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GEOLOGICAL AND GEOCHEMICAL REPORT ON THE
TOM CLAIM GROUP
FOR
SANTA MARINA GOLD LTD.
LIARD MINING DIVISION

LATITUDE 56°42'N
LONGITUDE 130°36'W

ISKUT RIVER AREA
BRITISH COLUMBIA

20,804
GEOLOGICAL BRANCH
ASSESSMENT REPORT

G. A. Malensek, B.Sc.
B. Dewonck, F.G.A.C.

November 30, 1990

OREQUEST



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SUMMARY

The Tom Project is located in the Iskut-Sulphurets area of northwestern British Columbia, currently the focus of extensive exploration and development programs. The property is under option to Santa Marina Gold Ltd. who engaged the services of OreQuest Consultants Ltd. to carry out the 1990 field program. A limited work programme of prospecting, reconnaissance mapping, silt and rock sampling was completed on the Tom 1-4 claims in September, 1990, during which 19 rock and 15 silt samples were collected.

The property is underlain by the Lower Jurassic Betty Creek Formation which has been intruded by a stock of the Jurassic Lehto Porphyry. Moderate base and precious metal mineralization assaying up to 360 ppb gold and 8103 ppm copper was located on the eastern margin of the porphyry body. Creeks draining the area are also anomalous with silt sample results up to 208 ppm copper, 75 ppm lead and 420 ppm zinc recorded.

A small Phase I work programme of further prospecting, mapping and contour soil sampling is recommended to investigate the extent of mineralization found at the eastern margin of the porphyry stock.

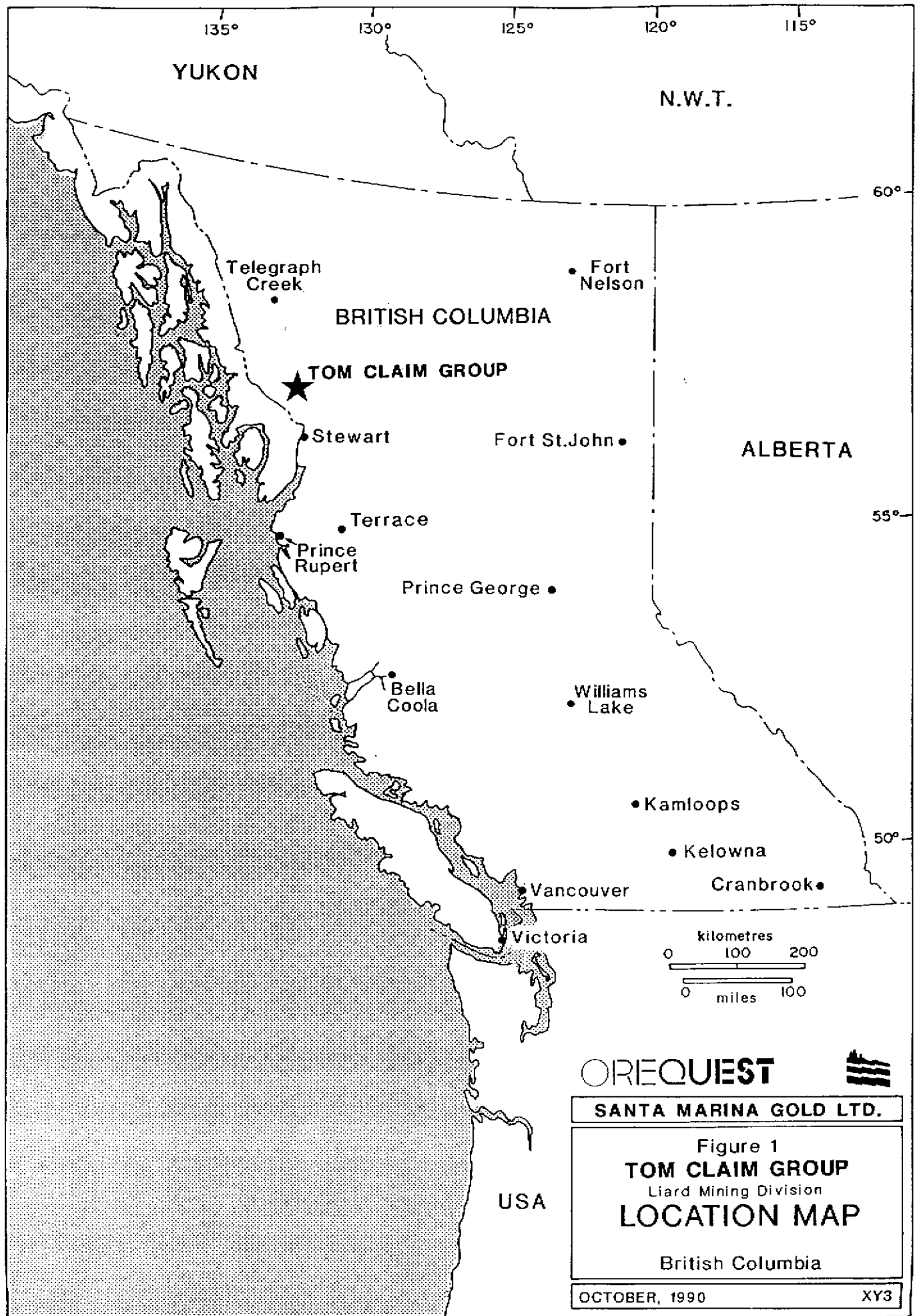


TABLE OF CONTENTS

Summary	
Introduction	1
Location and Access	1
Physiography and Vegetation	2
Claim Status	2
General Area History	3
Property History	8
Regional Geology	9
Property Geology	11
Alteration and Mineralization	11
Property Geochemistry	12
Conclusions and Recommendations	13
Statement of Expenditures	14
Certificate of Qualifications	
G. A. Malensek, B.Sc.	
B. Dewonck, F.G.A.C.	
Bibliography	

LIST OF FIGURES

Figure 1	Location Map	Following Summary
Figure 2	Claim Map	Following Page 2
Figure 3	Regional Geology Map	Following Page 6
Figure 4	Geology Map	In Pocket
Figure 5	Sample Location and Assay Results	In Pocket

LIST OF TABLES

Table 1	Claim Information	Page 3
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LIST OF APPENDICES

Appendix I	Property Rock Sample Descriptions
Appendix II	Assay Certificates
Appendix III	Analytical Procedures

INTRODUCTION

This report summarizes the 1990 exploration program conducted by OreQuest Consultants Ltd on the Tom Claim Group on behalf of Santa Marina Gold Ltd.

No previous work has been recorded on the Tom Project, therefore the 1990 program was designed to provide data on the underlying geology as well as first pass geochemical coverage. The work was carried out during September, 1990.

LOCATION AND ACCESS

The Tom claims are located at latitude $56^{\circ}42'$ north and longitude $130^{\circ}36'$ west (NTS 104B/10E) in the Iskut River area on the eastern edge of the Coast Mountain Range.

The claims, which are accessible by helicopter only, lie some 35 km east-northeast of the Bronson Creek airstrip and 7 km north of the Eskay Creek gold deposit of Prime Resources Ltd./Stikine Resources Ltd.

Access to the claims is by helicopter from the Bronson Creek airstrip 35 km to the west, or the Bell II staging area on the Stewart-Cassiar Highway, Highway 37, about 50 km to the east. The B.C. government and several interested mining companies in the area are presently funding the construction of a road into the Iskut area.

Surveying for the road location and environmental testing began this year.

