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Assessment Report of 1994 Work on the Thorn-Sutlahini Au-Ag-Cu Property in the Region of Tulsequah, Covered by the "Check-Mate" Mineral Claim, Tenure #320695, Claim Tag #208160.

**Atlin Mining Division, British Columbia
NTS 104K; Claim Map Series 104K/10W**

Location of Legal Corner Post of Check-Mate Claim:

Latitude: 58 Degrees 33' 52" North

Longitude: 132 Degrees 49' 47" West

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Gold Commissioner's Office
VANCOUVER, B.C.

Prepared For

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**GEOLOGICAL BRANCH
ASSESSMENT REPORT
November 15, 1994**

23,612

1.0 SUMMARY

i

The Check-Mate mineral claim covers the Thorn-Sutlahini property. It is a gold-silver-copper prospect with possible low grade bulk tonnage potential. Located in northwest British Columbia, the property falls within the Tulsequah 1:250,000 NTS map sheet 104K. The pertinent claim map is 104K/10W. It is accessible by fixed-wing aircraft from the community of Atlin and then by helicopter from Tulsequah.

An assumed Sloko age quartz feldspar porphyry stock is central to the claim; a smaller stock lies in the northwest corner of the property. The main stock is in contact with Sloko tuffs and Triassic Stuhini andesites, and approximates 1,500 metres in diameter. Fresh quartz feldspar porphyry specimens exhibit pervasive pyritization and sericitization; outcrops show spectacular jarosite alteration.

Intermittent prospecting, mapping, geochemical sampling, VLF-EM geophysics and diamond drilling has been carried out by various interests since 1959. The La Jaune Creek which drains the property exhibits massive sulphide boulders hosting tetrahedrite, enargite, silver and gold. The best analysis of a float sample collected from the west slope to La Jaune Creek returned 0.64 oz/t Au, 9.06 oz/t Ag and 8.45% Cu. Trenching over 12 feet on the east slope to La Jaune Creek returned grades to 0.25 oz/t Au, 9.1 oz/t Ag and 0.3% Cu.

During 1986, a 2,256.6 foot NQ drill program returned 0.08 oz/t Au, 1.03 oz/t Ag and 0.07% Cu over 33.75 feet of drill section. Another section returned grades of 0.033 oz/t Au, 1.25 oz/t Ag and 1.36% Cu over 19.5 feet.

Re-evaluation of 1986 NQ drill core during 1994 confirmed previous gold-silver-copper grades, and that mineralization is concentrated within the QFP stock, in a controlled stockwork, renamed the "86 Zone". The best drill section was 13 metres (42.6 feet) of contiguous core which returned 2,108 ppb Au, 23.6 ppm Ag and 522 ppm Cu. The highest gold grade over 1 metre (3.28 feet) was 9,060 ppb Au.

On surface the "86 Zone" is up to 17 metres (55.76 feet) wide, extends 538 metres (1,764.6 feet) east to west and is still open. It has a projected drilled depth to at least 70 metres (229.6 feet). Shorter mineralized sub-zones parallel the "86 Zone".

The geological setting appears similar to the high sulphidation Au-Cu-(Ag) model after the Lepanto-Frieda River-El Indio Au/Cu deposits. Difficult steep terrain, fast flowing creeks and remoteness has hitherto discouraged continuous seasonal exploration. An aggressive summer program of prospecting, geological mapping and sampling is required to locate additional mineralized zones. Field work should commence by late May 1995 to facilitate traverses across main creeks, as water-flow is minimal to the end of June.

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2.0 INTRODUCTION

2.1 Location and Access

The Check-Mate Claim is located in the Atlin Mining Division and covered by the Tulsequah 1:250,000 sheet NTS 104K, and claim sheet 104K/10W, (Figures 1,2). The property is drained by Camp Creek and then La Jaune Creek, a northwesterly flowing tributary of the Sutlahini River. The Sutlahini River is a tributary of the Taku river system which flows into the Pacific Ocean south of Juneau, Alaska.

The nearest Canadian centres of supply are Atlin, 125 Kilometres to the northwest and Telegraph Creek, 125 Kilometres to the Southeast. The mining camp of Tulsequah is situate 40 kilometres to the west. Access to the property is gained by float plane from Atlin to King Salmon Lake, then by helicopter. King Salmon Lake is located 20 kilometres northwest of the Check-Mate claim.

Juneau, Alaska is situated 100 air kilometres to the west. According to airborne LORAN C readings the coordinates of the Check-Mate LCP are: Long: 132 degrees 49' 47" W, Lat: 58 degrees 33' 52" N.

2.2 Physiography and Climate

The property is located near the edge of the Taku Plateau and the boundary ranges of the Coast Mountains. Topography is typically rugged, with hanging valleys and steep sided ravines. Elevation ranges from 2,500 feet to 6,800 feet above sea level. Vegetation consists of spruce, balsam, poplar; underbrush of devils club and huckle berry are common at the lower elevations; alpine vegetation and rock exposures are common at higher elevations.

2.3 Property Status and Ownership

500 ha The property was staked during August-September 1993 and recorded on 7th September 1993 in Atlin British Columbia (Figure 2). The claim, called the Check-Mate, consists of a four post claim comprising 20 units (2,000 hectares). The tag number is 203160 and tenure number is 320695. Assessment work described by this report was applied to the claim in July 1994, and should keep the Check-Mate claim in good standing to 2nd September 1997. (See Appendices #1 for title and assessment work documents).

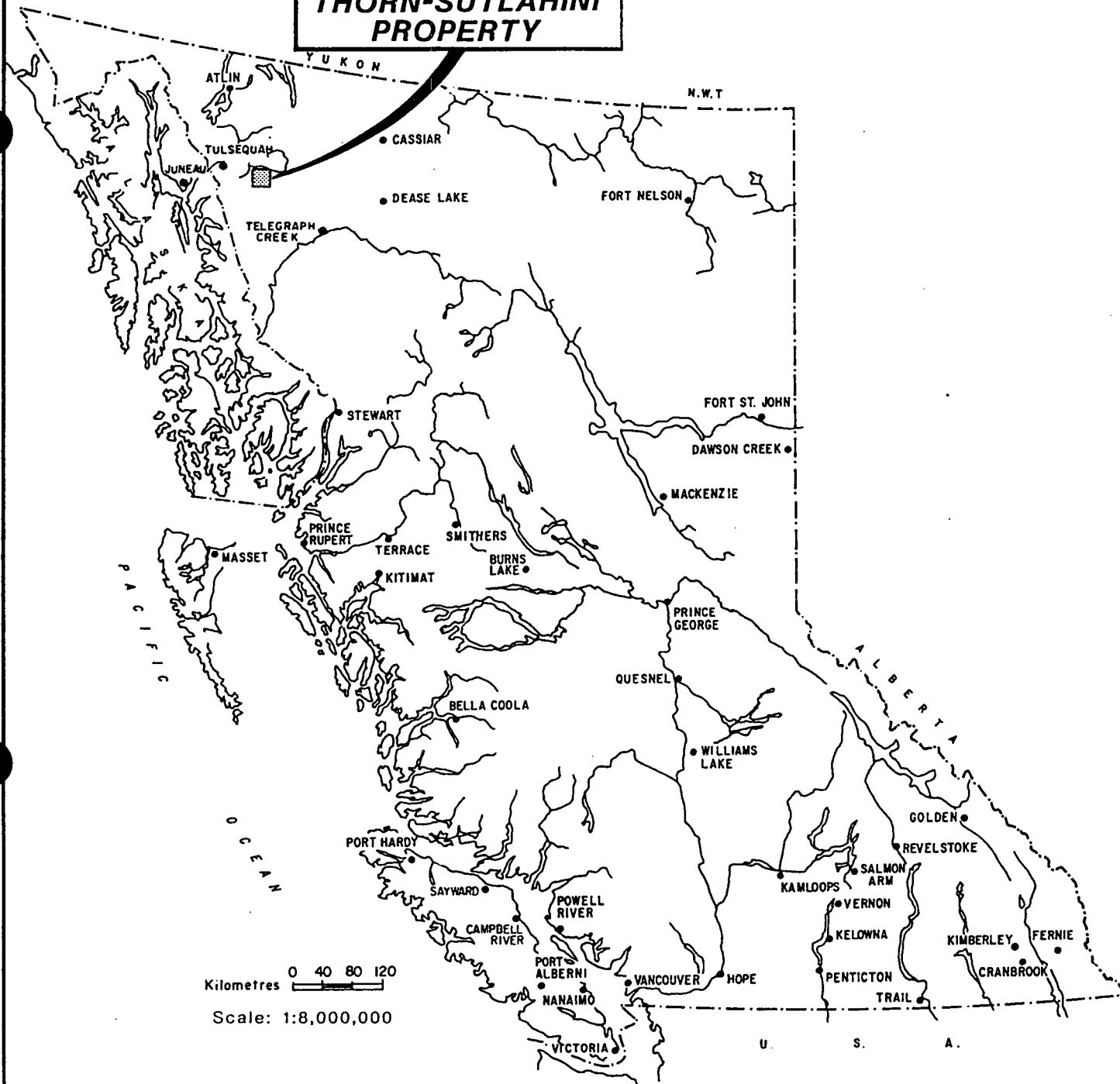
2.4 History of Exploration

The property was discovered and recorded as an anomalous jarositic alteration zone by D. Barr and J.R. Woodcock of Vancouver while working for Kennco in 1959.

Between 1963-1981 the property was staked by various groups including a subsidiary of Anaconda who B-X wire line drilled 3,000 feet on certain showings. Then Noranda staked the property, followed by J.R. Woodcock who called his claims "Daisy" and "Daisy #2"; these claims were later sold to Inland Recovery Group Ltd.

Intermittent prospecting and mapping since 1959 by these interests resulted in collection of massive sulphide samples with precious and base metal grades. Best grades recovered from float on

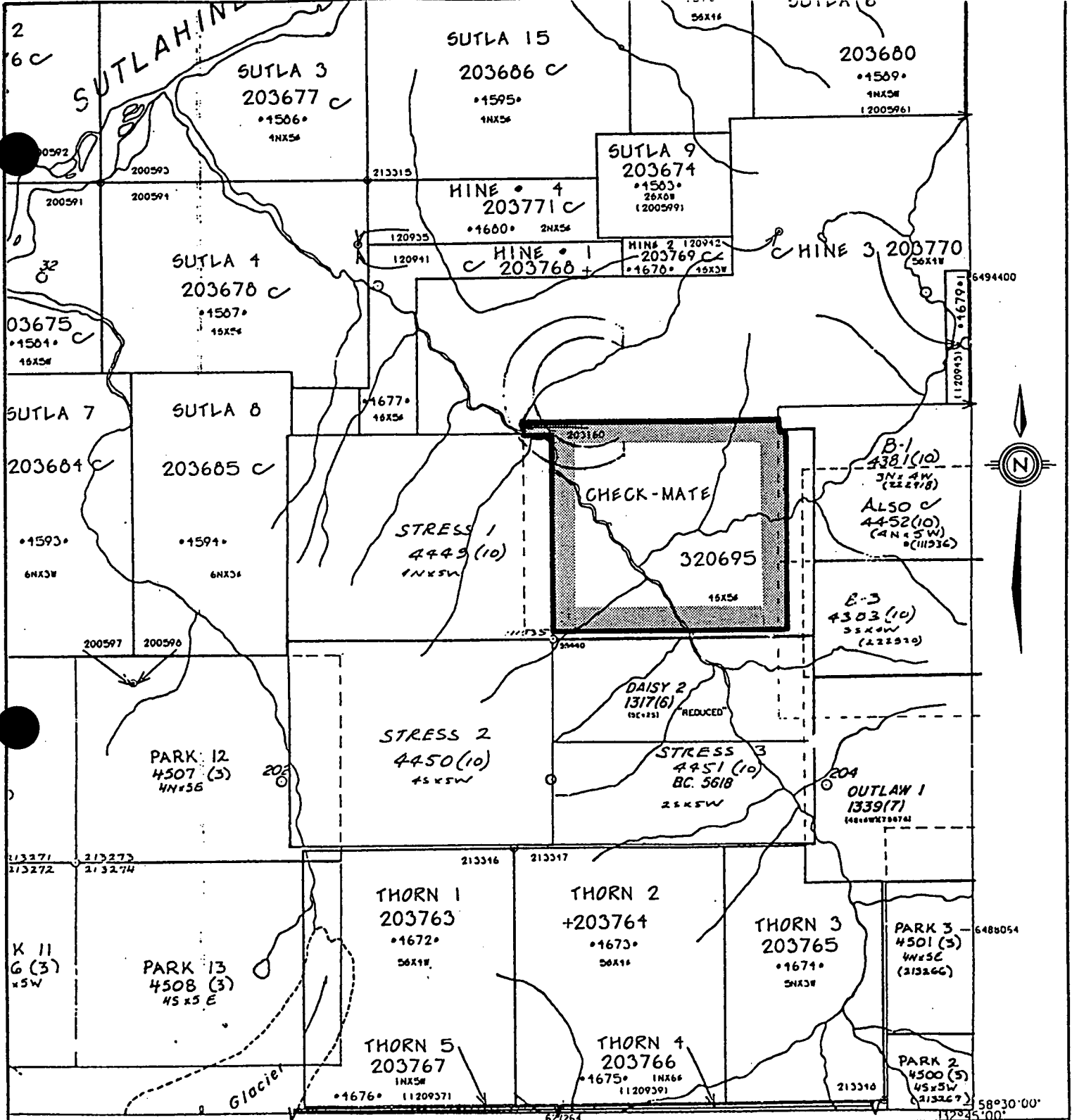
**THORN-SUTLAHINI
PROPERTY**



0 40 80 120
Kilometres
Scale: 1:8,000,000

Handwritten signature or initials

CLIVE ASPINALL AND ASSOCIATES		
THORN-SUTLAHINI PROPERTY (CHECK-MATE CLAIM) ATLIN MINING DIVISION, B.C.		
LOCATION MAP		
NTS 104/10W	DATE: September, 1994	FIGURE: 1



CLIVE ASPINALL AND ASSOCIATES		
THORN-SUTLAHINI PROPERTY		
(CHECK-MATE CLAIM)		
ATLIN MINING DIVISION, B.C.		
CLAIM MAP		
NTS 104/10W	DATE: September, 1994	FIGURE: 2

NSA

the west side of La Jaune Creek were up to 8.45% Cu, 0.64 oz/t Au, 9.06 oz/t Ag. Trenching the same extended zone on the east side of the creek returned 0.3% Cu, 0.25 oz/t Au and 9.1 oz/t Ag over 12 feet.

