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GEOCHEMICAL REPORT ON THE DOME 1 CLAIM

Liard Mining Division NTS 104 I / 5E

Latitude: 58°27' North Longitude: 129°43' West

A Report prepared for

RECEIVED #307 - 475 Howe Street Vancouver, B.C. V6C 2B3

Gold Commissioner's Office

Ву

VANCOUVER, B.C. David St. C. Dunn, P. Geo. 2348 Palmerston Avenue West Vancouver, B.C. V7V 2W1

October, 1991

GEOLOGICAL BRANGIA ASSESSMENT REPORT

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INTRODUCTION

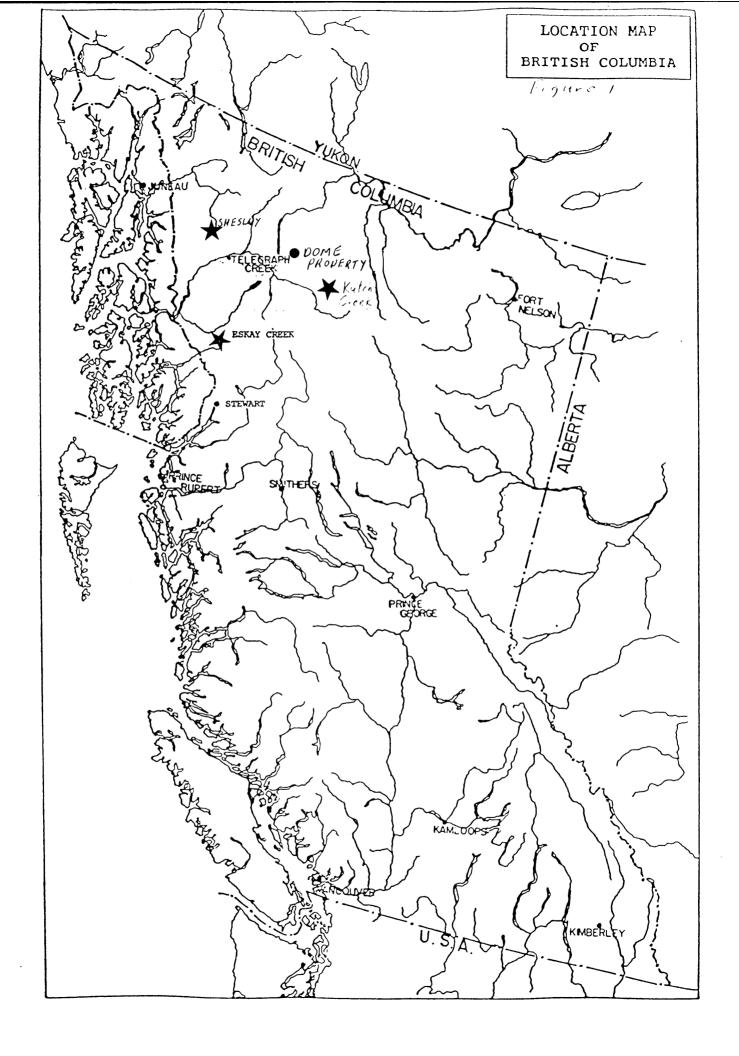
A two person crew carried out a geochemical sampling and prospecting program on the Dome 1 claim on August 23, 1991. The object of this program was to attempt to locate the source of the placer gold found in Dome and Goldpan Creeks (Johnston, 1925). Eleven silt, 11 pan concentrate, and five rock samples were taken. The Dome and Goldpan Creek area is recorded as a placer gold deposit, Minfile occurrence (104 I 2 and 86). Placer gold was discovered there in 1924 and has been worked intermittently since that time. There is no record of past hardrock work in the immediate area of the claim but Noranda carried out work on Squaw Creek three kilometres to the south in 1978 and 1987 (MacArthur, 1978, Ass. Rep. 6979, Maxwell, 1987, Ass. Rep. 15656). Noranda's work was targeted on Kutcho style VMS deposits. Some bedded chalcopyrite and sphalerite is present, but only surface geochemistry, geology and geophysics were carried out. The mineralization of interest is in a chlorite schist contained in a volcanic unit in the Inklin formation.

