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GEOLOGICAL AND GEOCHEMICAL ASSESSMENT REPORT ON SANTA MARINA GOLD LTD.'S WESTKIT PROJECT

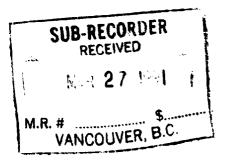
SKEENA MINING DIVISION KITSAULT RIVER AREA, NW BRITISH COLUMBIA

> LATITUDE 55<sup>0</sup>42'N LONGITUDE 129<sup>0</sup>36'W

> > NTS 103P/12

HEGISSON CAL BRANCH





Bernard Dewonck, F.G.A.C.

March 25, 1991





### SUMMARY

Exploration was completed on the Westkit Project between September 14th and September 20th, 1990. The property consists of 4 contiguous claims comprising 74 units on the west side of the Kitsault River valley, between Evindsen Creek and the West Kitsault River, 45 km southeast of Stewart, B.C.

Work entailed reconnaissance mapping, prospecting, rock and silt sampling during which a total of 48 grab rock samples and 10 silt samples were collected.

The lithologies on the property include mudstones, siltstones, sandstone, intermediate tuffs, breccias, conglomerates volcaniclastics and mafic flows. These rocks form a conformable sequence of northwesterly plunging parallel anticlines. They are of Lower to Middle Jurassic age.

Similar rocks host the Dolly Varden, Northstar, Torbrit and Homestake silver-base metal deposits 5 km to the east. These deposits have been mined periodically since 1915 and have produced a total of 1.3 million tons of ore grading 485 g/t silver, 0.38% lead and 0.02% zinc.

The highest assay value obtained during the 1990 field program is 0.039 oz/ton gold from a small shear. Due to the lack of any significant geochemical anomaly, mineralized zone or structure no further work is recommended on the Westkit claims.

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Paul M. Brucciani, Geologist Brett LaPeare, Geologist	

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### INTRODUCTION

This report, prepared by OreQuest Consultants Ltd. on behalf of Santa Marina Gold Ltd., summarizes exploration conducted by OreQuest during September of 1990 on the Westkit mineral claims, which consisted of reconnaissance mapping, rock and silt sampling.

### PROPERTY DESCRIPTION

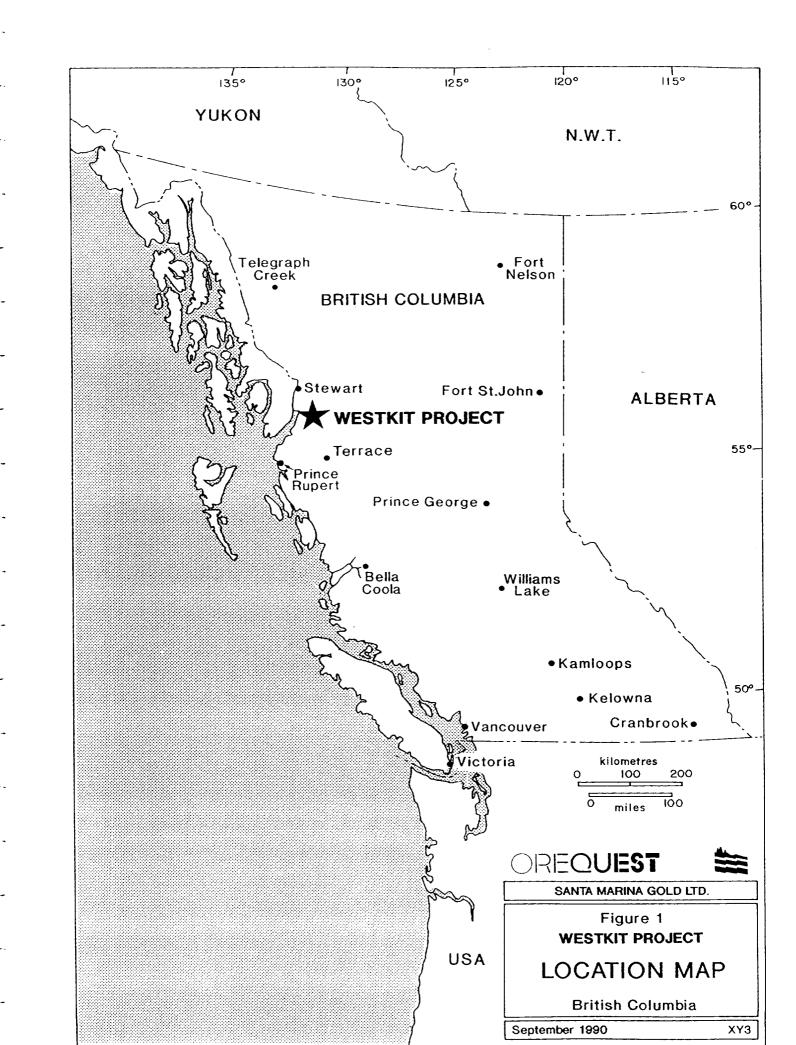
### Location and Access

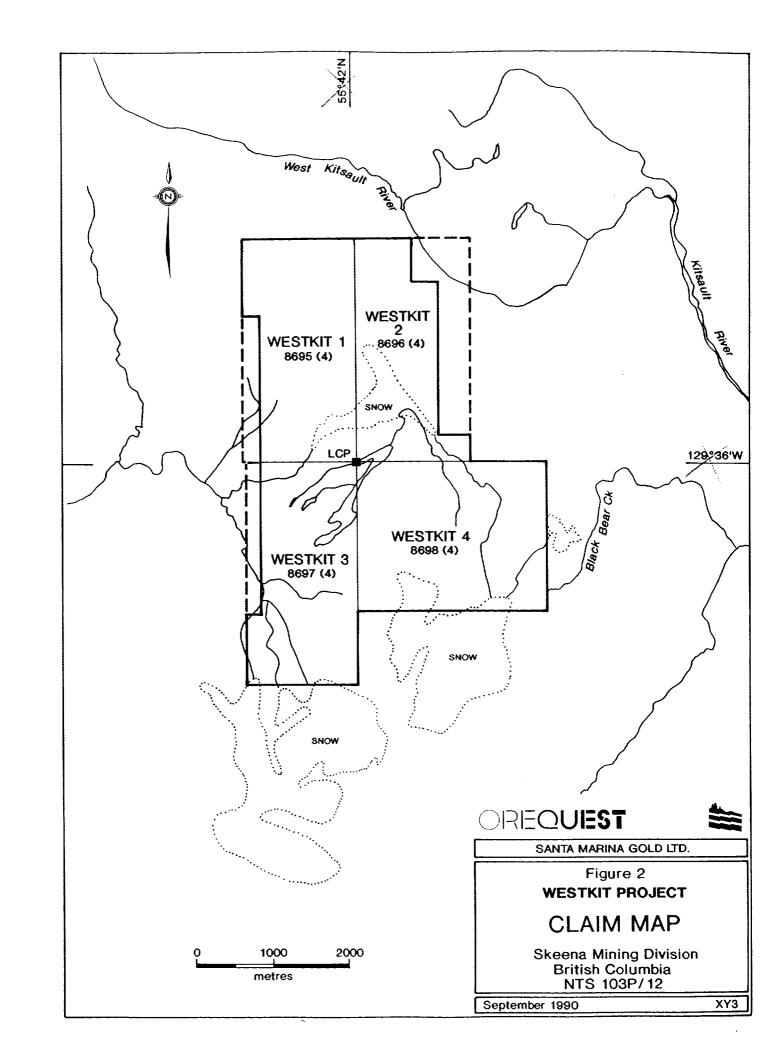
The property is located within the Boundary Mountain Range of the Coast Mountains, 20 km east of the Alaska-B.C. International Boundary, (Figure 1) on the western slope of the Kitsault River valley. The claims also lie 45 km southeast of Stewart and 30 km north of Kitsault and Alice Arm at the head of Alice Arm Inlet. The centre of the claims is located at a latitude of  $55^{o}42'N$  and a longitude of  $129^{o}38'W$ .

Access to the property is via helicopter based in Stewart, from which flight time is approximately 30 minutes.

### Claim Status

The Westkit property consists of 4 contiguous claims comprising 74 units (Figure 2) situated in the Skeena Mining Division and under option to Santa Marina Gold Ltd. They are listed in Table 1 as follows:





## TABLE 1: Claim Information

<u>Claim Name</u>	Record No.	No. of Units	Record Date	Expiry Date
Westkit 1	8695	18	April 3/90	April 3/91
Westkit 2	8696	18	April 3/90	April 3/91
Westkit 3	8697	18	April 3/90	April 3/91
Westkit 4	8698	20	April 3/90	April 3/91

The owner of record is Lawrence Barry. The work described in this report, when filed for assessment, would extend the expiry date beyond 1991.