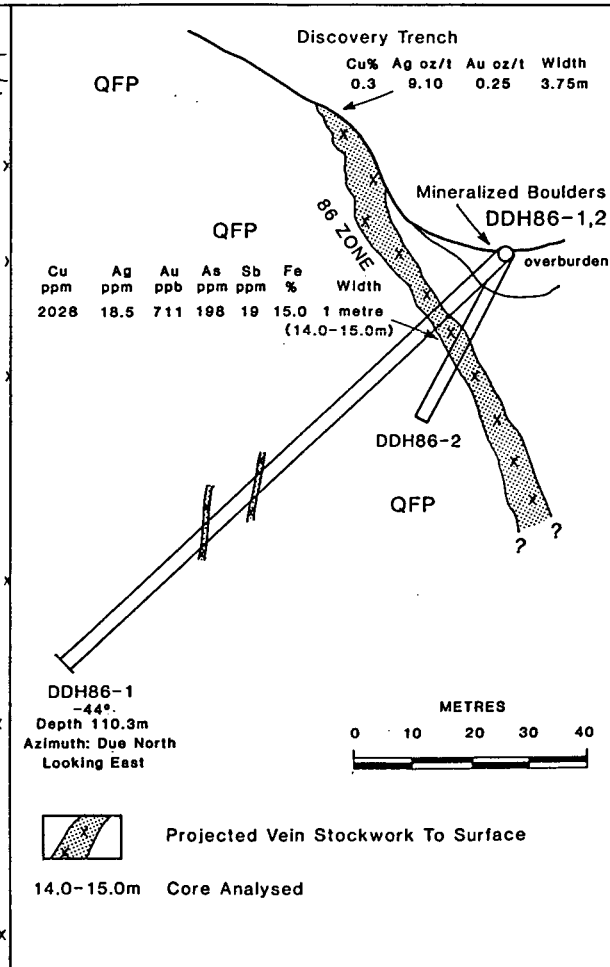
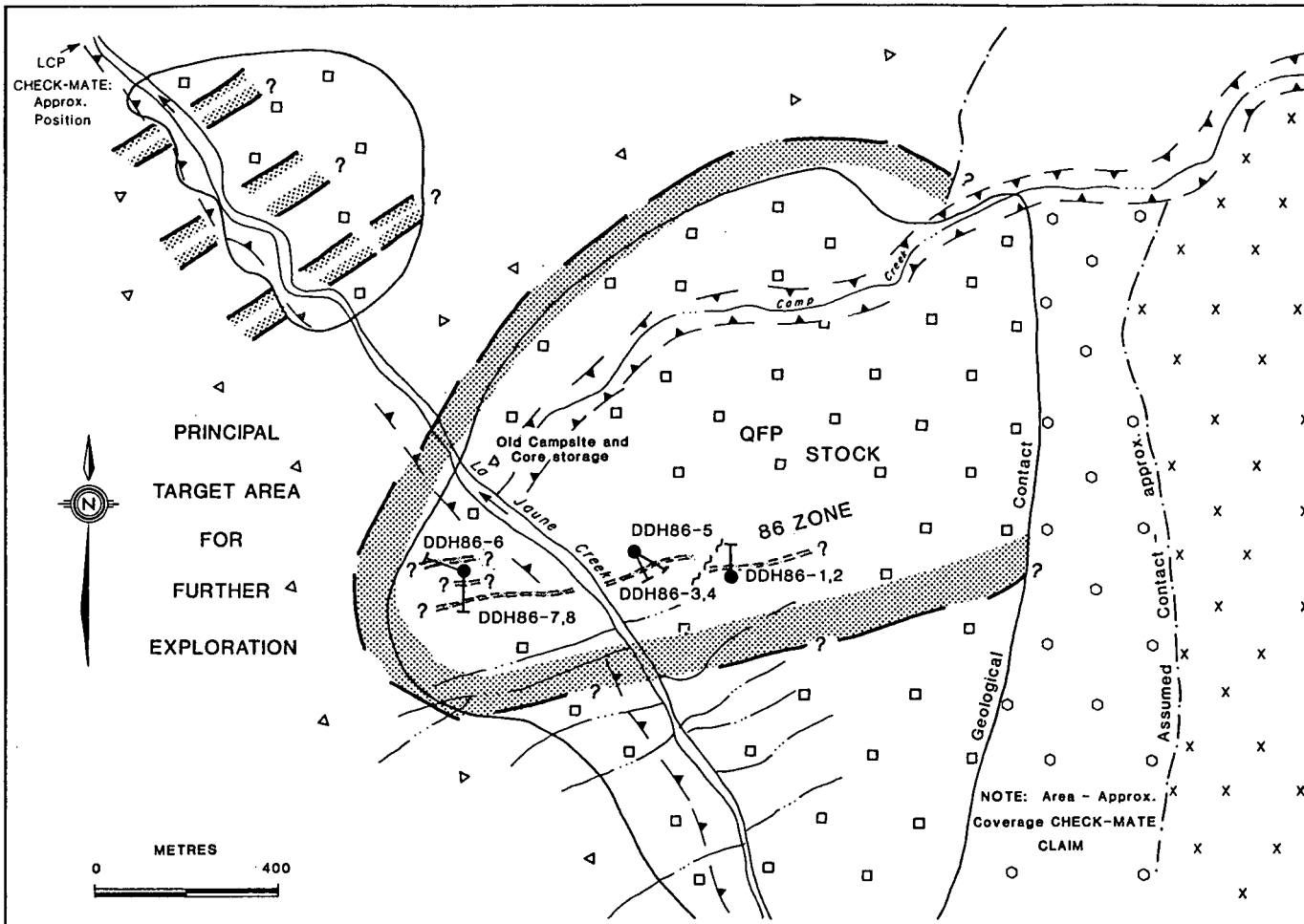
Geochemical work carried out over part of the property in 1983 suggests two weak gold anomalies trending southwesterly. These anomalies are not indicated on maps, but raw data is provided, (Wallis, 1983. B.C. Assessment Report #11,923). One of these reflects the mineralized zone drilled in 1986. This geochemical gold anomaly is open west of La Jaune Creek.

Inland Recovery Group Ltd. formed a joint venture with American Reserve Mining Corporation in 1986 and drilled 688 metres (2,256.6 feet) of NQ core. Due to difficult terrain and access, this drilling program was limited to one mineralized zone renamed in 1994 as the "86 Zone" (Figure 3,4). Apparently poor drill site preparation prevented a comprehensive drill program. Drill results are tabulated below.

TABLE I. 1986 THORN-SUTLAHINI DRILL RESULTS AFTER B.C. ASSESSMENT REPORT #15,897.

Hole #	From (m)	To (m)	Core length (m)	Cu%	Ag Oz/ton	Au Oz/ton
86-1	14.44	14.87	0.43	0.92	1.72	0.05
86-2	15.98	18.09	2.11	0.16	0.64	0.014
86-3	43.69	53.98	10.29	0.07	1.03	0.08
86-4	30.20	30.74	0.54	0.04	1.98	0.064
86-5	57.30	62.74	5.44	0.04	0.58	0.047
86-6	69.01	71.78	2.58	3.78	4.45	0.057
86-7	11.16	12.37	1.21	3.35	1.57	0.042
86-7	104.33	110.29	5.96	1.34	1.25	0.033
86-7	104.93	105.23	0.30	0.65	1.36	0.115
86-7	109.69	110.29	0.60	5.74	7.18	0.120
86-8	13.30	15.50	2.20	1.38	3.50	0.041

The Daisy claim, staked for J.R. Woodcock in 1981 expired on 24th April 1993, covered the known main mineralized showings and target zones. During late August 1993 Clive Aspinall of Atlin, re-staked the Daisy claim as "Check-Mate". This claim was recorded on 7th September 1993. Between 22nd-28th July 1994, he re-evaluated the 688 metres of core stored on site and re-interpreted the drill core geology. Sixty-one 1 metre lengths of core were re-analyzed and six selected core samples underwent petrographic study. An



LEGEND

- Sloko Group Tuffaceous Sedimentary Unit
- Quartz Feldspar Porphyry
- Coarse Feldspar Porphyry
- Stuhini Group Volcanics Andesitic Flows
- Yellow Tan Surface Alteration: Intensive Jarosite
- Projection of Vein Stockworks: 86 Zone and 86 Sub Zones #1, #2

SYMBOLS

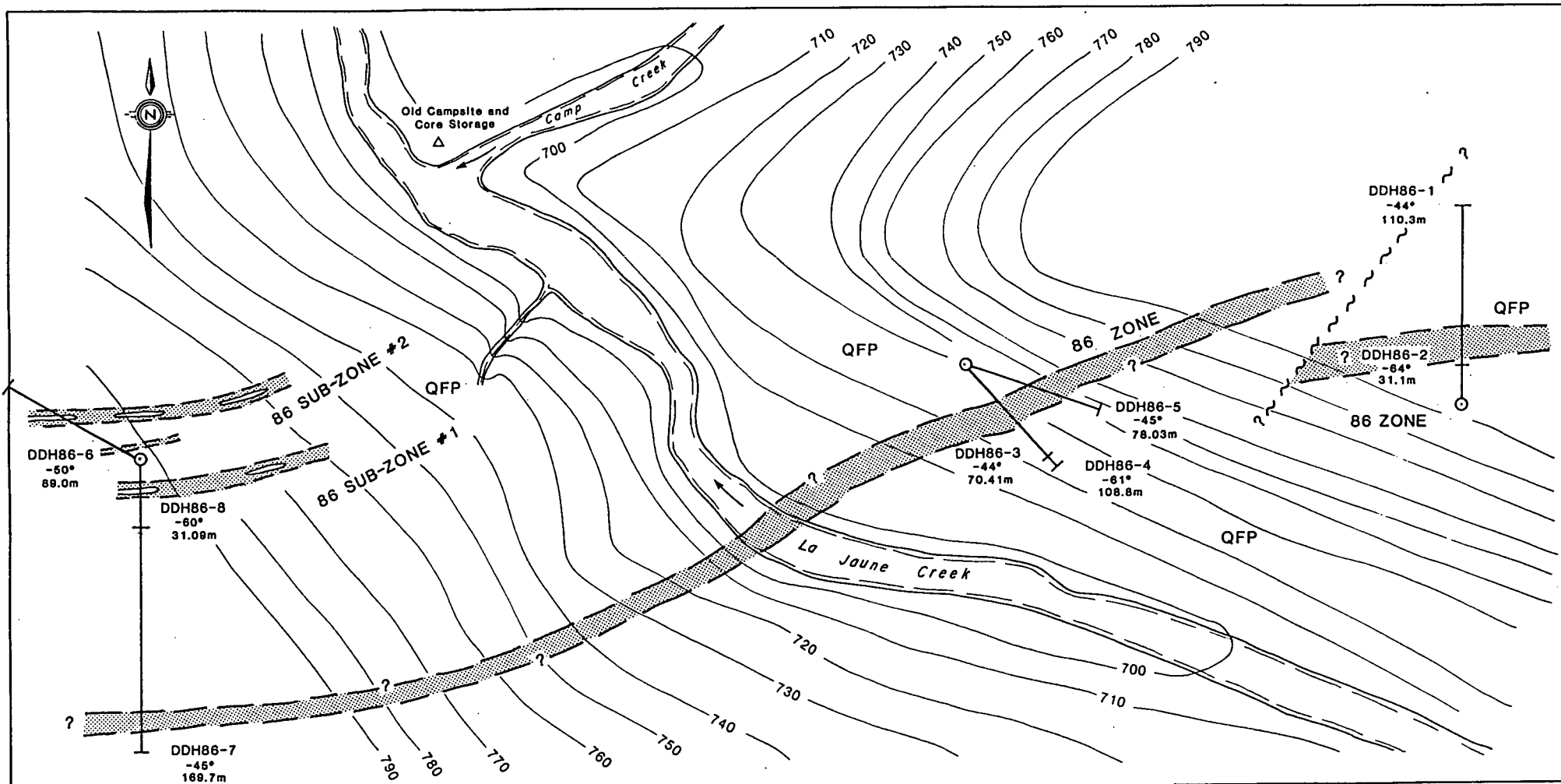
- Canyon Slope
- DDH86-3 Diamond Drill Hole and Drill Direction: Hole Number

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

CLIVE ASPINALL AND ASSOCIATES
THORN-SUTLAHINI PROPERTY
(CHECK-MATE CLAIM)
 ATLIN MINING DIVISION, B.C.

RECONNAISSANCE GEOLOGY
COMPILATION MAP:
REINTERPRETATION OF SECTION
DDH86-1 AND 2 WITH BEST RESULTS

NTS 104/10W DATE: September, 1994 FIGURE: 3



LEGEND

-  Projected Stockwork Zones To Surface
-  Assumed Fault
-  QFP Quartz Feldspar Porphyry
-  DDH86-1 1986 Diamond Drill Hole and Drilling Direction
-  750 Contours in metres

METRES
0 20 40 60

MSH

CLIVE ASPINALL AND ASSOCIATES
THORN-SUTLAHINI PROPERTY
(CHECK-MATE CLAIM)
ATLIN MINING DIVISION, B.C.

GEOLOGY
PROJECTED 86 ZONE AND
86 SUB-ZONE #1 AND #2

NTS
104/10W

DATE:
September, 1994

FIGURE:
4

application was made to keep the Check-Mate claim in good standing to 1st September 1997. This application is based on assessment work covered in this report, and was filed with the Government Agent in Atlin on 2nd August 1994.

2.5. Objectives of work in 1994

The principal objectives of the 1994 work were to:

- a) relog 1986 drill core on site,
- b) re-analyse mineralized sections of core and,
- c) undertake limited petrographic work of core and mineralized float samples.
- d) re-interpret the 1986 drilled mineralized sections.

3.0 GEOLOGY

3.1 Regional Geology

The Thorn-Sutlahini property is situated 8 kilometres to the northeast of the eastern contact of the Coast Range Plutonic complex. Physiographically, the property lies within the Tahltan Highland. The Tahltan Highland in this area is underlain by Pre-Upper Triassic metamorphic sedimentary and volcanic rocks, Upper Triassic Stuhini intermediate volcanic rocks, and Lower to Middle Jurassic rocks of the Takwahoni Formation (after Souther, 1971).