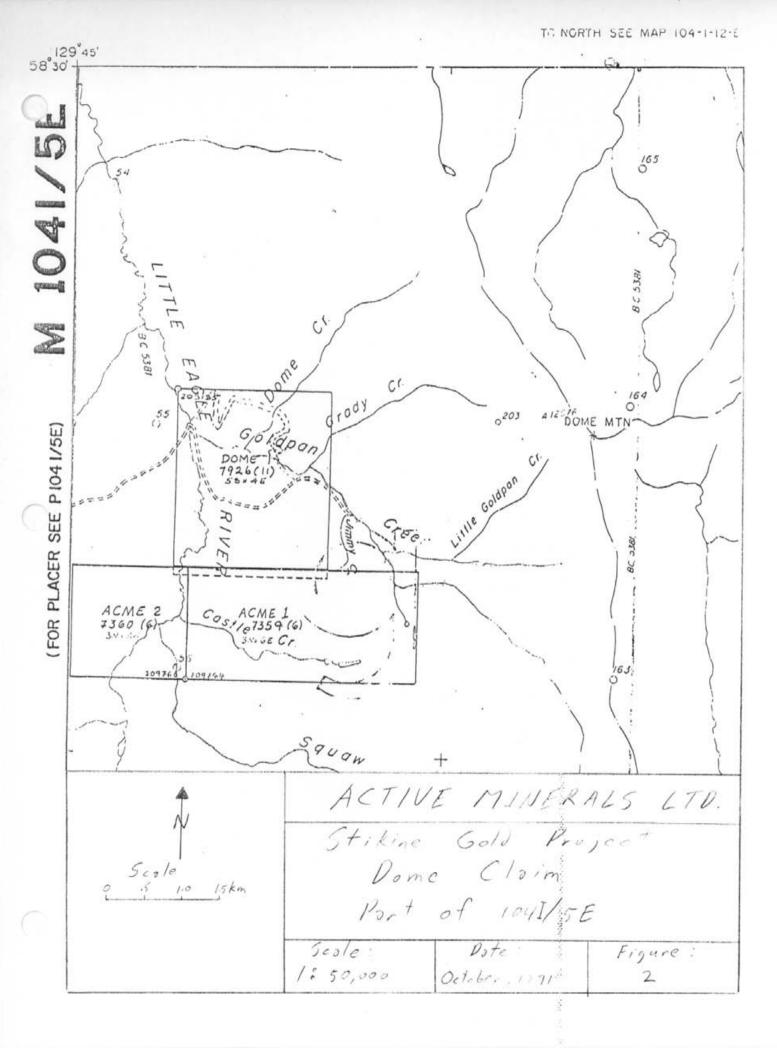
PROPERTY DEFINITION

The Dome property consists of one located mineral claim consisting of 20 units, the Dome 1, record number 7926. This claim is owned by Chris Graf and has an expiry date of 12/11/91.

LOCATION AND ACCESS

The Dome claim is located 17 km east of the town of Dease Lake (See Figures 1 & 2). The claim covers the lower parts of Dome, Grady and Gold pan creeks and 2.5 km of the Little Eagle





River. Access was achieved by helicopter set out from Dease Lake. Alternative access is possible by A.T.V. east from highway 37 at Dease Lake on a cat road that crosses the property.

TOPOGRAPHY AND VEGETATION

Topography is subdued with the exception of a moderately steep canyon on the lower one km of Goldpan Creek. Elevation ranges from 1160 m on the Little Eagle River to 1380 m on the west flank of Dome Mountain. Vegetation consists of mature sub-alpine spruce with considerable buck brush.