### Physiography and Vegetation

The claims overlie typically glaciated mountainous terrain. Elevations range from 820 m (2700 ft) near the southwestern corner to 1700 m (5600 ft) at the summit of Mt. Klayduc.

Below 1000 m sub-alpine vegetation in the form of spruce, fir, hemlock, slide alder and devil's club is present. Above 1000 m alpine flora predominates. The highest elevations support only mosses and lichens.

# HISTORY AND PREVIOUS WORK

Exploration started in the upper Kitsault valley in the early 1900's and by 1913 the Dolly Varden property was already staked, along with numerous other claims in the area. Exploration of the Dolly Varden property, located 5 km east of the Westkit claims, delineated a considerable tonnage of ore and a railway was constructed from Alice Arm to the deposit. The Dolly Varden deposit was in production from 1919 to 1921. At the same time, several other prospects were explored but interest in the area dropped in 1921 when the price of silver declined. However, a mill to concentrate the ore was built in 1928 on the Torbrit property.

The area remained relatively calm from 1930 to 1946. In 1946, a company controlled by Mining Corporation of Canada acquired the Torbrit mine and started to build the road from Alice Arm up the valley. A new mill was constructed and production started in 1949. Two other prospects, the Galena and the Vanguard, located less than 5 km northeast of the subject claims, were explored in 1951.

The total amount of concentrates produced to the end of 1951 by the Dolly Varden, the Homestake, the North Star, and the Torbrit deposits was: 84 ounces of gold; 7,189,130 ounces of silver; 2,183,965 pounds of lead; 344,832 pounds of zinc; and 1,740 pounds of copper (Black, 1951).

At the present time, the Dolly Varden property includes the Dolly Varden Mine, the Torbrit Mine, the Wolf Mine, the North Star Mine, as well as the Red Point Prospect.

Until recently silver has been the focus of mining in the area, however, results from the 1989 diamond drilling program at the Dolly Varden suggest that mining in the past has been concentrated within

the silver rich zone of a volcanic exhalative formation. The emphasis of current exploration has expanded to include the search for massive sulphide deposits rich in zinc, lead, and silver with appreciable gold, copper and cadmium.

In 1985 the regional geology and mineral deposits of the general area were mapped by Dawson and Alldrick (1986). There is no recorded history of exploration on the Westkit property specifically.

## REGIONAL GEOLOGY AND MINERALIZATION

The northwestern portion of British Columbia has undergone regional mapping by the Geological Survey of Canada over an extended period of time (Kerr, 1930, 1948; Hanson, 1935; GSC 1956, 1979; Anderson, 1984, 1989; Anderson and Thorkelson, 1990). On a more detailed basis, the geological framework from which current mapping is evolving was established by the British Columbia Ministry of Energy Mines and Petroleum Resources (Grove, 1986). Grove defined the Stewart Complex as an assemblage of volcanic and related sedimentary rocks, ranging in age from Upper Triassic to Upper Jurassic, bounded by the Coast Plutonic Complex to the west, the sedimentary Bowser Basin to the east, Alice Arm to the south and the Iskut River to the north. Included in the Complex were the Upper Triassic Takla Group, Lower Jurassic Unuk River and Betty Creek, Middle Jurassic Salmon River Formation and Upper Jurassic Nass Formation of the Hazelton Group.

In 1985 the BCMEMPR initiated an on-going regional mapping program by D. J. Alldrick and several co-workers, with the first work conducted in the Kitsault area (Alldrick et al, 1986). Mapping has extended more than 200 kilometres northwest, resulting in constantly evolving formation and age definition of rock units. In the Sulphurets Creek and Unuk River areas the Upper Triassic is referred to as the Stuhini Group, the Hazelton Group includes Unuk River, Betty Creek and the newly defined Mt. Dilworth Formations of Lower Jurassic Age and - on the open file maps for these areas (1988-4 and 1989-10 respectively) - the Middle Jurassic Salmon River Formation. On a more regional scale Alldrick (1989) has limited the Hazelton Group to the Unuk, Betty Creek and Mt. Dilworth Formations and suggested a correlation of the Salmon River Formation to rocks of the Spatzizi Group. The Ashman Formation, also Middle Jurassic, overlies the Salmon River and is part of the Bowser Group. Grove's Upper Jurassic Nass Formation no longer appears in the stratigraphic column.

In order of increasing age, lithologies of the Stewart Complex are described as follows:

1. Spatzizi Group (Middle Jurassic)

a) Salmon River Formation - thinly bedded alternating siltstones, mudstones and greywacke, and minor andesite pillow lavas and pillow breccias.

2. Hazelton Group (Lower to Middle Jurassic)

a) Mt. Dilworth Formation - intermediate to felsic pyroclastic rocks, including dust, ash, crystal and lithic tuffs, lapilli tuffs.

b) Betty Creek Formation - grey, green, locally maroon massive to bedded pyroclastic and sedimentary rocks, pillow lava.

c) Unuk River Formation - green and grey intermediate to mafic volcaniclastics and flows with local beds of fine grained immature sediments.

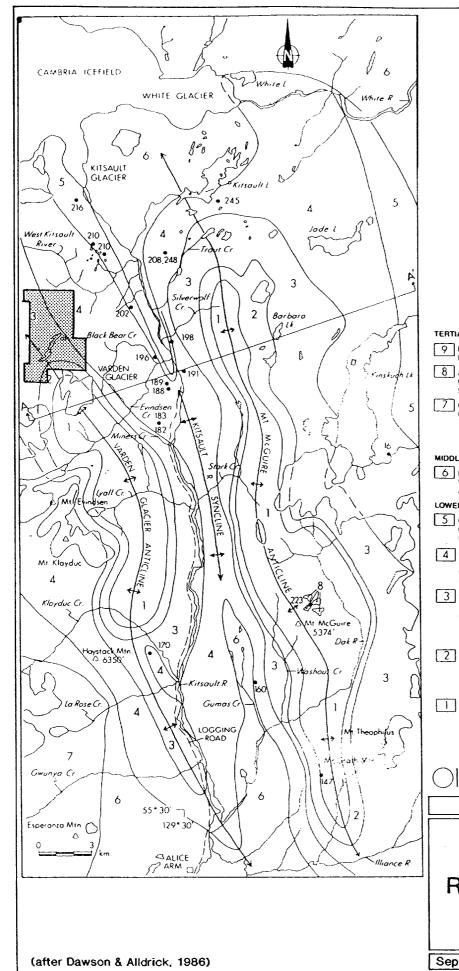
3. Stuhini Group (Upper Triassic)

Mixed sedimentary rocks interbedded with mafic to intermediate volcanic and volcaniclastic rocks.

The regional geology depicted in this report (Figure 3) is reproduced from Dawson and Alldrick's summary in Geological Fieldwork 1985 (Dawson and Alldrick, 1986). A more detailed geological map can be found as Open File 1986-2 (Alldrick et al, 1986). It should be noted that no formation designations appear on these maps since the nomenclature described above was published in later years.

The Bowser Lake Group, a large sedimentary basin, in part overlies the Stewart Complex to the east. Previous workers (Hansen, 1935 and Grove, 1971) have interpreted the Bowser Lake Group as a large successor sedimentary basin, consisting of marine and nonmarine sediments with only minor volcanics, that extends over an area 160 km wide by 320 km long. The Bowser Lake Group has been unaffected by regional metamorphism, although numerous dykes and small plutons have caused minor metasomatism. Historically the Bowser Lake Group has proven uneconomic, with no significant discoveries associated with it.

