Phase II: initial diamond drilling, airborne geophysics continued geological mapping, prospecting and geochemistry, contract diamond drill crew, senior geologist, core helper, 2 geologists, mapping, prospector, cook.

Diamond drilling, 5,000 feet at \$23 per foot	\$	115,000
Mapping, geologists (2), 30 days at \$550 per day		16,500
Prospector, 30 days at \$175 per day		5,250
Cook, 30 days at \$140 per day		4,200
Food, 30 days at 10 persons at \$25 per person		7,500
Camp supplies (propane, gas, etc.)		3,000
6 kW electric generator		2,500
Office supplies		400
Road construction		8,000
Drillers Cat for road maintenance and drilling, 100 hrs at \$75		7,500
Trailer camp lease mobilization and demob contingency		30,000
Expediting		2,000
Orthophoto mapping		14,000
Sample freight		1,200
Analytical		11,250
450 drill core samples for \$25 (Au, Ag, Pb, Zn, Cu)		-
100 prospecting samples at \$18.50		
400 soil samples at \$16.50		
Survey control		8,000
Airborne geophysics, Simpson Creek Area		50,000
60 line kms @ \$80 per line km		, -
Transportation, 2 pick-ups at 30 days 15 \$100 per day		3,000
Fixed wing		4,500
Helicopter, 7.2 hours at \$850/hr		6,100
Drafting, 80 hours at \$25 per hour		2,000
Word processing and reproduction		600
Assessment filing fees, 90 units		2,700
Report preparation		2,000
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Total Phase II	\$	300,000

Phase III: follow-up diamond drilling, ground geophysics, detail geology, trenching (excavator), contract diamond drilling, senior geologist, helper, geologist, prospector, cook.

Contract diamond drilling, 5,000 ft at \$23 per foot	\$	115,500
Support personnel		
Senior geologist, 45 days at \$300 per day		13,500
Assistant - core splitter, 45 days at \$175 per day		7,875
Cook, 45 days at \$140 per day		6,300
Transportation		Ē
Truck rental, 45 days at \$60 per day		2,700
Fuel		500
Transportation		600
Survey control		4,000
Ground geophysics		6,000
Helicopter, 3.8 hrs at \$850/hr		3,250
Cat for drill, 50 hours at \$75/hr		3,750
Food, 7 persons at 45 days at \$25 per man day		7,875
Camp supplies		4,000
Office supplies		300
Geological mapping and prospecting, 20 days at \$700 per day		14,000
Analytical		
300 drill core at \$25 per sample		7,500
100 rock samples at \$18.50 per sample		1,850
100 soil samples at \$16.50 per sample		1,650
Drafting, 40 hours at \$25 per hour		1,000
Report preparation		_2,000
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Total Phase III	-	220,000
GRAND TOTAL Phase I, II & III	\$	560.000

The Hot Spring Property

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APPENDIX I

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STATEMENT OF COSTS 1997

July 15, 1997

Appendix I STATEMENT OF COSTS - 1997 HOT SPRING PROJECT

Wages & Benefits

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J. T. Shearer, M.Sc., P.Geo. Geologist August 8, 9 & 10, 1996, May 9, 10, 11, 12 & 13, 19 8 days @ \$350 per day	97 \$ 2,800.00
S. E. Angus, Prospector August 8, 9 & 10, 1996, May 9, 10, 11, 12 & 13, 19 8 days @ \$275 per day	97 \$ 2,200.00
 A. E. Angus, Prospector August 8, 9 & 10, 1996, May 9, 10, 11, 12 & 13, 19 8 days @ \$275 per day 	97 \$ 2,200.00
GST on Wages	\$ <u>504.00</u>
Subtotal	\$ 7,704.00
Transportation	
Ford 4x4 Truck, Fully equipped 8 days @ \$53.50/day	\$ 428.00
Dodge 4x4 Truck, Fully equipped 8 days @ \$75/day	\$ 600.00
Gas	
Camp Rental, 6 days @ \$150/day	\$ 900.00
Food	\$ 875.00
Camp Supplies, Propane, etc.	\$ 415.00
Explosives	\$ 495.00
Cobra Drill Rental, 8 days @ \$53.50/day	\$ 428.00
Base Map Preparation	\$ 800.00
Drafting (SRK-Robinson)	\$ 1,200.00
Report Preparation	\$ 1,400.00
Word Processing and Reproduction	<u>\$ 550.00</u>

TOTAL

\$15,795.00 '

APPENDIX II

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STATEMENT OF QUALIFICATIONS

July 15, 1997

APPENDIX II

Statement of Qualifications

I, Johan T. Shearer of 1817 Greenmount Avenue, in the City of Port Coquitlam in the Province of British Columbia, do hereby certify:

- 1. I am a graduate of the University of British Columbia (B.Sc., 1973) in Honours Geology, and the University of London, Imperial College (M.Sc., 1977).
- 2. I have practiced my profession as an Exploration Geologist, continuously since graduation, for more than 25 years, and have been employed by such mining companies and McIntyre Mines Ltd., J. C. Stephen Explorations Ltd., Carolin Mines Ltd. and TRM Engineering Ltd. I am presently employed by Homegold Resources Ltd.
- 3. I am a fellow of the Geological Association of Canada (Fellow No. F439). I am also a member of the Canadian Institute of Mining and Metallurgy and the Geological Society of London. I am a member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (P.Geo., Member No. 19,279).
- 4. I am an independent consulting geologist employed since December 1986 by Homegold Resources Ltd. at #5-2330 Tyner St., Port Coquitlam B. C. V3C 2Z1.
- 5. I am the author of a report entitled "Geological and Trenching Report on The Hot Spring Property." dated June 15, 1997.
- 6. I have visited the area numerous times since 1987 and carried out geological mapping, drill core logging and sample collection. I am familiar with the regional geology and geology of nearby properties. I have become familiar with the previous work conducted on the Hot Spring Property by examining in detail the available reports, plans and sections, and have discussed previous work with persons knowledgeable of the area.
- 7. I have a share position in Mount Hope Resources Corp. and I am a director of the company.

Dated at Port Coquitlam, British Columbia, this 15th day of fuly 1997.

J. T. Shearer, M.Sc., F.G.A.C., P.Geo.

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