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**WILLISON BAY PROJECT
PROSPECTING REPORT
ATLIN MINING DIVISION
BRITISH COLUMBIA**

NTS 104 M/1, M/8

LATITUDE 59° 14' N

LONGITUDE 134° 07' W

SUB-RECORDER RECEIVED
APR 6 1990
M.R. # \$.....
VANCOUVER, B.C.

By

B.E.K. AUGSTEN

For

PACIFIC SENTINEL GOLD CORP.

1020 - 800 West Pender Street
Vancouver, B.C.
V6C 2V6

FEBRUARY 1990

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

19,887

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WILLISON BAY PROSPECTING REPORT

1.0 INTRODUCTION

A short reconnaissance prospecting program was conducted on the Willison Bay property between September 13 - 17, 1989. It was hoped to establish a general 'feel' for the property and to determine exploration possibilities.

Three main areas were prospected (see Fig. 2): (a) The area near the West Bay of Torres Channel, directly north of the Laverdiere showings, in the vicinity of the Callaghan veins; (b) the southwest portion of the property, and (c) the southeast portion of the property from the eastern border down to Hoboe Creek where the 'Mussen' showing is located. In addition, the Noranda claims were briefly examined in order to understand the type of mineralization that may extend to either the north or south onto Pacific Sentinel's property. Time and weather did not permit prospecting of the separate block in the northwest, although it was examined from the air by helicopter and numerous gossanous structures were noticed. The total area of the claims prospected is 2800 Ha.

1.1 Location and Access

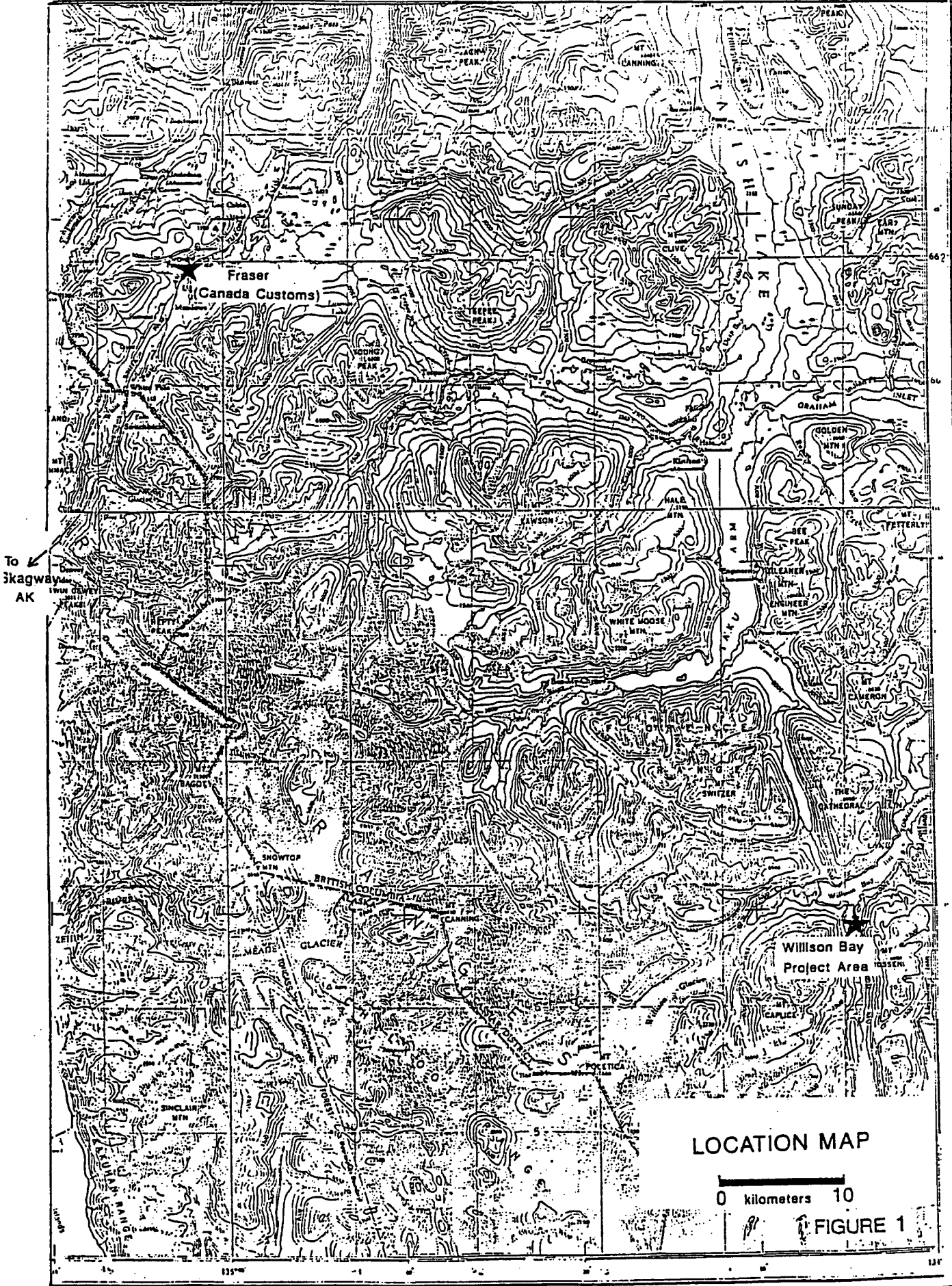
The easiest access to the property is by helicopter from Atlin. Access by water is also possible from Willison Bay to Atlin via the Torres Channel. Construction of land access would require a road around Willison Bay, with a link to the Whitehorse-Skagway Highway via Canada Customs at Fraser, B.C. on the White Pass - Yukon Railway (Fig. 1).

