

REPORT ON
RECONNAISSANCE MAPPING AND PROSPECTING
IN THE UNJK RIVER AREA
NORTHWEST BRITISH COLUMBIA
OCTOBER 1987

NTS 104B 7 & 10

Prepared by:

Paul A. Hawkins & Associates Ltd.

For:

Axiom Explorations Ltd.

Paul A. Hawkins & Associates

16858

LOG NO: 0111 RD.

ACTION:

FILE NO:

REPORT ON
RECONNAISSANCE MAPPING AND PROSPECTING
IN THE UNUK RIVER AREA
SKEENA AND LIARD MINING DIVISIONS
NORTHWEST BRITISH COLUMBIA

OCTOBER 1987

NTS 104 B 7 AND 104 B 10

LATITUDE: 56° 28' N
LONGITUDE: 130° 40' W

Prepared By:

PAUL A. HAWKINS & ASSOCIATES LTD.

PAUL A. HAWKINS, P.ENG.
O. R. CULLINGHAM, P.GEOL.
P. JURCIC

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VANCOUVER, B.C.

On Behalf Of:

AXIOM EXPLORATIONS LTD.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

CLAIMS

Skeena Mining Division:

- Iliad
- Homer
- Priam
- Menelaus
- Patroclus
- Flory
- Achilles
- Ginny
- Maxwell Smart
- Nestor

Liard Mining Division:

- Paris
- Hector
- Agememnon

16,858

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 89.01.04

ASSESSMENT REPORT 16858

MINING DIVISION: Skeena

Liard

PROPERTY: Candorada Stewart

LOCATION: LAT 56 30 35 LONG 130 42 13

UTM 09 6263899 395154

NTS 104B07E 104B10E 104B10W

CLAIM(S): Iliad 1-4, Homer 1-4, Priam 1-4, Menelaus 1-2, Patroclus 1-3
Nestor 1-4, Flory 1-4, Achilles 1-4, Ginny 1-4, Maxwell Smart
Agamemnon, Paris 1-4, Hector 1-4

OPERATOR(S): Candorada Mines Teuton Res.

AUTHOR(S): Hawkins, P.A.

REPORT YEAR: 1987, 73 Pages

GEOLOGICAL

SUMMARY: The area of interest is underlain by rocks of the Stewart Complex, a belt of diverse rock types and complicated structure. The belt trends northwest between the Coast Plutonic Complex to the west and the Bowser sedimentary basin to the east. Rocks of the Stewart Complex were emplaced in Triassic-Jurassic times during repeated cycles of volcanism, sedimentation, plutonism, uplift and erosion.

WORK
DONE: Geological
GEOL 9999.9 ha
Map(s) - 2; Scale(s) - 1:50 000

ROCK 111 sample(s) ;AU,AG
Map(s) - 1; Scale(s) - 1:50 000

SILT 78 sample(s) ;AU,AG
Map(s) - 1; Scale(s) - 1:50 000

MINFILE: 104B 009,104B 013,104B 080,104B 096

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
1.1 Preamble	1
1.2 Acknowledgements	1
1.3 Location Access and Transportation	3
1.4 Physiography	5
1.5 Claim Details and Ownership	10
1.6 Previous Work	10
2.0 CURRENT EXPLORATION - 1987	15
2.1 Summary	15
2.2 Reconnaissance Silt Sampling	17
2.3 Reconnaissance Mapping and Prospecting	18
3.0 GEOLOGY	20
3.1 General	20
3.2 Mineralization	23
4.0 SUMMARY OF CLAIMS	24
4.1 Priam Claim Group	24
4.2 Maxwell Smart Claim Group	24
4.3 Homer Claim Group	25
4.4 Flory Claim Group	26
4.5 Iliad Claim Group	26
4.6 Achilles Claim Group	27
4.7 Patroclus Claim Group	27
4.8 Menelaus Claim Group	28
4.9 Ginny Claim Group	28
4.10 Agamemnon Claim Group	29
4.11 Nestor Claim Group	29
4.12 Hector Claim Group	29
4.13 Paris Claim Group	30
5.0 OBSERVATIONS AND RECOMMENDATIONS	32
BIBLIOGRAPHY	36

LIST OF TABLES

- Table 1: Details of Claim Groups
- Table 2: Summary of Previous Work
- Table 3: Summary of Work Carried Out
- Table 4: Generalized Table of Formations

LIST OF APPENDICES

- Appendix A: Statement of Qualifications
- Appendix B: Tabulated Silt Sample Analysis and Method of Analysis
- Appendix C: Silt Sample Descriptions
- Appendix D: Tabulated Rock Sample Analysis and Method of Analysis

LIST OF DRAWINGS

Iskut-Sulphurets Gold Camp	Drawing No. A-87-123-1
Location Map - British Columbia	Drawing No. A-87-123-2
Location Map - Northwest British Columbia	Drawing No. A-87-123-3
Claim Location Plan	Drawing No. B-87-123-4
Assessment Report Location Plan	Drawing No. E-87-123-5
Silt Samples and Analyses	Drawing No. E-87-123-6
Rock Samples and Analyses	Drawing No. E-87-123-7
Regional Geology of the Unuk River	Drawing No. A-87-123-8
Reconnaissance Mapping Plan	Drawing No. E-87-123-9
Claim and Sample Plan - Priam Claim Group	Drawing No. A-87-123-10
Claim and Sample Plan - Priam Claim Group	Drawing No. A-87-123-11
Claim and Sample Plan - Maxwell Smart Group	Drawing No. A-87-123-12
Claim and Sample Plan - Homer Claim Group	Drawing No. A-87-123-13
Claim and Sample Plan - Paris Claim Group	Drawing No. A-87-123-14

1.0 INTRODUCTION

1.1 Preamble

Reconnaissance mapping and prospecting were carried out during late September and October over several claim groups in the Unuk River and Snippaker Creek areas of northwest British Columbia. Interest in the area was prompted by several promising high-grade gold and silver deposits. Notable amongst these are Newhawk-Lacana-Granduc's sulphurets property, Catear's Brucejack property, Skyline's Reg property and Magna-Silver Princess Q22/Q17 property (Drawing A-87-123-1). The general geology of the area of interest is similar to that of these developing gold properties.

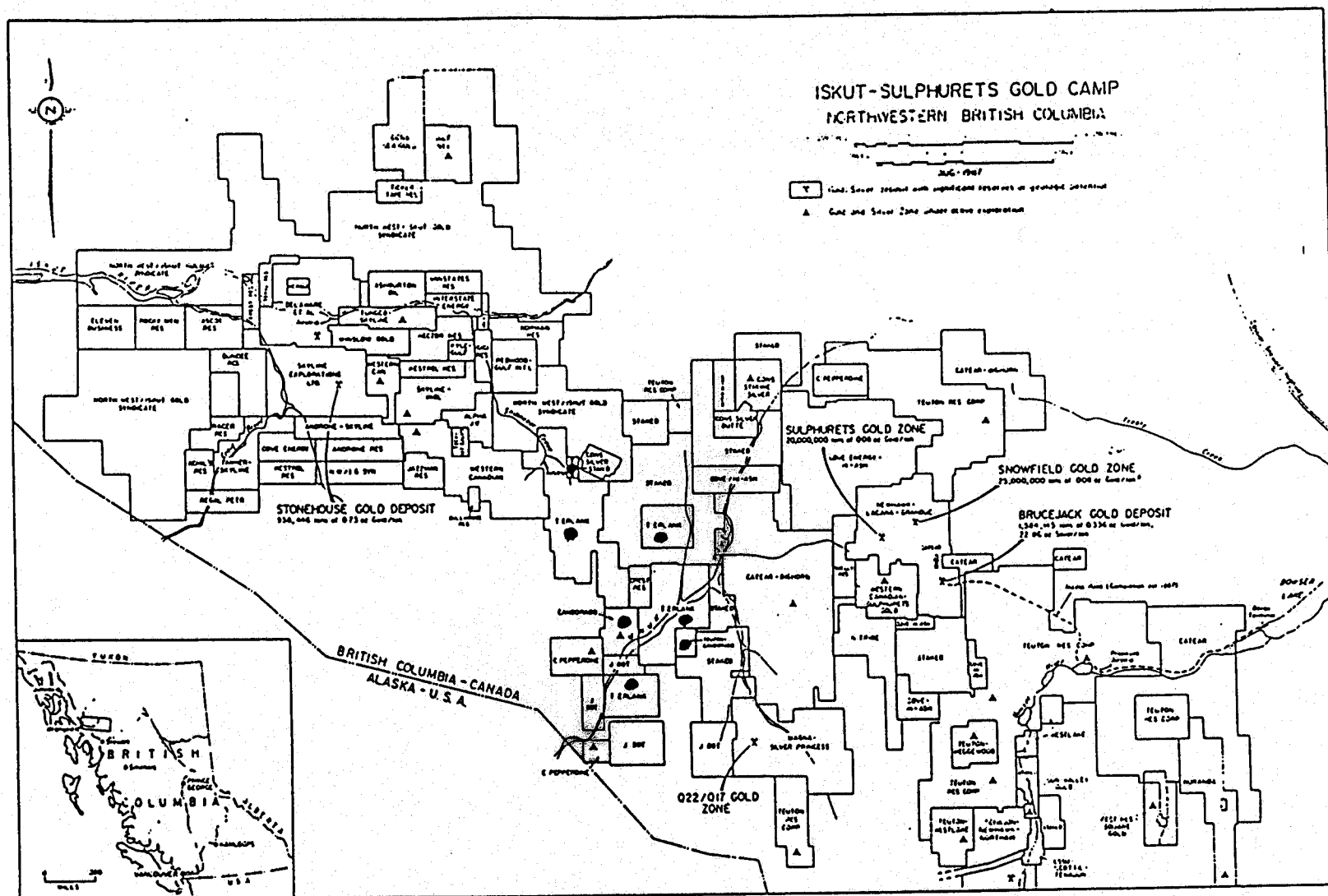
The work was carried out on behalf of Axiom Explorations Ltd. who also represent the interests of Candorado Mines Ltd. and Teuton Resources in the area.

1.2 Acknowledgements

The work was performed under the direction of Paul A. Hawkins, President of Paul A. Hawkins & Associates Ltd. Field investigations were carried out by:

Owen R. Cullingham - Geologist, and

Paul Jurcic - Geologist



Helicopter assistance was required to carry out the field work. Vancouver Island Helicopters provided a Bell 206B Jet Ranger III dedicated to the project; a Hughes 500D was used on a casual basis.

Room and board for the duration of the field work was provided by Magna Ventures Ltd. at their camp overlooking the South Unuk River at the Q17 showing.

1.3 Location, Access and Transportation

The Stewart Project area is located in the Skeena and Liard Mining Divisions within the coastal region of northwest British Columbia (Drawing A-87-123-2). The project area encompasses parts of map areas:

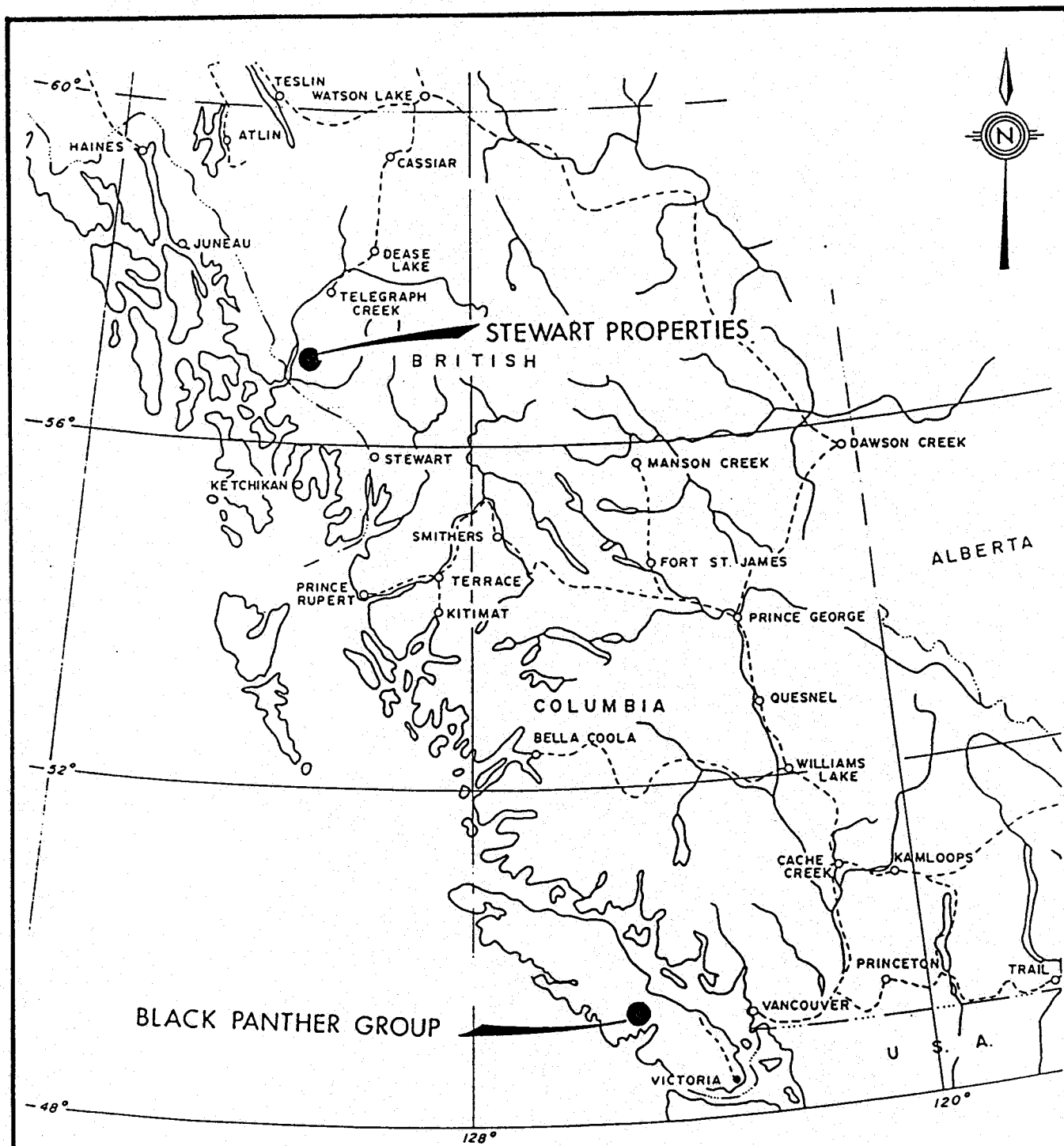
NTS 104 B 7 and 104 B 10

The center of the area is located by:

130° 40' W Longitude

56° 28' N Latitude

The area is approximately 70 kilometres north-northwest of Stewart, the closest town and seaport at the head of the Portland Canal, and approximately 260 kilometres north-northwest of Terrace, the closest center serviced by regular scheduled air service. Access is via paved all-weather Highway 37 from Highway 16 at Kitwanga, mid-way



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CanDorado Mines Ltd.
B.C. PROPERTY LOCATIONS

AUG. 1987

1"=125 Miles

-

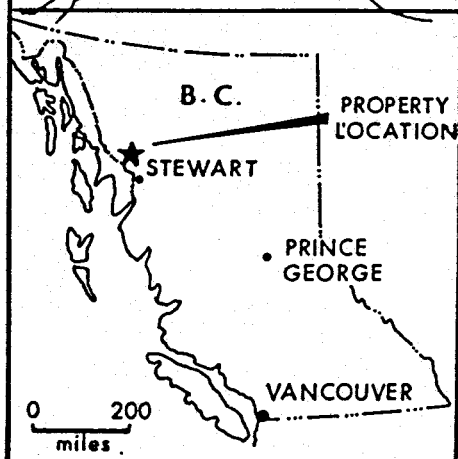
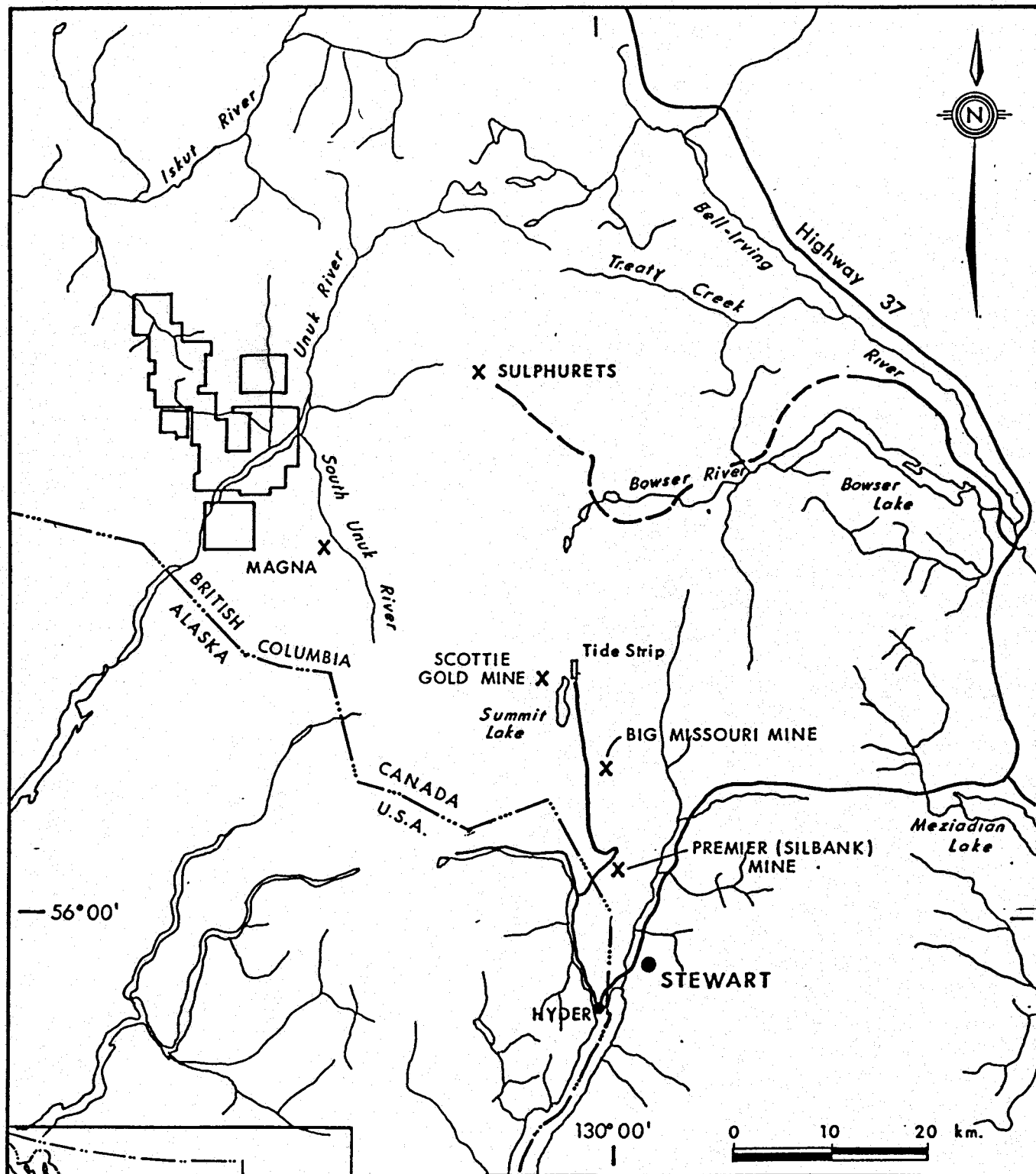
A87-123-2

between Terrace and Smithers, for approximately 172 km to Meziadin Junction and via Highway 37A for 67 km to Stewart. A paved all-weather airstrip at Stewart also permits access by charter aircraft.

Access to the project area is via helicopter from Stewart, or from the Tide airstrip the closest point reached by road access. The Tide airstrip is approximately 50 km north of Stewart via gravel all-weather road (Drawing A-87-123-3).

1.4 Physiography

The area of interest lies in the coastal mountain range of northwest British Columbia and is best described as glaciated mountainous with rugged and extreme relief. Elevations range from 120 m to 2000 m with local variable relief up to 1800 m. The area above tree line (variable from 1000 m to 1400 m) is characterized by rocky ridges (steep and rounded plateau-like) and talus, grass or moss covered steep slopes. Gentle alpine meadows are rare. Morrain deposits and steep sided "U" shaped valleys are evidence of considerable modification to the landscape by glaciation. Glaciers and snowfields occur frequently throughout the area, generally above 1600 m; receding glaciers occupy several prominent valleys down to an elevation of 600 m. Below the tree line the area is forest covered where varieties of spruce, hemlock, fir, alder and devils' club predominate. Vegetation often is dense rendering access difficult and slow.



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STEWART PROJECT LOCATION MAP

UNUK RIVER AREA
NORTHWESTERN BRITISH COLUMBIA

DEC. 1987

1:600,000

104

A87-123-3

The drainage pattern is best described as trellis or rectangular; being predominantly controlled by joints and faults. The drainage system feeds two main water courses in the area: the Unuk River and the Iskut River. The Unuk River drains the area south of Julian Lake which includes all claim groups except the Paris, Hector and Agamemnon claims. These latter three claim groups are drained by Snippaker Creek to the Iskut River. Both rivers drain into the Pacific Ocean; the Unuk River via Behm Canal and the Iskut River via the Stikine River.

The area of interest generally is wilderness with some hunting, trapping and future logging considerations. The weather is best described as cold and wet with snow cover in areas of higher elevation from late September to mid to late-June. An indication of the weather for the area is obtained from the Environment Canada weather monitoring station at Stewart, B.C. bearing in mind that the climate in the Unuk River probably is slightly drier with less rain and more snow (because of elevation). Daily average temperatures in the coldest month, January, are highs of -2°C and lows of -8°C with a minimum recorded temperature of -30°C and in the warmest months, July and August, are highs of 20°C and lows of 8°C with a maximum recorded temperature of 34°C . Average annual precipitation at Stewart is 1300 mm of rain and 556 cm of snow. The rainiest months are October (336 mm) and September (254 mm) while the snowiest month is December (153 cm).

TABLE 1

DETAILS OF CLAIMS

Name	Owner	Date Staked	Tag Number	Record Date	Record Number	Description and Area							
						Mining Division	GP	Units	Location LCP (UTM)			Staked Ha	Amended for Overstaking Ha
									Zone	Easting	Northing		
Iliad	Tony Erlank	86/12/12	126597 126598 126599 126600	87/01/05	5706 5707 5708 5709	Skeena	1 2 3 4	6N x 3E 6S x 3E 6S x 3W 6N x 3W	9	404630	6258300	450 450 450 450 <u>1,800</u>	
Homer	Tony Erlank	86/12/12	126601 126602 126603 126604	87/01/05	5710 5711 5712 5713	Skeena	1 2 3 4	4N x 3E 5S x 3E 5S x 4W 4N x 4W	9	401400	6254660	300 375 500 400 <u>1,575</u>	
Priam	Candorado Mines from Tony Erlank 87/06/26	86/12/12	126593 126594 126595 126596	87/01/05	5702 5703 5704 5705	Skeena	1 2 3 4	6N x 3E 5S x 3E 5S x 4W 6N x 3W	9	397900	6255600	450 375 500 450 <u>1,775</u>	384 <u>1,709</u>
Menelaus	Tony Erlank	86/12/12	126584 126585	87/01/08	5718 5719	Skeena	1 2	6S x 3E 5S x 4W	9	394000	6262570	450 500 <u>950</u>	
Patroclus	Tony Erlank	86/12/13	126586 126587 126588	87/01/12	5732 5733 5734	Skeena	1 2 3	5S x 4E 5S x 4W 5N x 4W	9	397790	6261020	500 500 500 <u>1,500</u>	252.5 <u>1,253</u>
Nestor	Tony Erlank	86/12/12	126580 126581 126582 126583	87/01/08	5714 5715 5716 5717	Skeena	1 2 3 4	3N x 5E 4S x 4E 4S x 5W 3N x 6W	9	393100	6264720	375 400 500 450 <u>1,725</u>	
Flory	Tony Erlank	86/12/13	126609 126610 126611 126612	87/01/09	5720 5721 5722 5723	Skeena	1 2 3 4	4N x 5E 4S x 5E 4S x 5W 4N x 5W	9	398700	6249360	500 500 500 500 <u>2,000</u>	

TABLE 1 (Continued)

DETAILS OF CLAIMS

Name	Owner	Date Staked	Tag Number	Record Date	Record Number	Description and Area							
						Mining Division	GP	Units	Location LCP (UTM)			Staked Ha	Amended for Overstaking Ha
									Zone	Easting	Northing		
Achilles	Tony Erlank	86/12/13	126589 126590 126591 126592	87/01/09	5728 5729 5730 5731	Skeena	1 2 3 4	5N x 4E 5S x 4E 5S x 4W 5N x 4W	9	401260	6259100	500 500 500 500	253.6 130.4
												<u>2,000</u>	<u>1,384</u>
Ginny	Tony Erlank	86/12/13	126605 126606 126607 126608	87/01/09	5724 5725 5726 5727	Skeena	1 2 3 4	4N x 5E 4S x 5E 4S x 5W 4N x 5W	9	402360	6264820	500 500 500 500	
												<u>2,000</u>	
Maxwell Smart	Teuton Resources Corp.				5268	Skeena	1	5S x 4E	9	402789	6255410	<u>500</u>	
Agamemnon	Tony Erlank				3876	Liard	1	4N x 5W	9	395570	6269420	<u>500</u>	<u>276</u>
Paris	Tony Erlank				3885 3886 3887 3888	Liard	1 2 3 4	3N x 6E 4S x 5E 4S x 5W 3N x 6W	9	394220	6267950	450 500 500 450	432.5 432.5
												<u>1,900</u>	<u>1,765</u>
Hector	Tony Erlank				3881 3882 3883 3884	Liard	1 2 3 4	5N x 4E 5S x 4E 3E x 4W 5N x 4W	9	391230	6272000	500 500 300 500	468
												<u>1,800</u>	<u>1,768</u>
TOTAL												<u>20,025</u>	<u>18,705</u>

1.5 Claim Details and Ownership

The Stewart Project comprises 13 claim groups covering approximately 200 square kilometres. Details of the claims are shown in in Table 1. The location of the claims are shown on Drawing B-87-123-4.

Candorado Mines Ltd. hold a 100% interest in the Priam claim group and hold an option agreement with Teuton Resources Corp. on the Maxwell Smart claim group. The remaining claim groups are held by Tony Erlank; however, Candorado has first right of refusal.

1.6 Previous Work

The Unuk River area has attracted prospectors, geologists and entrepreneurs in search of mineral deposits since 1893 (Grove, 1986, p. 111). Some of the mineral deposits prospected in the early decades of the twentieth century have been worked periodically and work on some continues today. Assessment reports filed on claim groups within the immediate area of interest date from 1959 when Granduc Mines Ltd. carried out exploration in the area of the Iliad, Homer and Maxwell Smart claim groups. This work was precipitated by an airborne magnetometer survey flown the previous year (Assessment Reports Nos. 345 and 346). Granduc maintained an interest in the area throughout the '60's and '70's; in 1968 Granduc carried out airborne electromagnetic and magnetometer surveys over McQuillan ridge (Assessment Report No. 1835) and in 1969 staked claims and

carried out work in the area of the Flory Claims (Assessment Report No. 2503). Further work was carried out over their MAX iron-copper deposit in the mid '70's (Assessment Reports Nos. 5496 and 6690). In 1971 Great Plains Development Company of Canada, Ltd. carried out a reconnaissance geochemical program in the Mt. Dunn and neighbouring areas which resulted in staking a copper anomaly in the area of the Priam, Petroclus and Achilles claims between King and Fewright Creeks (Assessment Report No. 5616). Work carried out in this area in 1974 and 1975 led to the extension to the north and south into the areas of the Ginny and Homer claims (Assessment Report No. 6234). In 1981 DuPont of Canada Exploration Limited staked claims in the area north of King Creek in the area of the Achilles claims to follow up a heavy mineral survey carried out in 1980 (Assessment Report No. 10,474). Further work was carried out on this claim group in 1983 while under option to Placer Development and Skyline Exploration (Assessment Report No. 11,673).

