Cook Property

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KEEWATIN ENGINEERING INC. #800, 900 West Hastings Street Vancouver, B.C. V6C 1E5

#### ABSTRACT

The Cook property consists of four contiguous modified-grid claims totalling 42 units located approximately 80 km northwest of Stewart, British Columbia. Access to the property is by fixed-wing aircraft from Terrace, Stewart, or Smithers to various airstrips in the area and then via helicopter to the property.

The property lies within the Intermontaine Tectono-Stratigraphic Belt and occurs near the contact between the Stikine Terrane and the unmetamorphosed sediments of the Bowser Basin. The central portion of the property is underlain by Upper Triassic sediments of the Stuhini Group. The eastern and western portions are underlain by the Lower Jurassic Unuk River Formation consisting of andesitic volcanics with lesser sediments, intruded by the Tertiary King Creek Dyke Swarm on the northwest corner of the property. Diorites of the Coast Plutonic Complex underlie a ridge in the centre of the COOK 3 and 4 mineral claims, and Pleistocene basalt flows underlie the lower reaches of the Unuk River valley.

The area has an exploration history dating back to the turn of the century when prospectors passed through the region on their way to the interior. In the 1970's, the porphyry copper boom again brought prospectors and companies into the area. The current gold exploration rush began in 1980 with the option of the Sulphurets property by Esso Minerals Canada and the acquisition of the Johnny Mountain claims by Skyline Exploration Ltd. which was brought into production in mid-1988. The adjacent SNIP property is slated for production in 1990.

At this time, the Eskay Creek prospect, located 30 km northeast of the Cook property and currently being explored by Calpine and Consolidated Stikine, is the most significant showing in the area. The prospect comprises at least eight mineralized zones occurring over a strike length of 1800 m within a sequence of felsic volcanics. The mineralization is associated with disseminated sulphides in felsic volcanic breccias and graphitic argillites in contact with overlying intermediate volcanic rocks.

Cook Property

A review of all available information indicates that the entire Unuk River area was subjected to reconnaissance geological mapping and prospecting by Newmont Mines Ltd. in 1959-1962 which led to the discovery of a number of showings within or adjacent to the property boundaries.

The Six Mile #2 copper showing occurs at the south end of a small lake near the northeast corner of the COOK 1 claim. Minor chalcopyrite and up to 5% disseminated pyrite occur within and adjacent to the Flory Creek Fault Zone. Located on the same structure, directly northeast of the property boundary, is the Homer #3 copper showing. A gossanous zone within the Flory Creek Fault Zone hosts disseminations and fracture fillings of pyrite and chalcopyrite. The Canyon Creek prospect occurs adjacent to the extreme southwest corner of the property. It consists of two showings known as the Black Bear and Daily Boy. The showings consist of mineralized quartz veins, occurring either along the selvage of a diorite porphyry dyke, or within silicified and hornsfelsed sediments which are disseminated with pyrite and on weathering are covered by a crust of deep brown limonite.

The 1989 exploration program consisted of helicopter-supported reconnaissance prospecting, geological mapping, and geochemical sampling with the objective of evaluating the property's potential for hosting economic precious metals deposits and for the purpose of fulfilling the assessment requirements. Reconnaissance prospecting and geochemical sampling were completed in areas of reported mineralization and gossans noted within the property.

An aerial reconnaissance of the property located a number of iron-stained areas in the western portion of the COOK 3 and 4 mineral claims. A limited amount of reconnaissance prospecting completed over this area located weak Pb and Zn mineralization in cherty silty sandstone. A number of quartz veins were located in the southwest corner of the property, near the reported location of the Canyon Creek occurrence; however, grab samples collected here did not yield any anomalous geochemical results.

Received a Field Keewatin Engineering Inc.

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1 - Geology and 1989 Exploration Locations and Results

### INTRODUCTION

Canadian Cariboo Resources Ltd. of Vancouver, commissioned Keewatin Engineering Inc. to conduct a field exploration program to be completed on the Cook property located in the Unuk River area of northern British Columbia. Exploration was directed by Keewatin Engineering Inc. with geological support and field supervision provided by Taiga Consultants Ltd. as a sub-contractor to augment the Keewatin crew.

The objective of this program was to evaluate the property's potential for hosting economic precious metals deposits, and for the purpose of fulfilling the assessment requirements. Exploration consisted of prospecting, geological mapping, and geochemical sampling. Geochemistry included lithogeochemical, stream silt, and heavy mineral sampling.

## Location and Access

The Cook property is located in northwestern British Columbia, approximately 80 km northwest of Stewart (Figure 1). The claims are situated within N.T.S. map-sheet 104-B/7E and centered about 56°24' North latitude and 130°38' West longitude. Access to the property is by fixed-wing aircraft from Terrace, Stewart, or Smithers to various airstrips in the area and then via helicopter to the property. The claims can also be directly accessed by helicopter from Stewart.

At some future date, road access to the area from the Stewart-Cassiar Highway could be obtained via the Upper Unuk River and Tiegen Creek valleys.

### Property Status and Ownership

The Cook property (Figure 2) consists of four modified-grid claims totalling 46 units, located within the Skeena Mining Division. Relevant claims data are tabulated below:





Claim Name	Record <u>Number</u>	No.of <u>Units</u>	Date of <u>Record</u>	Expiry <u>Date</u>
СООК 1	7050	6	Dec.21/88	1989
COOK 2	7051	16	Dec.21/88	1989
СООК З	7052	10	Dec.21/88	1989
COOK 4	7053	10	Dec.21/88	1989

These claims are apparently the subject of an agreement between the claim holder (K. S. Gouley) and Canadian Cariboo Resources Ltd. The claim maps show that the outer edges of the property encompass slivers of pre-existing mineral claims.

## Physiography and Climate

The Cook property is situated within the Coast Range Physiographic Division and is characterized by northern rain forests and sub-alpine plateaux. Valleys are steep sided and U- to V-shaped. Elevations (see Figure 2) range from 120 m in the valley of the Unuk River to 1400 m in the extreme southeast corner of the property.

A transitional treeline, characterized by dense sub-alpine scrub, occurs at approximately the 915 m elevation. Terrain above treeline is typified by intermontane alpine flora. Permanent glacial ice is found intermittently above the 1065 to 1370 m elevations. Conifers up to 30 m tall are common below treeline, especially in stream valleys. Water for camp and drilling purposes is generally in good supply from the numerous creeks draining the claim area.

Precipitation is heavy, exceeding 200 cm per annum, with short mild summers but very wet spring and fall periods. Thick accumulations of snow are common during winter. It is seldom possible to begin surface geological work before July and difficult to continue past September.

#### PREVIOUS EXPLORATION

The area drained by the upper reaches of the Stikine, Iskut, Unuk, Craig, and Bell-Irving Rivers has been explored for gold since the late 1800's when prospectors passed through the region on their way to the interior. In the 1970's, the porphyry copper boom again brought prospectors and companies into the area. The current gold exploration rush began in 1980 with the option of the Sulphurets property by Esso Minerals Canada and the acquisition of the Johnny Mountain claims by Skyline Explorations Ltd. The Johnny Mountain deposit was brought into production in mid-1988, and the adjacent SNIP property is slated for production in 1990.

The mineralization at Eskay Creek was discovered in 1932, and active prospecting has continued sporadically since then. Two adits are the result of limited mining activity on this prospect. In 1988, Calpine Resources Incorporated discovered high-grade gold and silver mineralization on the '21 Zone' (*Northern Miner* - November 7, 1988). A number of excellent diamond drill intersections have been obtained to date, including drill hole CA-88-06 which encountered 96 feet of 0.752 oz/ton gold and 1.13 oz/ton silver. Based on the results of 70 drill holes completed to June 1, 1989, a preliminary geological ore reserve of 2.8 million tons grading 0.23 oz/ton gold and 3.3 oz/ton silver has been calculated for the '21 Zone' (Consolidated Stikine Silver Ltd. - 1989 Annual Report).

The Unuk River area was covered by regional geological mapping in 1988 as part of the Iskut-Sulphurets project carried out by B.C. Ministry of Energy, Mines and Petroleum Resources (Britton, et al., 1989). The whole of N.T.S. 104-B is currently being mapped by R. G. Anderson of the Geological Survey of Canada (Anderson, 1989).

The results of a regional stream sediment sampling program conducted over this area were released in July 1988 (National Geochemical Reconnaissance, 1988). Britton (et al.) report that almost every known precious metal prospect in the Unuk River area is associated with high stream sediment gold values. Known gold deposits are also associated with high but variable values for such

pathfinder elements as silver, arsenic, antimony, and barium. No samples were collected from the creek draining the property.

A review of the material in the B.C. Ministry of Energy, Mines and Petroleum Resources assessment report archives indicates that the entire Unuk River area was subjected to reconnaissance geological mapping and prospecting by Newmont Mines Ltd. during the period 1959 to 1962.

The Six Mile #2 copper showing (Minfile #225) occurs at the south end of a narrow lake located in the northeast corner of the COOK 1 claim. Minor chalcopyrite and up to 5% disseminated pyrite occur within and adjacent to the Flory Creek Fault Zone.

The Homer #3 copper showing (Minfile #224) occurs adjacent to the northeast corner of the property at the north end of the same small lake on which the Six Mile #2 copper showing is located. A gossanous zone within the fault hosts disseminations and fracture fillings of pyrite and chalcopyrite.

The Fewright (6-Mile) showing (Minfile #097) is plotted as occurring near the northwestern boundary of the property. However, investigation of this area indicated that this showing is misplotted.

The Canyon Creek prospect (Minfile #098) occurs adjacent to the extreme southwest corner of the property. It consists of two showings known as the Black Bear and Daily Boy. The showings consist of mineralized quartz veins, occurring either along the selvage of a diorite porphyry dyke, or within silicified and hornsfelsed sediments which are disseminated with pyrite and on weathering are covered by a crust of deep brown limonite.

The assessment records indicate that Granduc Mines Ltd. conducted an airborne electromagnetic and magnetic survey over McQuillan Ridge in 1968. This survey covered the Cook property east of the Unuk River.

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### **REGIONAL GEOLOGY**

The property lies within the Intermontane Tectono-Stratigraphic Belt, one of five parallel northwest-southeast trending belts which comprise the Canadian Cordillera (Figure 3). The Cook property occurs near the contact between the Stikine Terrane, which makes up most of the western part of the Intermontane Belt, and the unmetamorphosed sediments of the Bowser Basin.

The Unuk River area (Figure 4) is underlain by a thick succession of Upper Triassic to Lower Jurassic volcano-sedimentary arc complex lithologies capped by Middle Jurassic marine basin lithologies. This package has been intruded by a variety of plutons representing at least four intrusive episodes spanning late Triassic to Tertiary time. These include synvolcanic plugs, small stocks, dyke swarms, isolated dykes and sills, as well as batholiths belonging to the Coast Plutonic Complex.

The stratigraphic sequence has been folded, faulted, and weakly metamorphosed during Cretaceous time, but some Triassic strata are polydeformed and may record an earlier deformational event. Remnants of Pleistocene to Recent basaltic flows and tephra are preserved locally.



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KEEWATIN ENGINEERING INC.



NOTE: Not to scale



Geology and mineral deposits, Unuk map area. Modified after Britton et. al. (1989)

## PROPERTY GEOLOGY

#### PROPERTY GEOLOGY

Regional geological mapping by Britton et al.(1989) shows that the property is underlain predominantly by Upper Triassic to Lower Jurassic supracrustal rocks (Figure 5). The central portion of the property is underlain by Upper Triassic Stuhini Group sediments, and the eastern and western portions by the Lower Jurassic Unuk River Formation. In the northwest corner of the property, the Unuk River Formation, which consists of andesitic volcanics with lesser sediments, has been intruded by the Tertiary King Creek Dyke Swarm. Pleistocene basalt flows underlie the lower reaches of the Unuk River valley.

### Upper Triassic <u>Stuhini Group</u> (Unit 1)

The Stuhini Group rocks occupy the nose of a north-plunging anticline, and occur as a wedge between the Harrymel-Unuk shear zone and the overlying Unuk River Formation. These rocks underlie the central portion of the property, and consist of thin bedded siltstones, immature fine-grained wackes, chert, impure limestones, and andesitic tuffs that locally attain a considerable thickness. Andesitic tuffs may be laminated to massive, aphanitic to hornblende-feldspathic. Limestones occur as thin beds or discontinuous lenses that show extensive recrystallization and highly disrupted internal structure. Fossil evidence led Britton et al.(1989) to ascribe a Carnian to Norian age to these rocks.

### Upper Triassic to Lower Jurassic <u>Unuk River Formation</u> (Unit 2)

Britton et al.(1989) described this sequence as green and grey intermediate to mafic volcaniclastics and flows with locally thick interbeds of fine-grained immature sediments. The volcanics are reported to be dominantly massive to poorly bedded plagioclase ( $\pm$  hornblende) porphyritic andesite. The sediments are predominantly grey, brown, and green thinly bedded tuffaceous siltstone and fine-grained wacke. These Norian to Sinemurian age rocks of the Unuk River Formation constitute the lowermost unit of the Hazelton Group. The basal contact with Triassic strata appears to lie near the top of a thick sequence of clastic sedimentary rocks. Neither an angular unconformity nor a widespread conglomerate marks the lower contact. Government regional geological mapping and mapping completed during the 1989 property exploration program indicate this unit underlies most of the western portion of the property and the extreme eastern part of the COOK 2 mineral claim.

### Pleistocene to Recent <u>Basalt Flows and Tephra</u> (Unit 6a)

Britton et al.(1989) mapped these flows along the valleys of the Unuk River and Canyon Creek. The are reported to commonly display columnar jointing.



COOK PROPERTY GEOLOGY

Figure 5

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AGE	GROUPS	FORMATIONS	MEMBERS	LITHOLOGIES
Bathonian	Bowser Lake	Ashman	Main Sequence Basal Conglomerate	Turbidites, wackes, intraformational conglomerates Chert pebble conglomerates
Bajocian to Toarcian	Spatsizi(?)	Salmon River	Pyjama Beds Basal Limestone	Thin bedded, alternating siltstones and mudstones Gritty, fossiliferous limestone
Toarcian		Mount Dilworth	Upper Lapilli Tuff Middle Welded Tuff Lower Dust Tuff	Dacitic lapilli tuff with flow- bandedd clasts Dacitic welded ash flow and lappilli tuff Dacitic dust tuff
Pliensbachian	Hazelton	Betty Creek	Sedimentary Members Volcanic Members	Hematitic volcaniclastic sediments, and turbidites Andesitic to dacitic tuffs and flows
Sinemurian to Hettangian(?)		Unuk River	Premier Porphyry Upper Andesite Upper Siltstone Middle Andesite Lower Siltstone Lower Andesite	Two feldspar + hornblende porphyritic tuffs Massive tuffs with local volcaniclastic sediments Turbidites, minor limestones Massive tuffs and minor volcaniclastic sediments Turbidites Massive to bedded ash tuffs
Norian to Carnian	Stuhini		Volcanic Members Sedimentary Members	Pyrozene porphyry flows and tuffs Turbidites, limestones, conglomerates

TABLE 1. Table of Formations Unuk River Area

### Eocene and possibly Jurassic <u>Coast Plutonic Complex</u> (Unit 12)

Britton et al.(1989) described the intrusions north of Boulder Creek as biotite-hornblende quartz diorite which probably contain many discrete stocks. The country rock contacts are reported to be sharp, discordant, and thermally metamorphosed. The age of these intrusives is Eocene, but the complex may include remnants of Jurassic granitoids. Mapping completed during the 1989 property exploration program indicates that this unit underlies a ridge located in the centre of the COOK 3 and 4 mineral claims.

## Tertiary <u>King Creek Dyke Swarm</u> (Unit 13b)

The limits of the unit, as shown on Figure 5, roughly indicate where the dykes exceed 50% of the exposed bedrock. This north trending belt of dykes range compositionally from rhyodacite to andesite, and texturally from aphanitic to holocrystalline. Britton et al.(1989) has classified individual dykes as feldspar porphyry dacites, andesite, diabases, and hornblende to quartz diorites. They are reported to be up to 10 m wide and are anastomose, cross-cutting one another at oblique angles. Most of the dykes are described as white-weathering medium-grey andesite to dacite with fine to coarse feldspar phenocrysts in an aphanitic groundmass.

### <u>Structure</u>

Actual fault surfaces or zones are rarely seen in the Unuk River area, but they are probably quite common and may have developed concurrently with regional folding. Britton et al.(1989) mapped several assumed faults within the property boundaries. These are assumed to be normal faults and are described as megascopic structures with relatively little offset.

#### ECONOMIC GEOLOGY

Britton et al.(1989) list 55 mineral occurrences in the Unuk map-sheet. These showings are predominantly gold/silver occurrences and are hosted by a number of various lithologies. Most can be classified into one of four categories: stratabound, vein, skarn, and disseminations. Grove (1986) has determined that the age of the mineralizing events is variable and, notably, can be post-Triassic.

Stratabound mineralization consists almost exclusively of pyritic zones and lenses contained within a particular stratum or a restricted set of strata. The best example is the Eskay Creek prospect, currently being explored by Calpine Resources Incorporated and Consolidated Stikine Silver Ltd. Intrusivecontact (skarn) deposits show a close spatial and temporal relationship with igneous intrusions. Three deposits in this category are the E & L nickel/copper deposit (Minfile #006), the Max copper/iron skarn (Minfile #013), and the Chris-Anne copper/iron skarn (Minfile #125). Britton et al.(1989) stated:

Mineralization at the E & L occurs within two medium- to coarsegrained, olivine-pyroxene gabbro bodies. These roughly triangular plugs are each approximately 1300 square metres in area and are probably connected. They intruded a sequence of argillites, tuffaceous siltstones, and grey dacitic ash tuffs that strike northwesterly with moderate to steep southwesterly dips. Mineralization consists of pyrrhotite, pentlandite, and chalcopyrite, with lesser amounts of pyrite and magnetite. In the northwestern gabbro, mineralization extends up to the contact with the sediments, whereas in the southeastern gabbro, mineralization is confined to the pluton. Diamond drilling has delineated pipe-like pods and disseminations of sulphides to a depth of 120 metres. Drill-indicated reserves are 2.8 million tonnes of 0.7% Ni and 0.6% Cu (Sharp, 1965).

The Max prospect lies on the northwest side of McQuillan Ridge, between the Unuk and South Unuk Rivers, at elevations between 455 and 1500 metres. Massive magnetite with lesser pyrrhotite and chalcopyrite occur in skarn-altered sedimentary rocks adjacent to a diorite stock. Garnet, epidote, actinolite, and diopside characterize the skarn assemblage. Drilling has indicated a reserve of 11 million tonnes at 45% iron (Canadian Mines Handbook 1973-1974, page 432).

The Chris-Anne prospect lies approximately 3 kilometres east of the Max. Skarn mineralization is reported in limestone beds which are up to 10 metres thick and that are interbedded with volcaniclastics. Magnetite and pyrrhotite-rich layers, from 0.5 to 7 metres

thick, with minor chalcopyrite, extend over a distance of 1 km. There are minor intrusive bodies reported on the property. Grades range from 0.1% to 0.4% copper (Allan and MacQuarrie, 1981).

The gold potential of these skarn deposits does not appear to have been tested. Based on recent skarn studies (Ettlinger and Ray, 1988), this area has many features that are associated with goldenriched skarns elsewhere in the province: sequences of calcareous and tuffaceous host rocks; structural deformation; intrusion by dioritic I-type granitoids; and contact metamorphism and recrystallization. Some auriferous skarns are enriched in cobalt, an element that may be a useful pathfinder.

High-grade precious metal quartz veins are the target of exploration programs at Mount Madge (Minfile #240 and #233) by Bighorn Development Corporation, and at the Doc prospect (Minfile #014) by Echo Bay Mines Limited. Britton et al.(1989) reported:

The Mount Madge prospects are located south of Sulphurets Creek near its confluence with Unuk River, on the east and west sides of Mandy Glacier. Two different targets are being evaluated (Kruchkowski and Sinden, 1988). On the west, the C-10 prospect (Minfile #240) is a stockwork of thin quartz veinlets, locally with thicker quartz lenses, in intensely altered, fine-grained tuffaceous andesite or dacite. Quartz veinlets locally form up to 30% of the rock. The alteration assemblage consists of quartz and sericite with up to 10% pyrite. Chalcopyrite and traces of sphalerite are also present. The rocks are strongly foliated to schistose and are very similar to the broad alteration zones seen at Brucejack Plateau 12 kilometres to the northeast (Britton and Alldrick, 1988). Soil samples locally return analyses in excess of 1 ppm gold.

Two kilometres to the east, Ken Konkin discovered a massive pyrite-siderite float boulder with visible gold. Prospecting uphill led to the discovery of the GFJ veins (Minfile #233), apparently flat-lying, zoned siderite-quartz-sulphide veins that returned assays up to 121 grams per tonne gold (Kruchkowski and Sinden, 1988). The veins are poorly exposed. Float blocks seen this year display symmetrical zoning from margin to core across vein widths of 10 to 15 centimetres. Vein margins are 1 to 2 centimetres of thin white guartz layers separated by hairline accumulations of very finegrained tin-white sulphide, probably arsenopyrite. The core is a very coarse-grained intergrowth of siderite, milky quartz, and cubes and clusters of pyrite, with lesser amounts of sphalerite and chalcopyrite as crystals and irregular masses. Rare tetrahedrite and visible gold have been observed (K.Konkin, personal communication, 1988). The veins cut variably foliated andesitic ash tuffs with thin interbeds of foliated to schistose siltstones.

The Doc prospect (Minfile #014) is located at treeline on a ridge overlooking the South Unuk River, opposite the mouth of Divelbliss Creek. The prospect consists of several west-northwest trending quartz veins up to 2 metres wide that have surface strike lengths of up to 275 metres (Gewargis, 1986). The main veins (Q17, 022) are massive white quartz with sparse sulphide mineralization (5% to 10%) consisting of galena, pyrite, chalcopyrite, and sphalerite, with associated specular hematite and magnetite. Precious metal values are mostly confined to the sheared edges of veins and immediately adjacent wallrock. Shear zones with very little quartz may also return good values. Seraphim (1948) observed that gold was associated with either specular hematite or with galena and pyrite, but not with chalcopyrite and pyrite assemblages. The veins are a true fissure type, crosscutting folded and metamorphosed andesitic tuffs and thin-bedded sediments, including marble, that have been intruded by irregular dioritic dykes or sills and small monzodioritic plugs. The veins are different from any others seen in the Sulphurets or Unuk map areas. They have very restricted wallrock alteration aureoles, no apparent zoning, and appear to be limited to a few large fluid pathways. In this, they display characteristics of mesothermal veins. Structural control of the vein sets has not been determined but may be due to fractures related to folds in the host rocks. Total mineral inventory of the Q17 and other veins is given as 426,000 tonnes with 9.26 grams per tonne gold and 44.91 grams per tonne silver (Northern Miner, November 7, 1988).

Porphyry-type disseminated pyrite, chalcopyrite, and molybdenite mineralization occurs immediately north and south of King Creek, west of Harrymel Creek. Two properties have been worked: the VV to the south and the Cole to the north.

The VV property (Minfile #079) is the site of a heavily weathered monzonitic intrusive body in fault contact, on the east and west, with layered andesitic lapilli tuffs and tuff breccias with minor siltstone and calcareous sandstone interbeds. The stock is 250 metres wide, at least 6 kilometres long, strikes northerly, and dips steeply to the west, parallel to the country rocks. Chalcopyrite occurs in quartz stockworks and as fine disseminations within the monzonite. Molybdenite, sphalerite, malachite, and azurite have also been reported (Winter and McInnis, 1975; Mawer et al.,1977). Representative assays give 0.34% copper, 0.003% molybdenum, 2.1 grams per tonne silver, and 0.8 gram per tonne gold. Maximum gold and silver values obtained were 8.65 grams per tonne gold and 19.54 grams per tonne silver (Mawer et al.,1977).

The Cole prospect (Minfile #209) is situated approximately 4 kilometres north of the VV claims; it appears to be on strike with the same fault system and has similar intrusive and country rocks. Mineralization consists of up to 10% pyrite as disseminations and fracture fillings. Minor chalcopyrite and malachite have been reported but the bedrock source of the gold/silver soil anomalies has not been located (Korenic, 1982; Gareau, 1983). Reported assays range up to 0.43% copper, 7.12 grams per tonne gold, and 13.03 grams Keewatin Engineering Inc. per tonne silver. Gold and copper values show a positive correlation on both properties.

At this time, the Eskay Creek prospect, located 30 km northeast of the Cook property, is the most significant showing in the area. This prospect comprises at least eight mineralized zones occurring over a strike length of 1800 m within a sequence of felsic volcanics (Mount Dilworth Formation). This property is currently being explored by Calpine and Consolidated Stikine Silver. Preliminary drilling on the '21 Zone' intersected 96 feet assaying 0.752 oz/ton gold and 1.13 oz/ton silver including 52.5 feet grading 1.330 oz/ton gold and 1.99 oz/ton silver (Northern Miner, November 7, 1988).

The drilling results obtained to date indicate that the '21 Zone' extends over 335 m and is open along strike and at depth. Based on the results of 70 drill holes completed to June 1, 1989, a preliminary geological reserve of 2.8 million tons grading 0.23 oz/ton gold and 3.3 oz/ton silver was calculated for the '21 Zone' (Consolidated Stikine Silver, 1989 Annual Report). These deposits have been variously described as silicified shear zones (Harris, 1985) or as volcanogenic deposits (Donnelly, 1976). The mineralization is associated with disseminated sulphides in felsic volcanic breccias and graphitic argillites in contact with overlying intermediate volcanic rocks.

A review of all the available information (Minfile, assessment reports, geological maps, reports, etc.) indicates that one mineralized occurrence is known within the area currently covered by the Cook property.

The Six Mile #2 copper showing (Minfile #225) occurs on the COOK 1 claim at the south end of a narrow lake. Minor chalcopyrite and up to 5% disseminated pyrite occur within and adjacent to the Flory Creek Fault Zone.

Located on the same structure and adjacent to the property boundary is the Homer #3 copper showing (Minfile #224). A gossanous zone within the fault hosts disseminations and fracture fillings of pyrite and chalcopyrite. The fault gouge is carbonatized and hosts up to 5% pyrite.

The Canyon Creek prospect (Minfile #098) occurs adjacent to the southwest corner of the property, and consists of two showings known as the Black Bear and the Daily Boy. The Daily Boy is portrayed as several veins with pyrite, pyrrhotite, and minor sphalerite and galena, hosted by silicified and hornsfelsed sediments. The sediments are described as altered slates, argillites, and quartzites (Unuk River Formation) which are characterized by a high percentage of disseminated pyrite. These are reported to be cut by a complex of lamprophyre dykes. The Black Bear is portrayed as a 60 cm wide quartz vein with auriferous pyrite and pyrrhotite, and is hosted by sediments at the margin of a diorite porphyry dyke.

### 1989 EXPLORATION PROGRAM

The 1989 property exploration program, completed between September 9 and October 16, consisted of helicopter-supported reconnaissance prospecting, geological mapping, and geochemistry (lithogeochemical, stream silt, and heavy mineral sampling). Areas of known mineralization and gossans noted within the area were investigated and sampled.

A total of 16 rock, 2 stream silt, and 3 heavy mineral samples were forwarded to Bondar-Clegg & Company in Vancouver for multi-element analyses; Au by fire assay-AA and the remaining 29 elements by I.C.P. (results are presented in the Appendix, along with rock sample descriptions).

The accompanying map depicts the property geology (modified after Britton et al.,1989), with 1989 prospecting traverses, sample locations, and Au/Ag/As/Sb analytical results. Descriptions of the exploration completed and the results follow.

### ROCK GEOCHEMICAL SAMPLING

Reconnaissance prospecting and geochemical sampling were completed over selected parts of the property. This work was concentrated in the areas of reported mineralization and gossans noted within the property. Britton et al.(1989) reported three mineral occurrences occurring either within or adjacent to the property boundaries. The 1989 exploration program investigated each of these areas.

The Fewright (6-Mile) Cu/Ag/Au/Pb showing (Minfile #097) is plotted as occurring near the northwest corner of the COOK 4 mineral claim. The Minfile occurrence description states that "a 30 metre wide mineralized ledge ran the entire length of seven claims (estimated strike length of about 300 metres). Some tunnel work was done on the claims and the mineralized zone was reported to carry values of Ag, Cu, Au, and Pb." Extensive investigation of this area during the current exploration program could not locate any old workings or mineralization. This showing location is probably misplotted.

The Black Bear and Daily Boy showings (Minfile #098) are plotted as occurring adjacent to the southwest corner of the COOK 3 mineral claim. These showings consist of mineralized quartz veins either occurring along the selvage of a diorite porphyry dyke or within silicified and hornsfelsed sediments which are disseminated with pyrite and on weathering are covered by a crust of deep brown limonite. Investigation of the southwestern corner of the property located a number of quartz veins. Grab samples collected here did not yield any anomalous geochemical results. Only a limited amount of reconnaissance prospecting was completed in this area. Additional work is required to fully evaluate the area.

A number of iron-stained areas were noted in the westernmost portion of the COOK 3 and 4 claims. One of these areas, located on the COOK 4 claim, was investigated. The area was found to be underlain by northerly striking, interbedded argillite/chert/siltstone and quartzite, probably belonging to the Upper Triassic Stuhini Group. Weak Pb and Zn mineralization was found occurring in cherty silty sandstone, the iron staining noted associated with weak

Cook Property

sulphide (pyrite) mineralization within the interbedded sediments. Three grab samples yielded elevated Pb and/or Zn values:

Sample_	Zn ppm	Pb ppm	Description
KCR-037	1330	1802	grey quartzite, <1% galena, trace Py
KVR-062	2870	-	cherty silty sandstone, trace galena, diss Py
KVR-063	1834	-	cherty silty sandstone, trace galena, diss Py

A large iron-stained area was noted in the northwest corner of the COOK 3 claim; however, budget constraints did not allow the area to be investigated during the current exploration program.

The Flory Creek Fault Zone cuts diagonally across the southeast corner of the COOK 1 claim and the west end of the COOK 2 claim. Two copper occurrences (Minfile #224 and #225) are plotted as occurring within and adjacent to the fault zone.

The Six Mile #2 copper showing (Minfile #225) occurs at the south end of a narrow lake in the northeast corner of the COOK 1 claim. The occurrence description reports "minor chalcopyrite and up to 5% disseminated pyrite occur within and adjacent to the Flory Creek Fault Zone." A limited amount of reconnaissance prospecting was conducted along the western side of this fault zone. No mineralization was located; however, iron staining was noted on cliffs along the east side of the lake. This showing is probably located to the east of the area prospected during the current exploration program. Additional prospecting is required to fully evaluate the area.

Several gossanous zones were noted in the eastern portion of the COOK 2 claim during aerial reconnaissance of the property. A pronounced airphoto lineament, interpreted as a shear zone, cuts across the property in this area. Budget constraints did not permit the area to be investigated during the current exploration program.

Since only a small portion of the Cook property was investigated during the current exploration program, additional exploration consisting of reconnaissance prospecting, geological mapping, and lithogeochemical sampling is required to fully evaluate the area. Particular attention should be given to the gossanous areas noted and to the Flory Creek Fault Zone.

### STREAM SILT SAMPLING

Stream silt geochemical sampling was conducted on the property as part of the current exploration program. Stream silt samples were collected whenever streams were crossed during reconnaissance prospecting traverses. The designation of anomalous values is based on regional G.S.C. survey results in Open File 1645 combined with a visual observation of data obtained during the 1989 exploration on a number of claim groups in the Unuk River area.

Based on these criteria, there were no anomalous precious metals values detected for any of the elements analyzed. Two creeks drain the western portion of the COOK 3 and 4 mineral claims. Stream silt samples should be collected at regular intervals along these drainages.

### HEAVY MINERAL SAMPLING

A heavy mineral stream sediment sampling survey was conducted on the property as part of the current exploration program. Heavy mineral samples were collected in parts of a creek where there is a sudden transition from high to low energy, if present, moss mat was used. Samples were sieved to -20 mesh and a 3 to 5 kg sample of sieved material was collected.

The samples were forwarded to Bondar-Clegg and Company in Vancouver for multi-element analyses: Au by fire assay-AA and the remaining 29 elements by I.C.P. The heavy mineral separation consists of floating off the light (<3.3) minerals using methylene-iodine followed by magnetic separation. A sample

weight of 0.5 grams is taken for the I.C.P. and the remainder used for fire assay.

The heavy mineral sampling survey was conducted by Mr. M. Waskett-Myers of Keewatin Engineering Inc. which company has done a considerable amount of work in the Unuk River area, and in the process, has assembled a fairly substantial data base. These data were used to assess the values obtained on the property.

Heavy mineral sampling is a good first-pass tool and should be considered as a micro-prospecting approach to evaluating an area.

A total of three heavy mineral samples were collected from creeks draining the eastern portion of the COOK 2 mineral claim; these reflect background values in all the elements.

### SUMMARY AND RECOMMENDATIONS

The 1989 exploration program consisted of helicopter-supported reconnaissance prospecting, geological mapping, and geochemical sampling, with the objective of evaluating the property's potential for hosting economic precious metals deposits and for the purpose of fulfilling the assessment requirements. This work was concentrated in the areas of reported mineralization and gossans noted within the property.

The Flory Creek Fault Zone cuts diagonally across the western end of the COOK 1 and 2 claims. The Minfile plots two occurrences within and adjacent to the fault zone. A limited amount of prospecting conducted along the west side of the zone did not located any mineralization. Iron staining and possible malachite staining were noted on cliffs along the east side of a narrow lake. These showings are probably located to the east of the area prospected.

The Fewright (6-Mile) Au/Ag/Cu/Pb showing is plotted adjacent to the northeast corner of the COOK 4 mineral claim. Extensive investigation of this area during the current exploration program could not locate any old workings or mineralization. This showing is probably misplotted.

A review of all available information on the area indicated that the Canyon Creek prospect (Minfile #098) probably occurs adjacent to the extreme southwest corner of the property. It consists of two showings known as the Black Bear and the Daily Boy. The showings consist of mineralized quartz veins occurring either along the selvage of a diorite porphyry dyke or within silicified and hornsfelsed sediments with disseminated pyrite, and on weathering are covered by a crust of deep brown limonite. An aerial reconnaissance of the property located a number of limonite-stained outcrops in the western portion of the COOK 3 and 4 mineral claims. A limited amount of reconnaissance prospecting located a number of quartz veins in the southwest corner of the property; however, grab samples collected here did not yield any anomalous geochemical results.

Investigation of one of the iron-stained outcrops located weak Pb and Zn mineralization in cherty silty sandstone, the iron staining noted is associated with weak sulphide (pyrite) mineralization within the interbedded sediments. Budget constraints did not allow for an examination of the remaining iron-stained zones noted. Additional prospecting is required to fully evaluate this area.

Several gossanous zones were noted in the eastern portion of the COOK 2 claim during aerial reconnaissance. A pronounced airphoto lineament, interpreted as a shear zone, cuts across the property in this area, and a geological and mineral occurrence compilation completed by Equity Preservation Corp. in 1988 plots a gold occurrence on or adjacent to this lineament north of the property boundary. Future exploration programs should investigate the mineral potential of this area.

Three heavy mineral samples were collected from creeks draining the eastern portion of the COOK 2 mineral claim. They yielded background values in all the elements.

Considering the limited amount of exploration completed on the claims, additional work is required in order to fully evaluate the property's mineral potential. This work should consist of extensive reconnaissance prospecting, combined with geological mapping, lithogeochemical sampling, and stream silt sampling. Particular attention should be given to the gossanous zones noted, to the Flory Creek Fault Zone, and to the southwest corner of the property near the reported location of the Canyon Creek prospect. Stream silt samples should be collected at regular intervals along the two creeks draining the western portion of the property, in which numerous gossanous zones were noted. Cook Property

## CERTIFICATE - C. H. Aussant

I, Claude Henry Aussant, of 31 Templebow Way N.E. in the City of Calgary in the Province of Alberta, do hereby certify that:

- 1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at Suite 400, 534 17th Avenue S.W., Calgary, Alberta.
- 2. I am a graduate of the University of Calgary, B.Sc.Geology (1976), and I have practised my profession continuously since graduation.
- 3. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and I am a Fellow of the Geological Association of Canada.
- 4. I am co-author of the report entitled "Geological, Prospecting, and Geochemical Report on the Cook Property, COOK 1 to 4 Mineral Claims, Skeena Mining Division, British Columbia", dated November 6, 1989. I personally worked on the property during the program described herein.
- 5. I do not own or expect to receive any interest (direct, indirect, or contingent) in the property described herein nor in the securities of **Canadian Cariboo Resources Ltd.**, in respect of services rendered in the preparation of this report.

DATED at Calgary, Alberta, this 6th day of November, A.D. 1989.

PERMIT TO PRACTICE TAIGA CONSULTANTS LTD.
Signature W. K. v.
Date muny 18, 1990
PERMIT NUMBER: P 2399
The Association of Professional Engineers, Geologists and Geophysicists of Alberta

Respectfully submitted,

C. H. Aussant, B.Sc., P.Geol., F.GAC





### CERTIFICATE

I, DAVID GEORGE DuPRE, of 56 Parkgrove Crescent in the Municipality of Delta in the Province of British Columbia, do hereby certify that:

- 1) I am a graduate of the University of Calgary, B.Sc. Geology (1969), and have practised my profession continuously since graduation.
- 2) I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and I am a Fellow of the Geological Association of Canada.
- 3) I am a consulting geologist with the firm of Keewatin Engineering Inc. with offices at Suite 800 900 West Hastings Street, Vancouver, British Columbia.
- 4) I am the co-author of the report entitled "Geological, Prospecting, and Geochemical Report on the Cook Property, COOK 1 to 4 Mineral Claims, Skeena Mining Division, British Columbia", dated November 6, 1989. I personally supervised the work on the property and visited the site on two occasions between September 6 and October 15, 1989.
- 5) I do not own or expect to receive any interest (direct, indirect or contingent) in the property described herein nor in the securities of **Canadian Cariboo Resources Ltd.**, in respect of services rendered in the preparation of this report.

Dated at Vancouver, British Columbia this 6th day of November, A.D. 1989.

sori David G. I FGAC u Pi ELLOW

Respectfully submitted,

#### **BIBLIOGRAPHY**

- Alldrick, D.J.; Drown, T.J.; Grove, E.W.; Kruchkowski, E.R.; Nichols, R.F. (1989): Iskut-Sulphurets Gold; <u>in</u> The Northern Miner Magazine, January 1989
- Anderson, R.G. (1989): A Stratigraphic, Plutonic and Structural Framework for the Iskut River Map Area (NTS 104B), Northwestern British Columbia; <u>in</u> Geol.Surv.Cda., Current Research, Part E; Paper 89-1E
- Britton, J.M.; Webster, I.C.L.; Alldrick, D.J. (1989): Unuk Map Area (104B/7E,8W,9W,10E); <u>in</u> B.C.Energy Mines & Petr.Res., Geological Field Work 1988, Paper 1989-1, pp.241-250

Consolidated Stikine Silver Ltd.: - 1989 Annual Report

Equity Preservation Corp. (1988): "Stewart-Sulphurets-Iskut Map Handbook"

- Geological Survey of Canada:
- Open File 1645 (1988): National Geochemical Reconnaissance; Iskut River
- Grove, E.W. (1971): Geology and Mineral Deposits of the Stewart Area, British Columbia; B.C.Energy Mines & Petr.Res., Bulletin 58
- ----- (1986): Geology and Mineral Deposits of the Unuk River-Salmon River-Anyox Area; B.C.Energy Mines & Petr.Res., Bulletin 63
- Hawkins, Paul A. & Associates Ltd. (Oct.1987): Report on Reconnaissance Mapping and Prospecting in the Unuk River Area, Skeena and Liard Mining Divisions; <u>for</u> Axiom Explorations Ltd.; B.C. Energy Mines & Petr.Res., Assess.Rpt. 16858
- Klein, J. (1968): Report on Airborne Geophysical Surveys, Stewart Area, British Columbia; <u>for</u> Granduc Mines Ltd.; B.C. Energy Mines & Petr. Res., Assess.Rpt.1835
- Korenic, J.A. (1982): Assessment Report of Geological, Geochemical, and Geophysical Work Performed on the Cole Claim in 1981, Skeena Mining Division; B.C.Energy Mines & Petr.Res., Assess.Rpt.10474

Northern Miner: - Nov.7, 1989

Pegg, R.S. (1988): Geological Compilation of the Iskut, Sulphurets, and Stewart Gold camps; <u>for</u> BP Resources Canada Limited, private company report Cook Property

## APPENDIX

## Summary of Personnel Rock Sample Descriptions Certificates of Analysis Analytical Techniques

## SUMMARY OF PERSONNEL

<u>Name / Address</u>	Position	<u>Dates</u>		<u>Man Days</u>
C. H. Aussant Calgary, Alberta	Project Geologist	Sep.9-Oct.16		2.00
B. C. Beattie Calgary, Alberta	Assistant Geologist	Sep.9-Oct.16		2.00
M. Waskett-Myers Vancouver, B,C.	Geochemist	Sep.9-Oct.16		0.75
B. McIntyre Vancouver, B.C.	Senior Prospector	Sep.9-Oct.16		0.75
C. Oevermann	Cook	Sep.9-Oct.16		0.75
Smithers, B.C.			TOTAL	6.25

Cook Property

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## ROCK SAMPLE DESCRIPTIONS

	<u>Au ppb</u>	
KCR-036	<5	talus; light grey chert, <1% diss pyrite
KCR-037	10	1802 ppm Pb, 1330 ppm Zn; talus; mottled grey quartzite, <1% galena, trace pyrite, in contact with light grey chert
KCR-038	<5	grab o/c; black argillite, 1% diss Py, rusty weathered, 005°/65°W to 010°/80°W; cliff area consists of interbedded black argillite with 1% pyrite / cherts and quartzites
KCR-039	<5	grab o/c; andesite, 1% diss pyrite, in contact with a diorite intrusion
KVR-061	5	talus; cherty fractured siltstone, <1% pyrite and stringers
KVR-062	<5	2870 ppm Zn; grab o/c; cherty silty sandstone, diss pyrite, trace Pb
KVR-063	<5	1834 ppm Zn; grab o/c; cherty silty sandstone, diss pyrite, trace Pb
KVR-064	<5	grab o/c; cherty fractured sandstone, pyrrhotite as dissemin- ations and stringers
KVR-065	<5	talus; granodiorite, 1-2% disseminated pyrite
KPR-070	8	float; quartz diorite, beige, rusty weathered in spots, very fine-grained, minor pyrrhotite, trace pyrite
KPR-071	26	grab o/c; mauve aphanitic dacite dyke, 1% diss pyrrhotite
KPR-072	6	grab o/c; grey quartz vein, very fine pyrite clots, diss pyrite, minor pyrrhotite, pyrite layers
KPR-073	26	float; rusty weathered grey quartz vein in siltstone
KPR-078	10	grab o/c; grey quartz, 1-2% Po as fine disseminations and clots
HZR-048	5	grab o/c; black argillite, pyrrhotite pockets, minor diss pyrite, minor pebbles of diorite
HOR-040	10	grab o/c; purple andesite tuff, minor diss pyrite, minor pyrrhotite blebs, weakly magnetic, minor quartz-carbonate stringers

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R7	89KV-R (165	<u></u> ,,	5	10	<111	23	<111	16	35	1	<i>.</i>		
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Bondar-Clegg & Company Ltd. 130 Pemberton Ave. North Vancouver, B.C. V7P 2R5 (604) 985-0681 Telex 04-352667



## Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES DATE PRINTED: 23-0CT-89

	REPORT: V89-06965.0									PROJECT: UNUK PAGE 1A					
1	SAMPLE	ELEMENT	Au	Ag	As	Ba	Be	Bi	Cd	Ce	Со	Cr	Cu		
	NUMBER	UNITS	PPR	Pfriti	PPfi	PPM	PPti	PPM	PPN	PPN	РРМ	PPM	PPN		

R2 89KP-R070 206 ~	8	Ŋ.2	<5	27	<n.5< th=""><th>&lt;2</th><th>2</th><th>21</th><th>7</th><th>79</th><th>8</th></n.5<>	<2	2	21	7	79	8
 R2 89KP-R071	26	<0.2	<5	156	<0.5	3	2	<5	34	35	
R2 89KP-R072 DE B-W	6	<0.2	<5	35	<0.5	3	<1	13	1	131	7
R2 89KP-R073 DEB - N	26	<0.2	<5	28	<8.5	2	<1	6	4 ·	157	20

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# Geochemical Lab Report

REPORT: V89-1	16965.0			NOF INCHC.	APE INSPECT	108& 11:511		TE PRINTE	D: 23-001	-89	PAGE 1B	· <u></u> ·-
SAMPLE NUMBER	FI FMFNT UNITS	Ga PPN	la PPM	l i PPM	Мо РРМ	Nb PPN	Ni PPM	Pb PPN	Rb PP11	Sb PPN	Sc PPM	Sn PPM
	· · ·					• • • • • • •						
												X
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113 9040 <b>0030</b>		4.4	40 ·	ţ		,	-			· .		
R2 89KP-R071		13	2	: 	4 3	4 	26	<2	32	*) <5	21	<20
R2 89KP-R072 R2 89KP-R073		13 14	6 3	4	4	7 8	4	7 28	29 29	 دي .	2	<20 <20
												<b></b>

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## Geochemical Lab Report

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

 								IF PRIMIT	J: 23-001-0	/
REPORT: V89	9-06965.0						PR	OJECT: UN	UK	PAGE 1C
SAMPLE	EI EMENT	Sr	Та	Ĩe -	V	H	Y	Zn	7r	
NUMBER	UNITS	PPM	PPN	PPN	PPN	PPN	PPh	PPn	PPN	

R2 89KP- <b>R07</b> 0 R2 89KP- <b>R07</b> 1	17 8	<10 <10	<10 <10	18 239	<10 <10	9 9	120 130	2 <1	••	
R2 89KP- <b>R07</b> 2 R2 89KP- <b>R07</b> 3	 3 8	<10 <10	<18 <10	13 28	<10 <10	6 12	39 55	3 2		

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Geochemical Lab Report

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	REPORT: V89	-06967.0					Pl	TE_PRINTE	D:26=0C1 NUK		PAGE 1A		
ľ	SAMPLE	ELEMENT	Au	Ag	As	Ba	Be	Bi	Cd	Ce	Co	Cr	Cu
	NUMBER	UNITS	PPB	PPN	PPH	PPN	PPN	PPN	PPN	PPN	PPN	PPN	PPH
•													

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R2 89KP-R178 D+6 ~=+ 1	10	<0.2	<5	51	<0.5	4	<1	15	2	. 100

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## Geochemicat Lab Report

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-06967.0							D4 PF	NTE_PRINTE ROJECT: UN	D:-26=0CT= 1UK	.89	PAGE 1B	 · · · · ·
SAMPLE	FLEMENT	Ga	La	Li	No	N <del>b</del>	NI	РЬ	Rb	Sb	Sc	Sn
NUMBER	UNITS	PPN	PP11	PPN	PPH	PPN	PPH	РРИ	PPN	PPN	PPN	PPN

	•									
R2 89KP-RN78		3	6	3	4	3	4	29	65	<5

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## Geochémicat Lab Report

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REPORT:         UB9-04292.0         PAGE 1C           SAMPLE         EIFMENT         Sr         Ta         Te         U         Y         Zn         Zr           NUMBER         UNTTS         PPN         PN         PN	 
SAMPLE         FI FHFNIT         Sr         Ta         Te         V         JJ         Y         Zn         Zr           NUMBER         UNITIS         PPH         PH         PH <th></th>	
R2 89KP-R178 8 <11 <10 <1 <11 11 51 2	
R2 89KP-RN78 8 <10 <1 <11 17 50 2	
R2 89KP-RN78 8 <10 <1 <11 10 50 2	
R2 89КР-R178 8 <1Л <10 <1 <1Л 1Л 5Л 2	
R2 89KP-R178 8 <10 <10 <1 <11 11 50 2	
R2 89KP-RN78 8 <10 <1 <10 17 50 2	
R2 89KP-R1178 8 <10 <10 <1 <10 11 50 2	
R2 89KP-R1178 8 <10 <1 <10 11 50 2	
R2 89KP-RN78 8 <10 <1 <10 10 50 2	
R2 89KP-RN78 8 <1N <10 <1 <1N 1N 5N 2	
R2 89KP-RN78 8 <10 <1 <1N 1N 5N 2	
R2 89KP-RN78 8 <10 <1 <10 10 50 2	
R2 89KP-RN78 8 <1N <10 <1 <1N 1N 5N 2	
	<b>.</b>

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## Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

							Di	ATE PRINTE	D: 20-001	-89		
REPORT: V89	-86960.0						PF	ROJECT: UN	IUK		PAGE 1A	
SAMPLE NUMBER	ELEMENT UNITS	Au PPR	Ag PPN	As PPN	Ba PP <b>n</b>	Be PPN	Bi PPN	Cd PPH	Ce PPN	Co PPN	Cr PPN	Cu PPM

11 89KVL002 (

HOPER/LOOK 11

<5 1

<0.2

175 <0.5

<D.5 2

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## Ceochenneat Lab Report

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A DIVISION OF INCHEAPEINSPECTION & HISTING SERVICES NATE PRIMITED: 20-001-89

SAMPLE ELFMENT Ga La Li Mo No Ni Po Ro So Sc S NUMBER INTES DEM	···	REPORT: V89	9-06960.0		]				PF	OJECT: UN	IUK		PAGE 1B	
NOIDEN . UNTIO FEIL FEIL FEIL FEIL FEIL FEIL FEIL FEIL		SAMPLE NUMBER	ELFHENT	Ga PPN	La PPN	L i PPN	No PPN	Nb PPN	Ni PPH	РЬ РРИ	Rb PPN	Sd PPN	Sc PPM	Sn PPN

<u>11</u> 89KVL002	18	9	6	5	18	90	<2	<21	14	12
			•	•						

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## Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES
DATE PRINTED: 20-0CT-89

	REPORT: V89	-06960.0						Pf	ROJECT: UN		PAGE 1C
Í	SAMPLE NUMBER	EI EMENT UNITS	Sr PPN	Ta PPN	Te PPN	V PPN	N PPN	Y PPN	Zn PPM	Zr PPN	

<u>11 89KVLDD2</u>	85	<10	<10	139	<10	13	148	113

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nara () (ogg oc Company Ltd. (1) (n.6) (car) (occ wile Vancouver, B.C. (1) 205 (1) 985–068) Teley (04- <b>352667</b> )				BO	EJ NDAR-C	LEGG				Geor Lab	In inne at Reparet	
REPORT: V89-07576.0	<u> </u>			NOLISHO	APE INSPEC	HONA HISH	NGNERVICE DA	TF PRINTE	D: 27-0CT	- 89	1'4G[ ]A	
SAMPLE FIFN NUMBER UN	FNT	Au PFB	ם Ag וייא וייא	As PPN	Ba PPN	Be PPN	Bi PPM	Cd PPN	Ce PPN	Со РР11	Cr HHM	C PP
	·											·
T1 89KV-L 016 Coul	د.	<5	<0.2	34	164	<1.5	6	2	. 11	19	61	3
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## Geochémica Lab Report

A DIVISION OF INCHCAPE INSPECTION & HESTING SERVICES

REPORT: V89-N7	576.0			avor ing fi	AFL BOOFES	1070 & 11:511.9	DA PF	TE PRINTE	<u>D: 27-0C1</u> UK	<u>-89</u> F	AGE 1B	
SAMPLE NUMBER	FL FMENT UNITS	Ga PPN	La PPN	Li PPN	Мо РРИ	Nb PPM	Ni PPN	Pb PPN	Rb PPM	Sb FPH	Sc FPN	Sn PPN
<u>.</u>		18	8	9	5	16	<u>-</u> SN	<2 ,	<20	8	8	<20
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<ul> <li>Predifection Ave.</li> <li>with Vancouver, B.C.</li> <li>P 2R5</li> <li>44) 985–0681 Telex (44-3)</li> </ul>	52667			BO	MDAR-C					Creathen Lab Rey	18438 18498 (
			A DIVISIO	N OF INCHC	APE INSPEC	HONA TESH	NG SERVICE DA	S TE PRINTE	): 27-0CT-0	89	
RFPORT: V89-N	7576.0						PR	OJECT: UNI	JK	I'AGF	1C <sup>.</sup>
SAMPLE NUMBER	FI EMFNT UNITS	Sr PPN	Ta PPN	Te PPH	V PPN	u PPN	Y PPN	Zn PPM	Zr PPN		- ·
41 89KV-L D16		58	<10	<10	111	<10	14	254	29		
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## Geochemicat Lab Report

REPORT: V89-	06886.0		]				PR	O.JFCT: NO	NF GIVEN	<b>-</b> -	PAGE 1A	• •••
SAMPLE NUNBER	ELEMENT UNITS	Au PPB	Ag PPM	As PPN	Ba PPM	Be PPM	Bi PFN	Cd PPN	Ce PPN	Co PPH	Cr Pfitt	Cu PP#
82 89H0 RT41	HomeR	10	<11.2	50	267	<1.5	<2	<b>(1</b> (	<5	12	ናበ	49

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## Geochemical Lab Report

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-DA	5886.0						D4 PF	ITE_PRINTE ROJECT: NO	<u>D: 13-0CT-</u> NE GIVEN	.89	PAGE 18	
Sample Number	FI FMINT UNITS	Ga PPN	l a PPN	l i PPN	No PPN	nd Ppn	Ni PPN	РЬ РРп	rb Pph	Sb Pfrit	Sc PPN	Sn PFM
 R2 89H0 <b>≈RD4</b> ∏		13	?	7	1	4	15	</td <td>161</td> <td></td> <td>9</td> <td>&lt;20</td>	161		9	<20

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## Geochemical Lab Report

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REPORT: V89-0	6886.0						DA PR	IE PRINIE	D: 13-001-89 NE GIVEN	PAGE 1C
SAMPLE NUMBER	FI FMFNT UNITS	Sr PPM	Ta PPM	Te PPM	V PPN	H PPN	Y PPM	Zn PPN	Zr PPN	· · · ·
									•	
R2 8940-RII40		102	<10	<111	127	<10	7	112	<1	

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Bandas C (egg & Company Fid. 16) Pendseton Ave. North Anteouver, B.C. V /P 2R5 (64) 4985-6681 Telex 04-352667



Lab Report

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A DIVISION OF INCHCAPT INSPECTION & IT STINGSFRVICES

REPORT	V89-06887.0		].		· .	. ·	0/	ROJECT: DI	INN-HOMER		PAGE 1A	
SAMPLE	ELEMENT	Au	Ag	As	Ba	Be	Bi	Cd	Ce	Co	Cr	Cu
NUMBER	UNITS	PPB	PPN	PPN	PPN	PPN	PPh	PPN	PPN	PPN	PPfi	PPN

7 - R2 8912-R048 Humer	5	0.4	59	169	<0.5	<2	<1	<5
· · · · · · · · · · · · · · · · · · ·								

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A DIVISION OF INCLUAPE INSPECTION & TESTING SERVICES

REPORT: V89	-06887.0						<b>D/</b>	ATE-PRINTI ROJECT: DI	D:-13-06 NN-Homfr		PAGE 1B	
SAMPLE NUMBER	ELEMENT	Ga PP11	La PPH	Li PPN	No PPN	Nb PPh	Ni PPn	РЬ РРИ	<b>R</b> Б рри	Sb PPN	Sc PPN	Sn PPM

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R2 89HZ <u>-R</u> 148	18	<1	13	2	6	19	<2	54	10	8	<20
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nda++C legg & Company FPenticiton Ave. wth Vancouver, B.C. P 2R5 44) 985-0681 Telex 04-35	2667			BOI	EC.					Geor Lai	licini Rep	( 1) ()]
REPORT: V89-D	6887.D		A DIVISIO	N OF INCHCA	API, INSPECT	IONA IESUN	SG SLRVICES	TE-PRINTE OJFCT: DU	D:-13-06T- NN-Honfr	<b>89</b>	PAGF	10
Sample Number	ELENENT UNITS	Sr PPN	Та РРН	Te PPii	V PPn	) <b>µ</b> <b>PPN</b>	Y PPN	Zn PPH -	Zr PPH	· · · · ·		
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R2 89112-8048		1 38	<10	<10	91	<10	6	<b>9</b> N	<1			
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<u></u>						······	· · · · · · · · · · · · · · · · · · ·	· •	•			

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## Geochemical Lab Report

#### A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-06781.0 ( COMPLETE )

REFERENCE INFO:

SUBMITTED BY: TERRAMIN RES. LAB CLIENT: KEEWATIN ENGINEERING INC. DATE PRINTED: 4-OCT-89 PROJECT: PARADIGM NUMBER OF LOWER ORDFR ANALYSES DETECTION LIMIT EXTRACTION METHOD ELEMENT 93 5 PPB Fire Assay AA 1 Gold - Fire Assay FIRE-ASSAY A ... 93 0.2 PPM Ind. Coupled Plasma 2 Aq Silver HN03-HCL HOT EXTR 93 5 PPM 3 As Arsenic HN03-HCL HOT EXTR Ind. Coupled Plasma HN03-HCL HOT EXTR 4 Ba Barium 93 1 PPM Ind. Coupled Plasma 5 Be Beryllium 93 0.5 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma 93 Ind. Coupled Plasma Bismuth 2 PPM 6 Bi HN03-HCL HOT EXTR Cadmium 93 Ind. Coupled Plasma 7 Cd 1 PPM HN03-HCL HOT EXTR 8 Ċe Cerium 23 5 PPH Ind. Coupled Plasma HN03-HCL HOT EXTR 23 9 1 PPM Ind. Coupled Plasma C٥ Cobalt HN03-HCL HOT EXTR 93 10 Cr Chromium 1 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma Cu 23 1 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma 11 Copper 93 12 Gallium 2 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma Ga 93 1 PPM Ind. Coupled Plasma 13 La Lanthanum HN03-HCL HOT EXTR 93 14 Li Lithium 1 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma 15 Mo Nolybdenua 93 1 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma 16 Nb Niobium 93 1 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma 93 17 NI Nickel 1 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma PЪ 23 2 PPH HN03-HCL HOT EXTR Ind. Coupled Plasma 18 Lead 93 Ind. Coupled Plasma 19 RЬ Rubidium 20 PPM HN03-HCL HOT EXTR 211 Sb Antimony 93 5 PPM HN03-HC1 HOT EXTR Ind. Coupled Plasma 23 1 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma 21 Sc Scandium 93 22 Sn Tin 20 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma 93 23 Sr Strontium 1 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma Ind. Coupled Plasma 24 Ta Tantalum 93 10 PPM HN03-HCL HOT EXTR 25 Tellurium 93 10 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma Te 93 U Vanadium 1 PPM HN03-HCL HOT EXTR Ind. Coupled Plasma 26 93 10 PPM Ind. Coupled Plasma 27 Ц Tungsten HN03-HCL HOT EXTR 28 Y Yttrium 93 1 PPM HN03 HCL HOT EXTR Ind. Coupled Plasma 29 Zn Zinc 93 1 PPN HN03-HCI HOT EXTR Ind. Coupled Plasma 93 1 PPM Zirconium HN03-HCL HOT EXTR Ind. Coupled Plasma 30 Zr

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Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-06781.0 ( COMPLETE )			REFERENCE INFO:
CLIENT: KEEHATIN ENGINEERING INC. PROJECT: PARADIGM		· · · · · · · · · · · · · · · · · · ·	SUBMITTED BY: TERRAMIN RES. LAB DATE PRINTED: 4-OCT-89
SAMPLE TYPES NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS NUMBER
T STREAM GEDIMENT,SILT 41 R ROCK OR BED ROCK 52	1 -8N 2 -15N	41 52	DRY, SIEVE -80 41 CRUSH,PULVERIZE -150 52
REPORT COPIES TO: KEENATIN ENGINEER TAIGA CONSULTANTS	ING INC. LTD.	INV	DICE TO: KEEWATIN ENGINEERING INC.
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COOK PROPERTY HEAVY MINERAL RESULTS

LAB	FIELD	A	u(30g	٨g	As	Ba	Be	Bi	Cď	Ce	Co	Cr	Cu	Ga	La	Lí	No	Nt	n Ni	Pl	b Rb	Sb	Sc	Sn	Sr	Ta	Te	۷	v	Y	Zn	Zr
NUMBER	NUMBER	LOCATI	opb)	(ppa)	(ppm)	(pps)	(ppm)	(ppm)	(ppa)	(ppm)	(ppm)	(pps)	(ppm)	(ppm)	(ppa)	(ppe)	(ppm)	(ppa)	(ppm)	(ppm)	) (ppm)	(ppm)	(ppa)	(ppm)	(pps)	(ppa)	(ppa)	(pps)	(ppm)	(ppa)	(ppa)	(ppm)
		*****			2:5533			, <del>22332</del> 8		*****		13 <u>1151</u> 2	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*****				***		<u>2=3k3</u> 1							a di katika mali s					
75770030	89 K WH44	. coo	8	-0.2	-5	46	-0.5	9	-1	-5	28	93	118	11	9	7	2	: :	5 37	' -i	2 -20	9	5	-20	96	-10	-10	86	-10	5	50	6
75770031	89 K WH45	C00	11	0.2	-5	40	-0.5	8	-1	-5	28	52	143	10	7	7	2	5	5 20		2 41	9	4	20	- 95	13	-10	87	-10	- 4	45	5
75770032	89 K WH46	003	6	1.5	-5	31	-0.5	7	-1	-5	23	60	106	11	6	7	1	6	5 17	· _;	2 -20	10	5	-20	140	-10	-10	93	-10	4,	53	7
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## SUMMARY OF EXPENDITURES

## Cook 1-4

Personnel and Crew		\$ 2,789.86
Transportation - helicopter/fixed wing/fuel		1,507.09
Camp - food/accommodation		475.25
Assay/Report/Drafting/Secretarial		1,010.47
	TOTAL EXPENDITURES:	<u>\$ 5.782.67</u>



		SYMBOLS
	~~~~~	Geological contact (observed, assumed)
		Bedding with dip
andesile, diabase, and hornblende to the dykes exceed 50% of the exposed	~>	Foliation
	-+-	Regional anticline
	$\sim \sim \sim$	Fault (defined, assumed)
horite to granodiorite.		Airphoto lineament
te, granodiorite	\$	Regional stream silt sample site (Au ppb, Ag ppm, As ppm Sb ppm)
nome	*	Minfile mineral occurrence (Cu ppm, Pb ppm, Zn ppm, Au ppb, Ag ppm)
	×	Rock sample - outcrop (Au ppb, Ag ppm, As ppm, Sb ppm)
rock within fault zone	<b>A</b>	Rock sample - float (Au ppb, Ag ppm, As ppm, Sb ppm)
	٠	Stream silt sample (Au ppb, Ag ppm, As ppm, Sb ppm)
AGE ,		Heavy mineral sample (Au ppb, Ag ppm, As ppm, Sb ppm)
	Ì	Trench