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GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE NO:

SER 1 TO 4 CLAIMS

NTS 104B\10W

Latitude 56° 37' Longitude 130° 52'

Liard Mining Division

SUB-RECORDER
DEU 23 1993
M.R. # \$ VARCOUNCER, B.C.

By

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November 1993

Project owner and operator: Homestake Canada Inc.

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GEOLOGICAL BRANCH ASSESSMENT REPORT

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SUMMARY

The SER 1-4 claims were staked to cover an area of strongly altered volcanic and intrusive rocks located on Sericite Ridge. The 1993 exploration program built on previous evaluations by establishing a detailed grid over an area of known Au, Cu soil anomalies and Au-Cu mineralization. Mapping, rock and soil geochemistry indicate that there is a significant area underlain by Cu-Au porphyry style mineralization associated with orthoclase porphyry dykes and stocks. The work has defined several areas of Cu and Au in soil anomalies that are largely transported from a known area of mineralization, the Blue Ribbon zone. The grade of the sampled mineralization and previous drillholes indicating limited depth potential, suggest that the economic potential of the area is limited and no further work is recommended at this time.

1. INTRODUCTION

The SER 1-3 claims were staked in 1992 to cover an area of strongly gossanous altered volcanic and intrusive rocks located on Sericite Ridge. The claims cover an area that has been evaluated by several groups, with known Au and Cu soil anomalies and lies adjacent to known porphyry Au style mineralization on the Snip 2 claim. The 1993 exploration program evaluated the potential of the claims to host an economic porphyry Au or Cu-Au deposit. In nine days of work, from August 22-28th, a two man crew established a picketed and flagged grid over the main area of interest to provide control for mapping, soil and rock sampling. The results of the program indicate the presence of significant alteration and restricted zones of Au mineralization. Some of the previously identified Au and Cu anomalies are probably transported downslope from the Snip 2 claim (Blue Ribbon showing). The potential for an economic bulk-tonnage Au deposit within the claim area is considered low and no further work is recommended.

Total costs for the program are \$9,900. The SER 4 claim were staked concurrent with the work program, and only \$600 of geological work are applied to that claim. Soil and rock samples collected prior to completion of the SER 4 claim are not included in costs filed for assessment purposes.

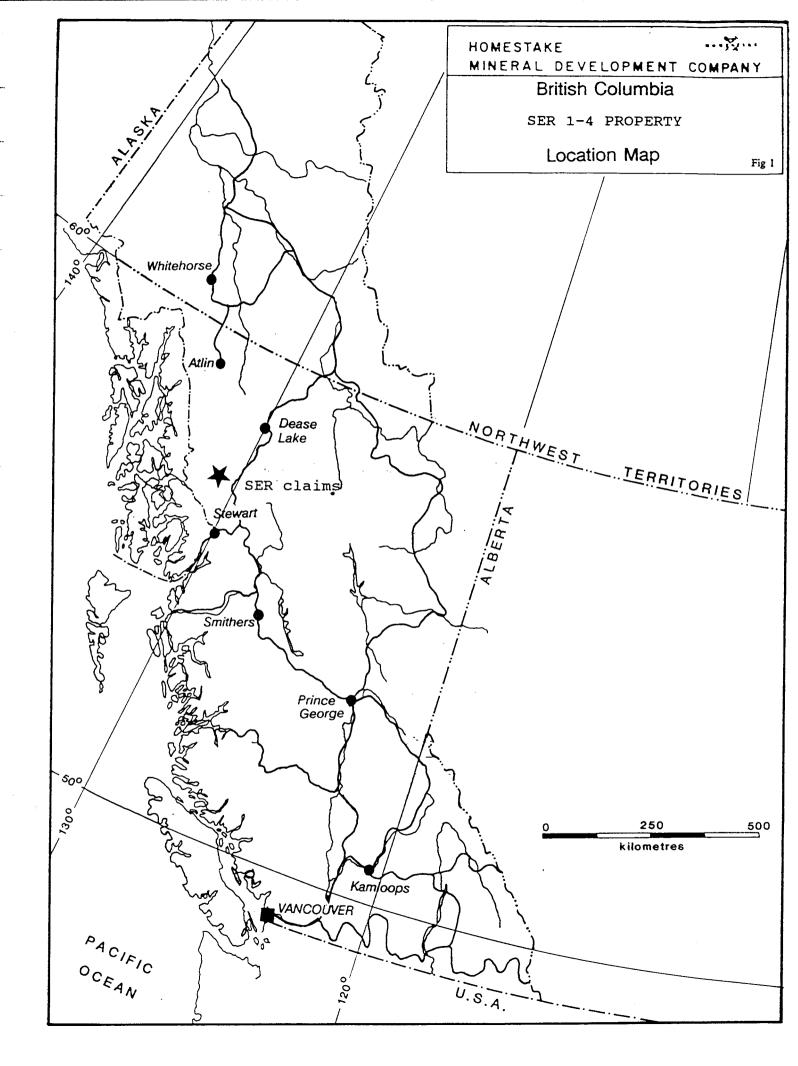
2.0 CLAIM STATUS

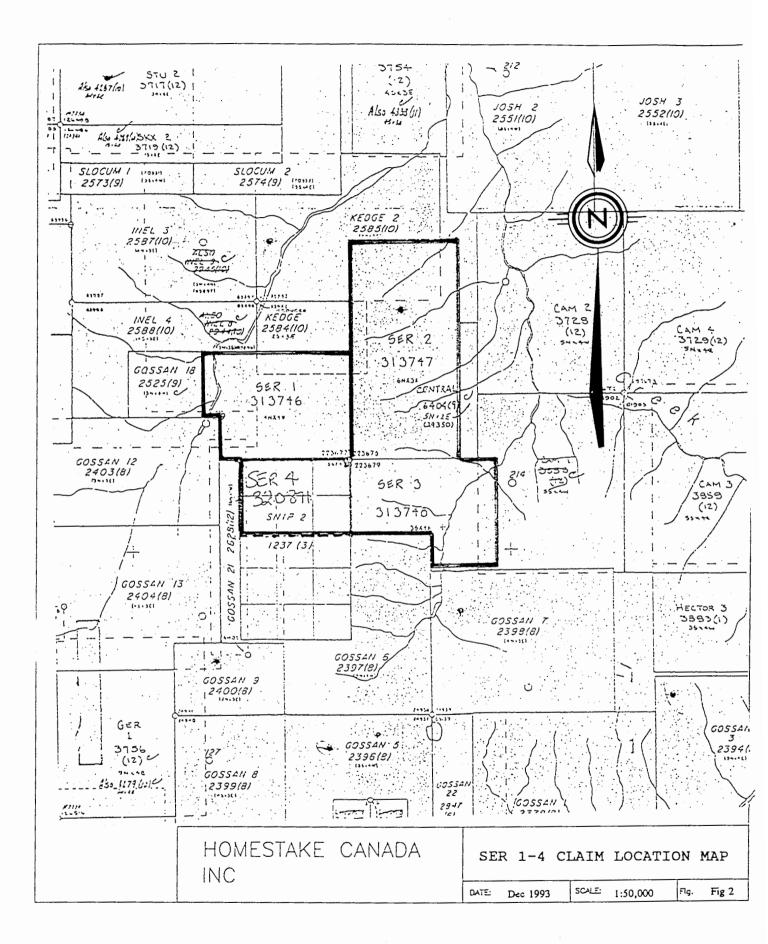
The SER 1-3 claims record date is October 6, 1992 and upon acceptance of this report will be valid until October 6, 1995. The SER 4 claim was staked to cover a probable gap between the Snip 2 claim and the SER 1-3 claims. The claim record date is August 26, 1993 and upon acceptance of this report will be valid until August 26, 1995.

Claim	Units	Record No	Due date
SER 1	16	313746	Oct 6, 1993
SER 2	18	313747	Oct 6, 1993
SER 3	12	313748	Oct 6, 1993
SER 4	6	320871	Aug 26, 1994

3.0 LOCATION AND ACCESS

The SER claims are located in northwestern British Columbia within the Liard Mining Division on NTS map 104B\10W. The claims are centred at latitude 56° 37', longitude 130° 52'. The area can only be accessed via helicopter, either from the Bronson airstrip and Snip Mine located 16 km to the northwest or from Bell II on the Stewart Cassiar highway, located 80 km to the east. During the 1993 field season the claims were worked from a small fly camp supported from the Eskay Creek exploration camp.





4.0 PHYSIOGRAPHY AND VEGETATION

The SER claims cover a broad north trending ridge. The top of the ridge is at 5600' and is a gentle plateau area devoid of vegetation with minor glacial and permanent snow cover. The east and west sides of the ridge are steep slopes extending down to 2000'. The slopes are covered by subalpine forest cover cut by numerous gullies and avalanche runs. Rainfall exceeds 2000 mm annually and the snowpack remains over much of the ridge until late July. The effective working season extends from mid to late July through the end of September.