Hoboe Creek flows northward in a wide, flat, swampy valley and drains into Willison Bay. Relief in the area varies from 670 m at Hoboe Creek to 2,140 m on.

1.2 Property History

Exploration of the Laverdiere prospect by trenching and drifting methods began around 1900. Since that time, various groups have worked on the property in an

White Pass and Yukon
Railroad Route

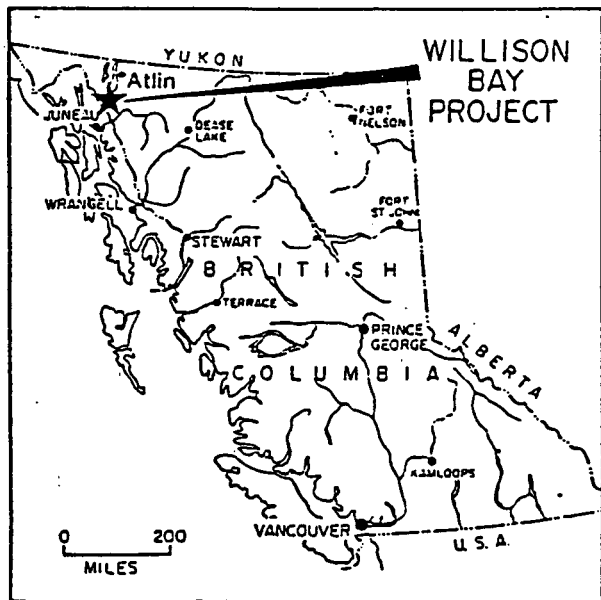
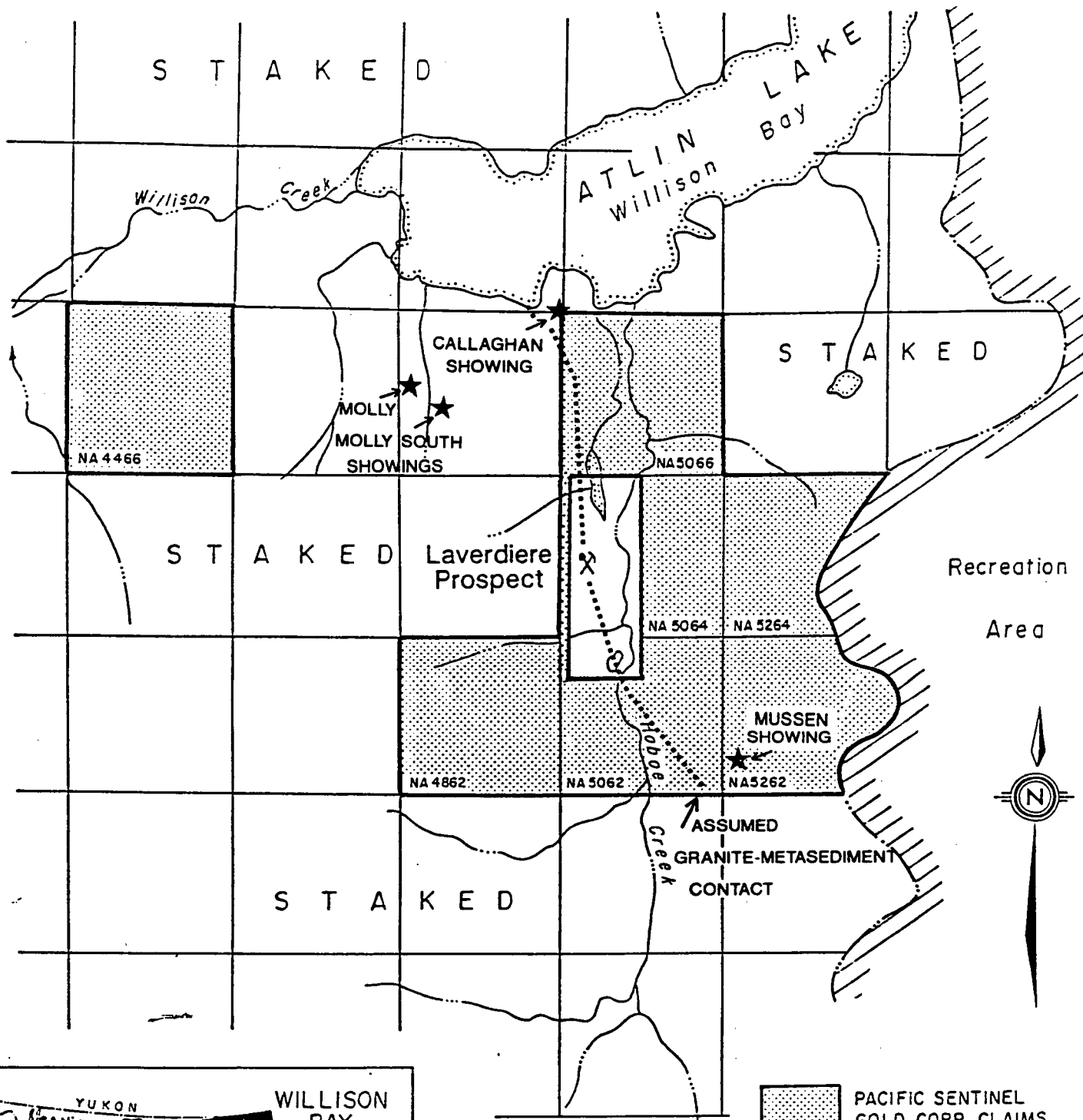


To Skagway
AK

LOCATION MAP

0 kilometers 10

FIGURE 1



PACIFIC SENTINEL GOLD CORP.		
WILLISON BAY PROJECT		
CLAIM MAP AND SHOWINGS		
ATLIN MINING DIVISION, B.C.		
DATE:	N.T.S.	FIGURE:
APRIL, 1989	104 M/8	2

attempt to prove up the economic grades and tonnage of both the high grade skarn and Cu, W, Mo porphyry-type mineralization styles that occur there.

The Callaghan showing, located north of the Laverdiere prospect and on the boundary of Pacific Sentinel's claim area (Fig. 2), displays skarn mineralization as well as two Au and Ag bearing quartz veins hosted in distorted schistose rocks.

The Mussen showing in the southeastern corner of the Willison Bay claim area consists of irregular quartz veins, with minor chalcopyrite and malachite, cross-cutting metasedimentary rocks.

1.3 Claim Status

The Willison Bay Project consists of 7 claims for a total of 112 units (see Fig. 2). The claims are owned 100% by Pacific Sentinel Gold Corp. The claims were awarded by lottery at the Vancouver Recording Office and, therefore, have no legal corner posts or marked boundaries.

