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GEOLOGICAL & GEOCHEMICAL

ASSESSMENT REPORT

on the

GLOVER CLAIM GROUP

**GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT**

Greenwood M.D.

N.T.S. 82E/1W

26,172

**January 20, 2000
Vancouver, B.C.**

**Laurence Sookochoff, P.Eng.
Sookochoff Consultants Inc.**

Sookochoff Consultants Inc.

**Geological & Geochemical
Assessment Report
on the
Glover Claim Group
for
Carnival Resources Ltd.**

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**Geological & Geochemical
Assessment Report
on the
Glover Claim Group
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Carnival Resources Ltd.**

Introduction

The geochemical portion of the current assessment work on the Glover Claim Group consisted of a localized geochemical program which was completed in two stages between November 4, 1999 and December 9, 1999. The purpose of the geochemical surveys was to determine potential gold-bearing skarn mineralization which may be reflected by a Noranda 1998 IP chargeability high anomaly. A comparable anomaly correlates with the Main Zone mineralization of the Glover Claim Group.

The geological portion of the current assessment work consisted of a lineament array analysis. The lineament array analysis was completed to provide additional information as to the structural controls to the known mineralized zones on the property. This information would be beneficial in locating other potential mineral zones that may be expressed as anomalous areas and correlative with mineral controlling structures.

Information for this report was obtained from sources as cited under the Selected Reference section of this report and from periodic work the writer completed since 1980 on the Hek and Glover Claim Group, which included the data acquired from the supervision and management of exploration programs.

Summary

The Glover Claim Group, comprised of three claims, the Glover 1, Glover II and Glover 13, is located within the northern extension of the Republic Graben. The Graben hosts a number of productive gold mines including one of the leading gold producers of the United States, the Knob Hill mine of northern Washington.

The Glover Claim Group includes the former Hek claim (presently the Glover 13 mineral claim) on which ground original exploration was carried out from 1901. As a result of exploration to date completed on the Glover Claim Group ground, three mineralized zones over a strike length of 400 metres have been delineated.

Summary (cont'd)

The three zones are offset from each other by faults and consist of gold-bearing massive sulfides in addition to gold bearing skarn zones. Former diamond drill testing of the zones resulted in the intersection of massive sulfide mineral zones assaying up to 0.794 ounces gold per ton over a 1.2 metre section and a skarn zone assaying 0.09 ounces gold per ton over a 10.3 metre section. The drill results also indicated limited depth extent to the mineralization and limited tonnage potential due to the number and complexity of the dykes and faults which intersect the mineral zones (Gill, 1998).

A 1995 magnetometer survey over the northern portion of the Glover 13 mineral claim, in part adjacent to and northeast of the three known mineral zones, has indicated 18 magnetometer anomalies of which up to six are located along a magnetic linear indicative of favourable geology for gold mineralization. In addition, a series of old pits may correlate with the magnetic highs.

In the 1998 geological mapping and sampling program on the Main Zone, one of the three mineral zones located on the Hek 13 claim, resulted in the delineation of a 121 metre mineral zone with a width of more than three metres. The zone was traced by three outcrops along its strike, with the massive sulfide content and the intensity of skarning, decreasing eastward. A three metre sample from the westernmost outcrop assayed 0.238 oz/t Au.

The 1999 geological mapping and sampling of the Glover Creek adit zone disclosed low gold values within a massive sulfide skarn zone. This zone, however, may correlate with the gold bearing massive sulfide zone intersected within a drill hole 90 metres to the northeast and at a depth of 60 metres.

In the 1999 magnetometer survey, neither the Glover Creek adit zone, nor the massive sulfide zone at depth and 90 metres northeast, was detected as anomalous. Bull's eye magnetometer HI's occur within the northwest sector of the survey where old trenches are known to occur in an area of intrusives with rare greenstone/andesite outcrop.

Property

The property is comprised of three contiguously located grid-unit claims totaling 29 units. Particulars are as follows:

Claim Name	Units	Tenure No.	Expiry Date
Glover	4	300170	June 13, 2000
Glover 11	16	307457	February 6, 2001
Glover 13	9	314726	November 18, 2000

Any legal aspects pertaining to the claims of the Glover Claim Group are beyond the scope of this report.