5.0 **PREVIOUS WORK**

The Sericite Ridge area is part of an extensive gossanous area that has attracted the attention of exploration companies for many years. The SER 1-3 claims cover an area originally staked as the Gossan 18-20 claims. The claim area and immediate vicinity have seen several previous exploration programs. The following is a brief chronology of work performed to date:

<u>1981</u> Teck Corporation conducted a soil geochemistry survey on the Snip 2 claim. 101 soil samples were taken at 50 m intervals on 150 m spaced lines. Teck defined a 300 X 200 m zone of Au > 0.1 ppm and Ag > 100 ppm open at both ends.

<u>1983</u> A programme of reconnaissance geochemical and geological mapping by Lonestar Resources Ltd. on the Gossan claims. Several reconnaissance traverses which involved rock and soil sampling were conducted along Sericite Ridge.

<u>1983</u> Onaping Resources conducted geological mapping, soil and rock sampling, ground magnetic and EM-16 (VLF) survey on Gossan 18 - 20, and Central claims. 34 km of grid line were established for geophysical surveys, soil sampling, and property geology. Soil samples were taken at 100 m intervals on 200 m spaced grid lines.

<u>1987</u> Program of rock and soil sampling, magnetometer survey and diamond drilling by Teck Corporation on Snip 2 claim. Eight holes were drilled for a total of 1015 m to define the extent of the Blue Ribbon zone to depth. Soil sampling was conducted on the northeast portion of Snip 2 at 25 m intervals on 50 m spaced lines.

<u>1987</u> Program of geochemical and geological mapping by Western Canadian Mining Corp. on Gossan 6, Gossan 9 - 13 and Gossan 21 claims. A grid was established on the east flank of Sericite Ridge. Samples were taken at 25 m intervals on lines 100 m apart for a total of 870 samples. This survey defined a 400 m² zone of Au > 50 ppb (SJ Zone).

<u>1989</u> Program of prospecting and rock sampling was conducted by Harrisburg-Dayton Resources on the Central Claims Group to determine the source region for Au soil anomalies defined in 1983 by Onaping Resources.

1990 Cathedral Gold Corp. conducted an exploration program on the Pelican Property (Gossan 1-7, 22, 25 claims) which involved geological mapping, geophysical survey, rock and soil sampling. A grid was established on the SJ Zone to conduct soil sampling and EM survey. Grid lines were set at 50 m intervals with soil samples taken every 25 m. Contour soil samples were taken north of the SJ grid every 25 m at 1460 and 1500 m elevations.

No further work was recorded prior to current exploration program. Regional

mapping surveys by the BCDM were conducted in 1989 and published as Open File map 1990-16.

6.0 **REGIONAL GEOLOGY**

6.1 Stratigraphy

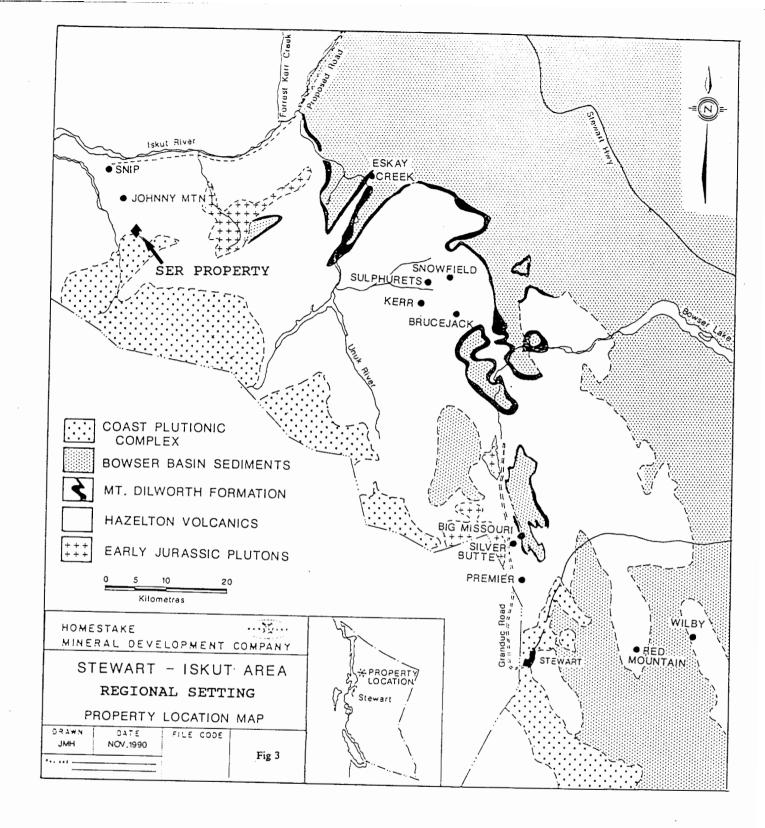
The SER claims are located within Stikinia, the largest of the accreted terranes that form the northern Canadian Cordillera. Stikinia is characterized by Paleozoic sedimentary and volcanic rocks of the Devonian to Permian Stikine Assemblage, Upper Triassic volcanic and sedimentary rocks of the Stuhini Group and Jurassic volcanic and sedimentary rocks of the Hazelton Group. Overlying Middle to Upper Jurassic sediments of the Bowser Lake Group, the Cretaceous Sustut Group and Tertiary volcanic fields are post accretionary overlap assemblages that link Stikinia to adjacent terranes.

The Iskut River map area is characterized by a volcano-plutonic arc complex of Triassic to mid-Jurassic age comprising the Stuhini and Hazelton Groups. These igneous and sedimentary rocks are part of an extensive volcanic field exposed around the periphery of a large post-volcanic marine sedimentary basin, the mid to late Jurassic Bowser basin.

The Stuhini Group consists of marine sedimentary rocks, predominantly argillite with calcareous siltstone or sandstone laminations and beds of coarse arenitic sandstone, intercalated with mafic volcanic rocks, predominantly feldspar-augite phyric volcaniclastic rocks.

The Hazelton Group has been traditionally divided into four main formations (Grove, 1986; Alldrick, 1987; Anderson and Thorkelson, 1990). The strata in the Sericite Ridge area separated from the Hazelton group strata in the Salmon River to Iskut river areas by the Harrymel and Unuk river shear zones (see Alldrick et al., 1989; Alldrick et al., 1990). Extension of the formational divisions defined in the former area cannot be extended into the Sericite-Snippaker area. Recent work by the MDRU (Rhys, 1993; Metcalfe and Moors, 1993) has defined a stratigraphic section for the Bronson Creek area. They divided the stratified rocks into a lower and upper sequence. The lower sequence comprises feldspathic, turbiditic greywacke with subordinate siltstone, mudstone and volcanic conglomerate. These rocks are of Upper Triassic age and are part of the Stuhini Group. The upper sequence comprises Early Jurassic intermediate to felsic volcanic and sedimentary rocks exposed on Johnny Mountain and Snippaker Ridge. They can be divided into a basal andesitic to dacitic basal unit, overlain by dacitic to rhyolitic volcanics and capped by basaltic volcanics. A U-Pb date from the middle dacitic to rhyolitic volcanic rocks indicates a 192+/- 3 Ma year age.

The stratified rocks are cut by a number of intrusive rocks that show important spatial relations with the known mineral occurrences. The most significant suite of intrusive rocks are potassium feldspar megacrystic intrusions present at Snip, Inel and Stonehouse. These stocks and dykes are commonly altered and are spatially associated with mineralization. The Red Bluff stock near Snip shows strong potassic alteration and some mineralization. A U-Pb date indicates a 195 +/- 1 Ma age. U-Pb dates from similar intrusive rocks at Stonehouse and Inel have indicated 192 +/- 3 Ma and 190 +/- 3 Ma ages. In the Snippaker Creek drainage, adjacent Sericite Ridge, a large undated pluton includes orthoclase megacrystic phases and is also of probable Early Jurassic (195-190 Ma) age.



6.2 Metallogeny

The Iskut River area is a well known and productive mining district. Past and present producing mines include precious metal veins deposits at Silbak Premier, Snip and Stonehouse and a volcanogenic massive sulphide Cu deposit at Granduc. The Eskay Creek deposit, a precious metal rich volcanogenic massive sulphide deposit, is scheduled for production in 1996. Significant reserves have been delineated in the Sulphurets area within Cu-Mo-Au porphyry systems, Au only porphyry systems and in shear hosted vein systems. Ongoing work at Red Mtn. will define significant reserves within Au-rich telluride bearing sulphide pods in breccia zones along the margin of a Bo-enriched intrusive. Table 1 lists the major deposits within the Iskut River map area and their indicated reserves.

Other deposit types known within the Iskut River map area include Fe-rich skarns, Au-rich skarns, and magmatic Cu-Ni mineralization.