The youngest rocks in the region are the Tertiary plutons of the Coast Plutonic Complex which forms the western contact of the Stewart Complex. Compositionally these plutons range from quartz monzonite and quartz diorite through to granodiorite and granite. They exhibit



MINERAL PROPERTIES (	LEGEND COMMODITIES	
GALENA (ACE TYEE)	Ag Pb Ag Pb	103P-245 103P-208, 248
WOLF TORBRIT	Ag. Pb. Zn Ag. Pb. Zn	103P-198
NORTHSTAR DOLLY VARDEN	Ag. Pb. Zn	103P-189
LA ROSE	Ag. Pb. Zn Ag. Pb	103P-188 103P-170
HOMESTAKE	Au. Cu	103P-216

#### INTRUSIVE ROCKS

#### TERTIARY

- 9 MINOR DYKES: MICRODIORITE (a), GRANODIORITE (b); LAMPROPHYRE (c)
- 8 AJAX INTRUSIONS: QUARTZ FELDSPAR PORPHYRITIC QUARTZ MONZONITE (a): BIOTITE QUARTZ MONZONITE (b). 55.1 Ma (K/Ar)
- 7 COAST PLUTONIC COMPLEX. QUARTZ MONZONITE (a): GRANODIORITE (b): 43-51 Ma (K·Ar)

INTRUSIVE CONTACT

VOLCANIC AND SEDIMENTARY ROCKS

#### MIDDLE TO UPPER JURASSIC

6 BASAL FOSSILIFEROUS WACKE (a); BLACK SILTSTONE AND WACKE (b); MINOR INTRAFORMATIONAL CONGLOMERATES AND LIMESTONE (c)

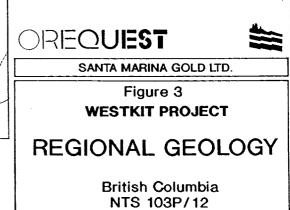
#### LOWER JURASSIC

- 5 GREEN AND MAROON VOLCANIC BRECCIA (a); EPICLASTIC CONGLOMERATE AND SEDIMENTS (b); LOCAL DACITIC FLOWS AND PYROCLASTICS (c)
- 4 FELDSPAR-HORNBLENDE PORPHYRITIC ANDESITIC PYROCLASTICS (a) AND FLOWS/SILLS (b); MINOR INTERBEDS OF LIMESTONE, SILTSTONE, SANDSTONE, CHERT, AND BARITE (c)

3 BASAL POLYMICTIC CONGLOMERATE, MINOR INTERBEDDED LIMESTONE, SILTSTONE, GRIT, SANDSTONE (a); SILTSTONE, ARGILLITE (b); VOLCANIC BRECCIA, MINOR INTERBEDDED SILTSTONE, SANDSTONE (c); INTERBEDDED SILTSTONE, SANDSTONE, AND PEBBLE CONGLOMERATE (MARKER HORIZON) (d)

2 AUGITE (OLIVINE) PORPHYRITIC BASALT FLOWS, PILLOWED FLOWS (a); AUGITE FELDSPAR PORPHYRITIC BASALT PYROCLASTICS AND VOLCANIC BRECCIAS (b): EPICLASTIC CONGLOMERATE, MINOR INTERBEDDED SILTSTONE. ARGILLITE, AND LIMESTONE (c)

I SILTSTONE, ARGILLITE, WACKE (a): RARE LIMESTONE (b);



September 1990

a typical massive crowsfoot texture and usually are medium to coarse grained and porphyritic. Mafic minerals present are almost always hornblende <u>+</u> biotite.

Within the older volcanics regional structural features include a series of parallel anticlines and synclines with the fold axis striking north-south to northwest-southeast. Faults, photolineaments, small and large scale shears and fracturing are common throughout the area.

A number of epithermal and mesothermal precious metal deposits, massive sulphides, skarns and hydrothermal systems, as well as coppergold porphyries have been found in northwestern British Columbia. The majority of these deposits are hosted by rocks of the Stewart Complex and often show a spatial relationship with Early Jurassic intrusions.

The principal deposits in the Stewart area are hosted by an assemblage of volcanics of Lower Jurassic age, forming a northwest trending belt. Three types of deposits have been found within this belt:

 Alkalic Copper-Gold Porphyry: High tonnage copper deposits containing significant amounts of gold (eg. Galore Creek and Copper Canyon deposits).

- 2) Gold-Silver Vein and Stockwork Deposits: High grade veins are found in the Lower Jurassic Hazelton volcanics (e.g. Silbak-Premier Mine). This type of deposit has been the most productive in the area.
- 3) Gold-Silver-Lead-Zinc Volcanic Exhalative Deposits: This type of deposit is found at Eskay Creek, within the upper sections of the Lower Jurassic volcanic-arc assemblage. The Dolly Varden Property, located 5 km east of the subject property, is believed to have potential for a similar type deposit as a result of interpretation of recent field mapping and diamond drilling.

The other types of mineralization are:

- 1) Silver-rich quartz-barite veins
- 2) Disseminated copper-gold mineralization

The silver-rich mineralization consists of mesothermal to epithermal veins deposited during folding within fractures and faults parallel to the axial plane of the fold. Historically exploration and development at Dolly Varden has been on this type of mineralization. Disseminated copper-gold mineralization includes the Homestake, Vanguard, Red Point and Red Bluff properties. The mineralization is localized along the upper contact of a feldspar and/or hornblende porphyritic flow or subvolcanic sill. Both types of mineralization occur within andesitic pyroclastics of Middle to Lower Jurassic lithologies.

## PROPERTY GEOLOGY AND GEOCHEMISTRY

The Westkit claims are underlain by Lower to Middle Jurassic rocks of the Stewart Complex which form a northwest-southeasterly striking conformable sequence of anticlines and synclines. The rock unit designations used in Figure 4 are as they appear in Open File Map 1986-2 (Alldrick et al, 1986).

Andesite tuffs (Unit 4) are the youngest of the volcanic and sedimentary rocks, forming a ridge on the northeastern side of the property. To the west they are underlain by intermediate volcanic breccias and conglomerates, siltstone and sandstone (Unit 3). The volcanics of Unit 3 are predominant on the north half of the property while the siltstone and sandstone of the same unit occur in the southern part.

The oldest rocks occur in the southern part of the property, overlain by the siltstone-sandstone lithology of Unit 3. They are comprised of flows of often pillowed porphyritic augite and olivine basalt, and basaltic conglomerates (Unit 2) with minor sandstone and siltstone (Unit 1) interbedded with the mafic volcanics (Unit 2).

Numerous small scale faults can be seen on exposed outcrop on the north side of the property. They are generally oriented northsouth to northeast-southwest.

The rocks appear to form two parallel anticlines separated by a syncline, also striking northwest-southeast and plunging at approximately 30° to the northwest.

The strata have been intruded by several dykes, the most notable of which occurs on the northern side of the property. It is medium to coarse grained, lamprophyric in composition, up to 10 m wide, 1 km long and trends subparallel to the strike of the strata.

Within the vicinity of this dyke are quartz veins up to 1 m wide and 100 m long, however only minor pyrite mineralization was observed within them.

Sheared rocks in the same area often form limonitic gossans exhibiting moderate to intense jarositic, sericitic and argillic alteration.

Arsenopyrite and chalcopyrite are locally observed associated with pyrite, in quartz veins and shears.

A total of 48 rock grab samples and 10 silt samples were collected and sent to TSL Laboratories of Saskatoon, Saskatchewan.

They were analyzed for gold by atomic absorption and underwent a 35 element geochemical analysis using inductively coupled plasma (ICP) spectrophotometry. Only one rock sample returned an anomalous gold value - sample #36771 (0.039 oz/ton Au) is a tuff exhibiting a high degree of limonitic, argillic and sericitic alteration within a small shear containing up to 20% pyrite. Sample #36768 (230 ppb Au) was taken from subvolcanic float of intermediate composition. It also exhibits strong limonitic and moderate argillic alteration but no sericitic alteration, and contains no pyrite. All other gold assays are insignificant. Sample locations are shown on Figure 5.

The 35 element ICP analysis showed only weakly anomalous zinc in two samples. Sample #36777 (100 ppm Zn) is from a large (lm x 10 m), siltstone hosted quartz - calcite - ankerite vein. Sample #36780 (400 ppm zinc) is from a large quartz vein with minor limonite and sericite in an intermediate tuff. Please refer to Appendix I for sample descriptions, Appendix II for a complete list of results for both gold and 35 element ICP analysis and Appendix III for analytical procedures.

### CONCLUSIONS AND RECOMMENDATIONS

The property is underlain by a conformable sequence of Lower to Middly Jruassic, anticlinally folded volcanic and sedimentary rocks of the Stewart Complex.

Geology of the Westkit claims consists of andesite and intermediate pyroclastics (breccia) to the east and to the north. Surrounding the lake in the south of the property are sandstones and greywacke. They are massive to bedded with the beds  $\leq$  1.0 metres thick. Small lenses of andesite are intercalated within the sandstone unit. Massive to porphyritic intermediate to mafic volcanics occur at the south end of the property.

Small scale faulting, intense limonitic alteration, gossans and shears were observed on the property but not found to be of significant extent. In total, 48 rock samples and 10 silt samples were taken.

Due to the lack of any significant geochemical anomaly, mineralized zone or structure no further work is recommended on the Westkit claims.