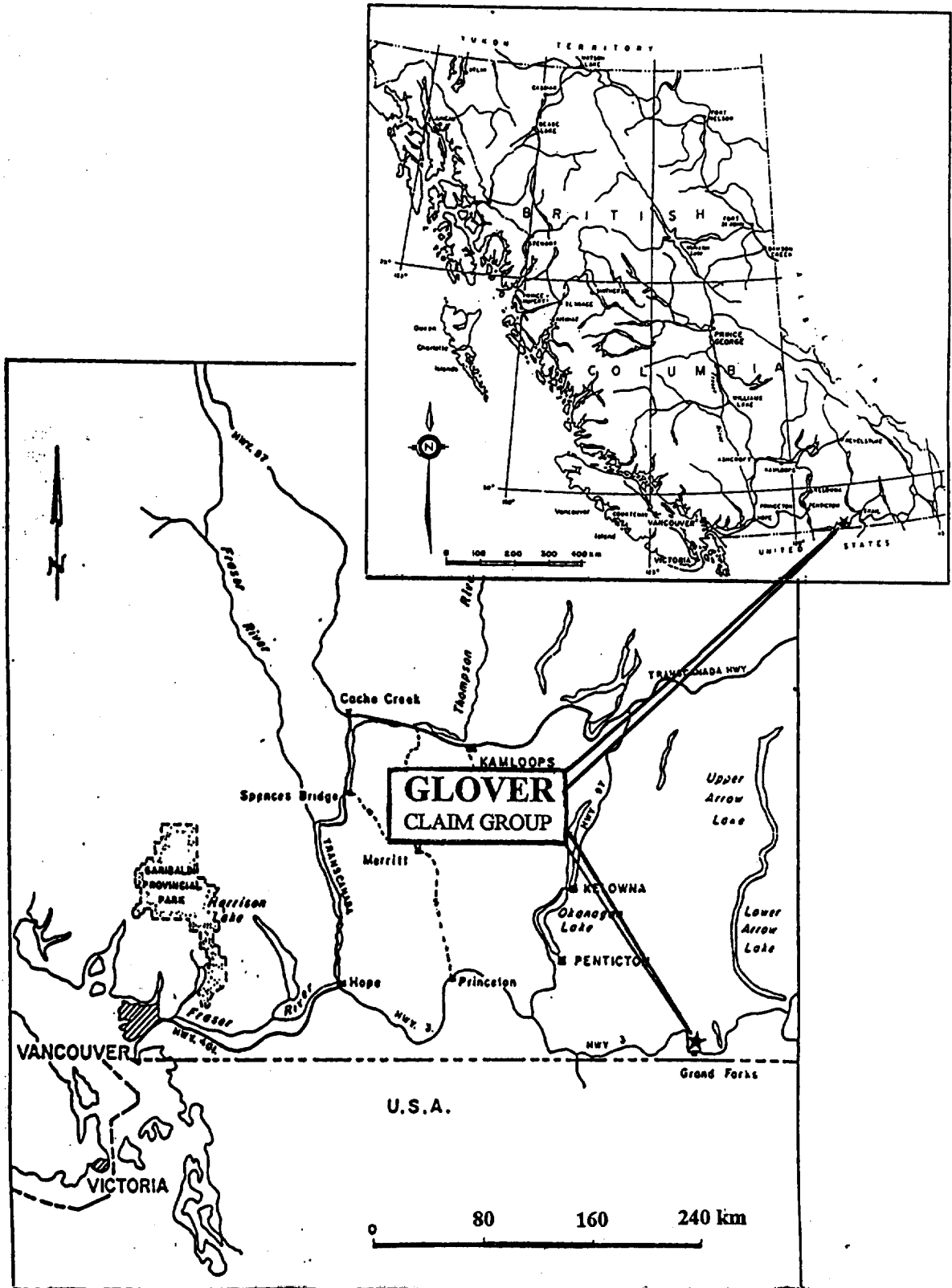


Figure 1. Location Map: Glover Claim Group

Water and Power

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Sufficient water for all phases of the exploration program would be available from the southerly flowing tributaries of Pass Creek which bisects the property. Commercial power could be available from power lines which are located along the southeast corner of the property.

Physiography and Climate

The property lies within the Christina Range of the Monashee Mountains which is characterized by moderate to steep forest sloped mountains to elevations of 1,950 meters. Elevations on the property range between 1200 and 600 metres. The general climate of the area is of arid summers with moderate winters which would provide a surface exploration season of up to 10 months of the year.

History

The history of the area stems from placer deposits discovered along Rock Creek and Boundary Creek west of Grand Forks in the early 1850's.

In 1890 gold-copper deposits were discovered at Rossland, 55 km east of Grand Forks stimulating prospecting throughout the area. The following year, large low grade copper deposits were discovered near Phoenix, 13 km northeast of Grand Forks. The Phoenix district produced about 15 million tons of ore averaging slightly over 1.5% copper with significant gold and silver values. The Phoenix mine ceased operations in 1919 but was later reopened and in production to 1978.

Some of the original exploration in the immediate area of the Glover claim group was on the Pathfinder, located one km east of the Glover claim group and bordering the east side of the Granby River. A 1895 publication on the exploration of the Pathfinder states that:

"...stripped the ledge for 500 feet in length, and in one spot for 25 feet in width, and it appears to be 100 feet wide. They have made a number of cuts and sunk shafts from ten to twenty feet. They have assays of \$51 gold and 2.5 per cent copper, and have had as high as 23 per cent copper."

In 1920, "1,250 tons of ore being shipped assaying 0.43 oz Au/ton and 3.93 Ag/ton". Exploration has continued on the Pathfinder from 1983 to and including 1987. During this period diamond drilling results included intersections of:

<u>Year</u>	<u>Mineralization</u>	<u>Length</u> (feet)	<u>Assay</u>		
			<u>oz Au/ton</u>	<u>oz Ag/ton</u>	<u>%Cu</u>
1985	Massive sulfide	5.0	0.133	0.57	1.18
	Massive sulfide	2.0	0.566	0.40	0.61
1983	Silicified tuff	41.0	0.021		
	including	14.7	0.042		
	Meta-dacitic tuff	12.2	0.120		
	Dacitic tuff	2.4	1.400		
		0.2	0.128		

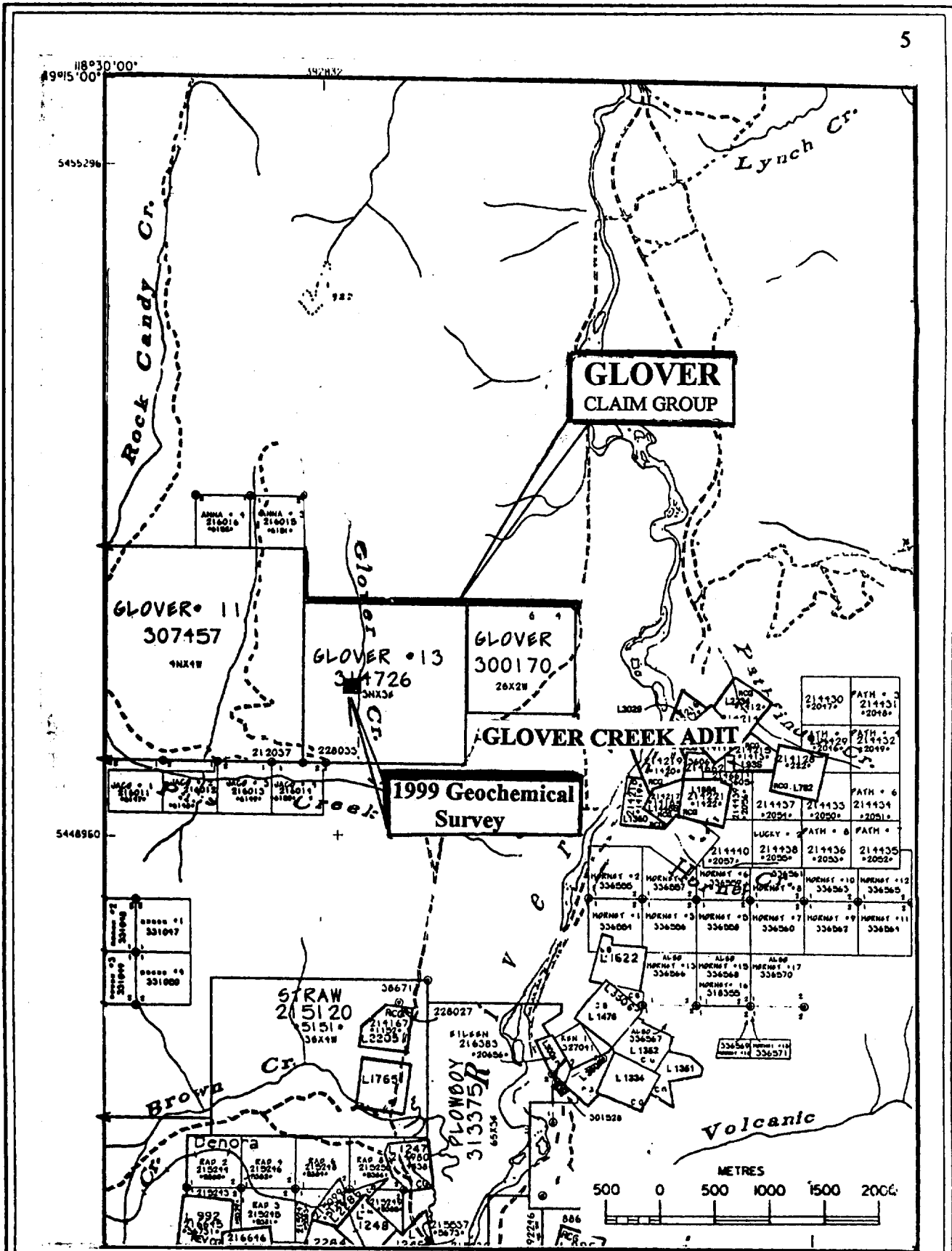


Figure 2. Claim and Index Map: Glover Claim Group

Note: Glover #13 = Former Hek Claim

On the adjacent Golden Eagle claim, exploration is first mentioned in 1899 and by 1925 development consisted of "a shaft 125 deep, a crosscut tunnel 383 feet long, drifting 363 feet, as well as stoping." Shipments totaled 1,057 tons returning 238 oz Au and 2,235 oz Ag or averaging 0.225 oz Au/ton and 2.11 oz Ag/ton.