Within the Tulsequah map area, intrusive rocks of the Sloko Group, dated as Late Cretaceous-Early Tertiary in age, are frequently associated with pervasive pyritization and surface jarositic alteration. Examples are Niagara Mountain, the mountainous areas south of King Salmon Lake and northwest of Yonakina Mountain.

3.2. Property Geology

Central to the property is a quartz-feldspar porphyry (QFP) stock considered Late Cretaceous-Early Tertiary in age, and associated with similar age undifferentiated rhyolites and tuffs. These rocks are in contact with Triassic Stuhini andesites and basalts. The QFP stock has been intensively pyritized and altered, is delineated by other workers as 1,840 metres in length and 1,340 metres along its short axis (Figure 3). A smaller QFP stock occurs 400 metres to the northwest. Other units on the property are Sloko Group tuffaceous sedimentary rocks and feldspar porphyries, (Figure 3).

3.2.1. Rock Types

The following description of rock types are primarily based on the examination of 688 metres of NQ drill core. Descriptions are also based on selected outcrops and rock float. Drill core was acquired from the former claim holders who drilled the property in 1986 (Refer Woodcock, 1987; B.C. Assessment Report # 15,897). Petrographic studies, carried out during 1994, were performed by Dr. J. F. Harris, Vancouver Petrographics Ltd., and descriptions are enclosed in Appendices II. Core log descriptions are enclosed in Appendices III. Rock types have been classified as follows.

3.2.2. Upper Triassic Stuhini Group Rocks

These rocks consist of andesites and basalts. They were not encountered in the 1986 drill core (except overburden) and consequently not studied in any detail.

Andesites and basalts within the property make up the entire west slope of La Jaune valley. They are reported by Souther (1971) to vary from pillow lavas to volcanic agglomerates. Associated with these rocks are lapilli tuffs, minor volcanic sandstone, greywacke and siltstone. On the lower western slope to La Jaune Creek they have been altered and oxidized as a result of pervasive pyritization. Chalcopyrite, pyrite and pyrrhotite as stringers and blebs have been reported in this area by other workers. This mineralization occurs within a contact aureole to the quartz feldspar porphyry described below. Old BX Wire-line drill core, after Anaconda work, is situated downstream from the old camp (Figures 3,4) and exhibits intensive pyrite stringer veinlets in andesites. It is not certain where this core originated; the 30 year old core boxes have since disintegrated.

3.2.3. Upper Cretaceous- Early Tertiary(?)

Feldspar Porphyry

This rock type outcrops east of the quartz feldspar porphyry stock (QFP) and is separate from it. It is fresh and unaltered, coarse in texture, light grey to cream in colour with phenocrysts making up 45% of the rock. Dominant phenocrysts are plagioclase, then quartz with some biotite. It is not mineralized.

3.2.4. Upper Cretaceous-Early Tertiary

Quartz feldspar Porphyry, (QFP)

This rock type is dominant within the claim and comprises the central stock. On weathered surface outcrops of QFP exhibit spectacular orange-tan jarosite alteration, (see photographs in Appendices).

In hand specimen, QFP cores lack the jarosite alteration seen on surface. Core samples are grey in colour, show 40% phenocrysts and 60% matrix with an estimated 3% disseminated pyrite. The phenocrysts are feldspar and quartz. The feldspar phenocrysts have been completely altered to sericite. Quartz phenocrysts often appear rounded with pseudo-pyramidal terminations. Mafic minerals are rare.

Typical QFP core samples, examined under thin-polished section (by Harris) show a leucocratic mafic-free rock with totally sericitized plagioclase phenocrysts, with quartz phenocrysts. These phenocrysts are set in microgranular to felsitic groundmass. The groundmass appears to consist principally of fresh plagioclase. The disseminated pyrite is fine grained, euhedral-subhedral in form and random in occurrence. This disseminated pyrite occurs indiscriminately within the sericitized phenocrysts as well as the groundmass. Pyritization, by deduction, is therefore contemporaneous or later than the sericitization. The following rock varieties are related to the QFP.

3.2.4.1. White Quartz Stockwork Breccia

This rock type occurs within the QFP. As seen in core, it occurs marginally to sulphide rich veinlet stockworks. It consists of white quartz veinlets with interconnecting white quartz pockets (specifically in DDH 86-3 and DDH 86-5) hosting angular fragments of QFP. This breccia hosts rare blebs of galena and sphalerite, but no disseminated pyrite. Therefore, by deduction it formed as a very late breccia event, the hydrothermal silica rich fluids invading and peripherally replacing the pyritized-sericitized QFP, but not the sulphide rich stockworks. Typically the white quartz grain size ranges between 100-400 microns. It sometimes occurs as rims or marginal fringes to nuclei of felted sericite, which possibly represent relic host-rock phenocrysts. The margins of the white quartz veinlets and pockets are often diffused and blend with the rock's groundmass.

This breccia was not observed in outcrop.

3.2.4.2. Quartz-Cemented Pyritic Breccia

This rock was not seen in 1986 drill core but as rock float in 30 cm diameter boulders in La Jaune Creek. These boulders are assumed to have originated from the west slope to La Jaune Creek. Macroscopically these boulders consists of brecciated fragments of semi-massive sulphides associated with partially assimilated sulphide free quartz. In thin section no remnants of primary textures are preserved. The breccia shows a sulphide rich phase grading to a quartz rich phase.

The intensive pyrite rich phase consists of closely clustered, locally coalescent euhedra or subhedra of pyrite 0.1-1.0 mm in size, in a matrix of mutually felted sericite. Quartz grains are occasionally speckled within this phase.

At the other end of the scale the quartz is devoid of sulphides and consists of equigranular anhedral aggregates of quartz of grain size 50-100 microns and minutely felted sericite. This sericite is intimately dispersed throughout as abundant tiny intergranular pockets or diffuse wisps.

Mineralization observed in section, other than pyrite, consists of accessory tetrahedrite. Enargite was not seen microscopically in sections reviewed but identified macroscopically in a similar rock type. No precious metals were observed in thin-section. Precious metals were detected by analysis.

3.2.4.3. Sulphide Rich Veinlet Stockworks

This rock type is hosted by the QFP; it is manifested as the "86 Zone" and "86 Sub-Zones #1 and #2" (Figures 3,4). These are sulphide rich vein stockworks which have been observed in 1986 core and outcrop. In hand specimen, this rock type, broadly speaking, is closely related to the quartz-cemented pyritic breccia float boulders found in La Jaune Creek. In detail it consists of quartz veinlets averaging a centimetre in thickness fingering around pockets of sulphide mineralization of a similar width; barren intersections of silicified QFP ranging up to tens of centimetres constitute intervals between veinlets.

In drill sections, the 86 Zone ranges to 13 metres of continuous veinlet stockwork, and can be projected for 538 metres along a southwesterly strike. The two short and narrow sub-zones parallel the 86 Zone over a short distance.

3.2.4.4. Tholeiitic Diabase

This rock type intrudes the QFP; it has been observed in core and outcrop, and macroscopically appears similar in colour and texture to andesite. It is a homogenous fine grained grey meshwork-textured rock with scattered phenocrysts of plagioclase; it is devoid of veining and macroscopically recognizable pyrite. It is quartz poor and mafic-rich. The rock shows a classic interstitial texture of lath-like plagioclase grains (0.1-0.4 mm in length) and an interstitial phase of minutely felted chlorphaeite (after original mafic glass), dusted with micron-sized rutile. Quartz occurs as diffuse-margined, equant grains, 50-150 microns in size, and is a rather evenly distributed minor accessory. Carbonate is present and a more abundant accessory, and occurs as small irregular grains throughout the matrix. It also forms scattered macroscopic visible granular clumps (0.5-2.0 mm in size), which may represent pseudomorphs of original mafic phenocrysts. Veinlets of carbonate are also present. Opaques as equant euhedra 10-100 microns in size are possibly Fe or Fe-Ti oxides.

3.2.4.5. Plagioclase Porphyry

These rocks were not intersected by the 1986 drilling but occur as outcrop near Camp Creek. It can be differentiated from the QFP by its green colour and fresh plagioclase. According to Woodcock (1982), it is composed of 45% phenocrysts; the phenocrysts content of the rock consists of 30% altered plagioclase, 8% quartz and 2% biotite replaced by muscovite. Calcite patches form about 6% of the rock. Traces of malachite sometimes occurs on weathered surfaces.

3.2.4.6. Tuffaceous Volcanics and Rhyolites

These rock types are closely associated with the QFP and for the present are not differentiated. The tuffaceous rock type intersected by drilling is a fine grained tuffaceous rock with distinctive bedding cleavage. This rock type, not studied by thin section, is a grey yellow colour on weathered surface with a grey colour on fresh surface. Also not studied in thin section nor intersected by drilling were the dense white to slightly cream rhyolites seen by other workers (Woodcock, 1982). According to Woodcock these rhyolites consist of plagioclase (60-65%), sericite (17-20%), quartz (15-17%) and minor limonite.

3.3. Structure

A structural interpretation of the geology was not carried out. However, faulting does appear to control the 86 Zone, and its sub zones (Figure 3). Where jarositic alteration is intensive, faulting and shearing is assumed to be present.

4.0 MINERALIZATION AND ALTERATION

4.1 Mineralization

Mineralization as seen to date is closely associated with the QFP, and less frequently with andesite. In-situ mineralization can be divided into four categories: sulphide veinlet stockworks, galena and sphalerite in white quartz stockwork breccia, disseminated pyrite and copper carbonates.

The sulphide veinlet stockworks with precious metal and base metal content are observed in core and outcrop. This sulphide veinlet stockwork comprises the 86 Zone and Sub-Zones #1 and #2, (Figures #2,#3). In hand specimen, massive pyrite, with tetrahedrite are identifiable macroscopically. Rare macroscopic galena, sphalerite and stibnite are observed individually as small pockets or blebs in quartz veinlets, generally free from pyrite. The presence of enargite and arsenopyrite are not confirmed in core. In outcrop enargite has been seen with pyrite associated with tetrahedrite (Wallis, 1983). The presence of precious metals as well as arsenopyrite and barite are indicated by analysis.

Within andesites, sulphides occur as closely spaced parallel stringer veinlets. In this case the sulphides are dominantly pyrite.

The white quartz stockwork breccia is generally not mineralized, but in core does host isolated blebs of galena and sphalerite. This breccia is believed to be a late stage event.

Disseminated pyrite is seen in core, outcrop and float. It is pervasive in the QFP and associated rocks. It is not observed in the white quartz stockwork breccia. On the weathered surface the QFP is highly jarositic. On fresh surface pyrite is euhedral to subhedral in form and frequently occurs as clusters averaging 3% by volume. Interestingly, one QFP core sample examined under section showed inclusions of tetrahedrite within a grain of disseminated pyrite. In some core an unidentified macro-sized mineral, possibly stibnite, also occurs as an accessory. Pyrite mineralization occurs indiscriminately within the sericitized phenocrysts as well as the groundmass. Therefore, by deduction pyritization may be contemporaneous with or later than the pervasive sericitization phase.

The plagioclase porphyry rock type hosts traces of malachite. This was only seen on weathered talus float fragments.

Float samples of quartz-cemented pyritic breccia consists of massive pyrite with tetrahedrite. This breccia was not seen in core or outcrop.

4.2 Alteration.

On the weathered QFP surface jarositic alteration is extensive, and can be seen almost continuously for 1,500 metres on the steep canyons walls of Camp Creek. Generally it occurs within the larger and smaller QFP stocks within the Check-Mate claim. This jarosite alteration is the result of weathering of disseminated pyrite, and may be more intensive along geological contacts, faults and shear zones.

Sericitization is the dominant type of alteration within the

QFP; plagioclase phenocrysts are totally altered to pseudomorphs of sericite. These pseudomorphs, with phenocrysts of quartz are set in a groundmass with sericite intergrowths.

Silicification, observed macroscopically, occurs in QFP bordering zones of white quartz stockwork breccias as well as zones of sulphide rich veinlet stockworks. This silicification extends for several metres thickness.

5.0 EXPLORATION AND DEVELOPMENT

5.1 Work Completed During 1994

All 1986 core was re-logged and details are given in Appendices to this report. A total of 61 split core samples of one metre lengths were sent for analyses to Min-En Laboratories 705 West 15th Street, North Vancouver, B.C. V7H 1T2, by way of the Min-En Laboratories in Smithers. Analyses involved ICP Analysis of 32 elements, including copper, silver, lead, zinc, and fire-AAS determinations for gold.

Six selected short lengths of core were collected and forwarded to Vancouver Petrographics Ltd, 800 Glover Road, Langley, B.C. V3A 4P9. These rocks were sent for thin and polished section work and details are given in the Appendices.

Re-interpretation of the 1986 drilled sections are presented with this report, refer to Figures 3-6.

All field work was done by the writer, working alone, between the 22nd July to 28th July 1994.

5.2 Analysis of 1986 NQ core

During the 1994 work program, mineralized sections of 1986 NQ core were re-split using a Longyear heavy duty wheel type core splitter. As this core had already been split during the 1986 field season most of the re-split core were in quartered lengths. In this way a quarter split was replaced in the core trays for future reference.

The best mineralized intersections encountered in 1994 are tabulated below. Complete data is enclosed in Appendices IV.

TABLE II. DDH-86-3, 4 METRE INTERSECTION 86 ZONE.

Meterage	Cu ppm	Ag ppm	Au ppb	As ppm	Sb ppm	Fe %
23.0-24.0	4809	57.0	346	2641	701	3.78
24.0-25.0	3227	39.1	417	1968	429	6.52
25.0-26.0	2239	48.3	1250	950	297	12.23
26.0-27.0	2510	61.5	1100	1244	349	8.54
Mean over 4 metres of core.	3129	51.5	778.2	1701	444	7.77

TABLE III. DDH-86-3, 13 METRE INTERSECTION 86 ZONE.

Meterage	Cu ppm	Ag ppm	Auppb	As ppm	Sb ppm	Fe %
43.5-44.5	397	17.4	987	419	52	5.88
44.5-45.5	817	55.2	4500	372	191	12.54
45.5-46.5	672	44.1	2830	431	154	9.03
46.5-47.5	228	6.4	460	332	19	4.92
47.5-48.5	640	48.9	2925	372	171	9.28
48.5-49.5	529	16.1	1315	393	111	7.59
49.5-50.5	711	23.5	1470	448	252	5.86
50.5-51.5	948	71.6	9060	440	413	11.70
51.5-52.5	511	13.7	1500	378	135	5.55
52.5-53.5	539	15.7	1185	412	103	6.22
53.5-54.5	343	8.4	604	293	50	4.87
54.5-55.5	132	2.8	215	267	6	4.10
55.5-56.5	321	7.2	349	269	38	6.86
Mean grade over 13 metres of core.	522	25.5	2108	371	130	7.20

TABLE IV. DDH-86-5, 3 METRE INTERSECTION 86 ZONE.