# STATEMENT OF EXPENDITURES

Mobilization/Demobilization (pro-rated from Kitsault Project)	\$ 650.37
Wages: B. La Peare (geologist) P. Brucciani (") 4 5/6 days @ \$330/day	1,530.00 <u>1,593.00</u> \$ 3,123.90
Engineering, Supervision & Administration (pro-rated from Kitsault Project)	1,641.67
Support Costs (camp costs, expiditing, etc pro-rated from Kitsault Project)	1,783.11
Transportation & Communication (pro-rated from Kitsault Project)	458.47
Helicopter	3,790.18
Analyses	1,141.80
Report	2,357.32
Total Expenditures	<u>\$14,946.82</u>

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### CERTIFICATE OF QUALIFICATIONS

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

- I am a graduate of the University of British Columbia (1974) and hold a BSc. degree in geology.
- 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. The information contained in this report was obtained by supervision of the work done on the Westkit property and a review of the materials listed in the bibliography.
- 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 25th day of March, 1991.

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KERR, F.A.

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1948: Lower Stikine and Western Iskut Rivers Area, British Columbia. GSC Memoir No. 246.

MCMILLAN, W.J.

1990: British Columbia's Golden Triangle: Report on Iskut Field Conference. Geoscience Can. Vol. 17, No. 1, p. 25-28.

# APPENDIX I

# ROCK SAMPLE DESCRIPTIONS

### APPENDIX I

-11-15

# ROCK SAMPLE DESCRIPTIONS

SAMPLE NO.	DESCRIPTION	ANALYSIS	(ppb	Au)
36751	<ul> <li>Intermediate volcanic brecc:</li> <li>0.15 m wide quartz vein, minor limonite</li> </ul>	ia 15		
36752	<ul> <li>Intermediate tuff</li> <li>Medium grained, Sericitic + Argillic alteration, limonia jarosite.</li> </ul>			
36753	- Intermediate Tuff - Fine grained, proximal to s - $\leq$ 2% disseminated pyrite	5 hear.		
36754	<ul> <li>Intermediate Tuff</li> <li>Fine grained, associated with</li> <li>&lt; 4% disseminated Pyrite, </li> </ul>			
36755	- quartz vein - 0.5 m x 20 m, white, massive	<5 e		
36756	<ul> <li>Intermediate Tuff</li> <li>Qtz-carbonate vein in shear limonite + argillite + jaros + sericite alteration.</li> <li>3% pyrite</li> </ul>			
36757	- Quartz vein - Massive, 0.4 m x 100 m	<5		
36758	<ul> <li>Intermediate Tuff</li> <li>Medium grained, sheared; sericite + argillite</li> <li>+ limonite + jarosite alteration</li> </ul>	5 ation.		
36759	- Basalt - Quartz vein: 0.4 m x 20 m	5		
36760	<ul> <li>Intermediate volcanic</li> <li>Proximal to dyke, brecciated oxidized</li> </ul>	15 d,		
36761	<ul> <li>Sandstone;</li> <li>Medium grained, limonite &amp; alteration</li> <li>≤5% pyrite,trace arsenopyric</li> </ul>	-		
36762	- Shale (float) - Limonitic alteration	5		

SAMPLE NO.	DESCRIPTION	ANALYSIS (ppb Au)
36763	<ul> <li>Sandstone</li> <li>Quartz vein 0.8m x 50m, mino limonite</li> </ul>	or <5
36764	<ul> <li>Sandstone (float)</li> <li>Quartz vein 5 cm wide, minor limonite</li> </ul>	20 r
36765	<ul> <li>Siltstone</li> <li>Quartz vein, vuggy, minor limonite.</li> <li>≤ 5% pyrite, trace aspy</li> </ul>	10
36766	<ul> <li>Sandstone (float)</li> <li>Brecciated;limonite + jaros: alteration.</li> </ul>	<5 ite
36767	<ul> <li>Sandstone</li> <li>Brecciated; limonite &amp; jaros alteration.</li> </ul>	5 site
36768	<ul> <li>Subvolcanic (float)</li> <li>High limonite, moderate argain</li> <li>alteration.</li> </ul>	230 illic
36769	- Quartz vein float - Moderate limonite alteration	5 n
36770	- Volcaniclastic - <u>&lt;</u> 20 % pyrite	30
36771	<ul> <li>Volcaniclastic</li> <li>High sericite + Argillite</li> <li>+ limonite in shear.</li> <li>&lt; 20% pyrite</li> </ul>	0.039 oz/ton Au
36772	<ul> <li>Volcanoclastic</li> <li>Quartz, chlorite epidote ve</li> <li>8 cm x 1 m; in shear.</li> </ul>	15 in
36773	<ul> <li>Volcanoclastic</li> <li>Quartz + Calcite + Ankerite in fractures, gossan.</li> </ul>	<5
36774	- Quartz vein	<5

(ppb Au)

<5

- Quartz vein - 5 cm wide x 3 m long Quartz vein (float)
Moderate limonite alteration
≤ 1 % chalcopyrite 36775 <5

SAMPLE NO.	DESCRIPTION	ANALYSIS (ppb Au)
36776	<pre>- Shale(float) - Qtz vein - ≤ 1% pyrite</pre>	<5
36777	<ul> <li>Siltstone</li> <li>Quartz + calcite + ankerite</li> <li>vein 1m x 10 m</li> </ul>	200ppm Zn,<5ppb Au ∋
36778	<ul> <li>Quartz vein (float)</li> <li>Grey, fine grained, hematital</li> <li>alteration</li> </ul>	<5 te
36779	- Breccia tuff - Sub parallel veins, 5cm x 1	<5 1m.
36780	<ul> <li>Intermediate tuff</li> <li>Quartz vein 1m x 10m, limon</li> <li>+ sericite.</li> </ul>	400ppm Zn,5 ppb nite
36781	<ul> <li>Quartz vein</li> <li>ankerite staining, minor</li> <li>limonite alteration</li> </ul>	<5
36782	- Quartz vein - 10m long x 25 cm wide	<5
36801	<ul> <li>Intermediate Volcanic</li> <li>Minor sericite alteration, moderate to highly fractured</li> <li>≤ 1% disseminated pyrite</li> </ul>	<5
36802	- Intermediate Volcanic - Barren qtz vein	<5
36803	- Sandstone - Minor chlortic alteration	5
36804	<ul> <li>Intermediate Porphyritic</li> <li>Volcanic</li> <li>Silicified, possible fault</li> </ul>	<5
36805	- Mudstone - Oxidized, highly fractured	<5
36806	- Mudstone - Oxidized, qtz/vein	5

SAMPLE NO.	DESCRIPTION	ANALYSIS (ppb Au)
36807	<ul> <li>Intermediate Porphyritic Volcanic</li> <li>Weathered oxidized surface</li> <li>≤ 1 % pyrite</li> </ul>	<5
36808	<ul> <li>Intermediate Porphyritic</li> <li>Volcanic</li> <li>Qtz. vein, 4 cm wide</li> </ul>	<5
36809	<ul> <li>Intermediate Volcanic</li> <li>Massive flow silicified</li> </ul>	<5
36810	- Intermediate Volcanic - Massive flow sillicified qt	<5 z vein
36811	<ul> <li>Intermeidate Volcanic</li> <li>Horizontal qtz vein, epidot</li> <li>+ chlorite + hematite alter</li> </ul>	
36812	- Intermediate Volcanic - Bullish white qtz vein	<5
36813	- Intermediate Volcanic - Qtz stringers	<5
36814	<ul> <li>Mafic Subvolcanic</li> <li>Medium grained, dark green</li> <li>2% disseminated cubic pyr</li> </ul>	<5 ite
36815	- Intermediate Volcanic - Oxidized shear	<5

APPENDIX II

ASSAY CERTIFICATES

4, 15	45			2 - SASKA	ATORIES CHNICAL ENTERPRISES LIMITED 302 - 48th STREET, EAST TOON, SASKATCHEWAN S7K 6A4 033 FAX: (306) 242-4717
		CERTIFIC	ATE OF ANAL	YSIS	
n→10	SAMPLE(S) FROM	Orequest Consultan 306-595 Howe Stree Vancouver, B.C. V6C 2T5			REPORT No. S1082
	SAMPLE(S) OF RO	ck		INVOICE P.O.: R	#: 15616 2610
 400-44		B.R. LaPeare Project WESTKIT			
-49 (18-1-					
		Au ppb			
475 A	36801 36802 36803 36804 36805	<5 <5 5 <5 <5			
	36806 36807 36808 36809 36810	5 <5 <5 <5 <5			
	36811 36812 36813 36814 36815	<5 <5 <5 <5 <5 <5			
e17ma	36761 36762 36763 36764 36765	10 5 <5 20 <5			
¢		O: B. Dewonck, J.			
140-	Sep 25/90	-	SIGNED	Bernie Ourn	[