On Carnival's Glover Claim Group (includes the former Hek claim), exploration has been intermittently carried out since 1901. In 1939 production from the Hek (Simpson Mine) was 364 tons of ore from which 2,593 ounces of gold and 90 ounces of silver were extracted. The Simpson is one of the few zones known on the property. Diamond drilling during the 1970's on a mineral zone southeast of the Simpson Mine returned values ranging from "75 feet of 0.07 oz Au/ton to 26 feet of 0.20 oz Au/ton". Diamond drilling by Consolidated Boundary Explorations Ltd. in 1986 intersected zones of volcanogenic stratified massive sulfide mineralization within a tuffaceous volcanic rock.

In 1986, Noranda Exploration optioned the Hek property from Consolidated Boundary and completed two phases of an exploration program. The first phase consisted of magnetometer, induced polarization, soil geochemical and geological mapping surveys completed in 1987. Reported results indicated gold mineralization to be associated with massive sulfides within highly altered meta-volcanic and sediments close to a large syenite intrusive body. The gold bearing zones are believed to be offset from one another by northeast striking faults. An IP survey delineated a number of anomalies which appear to have traced the offset intrusive/volcano-sedimentary contact for some 800 metres on the property (Gill, 1988).

The second phase of Noranda's exploration program, was completed in 1988 and was comprised of a seven diamond drill hole program. The results indicated that the mineralized zone may be comprised of two massive sulfide zones, as in DDH-HK-88-1 or predominantly a skarned zone as in DDH-HK-88-5. For a complete drill-hole analysis of results, the reader is referred to the detailed report by Gill (1988).

In 1995, 18 kilometres of grid were established over the northern half of the Glover 13 mineral claim whereupon a magnetometer survey, sampling and prospecting was completed by John Kemp of Grand Forks. Thornton (1995) states that of the 18 anomalies, five or six small features lie along or near one magnetic linear in the eastern half of the survey. All anomalies exhibit less than a 40 metre strike length and are considered to arise from thin discontinuous veinlets/fracture fillings of pyrite/pyrrhotite mineralization. Thornton also states that as better gold mineralization is reported to lie on metasedimentary/syenite contacts, the series of anomalies striking N/S at 700E on the grid provide a target for detailed examination.

The 1998 geological mapping and sampling program on the Main Zone, one of the three mineral zones located on the Hek 13 claim, resulted in the delineation of a 121 metre mineral zone with a width of more than three metres. The zone was traced by three outcrops along its strike, with the massive sulfide content and the intensity of skarning, decreasing eastward. A three metre sample from the westernmost outcrop assayed 0.238 oz/t Au..

The 1999 geological mapping and sampling of the Glover Creek adit zone disclosed low gold values within a massive sulfide skarn zone. This zone, however, may correlate with the gold bearing massive sulfide zone intersected within a drill hole 90 metres to the northeast and at a depth of 60 metres.

In the 1999 magnetometer survey, neither the Glover Creek adit zone, nor the massive sulfide zone at depth and 90 metres northeast, was detected as anomalous. Bull's eye magnetometer HI's occur within the northwest sector of the survey where old trenches are known to occur in an area of intrusives with rare greenstone/andesite outcrop.

Geology

The regional geology is described by J. Paxton, P.Eng. in a report on the former Glory claim which was located within four kilometres south-southwest of the Glover claims and adjacent to the east side of Granby River and the major Granby River Fault structure.

The geology is summarized as follows:

A major structure - The Granby River Fault - trends northerly through the property and separates the pre-Pennsylvanian Grand Forks Metamorphic Complex to the east from the Pennsylvanian to Tertiary rocks to the west. The Grand Forks Group are almost completely void of metallic mineral deposits. Pennsylvanian Permian rocks host a number of massive sulfide deposits plus numerous small shear zone polymetallic sulfide lenses

Where rocks have been intruded by later igneous plutons, precious metal quartz veins have developed as well as small skarn type deposits. Numerous small mines in the area such as the Dentonia, Lexington, Providence and Winnipeg are of this type.

The Triassic sequence of conglomerates and bedded limestone are host to the major ore deposits of the area. The chalcopyrite gold hematite ore deposits of the Phoenix, B.C., Motherlode, Sunset and Oro Denora all belong to this group.

On the Glover claim group, Gill (1988), reports on the geological exploration completed by Noranda of the Hek claim group which is summarized by the writer as follows.

Unit 1 consists of rocks of the Paleozoic-Triassic volcano-sedimentary Knobhill assemblage and is comprised of four categories: fine-grained, siliceous meta-andesite and andesite conglomerates (unit 1a); hornfelsed siltstones, fine-grained to medium-grained quartzites and fine-grained quartz-feldspar-biotite gneisses (units 1b, 1c and 1d).

Unit 2 consists of various phases of the Jurassic Nelson intrusive whereas unit 3 and unit 4 comprises the comagmatic Coryell intrusive which underlies most of central portion of the Hek grid.

Units 6, 7 and 8 are a host of Tertiary dyke rocks and are the last intrusive phase represented in the grid area. These dykes intrude all rock types with the latite and trachyte dykes predominating. The orientation pattern of the dyke rocks is generally northeast-southwest and northwest-southeast.

Alteration

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The predominant alteration, as indicated from the drill hole intersections, is of skarned andesites and hornfelsed sediments of the Knobhill group in association with semi-massive to massive zones of pyrite/pyrrhotite containing gold. In the andesites the skarn may be represented by variable degrees of siliceous, green, white andesite skarn associated with variable degrees of massive sulphides. The skarns may also exhibit moderate to intense biotite, varying degrees of calc-silicate and garnet alteration

Structure

A major structural break, the Granby River Fault, trends northerly, correlates in part with the Granby River and is within one kilometre east of the eastern border of the Glover claim group. The Fault, which extends northward from Washington, also forms the eastern edge of the Republic Graben, a major structural block which hosts many productive mineral zones including the Knob Hill Gold Mine of northern Washington, one of the leading gold producers of the United States.

On the Glover Claim group, northeast linear trends of magnetic lows, representing probable fault zones, have offset the sulfide zones at least twice in a south-southwest direction.

Mineralization

According to Gill (1988), mineralization on the Hek property (Glover Claim Group) is concentrated to the irregular contact zone between the Coryell syenite intrusive and the Knobhill volcano-sedimentary package. There are two distinct mineralized zones exposed on the property. The Main Zone is located between 100+30E and 101+60E at approximately 100+55N with the Eastern Zone located between 101+90E and 102+70E at 99+75N. Both the zones consist of semi-massive to massive pyrite and pyrrhotite and occur in highly epidote and biotite altered greenstones and sediments. These sulfide zones trend east-west and dip moderately to the north, not unlike the attitude of the Knobhill rocks.

A third mineralized zone, designated as the Glover Creek Zone, and as indicated from previous drill results, is located at depth on Line 98+50E, 101+35N. This Zone is also hosted within hornfelsed sediments and altered greenstones in close proximity to the Coryell syenite intrusive. Gill (1988) has calculated this Zone with an approximate attitude of 098/57N and oriented at 092/51N.