Meterage	Cu ppm	Ag ppm	Au ppb	As pmm	Sb ppm	Fe %
29.0-30.0	5085	120.6	1760	2784	823	12.97
30.0-31.0	1328	29.0	1255	809	200	11.17
31.0-32.0	280	5.4	327	405	9	5.21
Mean grade over 3 metres of core	2231	51.6	1117	1331	344	9.78

TABLE V. DDH-86-5, 3 METRE INTERSECTION 86 ZONE.

Meterage	Cu ppm	Ag ppm	Au ppb	As ppm	Sb pmm	Fe%
39.0-40.0	1461	22.7	804	829	148	6.96
40.0-41.0	1403	39.5	2530	645	221	11.14

41.0-42.0	7419	105.3	1455	4018	1394	5.59
mean grade over 3 metres of core.	3428	55.8	1596	1831	588	7.90

TABLE VI. DDH-86-5. 6 METRE INTERSECTION 86 ZONE.

Meterage	Cu ppm	Ag ppm	Au ppb	As ppm	Sb pmm	Fe %
57.0-58.0	590	14.0	838	394	86	5.65
58.0-59.0	537	42.7	4920	320	134	8.33
59.0-60.0	366	20.5	1608	260	64	5.16
60.0-61.0	374	9.7	905	202	24	6.53
61.0-62.0	379	9.5	835	140	13	7.94
62.0-63.0	220	5.0	509	323	8	4.91
Mean grade over 6 metres core.	411	16.8	1602	273	55	6.42

TABLE VII. DDH-86-7, 6 METRE INTERSECTION 86 ZONE.

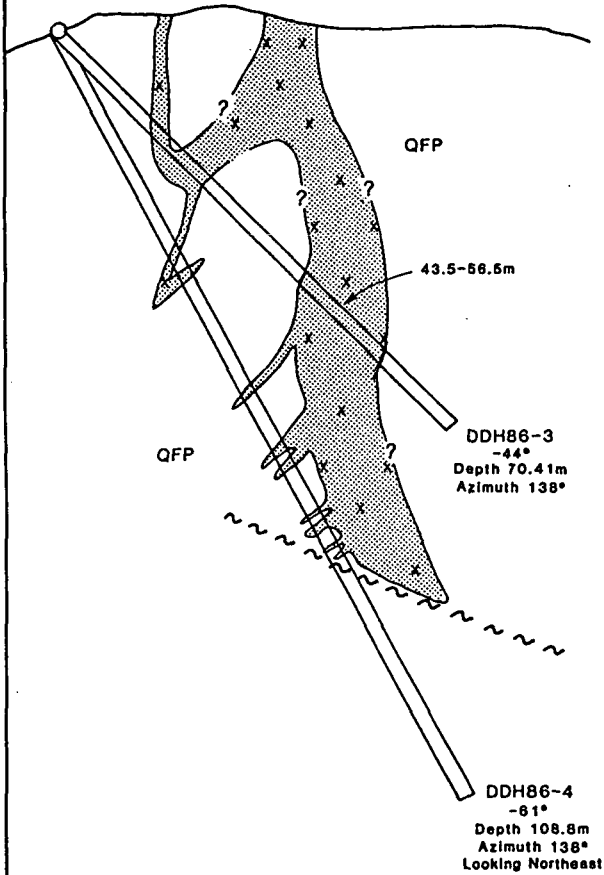
Meterage	Cu ppm	Ag ppm	Au ppb	As ppm	Sb ppm	Fe%
104.5-105.5	5356	50.7	3380	2459	316	>15.00
106.5-107.5	>10000	131.7	1410	>10000	1192	14.55
107.5-108.5	1626	6.4	58	1013	86	3.05
108.5-109.5	4526	17.2	494	2797	230	5.61
109.5-110.5	>10000	172.9	2970	>10000	3649	>15.00

While prospecting the La Jaune Creek in 1993 the writer collected float rock samples of quartz-cemented pyritic breccia which returned 21,892 ppm Cu, 227.4 Ag, 1,960 ppb Au, 525 ppm Pb, and 1,208 ppm Zn.

5.3 Re-interpretation of 1986 drill Sections

Previous assessment reports had interpreted 1986 drill sections correctly (Ref: Assessment Report # 15,897). Work during

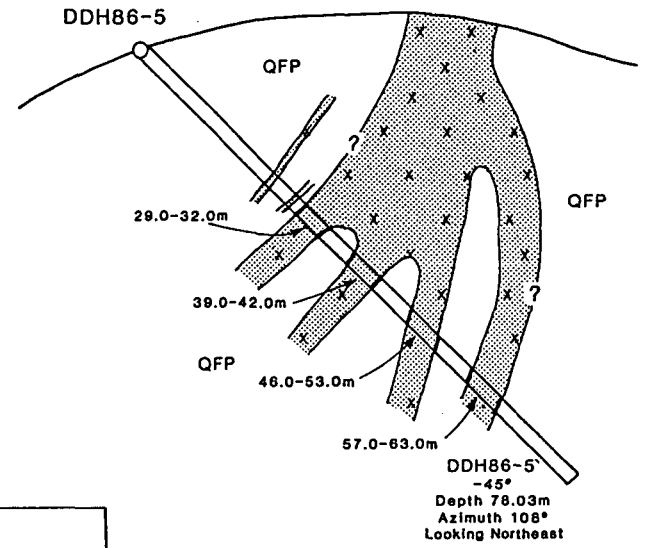
DDH86-3,4 86 ZONE



DRILL HOLE 86-3 ANALYSES

SAMPLE #	Cu ppm	Ag ppm	Au ppb	As ppm	Sb ppm	Fe %
43.5-44.5	397	17.4	987	419	52	5.88
44.5-45.5	817	55.2	4500	372	191	12.54
45.5-46.5	672	44.1	2830	431	154	9.03
46.5-47.5	228	6.4	460	332	19	4.92
47.5-48.5	640	48.9	2925	372	171	9.28
48.5-49.5	529	16.1	1315	393	111	7.59
49.5-50.5	711	23.5	1470	448	252	5.88
50.5-51.5	948	71.8	9060	440	413	11.70
51.5-52.5	511	13.7	1500	378	135	5.55
52.5-53.5	539	15.7	1185	412	103	6.22
53.5-54.5	343	8.4	604	293	50	4.87
54.5-55.5	132	2.8	215	267	6	4.10
55.5-56.5	321	7.2	349	269	38	6.12
Mean Grade over 13m core	522	25.5	2108	371	130	7.20

DDH86-5 86 ZONE



DRILL HOLE 86-5 ANALYSES

SAMPLE #	Cu ppm	Ag ppm	Au ppb	As ppm	Sb ppm	Fe %
29.0-30.0	5085	120.6	1760	2784	823	12.97
30.0-31.0	1328	29.0	1255	806	200	11.17
31.0-32.0	1380	5.4	337	405	9	5.21
Mean grade over 3m core	2231	51.6	1117	1331	344	9.78
39.0-40.0	1461	22.7	804	829	148	6.86
40.0-41.0	1403	39.5	2530	645	221	11.14
41.0-42.0	7419	105.3	1455	4018	1394	5.59
Mean grade over 3m core	3428	55.8	1596	1831	588	7.90
46.0-47.0	480	12.5	530	480	71	5.64
47.0-48.0	632	18.4	870	312	91	9.99
48.0-49.0	487	9.6	688	307	59	9.08
49.0-50.0	577	16.7	467	314	63	12.32
50.0-51.0	558	12.1	557	430	77	8.55
51.0-52.0	889	16.4	1020	242	112	>15.0
52.0-53.0	431	6.7	410	274	70	5.75
Mean grade over 7m core	576	12.5	652	337	775	9.50

DRILL HOLE 86-5 ANALYSES

SAMPLE #	Cu ppm	Ag ppm	Au ppb	As ppm	Sb ppm	Fe %
57.0-58.0	590	14.0	838	394	86	5.65
58.0-59.0	537	42.7	4920	320	134	8.33
59.0-60.0	368	20.5	1808	260	64	5.16
60.0-61.0	374	9.7	905	202	24	6.53
61.0-62.0	379	9.5	835	140	13	7.94
62.0-63.0	220	5.0	509	323	8	4.91
Mean grade over 6m core	411	16.9	1602	273	55	6.42

LEGEND

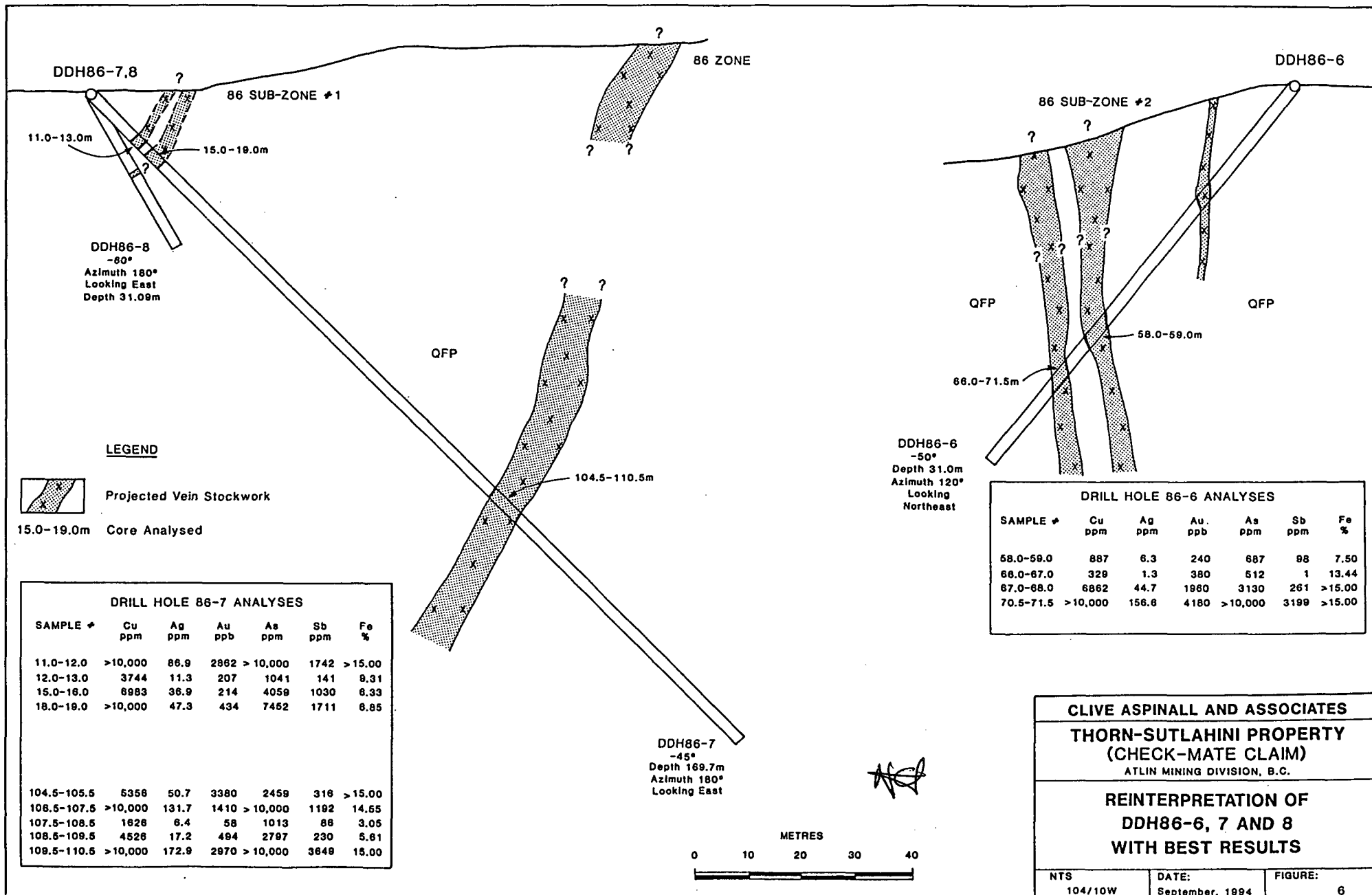
- Projected Stockwork Zones
- Quartz Feldspar Porphyry
- Assumed Fault
- Core Analysed

Handwritten signature/initials



CLIVE ASPINALL AND ASSOCIATES
THORN-SUTLAHINI PROPERTY
(CHECK-MATE CLAIM)
 ATLIN MINING DIVISION, B.C.

REINTERPRETATION OF
DDH86-3, 4, AND 5
WITH BEST RESULTS



the 1994 season involved the re-interpretation of these drill sections and renaming of mineralized zones according to the writer's view, (Figures 3-6).

The "East Extension", the "East Zone" and the "Main Zone", terms used by previous workers (Ref: Assessment Report #15,897) were renamed in 1994 as the "86 Zone" with "86 Sub-Zones #1 and #2", (Figure 4). The 86 Zone and its sub-zones are sulphide veinlet stockworks, 538 metres long and open at both ends. Cross-sections of the 86 Zone show it to be 10 metres thick with interfingering zones up to 20 metres wide, (Figures 5 and 6). In drill section the best intersection is 13 metres thick. The 86 Zone and 86 Sub-Zones #1 and #2 trend southwesterly with variable steep dips from vertical to 80 degrees north and south, (Figures 3, 5, and 6).

5.0 MODEL TYPE

The Thorn-Sutlahini property is a gold-silver-copper prospect. Copper minerals include tetrahedrite and enargite, with gold and silver associated with the tetrahedrite. The geology suggests the gold-silver-copper mineral zones on the Thorn-Sutlahini property to be structurally controlled. The mineral association suggests the property to be a high sulphidation system.

Important examples of high sulphidation systems are the Lepanto-FSE in the Philippines, Frieda River in Papua New Guinea, and El Indio in Chile. The significance of these examples is that they not only host gold-copper within the system but are proximally related to a deeper and sometimes hidden gold-copper porphyry systems.