For enquiries on this report, please contact Customer Service Department. Samples, Pulps and Rejects discarded two months from the date of this report. Page 1 of 2

			2 - 302 - 48th STREET, SASKATOON, SASKATCHE S7 (306) 931-1033 FAX: (306) 242
		CERTIFICATE OF AN	IALYSIS
SAMPLE(S) FROM		Consultants Ltd. Howe Street r, B.C.	REPORT No. S1082
SAMPLE(S) OF RO	ck		INVOICE #: 15616 P.O.: R2610
	B.R. LaPo Project N		
	Au ppb	Au ozt	
36766 36767 36768 36769	<5 5 230 5		
36770 36771 36772 36773 36774 36775	30 >1000 15 <5 <5 <5 <5	.039	
36776 36777 36778 36779 36780	<5 <5 <5 <5 <5 5		
36781 36782	<5 <5		
COPIES T INVOICE T		wonck, J. Chapman est - Vancouver	

Samples, Pulps and Rejects discarded two months from the date of this report.

2-302-46TH	STREET, SASKAT	DON, SASKATCHEWAN	57K 6A4
		(306) 931 - 1033 (306) 242 - 4717	
	THA #1	(306) 242 - 4717	

### I.C.A.P. PLASMA SCAN

Aqua-Regia Digestion

					Aqu	ua-Regia Die	gestion				
50A.	OREQUEST CONSUL 306 - 595 HOWE ( VANCOUVER. B.C.						T		e No. : *	6 - 1082 - 1 - 8138 5679	1
**	V6C 2T5 ATTN: B. DEWONCH	(, J.	CHAPMAN F	PROJECT: WES	TKIT R-24	510		ALL F	esults PPM		
iha	ELEMENT		36801	36802	36803	36804	36805	36806	36807	36808	36809
	Aluminum Iron	[A]] [Fe]	28000 48000	16000 29000	30000 57000	33000 46000	17000 <b>45</b> 000	14000 35000	1 <b>9</b> 000 <b>44</b> 000	16000 25000	15000 22000
	Calcium Magnesium	[Ca] [Mg]	5200 10000	2000 <b>75</b> 00	3000 11000	43000 10000	11000 5800	35000 6400	<b>4</b> 5000 9500	<b>4</b> 300 8200	10000 7500
-10 <b>7</b> .	Sodium Potassium Titusi	ENa] EK I	210 720	180 360	130 390	60 730	90 1700	60 1500	140 1600	110 420	130 1400
Nor.	Titanium Manganese Phosphorus	[Ti] [Mn] [P]	680 880 1 <b>4</b> 00	480 610 700	1000 800 940	75 920 1700	37 820 860	13 410 B10	24 790 2200	34 360 930	120 240 760
	Barium Chromium	[Ba] [Cr]	73 25	34 56	95 97	80 180	140 57	140 31	62 65	39 180	120 35
in.	Zirconium Copper	[Zr] [Cu]	15 76	7 17	19 63	11 150	10 66	7 190	11 150	5 47	4 53
-	Nickel Lead	[Ni] [Pb]	11 12	5 9	21 10	92 7	96 6	77 15	93 4	51 B	29 11
	Zinc Vanadium Strontium	[Zn] [V]] [Sr]	75 200 27	42 110 10	77 190 15	71 130 130	78 43 22	99 27 120	56 66 260	53 82	71 25
~	Cobalt Molybdenum	[Co]	14 ( 2	6 < 2	13 26 < 2	150 16 < 2	20 < 2	26 〈 2	200 16 < 2	17 10 < 2	58 B < 2
nu.	Silver Cadmium	[Ag] [Cd]	< 1 < 1	< 1 < 1	< 1 < 1	$\langle 1 \\ \langle 1 \rangle$	< 1 < 1	< 1 < 1	< 1 < 1	< 1 < 1	< 1 < 1
	Beryllium Baran Antimony	[Be] [B ] [Sb]	< 1 < 10 20	< 1 < 10 < 5	< 1 < 10	< 1 < 10	< 1 < 10	< 1 < 10	< 1 < 10	< 1 < 10	< 1 < 10
-	Yttrium Scandium	[30] [Y] [Sc]	20 8 15	× 0 4 6	10 7 18	10 9 6	5 10 9	5 7 5	10 11 9	< 5 4 4	5 5 2
	Tungsten Niobium	[W] [Nb]	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10
	Thorium Arsenic Bissuth	[Th] [As]	60 90	20 55	50 35 26	30 45	20 55	30 55	40 140	< 10 25	30 25
~	Bismuth Tin Lithium	[Bi] [Sn] [Li]	20 < 10 65	10 < 10 30	25 < 10 15	< 5 < 10 80	< 5 < 10 30	< 5 < 10 30	< 5 < 10 30	10 < 10 30	5 < 10 20
-	Holmium	[Ho]	< 10	< 10	< 10	10	< 10	< 10	< 10	< 10	< 10

DATE : OCT-01-1990

SIGNED : Bernie Dunn

2-302-48TH	STREET, SASKAT	DON, SASKATCHEWAN	S7K 6A4	
	TELEPHONE #:	(306) 931 - 1033		
	FAX #:	(306) 242 - 4717		

### I.C.A.P. PLASMA SCAN

Aqua-Regia Digestion

ANCOUVER, B.C. MGC 2T5	TREET						S.L. Fil S.L. Invoic		6E27MA 15679	
TTN: B. DEWONCK	, Ј. СНАРМИ	W	PROJECT: WES	TKIT	R-2610		ALL R	ESULTS PPM		
ELEMENT		36810	36811	36812	36813	36814	36815	36761	36762	36763
Aluminum	[A]]	4400	6000	12000	20000	17000	12000	<b>45</b> 00	20000	3200
	[Fe]	8200	11000	23000	43000	22000	33000	39000	36000	7200
Calcium	[Ca]	28000	5000	2300	11000	34000	11000	1600	2900	2600
Magnesium	(Mal	3200	4600	5900	8200	5900	4000	1500	7500	1400
Sodium	[Na]	40	300	100	1000	830	100	60	90	50
	EK 1	580	300	540	470	1200	1900	2300	1600	160
Titanium	[Ti]	12	820	860	1900	1100	47	17	500	400
	[Mn]	440	270	490	670	560	560	85	320	280
Phosphorus	[P]	200	460	320	1600	750	930	960	1200	140
	[Ba]	46	17	23	58	180	87	47	120	20
	[Cr]	100	69	71	68	42	13	21	27	130
Zirconium	[][]	2	4	7	13	8	6	5	7	2
••	[Cu]	28	6	16	28	14	19	7	59	6
	ENi]	12	4	2	18	4	5	2	16	6 3
Lead	CP63	9	5	18	11	11	2	5	14	5 8
Zinc	[Zn]	42	33	46	91	97	65	10	52	8
Vanadium	(V)	6	18	28	93	62	22	9	63	17
Strontium	[Sr]	190	120	12	59	120	i7	9	13	4
Cobalt	[Co]	3	7	5	16	9	15	7	6	2
Molybdenum	(Mo]	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Silver	[Ag]	< 1	< 1	< 1	< i	< 1	< 1	< 1	< 1	< i
	[[4]	< 1	< 1	< 1	< i	< 1	< 1	< 1	< 1	< 1
Beryllium	[Be]	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Boron	(B ]	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	220
	[56]	< 5	< 5	< 5	5	5	< 5	< 5	< 5	< 5
	[Y]]	3	2	4	8	7	8	3	. 8	< <b>1</b>
Scandium	[Sc]	< 1	1	3	4	3	5	1	5	1
	[₩]	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-	[Nb]	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	[Th]	< 10	10	20	40	20	30	10	30	< 10
	[As]	20	15	10	15	15	15	30	15	< 5
	[Bi]	< 5	< 5	5	10	< 5	< 5	< 5	10	< 5
	[Sn]	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	[Li]	5	< 5	· 10 15	10	25	10	< 5	35	< 5