Gill (1985), reports that the three zones are separated by pronounced structural breaks and are offset from one another in an en echelon fashion. However, no evidence exists in the field to explain these breaks although the dominant northeast-southwest trend of the dyke swarm may in fact represent underlying structures. These fault zones can be traced along linear trends of magnetic lows. The Tertiary dykes are also reported to parallel these magnetic lows.

The 1988 Noranda drill hole intersections have indicated mineral values in association with both massive sulfides and skarns. In DDH-HK-88-1 a 1.2 metre section of massive sulfide returned an assay of 0.794 opt Au whereas in DDH-HK-88-5 a 10.3 metre section of andesite skarn contained 0.09 opt Au. Gill (1988) concludes that although assays taken from drill core indicate that some fairly respectable gold grades exist in these zones, it is also apparent that the mineralization has limited depth extent as seen in DDH-HK-88-2, 4 and 7.

Lineament Array Analysis

A lineament array analysis on the contiguous Glover 1, Glover 11, and Glover 13 claims, with some peripheral area, was completed. The purpose of the analysis was in that commonly lineaments represent the trends of fault zones or the trends of major or minor structures and that knowledge of the structural pattern could be important in the interpretation of the mineral controls. In the case of the Larry claim extensive exploration has been completed, and even though significant mineral zones were delineated, the structural control knowledge of the claim could provide significant correlative information on which to base future exploration.

Air photographs 30 BCC 93073, No.'s 40 - 42 at a mean scale of approximately 1:20,000 were utilized for the lineament array analysis. The analysis was accomplished by a stereographic projection viewing of the photographs and marking the indicated lineaments on an overlay as indicated by Figures 3 & 4. The subsequent 128 indicated lineaments marked were plotted on a rose diagram at a class interval of 5° as indicated on Figure 5.

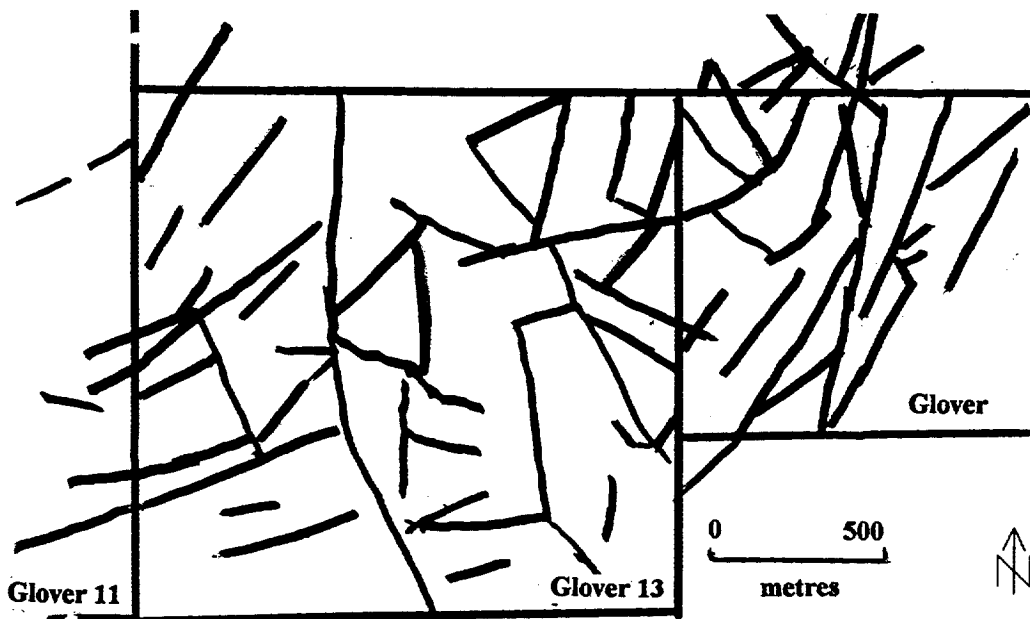


Figure 3. Lineaments on the Glover and Glover 13 mineral claims as interpreted from aerial photographs.

In interpreting the results of the analysis, two conjugate fault arrays are indicated with a principal northeasterly stress direction. The first conjugate fault array is comprised of two associated fault sets; the primary at 020° and the secondary at 320°. The dihedral angle between the sets is 60°, within the typical dihedral angle of fault sets displaying fault sets formed at the same time under the same stress conditions. The second conjugate fault array is also comprised of two apparent fault sets; the primary being at 040° and the secondary at 340°. The dihedral angle between the sets is also 60°, thus indicating the fault sets formed at the same time under the same stress conditions.

Lineament Array Analysis (cont'd)

A visual examination of the photographs to the north of the property, shows a distinctive, dominant regional fault set trending at 330° and a less distinctive fault set at 040° . The intersection site of these two dominant structures, some of which are obvious, could result in favourable mineral controlling conditions.