Lepanto-FSE Deposits, Philippines

The Lepanto high sulphidation enargite-gold deposit has reserves of 35 mt @ 3.5% Cu and 3 g/t Au. It is located 200-400 metres to the northwest and 400 metres above the high grade FSE porphyry copper-gold deposit with reserves of 300 mt @ 0.7% Cu and 2.2 g/t Au, (1993 figures after Corbett and Leach). Enargite-gold mineralization is hosted in structurally controlled NW trending vuggy silica zones within the dacite pyroclastics and porphyry body. Below Lepanto, the FSE porphyry deposit consists of bornite, chalcopyrite, pyrite, magnetite and hematite. Transecting the FSE is a breccia pipe which contains mineralized rock, and outcrops on surface.

The Frieda River Deposits, PNG

Exploration up to 1983 inferred a porphyry copper resource of 860 mt @ 0.47% Cu and 0.31 g/t Au within the Koki and Horse-Ival deposits. Within the adjacent Nina high sulphidation deposit a resource of 32 mt @ 2.35% Cu and 0.58 g/t Au has been outlined, (Corbett and Leach, 1993).

Copper mineralization occurs as late stage enargite deposition in cavities and fractures in the pyrite, locally banded with barite. Intense brecciation and local fluidized breccias accompany highgrade copper zones. Primary gold mineralization is postulated as tellurides, as submicroscopic inclusions in sulphides.

El Indio, Chile

This deposit has been described as a structurally controlled high sulphidation enargite copper system which has been overprinted by epithermal gold mineralization hosted in veins.

A reverse fault tectonic setting has facilitated the deposition of high grade ore, (Corbett and Leach, 1993).

7.0 CONCLUSIONS

The 86 Zone is a sulphide rich veinlet stockwork with analytical gold values ranging up to 9,060 ppb, silver up to 172.9 ppm and copper greater than 10,000 ppm. The most interesting values are the precious metals. The 86 zone extends for 538 metres and averages 10 metres thick. It remains open at both ends. The 86 Zone and two smaller sub-zones trend southwesterly.

Surface prospecting and geochemical work, carried out by previous workers, suggest the main target zone for further undiscovered mineralization occurs along the western extension of the 86 Zone, where, the quartz-pyritic cemented breccia boulders are believed to have originated. Quartz-cemented pyritic breccia boulders may have originated from variable veinlet stockworks or a separate mineralized zone. These mineralized boulders were only found in La Jaune Creek. West of La Jaune Creek the stock is thought to underlie the Stuhini Group andesite-basalts. This area has not been prospected in detail.

The 86 Zone is one of two geochemical gold anomalies surveyed by previous workers, over a limited area, suggesting other undiscovered stockworks exist within the QFP. Drill core sections of the 86 Zone indicate pyrite, tetrahedrite, galena, sphalerite, and stibnite. Enargite and arsenopyrite were not identified in the core by the writer, but have been found by previous workers in float and outcrop.

8.0 RECOMMENDATIONS.

- 1). Complete structural interpretation using aerial photograph coverage; prepare 1:4000 and 1:2000 contour maps.
- 2). Cut and clear trails in valley; set-up bridges across Camp and La Jaune Creeks in late May and early June when these creeks have a low water flow.
- 3). The alteration zones should be mapped at 1:2000 scale map and structural relationships established.
- 4). Carry out VLF-EM survey over alteration zones to locate structures; follow-up with UT-IP geophysics.
- 5). Geochemical sample selected areas related to structures.
- 6). Set-up drill pads and helicopter pads at selected sites well in advance of future drilling program.



CLIVE ASPINALL, M.Sc., P.Eng.

9.0 PROPOSED BUDGET.

AN INITIAL EXPLORATION PROGRAM, INCLUDING PROSPECTING, RECONNAISSANCE MAPPING-GEOCHEM-GEOPHYSICS PRIOR TO DRILLING. ALSO INCLUDES BRIDGE-BUILDING ACROSS LA JAUNE-CAMP CREEKS. CANADIAN DOLLARS.

PRE-FIELD MAPS/AERIAL PHOTO PREPARATION \$1000.00

FIELD WORK

GEOLOGICAL CONSULTANT

40 DAYS AT \$443.20/DAY,
INCLUDING REPORT, STRUCTURAL
AERIAL PHOTO INTERPRETATION, GST. \$17,729.00

FIELD ASSISTANT,

\$214.00 FOR 30 FIELD DAYS, GST \$6,420.00

GEOPHYSICS.

VLF-EM RENTAL \$1,500.00

INTERPRETATION OF DATA

REPORT \$2,000.00

ANALYTICAL

1500 GEOCHEMICAL SOIL AND
ROCK SAMPLES AT \$20.00 EACH \$3,000.00

SAMPLE BAGS/BOXES \$500.00

FREIGHT \$500.00

FIELD ACCOMMODATION AND FOOD.

\$30 PER MAN DAY/30 DAYS \$1,800.00

GEN-SET, COMPUTER RENTAL \$2,000.00

EXPEDITOR, VEHICLE, RADIO.

HELICOPTER/FIXED WING \$5,000.00


INCLUDES 2 HOUR BRIDGE

BUILDING WITH HELICOPTER.

ADMINISTRATION/SUPPORT/OFFICE/

DRAFTING \$7,551.00

TOTAL \$50,000.00



CLIVE ASPINALL, P.Eng.



10.0 REFERENCES.

CORBETT, G.J., AND LEACH, T.M., (1993). EXPLORATION WORKSHOP; A GUIDE TO PACIFIC REM Au/Cu EXPLORATION. 7/93 EDITION.

WOODCOCK, J.R., (1987). DRILLING REPORT THORN PROPERTY, B.C 104K-10W, DAISY, DAISY 2 CLAIMS FOR INLAND RECOVERY GROUP LTD AND AMERICAN RESERVE MINING CORP. B.C. ASSESSMENT REPORT# 15,897.

WOODCOCK, J.R., (1982). THORN PROPERTY, (TRAPPER LAKE, B.C.), ATLIN M.D.. ASSESSMENT REPORT 10,243.

WALLIS, J.E (1983), GEOLOGY, GEOCHEMISTRY, GEOPHYSICS OF THORN PROPERTY, (TRAPPER LAKE, B.C.). ATLIN MINING DIVISION. ASSESSMENT REPORT 11,923.

SANGUINETTI, M.H (1969). A REPORT ON THE INK AND LIN CLAIMS, SUTLAHINI RIVER AREA (NTS 104K), ATLIN M.D FOR AMERICAN URANIUM LTD. ASSESSMENT REPORT 2,512.

SOUTHER, J.G. GEOLOGY AND MINERAL DEPOSITS OF TULSEQUAH MAP-AREA, BRITISH COLUMBIA. 1971.

APPENDICES II. VANCOUVER PETROGRAPHICS THIN SECTION-POLISHED
SECTION DATA



Vancouver Petrographics Ltd.

8080 GLOVER ROAD, LANGLEY, B.C. V3A 4P9
PHONE (604) 888-1323 • FAX (604) 888-3642

Report for: Clive Aspinall,
Box 22, Pillman Hill,
ATLIN, B.C.
VOW 1A0

Job 940395

August 31st, 1994

SAMPLES:

6 rock samples from the Thorn-Sutlahini project were submitted for sectioning and petrographic examination. The samples are numbered as follows:

Group A

Sample 1: DDH 86-3 39.73 - 39.83m.
Sample 3: DDH 86-5 54.95 - 55.05m.

Group B

Sample 4: Float

Group C

Sample 5: DDH 86-4 43.18 - 43.28m.
Sample 2: DDH 86-5 56.10 - 56.20m.

Group D

Sample 6: DDH 86-6 85.90 - 85.95m.

SUMMARY:

Four of the six rocks of this suite are recognizably of the same (or closely similar) type - being highly leucocratic (mafic-free) quartz feldspar porphyries composed of phenocrysts of totally sericitized feldspar and minor quartz, set in microgranular to felsitic groundmasses which appear to consist essentially of fresh plagioclase. Fine-grained, randomly disseminated pyrite is a prominent accessory in all cases.

Sample 5 is a homogenous example of this lithotype.

Samples 1 and 3 are the same rock affected by quartz veining and silicification, and Sample 2 shows it brecciated and cemented by quartz.

Samples 3 and 5 show sporadic porphyroblastic development of epidote within the totally sericitized phenocrysts. Traces of epidote are also seen in Sample 1, in sericitized phenocrysts which have been affected by pervasive silicification marginal to a quartz veinlet.

Except in Sample 1, the mineralization (pyritization) appears to be entirely of randomly disseminated type. The occurrence of the disseminated pyrite indiscriminately within the sericitized phenocrysts as well as the groundmass is a notable feature - possibly indicative of the fact that the pyritization was contemporaneous with, or later than, the pervasive sericitization phase. In Samples 2 and 3 the quartz breccia fillings and veinlets are devoid of sulfides, and clearly invade and marginally replace the already pyritized host.

Sample 1 differs in that pyrite also occurs as a vein-like, presumably structurally controlled segregation, in the form of a selvage to a zone of silicification marginal to a quartz vein. In this sample disseminated pyrite is also present within the quartz vein.

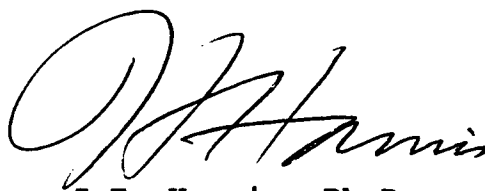
Sample 4 is the most strongly pyritic. It is intensely altered, and no plagioclase is recognizable. It appears to consist of a breccia of strongly pyritized compact sericite, pervaded and partially assimilated by microgranular quartz with accessory sericite. Its protolithic character is uncertain, but is most likely of related type to the other (felsic porphyry) samples. As in Samples 2 and 3 the invasive siliceous phase is devoid of sulfides.

Traces of tetrahedrite are associated with the pyrite in Samples 1 and 4, and rare specks of possible enargite were seen in Sample 3.

The complex mineralogy (including bornite, argentiferous galena, stibnite, Ag and Au, and the gangue minerals barite and calcite) suggested in your covering letter is not confirmed by the petrographic study. Sericite - a major component in all the samples - is not one of the minerals listed in your letter.

Sample 6 is a different rock type to the others, being a typical theoleiitic diabase. It shows classic intersertal texture, consisting of a meshwork of partially sericitized plagioclase laths with interstitial chlorophaeite. Carbonate and minor quartz are accessories - the former partly concentrating as sporadic clumps which may represent altered mafic phenocrysts. This rock appears devoid of sulfides.

This report is being faxed, to meet your deadline for assessment work. Sample remains, thin sections, off-cuts and the original of the report will be returned to you by mail.



J.F. Harris Ph.D. (929-5867)

SAMPLE 1: DDH 86-3 39.73 - 39.83m.
QUARTZ FELDSPAR PORPHYRY WITH QUARTZ-SULFIDE VEIN

Estimated mode

Phenocrysts:

Quartz	2
Sericite	36

Groundmass:

Plagioclase	38
Rutile	trace
Pyrite	4

Veining:

Quartz	8
Sericite	2
Epidote	trace
Pyrite	10
Tetrahedrite	trace

This appears to be another sample of the same general host-rock type (altered feldspar porphyry with disseminated pyrite) as the rest of the suite. It is distinctive in including a thin veniform segregation of sulfides, apparently developed as a selvage to a silicified zone marginal to a veinlet of white quartz.

Thin section examination reveals that this rock differs in having a notably finer-grained groundmass than the distinctly microgranular type characterizing the other porphyry samples. Here it is an even, felsitic aggregate of probable plagioclase, of grain size 5 - 15 microns, lightly dusted with minute flecks of sericite.

Phenocrysts consist predominantly of pseudomorphic masses of minutely felted sericite. On one side of the central quartz/sulfide zone, these are of the usual sharply euhedral prismatic form, and range in size from 0.2 - 2.5mm. They are accompanied by a few small, rounded/embayed phenocrysts of quartz.

The texture of the rock in a lcm zone adjacent to the other side of the central quartz veinlet is recognizably different, in that the felted sericite phase, instead of (or in addition to) concentrating as separate, discrete pseudomorphs, shows a breccia-like distribution of interconnected wisps and patches, delineating and cementing an apparent fragmental structure in the rock matrix.

Note that (with rare exceptions documented later) the sericitized pseudomorphs in this rock do not show the apparent superimposed (or concomitant development of accessory epidote seen in Samples 3 and 5. In this respect the rock resembles Sample 2.

The vein zone is a composite one. A 3mm core is composed of an equigranular aggregate of anhedral quartz, of grain size 30 - 300 microns. This is flanked, on the side adjacent to the breccia-textured wall-rock variant, by a zone of similar width consisting of individual anhedral quartz grains densely disseminated in a matrix

Sample 1 cont.

of felted sericite. The concentration of quartz in this zone increases outwards such that the contact with the sericitized/brecciated wall-rock is sharply demarked by a thin rind of compact quartz.

The other margin of the central quartz veinlet is marked by a selvedge of compact pyrite, 0.5 - 2.0mm in thickness, beyond which is a 3mm zone of pervasive silicification of the porphyry host, in which the groundmass consists largely of minutely cherty quartz, and the sericitized phenocrysts are totally replaced by, rimmed, and/or speckled with, granular quartz. It is interesting that a few of these partially silicified phenocrysts contain clusters of granular epidote - suggesting that the latter (also seen in other rocks of the suite) developed subsequent to sericitization, perhaps contemporaneously with a phase of dispersed silicification.

In contrast to other samples of the suite, sulfides in this rock occur not only in the form of randomly disseminated pyrite in the rock at large, but also as part of a structurally-controlled vein system.

The sulfide streak in the latter association is of similar mineralogy to the disseminated type, consisting of compact, essentially monomineralic pyrite. It is distinctive in containing traces of accessory tetrahedrite, as tiny concordant and discordant threads and small (up to 100 microns) interstitial pockets in the massive pyrite. A few similar occurrences of tetrahedrite were also found, independent of pyrite, in the adjacent vein quartz.

Interestingly, one other example of tetrahedrite was seen in the form of inclusions within a grain of disseminated pyrite, associated with a cluster of quartz in the zone of dispersed silicification marginal to the sulfide veinlet. This suggests contemporaneity of some, or perhaps all, the disseminated pyrite and vein-associated pyrite in this sample. The quartz vein in this instance (unlike other samples) contains clusters of disseminated and partly coalescent pyrite grains, 20 - 200 microns in size, similar to those in the normal host rock.