Deposit Name	Reserves	Deposit Classification
Eskay Creek	Proven and probable 1.2 Mt @ 65 gpt Au, 2924 gpt Ag	Precious metal volcanogenic exhalative
Snip Mine	0.96 Mt @ 28.5 gpt Au	Shear hosted vein. Epithermal
West Zone Brucejack	0.65 Mt @ 14.8 gpt Au, 675 gpt Ag	Shear hosted vein and stockwork. Epithermal
Kerr deposit Sulphurets	127.5 Mt @ 0.62% Cu, 0.27 gpt Au	Porphyry copper
Snowfields		Porphyry gold
Stonehouse Johnny Mtn	0.21 Mt @ 14 gpt Au, 22 gpt Ag and 0.45 % Cu	Quartz-sulphide veins. Mesothermal?
Silbak Premier	4.3 Mt @ 14 gpt Au, 304 gpt Ag	Quartz-sulphide veins and stockwork. Epithermal
Red Mtn	2.8 Mt @ 12.7 gpt (1992)	Intrusive-related Au-Te breccia zone

TABLE 1

There are many Minfile showings in the area with 90 showings located on the Snippaker mapsheet (Alldrick et al., 1990). There are two showings within the SER 1-4 claim block, Minfile 116, the Blue Ribbon showing and 318, Sericite East. A full description of the mineralization on the property is included below in section 7.2.

7.0 **PROPERTY GEOLOGY**

7.1 Stratigraphy

Pervasive, strong hydrothermal alteration and a lack of chronological control greatly obscures lithological relationships on the SER property. Within the core area of interest covered by the 1993 grid, most of the rocks are intrusive with several distinct phases. The stratified host rocks have the same phenocryst assemblage and can only locally be identified as extrusive volcanic rocks. The stratified rocks include sedimentary rocks of probable Upper Triassic age and andesitic volcaniclastics of probable Early Jurassic age. The distribution of the following units is displayed on Map 1, a 1:5,000 geological map of the 1993 SER grid.

1) Upper Triassic siltstone-sandstone

The lower slopes on the east side of Sericite Ridge is underlain by a monotonous sequence of strongly propylitized, well bedded siltstone and fine sandstone of probable Upper Triassic age.

2) Early Jurassic volcanic rocks

Above line 700E and the 5000 foot contour, the sedimentary rocks are overlain by lapilli tuff to bedded coarse ash tuff or volcanic sandstone. The lapilli tuffs are dark green with prominent rounded lapilli and hornblende-plagioclase phenocrysts. The ash tuffs are dark green, well bedded with medium to coarse sand sized grains. The phenocryst assemblage in the volcanic rocks is identical to that of the intrusives, making it very difficult to distinguish the two where hydrothermal alteration obscures any primary volcanic textures.

3) Intrusive rocks

All of the intrusive phases on the property are dykes and small stocks in the periphery of the Strip Mountain pluton. This pluton is an equigranular to porphyritic diorite to monzonite with locally prominent orthoclase megacrysts. Regional correlations suggest that the pluton is probably 190-195 Ma old.

3a) The most common rock type on the property is a dark green hornblende-feldspar porphyry with phenocrysts from 2-10 mm set in an aphanitic dark green grey matrix.

3b) Porphyry identical to 3a locally contains large orthoclase megacrysts. These crystals are subhedral, are up to several cm in diameter, and often enclose early hornblende phenocrysts.

3c) Equigranular intrusive rocks are also present, but less common. These rocks are fine to medium grained monzonite with hornblende, biotite and minor quartz.

7.2 Alteration and mineralization

The grid controlled mapping can more readily distinguish alteration facies than lithological type and Map 1 is predominantly an alteration map. The following description proceeds in order of increasing alteration intensity (increasing hydrogen ion metasomatism).

i) Chlorite-epidote-pyrite

Intrusive and volcanic rocks at the northeast end of the grid are altered to chloriteepidote with minor disseminated pyrite. The rocks have most of their original textures

preserved and are unfoliated.

ii) Chlorite-magnetite

Several areas of the grid are underlain by moderate to intense chloritization accompanied by disseminated and vein controlled magnetite. Chloritization affects the mafic phenocrysts and the matrix. Magnetite is either disseminated throughout the matrix or within quartz-magnetite, or magnetite only stringers up to several mm wide. Areas indicated on Map 1 as underlain by chlorite-magnetite alteration include some zones of magnetite-pyrite that are transitional to type iii alteration.

iii) Chlorite-sericite-pyrite

Roughly half the grid area is underlain by pale green, weakly foliated rocks with chlorite-sericite alteration. Both the matrix and phenocrysts are affected by the alteration and 1-2% pyrite is disseminated in the matrix.

iv) Quartz-sericite

There are several large areas of the grid that are underlain by strong quartz-sericite alteration. These rocks are moderately to highly foliated and deeply weathered. Leaching has removed much of the pyrite but fresh outcrops contain up to 5% disseminated pyrite. Alteration has destroyed primary textures and the hornblende and plagioclase phenocrysts are only locally evident as pseudomorphous. An important sub-type of alteration are zones of strong silicification and local quartz veining within quartz-sericite-pyrite alteration. This alteration type is present near: 600E 300S, 500E 250S and 000E at 850S.

There are several types of mineralization present on the property that fit into two broad categories. Early porphyry style Cu-Au mineralization and later quartz-base metal veins.

Porphyry style mineralization

The chlorite-magnetite and chlorite-sericite-pyrite alteration host zones of porphyry style Cu and Au mineralization. The most important zones are located around the Blue Ribbon zone, located west of line 000E at 900S. Disseminated pyrite, chalcopyrite and magnetite occur within sericite-chlorite altered porphyry in conjunction with quartz stockwork veinlets carrying magnetite and chalcopyrite. The Blue Ribbon zone is a strong expression of very similar mineralization, where abundant subparallel veinlets of quartz-magnetite-chalcopyrite are concentrated into a restricted zone striking 240/60 NE. A second zone of disseminated mineralization is present at line 300E 1000S.

A second style of related mineralization are abundant magnetite, quartz magnetite veinlets that carry some Au and weak Cu mineralization centred on line 600E at 700S.

Quartz-base metal veins

The areas of strong quartz-sericite mineralization do not host significant Cu-Au mineralization but do contain several zones with quartz-sphalerite (pale green)-chalcopyrite veins up to 40 cm wide. One zone of veining is located between lines 100 and 200E at 1100S and a second zone at 000E 500S. Similar veins with a quartz-barite gangue are present east of line 800E at 500S.

7.3 Structure

Due to the lack of well stratified rocks, little can be inferred of the regional structure. The more strongly altered rocks with abundant sericite are moderately to strongly foliated. The foliation varies from 290/30NE to 030/30-50SE with the latter predominating. Irregular quartz-chlorite gash veins are abundant in weakly to strongly foliated rocks.

The quartz-magnetite veining has a strong preferred orientation striking northeast, varying from 010 to 070 degrees. This appears to reflect part of a regional trend of orthoclase megacrystic intrusive rocks with associated magnetite +/- Cu, Au mineralization that trends roughly 070 degrees across Sericite Ridge.

8.0 GEOCHEMISTRY

The main area of interest was covered by a picketed and flagged grid. North-south lines, 1500 m long and 200 m apart with stations picketed and flagged at 50 m intervals cover the area of Maps 1 and 2. Fill in lines 100 m apart were established to cover the core area between 200 and 1100S. 177 Soil samples were collected at 100 to 50 m intervals on all lines. There is little or no vegetation and no A or B soil horizon development. The samples consist of colluvium collected from holes 20-50 cm deep, placed in Kraft bags and dried.

57 rock chip and grab samples were collected from mineralized outcrops and submitted to Bondar-Clegg for analysis.

All samples were sent to Bondar Clegg Analytical labs where they analyzed for Au by Fire Assay and for Ag, Cu, Pb, Zn, As and Sb by ICP.

8.1 Results

Complete rock and soil sample results are included in Appendix III. Au and Cu results are plotted on Map 2. Several patterns are readily evident from the soil anomaly patterns. An area of strongly anomalous Cu values occurs in the extreme southeast corner of the grid. Cu values range from > 200 ppm to 1400 ppm with a significant area with Cu >400 ppm. This area is underlain by ferricrete and iron seeps and the anomaly is probably due to secondary concentration of Cu derived from leaching of the disseminated mineralization located upslope in the Blue Ribbon area.

Au results show are more complex pattern. The most significant anomaly is a linear trend of Au > 100 ppb with a core area of Au > 500 ppb and up to 1188 ppb that extends east-west from line 000E 1000S to 500E 1000S. This anomaly is elongate downslope and decreases in strength downslope. The anomaly is probably due to downslope dispersion of Au from Cu-Au mineralization in the vicinity of the Blue Ribbon zone.

Four other areas have concentrations of Au > 100 ppb, but only one of these has Au values > 300 ppb up to 633 ppb Au. This anomaly, located at 600E 250S is located over an area of strong silicification and quartz stockwork that represents a second, small zone of mineralization.