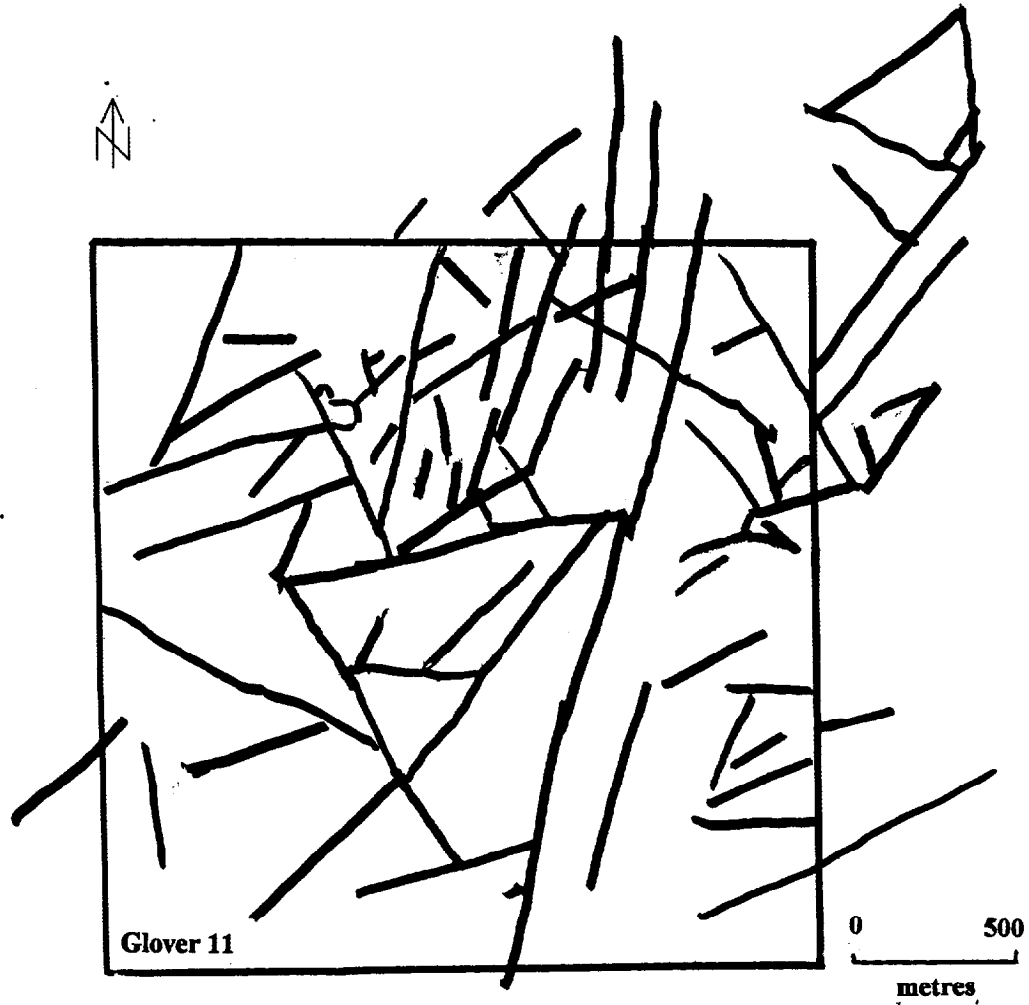


Figure 4. Lineaments on the Glover 11 mineral claim as interpreted from aerial photographs.

On the Glover Claim Group, major structure may only play a minor part in mineral controls as the mineralization appears to be attributed to intrusives with resulting mineralized hornfelsed sediments and altered greenstones adjacent to syenite intrusives. However, it appears that the predominant mineralization occurs along the east-west trending intrusive-sediment contact and offset by northeasterly trending structures. Therefore, the controls to the hornfelsed mineralization may be syn-intrusive structures and not directly related to the Granby Fault structural episode. This is also indicated in the structural analysis results where east-west mineral controlling structures do not relate to the dominant structural array.

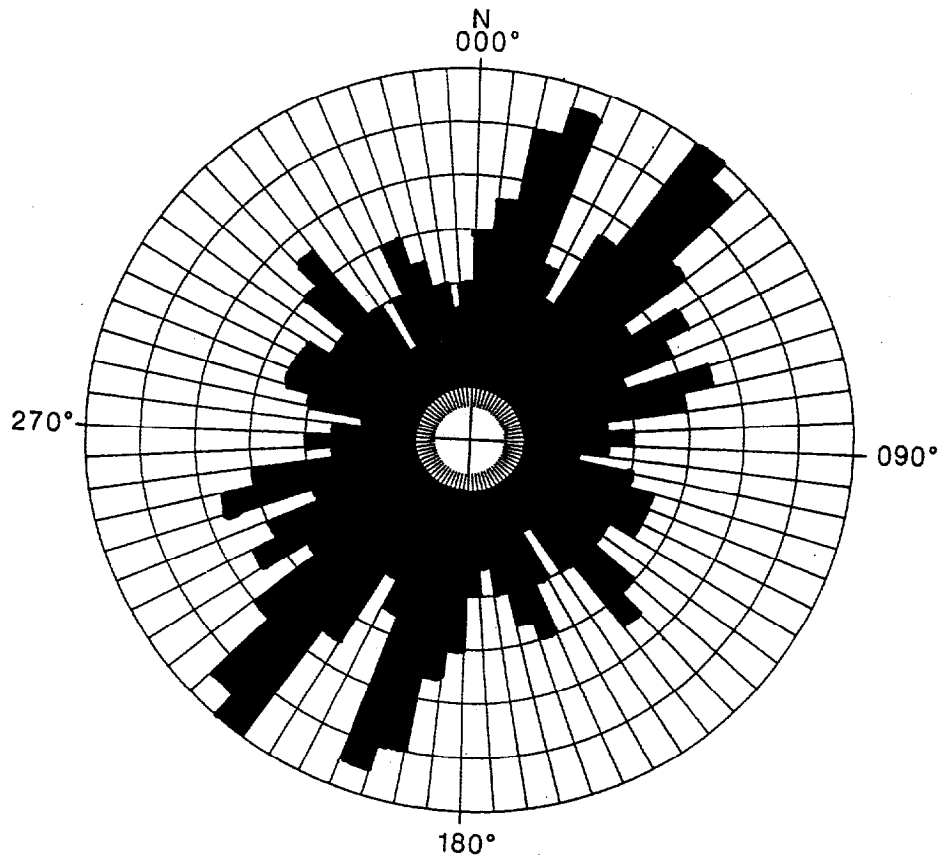
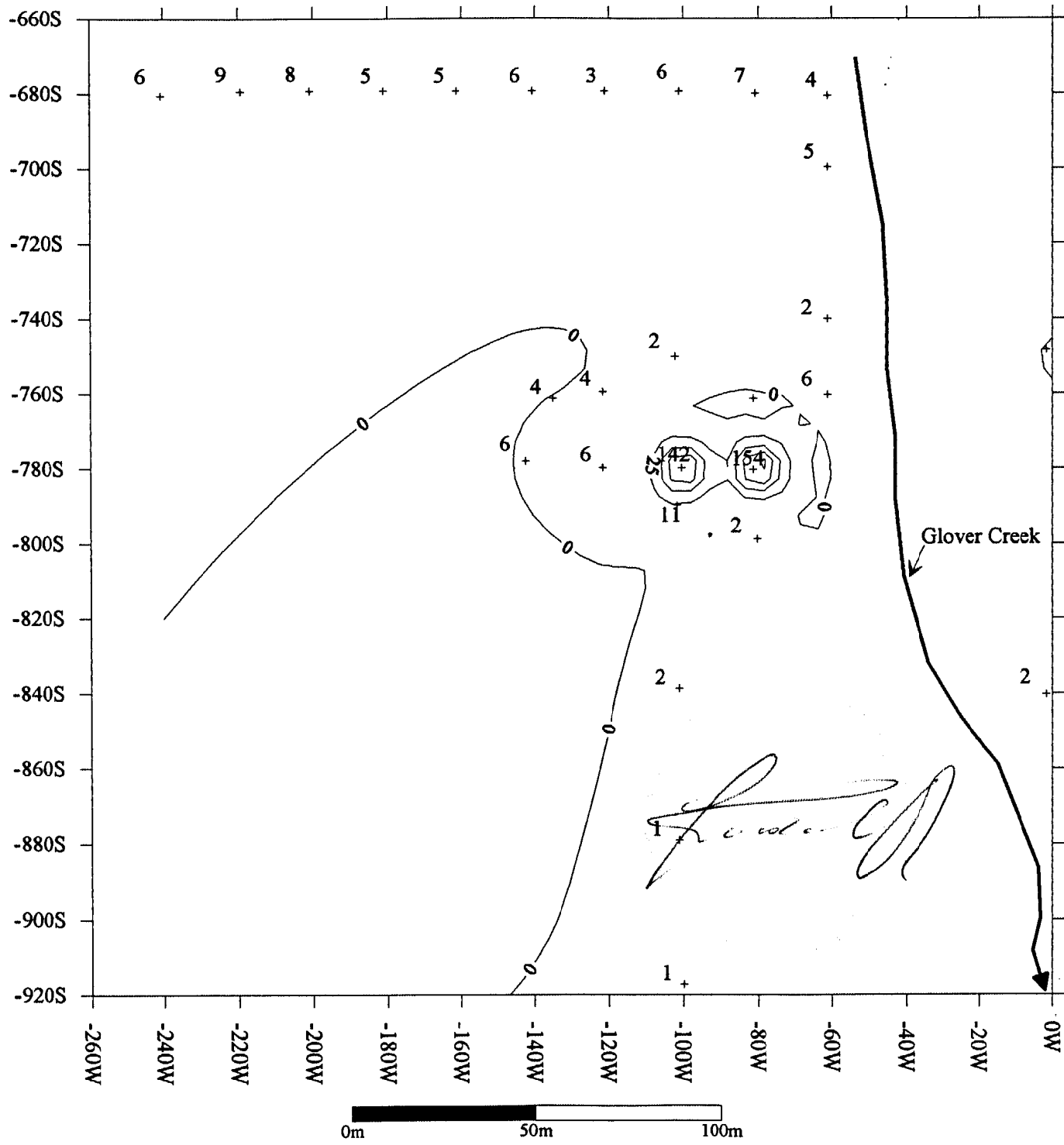