SAMPLE 3: DDH 86-5 54.95 - 55.05m.
QUARTZ FELDSPAR PORPHYRY

Estimated mode

Phenocrysts:

Quartz	2
Sericite	35
Epidote	3

Groundmass:

Plagioclase	30
Quartz	9
Rutile	trace
Pyrite	5
Enargite?	trace

Veinlets:

Quartz	14
Sericite	2

This rock is essentially identical to Sample 5 except that diffuse silicification is more extensive and, at one end of the sectioned portion, quartz concentrates as parallel veniform segregations.

Phenocrysts, ranging from 0.4 - 2.0mm in size, consist predominantly of prismatic pseudomorphs composed of structureless, minutely felted sericite plus, in a few cases, clumps and skeletal growths of granular prismatic epidote. These pseudomorphs presumably originated as feldspar phenocrysts. The rock also contains a few scattered, rounded phenocrysts of primary quartz.

The groundmass consists essentially of an evenly microgranular mosaic of plagioclase, of grain size 10 - 50 microns. Accessory quartz, of similar or slightly coarser grain size, occurs throughout in uncertain proportions as sporadic individual grains and diffuse clumps and networks.

As with all the samples of this lithotype, the rock contains no mafic silicates or their altered equivalents.

Again, consistent with the majority of other samples of the suite, fine-grained disseminated pyrite is a prominent constituent. This is in the form of individual, randomly distributed, euhedral-subhedral grains, 10 - 400 microns in size, occasionally aggregated as small clumps. It occurs indiscriminately in the groundmass and the sericite/epidote of the altered phenocrysts. Its distribution appears devoid of structural control and, in this case, no consistent relationship of pyrite to the more siliceous portions of the groundmass is recognizable.

This sample includes rare traces of an anisotropic grey sulfosalt which may be enargite. Two examples of this constituent were found: one as a 100 micron grain moulded on to a pyrite clump, and another, of similar size, developed (independent of pyrite) interstitially to the felted sericite of an altered phenocryst.

Sample 3 cont.

The two parallel veinlets at one end of the sectioned portion are 2 - 4mm in thickness and composed of anhedral, locally comb-textured aggregates of quartz, of grain size 100 - 500 microns. As in Sample 2, these incorporate occasional lenticular clumps of felted sericite. They show irregular, somewhat gradational contacts with the adjacent host rock - where offshoots of the vein quartz occur as small threads and form rims to sericitized phenocrysts.

In contrast to the adjacent host rock with its abundant disseminated pyrite, the vein quartz is strikingly devoid of sulfides.

The petrographic observations do not support the statement (in your covering letter) that this sample is one containing "sulfides in sealed fractures".

SAMPLE 4: GROUP B, FLOAT
QUARTZ-CEMENTED PYRITIC BRECCIA

Estimated mode

Quartz	40
Sericite	24
Chlorite	trace
Pyrite	35
Tetrahedrite	1

This sample is heavily mineralized and intensely altered. It contains no recognizable feldspar and is composed essentially of an intergrowth of quartz, sericite and pyrite. On the macroscopic scale, it appears to consist of brecciated fragments of semi-massive pyrite permeated and partially assimilated by sulfide-free quartz.

In thin section no remnants of primary textures are preserved. The best defined areas of "semi-massive sulfide" consist of more or less closely clustered, locally coalescent euhedra or subhedra of pyrite, 0.2 - 1.0mm in size, in a matrix of minutely felted sericite. Occasionally the latter also contains a speckling of quartz grains but, for the most part, these probably represent incipient silicification related to the invasive and assimilative quartz phase. In fact, all gradations can be seen, from quartz-free pyrite/sericite fragments through to diffuse wisps of the latter surviving as remnants in a matrix of quartz. The more or less silicified variant is probably the dominant type overall.

The invasive/cementing phase is devoid of sulfides and consists of an equigranular anhedral aggregate of quartz, of grain size 50 - 100 microns, with minutely felted sericite intimately dispersed throughout as abundant, tiny, intergranular pockets.

This sample contains tetrahedrite as a sporadically-developed minor accessory sulfide. This mineral forms small, irregular pockets, 0.1 - 0.5mm in size, in the silicate matrix peripheral to pyrite clusters, moulded-on to pyrite grains, and interstitial to pyrite aggregates. Most areas where tetrahedrite is seen are of the partially assimilated, intermingled pyrite/sericite/quartz type, but one example was found where it occurs with pyrite in an unsilicified sericite matrix.

SAMPLE 5: DDH 86-4 43.18 - 43.28m.
QUARTZ FELDSPAR PORPHYRY

Estimated mode

Quartz	9
Sericite	34
Epidote	3
Plagioclase	38
Rutile	trace
Pyrite	6

This rock is of similar general type to Sample 2, but lacks the prominent white quartz veining (breccia cementation) of that sample.

It is a highly leucocratic porphyry in which the dominant phenocrysts (0.2 - 2.0mm in size) are totally altered to pseudomorphs of minutely felted sericite. Scattered, rounded phenocrysts of quartz of a similar size are somewhat more abundant than in Sample 2.

The phenocrysts are set in an even, finely microgranular/saccharoidal groundmass of plagioclase, of grain size 10 - 40 microns, with minor intergrown flecks of sericite. The evenly distributed, minor accessory quartz seen in the groundmass of Sample 2 appears absent in this rock, but the central part of the section includes some diffuse patches and streaks of local silicification, in the form of aggregates of subhedral quartz of grain size 50 - 100 microns.

An accessory constituent not present in Sample 2 is epidote, which occurs in the present sample (as in Sample 3) as sporadic clumps of subhedral prismatic grains, 50 - 400 microns in size, developed mainly as cores to some of the sericitized phenocrysts.

Disseminated pyrite occurs as rather abundant, individual, euhedral-subhedral grains, 20 - 300 microns in size (occasionally aggregating as small clumps of up to 1mm). The pyrite distribution appears random, without structural control, and it occurs indiscriminately within the sericitized phenocrysts and the groundmass. There is a perceptible tendency for an increase in the abundance and grain size of disseminated pyrite in association with a central streak of diffuse silicification.

No sulfides other than pyrite could be found.

SAMPLE 2: DDH 86-5 56.10 - 56.20m.

QUARTZ FELDSPAR PORPHYRY WITH QUARTZ STOCKWORK

Estimated mode

Phenocrysts:

Quartz	2
Sericite	32

Groundmass:

Plagioclase	27
Quartz	3
Sericite	2
Pyrite	4
Rutile	trace
Zircon	trace

Veining:

Quartz	24
Sericite	6

The sectioned portion of this sample consists of a grey rock matrix dusted with fine-grained disseminated pyrite and cut by irregular segregations and veinlets of white quartz.

In thin section the host rock is found to be a highly leucocratic felsic porphyry. Phenocrysts consist predominantly of abundant, totally sericitized pseudomorphs - presumably after original feldspar (most likely plagioclase). These are of stumpy, euhedral/prismatic shape, show random orientation, and range from 0.2 - 4.0mm in size. There are also rare, rounded and/or embayed phenocrysts of quartz up to 2.0mm in size.

The phenocrysts are set in a strikingly equigranular groundmass composed of fresh plagioclase, plus minor quartz, as an even mosaic of grain size 30 - 60 microns. A little fine-grained sericite occurs as a patchily distributed interstitial component.

The rock appears devoid of mafics, or the altered equivalents thereof. Very rare traces of tiny granules of rutile and zircon are the only other constituents.

Disseminated pyrite, as individual, equant, subhedral grains and small clumps, 10 - 500 microns in size, forms a dissemination through the rock matrix. Interestingly, the pyrite occurs not only in the groundmass, but also within the totally sericitized phenocrysts. Possibly the pyritization and sericitization were contemporaneous.

The white veinlets and connected pockets consist of anhedral mosaics of quartz, of grain size 100 - 400 microns - sometimes as rims or marginal fringes to cores of felted sericite (possibly representing incorporated remnants of host-rock phenocrysts). The margins of the veins and segregations are often diffuse, blending gradationally with the saccharoidal groundmass. The veining is devoid of sulfides, and appears to represent a late breccia-filling event, invading and peripherally replacing the pyritized host.

SAMPLE 6: DDH 86-6 85.90 - 85.95m.
DIABASE

Estimated mode

Plagioclase	40
Quartz	3
Sericite	5
Chlorophaeite	33
Carbonate	15
Rutile	trace
Opagues	4

This sample is a homogenous, fine-grained, grey, meshwork-textured rock with scattered phenocrysts (see etched off-cut). It is devoid of veining and of macroscopically recognizable pyrite.

Thin section examination reveals that it is texturally and compositionally distinctive from the other rocks of the suite, being quartz-poor and mafic-rich.

The rock shows a classic intersertal texture of lath-like plagioclase grains (0.1 - 0.4mm in length) and an interstitial phase of minutely felted chlorophaeite (after original mafic glass) dusted with micron-sized rutile.

Quartz, as diffuse-margined, equant grains, 50 - 150 microns in size, is a rather evenly distributed minor accessory.

Carbonate (reactive to dilute acid and presumably mainly calcite) is a more abundant accessory. It occurs in similar mode to the quartz, as random, small, irregular grains throughout the matrix. It also forms scattered, macroscopically visible, granular clumps (0.5 - 2.0mm in size) which may represent pseudomorphs of original mafic phenocrysts. An irregular veinlet, 1mm in thickness, which traverses the section, is likewise composed of carbonate.

Rather abundant, evenly disseminated, equant euhedra (and rare elongate laths) of opaques, 10 - 100 microns in size, occur throughout the rock. This sample was prepared as a conventional (rather than polished) thin section, so the opaques cannot be positively identified. They are probably mainly Fe or Fe-Ti oxides.

This rock has the composition and texture of a tholeiitic diabase - most likely a dyke rock.

APPENDICES III. 1994 CORE LOGGING DATA

DIAMOND DRILL CORE LOGGING AND RE-EVALUATION DURING 1994 SEASON, BY CLIVE ASPINALL. THIN-SECTION/POLISHED SECTION WORK BY DR. J.F. HARRIS OF VANCOUVER PETROGRAPHICS LTD. REFERENCES TO PREVIOUS ROCK DESCRIPTIONS BY J.R WOODCOCK ARE INCLUDED.

Summary

Drilling program data: Drilling completed during 1986 by Caron Drilling of Whitehorse, Yukon.

DDH 86-1 to 86-8; these holes are drilled within the 86 Zone and Sub-Zones #1 and #2, along a southwest trend of 538 metres.

Almost all of the core consists of grey quartz feldspar porphyry, (QFP) with 40% phenocrysts and 60% matrix. Feldspar phenocrysts have been completely altered to sericite. Quartz phenocrysts often appear rounded with pseudo-pyramidal terminations. Mafic minerals are observed but rare.

Pyrite is pervasively disseminated in this porphyry rock; pyrite is euhedral to subhedral in form and frequently occurs as clusters. In some core an unidentified macro-sized mineral, possibly stibnite, also occurs as an accessory. Pyrite also occurs in veinlets, composing a sulphide veinlet stockwork. In such cases it is associated with visible tetrahedrite and precious metals determined analytically. Enargite, galena, sphalerite, stibnite and arsenopyrite is also known to be present. These sulphide veinlet stockworks are known to occur where the porphyry has been silicified.

A late stage milky quartz breccia event is associated with these sulphide veinlet stockworks.

Typical drill core samples examined under thin section show totally sericitized plagioclase and minor quartz set in microgranular to felsitic groundmass. The groundmass consists principally of fresh plagioclase. Fine grained euhedral-subhedral randomly disseminated pyrite is prevalent. Traces of epidote are present.

Another rock type intersected by drilling within the 86 zone is a fine grained tuffaceous rock with distinctive bedding cleavage. This rock type, not studied by thin section, is grey yellow colour on weathered surface with a grey colour on fresh surface. It is also pervasively pyritized.

A third rock type intersected by drilling are mafic dykes. Under the microscope it is identified as tholeiitic diabase. This rock shows of a meshwork of partially sericitized plagioclase laths with interstitial chlorophaeite. Carbonate and minor quartz are accessories. Pyritization has not affected this rock type.

Hole DDH-86-1

Azimuth: North.

Hole Angle: -44 degrees; Depth: 110.30 metres.

0-4.38 metres: No core.

4.38-6.08 metres. Overburden. Quartz feldspar porphyry....QFP. rusted on fracture planes, which are filled with lateritic conglomerate. Inclusions in lateritic conglomerate are various rock types including andesite, and silicified green rocks? Quartz feldspar porphyry consists of altered plagioclase and quartz phenocrysts in a felsitic matrix. Biotite and other mafic minerals are observed but not obvious. Possible epidote mineral and apatite? occur as accessories.

6.08-13.30 metres. Quartz feldspar porphyry; barren of disseminated pyrite along bedrock-overburden interface; Fe oxides occur. At 6.40 metres the QFP becomes much fresher and exhibits disseminated pyrite.

13.30-14.40 metres. QFP becoming more altered. Rock appears to be sericitized.

14.40-17.10 metres. Sericitized with massive sulphides.

17.10-41.50 metres. QFP with disseminated pyrite; disseminated traces of galena and stibnite?

41.50-51.0 metres. QFP, sericitized, thread veins of white material possibly barite.

51.0-71.0 metres. QFP, more sericitized and more sheared; sulphides at 56.00-57.00, massive at 56.70, and 69.00 metres; massive sulphides over 10 cm in both cases. Vein system at 45 degrees to core axis.

71.0-110.30 metres. QFP and end of hole.

Samples for analyses collected at 14.00-15.00, 20.00-21.00, 25.00-26.00, 35.00-36.00, 45.00-46.00, 56.00-57.00, 68.00-69.00 metres.

Hole DDH 86-2

Azimuth: North.

Hole Angle: -64 degrees. Depth: 31.10 metres.

0.00-7.32 metres. Overburden. Includes ferricrete limonated rock, QFP inclusions and sulphide rock fragments.

7.32-31.09 metres. QFP. Core has weathered brown colour which may be due to breakdown of plagioclase matrix. Disseminated pyrite on fresh surface. Mineralized zone between 15.45-17.27 metres. Visible mineralization consists of massive pyrite in vein system. Fractures cut core axis at 45 and 85 degrees.

31.09 metres. End of Hole.

Samples for Analyses. None.

Samples sent for Petrographic study: None.

Hole DDH-3

Azimuth: 138 degrees.

Hole Angle: -61 degrees: Depth: 70.41 metres.