Table 1

<u>Claim Number</u>	<u>Record No.</u>	<u>Units</u>	<u>Record Date</u>	<u>Expiry Date</u>
NA 4466	23	16	April 17, 1989	April 17, 1990
NA 4862	25	16	"	"
NA 5066	29	16	"	"
NA 5064	28	16	"	"
NA 5062	24	16	"	"
NA 5264	26	16	"	"
NA 5262	27	16	"	"

2.0 PROPERTY TRAVERSES

2.1 Northern Traverse

In the north portion of the property two prominent hills and the intervening ground were prospected in the hopes of finding the 'Callaghan' veins, in addition to new showings (see Figs. 2 and 3). In the very north portion, the large hill forming the

east side of West Bay consisted primarily of pyroxene-porphyritic volcanics, generally unmineralized although minor fracture-controlled malachite was observed. Subordinate quartz veining without visible sulphide was also observed. The Callaghan veins were never found, but probably occur very close to the shore of West Bay which would place them outside the limits of Pacific Sentinel's ground. The second prominent hill in the northern portion immediately east of a small lake and south of West Bay is comprised of a equigranular granodiorite to monzodiorite. It displays no economic mineralization, however, this may be a small satellitic stock intruded into sediments and volcanics represented by the surrounding low-lying areas, in which case the contact area becomes a possible exploration target. The intervening area between these two hills is predominantly drift-covered.

2.2 Southwestern Traverse

The entire southwestern portion (essentially block NA 4862) is underlain by an equigranular massive hornblende granodiorite. This unit is cut by fine-grained, light flesh-coloured to pink alaskite dykes varying in width from 3 cm to +15 cm.

In the vicinity of Sample #8801 (Fig. 3), the granodiorite has been moderately sheared and locally cut by iron-carbonate veins and veinlets. This alteration produces a visible gossan in this area. Further down this drainage (#8802 and #8803), iron-carbonate veining is accompanied by an 8 cm chalcopyrite-bearing quartz vein. The remainder of this drainage is underlain by unaltered granodiorite.

2.3 Eastern Traverse

This traverse covered the area from the south side of Mt. Mussen to the southern border of the property, and westward from there down the mountain to Hoboe Creek. Very minor sulphide mineralization was encountered. However, the geology in this area is extremely complex. There appears to be a very complex intrusive history in this region, especially in contrast to the western side of Hoboe Creek. In this area intrusive rocks include granite, diorite, plus an inordinate number of mafic to ultramafic rocks including coarse-grained pyroxenites with pyroxenes to 1 cm. These mafic to ultramafic rocks occur as plugs, stocks, and

dykes or sills. Where seen, these rocks are always magnetic but rarely carry sulphides.

In addition to intrusive rocks, minor sedimentary/volcanic rocks were found (#8807) emplaced between granite and diorite. This exposure was a fine-grained, layered rock with strong iron-carbonate alteration including both pervasive iron-carbonate and iron-carbonate as veinlets. This alteration has locally bleached the rock. Sulphides were not visible in this outcrop. This unit was easily accessible for about 30 m, however, another 100 m of goosan was visible on a very steep dip slope forming the back wall of a small cirque. It also strikes into an area of pyroxenites and other very mafic plugs. This area has not been prospected.

The Mussen showing, which is evidently located in the southeast corner of the property, was not found, but if plotted correctly this area is forested with much thick cover and is quite steep, so more prospecting would be needed to locate it.

3.0 RECOMMENDATIONS

The initial prospecting program was successful in defining several areas that require further work.

1. Skarn mineralization on Noranda's property could quite possibly strike onto Pacific Sentinel's ground both to the north and to the south. Glacial cover and the presence of marshes and small lakes prevents an adequate surface evaluation. Because the mineralization in the skarn includes massive magnetite and pyrrhotite, a surface magnetometer survey on Pacific Sentinel's ground to the north and south of Noranda's claim would be the best tool to evaluate this potential. As most of this area is swampy, winter would be the best time to carry out this survey. Some type of coincident electrical survey, such as VLF-EM, should also be conducted. At some point, mapping on a scale of 1:2500 to 1:5000 should also be done.
2. The entire eastern side of the property from the recreational area boundary westward to Hoboe Creek should be better prospected. Very little work

appears to have been done on this side in the past. The presence of iron-carbonate altered volcanics and/or sediments in close proximity to ultramafic rocks suggest the possibility of listwanite-hosted precious-metal deposits. In addition, possible quartz veining associated with ultramafics suggest Erickson-style lode-gold deposits. These are two possible directions to take when prospecting this side. Also, the Mussen showing should be found and evaluated more completely than has been done in the past.