Figure 5 Rose-diagram showing the plot of lineaments on and peripheral to the Glover Claim Group

Geochemical Survey

The location of the soil geochemical survey, adjacent and to the west of Glover Creek, was selected for the Noranda IP-chargeability/resistivity anomaly at 10275N 9700E (Noranda grid). Gill (1988) states that the information obtained from the IP survey (Noranda) indicates that many of the IP anomalies are coincident with the volcano-sedimentary/syenite contact, the anomaly at this location is underlain by Coryell syenite in close proximity to Tertiary trachyte dykes.

In the writer's traverse of the IP anomaly area, localized outcrops of the Knob Hill Group of greenstone were located on the west banks of Glover Creek in addition to the Knob Hill outcrop on the east side of Glover Creek as indicated on Noranda's Geology Map (1988) and on the accompanying Compilation Map. These outcrops, which will be mapped in the future, as a result of the geochem anomaly located in this program, could be an indication that the IP anomaly may be reflecting a mineralized zone comparable to the Main Zone IP anomaly expression.



CARNIVAL RESOURCES LTD.
Glover Claim Group 08201W

Soil Geochemistry Results
Au (ppm)

Scale: As shown January, 2000

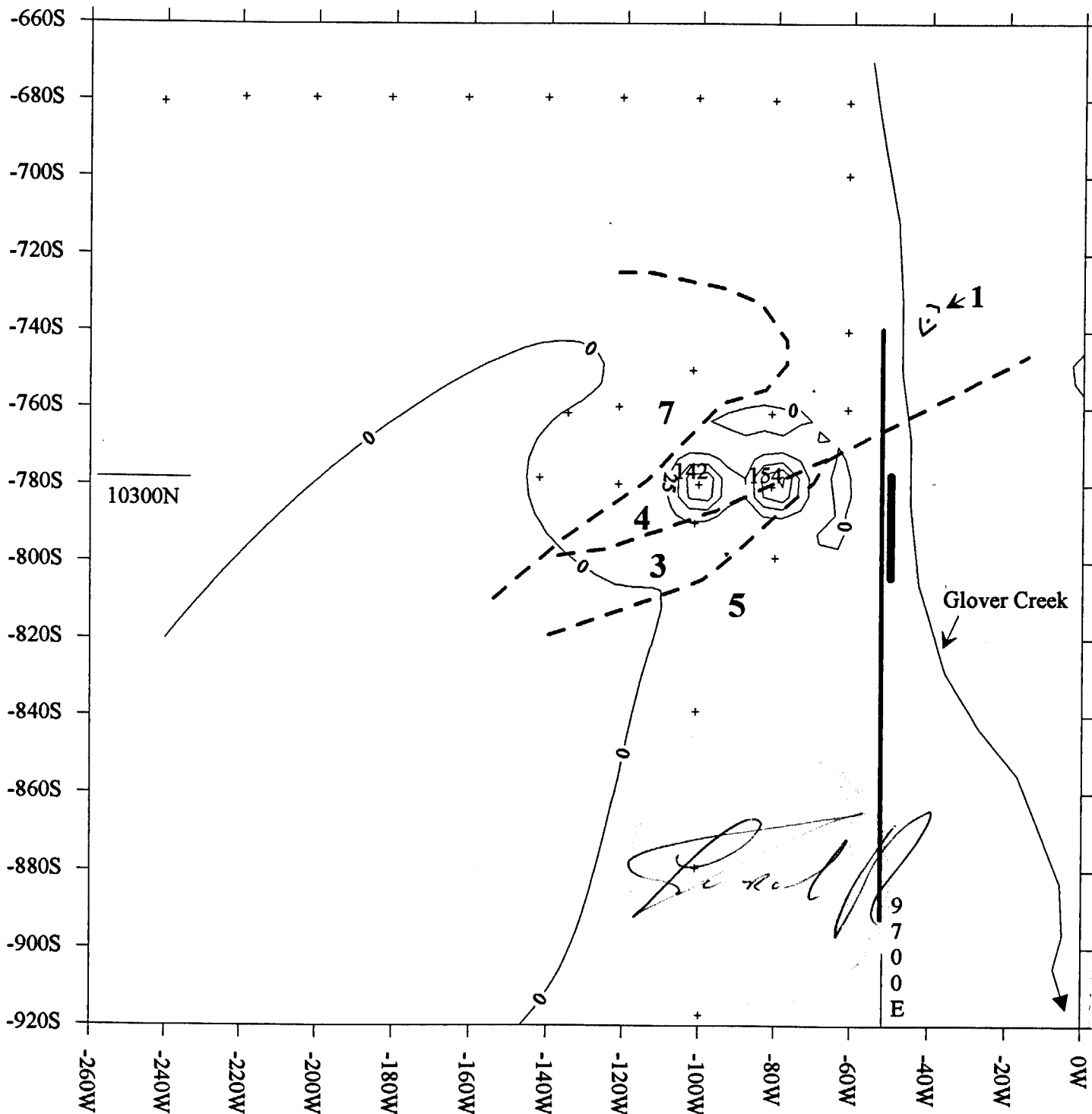
LEGEND

+ Sample site

45 Gold value in ppb

Glover Creek

Figure 6.



CARNIVAL RESOURCES LTD.
Glover Claim Group 08201W

COMPILATION MAP

Soil Geochemistry Results (1999)
Au (ppm)
&
Geology & IP (Noranda, 1988)

Scale: As shown January, 2000



LEGEND
(1999 Results)

- + Sample site
- 45 Gold value in ppb

(1988 Results) Noranda

10300N - 1988 Grid

- IP Anomalies
- Chargeability
- Resistivity (High)

- Geology
- - - Geological Contact
 - 1 Knob Hill Greenstone
 - 3 Quartz Diorite
 - 4 Monzonite
 - 5 Syenite
 - 7 Latite

Figure 7.

The geochemical survey was completed in two separate programs; in November and December, 1999. The reason for the two surveys was to initially determine the potential of the localized IP anomaly for reflecting a mineralized zone and should the results be positive, to expand on the survey and delineate the mineralized zone.