0.00-8.84 metres. Overburden and oxidized fractured rocks including QFP. Also chloritized and biotitized altered rocks.

8.84-43.69 metres. Bedrock.

Light grey QFP with disseminated pyrite; Estimated 40% phenocrysts and 60% matrix. Plagioclase has been sericitized; quartz phenocrysts are rounded with pyramidal terminal ends. Some quartz phenocrysts have feldspathic rims which has also been altered. Biotite not observed. Disseminated pyrite is prevalent in QFP rock.

Mineralization occurs in veins at 10.94, 15.84, 15.84, 28.86, 30.28, 31.33, 32.90, 34.23, 34.83, 39.80. Core has been previously split in some of these above sections.

A sample was collected for petrographic analysis collected at 39.73-39.83 metres; this is sample #1 of Group A.

The sample hosts a quartz veinlet; this veinlet consists of a 3 mm core of equigranular aggregate of anhedral quartz of grain size 30-300 microns. It is flanked on one side by a zone of similar width consisting of individual anhedral quartz grains densely disseminated in a matrix of felted sericite. The other flank of the quartz veinlet is marked by a selvedge of compact pyrite, 0.5-2.0 mm in thickness, beyond which is a 3.0mm zone of pervasive silicification of the host. The pyrite within the vein is distinctive in that it is associated with tetrahedrite, as concordant and discordant threads and small (up to 100 microns) interstitial pockets in massive pyrite. A few similar occurrences of tetrahedrite were found independent of pyrite in the adjacent quartz vein. Interestingly, tetrahedrite was seen as inclusions within a grain of disseminated pyrite, associated with clusters of quartz in a zone of dispersed silicification marginal to the quartz veinlet. This suggests contemporaneous deposition of some vein and disseminated pyrite.

43.69-56.30 metres. Sudden sharp contact at both ends. White quartz breccia prevails; this white quartz breccia is considered a late stage event, perhaps after pyritization, and sericitization. Interstitial QFP fragments are pyritized, whereas the white quartz breccia does not appear to be pyritized.

56.30-70.10 metres. QFP with disseminated pyrite; plagioclase phenocrysts completely altered. End of hole.

Samples sent for analyses.

15.00-16.00, 23.00-24.00, 24.00-25.00, 25.00-26.00, 26.00-27.00, 43.50-44.50, 44.50-45.50, 45.50-46.50, 46.50-47.50, (Approx: 60 cm of core loss in last section), 47.50-48.50, 48.50-49.50, 49.50-50.50, 50.50-51.50, (approx 50% core loss in these last four sections), 51.50-52.50, 52.50-53.50, 53.50-54.50, 54.50-55.50, 55.50-56.50. Sample sent for petrographic study: 39.73-39.83 metres

Hole DDH 86-4

Azimuth: 138 degrees.

Angle Hole: -62 degrees; Depth: 108.8 metres.

0-7.32 metres: Overburden; includes ferricrete, andesite fragments, QFP fragments.

7.32-74.80 metres. The lower vein stockwork lies between 26.00 metres to 73.00 metres. QFP with disseminated pyrite, grey coloured on fresh surface and weathered surface, colour grading into a light tan where feldspars have been altered. Quartz phenocrysts are rounded.

In thin section, one sample of QFP, exhibits a highly leucocratic porphyry in which the dominant phenocrysts 0.2-2.0 mm in size are totally altered to pseudomorphs of minutely felted sericite. Scattered rounded phenocrysts of quartz of similar size are present.

The phenocrysts are set in an even finely microgranular-saccharoidal groundmass of plagioclase with a grain size of 10-40 microns.

Streaks of local silicification exhibit aggregates of subhedral quartz of 50-100 micron grain size.

Epidote occurs as an accessory mineral. It forms as sporadic clumps of subhedral prismatic grains 50-400 microns in size, developed mainly as cores to some of the sericitized phenocrysts.

Disseminated pyrite occurs as abundant individual euhedral-subhedral grains 20-300 microns in size, occasionally aggregating as small clumps up to 1 mm. The pyrite distribution appears random without structural control; it occurs indiscriminately within the sericitized phenocrysts and the groundmass. There is a perceptible tendency for an increase in the abundance and grain size of disseminated pyrite in association with one streak of silicification as seen in this thin section.

Massive veinlet mineralization occurs at 26.00 metres, then 31.09, 34.70-35.30, 51.83-52.00, 59.10, 61.97, 68.80-69.19, 70.00, 73.00 metres. Veinlets of 1 cm to 10 cm thick are associated with pyrite and possible tetrahedrite. Veinlets are bisecting core from 35-45 degrees and occur in more silicified sections.

A major shear slip occurs at 74.80 metres at 20 degree to core axis.

74.80-108.81 metres. QFP with disseminated pyrite, core has brown colour on surface.

Samples collected for analysis. None.

Sample sent for petrographic study: 43.18-43.28 metres.

Hole: DDH 86-5
Azimuth: 108 degrees.
Hole Angle: -45 degrees. Depth: 78.01 metres.

0-7.30 metres. Overburden. Fragments of Sericitized QFP
7.30-46.22 metres. QFP with disseminated pyrite. Very fresh rock, with widely separated phenocrysts; plagioclase feldspars have been sericitized; quartz phenocrysts are rounded with pyramidal terminations. Quartz is also grey and semi-translucent in colour. Pyrite is euhedral to subhedral where disseminated. In veinlets it is massive. Possible shear at 10 metres.

Core sections previously split are 24.15-24.85, 27.00-31.50, 32.70-33.50, 33.83-34.90, 39.50-43.30. In these sections mineralization occurs in the form of massive pyrite with assumed tetrahedrite. Associated with these veinlets a mineral similar to barite occurs.

Massive pyrite in veinlets occur at 8.00-9.00, 24.00-25, 27.00-28.00, 29.00-30.00, 30.00-31.00, 31.00-32.00, 39.00-40.00, 41.00-42.00.

At 45.00-45.20 metres there is a silicified zone with epidote.

46.22-62.68. Quartz breccia bordering veinlet stockworks. This breccia is not as strongly pervasive as in hole DDH 86-3.

In thin section the QFP shows phenocrysts ranging from 0.4-2.0 mm in size consisting of plagioclase pseudomorphs composed of structureless minutely felted sericite and occasional granular prismatic epidote. the QFP also shows a few scattered rounded phenocrysts of quartz. Groundmass consists essentially of an even microgranular mosaic of plagioclase of 10-15 microns, with accessory quartz of similar or slightly coarser grain size. The rock contains no mafic silicates or their altered equivalents. In thin section fine-grained disseminated pyrite is a predominant constituent, consisting of euhedral-anhedral grains 10-500 microns, occasionally aggregated in small clumps. It occurs predominantly in the groundmass and the sericite-epidote of the altered phenocrysts. Its distribution appears devoid of structural control. The pyrite occurs in the groundmass and also the totally sericitized phenocrysts. By deduction, the pyritization and sericitization are possibly contemporaneous.

Quartz cementation is apparently lacking in sulphides. In thin section the white veinlets and connected pockets consist of anhedral mosaics of quartz, of grain size 100-400 microns. The quartz sometimes occur as rims or marginal fringes to cores of felted sericite. These cores may represent remnants of host-rock phenocrysts. The margins of the veins and segregations are often diffuse, blending gradationally with the saccharoidal groundmass. The quartz cementation appears to be a late event peripherally replacing the pyritized host.

Massive pyrite occurs in veinlets between 46.00-53.00 and 57.00-65.00 metres.

Samples collected for analysis: Lower vein stockwork subzone. 8.00-9.00, 24.00-25.00, 27.00-28.00, 29.00-30.00, 30.00-31.00, 31.00-32.00, 40.00-41.00, 41.00-42.00 metres.

Upper vein stockwork subzone. 46.00-47.00, 47.00-48.00, 48.00-49.00, 49.00-50.00, 50.00-51.00, 51.00-52.00, 52.00-53.00, barren zone, then: 57.00-58.00, 58.00-59.00, 59.00-60.00, 60.00-61.00, 61.00-62.00, 62.00-63.00 metres.

Samples sent for petrographic study: 54.95-55.05 metres, and 56.10-56.20 metres.

Hole DDH 86-6
Azimuth:120 degrees.
Hole Angle:-45 degrees. Depth 89.00 metres.

0.00-13.00 metres overburden.
13.00-82.40 metres. QFP, very brown weathered on surface.
Disseminated pyrite.

Mineralization occurs at 26.32, 54.50-60.05, 64.62-72.00

Around 82.40 metres the rock is very broken.

82.40-89.00. metres. Tholeiitic diabase. In hand specimen this rock looks like an andesite. It exhibits a homogeneous fine grained, grey, meshwork-textured rock with scattered phenocrysts. It lacks macroscopically disseminated pyrite and veining.

In this section it is distinctively quartz poor and mafic rich, with lath-like plagioclase grains 0.1-0.4 mm in length and interstitial minutely felted chlorophaeite after original mafic glass, dusted with micron sized rutile.

Quartz occurs as a minor accessory. It is evenly distributed with equant grains 50-150 microns in size. Carbonate is a more abundant accessory and consists mainly of calcite. It forms granular clumps, also macroscopically visible with grains 0.5-2.00 mm in size. These clumps may represent pseudomorphs of original mafic phenocrysts.

Evenly disseminated equant euhedra of opaques 10-100 microns in size occur throughout the rock, and may be Fe or Fe-Ti oxides.

Samples collected for analyses: 58.00-59.00, 66.00-67.00, 67.00-68.00, 70.00-71.00 metres.

Sample collected for petrographic study: 85.90-85.95 metres.

Hole DDH 86-7

Azimuth: 180 degrees.

Hole Angle: -45 degrees. Depth 167.47 metres.

0.00- 10.58 m Overburden.

10.58-24.79 m .QFP, slip with broken core at 12.00 and 14.38; mineralization at 11.00-12.00, 12.00-13.00, 17.00-18.00. Towards 24.79 m the rock has a brown colour on surface, and very is broken.

24.79-36.18 m Tholeiitic diabase textured, scattered phenocrysts. Pyrite less disseminated than in QFP.

36.18-45.72 m. QFP with disseminated pyrite. Rock has weathered red surface. Sericitized.

45.72-60.24 m. Tholeiitic diabase dyke, similar to above.

60.24-169.47 m. QFP weathered brown colour on surface. Sericitized. Disseminated pyrite.

Mineralization suddenly occurs at 104.50 metres and continues to 110.34 metres. Massive pyrite with possible tetrahedrite occurs in four veins up to 40 cm in size with minor veinlets.

Samples for analysis collected at: 104.50-105.50 m, 106.50-107.50, 107.50-108.50, 108.50-109.50, 109.50-110.50.

Samples sent for petrographic study: None.

Hole DDH 86-8

Azimuth: 180 degrees.

Hole Angle: -60 degrees. Depth 31.09 metres.

0.00-9.90 Overburden. Mixture of andesite, QFP, mud...

9.90-16.05 m. QFP with disseminated pyrite, becoming broken towards

12.80 m. Massive pyrite mineralized section between 15.00-15.85 m.

16.05-24.72 m Fine grained tuffaceous rock with bedding at 45 degrees to core axis. Yellow weathered surface with disseminated pyrite. Sericite and kaolinization? Veinlets of quartz along bedding cleavage.

24.72-26.85 m. QFP. Reddish brown colour. Disseminated pyrite, sericitized.

26.85- 29.87 m Tholeiitic diabase dyke, drab olivine green colour.

Texture becomes more definitive towards centre of dyke.

29.97-31.09 m QFP with massive sulphide veinlet at 30 degrees to core axis. End of hole.

Samples for Analysis. None.

Samples sent for petrographic study: None.