No other work covering the current claims is documented in assessment reports; however, some work peripheral to the Agememnon, Paris and Hector claims is on file. Silver Standard Mines Ltd. carried out work on their iron-nickel-copper property to the east of the Agememnon claim group and to the north of Paris 1 claim group in 1965 (Assessment Report No. 741). No further work on the claim group is on file; however, the claims appear to be held as patented claims. Observations during reconnaissance flights in the area suggest more work was done than is documented in assessment files. Great Plains Development Company of Canada Ltd. carried out geological,

geophysical and geochemical surveys for chalcopyrite-galena-sphalerite mineralization on their Kim claims southwest of Hector 3 claims from 1971 to 1974 (Assessment Reports Nos. 3981 and 5142). Cobre Exploration Ltd. carried out geological, geochemical and geophysical surveys for copper mineralization over their Pins claims southwest of Paris 4 and west of Paris 3 claim groups from 1971 to 1973 (Assessment Reports Nos. 3982, 4748 and 4749). In 1983 Active Mineral Explorations Ltd. carried out a reconnaissance mapping and geochemical sampling program for Lonestar Resources Ltd. which resulted in Staking in the Snippaker Creek area. Several companies including Brinco (Assessment Report No. 14972) and Western Canadian Mining Ltd. (Assessment Report No. 15,238) have carried out work on these claims located southwest of the Hector and west of the Paris claim groups.

Table 2 summarizes the documented work done and Drawing E-87-123-05 shows the location of the areas covered by the assessment reports.

The Unuk River area has been geologically mapped in part or in total by the Geological Survey of Canada, the U.S. Geological Survey and by the British Columbia Department of Mines variously from 1905 to the present (Grove, 1986, pp 13-15). The most recent geological mapping is by E.W. Grove for the British Columbia Department of Mines and Petroleum Resources (1986).

TABLE 2
SUMMARY OF PREVIOUS WORK

CURRENT CLAIM GROUP	ASSESSMENT REPORT NO.	DATE OF WORK	COMPANY/OWNER	CLAIM GROUP ID	MINERAL(S) OF INTEREST	SUMMARY OF WORK
ILIAD	345	1960	Granduc Mines	Har	Sulphides	Line-cutting, Mag. Geol.; Follow up of airborne mag.; minor specularite in carbonatized shear zone.
ILIAD, HOMER, FLORY & MAX. SMART	1,835	1968	Granduc Mines		Sulphides	Helicopter borne EM & MAG.; Follow up staking recommended over favourable conductors.
MAXWELL SMART, HOMER & ILIAD	346	1960	Granduc Mines	Max	MAG-CPY	Line-cutting, Mag.. Geol.. Geochem.. drilling (not reported on) 11x10 ⁶ t of Mag/Cu in skarn deposit.
FLORY	2,503	1969	Granduc Mines	Jin	Sulphides	Magnetite, cpy, py in altered tuff of assoc. skarn-type minerals. Mag., geol.
MAXWELL SMART	5,496	1975	Granduc Mines	Max	MAG-CPY	Line-cutting, Mag., Geol. Skarn type Fe/cu deposit.
MAXWELL SMART	6,690	1977	Granduc Mines	Max	MAG-CPY	Line-cutting, Mag., Geol. Skarn type Fe/cu deposit.
PATROCLUS	5,616	1974/75	Great Plains Develop. Co.	VV 1-6	Porphyry Cu/Au	Follow-up of regional geochemical reconn. (1971); Prospect; geochem soil, geol; dioritic intrusive/felsitized gorsan zone.
PATROCLUS, PRIAM, HOMER, ACHILLES & GINNY	6,234	1976	Great Plains Develop. Co.	VV 1-6, Eric, Boot, Frank, Can & Non	Porphyry Cu/Au	Follow-up geol., geochem, IP, Gamma-ray Spec, Mag.; narrow monzonitic intrusive trending north and in fault contact with country volcanics, volcanoclastics and sediments.
ACHILLES	10,474	1981	DuPont of Canada Exploration Ltd.	Cole	Sulphides/Au/Ag	Stream sed. samples, geoch. soil, picket grid, VLF-EM, MAG, Geol.; Gossan caused by py dissen. in fractures in andesite-rhyolite volcanics.
ACHILLES	11,673	1983	DuPont of Canada Exploration Ltd.	Cole	Sulphides/AU/Ag	Geochem. soil, silt and rock, mineralization may be localized along N-S faults.

TABLE 2 (CONTINUED)

SUMMARY OF PREVIOUS WORK

CURRENT CLAIM GROUP	ASSESSMENT REPORT NO.	DATE OF WORK	COMPANY/OWNER	CLAIM GROUP ID	MINERAL(S) OF INTEREST	SUMMARY OF WORK
E OF AGAMEMNON N OF PARIS	741	1965	Silver Standard Mines	E&L Prospect.	Nickel-Copper	Geol., Geochem., Mag., diamond drilling, trenching; Fe-Ni-Cu in E-W trending intermittent gabbro intrusives intruding Jurassic sediments.
S.W. OF HECTOR	3,981 & 5,142	1971 - 1974	Great Plains Development Co.	Kin	CPY	Geol., Geochem., IP, Mag., surveys; & Pros.; CPY assoc. / py and Qtz veins in tuff, volcanics and intrusives; also specular hematite.
S.W. OF PARIS	3,982, 4,748 & 4,749	1972 & 1973	Cobre Exploration Ltd.	Pins 1-40	CPY/Sulphides	Geol. Geochem., EM., MAG., Qtz veins assoc. with alteration zones.
S.W. OF PARIS	14,972	1985	Brinco Limited	Gossan 25	Au/Ag/Sulphides	Line-flagging, prospecting; sparse galena & sphalerite in narrow qtz veins in siltstones close to contact with andersite dykes.
S.W. OF HECTOR & S.W. & W. OF PARIS	15,238	1986	Western Canadian Mining Ltd.	Gossan 1-4, 7	Au/Ag	Geochem., Recce. geol.; Alteration and structure provide favourable environment for mineralization; results not encouraging.

2.0 CURRENT EXPLORATION - 1987

2.1 Summary

Field work, comprised of reconnaissance mapping, prospecting and geochemical silt and rock sampling, was performed over the Stewart area claim groups during the month of October, 1987. The field investigations were carried out by a two man geological party, using helicopter support.

One hundred and eighty nine silt and rock samples were collected for geochemical analysis primarily for gold and silver. Table 3 gives a break down of silt and rock samples, man days and helicopter hours applied to the various claim groups. Reconnaissance mapping and prospecting were carried out by "ground truthing" and investigating topographic and airphoto lineaments and observed gossanous zones and shear zones from helicopter reconnaissance. Because of the large area to evaluate (approximately 200 square kilometres) and the relatively short time allowed, it was necessary to be selective without passing up essential data. This proved to be difficult to accomplish owing to constraints of weather (there were 16 flyable days out of 23 days in the area), topography (steep and precipitous cliffs) and limitations of helicopter and/or pilot (few landing areas relative to exposures). Investigation of areas below treeline had to be kept to a minimum because dense bush and precipitous cliffs made progress extremely slow and hazardous.

TABLE 3
GEOCHEMICAL SILT AND ROCK SAMPLES, MAN DAYS AND HELICOPTER HOURS
APPLIED AGAINST CLAIM GROUPS

CLAIM	ROCK	SILT	MAN DAYS	HELICOPTER HRS
<u>LIARD MINING DIVISION:</u>				
AGEMEMNON	1	1	0.5	1
HECTOR	19	12	2	3
PARIS	<u>20</u>	<u>7</u>	<u>4</u>	<u>4</u>
Sub-Total	40	20	6.5	8
<u>SKEENA MINING DIVISION:</u>				
ACHILLES	2	3	0.5	3
FLORY	9	5	4	6
GINNY	0	12	1	3
HOMER	9	9	3	3
ILIAD	3	2	1	3
MAXWELL SMART	12	4	3	3
MENELAUS	2	3	1	2
NESTOR	10	7	2	3
PATROCLUS	10	7	1	3
PRIAM	<u>14</u>	<u>6</u>	<u>6</u>	<u>6</u>
Sub-Total	<u>71</u>	<u>58</u>	<u>22.5</u>	<u>35</u>
Total	111	78	29	43

2.2 Reconnaissance Silt Sampling

Reconnaissance level silt sampling was carried out over the Unuk River claim groups using a Bell 206B Jet Ranger helicopter and a Hughes 500D helicopter for more confined areas. Seventy-eight samples were collected and geochemically analysed for gold and silver. Drawing E-87-123-6 shows the sample locations and analytical results. The analyses were done by Vangeochem Lab Ltd. of Vancouver. The tabulated results and analytical methodology are attached as Appendix B. Sample site descriptions are attached as Appendix C.

Results of the analyses indicate for gold:

Background Values	0 - 18 ppb
Threshold Values	19 - 40 ppb
Anomalous Values	41 ppb+

One sample only is considered weakly anomalous for gold. Sample 87-122 collected from a tributary on the right bank of Snippaker Creek, located in the northwest corner of the Hector 4 claim group returned a value of 90 ppb gold.

Results of the analyses indicate for silver:

Background Values	0 - 0.3 ppm
Threshold Values	0.4 - 0.9 ppm
Anomalous Values	1.0 ppm+

Three samples returned anomalous values for silver:

Sample 87-074 (1.7 ppm) collected from a stream in the headwaters of Terwilligen Creek a tributary in the right bank of the Harrymel Creek on claim group Ginny 3;

Sample 87-131 (1.2 ppm) collected from a stream in the headwaters, right bank, of Snippaker Creek on claim group Paris 1; and,

Sample 87-144 (1.5 ppm) collected from a stream on the right bank of King Creek in an area adjacent to the east of Patroclus 1 claim group.

2.3 Reconnaissance Mapping and Prospecting

One hundred and eleven rock samples were collected for geochemical analysis for gold and silver during the course of reconnaissance mapping and prospecting. Drawing E-87-123-07 shows the sample locations and analytical results. The analyses were done by Vangeochem Lab Ltd. of Vancouver. Tabulated results and analytical methodology are attached as Appendix D.

Results of the analyses indicate for gold:

Background Values	0 - 23 ppb
Threshold Values	24 - 57 ppb
Anomalous Values	58 ppb+

Seven samples are considered anomalous: three, CB-87-097C, CB-87-097D, CB-87-097Q3 are located in the northwest corner of the Maxwell Smart claim group; one, AM-87-148 is located in the northeast corner of the Agememnon claim group; one, PR-87-12A, is located in a shear zone north of Fewright Creek on Priam 4 claim group; one, weakly anomalous sample, PA-87-151, is located on the Paris 2 claim group, and one weakly anomalous float sample collected from the Paris 4 claim group.

Results of the analyses indicate for silver:

Background Values	0 - 0.4 ppm
Threshold Values	0.5 - 0.9 ppm
Anomalous Values	1.0 ppm+

Four samples are considered anomalous: CB-87-97Q1 (1.1 ppm) is located in the northwest corner of the Maxwell Smart claim group; two samples, PA-87-116 (3.0 ppm) and PA-87-118B (1.2 ppm) are located in the northwest corner of Paris 3 claim group; and, PR-87-011 (1.3 ppm) is located in the Priam 4 claim group.

3.0 GEOLOGY

3.1 General

The area of interest is underlain by rocks of the Stewart Complex, a 170 kilometre long belt of diverse rock types and complicated structure. The belt trends northwest between the Coast Range Batholith to the west and the Bowser sedimentary basin to the east. Rocks of the Stewart Complex were emplaced in Triassic to Jurassic times during repeated cycles of volcanism, sedimentation, plutonism, uplift and erosion (Grove, 1986).

Table 4 illustrates the stratigraphic succession and nomenclature for the Unuk River area as established by Grove (1986). This nomenclature is accepted by the writer and utilized in this report despite considerable differences from past publications. The differences illustrate the complexity of the area, the lack of good marker horizons and the similarities in lithologies and probably point to further changes in the future. These changes are described by Grove (1986, pp 30-31): Rocks now shown as Triassic "... were shown on Map 9-1957 as Jurassic and Upper Jurassic to Lower Cretaceous ..." and "Lower Jurassic rocks have been identified between Len King and Fewright Creeks, but these are previously mapped as Triassic". The regional geology of the Unuk River area is shown in Drawing A-87-123-08 after Grove (1986).

GENERALIZED TABLE OF FORMATIONS

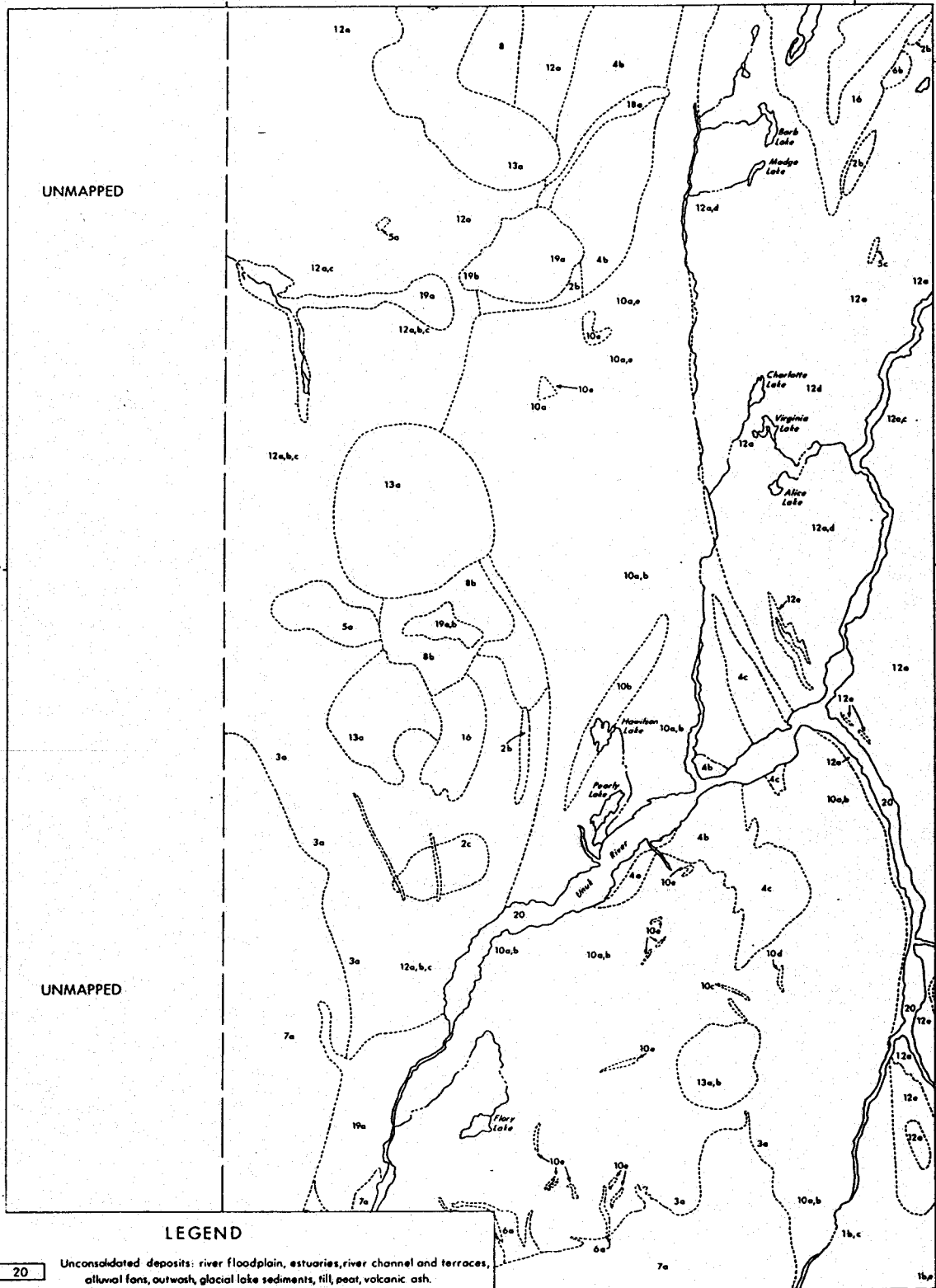
UNUK RIVER AREA

(AFTER GROVE (1986))

PERIOD/ DIVISION	GROUP	FORMATION	DESCRIPTION	MAP UNIT
QUATERNARY / RECENT	HAZELTON		Unconsolidated deposits: river floodplain, esturine, river channel and terraces, alluvial fans, outwash, glacial lake sediments, till, peat, volcanic ash.	20
			Basalt Flows (a); Cinders, ash (b).	19a,b
			Intrusives: Granodiorite.	8
		UNCONFORMITY		
SALMON RIVER		Siltstone, greywacke, sandstone, some calcarenite minor limestone, argillite, conglomerate, litoral deposits.	16	
		UNCONFORMITY		
BETTY CREEK		Green, Red, Purple and Black Volcanic Breccia, Conglomerate, Sandstone and Siltstone.	13	
		LOCALLY UNCONFORMABLE		
JURASSIC / LOWER		UNUK RIVER	Green, Red and Purple Volcanic Breccia, Conglomerate, Sandstone and Siltstone.	12a
			Crystal and Lithic Tuff.	12b
	Sandstone.		12c	
	Limestone.		12e	
	Intrusives: Diorite.		5	
	UNCONFORMITY			
TRIASSIC / UPPER	TAKLA	Siltstone, Sandstone, Conglomerate.	10a	
		Volcanic Siltstone, Sandstone, Conglomerate.	10b	
		Limestone.	10e	
		Intrusives: Diorite(a); Quartz Diorite(b); Granodiorite (c).	4a,b,c	

TABLE 4

56°30'



LEGEND

- | | |
|--------|---|
| 20 | Unconsolidated deposits: river floodplain, estuaries, river channel and terraces, alluvial fans, outwash, glacial lake sediments, till, peat, volcanic ash. |
| 19a,b | Basalt Flows (a); Cinders, ash (b). |
| 8 | Intrusives: Granodiorite. |
| 13 | Siltstone, greywacke, sandstone, some calcarenite, minor limestone, argillite, conglomerate, littoral deposits |
| 12a | Green, Red, Purple and Black Volcanic Breccia, Conglomerate, Sandstone and Siltstone. |
| 12b | Crystal and Lithic Tuff. |
| 12c | Sandstone. |
| 12e | Limestone. |
| 5 | Intrusives: Diorite. |
| 10a | Siltstone, Sandstone, Conglomerate, |
| 10b | Volcanic Siltstone, Sandstone, Conglomerate. |
| 10e | Limestone. |
| 4a,b,c | Intrusives: Diorite (a); Quartz Diorite (b); Granodiorite (c). |

km 2 1 0 2 4 6 km

Paul A. Hawkins & Associates Ltd.

STEWART PROJECT
REGIONAL GEOLOGYUNUK RIVER AREA
NORTHWESTERN, BRITISH COLUMBIA

DEC. 1987

1:150,000

1048/6-11

A87-123-8

3.2 Mineralization

The importance of the Unuk River area for minerals was recognized in the 1880's and saw a lot of activity in the early 1900's; however, transportation difficulties retarded development. In 1932 J.T. Mandy reported that the Unuk River "... should be intensely prospected. Favourable for silver-lead-zinc and also lode-gold deposits, possibly also some Placer gold in areas protected from too intense glaciation" (B.C.D.M. Annual Report 1932, p. A36). Grove (1986), classifies mineral deposits in the Stewart Complex into three categories:

1. Fissure veins and replacement veins.
2. Massive sulphide deposits - stratiform and concordant.
3. Porphyry deposits.

The majority of the mineral deposits fall into the first category which also is of the most interest in the current study. These mineral deposits generally are epigenetic, typically shallow and appear to be related to surface topography. Grove (1986, Figure 17, p. 112) empirically relates mineral deposits within the Stewart complex into zones. The Unuk River area falls into the zone dominated by copper; however, mineral deposits containing high gold values such as Magna's Q17 prospect also occurs within this zone.

4.0 SUMMARY OF CLAIMS

4.1 Priam Claim Group

Grove (1986) shows the Priam claim group to be underlain basically by volcanic breccias, tuffs and sediments of Lower and Middle Jurassic age and a large alteration zone occurring in the center of the group. A shear zone observed from aerial reconnaissance north of Fewright Creek cutting precipitous cliffs was investigated and sampled at the base of the cliff and at the top of the ridge along the north boundary of the claim group. One sample returned a slightly anomalous assay for silver PR-87-011 (1.3 ppm) from an altered dark gray banded siltstone below the shear zone. The shear zone contained a quartz vein within a graphitic, sericitic, altered rock containing disseminated pyrite and a trace of chalcopyrite. A grab sample of the quartz vein returned a weakly anomalous value for gold of 85 ppb.

The ridge south of Fewright Creek shown by Grove (1986) as a large alternation zone was investigated and found to contain highly altered, silicious brecciated andesitic volcanics. All samples assayed returned background and low threshold values for silver and gold.

4.2 Maxwell Smart Claim Group

The Maxwell Smart claim group is comprised of altered volcanics and sediments and contains a magnetite-copper deposit in a folded

granular limestone sequence or skarn. Approximately 11 million tonnes grading 45% iron and 0.75% Cu has been outlined (Wolverton and Company). Although it was intended to investigate the skarn, time and topography restricted investigations to Cebuck Creek above and below an impassable canyon. A quartz vein occurring along the west bank of the creek in the northwest corner of the claim block was sampled and returned anomalous gold and silver values. The north striking quartz vein intrudes an andesitic sandstone altered to greenschist. Sample CB-87-097Q3 was taken from the lower 15 cm of a 70 cm wide vein zone and assayed at 2290/2740 ppb (0.07/0.08 oz/t) Au. The upper 40 cm of the vein, sample CB-87-097Q1, returned a slight kick for silver (1.1 ppm) in brecciated quartz and greenschist. Fifteen metres south along strike the quartz vein was sampled in a small stream. Sample CB-87-097C represents the lower 44 cm, almost pure quartz vein, and sample CB-87-097D represents the upper 30 cm and is a stockwork of quartz veins intruding greenschist. Both samples returned anomalous values for gold of 410 ppb (0.01 oz/t) and 650 ppb (0.02 oz/t) respectively.

4.3 Homer Claim Group

The Homer claim group is underlain by Upper Triassic volcanic sediments, siltstones, sandstones and limestones and intruded by a Triassic diorite stock in the northeast (Grove, 1986). A northeast trending topographic aerial photo lineament cuts the southeast corner of the claim block and extends northeast onto the Maxwell Smart claim block. This lineament is interpreted as a shear zone. Several

gossanous zones along the southern end of this trend were observed from aerial reconnaissance and investigated and sampled. Analytical results for all samples show background values for gold and silver. No direct evidence for the interpreted shear was found along the lower slopes; however, the more prominent lineament zone was snow covered.

4.4 Flory Claim Group

Grove (1986) shows the Flory claim group to be underlain by Triassic volcanic sediments, siltstone, and sandstone, and intruded by Tertiary quartz monzonite and granodiorite dykes. The dykes mapped as a dyke swarm by Grove trending northwest across Flory Lake was investigated; however, evidence for the dyke swarm was not found, although granodiorite float was found on the north shore of Flory Lake. Another topographic and airphoto lineament trending west-northwest in the center of Flory 1 was investigated. The cause of this lineament was interpreted to be a quartz monzonite dyke and underlying shear zone. Analyses of rocks sampled on the Flory claims show background values for gold and silver, except sample FL-87-049B which returned a threshold value for gold of 55 ppb. This sample is taken from a quartz vein in the shear underlying the dyke. The quartz vein is less than 5 cm wide and dips N 30°E at 60°.

4.5 Iliad Claim Group

The Iliad claim group is underlain by Triassic volcanic clastics, siltstones and sandstones intruded by Triassic (or younger) quartz

diorite and granodiorite stocks and in the northeast, by Jurassic volcanic clastics, limestone and conglomerate (Grove, 1986). Access to this claim group is difficult due to tree cover and steep slopes, and only 1/2 day was spent in the northeast corner investigating a possible shear associated with a northwest trending lineament. No shear was encountered and the lineament probably is caused by differential weathering between a ridge forming limestone and an andesitic greenschist. Three samples collected indicate background values for gold and silver.

4.6 Achilles Claim Group

The Achilles claim group is underlain by Triassic volcanic clastics, and siltstone (Grove, 1986). Access to this claim group is extremely difficult due to tree cover, steep slopes and precipitous cliffs. Only two samples were collected on the claim group; both returned background values for gold and silver.

4.7 Patroclus Claim Group

According to Grove (1986) the Patroclus claim group is underlain by Lower Middle Jurassic volcanic breccia, sandstone and conglomerate, Upper Middle Jurassic clastic sediments and minor limestone, and recent granodiorite stocks and volcanics. Access to the Patroclus claims is limited due to steep and precipitous topography; gossanous zones observed from areal reconnaissance generally were inaccessible. Samples collected from the ridge top at the south end of the claim

group and from outcrop and float at the base of cliffs along King Creek returned background values for gold and silver.

4.8 Menelaus Claim Group

The Menelaus claim group is underlain by Middle Jurassic volcanoclastics and a diorite stock. Access to the claim group is extremely limited due to precipitous topography, ice fields, and glaciers. A shear zone observed from aerial reconnaissance on the north facing cliffs could not be reached; however, brown stained volcanic siltstones above the shear were sampled. Analysis of the samples showed background values for gold and silver.

4.9 Ginny Claim Group

The Ginny claim group is underlain by Triassic volcanoclastics, siltstone, sandstone and conglomerate and Lower Jurassic volcanic breccia, conglomerate, sandstone and siltstone (Grove, 1986). The Lower Jurassic is either in fault contact or unconformably overlies the Triassic with the contact running along a lineament caused by Harrymel Creek. Access to the eastern claims is restricted by tree growth and steep gorges along Harrymel Creek and tributary creeks; however, the headwaters of Terwilligan and Lyons Creeks are more accessible due to the relatively recent retreat of glaciers leaving wide treeless valleys. Silt samples were collected from several streams along these tributaries; one sample in the headwaters of Terwilligan Creek returned an anomalous silver value.

4.10 Agamemnon Claim Group

According to Grove (1986) the Agamemnon claim is underlain by Lower Jurassic volcanic breccias, volcaniclastics and sandstone and by Quaternary basalt along Snippaker Creek in the southwest corner of the claims. A gossanous area observed from aerial reconnaissance was sampled at its extreme eastern limit close to the eastern boundary of the claim group. The sample, an ochre brown weathering, dark gray siltstone, returned a weakly anomalous gold value and a threshold silver value. The values may be vestigous to the iron-nickel-copper mineralization associated with gabbroic intrusions on the adjacent, to the east, E&L property of Silver Standard.

4.11 Nestor Claim Group

The Nestor claim group is underlain by Lower Jurassic volcaniclastics, crystal and lithic tuffs and sandstone, and by lower Middle Jurassic volcanic breccia, conglomerate, sandstone and siltstone (Grove, 1986). Few gossanous zones were observed from aerial reconnaissance along the east side of King Creek and were investigated where possible. Samples collected for geochemical analysis returned background values for gold and silver.

4.12 Hector Claim Group

The Hector claim group is mapped as being comprised of Lower Jurassic Unuk River Formation volcaniclastics, siltstone and sandstone

(Grove, 1986). Access to the area is difficult with steep slopes and precipitous cliffs confining investigation to ridge tops and creek valleys. A gossanous shear zone in a steep gorge to the north of the Hector claims was the only observed feature of interest in the area. Access at this time was not possible; however, a north extension of this feature was investigated and sampled. The zone was comprised of replacement quartz and minor carbonate between quartz monzonite and iron stained bedded siltstone. Geochemical analysis returned background values for gold and silver. One silt sample from a stream draining an area underlain by quartz monzonite south of the shear zone returned an anomalous value for gold and a threshold value for silver. Much of the Hector claim group appears to be underlain by quartz monzonite rather than volcanoclastics or sediments.

4.13 Paris Claim Group

The Paris claim group is underlain by Lower Jurassic volcanoclastics and sedimentary sequences of the Unuk River Formation and by Quaternary basaltic flows along Snippaker Creek (Grove, 1986). The east and west extremities of the claim group are steep mountain slopes with snow fields and glaciers which limit access in those areas. Several gossanous zones are observed during aerial reconnaissance and, where practical, were investigated. The most prominent of these zones is along the steep precipitous ridge separating the North and South Pine Glacier valleys. Outcrop and talus along the base of the cliff as well as rocks along the ridge top were sampled. Ridge top samples returned two anomalous values

for silver (PA-87-116 and 118B) and two threshold values for silver (PA-87-118 and 120) all in ochre brown weathering, medium gray, banded siltstone. One talus sample, PA-87-111A, ochre brown weathering, dark gray altered siltstone containing calcite veinlets and fracture face coatings, and stringers of disseminated pyrite, returned a weakly anomalous value for gold (70 ppb). Another gossanous looking zone was investigated on the slopes east of Julian Lake. One sample PA-87-151, a reddish brown weathering, medium dark gray green andesitic flow, returned a weakly anomalous value (70 ppb) for gold.

5.0 OBSERVATIONS AND RECOMMENDATIONS

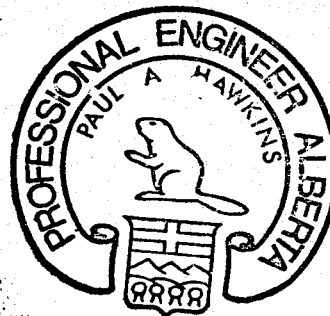
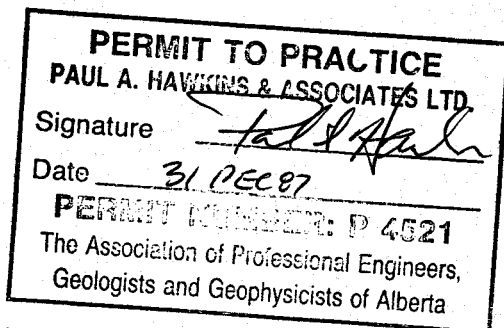
The results of the preliminary investigation of the Unuk River area claim groups are inconclusive in-so-much as no well-mineralized deposits were discovered; however, are sufficient to make the following observations and recommendations:

1. Several silt samples returned anomalous values for gold and/or silver. These sample areas should be followed up with more detailed prospecting and mapping in an attempt to explain the anomalies.
2. Favourable geology, that is, shear zones, quartz veins and alteration, and an indication of precious metal mineralization from geochemical analyses, point the way for follow-up more concentrated mapping and sampling in the following areas:
 - Priam claim group:
 - the shear zone on Priam 4 claim group from Fewright Creek to the saddle area east of Mount Dunn on Patroclus 2 claim block; and,
 - the altered zone in the saddle area of the mountain south of Fewright Creek.
 - Maxwell Smart claim group:
 - the area of the quartz vein in the northwest corner of the claim group should be more intensely prospected and geologically mapped;

- the geology from past assessment work should be verified and the skarn deposit located and sampled;
 - an airphoto and topographic lineament extending from the Homer 2 claim group should be prospected and mapped.
-
- Paris claim group:
 - the ridge separating the South and North Pine glaciers should be prospected and mapped in more detail in an attempt to explain the silver anomaly and in an effort to locate the source of the gold anomaly;
 - the ridge around sample PA-87-151 should be prospected and mapped in an attempt to explain the gold anomaly.
-
- Homer claim group:
 - the prominent lineament on Homer 2 claim block should be prospected and mapped in the belief that this is a prominent shear zone.
-
- Hector claim group:
 - the area at the north end of the claim group and the adjoining area to the north (if open) should be prospected and mapped. The presence of a thick replacement quartz vein in a shear zone is definitely interesting although geochemical analyses performed this year show background values for gold and silver only.

3. Considerable work has been carried out in the past. A preliminary review of the assessment work has been made - one day prior to going to the field and one day after completion of the field work - and it is recommended that a compilation study of previous work be undertaken prior to future work.
4. There is nothing to warrant further detailed work at this time on the Flory, Ginny, Iliad, Menelaus, Achilles or Agememnon claim groups; however, reconnaissance level prospecting and mapping could be continued under more favourable weather conditions and improved transportation (i.e., use of a Hughes 500D helicopter).
5. It is recommended to do an I.C.P. analysis for Cu/Pb/Zn/Ni, etc. on all silt and rock samples.
6. Some specific suggestions to accomplish follow-up work are:
 1. Field season from mid-June to late September.
 2. Helicopter supported (Hughes 500D).
 3. Basic 5-man geological party comprised of:
 - Senior supervisory geologist - team leader and reconnaissance work.
 - Two graduate geologists and two assistant juniors (students).

4. Four "bush rats" to cut and flag lines and collect grid samples.
5. Short term "climber samplers" to obtain samples from cliff areas.



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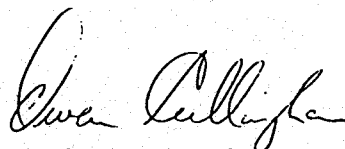
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APPENDIX A

APPENDIX A
STATEMENT OF QUALIFICATIONS

I, Owen R. Cullingham reside at 128 Oakcliffe Place S.W., Calgary, Alberta and declare:

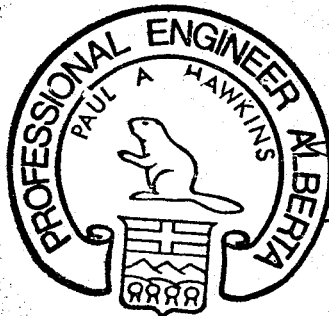
1. That I graduated from the University of Calgary in 1971 with a B.Sc. in Geology,
2. That I am a professional geologist of the Association of Professional Engineers, Geologists and Geophysicists of Alberta,
3. That I have practiced my profession as an exploration geologist throughout Canada and internationally since graduation,
4. That I personally participated in the field program and have helped compile, review and assess the resultant data,
5. That I have no interest, direct or indirect, in the properties of Axiom Explorations Ltd., Candorado Mines Ltd. and Teuton Resources Ltd.


O. R. Cullingham

CERTIFICATION

I certify that:

1. That I am a member of both the Association of Professional Engineers, Geologists and Geophysicists of Alberta and the N.W.T.
2. That I am the Principal in the firm of Paul A. Hawkins & Associates Ltd. which holds Permit #P4521 to Practise Engineering in Alberta.
3. That I am a graduate of Queen's University with a Bachelor of Science Degree in Geological Engineering.
4. That I have worked continuously as a practising geological engineer for the past 10 years.
5. That I have no interest in the claims covered by this report, nor do I hold any shares of Axiom Explorations, Candorado Mines Ltd. or Teuton Resources Ltd.
6. That I have visited the property and I am familiar with the area geology and mineral potential.
7. That I hereby consent to the publication of this report or parts thereof in a statement of material facts or to raise funds to finance my recommendations.



Paul A. Hawkins
Paul A. Hawkins, P.Eng.

APPENDIX B

Tabulated Silt Sample Analysis and Method of Analysis

REPORT NUMBER: 871666 6A

JOB NUMBER: 871666

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PAGE 1 OF 2

SAMPLE #	Ag ppm	Au ppb
87- 007	.2	20
NT 87- 016	.2	20
87- 017	.5	20
87- 018	.2	35
87- 019	.1	10
87- 020	.1	20
PR 87- 021	nd	10
87- 022	nd	10
87- 023	.1	20
87- 024	.2	20
87- 025	.5	nd
87- 026	nd	5
87- 027	.4	15
87- 028	.3	20
PR 87- 034	.4	40
87- 035	.6	25
87- 036	nd	20
87- 040	.4	10
87- 043	.2	15
87- 045	nd	10
87- 048	nd	25
87- 051	.4	30
87- 053	nd	20
87- 057	.1	20
87- 058	.2	20
87- 069	nd	20
87- 070	nd	15
GM -87- 071	.6	15
-87- 073	.2	15
-87- 074	1.7	25
-87- 075	.3	20
-87- 076	nd	nd
-87- 077	.8	15
-87- 078	.4	5
-87- 079	.2	20
-87- 080	.2	20
-87- 081	nd	30
-87- 082 (A)	.3	20
GM -87- 082 (B)	.5	20

DETECTION LIMIT 0.1 5

nd = none detected

-- = not analysed

is = insufficient sample

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Bathurst, New Brunswick
Reno, NevadaBranch Lab
1600 Porters Bl.
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1600 Porters Bl.
Vancouver, B.C.
Sample Preparation
Facilities
Pasadena, Newfoundland
Thunder Bay, Ontario
Bathurst, New Brunswick
Reno, Nevada

REPORT NUMBER: 871666 GA

JOB NUMBER: 871666

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PAGE 2 OF 2

SAMPLE #	Ag ppm	Au ppb
GN 87- 083	.6	20
87- 084	.1	10
CB 87- 088	.6	10
87- 089	.1	30
CB 87- 090	nd	25
PA 87- 092	.2	10
87- 094	.1	10
87- 096	.1	15
87- 107	nd	20
87- 108	.1	10
87- 110	.1	15
87- 121	.2	20
87- 122	.5	90
87- 123	nd	20
87- 124	.4	20
87- 125	.1	5
87- 126	nd	15
87- 127	.1	10
87- 128	nd	20
PA 87- 129	.3	5
PA 87- 130	nd	15
87- 131	1.2	20
87- 132	.3	25
87- 133	.4	10
87- 134	.6	15
87- 135	.2	nd
87- 136	.3	5
87- 137	.2	10
87- 138	nd	15
87- 139	.3	30
87- 140	.2	20
87- 141	.3	5
87- 142	.1	15
87- 143	.1	10
87- 144	1.5	5
87- 145	.5	10
87- 146	.1	25
87- 147	.6	10
87- 157	nd	25

DETECTION LIMIT

0.1

5

nd = none detected

-- = not analysed

is = insufficient sample

**VANGEOCHEM LAB LIMITED**

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(804) 986-5211 TELEX: 04-352578

BRANCH OFFICE
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VANCOUVER, B.C. V5L 1L6
(804) 251-5656

December 10th, 1987

TO: Paul Hawkins
PAUL A. HAWKINS & ASSOC.
300 - 444 5th Avenue
Calgary, Alta. T2P 2T8

FROM: Vangeochem Lab Limited
1521 Pemberton Avenue
North Vancouver, British Columbia
V7P 2S3

SUBJECT: Analytical procedure used to determine hot acid soluble
for Cu, Pb, Zn and Ag 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 heated in test tubes, on a sand bath in a Nitric and Perchloric concentrated acid solution (15% and 85% by volume respectively).
- (c) A minimum of 5000 ppm solution of $AlCl_3$ was added to each sample when Mo analyses were required. Digested samples were diluted with demineralized water to a



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fixed volume. The samples were agitated to obtain a homogeneous solution.

3. Method of Analyses

Cu, Pb, Zn, and Ag concentrations were determined using a Techtron Atomic Absorption Spectrophotometer Model AA5 with their respective hollow cathode lamps. The digested samples were directly aspirated into an air and acetylene mixture flame. The results, in parts per million, were calculated by comparing them to a set of standards used to calibrate the atomic absorption units.

4. Background Correction

A hydrogen continuum lamp was used to correct the Ag background interferences.

5. Analysts

The analyses were supervised or determined by either Mr. Conway Chun or Mr. Eddie Tang, and, the laboratory staff.

Eddie Tang
VANGEOCHEM LAB LIMITED

APPENDIX C

SILT SAMPLE DESCRIPTIONS

- 87-007 - Stream erosion channel; dry; fine black silt trapped in middle of stream; 1 to 1.5 m wide; low gradient.
- 87-016 - F. to m. gr. black silt from dry creek; moderate to steep gradient; trapped behind boulder.
- 87-017 - Slow, low gradient stream; sample trapped behind boulders; approx. 1.5 - 2.0 m wide.
- 87-018 - Moderate, low gradient stream near foot of glacial outwash; bar behind boulder; 2.5 - 3.0 m across; fine silt.
- 87-019 - As above; sample taken from middle of bar; coarse silt.
- 87-020 - Moderate to fast velocity; low gradient; approx. 2.5 - 3.0 m across; 30 - 50 cm deep; next to bank behind boulders.
- 87-021 - Slow to moderate velocity; approx. 1.5 - 2.0 m across; 10 - 20 cm deep; next to bank; low gradient.
- 87-022 - Fast to turbulent; approx. 3.0 m wide; 40 - 60 cm deep; stream bank behind boulders; low gradient.

- 87-023 - High gradient; base of waterfall; north bank of Fewright Creek; turbulent; trapped amongst roots in stream bank.
- 87-024 - High gradient; base of steep stream near confluence with Fewright Creek; turbulent; approx. 1.5 m wide; side of creek behind boulders.
- 87-025 - Moderate gradient; fast to turbulent; 1.5 - 2.5 m across; < 30 cm deep; next to bank behind boulders.
- 87-026 - Fast; approx. 2.0 m wide; 30 - 60 cm deep; behind boulder in bank; low gradient.
- 87-027 - Turbulent; high gradient; near confluence with stream to north; behind boulder next to bank.
- 87-028 - Turbulent; 2.5 - 3.0 m across; moderate gradient; 20 - 40 cm deep; next to bank in flood area (contaminated by plant material).
- 87-034 - Very slow trickle; low gradient; very fine m. brown (soil?) under moss.
- 87-035 - Very slow trickle; low gradient; very fine m. brown (soil?) under moss; high in organics.
- 87-036 - Very slow trickle; low gradient; very fine m. brown (soil?) under moss; high in organics.

- 87-040 - Slow, low to moderate gradient; under moss behind boulder; 1.0 - 1.5 m across; high in organics.
- 87-043 - Low to moderate gradient; dry stream beds; black silt; trapped behind boulder.
- 87-045 - Low gradient, slow to moderate velocity; 1.5 - 2.0 m across; < 5 cm deep; bar in creek.
- 87-048 - Moderate gradient, moderate velocity; 1.5 m to 2.0 m across; variable depth to 30 cm; next to bank behind boulders.
- 87-051 - Small, low angle, low velocity; behind boulder mid-stream; high in organics; approx. 1.0 - 1.5 m across; variable depth to 10 cm.
- 87-053 - Dry creek; moderate to steep gradient; behind boulder mid-stream; some organic contamination.
- 87-057 - Moderate gradient; fast velocity; behind boulder mid-stream; approx. 1.5 m across; variable to 10 cm.
- 87-058 - Gentle to moderate gradient; light flow; next to bank; approx. 1.0 m across.
- 87-069 - Small flow; low gradient; some organics in sediment.

- 87-070 - High velocity; low gradient; sand bar mid-stream; well sorted.
- 87-071 - Small flow; high gradient; poorly sorted with organics; behind boulder.
- 87-072 - Below large boulder in main stream; high gradient; small flow; poorly sorted.
- 87-073 - East bank of creek; moderate gradient; small flow; medium sorting and some organics.
- 87-074 - High gradient; small flow; behind boulder in main stream; poorly sorted.
- 87-075 - Moderate gradient; medium flow; trapped in mid-stream behind dead fall; medium sorting.
- 87-076 - High gradient; moderate flow; under large boulder in main stream; medium sorting.
- 87-077 - High gradient; moderate flow; in west bank; moderate sorting; some organics.
- 87-078 - High gradient; slow; behind boulder in main stream; medium sorting.
- 87-079 - Medium gradient; fast; sand bar in mid-stream; well sorted.

- 87-080 - High gradient; small flow; behind boulder in main stream; medium sorting.
- 87-081 - High gradient; small flow; main stream amongst boulders; poorly sorted.
- 87-082 - Moderate gradient; fast; sand bar in mid-stream; well sorted; minor organics.
- 87-083 - Moderate gradient; fast; west bank of main stream; well sorted; some organics.
- 87-084 - High gradient; moderate flow; behind boulder in main stream; well sorted.
- 87-088 - Turbulent; moderate to high gradient; fine well-sorted sand; behind boulder in northeast bank; 2.5 to 4.0 m across; variable depth to 0.5 m.
- 87-089 - Turbulent; moderate to high gradient; 3.0 to 4.0 m across; variable depth to 50 cm; behind boulders next to bank. Cebuck Creek.
- 87-090 - Right consequent stream to Cebuck; moderate to high gradient; fast flow; 2.5 - 3.0 m across; less than 15 cm deep; in roots below stream bank.

- 87-092 - Low gradient; fast velocity; 3 to 3.5 m across; variable depth to 50 cm; behind boulder in flood level.
- 87-094 - Toe of glacier in dry stream beds; high gradient; trapped amongst boulders.
- 87-096 - Cebuck Creek near mouth of canyon; fast to turbulent; low gradient; p-m sort; 4.0 - 5.0 m across; variable depth to 60 to 70 cm.
- 87-107 - Confluence 5th line Glacier Creek at Snippaker Creek; fast to turbulent; low gradient; 5.0 - 6.0 m across; variable depth up to approx. 50 cm; amongst boulders on a mid-stream bar.
- 87-108 - In wide flood area of South Pine Glacier Creek; turbulent; low gradient; 3.0 - 4.0 m across; variable depth up to approx. 50 cm; amongst boulders in flood level area.
- 87-110 - At toe of glacier; in flood level behind boulder; 3.5 - 4.0 m across; variable depth to approx. 50 cm; turbulent; low gradient.
- 87-121 - Steep gradient; low velocity; 2.0 - 2.5 m across; variable depth to < 10 cm; behind boulder at flood level area.
- 87-122 - Steep gradient; dried creek bed; amongst boulders; 3.0 - 3.5 m wide.

- 87-123 - High gradient; turbulent; behind boulder; high content of coarse material; 1.5 - 2.0 m across.
- 87-124 - High gradient; turbulent; behind boulder; high content of coarse; 1.0 - 1.5 m across.
- 87-125 - Moderate gradient; small stream; in south bank behind boulders; less than 1.0 m across.
- 87-126 - Low gradient; near confluence with Snippaker Creek; dried creek bed (approx. 3.0 - 3.5 m across); trapped amongst deadfall.
- 87-127 - High gradient; turbulent; trapped amongst boulders in flood level creek bed.
- 87-128 - Low gradient; fast to turbulent; behind boulders in bar; approx. 4.0 - 4.5 m across; variable depth to approx. 50 cm.
- 87-129 - Low gradient; moderate to fast velocity; behind boulders in flood level creek bed; approx. 2.0 - 2.5 m across.
- 87-130 - Snippaker Creek; low to moderate gradient; fast to turbulent; approx. 3.0 m across; on bar in flood level creek bed.
- 87-131 - High gradient; turbulent; amongst boulders in flood level creek; east bank tributary of Snippaker north of Julian Lake.

- 87-132 - High gradient; slow; behind boulders; coarse sample; 0.5 - 1.0 m across.
- 87-133 - High gradient; turbulent; up to 10 m wide; north bank amongst boulders.
- 87-134 - Moderate to high gradient; slow to moderate velocity; in roots below stream bank.
- 87-135 - Moderate gradient; fast; approx. 3.0 m wide; cut bank on north side.
- 87-136 - Low gradient; moderate velocity; approx. 4.0 m across; trapped amongst boulders on mid-stream bar.
- 87-137 - High gradient; mod. velocity; behind boulders in glacial outwash area; coarse silt.
- 87-138 - High gradient; turbulent; amongst boulders in flood level creek bed; approx. 1.5 - 2.0 m across.
- 87-139 - High gradient; base of massive cliffs; behind boulders in flood level creek bed.
- 87-140 - North side King Creek; high gradient; base of cliffs; behind boulder; coarse silt; approx. 4.0 m wide.

- 87-141 - Dried creek on south side of King Creek; high gradient; behind boulders.
- 87-142 - North side King Creek; low flow; high gradient; coarse silt behind boulders in flood level creek.
- 87-143 - High gradient; base of waterfill; fine silt (to soil) in west bank; 1.5 - 2.0 m across.
- 87-144 - High gradient; mod. velocity; amongst boulders in flood level creek; coarse silt.
- 87-145 - High gradient; low flow; amongst boulders in flood level creek.
- 87-146 - Low gradient; fast to turbulent; 9 - 10 m across; south bank of King Creek; trapped amongst boulders in flood level creek.
- 87-147 - King Creek near confluence with Harrymel Creek; north bank; low gradient; fast to turbulent; approx. 5.0 - 6.0 m across; amongst boulders in flood level.
- 87-157 - Moderate to high gradient; below toe of glacier; fast to turbulent; amongst boulders in flood level creek; approx. 3.0 - 3.5 m across.

APPENDIX D

Tabulated Rock Sample Analysis and Method of Analysis

VGC

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Thunder Bay, Ontario
Bathurst, New Brunswick
Reno, NevadaBranch Lab
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Facilities
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Thunder Bay, Ontario
Bathurst, New Brunswick
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VGC

VGC

REPORT NUMBER: 871667 GA

JOB NUMBER: 871667

PAUL A. HAWKINS & ASSOC.

PAGE 1 OF 3

SAMPLE #	Ag ppm	Au ppb
AM -87- 148	.9	110
CB -87- 085	.6	50
CB -87- 086	.6	45
CB -87- 087	nd	nd
CB -87- 091	.5	25
CB -87- 097A	.4	15
CB -87- 097B	.5	nd
CB -87- 097C	.5	410
CB -87- 097D	.8	650
CB -87- 097Q1	1.1	50
CB -87- 097Q1-Q2	.6	5
CB -87- 097Q2	.2	nd
CB -87- 097Q3	.8	2290 / 2740
CB -87- 098	nd	20
EL -87- 067	nd	10
FL -87- 039	.2	nd
FL -87- 041	.3	nd
FL -87- 042	.5	nd
FL -87- 045B	nd	nd
FL -87- 046	nd	nd
FL -87- 047	.2	10
FL -87- 049A	.2	nd
FL -87- 049B	nd	55
FL -87- 049C	nd	10
HE -87- 095A	.1	nd
HE -87- 099	.3	nd
HE -87- 100	.3	20
HE -87- 101	.3	5
HE -87- 102	.3	nd
HE -87- 103	nd	nd
HE -87- 104	nd	15
HE -87- 105	.4	nd
HE -87- 116	3.0	25
HE -87- 118	.9	10
HE -87- 120	.6	40
HE -87- 121	.1	nd
HE -87- 123	nd	nd
HE -87- 124	.2	nd
HE -87- 125	nd	nd

DETECTION LIMIT
nd = none detected0.1 5
-- = not analysed

is = insufficient sample

VGC

VGC

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Branch Lab

1630 Pandora St.

Vancouver, B.C.

Sample Preparation

Facilities

Pasadena Newfoundland

Thunder Bay, Ontario

Bathurst, New Brunswick

Reno, Nevada

VGC

VGC

REPORT NUMBER: 871667 6A

JOB NUMBER: 871667

PAUL A. HAWKINS & ASSOC.

PAGE 2 OF 3

SAMPLE #	Ag ppm	Au ppb
HE -87- 127	nd	nd
HE -87- 135	.2	nd
HM -87- 050	nd	nd
HM -87- 052	.2	nd
HM -87- 054	nd	nd
HM -87- 055	.5	5
HM -87- 056	nd	nd
HM -87- 059A	.2	45
HM -87- 059B	.4	nd
HM -87- 062	.4	nd
HM -87- 063	.2	nd
IL -87- 065	.7	nd
IL -87- 066	nd	nd
MS -87- 014	.4	nd
NE -87- 136	.2	nd
NE -87- 152	.2	15
NE -87- 153	.3	nd
NE -87- 154	.2	10
NE -87- 155	nd	nd
NE -87- 156	.3	nd
NE -87- 157B	.4	nd
NE -87- 157C	.1	10
NT -87- 015	.1	15
PA -87- 093	nd	nd
PA -87- 112	.4	nd
PA -87- 113	nd	nd
PA -87- 114	nd	nd
PA -87- 115	.1	15
PA -87- 118B	1.2	nd
PA -87- 119	.2	10
PA -87- 133	.2	nd
PA -87- 149	nd	nd
PA -87- 150	nd	15
PA -87- 151	nd	70
PE -87- 131	.1	35
PE -87- 138	nd	10
PE -87- 139	nd	20
PE -87- 140	.2	nd
PE -87- 142	.1	nd

DETECTION LIMIT

0.1

5

nd = none detected

-- = not analysed

is = insufficient sample

VGC

VGC

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Sample Preparation
Facilities
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Thunder Bay, Ontario
Bathurst, New Brunswick
Reno, Nevada

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REPORT NUMBER: 871667 6A

JOB NUMBER: 871667

PAUL A. HAWKINS & ASSOC.

PAGE 3 OF 3

SAMPLE #	Ag ppm	Au ppb
PE -87- 143	.4	nd
PE -87- 145	.3	nd
PR -87- 001	.2	nd
PR -87- 006	.4	nd
PR -87- 011	1.3	20
PR -87- 031	nd	30
PR -87- 038	.5	nd
PR -87- 068	.2	nd
PR -87- 068B	.3	nd

DETECTION LIMIT
nd = none detected

0.1 5
-- = not analysed

is = insufficient sample



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REPORT NUMBER: 871730 GA

JOB NUMBER: 871730

PAUL A. HAWKINS & ASSOC.

PAGE 1 OF 1

SAMPLE #	Cu ppm	Ag ppm	Au ppb
87- 141A	--	.2	30
87- 141B	--	.2	15
87- 146A	--	.2	25
HE -87- 095B	--	nd	10
HE -87- 106	--	.4	nd
HE -87- 122A	--	.1	10
HE -87- 122B	--	.2	15
HE -87- 122C	--	.4	30
HE -87- 122D	--	nd	nd
PA -87- 109	--	.2	nd
PA -87- 111A	--	.3	70
PA -87- 111B	--	nd	nd
PA -87- 111C	--	nd	nd
PR -87- 004	--	nd	10
PR -87- 005	--	.3	nd
PR -87- 009	30	.5	10
PR -87- 011A	65	.1	10
PR -87- 012A	30	nd	85
PR -87- 012B	--	nd	nd
PR -87- 013	43	.2	nd
PR -87- 030A	--	nd	nd
PR -87- 032	--	nd	nd
PR -87- 033	--	.1	nd
PR -87- 037	--	.2	nd

DETECTION LIMIT

nd = none detected

1

0.1

5

-- = not analysed

is = insufficient sample



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December 10th, 1987

TO: Paul Hawkins
PAUL A. HAWKINS & ASSOC.
300 - 444 5th Avenue
Calgary, Alta. T2P 2T8

FROM: Vangeochem Lab Limited
1521 Pemberton Avenue
North Vancouver, British Columbia
V7P 2S3

SUBJECT: Analytical procedure used to determine Aqua Regia soluble gold in geochemical 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) 5.00 to 10.00 grams of the minus 80-mesh portion of the samples were used. Samples were weighed out using an electronic micro-balance and deposited into beakers.
- (b) Using a 20 ml solution of Aqua Regia (3:1 solution of HCl to HNO₃), each sample was vigorously digested over a hot plate.
- (c) The digested samples were filtered and the washed pulps were discarded. The filtrate was then reduced in volume to about 5 ml.



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(d) Au complex ions were then extracted into a di-isobutyl ketone and thiourea medium (Anion exchange liquids "Allquot 336").

(e) Separatory funnels were used to separate the organic layer.

3. Method of Detection

The detection of Au was performed with a Techtron model AA5 Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out onto a strip chart recorder. A hydrogen lamp was used to correct any background interferences. The gold values, in parts per billion, were calculated by comparing them with a set of gold standards.

4. Analysts

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

Eddie Tang
VANGEOCHEM LAB LIMITED



VANGEOCHEM LAB LIMITED

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BRANCH OFFICE
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December 10th, 1987

TO: Paul Hawkins
PAUL A. HAWKINS & ASSOC.
300 - 111 5th Avenue
Calgary, Alta. T2P 2T8

FROM: Vangeochem Lab Limited
1521 Pemberton Avenue
North Vancouver, British Columbia
V7P 2S3

SUBJECT: Analytical procedure used to determine gold and silver by fire assay method and detect by gravimetry 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) 1/2 Assay tonne (14.584 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 Fahrenheit to form a lead "button".
- (c) The gold and silver is extracted by cupellation and weighed as a single bead. The gold is then parted with



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diluted nitric acid.

(d) The gold bead is retained for subsequent measurement.

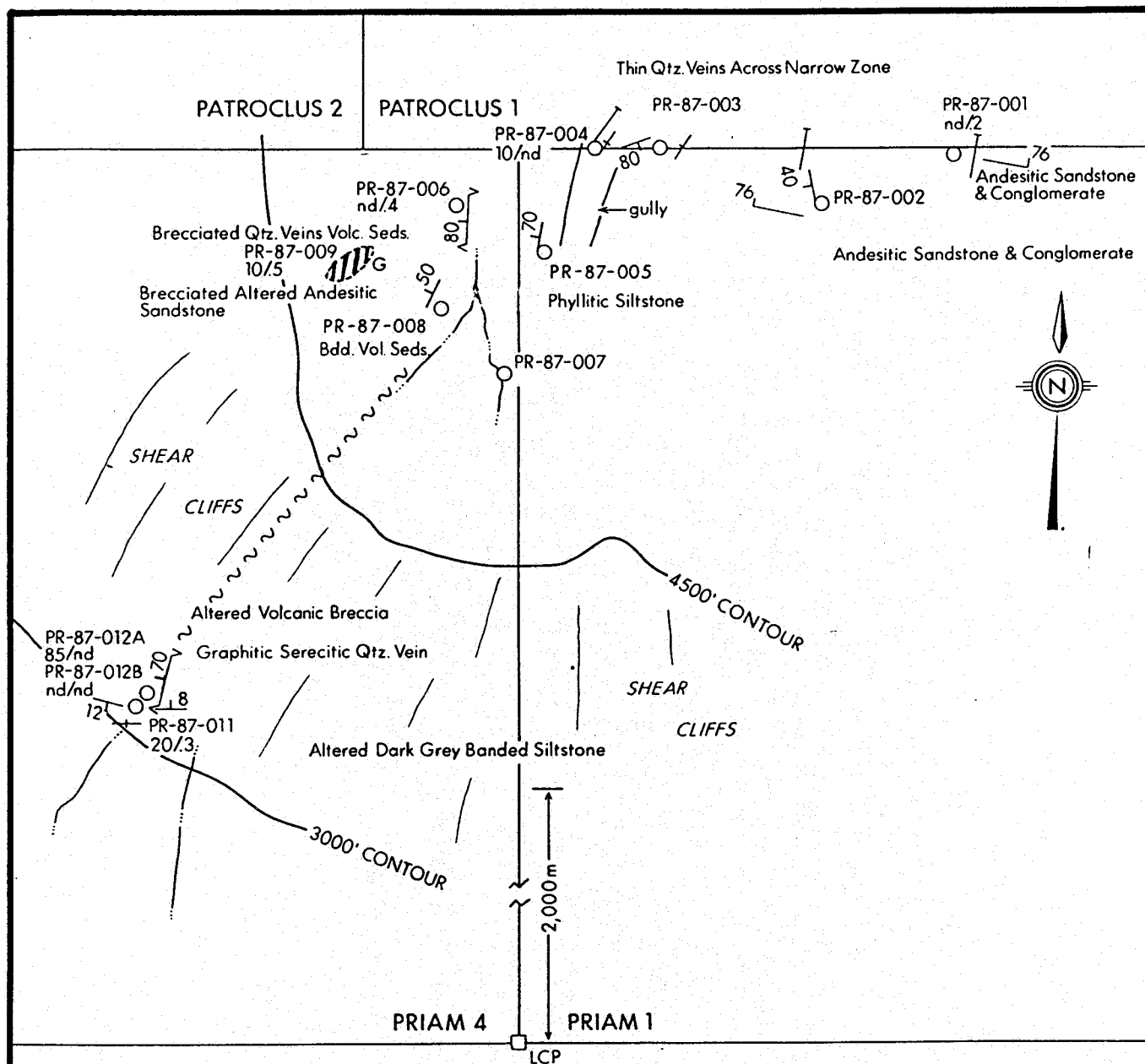
3. Method of Detection

The gold bead is weighed using a Sartorius micro-balance.

4. Analysts

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

David Chiu
VANGEOCHEM LAB LIMITED



LEGEND

- LCP LEGAL CORNER POST
- PR-87-009 Au.ppb/Ag.ppm SAMPLE STATION & NUMBER
- ~~~~~ POSSIBLE SHEAR ZONE
- /— SHEAR
- /— JOINT
- /— STRIKE & DIP
- /— GOSSANOUS ZONE
- STREAM

metres 200 100 0 200 400 metres

Paul A. Hawkins & Associates Ltd.

CLAIM & SAMPLE PLAN PRIAM CLAIM GROUP

UNUK RIVER AREA
NORTHWESTERN BRITISH COLUMBIA

DEC. 1987

1:10,000

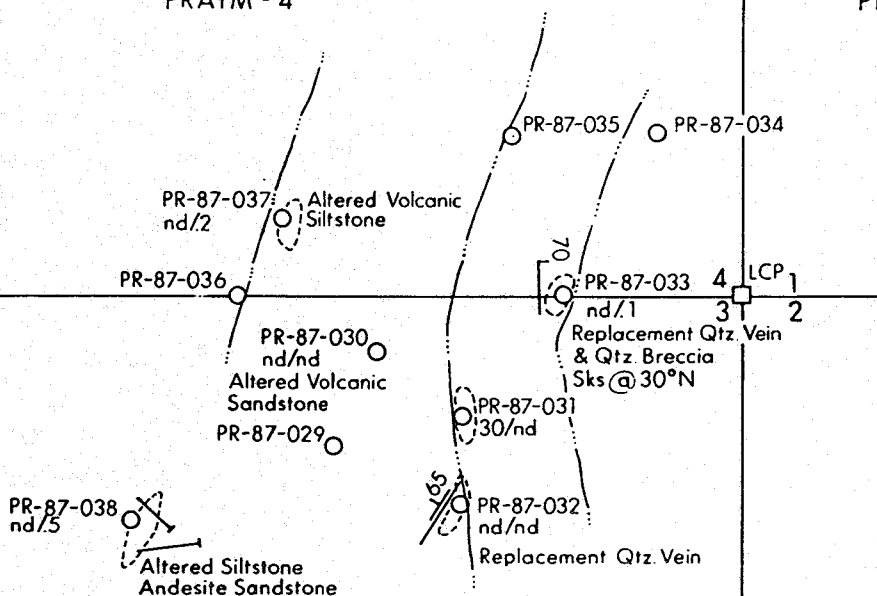
104 B/7

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

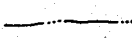





PRAIM - 4

PRAIM - 1



LEGEND

-  LCP
LEGAL CORNER POST
-  PR-87-031
Au.ppb/Ag.ppm SAMPLE STATION & NUMBER
-  GULLY/INTERMITTENT STREAM
-  JOINT
-  STRIKE & DIP
-  OUTCROP AREA

metres 200 100 0 200 400 metres

Paul A. Hawkins & Associates Ltd.

CLAIM & SAMPLE PLAN PRIAM CLAIM GROUP

UNUK RIVER AREA
NORTHWESTERN BRITISH COLUMBIA

DEC 1987

1:10,000

104 B/7

A87-123-11

LCP

MAXWELL SMART

CEBUCK
CREEK



- 50/1.1 — Q1 (upper) Quartz vein and Brecciated Greenschist.
- 5/0.5 — Q1-Q2 Greenschist (altered sandstone)
- nd/0.2 — Q2 Massive white Quartz vein.
- 2290/0.8 — Q3 (lower) Brecciated Greenschist and minor Quartz veining.

SAMPLE AREA CB-87-097

- nd/0.5 — B Lower-massive Greenschist (sandstone).
- 15/0.4 — A Footwall-fissile Greenschist (altered argillite).
- 410/0.5 — C Massive White Quartz vein
- 650/0.8 — D Brecciated Greenschist and Quartz veins (stockwork)

Quartz vein
(0.7m)

LEGEND

- LEGAL CORNER POST
- SHEAR
- STRIKE & DIP
- SAMPLED AREA
- 410/0.5 Au(ppb) / Ag(ppm)

metres 20 10 0 20 40 metres

Paul A. Hawkins & Associates Ltd.

CLAIM & SAMPLE PLAN MAXWELL SMART CLAIM GROUP

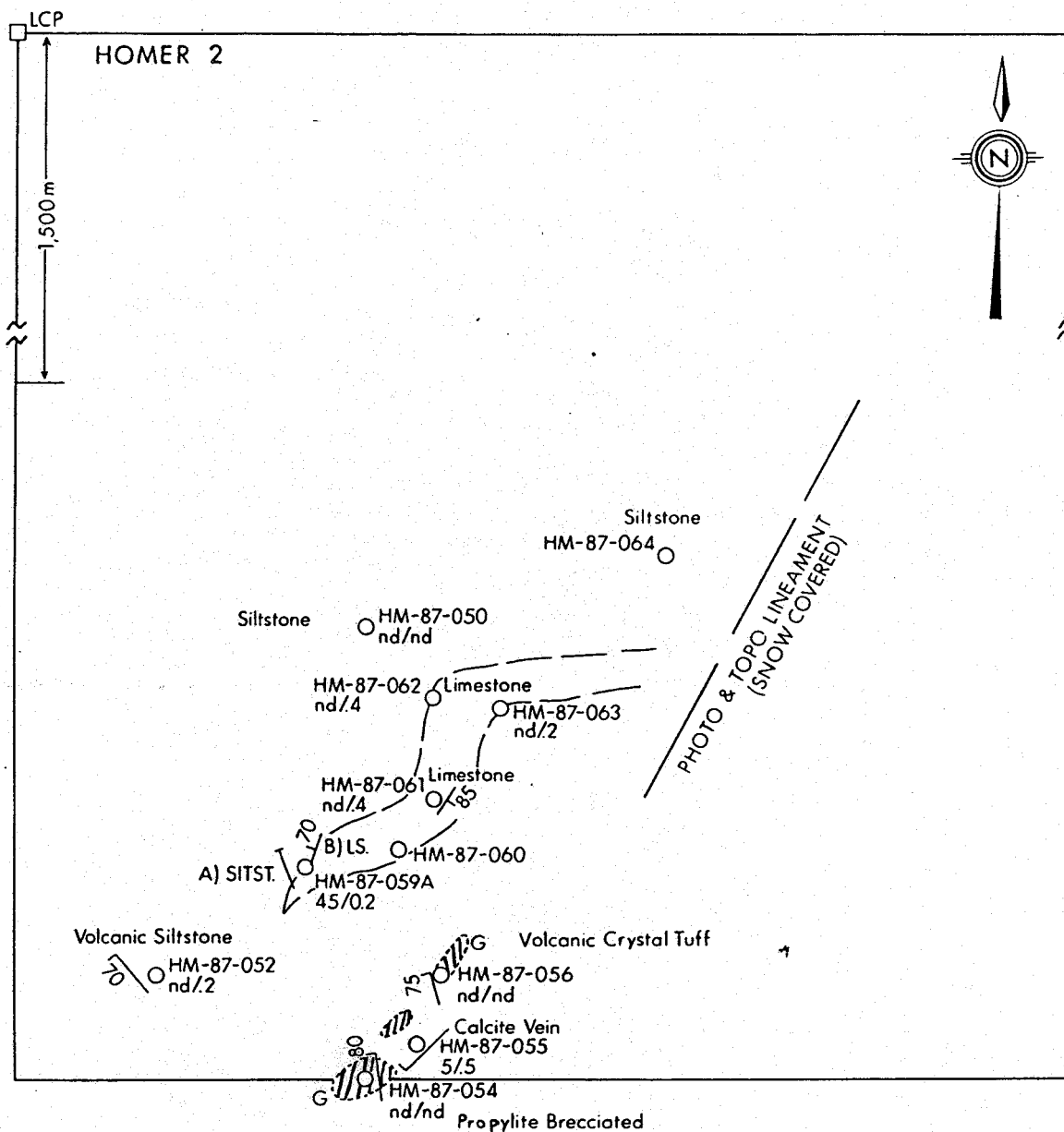
UNUK RIVER AREA
NORTHWESTERN BRITISH COLUMBIA

DEC. 1987

1:1,000

104 B/7

A87-123-12



LEGEND

- LCP LEGAL CORNER POST
- HM-87-052 Au, ppb / Ag, ppm SAMPLE STATION & NUMBER
- /// G GOSSANOUS AREA
- 10° JOINTING WITH DIP

metres 200 100 0 200 400 metres

Paul A. Hawkins & Associates Ltd.

CLAIM & SAMPLE PLAN HOMER 2

UNUK RIVER AREA
NORTHWESTERN BRITISH COLUMBIA

DEC 1987

1:10,000

104 B/7

A87-123-13

EXPENDITURE STATEMENT
CANDORADA STEWART PROPERTIES

Field Expenditures

Professional Services	\$34,623.08
Technical Services (Drafting & Typing)	\$ 2,638.87
Travel Expenses	\$ 7,017.07
Operating Expenses(Room & Board)	\$ 4,829.75
Technical Data	\$ 930.25
Reproduction	\$ 1,076.27
Field Equipment and Supplies	\$ 2,355.43
Transportation	\$ 1,631.42
Equipment Rental	\$ 40.00
Communication	\$ 289.95
	<hr/>
Sub - Total	\$55,432.09

Prorated Field Expenses

Helicopter Charter	\$26,063.78
Assays	\$ 2,042.80
	<hr/>

Total Expenditures	<u><u>\$83,538.67</u></u>
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Averaged Hourly Rate for Helicopter
 $\$23,063.00 \div 43 = 606.13$

Averaged Per Manday Field Costs (All Up)
 $\$55,432.09 \div 29 = \$ 1911.45$

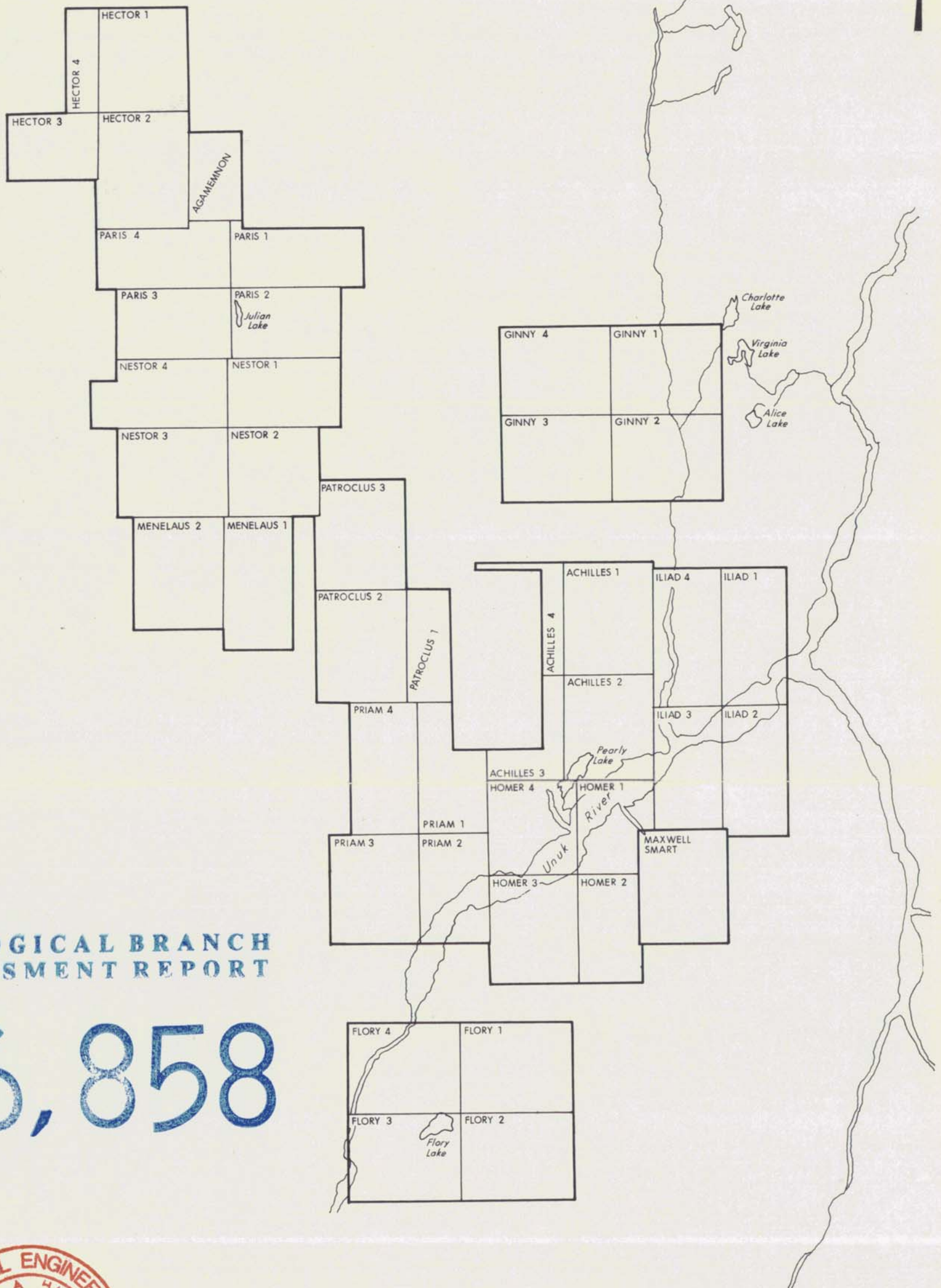
Analytical Costs
Rocks @ \$12.50
Silts @ \$8.35


Paul A. Hawkins, P.Eng.

CANDORADA STEWART PROPERTIES

DAILY CONTRACT RATES

Paul A. Hawkins, P.Eng., Principal	\$320.00
Owen Cullingham, P.Geol., Geologist	\$275.00
Paul Jurcic, M.Sc., Geologist	\$275.00

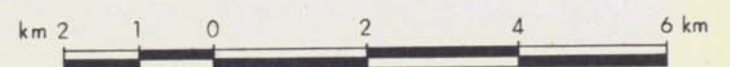


GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,858



PERMIT TO PRACTICE
PAUL A. HAWKINS & ASSOCIATES LTD.
Signature Paul A. Hawkins
Date DEC 30 1987
PERMIT NUMBER P 4521
The Association of Professional Engineers,
Geologists and Geophysicists of Alberta



Paul A. Hawkins & Associates Ltd.

STEWART PROJECT
CLAIM LOCATION PLAN

UNUK RIVER AREA
NORTHWESTERN, BRITISH COLUMBIA

DEC. 1987 1:100,000 104B / 6-11 B87-123-4



LEGEND
○ 87-069
SILT SAMPLE STATIONS
Au (ppb) / Ag (ppm)

LEGEND

87-027 SAMPLE NUMBER
○ SILT SAMPLE LOCATION
15/4 Au (ppb) / Ag (ppm)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,858

Kilometres 1 1/2 0 1 2 3 Kilometres

Paul A. Hawkins & Associates Ltd.

STEWART PROJECT
SILT SAMPLES AND ANALYSES

UNUK RIVER AREA
BRITISH COLUMBIA

DECEMBER, 1987 1:50,000 104 B/6-11 E87-123-6



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LEGEND

- ROCK SAMPLE
- ⊕ FLOAT SAMPLE
- 10/2 SAMPLE NUMBER
- 10/2 Au (ppb) / Ag (ppb)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,858

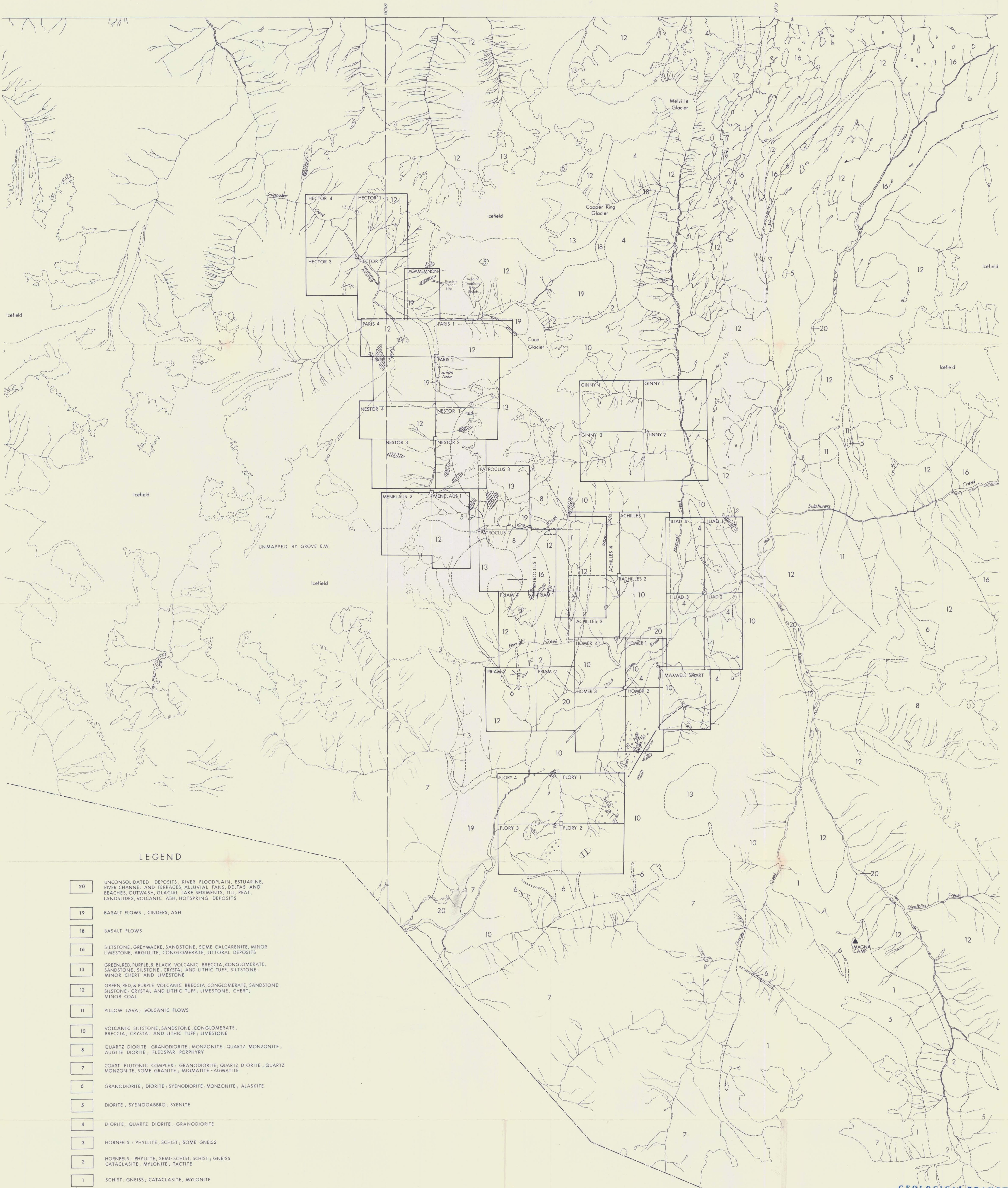
Kilometres 1 1/2 0 1 2 3

Paul A. Hawkins & Associates Ltd.

STEWART PROJECT
ROCK SAMPLES AND ANALYSES

UNUK RIVER AREA
BRITISH COLUMBIA

DECEMBER, 1987 1:50,000 104 B/6-11 E87-123-7



LEGEND

- 20 UNCONSOLIDATED DEPOSITS; RIVER FLOODPLAIN, ESTUARINE, RIVER CHANNEL AND TERRACES, ALLUVIAL FANS, DELTAS AND BEACHES, OUTWASH, GLACIAL LAKE SEDIMENTS, TILL, PEAT, LANDSLIDES, VOLCANIC ASH, HOTSPRING DEPOSITS
- 19 BASALT FLOWS; CINDERS, ASH
- 18 BASALT FLOWS
- 16 SILTSTONE, GREYWACKE, SANDSTONE, SOME CALCARENITE, MINOR LIMESTONE, ARGILLITE, CONGLOMERATE, LITTORAL DEPOSITS
- 13 GREEN, RED, PURPLE, & BLACK VOLCANIC BRECCIA, CONGLOMERATE, SANDSTONE, SILTSTONE, CRYSTAL AND LITHIC TUFF, SILTSTONE, MINOR CHERT AND LIMESTONE
- 12 GREEN, RED, & PURPLE VOLCANIC BRECCIA, CONGLOMERATE, SANDSTONE, SILTSTONE, CRYSTAL AND LITHIC TUFF, LIMESTONE, CHERT, MINOR COAL
- 11 PILLOW LAVA; VOLCANIC FLOWS
- 10 VOLCANIC SILTSTONE, SANDSTONE, CONGLOMERATE, BRECCIA, CRYSTAL AND LITHIC TUFF, LIMESTONE
- 8 QUARTZ DIORITE, GRANODIORITE, MONZONITE, QUARTZ MONZONITE, AUGITE DIORITE, FELDSPAR PORPHYRY
- 7 COAST PLUTONIC COMPLEX; GRANODIORITE, QUARTZ DIORITE, QUARTZ MONZONITE, SOME GRANITE, MIGMATITE-AGMATITE
- 6 GRANODIORITE, DIORITE, SYENODIORITE, MONZONITE, ALASKITE
- 5 DIORITE, SYENOGABBRO, SYENITE
- 4 DIORITE, QUARTZ DIORITE, GRANODIORITE
- 3 HORNFELS, PHYLLITE, SCHIST, SOME GNEISS
- 2 HORNFELS, PHYLLITE, SEMI-SCHIST, SCHIST, GNEISS, CATACLASTITE, MYLONITE, TACTITE
- 1 SCHIST, GNEISS, CATACLASTITE, MYLONITE

- 50 BEDDING
- OUTCROP - AREA
- FLOAT
- FOSSIL LOCATION
- BANDING
- SHEAR AND DIP
- DYKE OR VEIN (defined)
- JOINT
- TRENCH
- GOSSAN

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,858

1 1/2 0 1 2 3 4 5 km

GEOLOGY MODIFIED AFTER
(GROVE E.W., 1986)



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Signature: *Paul A. Hawkins*
Date: DEC 30 1987
PERMIT NUMBER: P 4521
The Association of Professional Engineers,
Geologists and Geophysicists of Alberta

Paul A. Hawkins & Associates Ltd.
STEWART PROJECT
RECONNAISSANCE MAPPING PLAN

UNUK RIVER AREA
NORTHWESTERN, BRITISH COLUMBIA

DECEMBER 1987 1:50,000 1048/6-11 E87-123-9