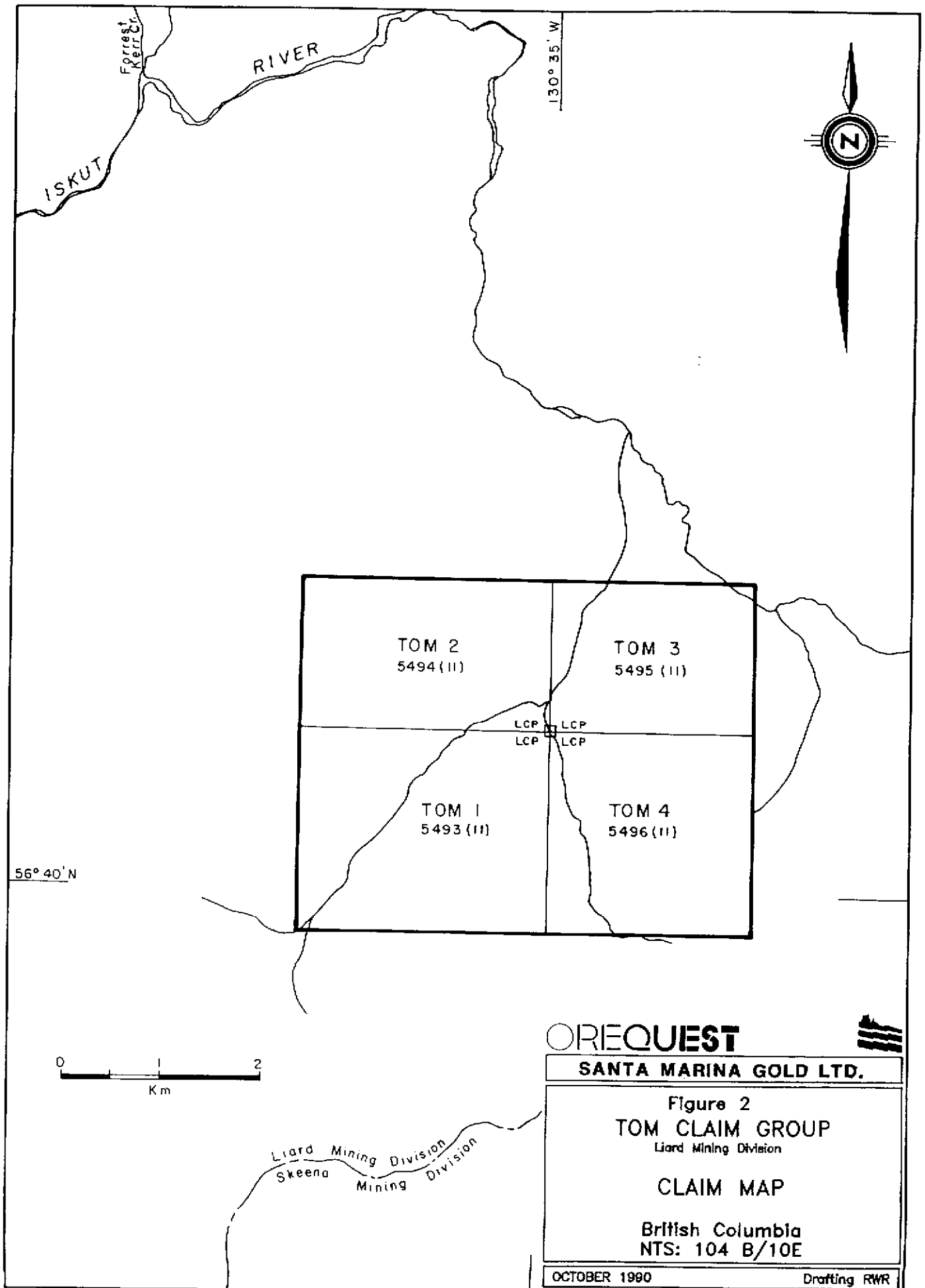
Frequent scheduled and charter flights from Smithers (330 kilometres to the southeast) to the Bronson Creek strip service the exploration and mining activity in the area. The nearby Johnny Mountain airstrip is serviced regularly from Terrace. The Snippaker Creek airstrip, located 34 km west of the Tom Project, was used during the 1990 field season by single-engine fixed wing aircraft. Exploration work was done via helicopter from OreQuest's seasonal camp located 20 km east of the property.

PHYSIOGRAPHY AND VEGETATION

Elevations on the property vary from 1070 m (3500 ft.) in the valleys to 1520 m (500 ft.) along the ridges with extensive ice cover. The valley walls are very steep and hazardous to traverse. A veneer of unconsolidated glacial debris ranging from a few centimetres to several metres in thickness mantles the valley bottoms and the lower slopes.

Water is plentiful as glacial melt and ground water seepage. Vegetation is limited to the occasional grassy slope with sparse stands of trees limited to the lower elevations along Tom Creek.

Climate in the area is severe, particularly at the higher elevations. Heavy snowfalls in winter and rain in the short summer



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Figure 2
TOM CLAIM GROUP
 Liard Mining Division

CLAIM MAP

British Columbia
 NTS: 104 B/10E

OCTOBER 1990

Drafting RWR

working season are typical of the Iskut-Sulphurets area. Inclement weather conditions and reliance on helicopter transport make this a high cost area to explore for minerals.

CLAIM STATUS

The Tom property consists of the Tom 1-4 claims which were staked for Chris Graf in November 1988. The claims were later transferred to Ecstall Mining Corp. and Omega Gold Corporation who hold the claims on a 50/50 basis. Santa Marina Gold Ltd. optioned the claims in 1990.

The claims are located in the Liard Mining Division on NTS map sheet 104/B15E (Figure 2) and pertinent claim information is summarized below.

TABLE 1 - CLAIM INFORMATION

Claim #	Record #	Units	Record Date	Expiry Date
TOM 1	5493	20	Nov 12, 1988	Nov 12, 1991
TOM 2	5494	15	Nov 12, 1988	Nov 12, 1991
TOM 3	5495	12	Nov 12, 1988	Nov 12, 1991
TOM 4	5496	16	Nov 12, 1988	Nov 12, 1991

The expiry date indicated above reflects assessment filed on the basis of work described in this report.

GENERAL AREA HISTORY

The Tom Project lies within an historically active mining and exploration area that extends some 225 kilometres from Stewart in the south to near Telegraph Creek in the north. Within this area, which has been referred to as the Stikine Arch, mining activity goes back to the turn of the century. Due to the size of the region it historically has been referred to as more specific areas, ranging from the Stewart area to Sulphurets, Iskut River and Galore Creek, however all of these individual camps appear to be related to the Stikine Arch as a whole and are located in the area now referred to as the "Golden Triangle". Recent discoveries appear to be filling in areas between these known mineralized camps. It is probable that the entire area can be considered as one large mineralized province with attendant subareas.

The Tom Project is located on the northern margin of the Iskut-Sulphurets area which has seen extensive exploration in the last three years. The Iskut area originally attracted interest at the turn of the century when prospectors, returning south from the Yukon goldfields searched for placer gold and staked bedrock gossans. In the 1970s the porphyry copper boom drew exploration into the area. The new era of gold exploration began with the 1979 option of the Sulphurets claim block by Esso Minerals Canada and the 1980 acquisition of the Mount Johnny claims by Skyline Explorations Ltd. Skyline (now Skyline Gold Corporation) commissioned its mill in July, 1988, however production has recently been suspended temporarily.

Cominco Ltd. and Prime Resources Group Inc. are presently preparing the adjacent Snip deposit for production.

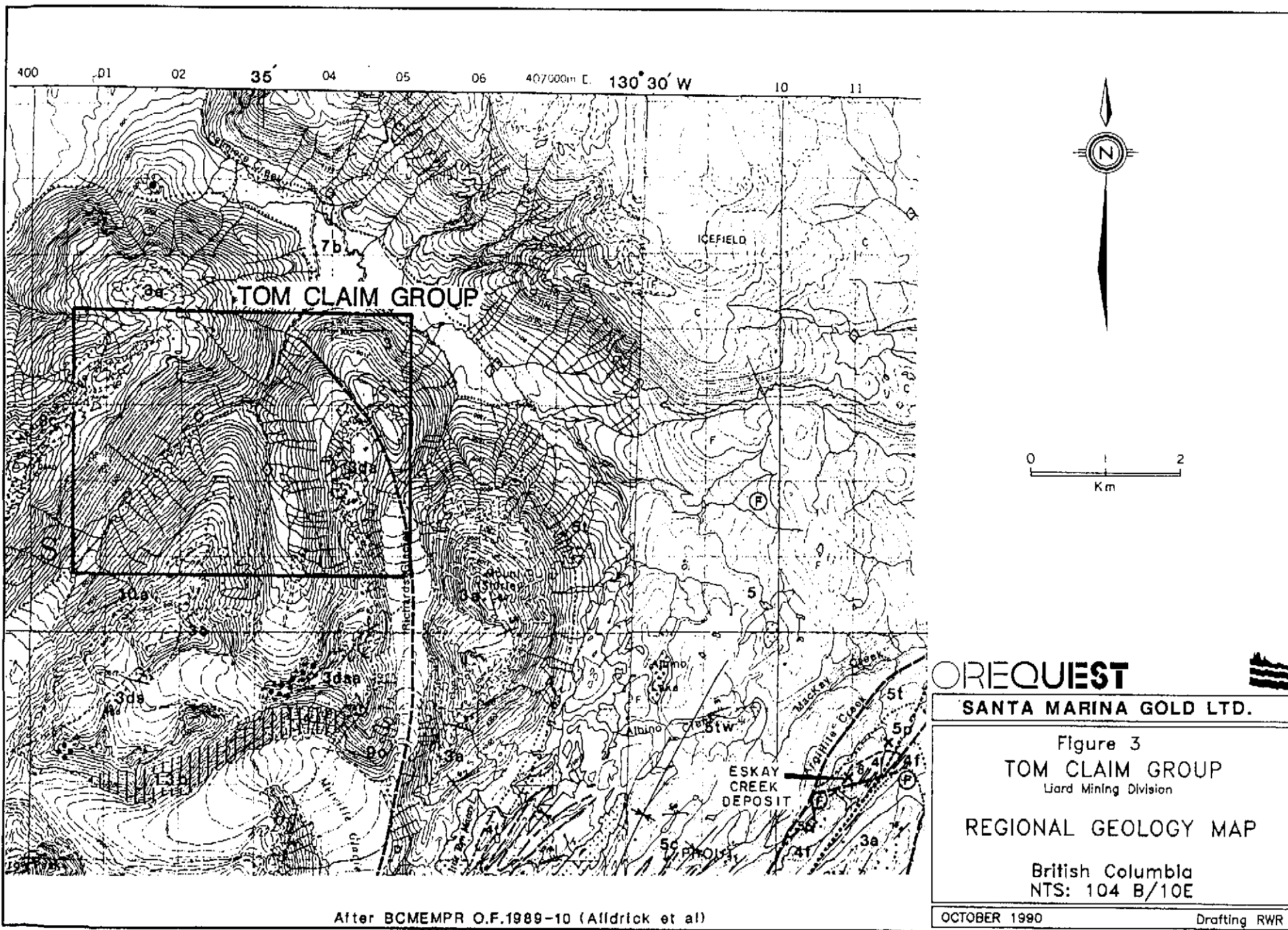
Beyond these projects, and except for limited early placer gold recovery from some creeks, the area has had no mineral production history. Since 1979, more than 70 new mineral prospects have been identified, though ground acquisition was relatively slow until the fall of 1987 when the promising results of summer exploration programs became known and the provincial government announced the upcoming release of analytical results from a regional stream sediment survey. By April 1988, all open ground had been staked. More than 60 companies hold ground in the Iskut-Sulphurets belt but to date only small areas within this 40 x 80 km district have received extensive exploration.