REGIONAL GEOLOGY

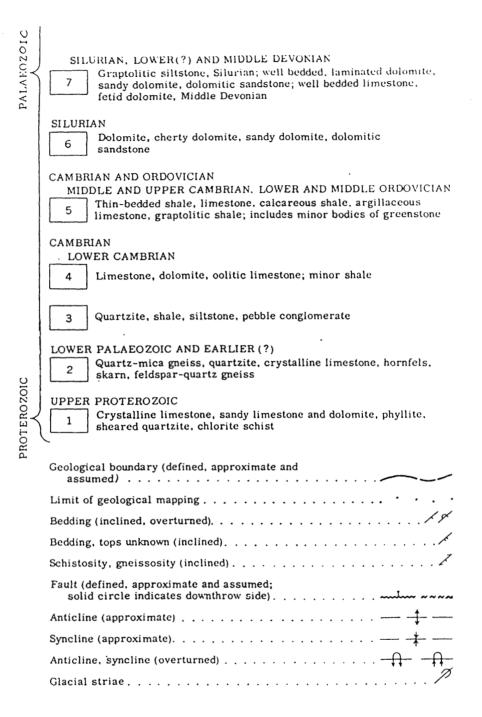
The Dome claim lies in the Intermontane Tectonic Belt approximately 20 km south west of its boundary with the Omineca Crystalline Belt. The claim overlies part of a fault bounded west north west trending Triassic Volcano-sedimentary package, the Sinwa and Inklin Formations. This package is composed mainly of phyllite and greywacke with minor limestone, conglomerate and andesite, and is bounded to the north by the Nahlin thrust fault and to the south by the King Salmon thrust fault.

PROPERTY GEOLOGY

The majority of the Dome claim is covered by glacial till, ranging from a few metres on upper Dome Creek to greater than 30 metres near the mouth of Goldpan Creek. The only exposures observed were in the upper part of Dome Creek and in Goldpan Creek. These outcrops consisted of interbedded greywacke and phyllite striking north west and dipping steeply

15a 153005 18 [19] , (8ā 15a 18 1500 18 14 50 18 17 8a D 18 Eaglehead 18 18 15a 18 83 /14 2 515a 18 8b 18 / 17 8a ----13 18 191:151:25 18 13 18 18 0 11 18 18 11 15) 18 19 11 18 15 15 11 11 SO MIN LOGACIAL ACTIVE MINICALS LID. Stikine Gold Project Dome Claim Regional Geology Port of 104 I - G.S.C Mop 29-1962 After Gobrielse et al Scale: Date: Figure: Scoley 6km 18250,000 October, 1991 3

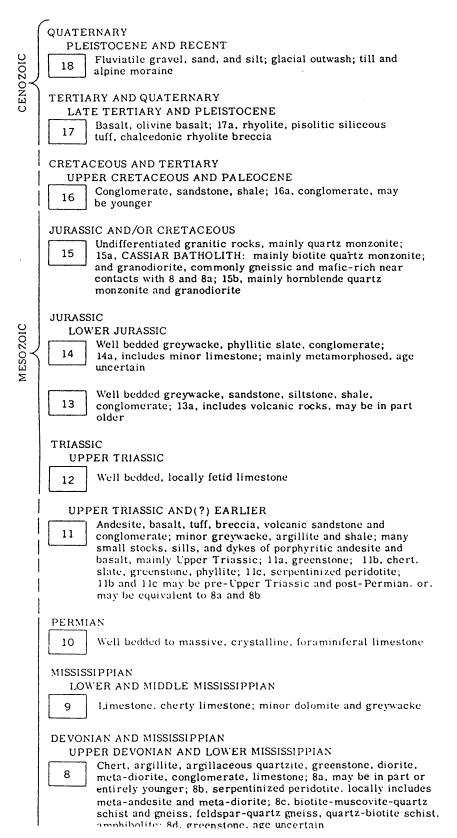
1:1:7-



Geology by H. Gabrielse, 1957, 1958, 1960, 1961 and by Officers of the Geological Survey of Canada, Operation Stikine, 1956

Base-map by the Army Survey Establishment, R. C. E., Department of National Defence, 1949-52

LEGEND



east. Occasional quartz stringers are present in the sediments. These stringers are erratic in width, the largest width observed being 60 cm. No mineralization was observed in the stringers and they appear to be sweat veins, a product of regional metamorphism.