3. The separate claim block in the northwest should be prospected and mapped. Potential exists there for porphyry-style molybdenum-copper mineralization.

APPENDIX I

SAMPLE DESCRIPTIONS WITH
GEOCHEMICAL DATA

Sample Description and Analysis Record

NTS: _____

 Project: Willison Bay

Claim: _____

 Geologist: S.E.K. AUGSTEN

Sample No.	Location	Type	Sample Description	Length	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
WB-8801	SW side of property. (See map) @ 1473m. elev.	O	- weakly sheared Fe-oxide-stained granodiorite \pm Fe. carb. alt'n (pers.) + minor qtz-Fe. carb. veining. - N.V.S. Tr. malachite.	—	105	1.4	3	138	335
WB-8802	" @ 1209m elev.	O	- sheared granodiorite cross-cut by numerous Fe. carb. veinlets 1% malachite staining on fractures. Tr. cpy. Close to a X-cutting qtz vn.	50cm	21	4.0	843	20	58
WB-8803	"	O	8cm wide qtz-carb. vein within a sheared granodiorite 1-2% diss py up to 2-3% c.g. cpy. vn. 090/85°	8cm	68	34.3	27293	1942	575
WB-8804	See map @ 840m. elev.	Si	light greenish grey silt	—	2	0.1	6	3	14
WB-8805	French Adit. (Dump)	Dump.	Mt-py-cpy \pm diopside skarn material. - Massive mt; up to 3% cpy.	Compos. Grab.	230	9.2	16396	31	537
WB-8806	French Adit	O	Mt-py-cpy skarn. skarnified sediments appear to be trending 020-030° and dipping 45-60° to the southeast	30cm.	460	18.7	40508	3	611
WB-8807	On east side of Hobbs CK. near top of ridge @ 1860m. elev.	O	Sheared Fe. carb.-alt'd (including Fe-carb veining) fine-grained green-coloured sediment/volcanic - N.V.S. - c.c. exposed for 130m ⁺ bd: 173/32°w	—	6	0.1	554	6	45
WB-8808	" @ 1760m. elev.	O	- narrow 10cm shear hosted by a c.g. pyroxene diorite that has a weak \rightarrow mod. gneissosity. Shear contains 1% diss. py + up to 0.5% diss. cpy	10cm.	22	0.6	2972	6	32

O-Outcrop

F-Float

V-Vein

So-Soil

T-Talus Fines

Si-Silt

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: P1 ROCK P2 SILT AU* ANALYSIS BY ACID LEACH/AA FROM 10 GR SAMPLE.

DATE RECEIVED: SEP 20 1989 DATE REPORT MAILED: *Sept 27/89* SIGNED BY: *C. Long* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Pacific Sentinel Gold Corp. File # 89-3789 Page 1

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Pt	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
WB 8801	1	3	138	335	1.4	7	9	697	2.25	1475	5	ND	11	127	7	2	2	28	4.51	.022	11	38	1.29	904	.01	20	.29	.01	.15	1	105
WB 8802	25	843	20	58	4.0	7	6	623	2.37	59	5	ND	24	113	1	2	2	35	2.44	.073	36	29	.90	344	.04	5	.56	.01	.20	7	21
WB 9803	270	27293	1942	545	34.3	7	17	2250	5.64	2320	7	ND	5	198	13	1055	464	16	7.91	.001	3	13	2.35	90	.01	5	.14	.01	.07	1	68
WB 8805	5	16369	31	537	9.2	24	78	1893	32.71	59	5	ND	4	4	3	2	21	24	.99	.011	2	41	5.71	32	.06	171	.56	.01	.01	1	230
WB 8806	1	40508	3	611	18.7	48	160	1221	32.32	65	7	ND	4	9	5	2	32	26	.56	.006	2	15	4.99	27	.05	156	.40	.01	.01	1	460
WB 3807	1	554	6	45	.1	88	26	1200	4.52	4	5	ND	3	68	1	2	2	146	12.62	.016	4	189	3.30	98	.01	9	3.58	.01	.01	2	6
WB 8808	1	2972	6	32	.6	24	30	210	2.99	3	5	ND	1	32	1	2	2	32	1.35	.050	2	2	.74	36	.03	4	2.12	.13	.03	1	22
STD C/AU-R	18	60	43	132	7.1	67	31	961	4.03	41	22	7	37	48	18	14	22	58	.49	.090	38	57	.88	172	.07	35	1.95	.06	.14	12	515

Assay in Progress

APPENDIX II

COST STATEMENT

**WILLISON BAY PROJECT
COST STATEMENT**

GEOLOGIST

Field	7 days @ \$275/day	\$ 1,925.00
Office	3 days @ \$275/day	<u>825.00</u>
	Subtotal	\$ 2,750.00

TRANSPORTATION

Helicopter & Fuel (6.1 hrs @ \$685/hour)	\$ 4,178.50	
Commercial (Van. to Whitehorse Rtn.)	689.20	
Truck Rental & Fuel	543.14	
Taxi	<u>17.00</u>	
	Subtotal	\$ 5,427.84

ROOM & BOARD

7 days @ \$100/day	\$ 700.00
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GEOCHEMICAL ANALYSIS & FREIGHT

5 Samples @ \$15/sample	\$ 120.00
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REPRODUCTION & DRAFTING SUPPLIES

Maps, Typing, Film and Developing	\$ 150.00
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CONSUMABLES

	<u>\$ 50.00</u>
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Subtotal	\$ 9,197.84
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10% Administration	<u>\$ 919.78</u>
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GRAND TOTAL	<u><u>\$10,117.62</u></u>
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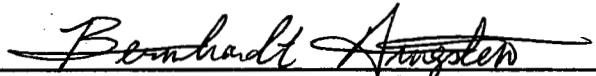
APPENDIX III

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, BERNHARDT E.K. AUGSTEN, of 214 - 144 West 4th Street, of the City of North Vancouver, British Columbia do hereby certify that:

1. I am currently employed as Senior Exploration Geologist by Continental Gold Corp. offices at 1020-800 W. Pender Street Vancouver, B.C.
2. I graduated from Carleton University in geology, having obtained my Honours Bachelor of Science in 1985.
3. I have worked in the field of mineral exploration in B.C., Manitoba, Ontario and Quebec.
4. The foregoing report is based on:
 - a. A study of all available company and government reports.
 - b. My examination of the property during the period September 13 to September 19, 1989.



Bernhardt E.K. Augsten, B.Sc.
Senior Exploration Geologist
CONTINENTAL GOLD CORP.

Vancouver, B.C.

ATLIN LAKE

WILLISON BAY

GOSSAN

CLAIM BOUNDARY

8805: 230; 9.2; 16,396
8806: 480; 18.7; 40,506

NORANDA

8804: 2; 0.1; 6

8802: 2; 4.0; 843
8803: 68; 34.3; 27,293

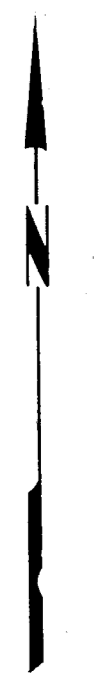
GOSSAN
8801: 105; 14; 3

MOUNT MUSSEN

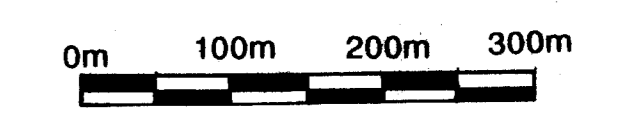
GOSSAN
8807: 6; 0.1; 554

8808: 22; 0.6; 2972

CLAIM BOUNDARY



SAMPLE LOCATIONS: Au,ppb; Ag,ppm; Cu,ppm



SCALE: 1:10,000

19887

PACIFIC SENTINEL GOLD CORP.

WILLISON BAY PROJECT
NORTHWEST BRITISH COLUMBIA
SAMPLE LOCATIONS
WITH Au, Ag, and Cu VALUES

DRAWN BY: G.J.D. NTS: 104M/1.8
DATE: APRIL 1990 FIGURE: 3