In the Sulphurets Creek camp 35 km southeast of the Tom Project, near Brucejack Lake, the vein-hosted West Zone of Newhawk Gold Mines Ltd./ Granduc Mines Ltd./Corona Corporation is reported to contain a diluted minable reserve of 550,000 tons grading 0.42 oz/ton gold and 18.0 oz/ton silver (The Northern Miner, Vol. 76, #36; Nov. 12/90) while the Snowfield Gold Zone and Sulphurets Lake gold zone are bulk tonnage low grade deposits containing 7.7 million tons of 0.075 oz/ton gold and 20 million tons of 0.08 oz/ton gold respectively (GCNL Aug. 24, 1989). Newhawk has recently completed a feasibility study which has indicated that current gold and silver prices preclude production at present. Catear Resources Ltd.'s Gold Wedge Property is reported

to contain 319,169 tons of 0.80 oz/ton gold in the Golden Rocket Vein in a similar setting (Canadian Mines Handbook, 1990-91). Also located in this area is Placer Dome Inc.'s Kerr property, a porphyry copper-gold occurrence to which they have assigned a geological resource of 138,000,000 tons grading 0.61% copper and 0.01 oz/ton gold (Placer Dome Inc. Annual Report, 1989).

On the Snip property situated 35 km to the west of the VR Project, the Twin Zone, a 3 to 25 ft thick discordant shear vein cuts a thickly bedded sequence of intensely carbonatized feldspathic wackes and siltstones. Twin Zone reserves in all categories have been reported as 1,030,000 tons of 0.88 oz/ton gold (Canadian Mines Handbook, 1990-1991). This does not include additional reserves which may be developed outside the Twin Zone when mining begins. Twin Zone mineralization occurs in a banded shear zone comprising alternating bands of massive calcite, heavily disseminated to massive pyrite, crackle quartz and thin bands of biotite-chlorite.

At Skyline's nearby Johnny Mountain Mine, reserves in all categories are estimated at 740,000 tons of 0.52 oz/ton gold and 1.00 oz/ton silver with copper, zinc, and lead (Canadian Mines Handbook, 1990-1991). Five major areas of gold-bearing sulphide are known. The most important Stonehouse Zone consists of sulphide-potassium feldspar-quartz vein and stockwork systems which have been only partly explored. The Johnny Mountain Mine has been temporarily shut down,



LEGEND

INTRUSIVE ROCKS



TERTIARY

- 13** POST-TECTONIC DYKES
- 13a Lamprophyre, andesite, diabase (Narrow not shown)
 13b King Creek Dyke Swarm: feldspar porphyry diorite, andesite, diabase, quartz diorite
 13c Hamilton monzonia: fine-grained leuco-monzonite
- 12** COAST PLUTONIC COMPLEX
- 12a Biotite granite
 12b Hornblende-biotite quartz diorite
 12c Lee Brant Stock: K-feldspar porphyry, hornblende-biotite quartz monzonite
- JURASSIC**
- 11** NICKEL MOUNTAIN GABBRO: melanocratic olivine-pyroxene gabbro
- 10** SYN TO POST-VOLCANIC INTRUSIONS: Porphyritic to phenitic textured; possibly hypabyssal equivalents of extrusive rocks
- 10a Letho Porphyry: K-feldspar-plagioclase-hornblende porphyry granodiorite to syenite
 10b Barb Lake Dyke: fine- to medium-grained hornblende diorite
 10c Andesite-Diorite Complex: melanocratic, fine- to medium-grained diorite with abundant xenoliths of dark green meta-andesite; (possibly Triassic)
 10d Unuk River Diorite Suite: medium- to coarse-grained, mafic to intermediate stocks
- 9**
- 9a John Peaks melanocratic hornblende diorite
 9b Max diorite-hornblende diorite; quartz diorite
 9c Melville hornblende-biotite diorite to quartz diorite
 9d Doc Ridge biotite monzodiorite
- TRIASSIC**
- 8** BUCKE GLACIER STOCK: light grey, gneissic to foliated, medium-grained hornblende-biotite quartz diorite

METAMORPHIC ROCKS

- A - F** METAMORPHIC EQUIVALENTS OF UPTS 1, 2 OR 3
- A Metapelite: dark grey, carbonaceous quartz-feldspar-sericite phyllite
 B Felsic metavolcanics: light green, quartz-sillite-chlorite-sericite phyllite; locally with deformed lapilli
 C Mafic to intermediate metavolcanics: dark green, plagioclase-chlorite phyllite
 D Hornblende-plagioclase mylonite; mylonitic meta-tuffs
 E Hornblende-plagioclase gneiss; agmatitic migmatite
 F Strongly sheared rocks within the Unuk-Harney fault zone

GOSSANOUS ALTERATION ZONES

-  Pyrite ± quartz ± sericite ± carbonate ± clay; locally fogged to schistose
-  Disseminated pyrite in felsic volcanics

VOLCANIC AND SEDIMENTARY ROCKS

(Note: No stratigraphic order is implied within sequences.)

QUATERNARY

RECENT

- 7** UNCONSOLIDATED SEDIMENTS
- 7a Alluvium, glaciofluvial deposits, landslide debris, moraine
 7b Alluvium underlain by Pleistocene to Recent basalt

PLEISTOCENE TO RECENT

- 6** BASALT FLOWS AND TEPHRA
- 6a Dark grey to black, basalt flows and tephra; minor pillow lavas
 6b Basalt tephra

TRIASSIC TO JURASSIC HAZELTON GROUP

MIDDLE JURASSIC (TOARCICAN TO BAJOCIAN)

- 5** SILTSTONE SEQUENCE (Salmon River Formation): Dark grey, well-bedded siltstone with minor sandstone and conglomerate.
- 5c Chert pebble conglomerate and siltite
 5f Rhythmically bedded siltstone and shale (urbidite)
 5w Thinly bedded wacke
 5p Andesitic pillow lavas and pillow breccias with minor siltstone interbeds

LOWER JURASSIC (TOARCICAN)

- 4** FELSIC VOLCANIC SEQUENCE (Mount Dewart Formation): Light weathering, intermediate to felsic, pyroclastic rocks, including dust, ash, crystal and lithic tuffs, lapilli tuff. Locally pyritic (5 to 15%) and gossanous. Minor chalcocenic quartz veins locally.
- 4a Variably bedded ashfall tuff
 4f Massive felsic tuff
 4r Black and white, carbonaceous felsic volcanics; locally flow banded and subbrecciated

LOWER JURASSIC (PLIENSBACHIAN TO TOARCICAN)

- 3** PYROCLASTIC-EPICLASTIC SEQUENCE (Belly Creek Formation): Heterogeneous, grey, green, locally purple or maroon, massive to bedded pyroclastic and sedimentary rocks; pillow lava
- 3a Green and grey, massive to poorly bedded andesite
 3d Grey, green and purple dacitic tuff, lapilli tuff, crystal and lithic tuff, massive to well bedded, feldspar phyric
 3f White weathering, felsic tuffs and breccias with quartz siltstones
 3c Andesitic lapilli tuff with pink siliceous clasts
 3p -Andesitic pillow lavas and pillow breccias with minor siltstone interbeds
 3r Black, thinly bedded siltstone, shale and argillite (urbidite)

UPPER TRIASSIC TO LOWER JURASSIC (NORIAN TO SINEMURIAN)

- 2** ANDESITE SEQUENCE (Unuk River Formation): Green and grey, intermediate to mafic volcanic tephritics and flows with locally thick interbeds of fine-grained immature sediments; minor conglomerate and limestone
- 2a Grey and green, plagioclase ± hornblende porphyritic andesite; massive to poorly bedded
 2b Grey and green, hornblende-(± pyroxene)-feldspar porphyritic andesitic lapilli and ash tuff
 2c Grey, brown and green, thinly bedded, tuffaceous siltstone and fine grained wacke
 2f Black, thinly laminated siltstone (urbidite); shale; argillite
 2g Dark grey, matrix-supported conglomerate with granitic cobbles
 2j Grey, variably bedded limestone (completely recrystallized along South Unuk valley)

TRIASSIC

STUHINI GROUP

UPPER TRIASSIC (CARNIAN TO NORIAN)

- 1** LOWER VOLCANOSEDIMENTARY SEQUENCE: Brown, black and grey, mixed sedimentary rocks interbedded with medium to dark green, mafic to intermediate volcanic and volcanoclastic rocks
- 1f Grey to black, thinly bedded siltstone, shale, argillite (urbidite)
 1w Brown and grey, fine grained tuffaceous wacke; minor siltstone or conglomerate
 1i Grey, impure, silty, sandy limestone
 1a Green, fine-grained, andesitic ash tuff, feldspar and hornblende phyric
 1b Dark green basalt
 1p Grey and green, andesitic breccia with augite-hornblende plagioclase clasts and augite-rich matrix

but with the completion of the Iskut road may be economically viable again.

The most recently discovered and perhaps the most exciting gold mineralization occurs on the Eskay Creek property of Prime Resources Group Inc./Stikine Resources Ltd., located 10 km southeast of the Tom Project. Numerous Calpine (now Prime)/Stikine news releases have announced results from over 600 drill holes completed from 1988 to the present, the most spectacular of which is hole CA-89-109 which produced 682.2 feet of 0.875 oz/ton gold. Published preliminary reserve calculations done in-house by Prime, based on drilling up to hole CA90-657, indicate probable geological reserves of 1,992,000 tons grading 1.47 oz/ton gold and 55.77 oz/ton silver (Vancouver Stockwatch, Sept 14, 1990). The company is currently driving an exploration drift to test the deposit at depth for continuity and to conduct metallurgical testing.

Immediately south of the Eskay deposit, American Fibre Corporation and Silver Butte Resources are in a joint venture on the SIB Project, on ground that hosts the same stratigraphy as the Eskay deposit. Results from recent drilling have returned results of 46.9 ft of 0.421 oz/ton gold and 30.91 oz/ton silver from hole 90-30 (Vancouver Stockwatch, October 10, 1990). Results from the final 1990, 26 hole program included values of 6.3 ft of 0.13 oz/ton gold and 19 ft of 0.13 oz/ton gold both in hole 90-38 (GCNL, November 5, 1990).

Elsewhere in the area Tymar Resources and Akiko-Lori Gold Resources have been drilling on the Lakewater Project which adjoins the Prime/Stikine project to the west. The companies are drilling a 320 m wide gap in the American Fibre/Silver Butte SIB claims within which the favourable Eskay deposit stratigraphy occurs. Results have been encouraging and include the following: 9.8 ft of 1.197 oz/ton gold, 1.7 oz/ton silver, 0.73% lead and 0.72% zinc (LW90-2), 3.3 ft of 0.115 oz/ton gold (LW90-3) and 16.4 ft of 0.042 oz/ton gold (LW90-6), (Vancouver Stockwatch, October 30, 1990).

The E & L deposit is also situated in the area southwest of the Tom property. This deposit was worked in the 1960s and early 1970s by trenching, drilling and 460 m of underground development, and has proven reserves of 3.2 million tons of 0.8% nickel and 0.6% copper (BCMEMPR Minfile). Mineralization consisting of disseminated pyrrhotite, chalcopyrite with minor pentlandite, pyrite and bornite occurs in a small stock of altered coarse grained gabbro.

PROPERTY HISTORY

No previous work has been recorded on the Tom Claim Group, however old shovels and lumber were located on the property suggesting some work was carried out in the past, (Nicholson et al, 1990). In 1988 silts taken by the GSC and the BCMEMPR on the Tom Claim Group returned no significant values (Nicholson et al, 1990). In 1989 Nicholson and Associates undertook a limited silt and rock geochemical reconnaissance survey for Ecstall Mining Corp. and Omega Gold Corp.

Santa Marina Gold Ltd. entered into an option with Ecstall and Omega this year and contracted OreQuest Consultants to carry out a limited reconnaissance program in September, 1990 to satisfy minimum assessment requirements.

REGIONAL GEOLOGY

The area is underlain by the Stewart Complex (Grove 1971, 1986). The Stewart Complex encompasses Late Palaeozoic and Mesozoic rocks, confined by the Coast Plutonic Complex to the west, the Bowser Basin to the east, Alice Arm to the south and the Iskut River to the north. A simplified representation of the regional geology setting after Alldrick (1989) appears in Figure 3.

The oldest units in the Stewart Complex are Upper Triassic epiclastic volcanics, marbles, sandstones and siltstones. These, in turn, are overlain by sedimentary and volcanic rocks of the Upper Triassic to Middle Jurassic Hazelton Group. In the Unuk River area, the Hazelton Group had been subdivided (Alldrick et al, 1989) into the Lower Jurassic Unuk River, Betty Creek and Mt. Dilworth Formations, and the Middle Jurassic Salmon River Formation. Upper Jurassic sedimentary rocks were identified as the Nass Formation by Grove (Grove, 1986) and included by him in the Hazelton Group. More recently the Salmon River Formation has been correlated with the Spatzizi Group, underlying the Ashman Formation which is the basal unit of the Bowser Group (Alldrick, 1989). Both the Salmon River and Ashman Formations occur in the Middle Jurassic.

The Unuk River Formation was deposited during Upper Triassic to Lower Jurassic times and marks a period of submergence (marine sedimentation) followed by emergence marked by volcanoclastic rocks. These rocks include arkosic and lithic wackes, siltstones, conglomerates, tuffites and green and grey intermediate to mafic volcanics.

Unuk River rocks outcrop along a broad north northwesterly trending belt from Alice Arm to the Iskut River.

Subsequent to deposition of the Unuk River Formation, a period of erosion and deformation occurred followed by deposition of the Betty Creek Formation volcanics and marine sediments. Betty Creek rocks are characterized by red and green volcanoclastic agglomerates with intercalated andesitic flows, pillow lavas, chert and minor carbonate lenses.

The Mt. Dilworth Formation was deposited during a period of explosive felsic volcanic activity. Massive to bedded airfall tuffs and welded ash flow tuff characterize this formation.

The Salmon River Formation comprises thin bedded, alternating siltstones and mudstones with minor limestone. The overlying Ashman Formation is characterized by turbidites and wackes with lesser intraformational conglomerates and marked by a basal chert pebble conglomerate.

PROPERTY GEOLOGY

The Tom claims are underlain mainly by the Lower Jurassic Betty Creek Formation consisting of felsic to intermediate volcanics and volcanoclastic rocks with minor associated clastic sediments (Figure 4). In the northwest corner of the claim the ridge is underlain by a green andesitic lapilli tuff containing large boulders of buff crinoidal limestone up to 1 m in diameter and minor pod-like siliceous rhyolite dykes (?). The southeast corner of the property is underlain by green to red dacitic to andesitic tuffs with minor fine grained shale interbeds. Lithological contacts are often difficult to separate as the whole package has been intruded by a phaneritic to porphyritic intermediate stock of the Jurassic Lehto Porphyry which underlies the south-southwest portion of the property. Numerous rhyolite dykes were noted on the eastern flank of the intrusive body along with minor faults but no significant structures were located.

ALTERATION AND MINERALIZATION

A strong carbonate-chlorite-hematite alteration assemblage, 2.5 square km in area, was noted in the northwest corner of the property. Small areas (up to 2 x 10 m size) of localized quartz flooding, sericitization and pyritization (up to 3%) were also found during the program. These pod-shaped zones occur occasionally in the volcanoclastics in the northwest and southeast areas of the property.

Quartz-calcite stringer veining in the intermediate porphyry body locally contained up to 8% chalcopyrite. Minor chalcopyrite stringers

were found in the volcanoclastics on the northwest ridge along with minor crustiform quartz-carbonate veins. Large boulders of massive pyrite were located at the toe of the glacier in the left hand fork of the main creek. The source of these boulders was not located and is probably south of the claim boundary. Most mineralization appears to be related to the intrusive contact along the eastern flank of the porphyry body.

PROPERTY GEOCHEMISTRY

A total of 19 grab rock and 15 silt samples were collected during the programme. A float sample (16936) containing quartz-carbonate-chalcopyrite stringers assayed 420 ppb gold, 12.1 ppm silver, 3451 ppm copper, 330 ppm lead. Grab samples of similar chalcopyrite mineralization within the porphyry body assayed 360 ppb gold, 4873 ppm copper (#33279); 4392 ppm copper (#33280); 20 ppb gold, 619 ppm copper (#33281); and 20 ppb gold, 3.8 ppm silver, 8103 ppm copper (#33282). Widths of the veinlets range from 1-4 cm and locally extend up to 4 m in length.

Silt geochemistry also returned moderately anomalous base metal and weakly anomalous gold values. Three silt samples from near the toe of the glacier in the southeast corner of the property returned assays of 108 ppm copper, 334 ppm zinc (TS-01) 103 ppm copper, 238 ppm zinc, 15 ppb gold (TS-02) and 208 ppm copper, 75 ppm lead, 420 ppm zinc (TS-03). Preliminary traversing of the ridge drained by these streams did not locate any obvious sources for these anomalies.

Rock samples were collected in plastic bags while silt samples were collected by hand from active drainages into kraft paper bags. All samples were shipped to Vangeochem Labs in Vancouver for analysis for gold by atomic absorption plus 25 elements by inductively coupled plasma (ICP) spectrophotometry. Rock sample descriptions appear in Appendix I, followed by assay certificates in Appendix II and analytical procedures in Appendix III.

CONCLUSIONS AND RECOMMENDATIONS

The property is underlain by rocks of the Lower Jurassic Betty Creek Formation consisting of felsic to intermediate volcanic and volcaniclastics which have been intruded by an intermediate stock of the Jurassic Lehto Porphyry.

Mineralization appears to be restricted to the eastern contact of the Lehto Porphyry. Chalcopyrite stringers in dacite porphyry contain up to 8103 ppm copper. Silt samples from the creek to the east of the mineralization assayed up to 208 ppm copper, 75 ppm lead and 420 ppm zinc. Large boulders of pyrite were found but the source is probably located to the south of the property. Only minor mineralization was noted elsewhere on the property.

A 2-3 day Phase II programme of further prospecting, mapping and contour soil sampling is recommended to investigate the extent of mineralization found close to the contact of the Lehto Porphyry Stock and the host volcaniclastic package in the south-southwest part of the

property. A further programme of gridding, soil sampling, mapping and geophysics should be done if the results of the Phase I program warrant it.

STATEMENT OF EXPENDITURES

Mobilization/Demobilization (prorated from Iskut Project)		\$ 523.45
Wages:		
G. Malensek (geologist)	1 day @ \$320/day	\$ 320.00
A. Walus (geologist)	1 day @ \$330/day	330.00
W. Raven (geologist)	1 day @ \$390/day	390.00
R. Riedel (prospector)	1 day @ \$300/day	300.00
O. Wiggerman (field assistant)	1 day @ \$300/day	300.00
C. Birarda (")	2 days @ \$270/day	540.00
J. Rollins (")	1 day @ \$250/day	250.00
Camp Costs		968.00
Helicopter		2,349.73
Analyses		520.56
Report Costs		<u>1,495.94</u>
Total Expenditures		\$8,287.68

CERTIFICATE OF QUALIFICATIONS

I, Grant A. Malensek of 7809 Borden Street, Vancouver, British Columbia hereby certify:

1. I am a graduate of the University of British Columbia (1987) and hold a BSc. degree in Geology.
2. I am presently employed as a consulting geologist with OreQuest Consultants Ltd. of 306-595 Howe Street, Vancouver, British Columbia.
3. I have been employed in my profession by various mining companies since 1986 and have worked in British Columbia and Papua New Guinea.
4. The information contained in this report was obtained by supervision of the work done on the property and a review of materials listed in the bibliography.
5. Neither OreQuest Consultants Ltd. nor myself have or expect to receive direct or indirect interest in the property or in the securities of Santa Marina Gold Ltd.
6. I consent to and authorize the use of the attached report and my name in the Company's Prospectus, Statement of Material Facts or other public document.



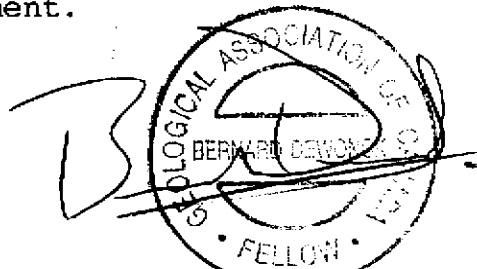
Grant A. Malensek, B.Sc

DATED at Vancouver, British Columbia, this 30th day of November, 1990

CERTIFICATE OF QUALIFICATIONS

I, Bernard Dewonck, of 11931 Dunford Road, Richmond, British Columbia hereby certify:

1. I am a graduate of the University of British Columbia (1974) and hold a BSc. degree in geology.
2. I am an independent consulting geologist retained by OreQuest Consultants Ltd. of 306-595 Howe Street, Vancouver, British Columbia.
3. I have been employed in my profession by various mining companies since graduation.
4. I am a Fellow of the Geological Association of Canada.
5. I am a member of the Canadian Institute of Mining and Metallurgy.
6. This report is based on work performed on the Tom claims by OreQuest Consultants Ltd. in September, 1990, a review of material listed in the bibliography and knowledge of the area gained through supervision of numerous exploration projects in the general area.
7. Neither OreQuest Consultants Ltd. nor myself have or expect to receive direct or indirect interest in the property or in the securities of Santa Marina Gold Ltd.
8. I consent to and authorize the use of the attached report and my name in the Company's Prospectus, Statement of Material Facts or other public document.



Bernard Dewonck, F.G.A.C.
Consulting Geologist

DATED at Vancouver, British Columbia, this 30th day of November, 1990.

BIBLIOGRAPHY

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PRIME CAPITAL CORPORATION
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APPENDIX I
ROCK SAMPLE DESCRIPTIONS

Sample	Date	Location	Lithology	Remarks/Alteration/Structure	Mineralization
GS 16932	9/18/90	Main Ridge in TOM2 traversing NE 1525m	ANDESITE LAPILLI TUFF	Silicified zone, 5to25cm wide 20m long, weakly crustiform qtz-carb-chl-he-py veining, 100°/80° SW	Minor-trace py
GS 16933	"	1525m	" "	W/small pocket of jasper & weak qtz-chl atln 9cm wide, boulder?	Trace dess malachite
GS 16934	"	1490m	" "	1.5m wide oxidized zone, rusty weathering, fg vuggy app. w/minor qtz flooding-< 30cm wide, pod-like	Strong fracture MnOx stain w/ mass. carb-chl veining.
GS 16935	"	1490m	QTZ vein in AND. LAPILLI TUFF	Beige to green, mottled, hard, minor vuggy texture, mainly brecciated polyphase veining 25cm wide, 10 m long in small fault 060°/75° SE	Qtz-chl-carb-he veining.
F 16936	"	1480m	AND. LAPILLI TUFF	Dark green, fg to massive texture, small irregular 1mm cpy stringers.	Minor cpy stringers
GS 16937	"	1450m	" " "	Dark green, strongly chl alt ^d matrix, massive texture	Small anastomosing chl-py veining.
GS 16938	"	4550'	RHYOLITE?	rusty weathering, fg siliceous/ silicified(?) rock, white to grey, highly fractured, hard, strongly oxidized 2x10m pod	5% fg diss + Crystalline py
GS 16939	"	4550'	RHYOLITE?	As above 3x8m pod-50m NE of Stn 16938, silicified, sheared	Minor diss py

Sample	Date	Location	Lithology	Remarks/Alteration/Structure	Mineralization
33123	Sept18	4550'	MONZONITE	Grab sample heavily chl altd 1-2% hematite	1-2% blebby py
33278	Sept18	TOM	PORPHYRY	Some chlorite Altn.	Traces pyrite & spec. hematite
33279	Sept18	TOM	PORPHYRY	Qtz/calcite vein 1-4cm x1.5m?	3-8% chalcopryite
33280	"	"	"	" " " 1-4cm x80cm?	5% chalcopryite possible ext.of 3.
33281	"	"	"	Siliceous vein 4cm x 50cm?	1-2% chalcopryite
33282	"	"	"	Qtz/calcite-vein 1-4cm x 4m?	3-8% chalcopryite
33283	"	"	RHYOLITE DYKE	Host chlorite Altd Andesite 4m x 25m	3% diss pyrite
33917	"	"	ANDESITE TUFF	Sericite Alteration	Trace-2% py
33918	"	"	ANDESITE TUFF		10%v.fg. diss py
33919	"	"	DACITE	Very Rusty	1-2%(+) py
33920	"	"	ANDESITE TUFF	Rhyodacite pod 4+7 m, pale green to chalk white colour	10% diss py locally up to 10%

APPENDIX II
ASSAY CERTIFICATES

REPORT NUMBER: 900626 GA

JOB NUMBER: 900626

OREQUEST CONSULTANTS LTD.

PAGE 1 OF 1

SAMPLE #	ko
16932	ppb
16933	30
16934	nd
16935	nd
16936	20
	430
16937	nd
16938	nd
16939	nd
33278	nd
33279	360
33280	nd
33281	20
33282	20
33283	nd

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

VANGEOCHEM LAB LIMITED

=====

1630 Pandora Street, Vancouver, B.C. V5L 1L6
Ph: (604)251-5656 Fax: (604)254-5717

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCl to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: *[Signature]*

REPORT #: 900626 PA

REQUESTOR: CONSULTANTS LTD.

PROJECT: SM TOM

DATE IN: OCT 01 1990

DATE OUT: NOV 05 1990

ATTENTION: MR. GEORGE CAVEY

PAGE 1 OF 1

Sample Name	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	U	W	Zn	
	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
16932	0.4	0.65	<3	>1000	<3	3.43	<0.1	4	95	111	1.39	0.20	0.37	1001	<1	0.03	7	0.03	<2	<2	<2	490	<5	<3	28	
16933	0.4	1.89	<3	596	<3	4.35	1.3	13	105	161	3.65	0.27	1.21	1392	12	0.06	11	0.05	<2	<2	<2	101	<5	<3	78	
16934	0.4	1.10	<3	61	<3	>10.00	2.7	14	32	36	5.78	0.31	4.44	4619	17	0.08	14	0.02	17	4	<2	244	<5	<3	57	
16935	0.1	1.56	<3	>1000	<3	4.39	1.0	8	131	70	2.25	0.24	0.93	1532	3	0.05	3	0.06	<2	<2	<2	159	<5	<3	62	
16936	12.1	1.80	297	16	<3	0.22	1.2	20	185	3451	9.78	0.20	0.95	521	73	0.09	15	0.06	339	2	<2	7	<5	<3	74	
16937	0.1	3.27	<3	56	<3	2.93	2.2	35	58	64	5.49	0.30	2.22	1310	13	0.13	13	0.07	<2	<2	<2	45	<5	<3	90	
16938	<0.1	0.67	<3	123	<3	0.09	<0.1	2	103	17	1.99	0.04	0.16	368	3	0.05	<1	0.02	<2	<2	<2	7	<5	<3	13	
16939	<0.1	0.63	<3	69	<3	0.02	<0.1	2	58	9	2.18	0.04	0.07	51	4	0.04	<1	0.03	<2	<2	<2	3	<5	<3	9	
33278	<0.1	0.59	<3	49	<3	0.41	<0.1	<1	114	5	1.12	0.05	0.22	325	11	0.04	<1	0.01	<2	<2	<2	12	<5	<3	10	
33279	0.5	0.38	<3	146	<3	2.88	<0.1	2	125	4873	1.06	0.16	0.14	1872	12	0.05	5	<0.01	<2	<2	<2	43	<5	<3	11	
33280	0.3	0.77	<3	100	<3	0.66	<0.1	2	137	4392	1.50	0.10	0.19	1469	4	0.06	<1	<0.01	<2	<2	<2	12	<5	<3	14	
33281	0.3	0.35	<3	45	<3	1.53	<0.1	<1	130	619	0.53	0.12	0.10	568	10	0.05	<1	<0.01	<2	<2	<2	23	<5	<3	5	
33282	3.8	1.08	<3	405	<3	0.39	<0.1	4	169	8103	2.57	0.06	0.63	955	7	0.06	3	<0.01	<2	<2	<2	17	<5	<3	57	
33283	0.5	0.37	<3	320	<3	<0.01	<0.1	1	97	62	0.88	<0.01	0.03	37	10	0.05	<1	<0.01	<2	<2	<2	4	<5	<3	3	
Minimum Detection	0.1	0.01	3	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1	
Maximum Detection	50.0	10.00	2000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000	
< - Less Than Minimum	> - Greater Than Maximum		is - Insufficient Sample		ns - No Sample		ANOMALOUS RESULTS - Further Analyses By Alternate Methods Suggested.																			

REPORT NUMBER: 900627 GA

JOB NUMBER: 900627

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PAGE 1 OF 1

SAMPLE #	Au
SM TOM - S - 352	ppb
SM TOM - S - 701	nd
SM TOM - S - 702	nd
SM TOM - S - 703	5
	20

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

VANGEOCHEM LAB LIMITED

1630 Pandora Street, Vancouver, B.C. V5L 1L6
 Ph: (604)251-5656 Fax: (604)254-5717

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCl to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: *Agredh*

REPORT #: 900627 PA

OREQUEST CONSULTANTS LTD.

PROJECT: SM TOM

DATE IN: OCT 01 1990

DATE OUT: NOV 05 1990

ATTENTION: MR. GEORGE CAVEY

PAGE 1 OF 1

Sample Name	Ag ppm	Al %	As ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sn ppm	Sr ppm	U ppm	W ppm	Zn ppm	
SM TOM - S - 352	<0.1	2.75	<3	109	<3	1.39	1.8	27	54	65	3.90	0.17	1.59	998	6	0.09	49	0.07	<2	<2	<2	47	<5	<3	159	
SM TOM - S - 701	0.1	3.13	<3	305	<3	0.76	1.4	26	46	60	5.88	0.18	1.59	1419	7	0.09	34	0.09	<2	<2	<2	48	<5	<3	147	
SM TOM - S - 702	0.1	2.85	<3	257	<3	0.98	2.1	33	51	75	4.92	0.17	1.44	1414	9	0.07	41	0.08	<2	<2	<2	53	<5	<3	151	
SM TOM - S - 703	0.4	2.53	<3	377	<3	0.75	1.5	30	38	65	6.21	0.19	1.21	1755	10	0.09	41	0.10	<2	<2	<2	51	<5	<3	187	
Minimum Detection	0.1	0.01	3	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1	
Maximum Detection	50.0	10.00	2000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000	
< - Less Than Minimum	> - Greater Than Maximum																									
is - Insufficient Sample			ns - No Sample			ANOMALOUS RESULTS - Further Analyses By Alternate Methods Suggested.																				

REPORT NUMBER: 900659 GA

JOB NUMBER: 900659

ORQUEST CONSULTANTS LTD.

PAGE 1 OF 1

SAMPLE #	Au
33123	70
33917	60
33918	20
33919	10
33920	10

DETECTION LIMIT

5

nd = none detected

-- = not analysed

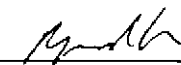
is = insufficient sample

VANGEOCHEM LAB LIMITED

1630 Pandora Street, Vancouver, B.C. V5L 1L6
 Ph: (604)251-5656 Fax: (604)254-5717

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCl to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: 

REPORT #: 900659 PA

REQUEST CONSULTANTS LTD.

PROJECT: SM-TOM

DATE IN: OCT 10 1990

DATE OUT: NOV 05 1990

ATTENTION: MR. GEORGE CAVEY

PAGE 1 OF 1

Sample Name	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	U	W	Zn
	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
33123	0.1	2.53	<3	312	<3	0.32	0.9	9	74	37	5.38	0.12	1.11	903	9	0.09	4	0.08	<2	<2	<2	10	<5	<3	43
33917	<0.1	1.70	<3	57	<3	3.25	<0.1	8	46	99	2.80	0.23	1.00	1034	6	0.07	10	0.08	<2	<2	<2	196	<5	<3	48
33918	0.9	1.93	<3	53	<3	0.52	0.1	23	36	20	4.74	0.14	1.38	1149	23	0.08	4	0.16	30	<2	<2	7	<5	<3	82
33919	<0.1	1.51	<3	138	<3	0.26	<0.1	15	39	33	4.65	0.11	0.39	807	9	0.12	2	0.10	<2	<2	<2	11	<5	<3	84
33920	<0.1	0.60	<3	51	<3	0.03	<0.1	2	92	5	2.43	0.03	0.19	124	5	0.07	2	0.02	15	<2	<2	8	<5	<3	16

Minimum Detection	0.1	0.01	3	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1	
Maximum Detection	50.0	10.00	2000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000	
< - Less Than Minimum) - Greater Than Maximum																									
is - Insufficient Sample			ns - No Sample			ANOMALOUS RESULTS - Further Analyses By Alternate Methods Suggested.																				

REPORT NUMBER: 900660 GA

JOB NUMBER: 900660

ORQUEST CONSULTANTS LTD.

PAGE 1 OF 1

SAMPLE #	As ppb
T S-01	nd
T S-02	15
T S-03	nd
T S-04	5
T S-05	nd
T S-06	10
T S-07	nd
T S-08	10
T S-09	10
T S-10	nd
T S-11	nd

DETECTION LIMIT

5

nd = none detected

-- = not analysed

ls = insufficient sample

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCl to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: *[Signature]*

REPORT #: 900650 PA DREQUEST CONSULTANTS LTD. PROJECT: SM-TOM DATE IN: OCT 10 1990 DATE OUT: NOV 07 1990 ATTENTION: MR. GEORGE CAVEY PAGE 1 OF 1

Sample Name	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	U	W	Zn
	ppm	λ	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
T S-01	0.5	2.60	<3	130	<3	2.42	3.5	27	51	108	5.09	0.21	1.61	1193	12	0.11	42	0.06	<2	<2	<2	62	<5	<3	334
T S-02	0.5	2.54	<3	151	<3	2.21	2.2	26	47	103	4.77	0.21	1.52	1285	11	0.10	31	0.06	<2	<2	<2	60	<5	<3	238
T S-03	0.7	3.40	<3	121	<3	0.64	4.2	32	53	208	5.95	0.17	2.01	1644	14	0.12	52	0.05	75	<2	<2	29	<5	<3	420
T S-04	0.5	3.20	<3	157	<3	1.18	3.2	32	72	97	5.45	0.20	1.86	1401	12	0.12	38	0.05	<2	<2	<2	46	<5	<3	293
T S-05	0.6	2.48	<3	137	<3	0.93	2.6	29	51	71	5.01	0.15	1.55	1239	10	0.08	20	0.08	<2	<2	<2	36	<5	<3	269
T S-06	0.6	2.73	<3	200	<3	1.26	1.8	26	51	70	4.90	0.15	1.70	1226	8	0.09	16	0.07	<2	<2	<2	47	<5	<3	217
T S-07	0.5	3.20	<3	179	<3	0.95	1.6	24	97	73	4.87	0.16	1.95	1295	10	0.10	13	0.05	<2	<2	<2	44	<5	<3	189
T S-08	0.4	2.99	<3	155	<3	1.43	1.9	28	56	77	4.12	0.18	1.55	1342	7	0.08	16	0.08	<2	<2	<2	99	<5	<3	186
T S-09	0.3	2.86	<3	140	<3	1.85	0.4	28	59	44	3.98	0.17	1.77	1043	7	0.07	3	0.04	<2	<2	<2	57	<5	<3	116
T S-10	0.5	3.60	<3	162	<3	2.60	<0.1	30	92	45	4.68	0.22	2.36	1132	12	0.11	17	0.04	<2	<2	<2	63	<5	<3	105
T S-11	0.4	3.36	<3	148	<3	1.22	<0.1	30	70	51	4.48	0.19	2.00	1141	8	0.10	<1	0.04	<2	<2	<2	39	<5	<3	135

Minimum Detection 0.1 0.01 3 1 3 0.01 0.1 1 1 1 0.01 0.01 0.01 1 1 0.01 1 0.01 2 2 2 1 5 3 1
 Maximum Detection 50.0 10.00 2000 1000 1000 10.00 1000.0 20000 1000 20000 10.00 10.00 10.00 20000 1000 10.00 20000 10.00 20000 2000 1000 10000 100 1000 20000

< - Less Than Minimum > - Greater Than Maximum is - Insufficient Sample ns - No Sample ANOMALOUS RESULTS - Further Analyses By Alternate Methods Suggested.

APPENDIX III
ANALYTICAL PROCEDURES

October 10, 1990

TO: Mr. Grant Malensek
OREQUEST CONSULTANTS LTD.
306 - 595 Howe Street
Vancouver, BC V6C 2T5

FROM: VANGEOCHEM LAB LIMITED
1630 Pandora Street
Vancouver, BC V5L 1L6

SUBJECT: Analytical procedure used to determine gold by fire assay method and detect by atomic absorption spectrophotometry in geological samples.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received at the laboratory in high wet-strength, 4" x 6", Kraft paper bags. Rock samples would be received in poly ore bags.
- (b) Dried soil and silt samples were sifted by hand using an 8" diameter, 80-mesh, stainless steel sieve. The plus 80-mesh fraction was rejected. The minus 80-mesh fraction was transferred into a new bag for subsequent analyses.
- (c) Dried rock samples were crushed using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for subsequent analyses.

2. Method of Extraction

- (a) 20.0 to 30.0 grams of the pulp samples were used. Samples were weighed out using a top-loading balance and deposited into individual fusion pots.
- (b) A flux of litharge, soda ash, silica, borax, and, either flour or potassium nitrite is added. The samples are then fused at 1900 degrees Farenhiet to form a lead "button".

-2-

(c) The gold is extracted by cupellation and parted with diluted nitric acid.

(d) The gold beads are retained for subsequent measurement.

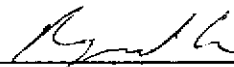
3. Method of Detection

(a) The gold beads are dissolved by boiling with concentrated aqua regia solution in hot water bath.

(b) The detection of gold was performed with a Techtron model AA5 Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out on a strip chart recorder. The gold values, in parts per billion, were calculated by comparing them with a set of known gold standards.

4. Analysts

The analyses were supervised or determined by Mr. Raymond Chan or Mr. Conway Chun and his laboratory staff.



Raymond Chan
VANGEOCHEM LAB LIMITED

October 10, 1990

TO: Mr. Grant Malensek
OREQUEST CONSULTANTS LTD.
306 - 595 Howe Street
Vancouver, BC V6C 2T5

FROM: VANGEOCHEM LAB LIMITED
1630 Pandora Street
Vancouver, BC V5L 1L6

SUBJECT: Analytical procedure used to determine hot acid soluble for 25 element scan by Inductively Coupled Plasma Spectrophotometry in geochemical silt and soil samples.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received at the laboratory in high wet-strength, 4" X 6", Kraft paper bags. Rock samples would be received in poly ore bags.
- (b) Dried soil and silt samples were sifted by hand using an 8" diameter, 80-mesh, stainless steel sieve. The plus 80-mesh fraction was rejected. The minus 80-mesh fraction was transferred into a new bag for subsequent analyses.
- (c) Dried rock samples were crushed using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for subsequent analyses.

2. Method of Digestion

- (a) 0.50 gram portions of the minus 80-mesh samples were used. Samples were weighed out using an electronic balance.
- (b) Samples were digested with a 5 ml solution of HCl:HNO₃:H₂O in the ratio of 3:1:2 in a 95 degree Celsius water bath for 90 minutes.
- (c) The digested samples are then removed from the bath and bulked up to 10 ml total volume with demineralized water and thoroughly mixed.

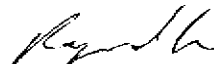
-2-

3. Method of Analyses

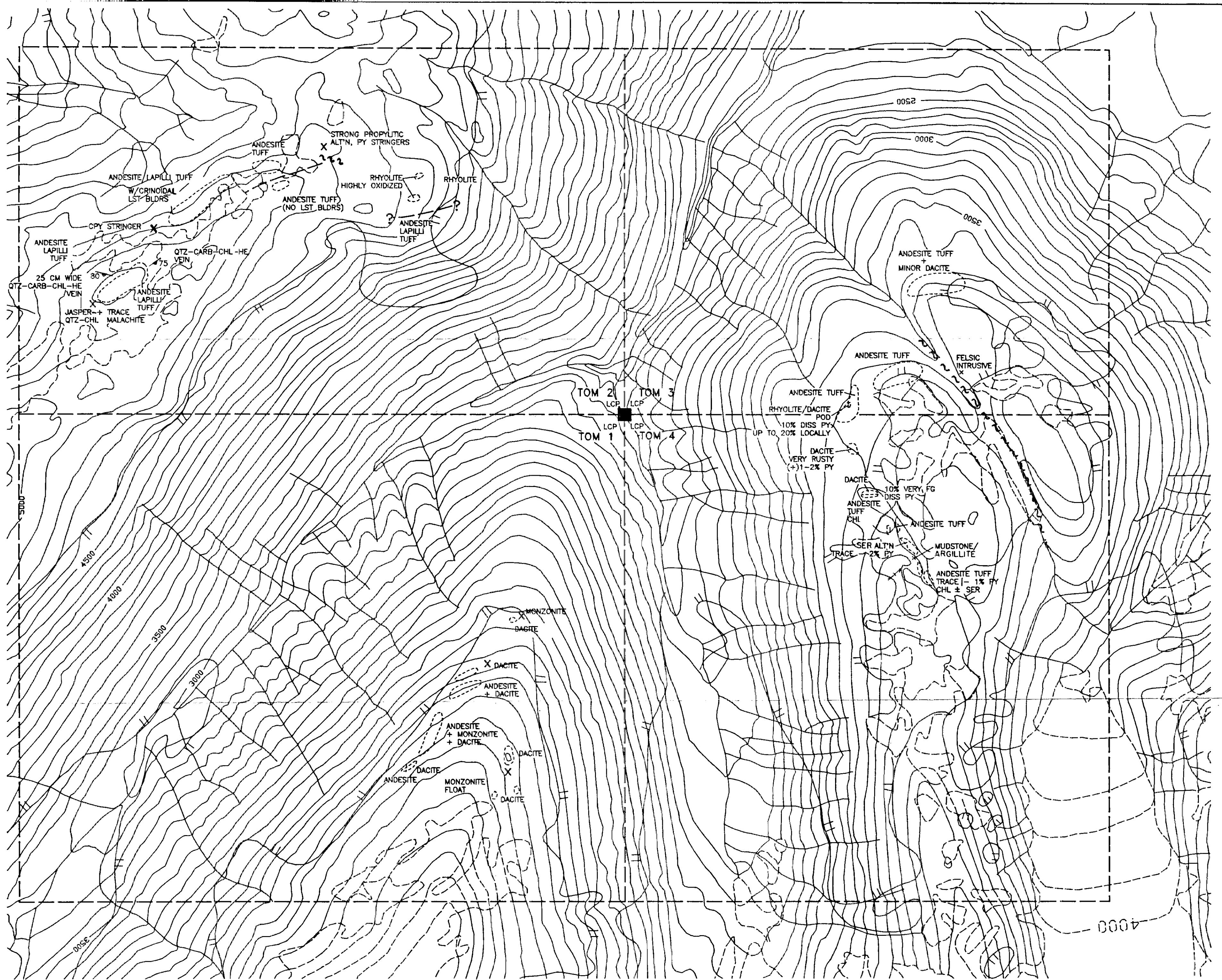
The ICP analyses elements were determined by using a Jarrell-Ash ICAP model 9000 directly reading the spectrophotometric emissions. All major matrix and trace elements are interelement corrected. All data are subsequently stored onto disketts.

4. Analysts

The analyses were supervised or determined by Mr. Conway Chun and his laboratory staff.



Conway Chun
VANGEOCHEM LAB LIMITED



- LEGEND:
- OUTCROP
 - FLOAT or SMALL OUTCROP
 - GEOLOGICAL CONTACT (approx.)
 - FAULT
 - VEIN (INCLINED, VERTICAL)
 - FOLIATION (INCLINED, VERTICAL)
 - PY PYRITE
 - CHL CHLORITE
 - SER SERICITE
 - QTZ QUARTZ
 - CARB CARBONATE
 - HE HEMATITE

TOPOGRAPHIC CONTOURS IN FEET A.S.L.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

20,80'



OREQUEST

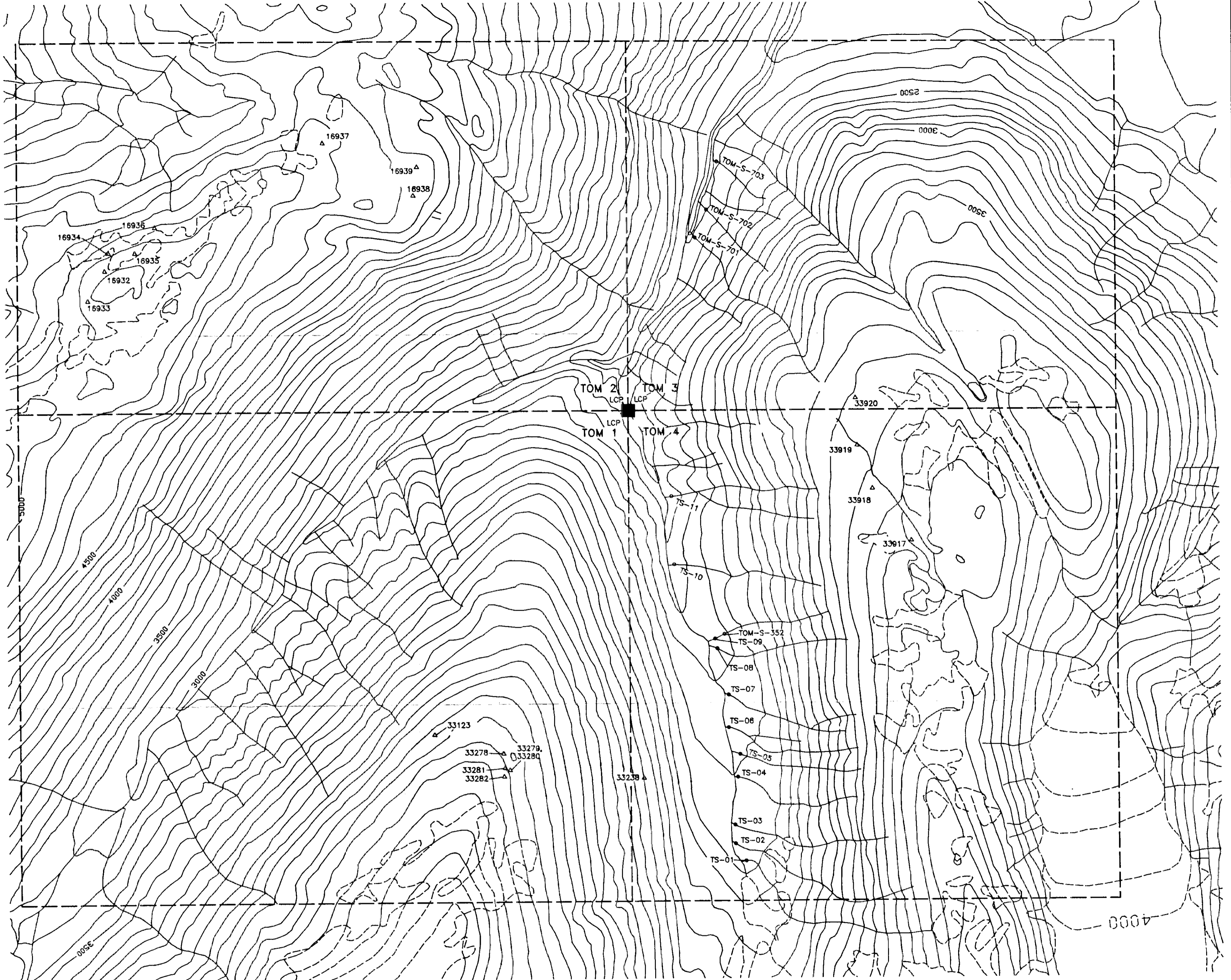
SANTA MARINA GOLD LTD.

Figure 4
TOM 1 - 4 CLAIM GROUP
Liard Mining Division

GEOLOGY MAP

British Columbia
NTS: 104 B/10

NOVEMBER 1990 Drafting RWR



GRAB & FLOAT SAMPLE RESULTS

SAMPLE No.	Type	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
16932	GS	30	0.4	111	<2	28
16933	GS	<5	0.4	161	<2	78
16934	GS	<5	0.4	36	<2	17
16935	GS	20	0.1	70	<2	62
16936	F	430	12.1	3451	339	74
16937	GS	<5	0.1	69	<2	90
16938	GS	<5	<0.1	17	<2	13
16939	GS	<5	<0.1	9	<2	9
33123	GS	70	0.1	37	<2	43
33278	GS	<5	<0.1	5	<2	10
33279	GS	360	0.5	4873	<2	11
33280	GS	<5	0.3	4392	<2	14
33281	GS	20	0.3	619	<2	5
33282	GS	20	3.8	8103	<2	57
33283	GS	<5	0.5	62	<2	3
33217	GS	60	<0.1	99	<2	48
33218	GS	20	0.9	20	30	82
33219	GS	10	<0.1	33	<2	34
33220	GS	10	<0.1	5	15	15

GS = GRAB SAMPLE
F = FLOAT SAMPLE

▲ ROCK SAMPLE LOCATION
○ SILT SAMPLE LOCATION

SILT SAMPLE RESULTS

SAMPLE #	Type	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
TS-01	s	<5	0.5	108	<2	334
TS-02	s	<5	0.5	103	<2	238
TS-03	s	<5	0.7	208	75	420
TS-04	s	<5	0.5	97	<2	293
TS-05	s	<5	0.6	71	<2	263
TS-06	s	10	0.6	70	<2	217
TS-07	s	<5	0.5	73	<2	189
TS-08	s	10	0.4	77	<2	186
TS-09	s	10	0.3	44	<2	116
TS-10	s	<5	0.5	45	<2	105
TS-11	s	<5	0.4	51	<2	135

SAMPLE #	Type	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
SM TOM-S-352	s	<5	<0.1	65	<2	159
SM TOM-S-701	s	<5	0.1	60	<2	147
SM TOM-S-702	s	5	0.1	75	<2	151
SM TOM-S-703	s	20	0.4	65	<2	187

TOPOGRAPHIC CONTOURS IN FEET ASL

20,804
 GEOLOGICAL BRANCH
 ASSESSMENT REPORT
 0 100 200 300 400 500 metres

OREQUEST
 SANTA MARINA GOLD LTD.

Figure 5
TOM 1 - 4 CLAIM GROUP
 Liard Mining Division
**SAMPLE LOCATIONS AND
 ASSAY RESULTS (ROCK & SILTS)**

British Columbia
 NTS: 104 B/10

NOVEMBER 1990

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