Rock sampling of mineralized outcrops indicates two zones of Cu-Au mineralization and one zone of weak Au mineralization. The only economically significant mineralization encountered to date lies west of the property boundary on the Snip 2 claim, in the area of the Blue Ribbon Zone. Resampling of the Blue Ribbon quartz-magnetite mineralization indicated 4.4 gpt Au and 0.89% Cu over 4.0 m (66283) and 8.1 gpt Au and 0.95% Cu over 2.0 m (66284) from the main showing area. Sample 66281 is of chlorite+/-sericite pyrite-magnetite mineralization in the vicinity of the Blue Ribbon zone, The sample returned 0.75 gpt Au and no significant Cu.

Samples 66266-66272 are from a small zone of chlorite-magnetite-chalcopyrite mineralization at 300E 950S. The mineralization includes narrow zones of quartz-sericite alteration. The samples indicate Au values ranging from negligible to 0.7 gpt and Cu to 0.17%.

Samples 66294 to 66300 are from a zone of magnetite veining and minor quartzsericite-pyrite near a spot Au soil anomaly of 762 ppb at 700E 600S. The rock sampling failed to indicate significant mineralization with a high of 0.18 gpt Au from sample 66298.

The Au in soil anomaly at 600E 300S is centred on quartz stockwork and silicification in strong quartz-sericite-pyrite alteration. Rock samples 66273-74 and 66292-93 are from this area. Samples 66274 assayed 0.4 gpt Au, 9.2 gpt Ag and no significant Cu.

Samples 66275-76 are located on line 000E, to the east of the Blue Ribbon zone and indicate elevated Au values (0.98 and 0.51 gpt) and some Cu (0.09%) associated with quartz stockwork zones, within quartz-sericite-pyrite and chlorite-sericite-pyrite alteration.

Samples 66277 and 78 are from line 000E 1200S and indicate elevated Au values (0.4 and 0.3 gpt Au) from strong chlorite-sericite-pyrite alteration.

None of the above results indicate the potential for a large tonnage of material with Au grades in excess of 1-2 gpt Au. The mineralization is restricted to areas of stockwork veining or chlorite-magnetite-chalcopyrite alteration and does not extend into areas of strong quartz-sericite pyrite alteration. This pattern is also well displayed in drill logs (Folk, 1987; AR#16895) in the Blue Ribbon zone. Good gold grades were encountered in the upper portions of some drill holes with chlorite, chlorite-sericite alteration hosting quartz-magnetite-chalcopyrite veinlets but drops off dramatically lower in the holes where the alteration is dominated by strong quartz-sericite-pyrite with anhydrite/gypsum veining.

9.0 CONCLUSIONS AND RECOMMENDATIONS

The SER claims and the adjacent Snip 2 claim cover a zone of porphyry style mineralization in which Au and minor Cu values occurs in quartz-magnetite-chalcopyrite veinlets within chlorite to chlorite-sericite alteration.

The mineralization is porphyry style mineralization with chlorite+/-sericite alteration associated with orthoclase megacrystic intrusives. The intrusives occur in a roughly 070 degree trending belt. This trend is replicated in the strike of veins in the Blue Ribbon Zone.

Mechanical dispersion of Au and chemical redeposition of Cu in ferricrete artificially enlarges the apparent area of soil anomalies. Economically interesting Au grades are restricted to the main Blue Ribbon showing located on the Snip 2 claim. Weaker, disseminated mineralization extends east to line 000E. Two other mineralized areas are present on the grid. Disseminated magnetite-chalcopyrite is present in a small zone exposed at 400E 100S. Quartz stockwork zones at 500E 300S also carry minor Au grades.

Surface sampling indicates the potential for a volume of material of Au < 1gpt and

Cu < 0.1 % between the Blue Ribbon showing and line 400E at 1000S, an area of 700 by 400 m.

Drilling beneath the Blue Ribbon zone by Teck Corp in 1987 indicated that the mineralization was underlain by barren, intense quartz-sericite-pyrite alteration, limiting the potential of the zone.

The above zone is unlikely to be economic at the grades indicated above and no further work is recommended at this time. Further grid controlled soil sampling and mapping between the northeast of the existing grid may indicate further mineralization.

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APPENDIX I STATEMENT OF COSTS

Geological and geochemical work on the SER1-4 claims Work performed from Aug 22-28, 1993

Food and accommodation: 18 man days @ \$100/day Salaries and benefits:	1800
Henry Marsden 9 days @ \$300/day	2700
Chris Downie 9 days @ \$125/day	1125
Helicopter 2.0 hrs @ \$743/hr	1500
Analytical	
Soil samples 86 @ \$13/sample	1118
Report preparation 5 days @ \$300/day Henry Marsden 5 days @ \$280/day	1500 1400

Total \$9,900

APPENDIX II ROCK SAMPLE DESCRIPTIONS

Abbreviations: chl=chlorite cpy=chalcopyrite py=pyrite qz=quartz ser=sericite sph=sphalerite

Sample	Width	Description
66257	2.0 m	qz-ser-py with weak qz veining
66258	0.4 m	10 cm qz-sph-cpy vein in qz-ser-py
66259	1.0 m	Strong silicification within qz-ser-py
66260	grab	Strong quartz-pyrite
66261	0.8 m	Strong silicification with qz veining in chl-ser alteration
66262	1.0 m	Leached qz-ser-py with qz veining
66263	0.8 m	Qz-ser-py with 10 cm qz-py vein
66264	2.0 m	Qz-ser-py with silicification and qz stockwork
66265	1.0 m	Leached strong silicification within qz-ser-py
66266	2.0 m	Chlorite-epidote with disseminated and veinlet magnetite
66267	1.0 m	Qz-chlorite gash veins
66268	1.5 m	Strong silicification in qz-ser-py with trace bornite
66269	0.6 m	Fracture controlled qz-ser-py and qz stockwork
66270	2.0 m	Strong chlorite with magnetite, pyrite and chalcopyrite
66271	2.0 m	Moderate chlorite with disseminated magnetite, pyrite
66272	2.0 m	Strong chlorite with zones of qz-ser-py and qz veinlets. Trace cpy
66273	Float	Strong silicification (+kspar?) and qz stockwork
66274	1.5 m	Strong qz-ser-py with silicification and qz stockwork
66275	1.0 m	Strong qz stockwork
66276	2.0 m	Chlorite-ser-py with weak qz stockwork
66277	1.5x1.0	Strong chlorite-sericite-pyrite
66278	1.0x1.0	Strong chlorite +/- sericite-pyrite (4%)
66279	1.5x0.6	Strong sericite-chlorite with 2-4% py and hematite?
66280	2.0x2.0	Strong chlorite-pyrite
66281	1.0x1.0	Strong chlorite-magnetite, minor py

-	m		
	66282	1.0x1.0	Strong qz-ser-py with weak qz sw
-	66283	4.0 m	Strong qz-mgt-cpy veining in chlorite-ser-py-cpy
1 1	66284	2.0 m	ditto
-	66285	1.5 m	Moderate qz sw in qz-ser-py
	66286	2.0x1.0	Chlorite, chlorite-ser-py
	66287	1.0 m	Strong qz-ser-py with qz-sph-cpy veining
	66288	grab	Chlorite-epidote-py with disseminated sphalerite
	66289	grab	Barite-galena-sphalerite vein
	66290	1.5 m	Strong chlorite-sericite-py
	66291	1.0 m	Leached strong silicification
	66292	1.5 m	Strong silicification in well bedded sediments
	66293	1.5 m	Chlorite with patchy silicification, qz-magnetite veining
	66294	1.0 m	Strong qz-ser-py with qz-barite veining
	66295	2.0 m	Strong chlorite-sericite-pyrite (2%)
	66296	2.0 m	Zones of qz-ser-py with qz veining
	66297	2.0 m	Chlorite-pyrite
	66298	2.0 m	Strong chlorite-magnetite with minor qz veining
	66299	2.0 m	ditto
	66300	1.0 m	Highly fractured, chlorite altered porphyry
	66301	2.0 m	Strong sericite-chlorite-py (3%)
	66302	1.0 m	Variable chlorite to ser-chl-py alteration
	66303	3.0 m	Strong chlorite-py alteration

APPENDIX III

ANALYTICAL RESULTS



l.