APPENDICES IV. 1994 ANALYTICAL DATA

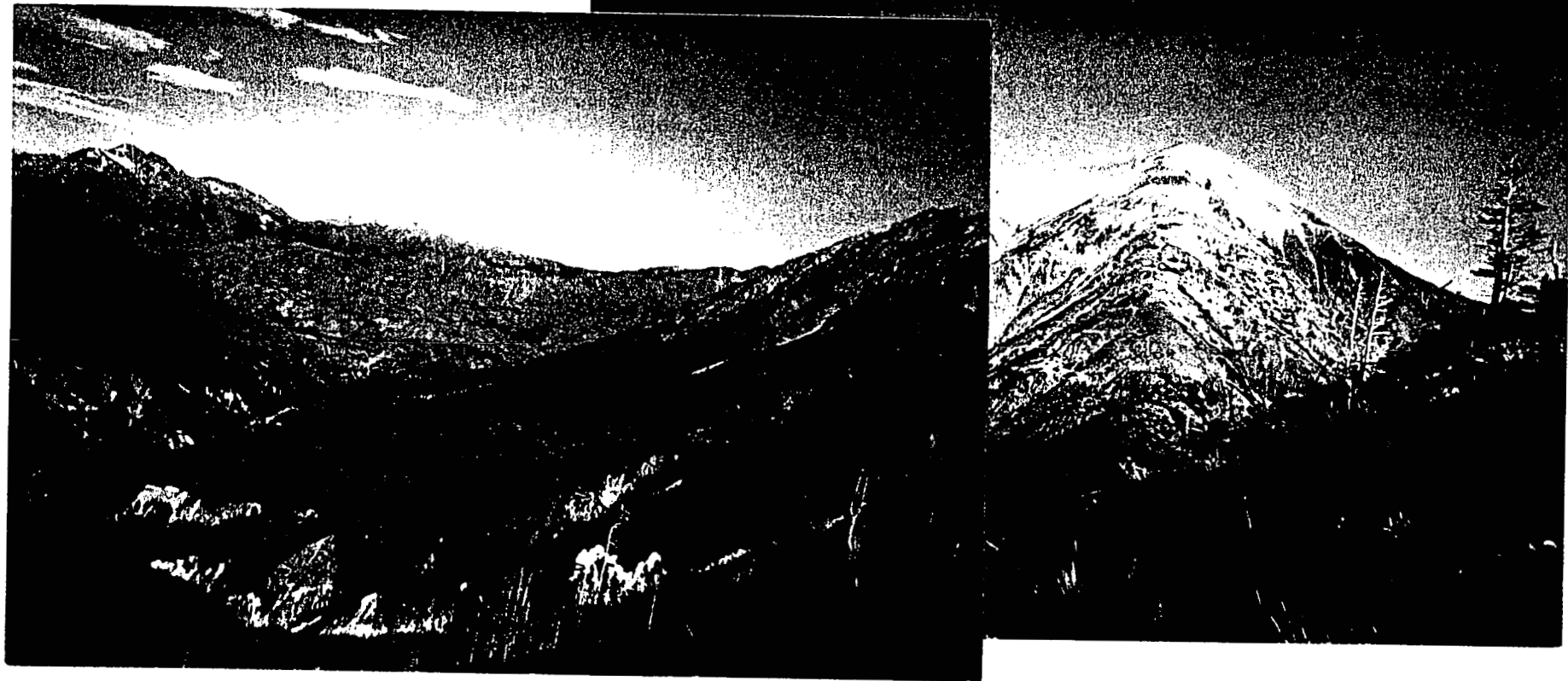
COMP: MR CLIVE ASPINALL
 PROJ: THORN SUTTAHINI
 ATTN: CLIVE ASPINALL

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
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FILE NO: 4S-0178-RJ1+2
 DATE: 94/08/16
 * rock * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI %	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	Au-Fire PPB
86-1 14-15	18.5	.35	198	1	29	.1	11	.21	.1	15	2028	>15.00	.12	1	.02	1	.03	61	470	218	19	301	1	.01	4.4	1547	1	1	4	94	711	
86-1 20-21	.1	1.12	1	1	180	.8	4	1.12	.1	7	32	3.36	.32	8	.53	4184	7	.10	31	1040	96	10	626	6	.01	20.6	148	1	1	7	90	6
86-1 25-26	.7	.98	1	1	188	.8	2	.42	.1	6	22	3.30	.34	1	.12	468	4	.06	16	980	261	8	371	7	.01	11.2	257	2	1	6	84	3
86-1 35-36	.1	.93	1	1	153	1.0	5	2.68	.1	6	20	2.89	.26	3	.69	3019	7	.07	26	1010	72	12	410	8	.01	28.2	74	1	1	7	85	2
86-1 45-46	.1	1.25	1	1	215	.8	4	2.10	.1	5	14	2.61	.33	7	.75	3197	5	.03	24	910	92	14	267	7	.01	17.2	82	1	1	7	68	8
86-1 56-57	41.4	.36	1323	1	16	.2	40	.27	14.4	10	3484	10.00	.09	2	.02	13	1	.02	42	680	757	257	689	1	.01	5.4	1058	1	1	6	109	490
86-1 68-69	12.6	.46	163	1	40	.4	21	.22	21.8	7	644	5.36	.16	1	.02	19	1	.04	24	450	1381	39	519	2	.01	5.6	2240	1	1	6	95	129
86-3 15-16	121.4	.20	676	24	62	.3	19	.03	78.0	7	548	4.90	.06	1	.01	16	4	.01	22	200	2825	101	49	2	.01	3.6	6957	1	1	6	110	942
86-3 23-24	57.0	.13	2641	76	92	.3	119	.02	14.1	8	4809	3.78	.01	1	.01	116	7	.01	22	30	72	701	29	2	.01	2.9	83	2	1	5	82	346
86-3 24-25	39.1	.10	1968	1	84	.3	171	.03	6.4	10	3227	6.52	.01	1	.01	72	8	.01	34	20	49	429	23	1	.01	3.5	47	1	1	7	122	417
86-3 25-26	48.3	.07	950	1	32	.4	106	.02	.1	10	2239	12.23	.01	1	.01	10	1	.01	48	10	123	279	13	1	.01	1.8	24	1	1	4	80	1250
86-3 26-27	61.5	.07	1244	1	23	.3	69	.02	.1	9	2510	8.54	.01	1	.01	19	14	.01	34	20	189	349	12	1	.01	2.1	147	1	1	5	99	1100
86-3 43.5-44.5	17.4	.12	419	1	45	.4	11	.01	.1	7	397	5.88	.01	1	.01	1	1	.01	28	30	132	52	19	1	.01	2.9	56	1	1	6	118	987
86-3 44.5-45.5	55.2	.07	372	1	23	.1	24	.01	.1	12	817	12.54	.01	1	.01	1	1	.01	49	20	429	191	13	1	.01	2.0	89	1	1	9	184	4500
86-3 45.5-46.5	44.1	.10	431	1	12	.3	25	.01	.1	10	672	9.03	.01	1	.01	1	1	.01	38	100	525	154	64	1	.01	2.4	172	1	1	7	142	2830
86-3 46.5-47.5	6.4	.11	332	1	8	.3	4	.01	.1	7	228	4.92	.01	1	.01	1	3	.01	23	60	148	19	28	2	.01	2.9	38	2	1	7	121	460
86-3 47.5-48.5	48.9	.07	372	1	8	.2	21	.01	9.1	7	640	9.28	.01	2	.01	1	1	.01	39	20	747	171	14	1	.01	1.9	3105	1	1	10	199	2925
86-3 48.5-49.5	16.1	.07	393	1	28	.3	15	.03	.1	8	529	7.59	.01	1	.01	1	2	.01	34	60	521	111	22	1	.01	2.0	869	1	1	7	150	1315
86-3 49.5-50.5	23.5	.09	448	1	40	.4	15	.03	.1	7	711	5.86	.01	1	.01	7	1	.01	30	20	722	252	20	2	.01	2.3	500	1	1	9	168	1470
86-3 50.5-51.5	71.6	.04	440	1	28	.3	28	.02	.1	10	948	11.70	.01	1	.01	1	1	.01	45	10	1111	413	13	1	.01	1.4	1341	1	1	9	193	9060
86-3 51.5-52.5	13.7	.08	378	1	37	.1	15	.04	8.0	6	511	5.55	.01	2	.01	13	1	.01	25	50	467	135	31	1	.01	2.1	1906	1	1	10	186	1500
86-3 52.5-53.5	15.7	.06	412	1	13	.4	17	.03	.1	7	539	6.22	.01	1	.01	1	2	.01	28	30	439	103	21	1	.01	1.9	500	1	1	9	166	1185
86-3 53.5-54.5	8.4	.07	293	1	46	.2	9	.03	.1	6	343	4.87	.01	1	.01	7	2	.01	25	20	235	50	32	1	.01	2.0	212	1	1	9	178	604
86-3 54.5-55.5	2.8	.05	267	1	63	.3	5	.03	.1	6	132	4.10	.01	1	.01	10	6	.01	20	60	120	6	42	3	.01	1.6	49	2	1	10	195	215
86-3 55.5-56.5	7.2	.06	269	1	53	.1	6	.06	.1	6	321	6.12	.01	1	.01	2	1	.01	27	140	215	38	67	1	.01	1.2	212	1	1	9	189	349
86-5 8-9	23.8	.09	203	1	25	.2	22	.01	16.2	5	486	6.86	.01	1	.01	1	1	.01	30	30	963	84	40	1	.01	1.2	1990	1	1	7	150	807
86-5 24-25	130.5	.08	4016	1	60	.2	823	.03	27.9	7	7363	5.80	.01	1	.01	109	1	.01	26	40	357	1397	16	1	.01	1.9	212	1	1	5	100	928
86-5 27-28	44.3	.13	1570	1	105	.1	77	.03	5.0	6	2078	4.87	.01	1	.01	67	1	.01	23	50	82	237	22	1	.01	2.9	47	1	1	3	76	440
86-5 29-30	120.6	.07	2784	1	22	.1	131	.02	5.0	10	5085	12.97	.01	1	.01	43	1	.01	49	10	288	823	14	1	.01	2.7	335	1	1	6	143	1760
86-5 30-31	29.5	.11	809	1	16	.1	208	.01	.1	9	1328	11.17	.01	1	.01	1	1	.01	45	20	244	200	21	1	.01	2.3	916	1	1	6	139	1255
86-5 31-32	5.4	.09	405	1	8	.3	19	.01	.1	6	280	5.21	.01	1	.01	10	2	.01	24	20	72	9	18	1	.01	2.1	1783	1	1	7	153	337
86-5 39-40	22.7	.10	829	1	37	.1	22	.02	.1	8	1461	6.96	.01	1	.01	1	1	.01	30	10	74	148	19	1	.01	2.0	218	1	1	4	97	804
86-5 40-41	39.5	.05	645	1	29	.2	27	.01	.1	10	1403	11.14	.01	1	.01	1	1	.01	45	10	310	221	10	1	.01	1.3	198	1	1	8	192	2530
86-5 41-42	105.3	.11	4018	1	38	.2	21	.01	39.9	7	7419	5.59	.01	1	.01	2	1	.01	27	10	111	1394	16	1	.01	2.5	1492	1	1	5	87	1455
86-5 46-47	12.5	.06	480	1	7	.2	14	.03	15.9	7	460	5.64	.01	1	.01	11	3	.01	28	60	1226	71	15	1	.01	1.6	4221	1	1	10	207	530
86-5 47-48	18.4	.04	312	1	5	.2	12	.02	.1	8	632	9.99	.01	1	.01	1	1	.01	41	10	725	91	8	1	.01	1.2	438	1	1	7	165	870
86-5 48-49	9.6	.06	307	1	6	.2	8	.04	.1	9	487	9.08	.01	1	.01	1	1	.01	39	100	369	59	14	1	.01	1.2	477	1	1	8	173	688
86-5 49-50	11.7	.07	314	1	5	.1	19	.02	.1	11	577	12.32	.01	1	.01	1	1	.01	49	10	578	63	9	1	.01	1.8	384	1	1	5	126	487
86-5 50-51	12.1	.08	430	1	8	.4	10	.04	.1	9	558	8.55	.01	1	.01	1	1	.01	36	30	348	77	18	1	.01	2.4	1471	1	1	6	133	557
86-5 51-52	16.4	.05	242	1	5	.1	14	.02	.1	13	889	>15.00	.01	1	.01	1	1	.01	60	10	564	112	12	1	.01	1.6	107	1	1	5	135	1020
86-5 52-53	6.7	.08	274	1	8	.3	6	.03	7.1	5	431	5.75	.01	1	.01	2	2	.01	26	70	433	70	24	1	.01	1.1	2841	1	1	9	165	410
86-5 57-58	14.0	.07	394	1	12	.4	17	.03	19.2	5	590	5.65	.01	1	.01	11	1	.01	25	30	729	86	20	1	.01	1.6	3524	1	1	8	162	838
86-5 58-59	42.7	.06	320	1	6	.4	22	.03	.1	6	537	8.33	.01	1	.01	1	1	.01	34	40	719	134	15	1	.01	1.4	383	1	1	10	209	4920
86-5 59-60	20.5	.06	260	1	12	.3	16	.02	5.6	5	366	5.16	.01	1	.01	8	1	.01	23	40	451	64	18	1	.01	1.5	2058	1	1	7	163	1608
86-5 60-61	9.7	.07	202	1	15	.1	13	.02	.1	6	374	6.53	.01	1	.01	1	1	.01	30	10	268	24	19	1	.01	1.7	185	1	1	10	210	905
86-5 61-62	9.5	.08	140	1	11	.2	11	.02	.1	7	379	7.94	.01	1	.01	1	1	.01	36	10	488	13	19	1	.01	1.5	221	1	1	7	153	835
86-5 62-63	5.0	.14	323	1	65	.1	8	.04	.1	7	220	4.91	.01	1	.01	10	4	.01	23	20	160	8	33	1	.01	2.3	369	1	1	10	209	509
86-5 63.5-64.5	17.5	.23	505	1	30	.4	11	.04	.1	6	981	5.00	.01	1	.01	13	1															

APPENDICES V. PHOTOGRAPHS OF PROPERTY



LOOKING NORTH OVER CHECKMATE CLAIM, THORN-SUTLAHINI PROPERTY.



JAROSITE ALTERATION AND "86 ZONE"; LA JAUNE CREEK SECTION.

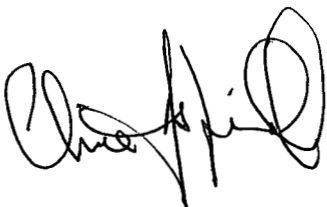


LA JAUNE CREEK IN AUGUST WHEN IT CANNOT BE TRAVERSED SAFELY; THIS CREEK IS GLACIER FED AND IN EARLY SPRING IS ALMOST DRY.

APPENDICES VI; 1994 STATEMENT OF COSTS

1994 STATEMENT OF COSTS. CDN DOLLARS

DISCOVERY HELICOPTERS	1,583.50
OSPREY AIR LTD	300.84
ANALYSIS COSTS	1,191.00
PETROGRAPHIC COSTS	730.00
ASSESSMENT WORK RECORDING	600.00
AIRLINE TICKET VANCOUVER-WHITEHORSE RETURN . . .	1060.00
PERSONAL AIRCRAFT COSTS	300.00
INTE-GRAPHICS REPRODUCTION	36.54
DRAFTING COSTS	850.00
SHIPPING SAMPLES, WHITEHORSE-SMITHERS	107.00
PERSONAL VEHICLE EXPENSES	100.00
PERSONAL FIELD TIME, AT \$350 PER DAY FOR 7 DAYS	2,450.00
PERSONAL REPORT WRITING TIME, AT \$350 PER DAY FOR 7 DAYS	2,450.00
 TOTAL	 \$11,758.88
 TOTAL UNDER APPLICATION OF STATEMENT OF WORK #3056149	 \$6000.00




APPENDICES VII
STATEMENT OF QUALIFICATIONS

I, N. CLIVE ASPINALL, of Pillman Hill, the Community of Atlin, Province of British Columbia, do hereby certify that:

1. I am an International Geologist with offices at 123-626 West Pender Street, Vancouver, B.C. V6B 1V9, and other offices at San Miguel de Allende, Guanajuato, Mexico.
2. I am a graduate of McGill University with a Bachelor of Science degree in 1964 and a Master of Science degree from Camborne School of Mines in 1987, in Mining Geology and I have practised my profession for 29 years.
3. I am a member in good standing of the Association of Professional Engineers of British Columbia.
4. I am the author of the report entitled "Assessment Report of 1994 Work on the Thorn-Sutlahini Au-Ag-Cu Property in The Region of Tulsequah, covered by the Check-Mate mineral claim, Tenure #320695, Claim Tag #203160, Atlin Mining Division, British Columbia NTS 104/k; Claim Map Series 104/10W;" Dated 15th November 1994.
5. This report records information provided by an independent Vancouver analytical laboratory, an independent petrographer, previous assessment reports and geological field-work by myself.
6. I own the mineral title to this property.

Dated at Vancouver, British Columbia this 15th day of November, 1994.

Respectfully submitted,



N. Clive Aspinall, M.Sc., P.Eng.