A separate grid had to be established for the current survey and was tied into the 1995 Kemp grid which was established at a northeasterly- northwesterly angle. Soil samples were taken at irregular intervals, but not less than 20 metres apart. The soil was selected from the B horizon of the brown to brownish-grey sandy-silted forest soil at a depth of commonly 30 centimetres. The soil was placed in a brown wet-strength paper bag with the grid coordinates marked thereon and a flagged grid station was placed at the sample site. A total of 25 samples were taken

The samples were analyzed by Acme Laboratories of Vancouver, B.C. The analysis procedure is first to thoroughly dry the sample and then a .500 gram sample is digested with 3 ml. of 3:1:2 HCL-HNO₃-H₂O at 95° for one hour and is diluted to 10 mls. with water. The sample is then analyzed by ICP for 32 elements. Gold analysis is by aqua-regia/MIBK extract and a GF/AA finish. The sample results were reported by Acme as File # 9904328, File # 9904716 and File # 9904328R, all of which are included as Appendix I.

The anomalous soil gold values ranged from a background value of less than 2ppb, to an anomalous high of 153 ppb. A statistical analyses of the results was not completed due to the low number of samples. The gold values were plotted and contoured utilizing the Surfer computer program. The resulting map is indicated as Figure 6.

Conclusions

The soil geochemical survey was successful in that a potential mineralized zone was located which correlates with, and may be the expression, of the IP anomaly along line 9700E. Additional exploration on the soil geochem anomaly would be required to determine the extent and degree of the mineralization reflected by the IP anomaly.

The results of the lineament array analysis indicated that the hornfused zones of mineralization which are dominantly trending east-west are not related, but are subjected to, the structures resulting from the dominant (Granby River Fault) structural array.

To locate other potential mineral zones on the Glover Claim Group, correlative IP anomalies/east-west structures should be investigated.

Respectfully submitted
Sookochoff Consultants Inc.


Laurence Sookochoff, P.Eng.

January 20, 2000
Vancouver B.C.

Sookochoff Consultants Inc.

**Glover 13 Claim
Statement of Costs**

The field work on the Glover 13 Claim was carried out between November 4, 1999 and December 9, 1999 to the value as follows:

L. Sookochoff, P.Eng.	
4 man days @ \$500.	\$ 2,000.00
Car rental:	
4 days @ \$40.00 plus gas & km	253.50
Room & board:	
3 man days @ \$100.00	300.00
Assays	404.36
Results, maps & compilation	625.00
Report, xerox, & printing	1,000.00
Lineament Array Analysis	<u>2,500.00</u>
	<u>\$ 7,082.86</u>

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- CHAPMAN, D.A.** - Fracture Density Study on the Glory and Hit Claims for Beverly Developments Ltd. July 25, 1985.
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- LEROY, O.E.** 1912 - Geological Survey of Canada. Memoir No. 21.
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- McNAUGHTON** - Greenwood - Phoenix Area, British Columbia, G.S.C. Paper 45-20 Canada Dept. of Mines, Ottawa, 1945.
- McNAUGHTON, D.A.** - 1945 - Greenwood-Phoenix Area, B.C. G.S.C. Paper 45-20 Map Scale - 1 inch to 800 feet.
- MEYER, W.** - Diamond Drilling, Geological, Magnetometer and Soil Geochemical Report on the Hek Claim for Boundary Gold Ltd. 1975. AR 6,130.
- MINDEP FILES** - Computer retrieval mineral inventory files on B.C. including entry 82E/SW 020-028. (Phoenix). B.C. Ministry of Energy, Mines and Petroleum Resources.
- MINISTER OF MINES ANNUAL REPORTS:** 1898 p. 1118; 1906 p. 254; 1928 p. 251; 1939 p. D5.

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SOOKOCHOFF, L. - Geological Report on the Hek and Hel claims for Aries Resources Ltd., February 25, 1980.

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- 1986 Assessment Diamond Drilling Program on the Hek Claim Group for Consolidated Boundary Explorations Ltd. and Grand Forks Mines Ltd. January 26, 1987. AR 16,066.

- Geological Assessment Report on the Glover 13 claim, July 14, 1998. AR 25,563; AR 25,720.

- Geological & Geophysical Assessment Report on the Glover 11 claim, April 30 1999. AR 25,901.

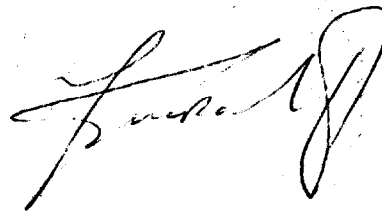
Certificate

I, Laurence Sookochoff, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist and principal of Sookochoff Consultants Inc. with offices at Suite 1027, The Standard Building, 510 West Hastings Street, Vancouver, BC V6B 1L8.

I, Laurence Sookochoff, further certify that:

- 1) I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology.
- 2) I have been practicing my profession for the past thirty-three years.
- 3) I am registered and in good standing with the Association of Professional Engineers and Geoscientists of British Columbia.
- 4) The information for this report is based on information as itemized in the Selected Reference section of this report and from work the writer has completed on the Glover (Hek) property since 1980.



Laurence Sookochoff, P. Eng.

Vancouver, BC
January 20, 2000

Appendix I

ASSAY CERTIFICATES

ACME ANALYTICAL LABORATORIES LTD.
(ISO 9002 Accredited Co.)

852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Sookochoff Consultants Inc. PROJECT HEK File # 9904329
1027 - 510 W. Hastings St, Vancouver BC V6B 1L6 Submitted by: L. Sookochoff



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au*	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb
RHEK 1	24	48	11	140	.6	18	4	137	3.12	2	<8	<2	6	62	1.8	<3	<3	95	.68	.138	13	27	.20	117	.10	<3	.74	.16	.17	3	<5	1	4	

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK AU* GROUP 3A - 10.00 GM SAMPLE, AQUA-REGIA, MIBK EXTRACT, ANALYSIS BY GF/AA.

DATE RECEIVED: NOV 8 1999 DATE REPORT MAILED: Nov 15/99 SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS CERTIFICATE