Geochemical Lab Report

Inchcape Testing Services

REPORT: V93-00942.0 (COMPLETE)									DATE PRINTED: 22-SEP-93 PROJECT: 90700/SER			
SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM			
R2 66257		36	1.1	26	34	57	3	11.0	1.4	••••••		
R2 66258		29	4.2	771	1178	10167	297	32.0	9.4			
R2 66259		23	0.8	16	14	68	8	5.0	1.7			
R2 66260		17	0.5	28	240	36	11	7.8	0.8			
R2 66261		<5	<0.2	7	29	9	5	4.8	0.6			
R2 66262		37	0.4		28	<1	5	1.7	0.6			
R2 66263		52	1.3	19	112	8	79	8.1	1.9			
R2 66264		108	0.8	9	227	<1	3	3.2	0.8			
R2 66265		136	0.3	31	267	22	68	9.0	0.8			
R2 66266		238	1.7	225	56	288	27	14.0	<0.5			
R2 66267		172	1.6	235	53	233	24	7.5	<0.4			
R2 66268		32	0.7	18	57	22	21	7.0	4.0			
R2 66269		226	1.2	187	25	164	54	7.6	1.4			
R2 66270		703	1.8	1728	16	621	11	4.0	0.7			
R2 66271		199	0.8	537	7	103	7	2.0	1.0			
R2 66272		158	2.7	477	23	309	21	10.0	2.7	••••		
R2 66273		41	0.8	19	29	<1	<1	2.6	2.9			
R2 66274		404	9.2	11	36	<1	1	4.1	8.5			
R2 66275		984	0.9	26	102	<1	26	20.0	2.3			
R2 66276		513	1.8	963	17	276	1	21.0	1.5			
R2 66277		407	0.7	52	14	170	1	13.0	0.9			
R2 66278		332	0.8	174	9	259	5	12.0	0.8			
R2 66279		14	0.5	44	11	257	1	12.0	1.4			
R2 66280		1.7	0.6	70	21	186	<1	11.0	1.2			
R2 66281		740	1.4	84	<2	159	2	7.4	0.9			
R2 66282		150	0.8	17	5	<1	2	4.3	1.2			
R2 66283		4451	7.6	8885	9	120	4	9.4	1.9			
R2 66284		8123	7.6	9509	12	306	3	28.0	1.4			
R2 66285		76	0.6	111	15	<1	4	4.6	1.6			
R2 66286		48	1.3	48	12	60	12	8.2	1.5			
R2 66287		106	3.3	445	1911	3504	30	14.0	3.3			
R2 66288		22	0.4	33	38	166	2	93.0	5.7			
R2 66289		111	20.2	39	>10000	1278	3	3.0	20.0			
R2 66290		35	1.1	47	172	147	3	63.0	3.0			
R2 66291		36	0.6	23	110	10	6	42.0	2.8			
R2 66292		90	0.2	13	124	13	16	2.8	1.8			
R2 66293		37	0.4	58	14	137	4	9.0	2.1			
R2 66294		19	0.3	31	26	10	5	2.6	0.6			
R2 66295		25	0.6	48	18	85	2	5.9	1.1			
R2 66296		84	1.6	173	25	65	7	6.3	2.0			

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Geochemical Lab Report



6297 54 0.2 94 11 190 4 4.8 1.3	
6297 54 0.2 94 11 190 4 4.8 1.3	
6298 179 2.6 134 36 150 10 6.4 1.9	
6299 53 0.6 42 55 147 10 4.5 2.0	
6300 29 0.4 104 6 134 4 5.6 0.9	
6301 31 <0.2 29 30 52 9 2.6 <0.2	

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Geochemical Lab Report

Inchcape Testing Services

	0942.0 (COM	PLETE)						PROJECT: 9	TED: 22-SEP-93 90700/SER	PAGE 3
••••••										
STANDARD	ELEMENT	Au	Ag	Cu	Pb	Zn	Мо	As	Sb	
NAME	UNITS	PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	
BCC GEOCHEM S	TD 4	-	0.8	310	34	253	4	29.0	0.5	
BCC GEOCHEM S		-	•	-	-		-	29.0	0.5	
Number of Ana		-	1	1	1	1	- 1	28.0	2	
Mean Value	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-	0.80	310.0	33.9	253.0	4.2	28.50	0.48	
Standard Devi	ation	-		-	-	-	4.2	0.707	0.028	
							••••••	0.101	0.020	
Accepted Value	e	-	0.5	290	33	255	4	28.7	0.5	
						· · · · · · · · · · · · · · · · · · ·				
ANALYTICAL BLA	ANK	<5	<0.2	<1	2	<1	<1		-	
ANALYTICAL BLA		-	<0.2	<1	<2	<1	<1	-	-	
Number of Anal		1	2	2	2	2	. 2	-	-	
Mean Value		2.5	0.10	0.5	1.5	0.5	0.5		-	
Standard Devia	ation	•	<0.001	<0.01	0.71	<0.01	<0.01	-	-	
Accepted Value	e	5	0.2	1	2	1	1	<0.1	<0.1	
BCC GEOCHEM ST	D 3			······				295 በ	68 5	
BCC GEOCHEM ST Number of Anal		 - -	- - -	-			-	295.0	68.5 1	
BCC GEOCHEM ST Number of Anal Mean Value		- - -	- - - -				-	1	1	
Number of Anal Mean Value	yses	- - - - -	- - - - -				-			
Number of Anal	yses ation	- - - - -	- - - 5.0	- - - - 820	- - - 250	- - - 500	- - - - 600	1	1	
Number of Anal Mean Value Standard Devia Accepted Value	yses ation							1 295.00 -	1 68.50 -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST	yses ation 2 D 2		- - - 5.0 33.6 1	208	16	56	15	1 295.00 -	1 68.50 -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST Number of Anal	yses ation 2 D 2		33.6 1	208 1	16 1	56 1	15 1	1 295.00 -	1 68.50 -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST Number of Anal Mean Value	yses ation 2 D 2 yses		33.6	208	16	56	15	1 295.00 -	1 68.50 -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST Number of Anal	yses ation 2 7D 2 yses ation	-	33.6 1	208 1	16 1	56 1	15 1	1 295.00 -	1 68.50 -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST Number of Anal Mean Value Standard Devia Accepted Value	yses ation 2 D 2 yses ation		33.6 1 33.60 -	208 1 208.0 -	16 1 16.0 -	56 1 56.0 -	15 1 15.0 -	1 295.00 - 310.0 - - - -	1 68.50 - 70.0 - - - -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST Number of Anal Mean Value Standard Devia Accepted Value	yses ation D 2 yses ation DARD	- - - - - - - - - - - - - - - - - - -	33.6 1 33.60 -	208 1 208.0 -	16 1 16.0 -	56 1 56.0 -	15 1 15.0 -	1 295.00 - 310.0 - - - -	1 68.50 - 70.0 - - - -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST Number of Anal Mean Value Standard Devia Accepted Value HIGH GOLD STAN Number of Anal	yses ation D 2 yses ation c DARD yses	1	33.6 1 33.60 -	208 1 208.0 -	16 1 16.0 -	56 1 56.0 -	15 1 15.0 -	1 295.00 - 310.0 - - - -	1 68.50 - 70.0 - - - -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST Number of Anal Mean Value Standard Devia Accepted Value HIGH GOLD STAN Number of Anal Mean Value	yses ation D 2 yses ation c DARD yses		33.6 1 33.60 -	208 1 208.0 -	16 1 16.0 -	56 1 56.0 -	15 1 15.0 -	1 295.00 - 310.0 - - - -	1 68.50 - 70.0 - - - -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST Number of Anal Mean Value Standard Devia Accepted Value HIGH GOLD STAN Number of Anal	yses ation D 2 yses ation DARD yses	1	33.6 1 33.60 -	208 1 208.0 -	16 1 16.0 -	56 1 56.0 -	15 1 15.0 -	1 295.00 - 310.0 - - - -	1 68.50 - 70.0 - - - -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST Number of Anal Mean Value Standard Devia Accepted Value HIGH GOLD STAN Number of Anal Mean Value Standard Devia Accepted Value	yses ation D 2 yses ation DARD yses ation	1 517.3 - 500	33.6 1 33.60 -	208 1 208.0 -	16 1 16.0 -	56 1 56.0 -	15 1 15.0 -	1 295.00 - 310.0 - - - -	1 68.50 - 70.0 - - - -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST Number of Anal Mean Value Standard Devia Accepted Value HIGH GOLD STAN Number of Anal Mean Value Standard Devia Accepted Value	yses ation 2 D 2 yses ation yses ation 2 DARD yses ation	1 517.3 - 500 19	33.6 1 33.60 -	208 1 208.0 -	16 1 16.0 -	56 1 56.0 -	15 1 15.0 -	1 295.00 - 310.0 - - - -	1 68.50 - 70.0 - - - -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST Number of Anal Mean Value Standard Devia Accepted Value HIGH GOLD STAN Number of Anal Mean Value Standard Devia Accepted Value Standard Devia Accepted Value	yses ation 2 D 2 yses ation yses ation 2 DARD yses ation	1 517.3 - 500 19 1	33.6 1 33.60 -	208 1 208.0 -	16 1 16.0 -	56 1 56.0 -	15 1 15.0 -	1 295.00 - 310.0 - - - -	1 68.50 - 70.0 - - - -	
Number of Anal Mean Value Standard Devia Accepted Value BCC GEOCHEM ST Number of Anal Mean Value Standard Devia Accepted Value HIGH GOLD STAN Number of Anal Mean Value Standard Devia Accepted Value	yses ation 2 D 2 yses ation 2 DARD yses ation 2 D yses	1 517.3 - 500 19	33.6 1 33.60 -	208 1 208.0 -	16 1 16.0 -	56 1 56.0 -	15 1 15.0 -	1 295.00 - 310.0 - - - -	1 68.50 - 70.0 - - - -	