DATE : OCT-01-1990

SIGNED : Bernie Punn

2-302-48TH	STREET, SASKATO	JON, SASKATCHEWAN	S7K 6A4
		(306) 931 - 1033 (306) 242 - 4717	

# I.C.A.P. PLASMA SCAN

Aqua-Regia Digestion

OREQUEST CONSUL 306 - 595 HOWE ( VANCOUVER, B.C. V&C 2T5							Na.:		1
ATTN: B. DEWONC	(, J. CHAPMAN	PROJECT:	WESTKIT	R-2610		ALL REE	JULTS PF	M	
ELEMENT	36	764 3670	55 36766	36767	36768	36769	36770	36771	36772
Aluminum Iron Calcium	[Fe] 11	100 15( )00 43( 340 3(	0 14000	3700 22000 1000	6800 42000 860	1000 8500 1500	9100 64000 1300	4900 56000 7200	6100 22000 <b>4</b> 2000
Magnesium Sodium Potassium	[Na] [K] 1	250 18	<b>10 80</b> 10 750	1400 150 470	<b>43</b> 00 370 <b>1</b> 500	420 70 330	2200 120 1900	1000 80 2000	3200 10 430
Titanium Manganese Phosphorus Barium		570 33 260 5	46 9 30 820 38 440 .0 57	9 890 400 57	12 87 960 82	6 210 140 20	20 480 860 1000	9 330 930 130	7 1700 120 89
	[[7]]	15 15 2 15		57 93 3 6	38 6 21	140 1 6	1000 35 8 26	49 6 7	87 89 3 10
	(Ni] (Pb] [Zn]	B 5	5 30 4 3 5 14	30 3 17	4 2 5	9 4 14	3 13 18	2 39 11	4 4 42
Vanadium	(V ) (Sr) (Co)	1B 5 4	6 9 2 33 1 5	13 8 7	22 15 4	6 5 2	22 45 8	20 16 9	13 150 6
Molybdenum Silver	[Mo] ( [Ag] (		4 < 2 1 < 1	< 2 < 1 < 1	30 < 1 < 1	2 〈 1 〈 1	2 < 1 < 1	< 2	2 < 1 < 1
Beryllium Boron Antimony	[Be] <	1 < 10 < 1 10 < 2	$\begin{array}{ccc} 1 & < 1 \\ 0 & < 10 \end{array}$	<pre>&lt; 1 &lt; 10 &lt; 5 5</pre>	<pre> &lt; 1 &lt; 10 5 2</pre>	< 1 < 10 240 < 1	< 1 < 10 25 6	<pre> &lt; 1 &lt; 10 10 5 </pre>	<pre>&lt; 1 &lt; 10 &lt; 5 5</pre>
Tungsten Niobium Thorium	END3 < ETh3 <	10 < 1 10 < 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4 < 10 < 10 < 10	1 ← 10 ← 10 20	<pre> { 1     10     &lt; 10     &lt; 10     &lt; 10</pre>	$\begin{array}{c} & 2 \\ \langle & 10 \\ \langle & 10 \\ & 20 \end{array}$	2 < 10 < 10 10	$\langle 1 \\ \langle 10 \\ \langle 10 \\ \langle 10 \\ \langle 10 \rangle$
Arsenic Bismuth Tin Lithium	[As] [Bi] < [Sn] < [Li] <	5 < 10 < 1	5 45 5 < 5 0 < 10 5 < 5	45 < 5 < 10 < 5	5 < 5 < 10 < 5	10 < 5 < 10 < 5	55 < 5 < 10 < 5	15 < 5 < 10 < 5	5 < 5 < 10 < 5

DATE : OCT-01-1990

dina.

SIGNED : Bernie Um

2-302-48TH STREET, SASKATOON, SASKATCHEWAN 57K 6A4 TELEPHONE #: (306) 931 - 1033 FAX #: (306) 242 - 4717

### I.C.A.P. PLASMA SCAN

Aqua-Regia Digestion

~	OREQUEST CONSUL 306 - 595 HOWE : VANCOUVER, B.C. V6C 215		TD.				T		le No. :		4
Ð	ATTN: B. DEWONC	<, J. C	Hapman	PROJECT: WES	STKLT	R-2610		ALL F	RESULTS PPM	ŧ	
-	ELEMENT		36773	36774	36775	36776	36777	36778	36779	36780	36781
87.	Aluminum Iron Calcium Maonesium	[A]] [Fe] [Ca] [Mg]	4100 38000 44000 5300	950 5600 2700 <b>4</b> 90	920 5600 3200 430	1500 8600 85000 1900	440 10000 86000 2000	210 3100 22000 220	1900 7300 6000 980	17000 31000 13000 8300	4800 12000 880 2400
<b>6</b> 3	Sodium Potassium Titanium	ENa] EK ] ETi]	200 1600 5	70 260 5	40 350 6	30 230 < 1	< 10 110 < 1	20 60 4	30 400 4	120 570 490	40 460 28
en.	Manganese Phosphorus Barium Chromium	[Mn] [P ] [Ba] [Cr]	1600 970 510 42	840 110 46 190	190 84 27 150	1500 ≺ 2 20 <b>4</b> 8	720 〈 2 38 38	740 16 47 210	520 98 42 120	1900 360 99 150	260 170 16 130
-	Zirconium Copper Nickel Lead	(Zr] (Cu] (Ni] (Pb]	7 8 1 4	1 5 5 < 1	< 1 87 3 2	1 5 4 < 1	2 4 2	<pre>&lt; 1 5 5 2</pre>	2 5 4 20	9 58 24 93	2 3 5 5
~	Zinc Vanadium Strontium	[Zn] [V] [Sr]	76 20 170	13 4 11	8 3 20	9 3 1600	200 2 1700	14 2 95	23 3 37	400 67 34	. 31 10 4
~	Cobalt Molybdenum Silver Cadmium	[Co] [Mo] [Ag] [Cd]	10 < 2 < 1 < 1	2 4 < 1 < 1	2 < 2 < 1 < 1	< 1 < 2 < 1 < 1	<pre>&lt; 1 &lt; 2 &lt; 1 &lt; 1 </pre>	< 1 6 < 1 < 1	4 〈 2 〈 1 〈 1	12 < 2 < 1 1	3 < 2 < 1 < 1
~	Beryllium Baron Antimony	[Be] (B ] (Sb]	< 1 20 5	< 1 < 10 < 5	<pre> &lt; 1 &lt; 10 &lt; 5 </pre>	$\begin{pmatrix} & 1 \\ & 10 \\ & & 5 \\ & & 5 \\ \end{pmatrix}$	<pre> &lt; 1 </pre> < 10    < 5		$\begin{pmatrix} < 1 \\ < 10 \\ < 5 \\ \end{bmatrix}$	< 1 < 10 5	<pre> &lt; 1 &lt; 10 &lt; 5 </pre>
kan,	Yttrium Scandium Tungsten Niobium	(Y ] [Sc] [W ] [N5]	11 4 < 10 < 10	2 < 1 < 10 < 10	<pre> &lt; 1 &lt; 1 20 &lt; 10 </pre>	13 1 < 10 < 10	$\begin{array}{ccc} 10 \\ < 1 \\ < 10 \\ < 10 \end{array}$	<pre> &lt; 1 &lt; 1 &lt; 10 &lt; 10 &lt; 10</pre>	2	7 6 < 10 < 10	1 < 1 < 10 < 10
51	Thorium Arsenic Bismuth	[Th] [As] [Bi]	30 < 5 < 5	<pre>&lt; 10 &lt; 5 &lt; 5</pre>	<ul> <li>10</li> <li>5</li> <li>5</li> </ul>	<pre>&lt; 10 &lt; 10 &lt; 5 &lt; 5 &lt; 5</pre>	$\langle 10 \\ \langle 10 \\ \langle 5 \\ \langle 5 \\ \langle 5 \rangle$	$\begin{array}{c} 10\\ \langle 10\\ \langle 5\\ \langle 5\\ \langle 5\end{array}$	< 10 < 10 10 < 5	20 20 30 5	< 10 < 10 < 5
	Tin Lithium Holmium	[Sn] [Li] [Ho]	< 10 < 5 < 10	< 10 < 5 < 10	< 10 < 5 < 10	<pre>&lt; 10 &lt; 5 20</pre>	< 10 < 5 20	< 10 < 5 < 10	< 10 < 5 < 10	< 10 15 < 10	< 10 < 5 < 10

DATE : OCT-01-1990

SIGNED : \_ Bernie Pun

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2-302-48TH STREET, SASKATOON, SASKATCHEWAN S7K 6A4 TELEPHONE #: (306) 931 - 1033 FAX #: (306) 242 - 4717

### I.C.A.P. PLASMA SCAN

36782

Aqua-Regia Digestion

OREQUEST CONSULTANTS LTD.			T.S.L.	REPORT N	o. :	S - 1082 - 5
306 - 595 HOWE STREET			T.S.L.	File N	o. :	SE27MA
VANCOUVER, B.C.			T.S.L. 1	Invoice N	0.:	15679
V6C 2T5						
ATTN: B. DEWONCK, J. CHAPMAN	PROJECT: WESTKIT	R-2610		ALL RESUL	TS PP	H

ELEMENT

Aluminum	[A]]	950
Iron	{Fel	3900
Calcium	[Ca]	500
Magnesium	[Mg]	460
Sodium	[Na]	40
Potassium	(K. 1	160
Titanium	{Ti]	9
Manganese	[Mn ]	110
Phosphoru	s (P )	36
Barium	[Ba]	6
Chromium	[Cr]	190
Zirconium	[Zr]	1
Соррег	(Ըս)	4
Nickel	[Ni]	4
Lead	[Pb]	2
Zinc	[Zn]	6
Vanadium	[V ]	2 3
Strontium	[Sr]	3
Cobalt	[Co]	< 1
Molybdenu	a [Mo]	4
Silver	[Ag]	< 1
Cadmium	[Cd]	< 1
Beryllium	[Be]	< 1
Baron	[B]	< 10
Antimony	[66]	< 5
Yttrium	EY 3	< 1
Scandium	[Sc]	< 1
Tungsten	[W]	< 10
Niobium	[Nb]	< 10
Thorium	[Th]	< 10
Arsenic	[As]	45
Bismuth	[Bi]	< 5
Tin	[Sn]	< 10
Lithium	[Li]	< 5
Holmium	[Ho]	< i0

DATE : OCT-01-1990

SIGNED : Bernie Dunn

	-	TSL LABORATORIES DIV. BURGENER TECHNICAL ENTERPRISES LIMITED 2 - 302 - 48th STREET, EAST
		SASKATOON, SASKATCHEWAN S7K 6A4 (306) 931-1033 FAX: (306) 242-4717
m.	CERTIFICATE OF ANAL	YSIS
SAMPLE(S) FROM	OreQuest Consultants Ltd. 306 - 595 Howe Street Vancouver, B.C. V6C 2T5	REPORT No. S1057
SAMPLE(S) OF RO	ock	INVOICE #: 15559 P.O.: R2576
	P. Brucciani Project WESTKIT	
-	Au ppb	
- 36751 36752 36753 36754 36755	15 5 5 5 <5	
36756 36757 36758 36759 36760	5 <sup>*</sup> <5 5 5 15	
æ.		
<del>م</del>		
~		

COPIES TO: B. Dewonck, J. Chapman INVOICE TO: OreQuest - Vancouver

Sep 21/90

mis Pilmin SIGNED

For enquiries on this report, please contact Customer Service Department. Samples, Pulps and Rejects discarded two months from the date of this report. Page 1 of 1

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2-302-48TH STREET, SASKATOON, SASKATCHEWAN S7K 6A4 TELEPHONE #: (306) 931 - 1033 FAX #: (306) 242 - 4717

### I.C.A.P. PLASMA SCAN

Aqua-Regia Digestion

OREQUEST CONSULTANTS L 304 - 595 HOWE STREET VANCOUVER, B.C. V6C 215	.TD.					T.S.L. T.S.L. T.S.L.	File	No. : 5 - No. : M - No. : 156	8120	
ATTN: B. DEWONCK, J.	Chapman	PROJECT:	WESTKIT	R-2576			ALL RESU	ILTS PPM		
ELEMENT	36751	36 <b>7</b> 52	36753	36754	36755	36756	36757	36758	36759	36760
Aluminum [Al]	1900	7700	4700	9100	8300	1400	740	<b>88</b> 00	2400	5300
Iran [Fe]	5600	48000	60000	50000	30000	8900	3200	57000	7100	36000
Calcium (Ca)	900	1300	1200	2100	71000	1500	2400	12000	1100	3300
Magnesium [Mg]	1500	2400	2300	4600	6400	990	730	4800	1700	2500
Sodium [Na]	150	140	340	260	50	130	60	220	90	410
Potassium [K]	190	3100	640	2100	710	250	80	1400	150	1700
Titanium [Ti]	110	1200	1600	1400	110	210	20	970	190	1400
Manganese [Mn]	96	71	110	130	1400	60	120	410	96	110
Phosphorus [P]	170	1100	960	1300	330	140	60	1400	150	1300
Barium [Ba]	740	170	84	43	60	67	34	11	620	66
Chromium [Cr]	120	57	35	22	22	120	9 <b>9</b>	23	100	44
Zirconium [Zr]	2	19	16	16	7	2	< 1	15	2	13
Copper [Cu]	24	29	56	52	26	10	29	93	7	73
Nickel [Ni]	7	1	3	3	4	3	3	2	2	2
Lead [Pb]	5	19	16	7	3	3	21	13	3	11
Zinc [Zn]	9	5	16	11	19	4	4	71	10	22
Vanadium [V]	19	72	160	100	32	21	6	74	19	100
Strontium [Sr]	11	11	16	14	220	7	8	38	9	21
Cobalt [Co]	3	< 1	8	6	7	2	< 1	14	3	6
Molybdenum (Mo)	< 2	4	< 2	< 2	< 2	< 2	4	< 2	< 2	4
Silver [Ag]	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cadmium [Cd]	< i	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< ī	< i
Beryllium (Be]	< 1	< 1	< i	$\langle 1 \rangle$	< 1	< 1	< 1	< 1	< 1	< 1
Boron [B]	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Antimony [Sb]	10	< 5	< 5	< 5	5	< 5	< 5	< 5	< 5	< 5
Yttrium [Y]	< 1	5	4	4	6	< 1	< 1	7	< 1	4
Scandium [Sc]	<u>i</u>	20	10	10	6	2	< 1	8	2	5
Tungsten (W )	< 10	< 10	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Niobium [Nb]	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Thorium [Th]	< 10	20	10	40	40	< 10	< 10	40	< 10	60
Arsenic [As]	15	. 15	20	25	15	< 5	5	35	5	25
Bismuth [Bi]	10	Κ 5	< 5	< 5	15	10	15	< 5	15	< 5
Tin [Sn]	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Lithium [Li]	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Holmium [Ho]	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

DATE : SEP-26-1990

SIGNED : Bernie Dunn

		TSL LABORATORIES DIV. BURGENER TECHNICAL ENTERPRISES LIMITE
		2 - 302 - 48th STREET, EAS SASKATOON, SASKATCHEWAI S7K 6A
		(306) 931-1033 FAX: (306) 242-471
	CERTIFICATE OF ANA	LYSIS
SAMPLE(S) FROM	Orequest Consultants Ltd. 306-595 Howe Street Vancouver, B.C. V6C 2T5	REPORT No. S1113
SAMPLE(S) OF Si	lt	INVOICE #: 15632 P.O.: R2612
****	B.P. LaPeare Project WESTKIT	
	Au ppb	
WK 301 WK 302	<5 5	
WK 303	<5	
WK 304 WK 347	5 5	
WK 348 WK 349	20 10	
WK 349 WK 350	15	

COPIES TO: B. Dewonck, J. Chapman INVOICE TO: Orequest - Vancouver

Sep 26/90

WK 351

WK 352

<5

5

SIGNED

Burne U. Page 1 of 1

For enquiries on this report, please contact Customer Service Department. Samples, Pulps and Rejects discarded two months from the date of this report.

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2-302-48TH STREET, SASKATOON, SASKATCHEWAN S7K 6A4 TELEPHONE #: (306) 931 - 1033 FAX #: (306) 242 - 4717

## I.C.A.P. PLASMA SCAN

Aqua-Regia Digestion

)6	QUEST CONSULT - 595 HOWE & COUVER, B.C. 2T5		TD.					T.S.L. T.S.L. T.S.L.	File	No.: S - No.: M - No.: 157	8164	
TN: B. DEWONCK, J. CHAPMAN PROJECT: WESTKIT R-2612					ALL RESULTS PPM							
~	BLBMBNT		WK 301	WK 302	WK 303	WK 304	WK 347	WK 348	WK 349	WK 350	WK 351	WK 352
~	Aluminum	[A1]	12000	14000	15000	18000	21000	17000	14000	14000	19000	19000
	Iron	[Fe]	28000	31000	32000	37000	41000	36000	32000	32000	34000	37000
	Calcium	[Ca]	10000	4800	2400	3600	4400	12000	3700	3500	3300	4200
	Nagnesium	[Mg]	5300	5600	4900	6300	6300	6400	5800	5900	6300	6000
	Sodium Potassium Titanium Manganaga	[Na] [K] [T1]	130 410 230 520	150 480 230 700	80 820 98	80 450 110 690	80 1000 31	80 490 360	50 520 200	50 490 210 710	80 550 210	90 820 100
	Manganese Phosphorus Barium Chromium	[Mn] [P] [Ba] [Cr]	960 960 80 27	960 110 32	1200 670 120 16	1100 87 51	1400 920 160 20	650 1100 110 42	730 810 74 13	710 740 73 12	840 920 80 65	1300 1100 110 50
l	Zirconium	[Zr]	5	5	3	7	6	7	6	6	4	6
	Copper	[Cu]	63	62	23	72	88	74	50	53	66	120
	Nickel	[N1]	25	28	11	38	22	30	11	11	56	65
	Lead	[Pb]	9	10	15	9	12	10	19	19	13	19
	Zinc	[Zn]	68	71	77	69	85	71	86	79	76	88
	Vanadium	[V]	61	69	40	87	77	90	61	63	78	70
	Strontium	[Sr]	63	36	16	20	23	49	29	29	19	33
	Cobalt	[Co]	10	13	11	14	18	14	12	12	15	21
	Molybdenum	[Mo]	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	Silver	[Ag]	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	Cadmium Beryllium Boron	[Cd] [Be] [B]	< 1 < 1 < 10 < 5	1 < 1 < 10	< 1 < 1 < 10 < 5	< 1 < 1 < 10 < 5	< 1 < 1 < 10					
	Antimony	[Sb]	< 5	< 5	< 5	< 5	< 5	< 5	5	< 5	< 5	< 5
	Yttrium	[Y]	8	8	7	9	12	8	8	8	9	12
	Scandium	[Sc]	5	6	4	7	8	7	6	6	5	6
	Tungsten	[W]	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
~	Niobium	[Nb]	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	Thorium	[Th]	30	30	60	30	50	30	40	30	20	30
	Arsenic	[As]	15	15	15	10	25	20	45	45	10	30
-	Bismuth	[B1]	10	< 5	< 5	5	5	10	< 5	< 5	< 5	5
	Tin	[Sn]	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	Lithium	[L1]	15	20	20	25	45	25	25	25	25	25
	Holmium	[Ho]	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

TE : OCT-01-1990

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SIGNED : Bernie Dun

# APPENDIX III

# ANALYTICAL PROCEDURES





DIVISION OF BURGENER TECHNICAL ENTERPRISES LIMITED 2 - 302 - 48th STREET, SASKATOON, SASKATCHEWAN S7K 6A4 (306) 931-1033 FAX: (306) 242-4717

OreQuest Cor 306 - 595 Ho Vancouver, E V6C 2T5		Jan.9/90								
	SAMPLE PREPARATION PROCEDURES Rock and Core									
	- Entire sample is crushed, riffled and the subsequent split is pulverized to -150 mesh.									
	and Silts Le is dried and sieved t	o -80 mesh.								
		ed, cupelled and the subsequent d in aqua rega. The solution e Atomic Absorption.								
Assay (	sequent dore' bead is acid solution. The go	fused, cupelled and the sub- parted with a dilute nitric ld obtained is rinsed with weighed on a microbalance.								
3 - Geochem	for $1 \ 1/2$ to 2 hours,	ested with 5mls of aqua rega then diluted with DI H20. I run on the Atomic Absorption.								
Assay Si	HNO3 for 1 hour in a c	ested with 15mls HCl plus 5mls covered beaker; diluted to 100mls ution is run on the Atomic								
4 – BASE Geocher	for $1 \ 1/2$ to $2$ hour	ligested with 5mls of aqua rega rs, then diluted with DI H20. Then run on the Atomic Absorption.								
Assay	HC1 plus 5mls HNO3,	taken to dryness with 15mls then redissolved with 5mls 100mls with DI H20. The solution c Absorption.								





DIVISION OF BURGENER TECHNICAL ENTERPRISES LIMITED 2 - 302 - 48th STREET, SASKATOON, SASKATCHEWAN S7K 6A4 306) 931-1033 FAX: (306) 242-4717

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5. ICAP Geochemical Analysis -

A lg subsample is digested with 5mls of aqua rega for 1 1/2 to 2 hours, then diluted with DI H2O. The solutions are then run on the ICAP.

6. Heavy Mineral Concentrates -

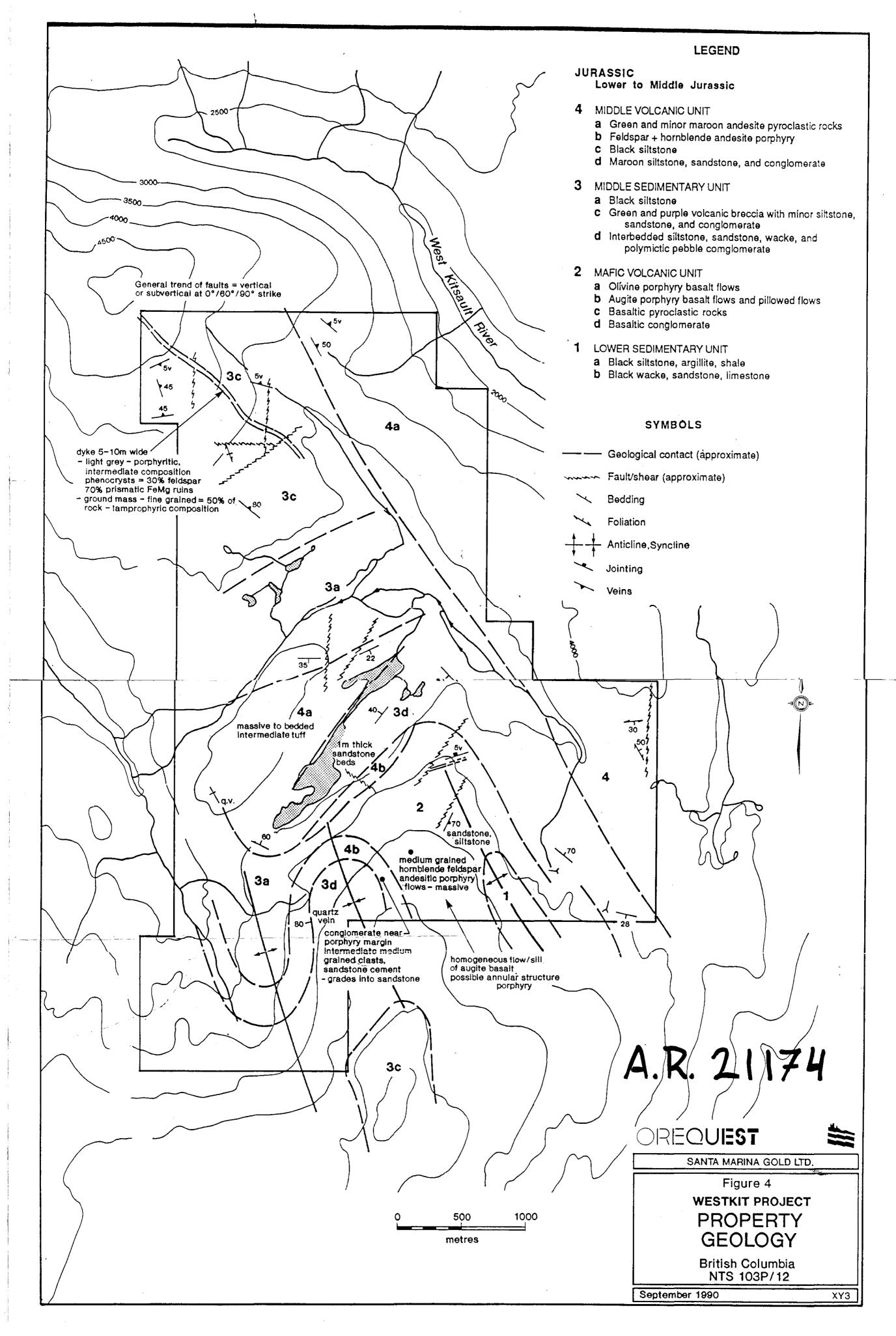
The sample is initially wet sieved through -1700 micron, then placed on a shaker table. A heavy liquid separation is performed, Methylene Iodide, (S.G. - 3.3); diluted to give a S.G. of 2.96. The heavies were then analyzed for Au by Fire Assay plus an ICAP Scan.

Yours truly,

Bernie Dunn

Bernie Dunn

BD/vh



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