Larger blocks of quartz, up to one metre in diameter, were observed in float below 1300 m elevation on Dome Creek and on Goldpan Creek below Dome Creek.

DISCUSSION OF 1991 FIELDWORK

The 1991 program consisted of taking paired pan concentrate and silt samples at 0.5 km intervals down Dome and Goldpan Creek. Eleven pan concentrate, eleven silt and five rock samples were taken.

Not enough samples were taken to set anomalous levels by statistical methods. Anomalous levels were set based on past work in the area and discussions with other geoscientists familiar with the region. Sampling Methodology and Analytical Methods are included in Appendices B and E, respectively.

Two silt samples were anomalous , one for gold (882 ppb) and one for silver (2.6 ppm). Six pan concentrate samples were anomalous in gold (236 - 4250 ppb) and one for silver (1.7 ppm).

None of the rock samples were anomalous in base or precious metals and none of the stream sediment samples were anomalous in base metals.

The one silt sample anomalous in gold (091-882 ppb) was taken east of the claim boundary on Goldpan Creek

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approximately 100 metres upstream from Goldpan Creek's confluence with Jimmy Creek. This sample would indicate a source of gold off the claim, perhaps associated with the sulphide mineralization Noranda worked on, mentioned in the Introduction. Samples further down Goldpan Creek reflect known placer gold occurrences.

Sampling on Dome Creek returned anomalous gold values in pan concentrates, particularly sample 257-4250 ppb Au. Large boulders of quartz float were observed for 200 metres upstream from sample 257. Sample 255, taken 600 metres upstream from sample 257 returned 266 ppb Au.

CONCLUSION

There is more than one source for the placer gold in Goldpan Creek. A source of gold exists east of the claim further up Goldpan Creek, above 1340 m elevation. This source might be associated with the mineralization Noranda worked on, approximately three km southeast of the Dome claim.

Another source of gold exists up Dome Creek. The majority of the gold in Dome Creek comes from an area between 1320 m elevation and 1375 m elevation. The gold is probably associated with quartz veins, as demonstrated by the large quartz boulders seen in this vicinity. Another minor gold source must exist above 1320 m elevation as two samples returned weakly anomalous values further upstream.

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RECOMMENDATIONS

Detailed stream sediment sampling and prospecting should be carried between elevations 1320 m and 1375 m on Dome Creek. This work should be carried out to attempt to locate the quartz vein or veins which this program indicates might be the source of much of the gold in Dome Creek. Stream sediment sampling, both pan concentrates and silts, should be carried out at 50 m intervals or less and all quartz float should be sampled. Prior to this work another claim should be staked 5E 4N from the Dome 1 LCP.

This work should take a two person crew two days and cost \$4,000 if carried out in conjunction with other work in the area.

Respectfully submitted by:

St Geo.

BIBLIOGRAPHY

- Gabrielse, H. et al. 1971, Department of Energy, Mines and Resources. O.F. 707
- Gabrielse, H., Souther, J.G., 1962, Geological Survey of Canada, Map 29-1962 and Descriptive Notes
- Johnston, W.A., 1925, Gold Placers of Dease Lake Area, Cassiar District
- MacArthur, R.G., Bradish, L.G., 1978, Geological Geochemical and Geophysical Report on Castle 1 and Castle 2 Mineral Claims.
- Maxwell, G., Bradish, L.G., 1987, Geolgical and Geophysical Report on the Caste Claim.
- Waskett-Myers, M., Graf, C., 1990, Geological Report on Stikine Gold Project

ASSAY CERTIFICATES

APPENDIX "A"

MIN • EN LABORATORIES (DIVISION OF ASSAYERS CORP.)

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VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621

SMITHERS LAB.: 3176 TATLOW ROAD SMITHERS, B.C. CANADA VOJ 2NO TELEPHONE (604) 847-3004 FAX (604) 847-3005

<u>Geochemical Analysis Certificate</u>

Set Charling and a set of the set of the set

1V-0962-RG1

Company: ACTIVE MINERALS LTD. Project: STIKINE GOLD SYNDICATE DOME Attn: DAVID DUNN

Date: SEP-06-91 Copy 1. ACTIVE MINERALS, VANCOUVER, R.C.

He hereby certify the following Geochemical Analysis of 5 ROCK samples submitted AUG-30-91 by DAVID DUNN.

Sample Numb er	AU-FIRE PPB	AG PPM	CU PPM	PB PPM	ZN PPM	
1-00092	9	0.1	12	4	17	
100097	<u>i</u>	0,1	7	3	13	
1-00102	2	i.4	8	38	35	
14999	1	1.1	11	12	14	
1-00252	2	O . 4	23	13	0 <i>E</i>	

Certified by__

COMP: ACTIVE MINERALS LTD.

PROJ: STIKINE GOLD SYNDICATE DOME

AG

AL

AS

BA

В

BE

BI

CA CD CO CU

KLI

FE

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 (604)980-5814 OR (604)988-4524

MG MN MO NA NI P PB SB SR TH TI

FILE NO: 1V-0962-PJ1

PAN CONCENTRATE * (ACT:F31)

V ZN GA SN W CR AU-FIRE WT-GM

DATE: 91/09/07

6 32.80

533 17.28

145 28.66

640 42.47

10 27.08

236 18.38

147 18.20

266 25.74

233 31.73

4250 25.23

2 28.26

PPB

ATTN: DAVID DUNN

SAMPLE

PPM PPM PPM PPM PPM NUMBER PPM 1-00090 .5 8260 95 11 6550 22 37 52230 1440 7 23470 467 1 100 133 710 1 6 .4 .1 10 1 26 1 1740 105.5 66 4 48 1-00093 8760 6 165 - 1 15 7360 .1 25 46 90280 1390 8 10300 614 1 60 42 760 13 27 1 2797 250.6 .1 1 1 75 7 5 91 1 1 7930 15 6520 29 42 83040 1450 6 24100 645 90 126 710 116 1 2752 209.5 1-00095 .1 1 4 .1 .1 1 13 1 26 32 74 77 2 1 .1 8 9340 435 70 35 670 1-00098 9880 2 141 11 7870 17 36 52480 1620 .1 13 1 1998 141.5 .6 1 1 1 61 1 47 54 1 1-00100 .1 7630 1 3 128 .1 16 6620 .1 33 42 104910 1280 6 27670 688 1 80 143 770 5 1 24 1 3152 284.7 94 79 2 1 .1 21 .1 28 .1 14997 .2 13920 5 107 15 8970 39 71680 1870 13 10430 527 9 1 100 28 670 35 1 2926 210.8 5 1 76 62 1 .1 9050 71 22 7580 35 118400 1320 23 28 15000 7 .1 8 8580 604 1 80 16 580 7 1 4550 402.0 1 83 2 8 90 1 102 14 7720 .1 18 36 64580 1830 9 8390 512 <u>90</u> 1-00253 .6 11330 1 .1 23 670 1 1 15 1 1 2487 188.0 68 55 51 1 1 100 13 7680 .1 18 34 63760 1880 1 90 1-00255 .4 11460 1 .1 10 8790 492 26 660 12 1 1 27 1 2425 181.1 70 1 57 1 1-00257 1.7 9220 1 85 .1 19 6940 .1 24 36 97440 1500 8 8410 529 1 60 18 650 8 22 6 1 1 1 3644 310.0 72 2 - 75 1 .1 1-00259 .2 10490 1 1 88 14 7680 .1 20 34 69510 1560 9 9710 479 1 70 32 680 9 1 27 1 2490 205.1 68 1 5 69 1

COMP: ACTIVE MINERALS LTD.

PROJ: STIKINE GOLD SYNDICATE DOME

MIN-EN LABS --- ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 1V-0962-LJ1

DATE: 91/09/07

SILT (ACT:F31)

(604)980-5814 OR (604)988-4524 ATTN: DAVID DUNN BA 8E BI CA CD CO CU FE κ LI MG MN MO NA NI P PB SB SR TH TI V ZN GA SN W CR AU-FIRE SAMPLE AS В AG AL PPM PPB NUMBER 46 31240 2050 9 9820 531 50 850 16 974 45.6 .3 10520 3 3 151 .4 6 7480 .1 13 1 130 1 38 79 3 2 29 882 1-00091 - 1 13 7830 7 11290 1226 62.2 965 50.3 905 48.8 66 38940 2660 .4 16220 2 267 .7 8 9090 15 776 1 160 35 1140 13 59 84 3222 37 8 5 2 7 .1 1 1 1 - 000941 72 .1 10000 7 6520 .1 14 44 34100 2230 618 1 100 59 840 11 38 1 1 28 1-00096 3 1 1 44 29190 2230 10 7100 33 .4 11940 127 .4 6 7520 11 435 80 25 720 11 26 27 1-00099 1 .1 1 1 1 1 1 1 187 .4 7 7050 .1 12 42 32280 2100 7 9090 571 1 100 44 820 16 37 943 54.3 73 .3 9700 1 1 1 1-00101 1 -1 23 .3 18160 10 9780 14 59 36720 2020 16 8430 630 1 170 39 970 12 57 1 1487 67.2 14998 1 203 .6 .1 90 1 1 3 41 .1 222 160 7 8780 13 59 33820 2070 12 7090 478 1 120 30 1080 15 48 1 1024 55.7 95 22 33 1-00251 2.6 15180 1 1 .6 1 1 12 12 1 1114 54.5 31 33 7850 4 2 1 1-00254 .3 12670 1 110 .4 8 7600 .1 11 42 30320 1640 485 1 90 28 700 12 1 31 80 1 - 1 990 61 33810 1690 7860 32 35 133 7 7610 13 520 1 100 11 1-00256 .4 13180 1 .4 .1 1 78 1 12 7730 516 152 7 8910 13 53 33340 1690 1 90 27 1030 12 1 43 1 1050 57.5 78 ž 31 .4 13070 1 .4 .1 1-00258 1 1 - 1 198 7 9400 .1 12 48 32000 2160 14 7870 467 1 110 27 1040 12 1 52 1 1027 54.8 75 1-00260 .3 16390 1 1 -6 1 1 2 34 1

APPENDIX "B"

SAMPLING METHODOLOGY

SAMPLING METHODOLOGY

ROCK SAMPLES

Approximately 5 kg of rock chips were placed in a 6 mil plastic bag with a sample tag; the bag was marked with the tag number and the samples shipped to Min-En Laboratories in North Vancouver.

SILT SAMPLES

Approximately 0.5 kg of fine sediment was collected from the active stream channel, placed in a standard kraft bag with a sample tag and the tag number written on the bag. The sample was then dried and shipped to Min-En Laboratories in North Vancouver.

SOIL SAMPLES

Approximately 0.5 kg of B horizon soil was collected from 10 cm to 25 cm depth, put in a standard kraft bag with a sample tag and the tag number written on the bag. The sample was then dried and shipped to Min-En Laboratories in North Vancouver.

PAN CONCENTRATE SAMPLES

Two pans of material were collected from the active stream channel, sieved to -1.25 cm and panned to a black sand concentrate. One pan of moss was washed with the resulting residue panned to a black sand concentrate. These concentrates were combined and placed in a 6 mil plastic bag with a sample tag. The bag was labelled with the tag number and shipped to Min-En Laboratories in North Vancouver.

STATEMENT OF QUALIFICATIONS

APPENDIX "C"

STATEMENT OF QUALIFICATIONS

I, David St. Clair Dunn, with a business address of 2348 Palmerston Avenue, West Vancouver, B.C. declare that:

- I am a Professional Geoscientist registered under the Professional Engineers and Geoscientists Act of the Province of British Columbia.
- 2. I am a Fellow of the Geological Association of Canada.
- 3. I am an affiliate member of the Association of Exploration Geochemists.
- I have practised my profession as a prospector and geologist in Canada, U.S.A. and Australia for over 20 years.
- 5. I personally supervised the work on the Dome claim.
- I do not hold any interest in the Dome claim nor do I expect to receive any.

Geo. St р.

STATEMENT OF COSTS

APPENDIX "D"

STATEMENT OF COSTS

Project Preparation		87.23
Mob Demob		463.21
Project Expenses:		
Wages: D. Dunn 1 day @ \$250/day (August 23, 1991) D. Coad 1 day @ \$150/day		267.50
B. Goad 1 day @ \$150/day (August 23, 1991)	+ 621	160.50
Room and Board		214.29
Helicopter		662.54
Truck Rental		189.11
Analytical charges: 5 rocks 11 silts 11 pan con	159.50	
	428.00	428.00
Report preparation		600.00
TOTAL ====================================	> Æ	COLUMO A SCIEN 12 12 12 COLUMO A

APPENDIX "E"

ANALYTICAL METHODS



Division of Assayers Corp. Ltd.

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ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK: PROCEDURE FOR AG, CU, PB, ZN, NI, CO OR CD GEOCHEM

Samples are processed by Min-En Laboratories at 705 West 13th Street, North Vancouver, employing the following procedures.

After drying the samples at 95 C, soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized on a ring mill pulverizer.

0.50 gram of the sample is digested for 2 hours with an aqua regia mixture. After cooling samples are diluted to standard volume.

The solutions are analysed on atomic absorption spectrometers using the appropriate standard sets. A background correction can be applied to Ag, Pb, and Cd if requested.

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Division of Assayers Corp. Ltd.

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK

PROCEDURE FOR AU, PT OR PD FIRE GEOCHEM

Geochemical samples for Au Pt Pd are processed by Min-En Laboratories, at 705 West 15th St., North Vancouver, B.C., laboratory employing the following procedures:

After drying the samples at 95 C, soil and stream sediment Samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer or ring mill pulverizer.

A suitable sample weight; 15.00 or 30.00 grams is fire assay preconcentrated. The precious metal beads are taken into solution with agua regia and made to volume.

For Au only, samples are aspirated on an atomic absorption spectrometer with a suitable set of standard solutions. If samples are for Au plus Pt or Pd, the sample solution is analyzed in an inductively coupled plasma spectrometer with reference to a suitable standard set.



Division of Assayers Corp. Ltd.

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK: PROCEDURE FOR 31 ELEMENT TRACE ICP

> Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni P, Pb, Sb, Sr, Th, Ti, V, Zn Ga, Sn, W, Cr

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, employing the following procedures.

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After drying the samples at 95 C, soil and stream sediment samples are screened by 30 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer or ring mill pulverizer.

0.5 gram of the sample is digested for 2 hours with an aqua regia mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by computer operated Jarrall Ash 9000 ICAP or Jobin Yvon 70 Type II Inductively Coupled Plasma Spectrometers. Reports are formatted and printed using a dot-matrix printer.

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