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Geochemical Lab Report



DEDODT - 107 000					ED: 22-SEP-93	·				
REPORT: V93-009	742.U (LUM	MPLEIC)					P	ROJECT: 9	PAGE 4	
SAMPLE	ELEMENT	Au	Ag	Cu	Pb	Zn	Mo	As	Sb	
NUMBER	UNITS	PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	
66259		23	0.8	16	14	68	8	5.0	1.7	
Duplicate		34	0.8	15	13	61	10			
66260		17	0.5	28	240	36	11	7.8	0.8	
Duplicate								6.9	0.7	
66276		513	1.8	963	17	276	1	21.0	1.5	
Duplicate			1.7	846	17	274	3			
66282		150	0.8	17	5	<1	2	4.3	1.2	
Duplicate		154								
66289		111	20.2	39	>10000	1278	3	3.0	20.0	
Duplicate								3.5	19.0	
66294		19	0.3	31	26	10	5	2.6	0.6	
Prep Duplicate		22	0.3	31	29	17	6	3.0	2.2	
Prep Duplicate		22	0.3	31	29	17	6	3.0	2.2	
Duplicate			0.4	31	28	19	6			
66304		6	<0.2	176	9	333	<1	1.4	0.6	
Duplicate		<5								
66305		<5	<0.2	26	12	63	5	4.0	2.7	
Prep Duplicate		<5	<0.2	27	16	64	5	5.4	3.4	
66312		36	1.3	100	11	206	4	5.1	1.5	
Duplicate			1.4	110	12	248	4			

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Geochemical Lab Report



REPORT: V93-00943		NTE PRINTE ROJECT: 90	PAGE 1						
SAMPLE E NUMBER	LEMENT AU UNITS PPE	•	Cu PPM	РЬ РРМ	Zn PPM	Mo PPM	As PPM	Sb PPM	
S1 L0-00E 0+00S	53	s <0.2	59	60	120	2	26	· · · · · · · · · · · · · · · · · · ·	······································
S1 L00+00E 1+45S	141		71	64	90	3	20	~ 5	
S1 L+00E 2+00S	41		54	31	96	6	10	<5	
S1 L+00E 3+00S	227		64	60	83	7	20	<5	
S1 L+00E 4+00S	49		79	37	72	11	24	7	
S1 L+00E 5+00S	72	2 0.2	44	48	58	7	22	5	
S1 L+00E 5+50S	85		66	80	100	12	17	<5	
S1 L+00E 6+15S	88		97	121	113	4	19	<5	
S1 L+00E 6+50S	52		35	122	75	17	27	<5	
S1 L+00E 7+00S	53		35	87	48	2	6	<5	
S1 L+00E 7+50S	61	0.5	15	99	50	12	9	<5	
S1 L+00E 8+00S	100	0.4	40	57	109	11	12	<5	
S1 L+00E 8+50S	91	0.4	43	42	61	12	9	<5	
S1 L+00E 9+00S	115	0.8	149	66	117	10	34	8	
S1 L+00E 9+50S	626	2.3	110	71	86	8	24	<5	
S1 L+00E 10+00S	1188	0.8	125	55	90	4	21	<5	
S1 L+00E 10+50S	609	1.5	92	57	118	4	15	7	
S1 L+00E 11+00S	426	1.2	53	48	119	5	11	6	
S1 L+00E 12+00S	76	0.5	45	65	99	<1	30	<5	
S1 L+00E 12+95S	266	1.4	74	90	149	2	16	9	
S1 L+00E 14+05S	60	<0.2	131	39	153	6	34	<5	
S1 L+00E 15+00S	144	0.7	53	47	91	5	19	7	
S1 L1+00E 5+00S	60	<0.2	101	32	88	<1	29	11	
S1 L1+00E 5+40S	85	0.7	38	84	65	2	15	7	
S1 L1+00E 6+10S	50	1.1	20	88	67	<1	17	6	
S1 L1+00E 6+50S	78	0.6	56	119	99	1	18	7	
S1 L1+00E 7+00S	61	0.8	31	160	73	2	12	10	
S1 L1+00E 7+50S	58	<0.2	46	76	61	8	6	8	
S1 L1+00E 8+00S	54	0.3	23	106	42	<1	6	6	
S1 L1+00E 8+50S	62	<0.2	51	47	95	9	13	<5	
S1 L1+00E 9+00S	57	0.5	28	47	63	8	7	<5	
S1 L1+00E 9+50S	351	1.0	66	61	76	19	19	<5	
S1 L1+00E 10+00S	595	1.0	104	47	86	13	31	<5	
S1 L1+00E 10+50S	778	1.2	148	106	167	19	28	<5	
S1 L1+00E 11+00S	320	0.8	76	50	114	5	21	<5	
S1 L2+00E 0+00S	256	<0.2	65	61	79	8	23	<5	
S1 L2+00E 1+00S	144	0.2	60	67	73	9	32	<5	
S1 L2+00E 2+00S	166	<0.2	78	69	103	13	22	<5	
S1 L2+00E 3+00S	74	<0.2	75	83	114	18	11	<5	
S1 L2+00E 4+00S	91	<0.2	87	55	95	4	19	<5	

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Geochemical Lab Report

Inchcape Testing Services

REPORT: V	93-00943.0 (COM	PLETE)						OJECT: 90	D: 24-SEP-93 0700/SER	PAGE 2
SAMPLE	ELEMENT	Au	Ag	Cu	РЬ	Zn	Mo	As	Sb	
NUMBER	UNITS	PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	
S1 L2+00E	5+005	37	<0.2	62	210	130	11	22	~5	
S1 L2+200E		63	0.5	40	85	77	4	<22 <5	<5 <5	
S1 L2+200E		83	1.0	39	176	70	4 11	20	<5	
S1 L2+200E		78	0.4	43	100	87	5	16	<5	
S1 L2+200E		61	1.1	56	251	88	12	<5	<5	
		01			231	00	12	~,	<u>د</u>	
\$1 L2+200E	8+00S	82	0.3	34	64	80	16	8	<5	
S1 L2+2008	8+50s	96	0.4	47	118	70	7	14	<5	
S1 L2+200E	9+00S	58	0.3	21	105	39	10	5	<5	
S1 L2+200E	9+50s	54	0.2	36	35	63	13	<5	<5	
S1 L2+200E	10+00s	392	0.6	117	46	104	8	<5	<5	
				• • • •	·····			-	_	
S1 L2+200E		598	0.7	114	46	87	13	<5	<5	
S1 L2+200E		204	0.6	86	86	104	9	10	<5	
S1 L2+200E		65	0.7	27	57	71	7	<5	<5	
S1 L2+200E		77	0.6	61	131	148	3	15	<5	
S1 L2+200E	14+00S	62	<0.2	88	32	90	14	12	<5	
\$1 L2+200E	15+30s	27	<0.2	77	57	104	6	<5	<5	
S1 L3+00E		145	<0.2	115	163	141	4	<5	<5	
S1 L3+00E		94	<0.2	82	68	79	6	12	<5	
S1 L3+00E		75	0.6	36	97	78	7	11	<5	
S1 L3+00E		65	<0.2	94	71	88	12	<5	<5	
	· · · · · · · · · · · · · · · · · · ·									
S1 L3+00E	7+00s	65	0.3	48	116	86	5	<5	<5	
S1 L3+00E	7+50s	57	<0.2	60	174	86	23	<5	<5	
S1 L3+00E	8+00S	103	<0.2	54	91	67	13	7	<5	
S1 L3+00E	8+50s	39	<0.2	65	52	61	17	<5	<5	
S1 L3+00E	9+00S	37	<0.2	23	75	48	8	8	<5	
C1 17.005	0,500		-0.2	/ 0	74	47	17			
S1 L3+00E		49	<0.2	40	76	63	13 7	<5	<5	
S1 L3+00E S1 L3+00E		353 433	1.2 0.3	80 153	57 57	92 95		13 <5	<5 <5	
S1 L3+00E		435 587	<0.2	153			11		<5	
S1 L3+00E		170	0.7	37	66 121	110 70	14 9	16 14	<5	
							·····		-	
S1 L4+00E	1+00s	87	<0.2	54	56	65	<1	25	<5	
S1 L4+00E	2+00S	47	<0.2	52	34	37	<1	<5	<5	
S1 L4+00E	3+00s	75	<0.2	116	57	66	<1	<5	<5	
S1 L4+00E	4+00s	108	<0.2	110	75	113	4	<5	<5	
S1 L4+00E	5+00S	24	<0.2	50	21	91	2	18	<5	
c1 + / · 00-	5.500	440	-0.2	60				•••••	-r	
S1 L4+00E		119	<0.2	89 118	112	114	<1	10 15	<5	
S1 L4+00E		136	<0.2	118	78	142	7	15	<5 -5	
S1 L4+00E		201	<0.2	70 50	77	153	1	8	<5 45	
S1 L4+00E		67	<0.2	50	60	62	8	14	<5	
S1 L4+00E	1+505	6	<0.2	43	26	74	<1	15	<5	

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Geochemical Lab Report



REPORT: V93-0094	3.0 (COMPLETE)		DATE PRINTED: 24-SEP-93 PROJECT: 90700/SER						
	ELEMENT AU	Ag	Cu	РЬ	Zn	Mo	As	Sb	
NUMBER	UNITS PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	
S1 L4+00E 8+00S	192	<0.2	66	59	78	3	21	<5	the service management
S1 L4+00E 8+50S	111	<0.2	91	57	95	4	15	<5	
S1 L4+00E 9+00S	58	<0.2	62	34	75	8	15	<5	
S1 L4+00E 9+50S	17	<0.2	57	15	64	8	5	<5	
S1 L4+00E 10+00S	259	1.0	73	49	67	<1	<5	<5	
S1 L4+00E 10+50S	643	0.3	145	44	83	4	<5	<5	
S1 L4+00E 11+00S	194	<0.2	109	57	71	4	<5	<5	
S1 L4+00E 12+00S	152	0.6	42	44	85	1	19	<5	
S1 L4+00E 13+00S	112	<0.2	96	61	88	<1	22	<5	
S1 L4+00E 14+00S	206	0.3	80	243	78	9	30	<5	
S1 L4+00E 15+00S	92	<0.2	79	81	92	6	16	7	
S1 L5+00E 2+00S	138	<0.2	63	54	82	1	<5	10	
S1 L5+00E 2+50S	90	<0.2	6	86	47	<1	5	<5	
S1 L5+00E 3+00S	115	<0.2	49	67	86	7	<5	<5	
s1 L5+00E 3+50s	633	<0.2	54	65	102	2	<5	<5	
S1 L5+00E 4+00S	114	<0.2	62	40	72	11	<5	<5	
S1 L5+00E 4+50S	235	<0.2	70	95	109	12	17	<5	
S1 L5+00E 5+00S	39	<0.2	73	32	110	5	23	<5	
S1 L5+00E 5+50S	12	1.2	43	20	79	6	19	<5	
S1 L5+00E 6+00S	109	<0.2	59	140	134	12	11	<5	
S1 L5+00E 6+50S	12	<0.2	44	16	60	6	18	<5	
S1 L5+00E 7+00S	158	<0.2	67	71	122	21	14	<5	
S1 L5+00E 7+50S	34	<0.2	83	40	74	12	10	<5	
S1 L5+00E 8+00S	17	<0.2	57	24	65	6	7	<5	
S1 L5+00E 8+50S	107	<0.2	61	149	270	14	<5	<5	
S1 L5+00E 9+00S	55	<0.2	58	36	76	12	<5	<5	
S1 L5+00E 9+50S	297	<0.2	98	110	117	22	<5	<5	
S1 L5+00E 10+00S	82	0.5	57	40	35	<1	16	<5	
S1 L5+00E 10+50S	722	1.3	63	73	49	21	<5	<5	
S1 L5+00E 11+00S	73	0.5	216	29	48	3	<5	<5	
S1 L6+00E 00+00S	50	<0.2	102	44	66	<1	19	<5	
S1 L6+00E 1+00S	24	0.3	56	23	47	4	<5	<5	
S1 Lö+00E 2+00S	6	1.3	46	14	60	3	6	<5	
S1 L6+00E 2+50S	110	0.4	35	26	46	2	11	<5	
S1 L6+00E 3+00S	399	0.4	54	34	53	9	<5	<5	
S1 L6+00E 3+50S	67	0.2	50	43	62	4	8	<5	
S1 L6+00E 4+00S	127	<0.2	59	62	60	<1	<5	<5	
S1 L6+00E 4+50S	26	<0.2	72	23	39	6	6	<5	
S1 L6+00E 5+00S	43	<0.2	60	20	66	<1	<5	<5	
S1 L6+00E 5+50S	<5	2.3	46	18	54	2	9	<5	

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Geochemical Lab Report



REPORT: V93-00	943.0 (COMPLET	E)					OJECT: 90	ED: 24-SEP-93 0700/SER	PAGE 4
SAMPLE NUMBER	ELEMENT UNITS F	AU Ag PB PPM	Cu PPM	РЬ РРМ	Zn PPM	Mo PPM	As PPM	Sb PPM	
S1 L6+00E 6+00	5	33 0.4	55	27	44	7	<5	<5	· · · · · · · · · · · · · · · · · · ·
S1 L6+00E 6+50	5	41 0.8	48	19	43	<1	<5	<5	
S1 L6+00E 7+00		59 <0.2	74	47	55	1	6	<5	
S1 L6+00E 7+50	5	20 0.7	74	31	90	7	22	<5	
S1 L6+00E 8+009		<5 1.3	61	21	53	9	<5	5	
S1 L6+00E 8+505	5 1	15 <0.2	77	89	75	5	16	<5	
S1 L6+00E 9+005	; 1	0.6	135	100	81	2	47	<5	
S1 L6+00E 9+50S	5	13 2.1	257	23	66	6	6	<5	
S1 L6+00E 10+00)S	23 <0.2	888	21	67	9	<5	<5	
S1 L6+00E 10+50	S	<5 <0.2	1926	<2	81	<1	<5	<5	
S1 L6+00E 11+00)S	40 <0.2	641	23	53	7	<5	<5	
S1 L6+00E 12+00	S	55 0.9	51	94	48	<1	35	<5	
S1 L6+00E 13+00	S	99 0.4	92	34	104	12	8	<5	
S1 L6+00E 14+00	IS	<5 0.4	94	22	58	12	27	<5	
S1 L6+00E 15+00	S	68 0.5	133	30	92	11	<5	<5	
S1 L7+00E 2+00S		45 1.9	59	26	70	1	20	<5	
S1 L7+00E 2+50S		42 0.6	51	31	61	16	12	<5	
S1 L7+00E 3+00S		14 <0.2	53	62	22	13	10	<5	
S1 L7+00E 3+50S	3	42 0.3	134	71	90	9	13	<5	
S1 L7+00E 4+00S	2	26 0.4	71	100	157	43	6	<5	
S1 L7+00E 4+50S		18 1.9	78	32	85	11	16	<5	
S1 L7+00E 5+00S	1	46 0.7	60	72	69	19	<5	<5	
S1 L7+00E 5+50S	1	35 0.6	57	85	82	9	<5	<5	
S1 L7+00E 6+00S	7	62 7.7	288	45	108	14	<5	<5	
S1 L7+00E 6+50S		42 7.0	338	25	90	27	<5	<5	
S1 L7+00E 7+00S		IS 15.7	980	11	73	12	<5	<5	
S1 L7+00E 7+50S		6 4.8	1498	3	88	8	<5	<5	
S1 L7+00E 8+00S		6 0.9	1707	7	102	<1	<5	<5	
S1 L7+00E 8+50S	26	22 4.5	95	91	71	13	<5	<5	
S1 L7+00E 9+00S		29 0.3	77	64	62	3	8	<5	
S1 L7+00E 9+50S		12 <0.2	751	7	84	<1	<5	<5	
S1 L7+00E 10+00	s	12 0.7	66	26	34	11	7	<5	
S1 L7+00E 10+50	S	23 1.4	67	24	75	9	<5	<5	
S1 L7+00E 11+00	S ·	<5 0.5	78	23	71	13	11	<5	
S1 L7+80E 3+80S		14 0.9	73	59	77	<1	<5	<5	
S1 L8+00E 0+00S		53 0.7	59	81	72	2	25	<5	
S1 L8+00E 1+00S		33 <0.2	114	52	86	2	16	6	
S1 L8+00E 2+00S		12 1.8	58	23	50	4	<5	<5	
S1 L8+00E 2+50S		6 <0.2	39	5	108	<1	77	6	
S1 L8+00E 3+00S		<5 <0.2	180	6	295	<1	<5	<5	

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Geochemical Lab Report

Inchcape Testing Services

									D: 24-SEP-93	
REPORT: V93-009	243.0 (COM	PLETE)		PR	OJECT: 90)700/SER	PAGE 5			
SAMPLE	ELEMENT	Au	Ag	Cu	РЪ	Zn	Mo	As	Sb	
NUMBER	UNITS	PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	
					• •••					· · · · · · · · · · · · · · · · · · ·
S1 L8+00E 3+50S		<5	2.5	58	24	63	<1	<5	<5	
S1 L8+00E 4+50S		105	1.2	110	62	157	4	11	<5	
S1 L8+00E 5+00S		6	1.1	540	10	81	14	<5	<5	
S1 L8+00E 5+50S		8	<0.2	419	4	76	<1	<5	<5	
S1 L8+00E 6+00S		27	<0.2	339	15	87	5	<5	7	
S1 L8+00E 6+50S		58	0.6	151	24	75	4	11	<5	
S1 L8+00E 7+00S		60	0.6	398	36	145	<1	32	<5	
S1 L8+00E 7+50S		<5	<0.2	1281	3	137	<1	17	<5	
S1 L8+00E 8+30S		90	<0.2	143	51	97	8	18	<5	
S1 L8+00E 8+50S		<5	<0.2	1013	<2	178	4	<5	6	
S1 L8+00E 9+50S		6	<0.2	420	4	145	<1	25	<5	
S1 L8+00E 10+50	S	<5	<0.2	399	11	55	<1	<5	<5	
S1 L8+00E 11+00	S	62	0.3	183	50	80	3	14	6	
S1 L8+00E 12+00	S	<5	0.7	105	22	59	5	23	6	
S1 L8+00E 13+00	S	49	0.8	96	89	52	15	14	<5	
S1 8+20E 10+00S		13	<0.2	606	6	129	<1	<5	<5	
S1 8+30E 9+00S		<5	<0.2	1400	3	129	<1	<5	8	



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Geochemical Lab Report



REPORT: V93-0	0943.0 (CO	MPLETE	1						NTED: 24-S	
ACCORT. ¥73*0								FRUJEUI:	90700/SER	PAGE 6
STANDARD	ELEMENT	Au	Ag	Cu	Pb	Zn	Мо	As	SÞ	
NAME	UNITS	PPB	PPM	PPM	PPM	PPM	PPM	PPM	PPM	
								••••		e e construction de la construction
HIGH GOLD STAN	NDARD	518	-	-	-	-	-	-	•	and the second
HIGH GOLD STAP	NDARD	518	-	-	-	-	-	-	-	
HIGH GOLD STAN		531	-	-	-	-	-	-	-	
Number of Ana		3	-	-	-	-	-	-		
Mean Value		522.5	-	-	-	-	-	-	•	
Standard Devia	ation	7.61		•	-	•	-	-	-	
Accepted Value	;	500	-	-		-	-	-	-	
BCC GEOCHEM ST	D 4	-	0.2	298	31	256		35	6	
BCC GEOCHEM ST		-	0.4	295	27	260	5	49	<5	
Number of Anal		-	2	2	2	2	2	2	2	
Mean Value	,	-	0.33	296.5	28.9	258.3	5.4	41.7	4.5	
Standard Devia	ation	-	0.132	2.13	2.39	2.74	0.23	9.70	2.81	
						••••••				· ···· · ·····
Accepted Value		-	0.5	290	33	255	4	30	-	
	-							· · · ·		
LOW AU STANDAR		17	-	-	-	-	-	-	-	
LOW AU STANDAR		17	-	-	-	-	-	-	-	
Number of Anal	yses	2	-	-	-	-	-	-	-	
Mean Value	*:	17.0	-	-	-	-	-	-	-	
Standard Devia	tion	<0.01		-	•	-	• • • • • • •		- 	
Accepted Value		17	-	-	-	-	-	-	· · · · · · · · ·	
ANALYTICAL BLA	NY	<5	<0.2	`				 	··· · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
ANALYTICAL BLA		<5 <5	<0.2 <0.2	2	<2 <2	<1 -1	<1	<5	<5 (5	
		<5 <5	<0.2 <0.2	, <1	<2 3	<1	<1	<5	<5 45	
ANALVTICAL OF A		<>> <5	<0.2 <0.2	<1	-	<1 -1	<1	<5 ~5	<5 -5	
ANALYTICAL BLA		-	<0.2 <0.2	<1	<2 3	<1 1	<1 z	<5 <5	<5 <5	
ANALYTICAL BLA	VY .	-	NU.2	S	د	1	3	<5	<5	
	NK								. . .	
ANALYTICAL BLA		· · · · ·	<0.2	<1	3	<1	-	-	<5	
ANALYTICAL BLA ANALYTICAL BLA	NK	- 4	<0.2 6	<1 6	3 6	<1 6	- 5	- 5	<5	
ANALYTICAL BLA ANALYTICAL BLA ANALYTICAL BLA	NK	- 4 2.5					- 5 1.0	- 5 2.5		
ANALYTICAL BLA ANALYTICAL BLA ANALYTICAL BLA Number of Anal	NK yses		6	6	6	6	-	-	6	

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STANDARD NAME	ELEMENT UNITS	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	SD PPM	
	•••••••••••••••••••••••••••••••••••••••		· · · · · · · · ·							· · · · · · · · · · · · · · · · · · ·
BCC GEOCHEM S		-	5.4	807	210	470	513	291	47	
BCC GEOCHEM S		-	5.5	798	197	482 2 475.7 8.60	496	275	-	
Number of Ana	alyses	-	2	2	2		2	2	1	
Mean Value		-	5.44	802.8	203.8		504.8	283.3	47.0	
Standard Devi	ation	-	0.042	6.46	9.24		11.73	11.12	-	
Accepted Valu	le	-	5.0	820	250	500	600	320	50	
BCC GEOCHEM S BCC GEOCHEM S Number of Ana Mean Value	TD 2	- - -	31.6 34.2 2 32.90	224 227 2 225.8	16 12 2 14.2	58 58 2 58.2	18 - 1 17.7	<5 11 2 6.7	7 8 2 7.4	
Standard Devi	ation	-	1.877	2.10	3.15	0.04	-	5.91	0.46	
Accepted Valu	le	-	34.0	190	15	62	17	8	-	
								•••••		

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Geochemical Lab Report

Inchcape Testing Services

REPORT: V93-00	943.0 (COM	PLETE)				OJECT: 90	D: 24-SEP-93 0700/SER	PAGE 8		
SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM	
L+00E 3+00S		227	0.4	64	60	83	7	20	<5	· · · · · · · · · · · · · · · · · · ·
Duplicate		227	0.5	67	62	89	5	22	<5	
L+00E 14+05S		60	<0.2	131	39	153	6	34	<5	
Duplicate			0.3	129	44	153	4	22	<5	
L1+00E 7+00S		61	0.8	31	160	73	2	12	10	
Duplicate		72								
L2+00E 5+00S		37	<0.2	62	210	130	11	22	<5	
Duplicate			<0.2	57	195	113	•••••	25	<5	
L2+200E 9+50S Duplicate		54 59	0.2	36	35	63	13	<5	<5	
L3+00E 5+00S		145	<0.2	115	163	141	4	<5	<5	
Duplicate			<0.2	114	151	136	<1	<5	<5	
L4+00E 2+00S Duplicate		47 41	<0.2	52	34	37	<1	<5	<5	
L4+00E 6+00S		136	<0.2	118	78	142	7	15	<5	
Duplicate			<0.2	116	80	136	8	7	<5	
L5+00E 3+00S		115	<0.2	49	67	86	7	<5	<5	
Duplicate			<0.2	57	68	89	8	13	<5	
L6+00E 2+50S Duplicate		110	0.4 0.4	35 40	26 28	46	2 5	11 <5	<5 <5	
Dupticate			0.4	40	20		,	••••••••••••••••••••••••••••••••••••••	••••••••••••••••••••••••••••••••••••••	
L6+00E 11+00S Duplicate		40	<0.2 0.3	641 692	23 23	53 57	7 7	<5 <5	<5 <5	
L7+00E 4+50S Duplicate		18 14	1.9	78	32	85	11	16	<5	
······································		· · · ··		· · · · · · · · · · · · · · · · · · ·						
L7+00E 9+50S Duplicate		12	<0.2 <0.2	751 751	7 4	84 82	<1 <1	<5 7	<5 <5	
L8+00E 5+50S Duplicate		8 6	<0.2	419	. 4	76	<1	<5	<5	
bupticate		Ū								
L8+00E 7+50S Duplicate		<5	<0.2 <0.2	1281 1228	3 <2	137 129	<1 <1	17	<5 <5	
SER S-10		196	1.6	103	63	85	11	47	<5	

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Geochemical Lab Report

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	00943.0 (COM	•••••		·····				TE PRINTE OJECT: 90	D: 24-SEP-93 700/SER	PAGE 9
 SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	AS PPM	Sb PPM	
 SER S-11 Duplicate		60	0.8 0.8	111 102	44 34	67 64	13	27 42	<5 <5	
 			•							
 							·····			

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APPENDIX IV STATEMENT OF QUALIFICATIONS

I, Henry Marsden, of the City of Vancouver, in the Province of British Columbia, do hereby certify that:

1. I am a geologist in the employ of Homestake Canada Inc. and have worked in this position since 1991.

2. I graduated from the University of British Columbia with a Bachelor of Science degree in Geology in 1986.

3. I graduated from Carleton University with a Master of Science degree in Geology in 1990.

4. My primary employment since 1981 has been in the field of mineral exploration.

5. I personally performed and supervised all work performed for this report.

Henry Marsden Geologist