Sookochoff Consultants Inc. PROJECT HEK File # 9904716

1027 - 510 W. Hastings St, Vancouver BC V6B 1L8 Submitted by: L. Sookochoff

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Tl	Hg	Au*	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppb
7+50S 1+00W	1	25	24	107	.3	19	12	1270	3.17	7	<8	<2	9	60	<.2	<3	<3	75	.48	.095	51	38	.54	190	.16	6	2.76	.02	.28	3	<5	<1	1.8	
7+50S 0+00W	1	27	20	119	<.3	30	11	864	2.96	9	<8	<2	7	70	.2	4	3	67	.53	.098	37	32	.48	164	.14	4	2.79	.02	.30	3	<5	<1	27.4	
7+60S 1+20W	1	33	18	197	<.3	38	18	1712	2.36	5	<8	<2	4	60	1.5	<3	<3	54	.50	.137	21	21	.31	162	.10	<3	2.16	.02	.12	4	<5	<1	4.0	
7+80S 1+20W	1	25	16	183	<.3	21	10	1556	2.66	6	<8	<2	7	63	1.4	<3	<3	63	.48	.115	32	30	.41	218	.13	3	2.34	.02	.26	4	<5	<1	6.4	
7+80S 1+00W	3	41	15	251	.4	44	17	1085	3.55	11	<8	<2	8	46	.7	4	<3	86	.42	.102	39	33	.52	137	.14	4	3.00	.02	.16	2	<5	1	142.4	
7+90S 1+00W	4	39	18	209	<.3	36	16	922	3.29	11	<8	<2	7	33	.3	3	<3	76	.32	.078	36	32	.38	98	.11	5	2.36	.02	.09	3	<5	<1	11.6	
8+40SE 1+00W	2	23	14	123	<.3	14	8	1009	2.21	3	<8	<2	5	56	.3	<3	<3	53	.48	.136	27	27	.23	174	.08	<3	1.76	.02	.12	2	<5	1	1.5	
8+40SE 0+00W	1	17	21	111	<.3	12	7	1110	2.30	2	<8	<2	6	73	.2	3	<3	54	.73	.106	43	32	.31	175	.08	7	1.23	.01	.25	3	<5	<1	1.5	
8+80SE 1+00W	3	21	15	99	<.3	10	6	1127	2.00	4	<8	<2	5	72	.4	<3	<3	46	.60	.180	25	23	.22	252	.08	3	1.54	.01	.19	2	<5	<1	1.3	
9+20SE 1+00W	2	14	11	63	<.3	10	6	810	2.11	2	<8	<2	6	39	<.2	<3	<3	54	.35	.123	29	27	.20	140	.07	<3	1.26	.01	.09	<2	<5	1	1.1	
RE 9+20SE 1+00W	2	14	14	64	<.3	11	6	812	2.13	3	<8	<2	6	40	<.2	<3	<3	55	.35	.124	30	29	.20	141	.07	<3	1.28	.01	.09	2	<5	1	1.3	
STANDARD DS2	15	134	31	175	<.3	40	14	887	3.47	59	23	<2	4	31	11.6	11	11	87	.58	.089	18	188	.65	155	.09	4	1.89	.04	.17	12	<5	2	197.7	

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
 UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
 AU* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 gm)
 - SAMPLE TYPE: SOIL Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: DEC 8 1999 DATE REPORT MAILED: *Dec 17/99* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE

Sookochoff Consultants Inc. PROJECT HEK File # 9904328

1027 - 510 W. Hastings St., Vancouver BC V6B 1L8 Submitted by: L. Sookochoff



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
6+80S 2+40W	2	30	17	91	<.3	12	7	843	2.21	4	<8	<2	8	94	.7	3	<3	46	.54	.283	33	24	.34	201	.10	3	2.19	.03	.13	<2	
6+80S 2+20W	<1	20	10	105	<.3	3	3	1351	.82	3	<8	<2	2	80	.2	<3	<3	21	.54	.083	9	5	.11	159	.05	<3	.70	.04	.11	<2	
6+80S 2+00W	1	21	17	99	<.3	8	5	1314	1.83	2	<8	<2	4	67	.6	<3	<3	36	.45	.145	37	16	.21	220	.08	<3	1.91	.03	.09	<2	
6+80S 1+80W	1	21	24	92	<.3	9	7	1077	2.09	3	<8	<2	6	61	.6	<3	<3	40	.48	.097	49	22	.28	242	.10	4	2.30	.03	.20	<2	
6+80S 1+60W	2	26	22	92	.3	12	8	1059	2.60	5	<8	<2	9	51	.7	<3	4	51	.38	.070	57	25	.31	218	.12	<3	2.92	.03	.20	<2	
6+80S 1+40W	2	31	32	99	<.3	18	10	1004	2.88	6	<8	<2	7	56	.8	<3	<3	60	.46	.116	45	35	.50	287	.15	<3	2.91	.03	.26	<2	
6+80S 1+20W	1	23	22	84	<.3	13	8	729	2.59	4	<8	<2	6	59	.6	3	3	56	.56	.106	37	38	.35	204	.12	<3	2.59	.03	.21	<2	
6+80S 1+00W	1	21	11	56	<.3	5	5	621	1.34	4	<8	<2	2	54	<.2	<3	<3	32	.52	.166	10	12	.18	143	.06	4	1.10	.04	.11	<2	
6+80S 0+80W	1	18	21	79	<.3	14	7	468	2.74	2	<8	<2	9	43	.6	<3	<3	57	.34	.065	31	32	.37	127	.13	<3	2.14	.03	.23	<2	
6+80S 0+60W	<1	10	5	64	<.3	3	3	600	.76	<2	<8	<2	<2	36	<.2	<3	<3	23	.25	.136	4	8	.10	145	.06	<3	.48	.04	.10	<2	
7+00S 0+60W	<1	17	13	72	<.3	7	4	682	1.07	<2	<8	<2	2	54	<.2	<3	<3	28	.34	.078	9	12	.18	132	.07	<3	.74	.05	.11	<2	
RE 7+00S 0+60W	<1	17	16	72	<.3	7	4	683	1.08	2	<8	<2	2	52	<.2	<3	<3	28	.34	.076	9	13	.18	129	.07	3	.73	.05	.11	<2	
7+40S 0+60W	1	27	10	291	.3	7	6	3311	1.32	3	<8	<2	2	150	1.2	<3	<3	25	.96	.258	12	12	.20	458	.06	6	1.15	.03	.15	<2	
7+60S 0+60W	1	24	14	253	<.3	34	13	1379	2.42	7	<8	<2	5	52	1.9	<3	<3	50	.45	.067	21	23	.30	157	.10	5	2.07	.03	.19	<2	
7+80S 0+80W	6	67	20	264	1.4	56	21	777	3.99	15	<8	2	10	28	1.2	3	4	75	.28	.145	34	30	.48	91	.14	3	3.60	.03	.10	<2	
8+00S 0+80W	1	27	17	127	<.3	16	8	800	2.46	8	<8	<2	7	58	.9	<3	<3	54	.45	.120	30	26	.25	139	.09	<3	1.67	.03	.12	2	
STANDARD C3	26	67	34	170	5.8	37	13	812	3.42	58	14	4	22	31	25.5	23	25	81	.58	.092	18	173	.63	157	.08	20	1.99	.05	.18	18	
STANDARD G-2	2	3	5	43	<.3	8	5	561	2.11	2	<8	<2	4	100	<.2	<3	<3	41	.72	.096	8	83	.62	271	.12	<3	1.30	.19	.63	2	

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SOIL Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: NOV 8 1999

DATE REPORT MAILED: NOV 15/99

SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE



Sookochoff Consultants Inc. PROJECT HEK File # 9904328R

1027 - 510 W. Hastings St., Vancouver BC V6B 1L8 Submitted by: L. Sookochoff

SAMPLE#	Au* ppb
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6+80S 2+40W	5.7
6+80S 2+20W	9.1
6+80S 2+00W	8.3
6+80S 1+80W	5.2
6+80S 1+60W	5.2
6+80S 1+40W	6.0
6+80S 1+20W	3.2
6+80S 1+00W	6.0
6+80S 0+80W	7.2
6+80S 0+60W	3.5
7+00S 0+60W	5.2
RE 7+00S 0+60W	1.7
7+40S 0+60W	1.9
7+60S 0+60W	5.8
7+80S 0+80W	153.6
8+00S 0+80W	11.4
STANDARD DS2	226.2

AU* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 gm)

- SAMPLE TYPE: SOIL PULP

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: DEC 8 1999

DATE REPORT MAILED: Dec 15/99

SIGNED BY: *C. Toy* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS