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Geological, Prospecting, and Geochemical Report
on the
Gold Unuk Property
GOLD UNUK 1 to 4 Claims
Skeena Mining Division
N.T.S. 104-B/7E
Latitude 56°25′ North
Longitude 130°43′ West
British Columbia

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,722

November 6, 1989

on behalf of

Canadian Cariboo Resources Ltd.

Vancouver, B.C.

by

C. H. Aussant, B.Sc., P.Geol., F.GAC
- and -
D. G. DuPré, B.Sc., P.Geol., F.GAC

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

ABSTRACT

The Gold Unuk property consists of four contiguous modified-grid claims totalling 56 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 western two-thirds of the property is underlain by quartz diorite of the Coast Plutonic Complex. The remaining property area is underlain by the Upper Jurassic to Lower Triassic Unuk River Formation which has been intruded by the King Creek Dyke Swarm. Pleistocene basalt flows underlie the lower reaches of Canyon Creek valley in the southern part of the property.

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 32 km northeast of the Gold Unuk 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.

In 1988, an airborne electromagnetic and magnetic survey was conducted over the property. Several northerly and easterly trending conductors were delineated. The magnetic data indicated a more complex geological setting than the regional mapping shows.

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.

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 was completed over the northeast corner of the property, investigating a reported gossanous alteration zone. Extensive iron staining was noted throughout this area, but no mineralization was found.

A limited amount of reconnaissance prospecting was completed over the southwest portion of the property. Gneissic quartzite and schist containing numerous quartz stringers and veinlets were located near the southern claim boundary. A grab sample yielded an elevated gold value of 346 ppb.

The occurrence of sediments in this area indicates that the western part of the property is not entirely underlain by diorite of the Coast Plutonic Complex, and consequently enhances the attractiveness of this area for hosting as yet undiscovered economic mineralization.

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INTRODUCTION

Canadian Cariboo Resources Ltd. of Vancouver, commissioned Keewatin Engineering Inc. to conduct a field exploration program to be completed on the Gold Unuk 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 and heavy mineral sampling.

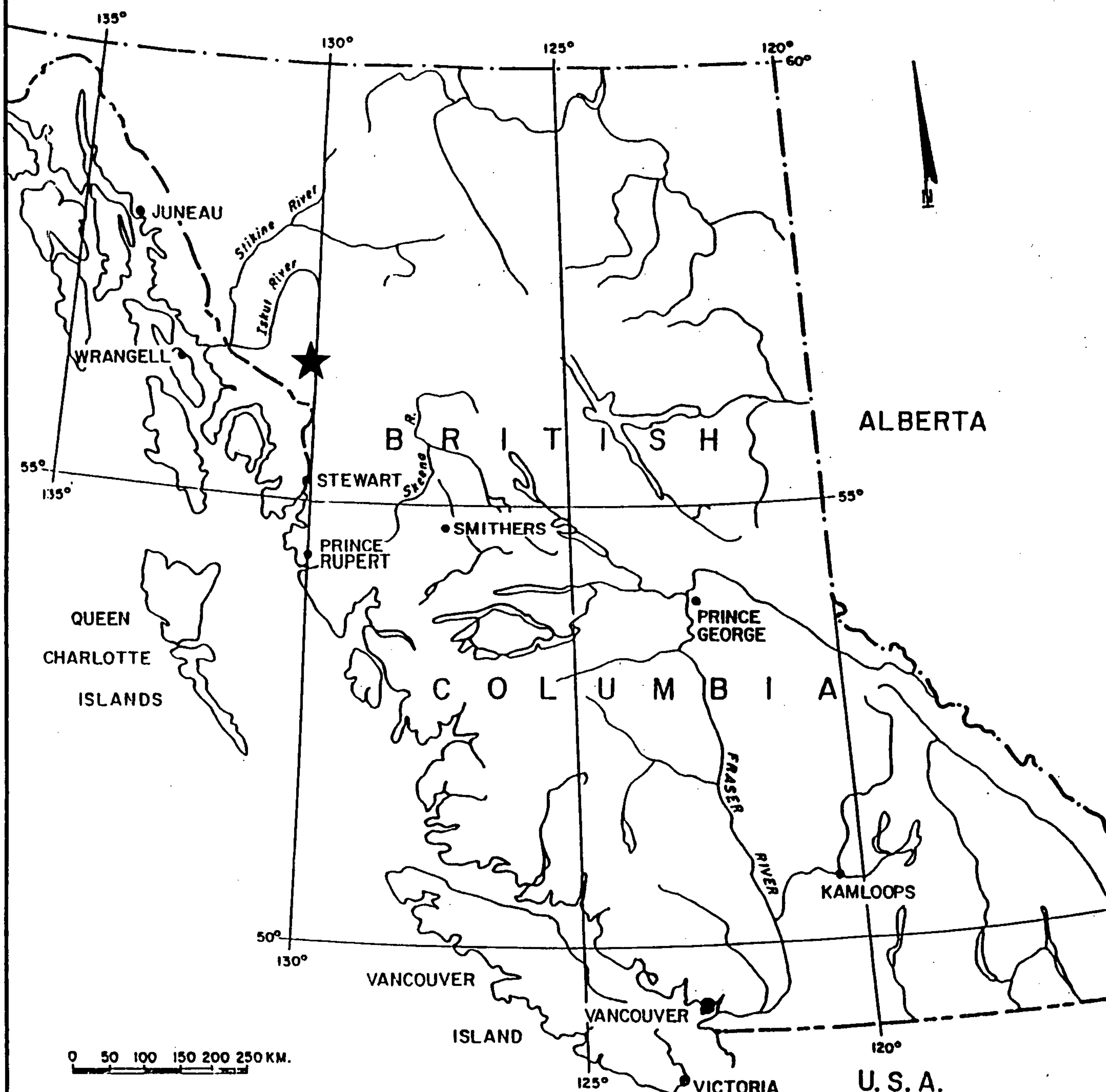
Location and Access

The Gold Unuk 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°25′ North latitude and 130°43′ 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

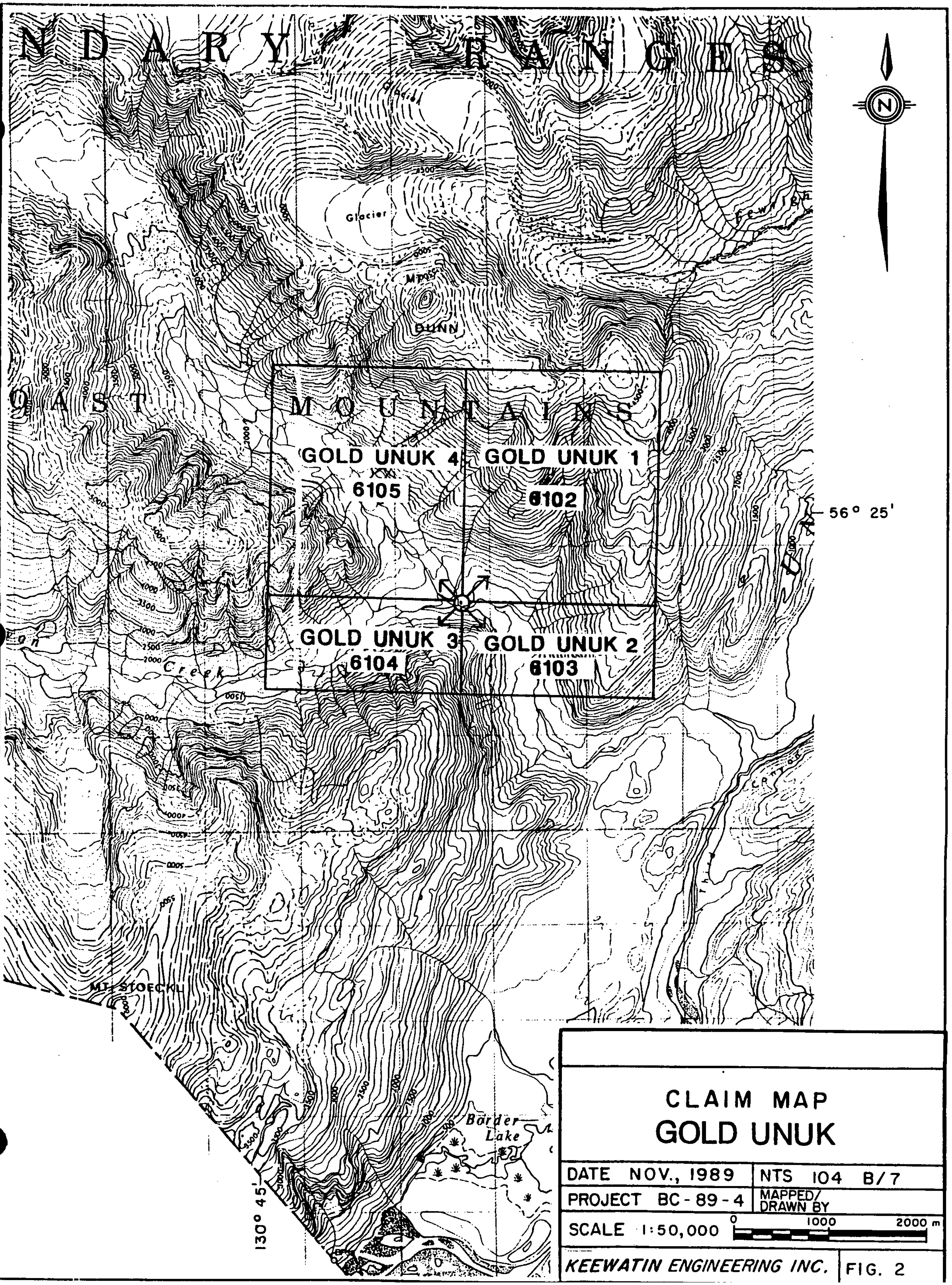
The Gold Unuk property (Figure 2) consists of four modified-grid claims totalling 56 units, located within the Skeena Mining Division. Relevant claims data are tabulated below:



★ PROPERTY LOCATION MAP

Figure 1

KEEWATIN ENGINEERING INC.



CLAIM MAP
GOLD UNUK

DATE NOV., 1989	NTS 104 B/7
PROJECT BC-89-4	MAPPED/ DRAWN BY
SCALE 1:50,000 (0 – 1000 – 2000 m)	
KEEWATIN ENGINEERING INC.	FIG. 2

Claim Name	Record Number	No.of Units	Date of Record	Expiry Date
GOLD UNUK 1	6102	20	Apr.28/87	1990
GOLD UNUK 2	6103	8	Apr.28/87	1990
GOLD UNUK 3	6104	8	Apr.28/87	1990
GOLD UNUK 4	6105	20	Apr.28/87	1990

These claims are apparently the subject of an agreement between the claim holder (Chris Pepperdine) and Ross Resources Ltd., which has recently optioned the property to Canadian Cariboo Resources Ltd.

Physiography and Climate

The Gold Unuk 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 230 m in the valley of Canyon Creek to 1465 m.

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. Ten samples were collected from creeks draining the property, but did not yield any elevated values for the elements.

An airborne geophysical survey was completed over the property in 1988. The magnetic data indicates a more complex geological setting than the regional mapping shows. Several northerly and easterly conductive lineations were mapped by the survey. One strong VLF-EM conductive zone in the centre of the property occurs adjacent to inferred faults and corresponds with a magnetic high, and is located in the vicinity of the Black Bear mineral showing.

A review of the material in the B.C. Ministry of Energy, Mines and Petroleum Resources assessment report archives indicates no other work has been filed for the specific area now covered by the Gold Unuk property. However, these files do show 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 Canyon Creek prospect (Minfile #098) probably occurs adjacent to the southeast corner of the property. It consists of two showings known as the Black Bear and the Daily Boy.

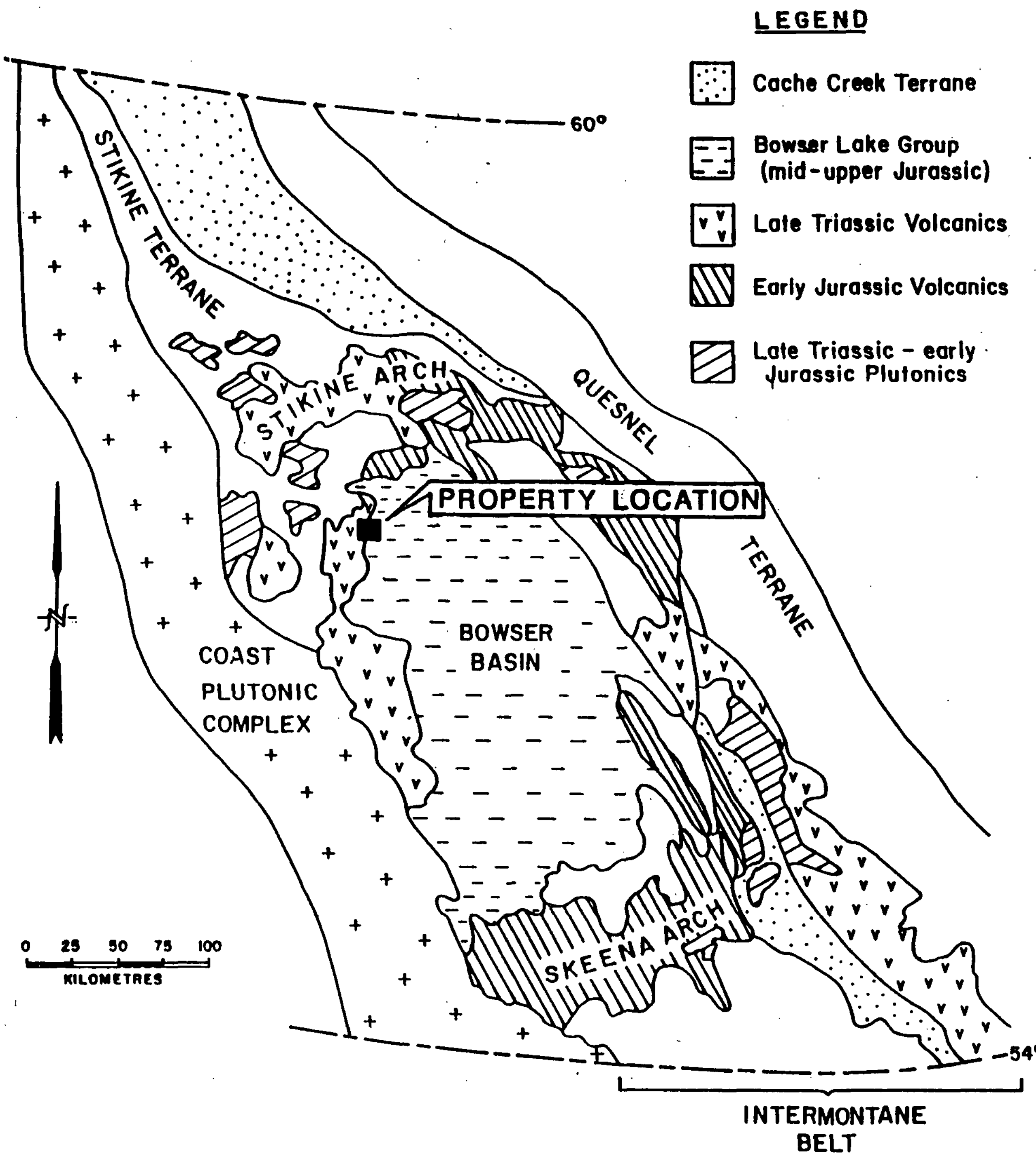
The assessment records (Korenic, 1982) indicate that Duval Corp. undertook a regional heavy mineral survey in the Unuk River area in 1981.

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 Gold Unuk 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.

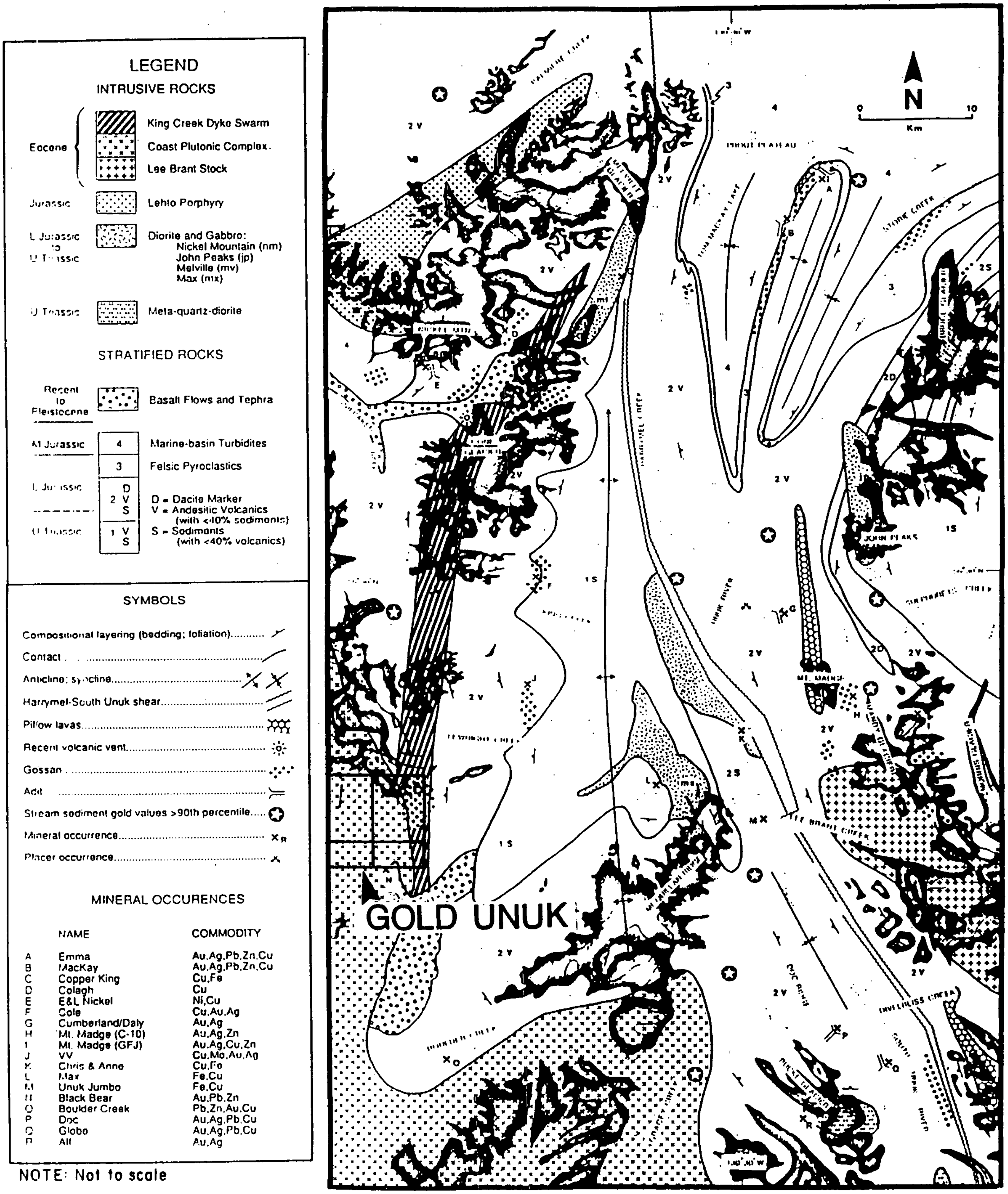


REGIONAL GEOLOGY
BOWSER BASIN
NW BRITISH COLUMBIA

(Outline of terrane boundaries and major rock groups of the Jurassic and Triassic – modified from Thomson, 1985).

Figure 3

KEEWATIN ENGINEERING INC.



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

PROPERTY GEOLOGY

Figure 4

PROPERTY GEOLOGY

Regional geological mapping by Britton et al.(1989) shows that the property is underlain predominantly by the Coast Plutonic Complex on the west, and on the east by the Lower Jurassic Unuk River Formation (Figure 5). 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 Canyon Creek valley in the southern part of the property.

Upper Triassic to Lower Jurassic Unuk River Formation (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 (± 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 may underlie the eastern portion of the property area, a large portion of which has been intruded by the King Creek Dyke Swarm.

Pleistocene to Recent Basalt Flows and Tephra (Unit 6a)

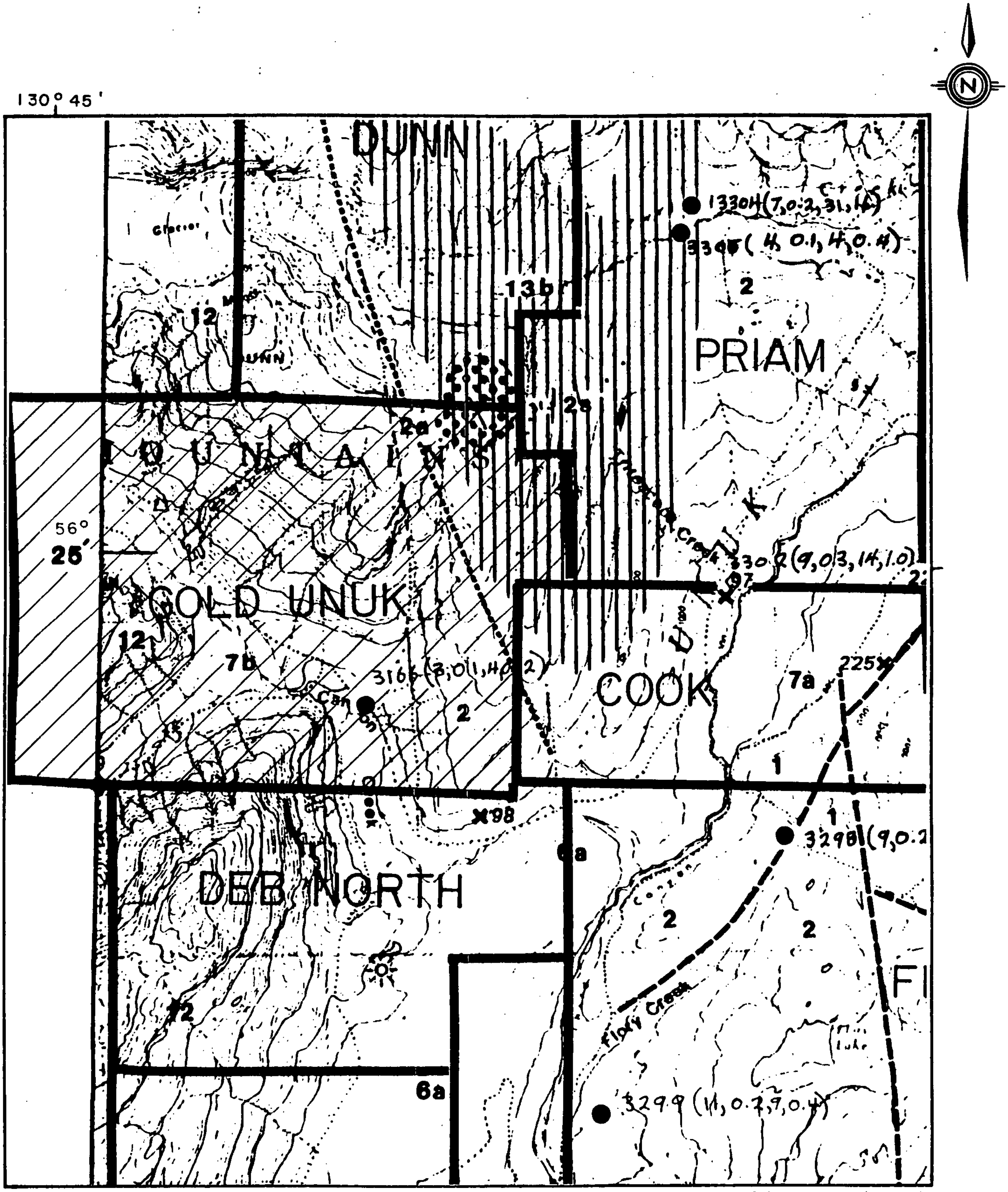
Britton et al.(1989) mapped these flows along the valleys of the Unuk River and Canyon Creek. The are reported to commonly display columnar jointing.

Eocene and possibly Jurassic Coast Plutonic Complex (Unit 12)

Britton et al.(1989) described the intrusions as ranging in composition from biotite granite to biotite-hornblende quartz diorite. Numerous discrete stocks are probably present. 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.

Tertiary King Creek Dyke Swarm (Unit 13b)

The limits of this unit, as shown on Figure 5, roughly indicate where the dykes exceed 50% of the exposed bedrock. This north-trending belt of dykes



SCALE 1:50,000

Modified after Britton et al (1989)
NTS 104 B/10

GOLD UNUK
PROPERTY GEOLOGY

Figure 5

LEGEND

INTRUSIVE ROCKS

TERTIARY

13 *POST-TECTONIC DYKES*

- 13a Lamprophyre, andesite, diabase (Narrow not shown)
- 13b King Creek Dyke Swarm: feldspar porphyry dacite, andesite, diabase, quartz diorite
- 13c [illegible] fine-grained [illegible]

12 *COAST PLUTONIC COMPLEX*

- 12a Biotite granite
- 12b Hornblende-biotite quartz diorite
- 12c Lee Brant Stock: K-feldspar porphyry, hornblende-biotite quartz monzonite

JURASSIC

11 *NICKEL MOUNTAIN GABBRO:* [illegible] olivine-pyroxene gabbro

10 *SYN TO POST-VOLCANIC INTRUSIONS:* Porphyritic to phaneritic textured; possibly hypabyssal equivalents of extrusive rocks

- 10a [illegible] Porphyry: K-feldspar-plagioclase-hornblende porphyry granodiorite to syenite
- 10b [illegible] Lake Dyke: fine- to medium-grained hornblende diorite
- 10c Andesite-Diorite Complex: [illegible], fine- to medium-grained diorite with abundant xenoliths of dark green [illegible]-andesite; (possibly Triassic)

9 *UNUK RIVER DIORITE SUITE:* medium- to coarse-grained, mafic to intermediate stocks

- 9a John Peaks [illegible] hornblende diorite
- 9b [illegible] biotite-hornblende diorite; quartz diorite
- 9c [illegible] hornblende-biotite diorite to quartz diorite
- 9d [illegible] Ridge biotite [illegible]

TRIASSIC

8 *BUCKS GLACIER STOCK:* light grey, gneissic to foliated, medium-grained hornblende-biotite quartz diorite

METAMORPHIC ROCKS

A - F *METAMORPHIC EQUIVALENTS OF UNITS 1, 2 OR 3*

- A Metapelite: dark grey, carbonaceous quartz-feldspar-sericite phyllite
- B Felsic metavolcanics: light green, quartz-albite-chlorite-sericite phyllite; locally with deformed lapilli
- C Mafic to intermediate metavolcanics: dark green, plagioclase-chlorite phyllite
- D Hornblende-plagioclase mylonite; mylonitic [illegible]
- E Hornblende-plagioclase gneiss; agmatitic migmatite
- F Strongly sheared rocks within the Unuk-Harrymel fault zone

GOSSANOUS ALTERATION ZONES

- Pyrite ± quartz ± sericite ± carbonate ± clay; locally foliated to schistose
- Disseminated pyrite in felsic volcanics

VOLCANIC AND SEDIMENTARY ROCKS

(Note: No stratigraphic order is implied within sequences.)

QUATERNARY

RECENT

7 *UNCONSOLIDATED SEDIMENTS*

- 7a Alluvium, glaciofluvial deposits, landslide debris, moraine
- 7b Alluvium underlain by Pleistocene to Recent basalt

PLEISTOCENE TO RECENT

6 *BASALT FLOWS AND TEPHRA*

- 6a Dark grey to black, basalt flows and tephra; minor pillow lavas
- 6b Basalt tephra

TRIASSIC TO JURASSIC

HAZELTON GROUP

MIDDLE JURASSIC (TOARCIAN TO BAJOCIAN)

5 *SILTSTONE SEQUENCE* (Salmon River Formation): Dark grey, well-bedded siltstone with minor sandstone and conglomerate.

- 5c Chert pebble conglomerate and arenite
- 5t Rhythmically bedded siltstone and shale (turbidite)
- 5w Thinly bedded wacke
- 5p Andesite pillow lavas and pillow breccias with minor siltstone interbeds

LOWER JURASSIC (TOARCIAN)

4 *FELSIC VOLCANIC SEQUENCE* (Mount Dilworth Formation): Light weathering, intermediate to felsic pyroclastic rocks, including dust, ash, crystal and lithic tuffs, lapilli tuff. Locally pyritiferous (3 to 15%) and gossanous. Minor chalcedonic quartz veins locally.

- 4a Variably bedded airfall tuffs
- 4f Massive felsic tuff
- 4r Black and white, carbonaceous felsic volcanics; locally flow banded and autobrecciated

LOWER JURASSIC (PLIENSBACHIAN TO TOARCIAN)

3 *PYROCLASTIC-EPICLASTIC SEQUENCE* (Betty Creek Formation): Heterogeneous, grey, green, locally purple or maroon, massive to bedded pyroclastic and sedimentary rocks; pillow lava

- 3a Green and grey, massive to poorly bedded andesite
- 3d Grey, green and purple dacite tuff, lapilli tuff, crystal and lithic tuff; massive to well bedded; feldspar phyric
- 3f White weathering, felsic tuffs and breccias with quartz stringers
- 3a Andesite lapilli tuff with pink siliceous clasts
- 3p Andesite pillow lavas and pillow breccias with minor siltstone interbeds
- 3t Black, thinly bedded siltstone, shale and argillite (turbidite)

UPPER TRIASSIC TO LOWER JURASSIC (NORIAN TO SINEMURIAN)

2 *ANDESITE SEQUENCE* (Unuk River Formation): Green and grey, intermediate to mafic volcaniclastics and flows with locally thick interbeds of fine-grained immature sediments; minor conglomerate and limestone

- 2a Grey and green, plagioclase ± hornblende porphyritic andesite; massive to poorly bedded
- 2b Grey and green, hornblende-(± pyroxene)-feldspar porphyritic andesite lapilli and ash tuff
- 2s Grey, brown and green, thinly bedded, tuffaceous siltstone and fine grained wacke
- 2t Black, thinly laminated siltstone (turbidite); shale; argillite
- 2g Dark grey, matrix-supported conglomerate with granitic cobbles
- 2l Grey, variably bedded limestone (completely recrystallized along South Unuk valley)

TRIASSIC

STUHINI GROUP

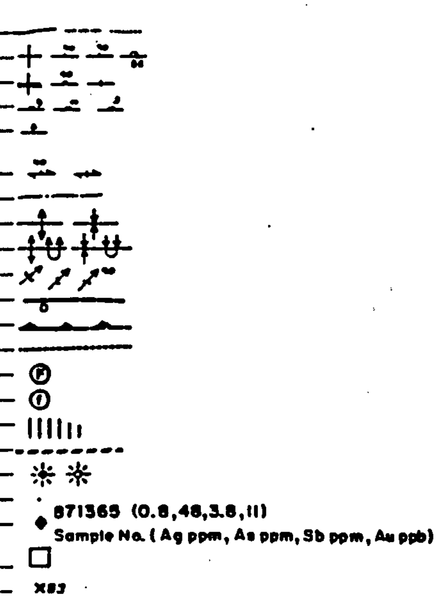
UPPER TRIASSIC (CARNIAN TO NORIAN)

1 *LOWER VOLCANOSEDIMENTARY SEQUENCE:* Brown, black and grey, mixed sedimentary rocks interbedded with medium to dark green, mafic to intermediate volcanic and volcaniclastic rocks

- 1t Grey to black, thinly bedded siltstone, shale, argillite (turbidite)
- 1w Brown and grey, fine grained tuffaceous wacke; minor siltstone or conglomerate
- 1l Grey, impure, silty, sandy limestone
- 1a Green, fine-grained, andesite ash tuff; feldspar and hornblende phyric
- 1b Dark green basalt
- 1p Grey and green, andesite breccia with augite-hornblende-plagioclase clasts and augite-rich matrix

SYMBOLS

- Geological boundary (defined, approximate, assumed)
- Bedding, tops known (horizontal, inclined, vertical, overturned)
- Bedding, tops unknown (horizontal, inclined, vertical)
- Bedding, estimated dip (gentle, moderate, steep)
- Stratigraphic tops in pillow volcanics
- Compositional layering in metamorphosed rocks; foliation (inclined, vertical)
- Trend line
- Regional anticline; syncline
- Anticline; syncline (normal, overturned)
- Minor fold axis with M, Z or S symmetry; with plunge
- Fault (defined, assumed; D = downthrown side)
- Thrust fault (defined, assumed; teeth on upper plate)
- Air photo lineament
- Fossil locality
- Flowrock
- Area with more than 40% Tertiary dykes
- Limit of major phyllite zone
- Volcanic vent (observed, assumed)
- Geologic station
- National geochemical reconnaissance sample site
- Potassium-argon isotopic age site; H = hornblende; age in millions of years before present
- Mineral occurrence; MINFILE number



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	Hazelton	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(?)	Hazelton	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	Pyroxene porphyry flows and tuffs Turbidites, limestones, conglomerates

TABLE 1. Table of Formations Unuk River Area

Keewatin Engineering Inc.

ranges compositionally from rhyodacite to andesite, and texturally from aphanitic to holocrystalline. Britton et al.(1989) 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.

Structure

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. These are assumed to be normal faults and are described as megascopic structures with relatively little offset.

A 12 km long, north-northwest trending airphoto lineament is reported by Britton et al.(1989). This lineament passes diagonally across the eastern portion of the GOLD UNUK 1 claim. The significance of this lineament is unknown.

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. Intrusive-contact (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 coarse-grained, 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 northwest 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 pipelike 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 gold-enriched 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 quartz layers separated by hairline accumulations of very fine-grained 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, Q22) 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 per tonne silver. Gold and copper values show a positive correlation on both properties.

At this time, the Eskay Creek prospect, located 32 km northeast of the Gold Unuk 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 no mineralized occurrences are known within the area currently covered by the Gold Unuk property.

The Canyon Creek prospect (Minfile #098) probably occurs adjacent to the southeast corner of the property. The prospect consists of two showings, the Black Bear and the Daily Boy. The Daily Boy is portrayed as several veins containing pyrite, pyrrhotite, and minor sphalerite and galena, hosted by silicified and hornsfelsed sediments. These sediments are described as altered slates, argillites, and quartzites (Unuk River Formation) which are characterized by a high percentage of disseminated pyrite. The sediments are reported to be cut by a complex of lamprophyre dykes. The Black Bear is portrayed as a 60 cm wide quartz vein which contains 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 and heavy mineral sampling). Areas of known mineralization and gossans noted within the area were investigated and sampled.

A total of 11 rock and 8 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 areas of reported mineralization and gossans noted within the property.

Britton et al.(1989) mapped a gossanous alteration zone (pyrite ± quartz ± sericite ± carbonate ± clay) in the northeast corner of the property. Prospecting completed in this area during the current exploration program found the area to be underlain by andesite tuff and minor narrow conglomerate and argillite beds, intruded by the King Creek Dyke Swarm (felsic porphyry, lamprophyre, felsic, and diorite dykes). Throughout most of the area, the King Creek Dyke Swarm makes up more than 50% of the underlying rocks. Extensive iron staining was noted throughout this area associated with weak sulphide mineralization (mainly pyrite, minor pyrrhotite). There was no mineralization located.

Reconnaissance prospecting was completed along Canyon Creek, in the south-central portion of the GOLD UNUK 3 claim in conjunction with the heavy mineral sampling program. The area is underlain primarily by quartz diorite of the Coast Plutonic Complex. Gneissic quartzite and schist containing numerous quartz stringers and veinlets were located near the southern claim boundary. A grab sample from gossaned schist, with minor disseminated molybdenite and light grey quartz stringers, yielded an elevated gold value of 364 ppb.

Additional reconnaissance prospecting combined with geological mapping is required over this area to determine the underlying geology and to investigate the possibility of locating significant precious metals values.

Britton et al.(1989) reported the Black Bear and Daily Boy showings (Minfile #098) as occurring adjacent to the southeast corner of the property. These 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 southeast corner of the property located numerous limonite-stained outcrops; however, budget constraints did not allow for the area to be investigated. Future exploration programs should examine the mineral potential of this area.

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 eight heavy mineral samples were collected from creeks draining the property area, and 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.

Britton et al.(1989) mapped a gossanous alteration zone in the northeast corner of the property. Extensive iron staining was noted throughout this area, associated with weak sulphide (mainly pyrite) mineralization. There was no mineralization located.

A limited amount of reconnaissance prospecting was completed over the southwest portion of the property. Gneissic quartzite and schist containing numerous quartz stringers and veinlets were located near the southern claim boundary. A grab sample yielded an elevated gold value of 364 ppb.

The occurrence of sediments in this area indicates that the western portion of the property is not entirely underlain by diorites of the Coast Plutonic Complex, and consequently enhances the attractiveness of this area for hosting as yet undiscovered economic mineralization.

A review of all available information for the area indicates that the Canyon Creek prospect (Minfile #098) probably occurs adjacent to the southeast property boundary. It consists of two showings 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 this area located numerous limonite-stained outcrops; however, budget constraints did not allow for the area to be investigated. Future exploration programs should examine the mineral potential of this area.

A heavy mineral stream sediment sampling survey was completed over the property. The sample results reflect background values in all the elements.

Considering the limited amount of exploration completed on the claims, additional work is required 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. Stream silt samples should be collected at regular intervals along all creeks draining the property. A structural airphoto study should be completed to help direct exploration into areas of potential shearing.

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 **Gold Unuk Property,** GOLD UNUK 1 to 4 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.

Respectfully submitted,

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

PERMIT TO PRACTICE
TAIGA CONSULTANTS LTD.
Signature
Date Nov. 6, 1989
PERMIT NUMBER: P 2399
The Association of Professional Engineers, Geologists and Geophysicists of Alberta

GEOLOGICAL ASSOCIATION OF CANADA · FELLOW ·
C. H. AUSSANT

PROFESSIONAL GEOLOGIST ALBERTA
CLAUDE H. AUSSANT

CERTIFICATE - D. G. DuPré

I, David G. DuPré, of 56 Parkgrove Crescent in the Municipality of Delta in the Province of British Columbia, do hereby certify that:

1. I am a Consulting Geologist with the firm of Keewatin Engineering Inc. with offices at Suite 800, 900 West Hastings Street, Vancouver, B.C.

2. I am a graduate of the University of Calgary, B.Sc. Geology (1969), 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 **Gold Unuk Property**, GOLD UNUK 1 to 4 Claims, Skeena Mining Division, British Columbia", dated November 6, 1989.

5. I do not 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.

Respectfully submitted,

PROFESSIONAL GEOLOGIST DAVID DUPRE ALBERTA

David G. DuPré, P.Geol., F.GAC

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A P P E N D I X

Summary of Personnel
Rock Sample Descriptions
Certificates of Analysis
Analytical Techniques

*

SUMMARY OF PERSONNEL

Name / Address	Position	Dates	Man Days
C. H. Aussant Calgary, Alberta	Project Geologist	Sep.9-Oct.16	1.50
B. C. Beattie Calgary, Alberta	Assistant Geologist	Sep.9-Oct.16	1.50
M. Waskett-Myers Vancouver, B,C.	Geochemist	Sep.9-Oct.16	2.50
B. McIntyre Vancouver, B.C.	Senior Prospector	Sep.9-Oct.16	2.50
C. Oevermann Smithers, B.C.	Cook	Sep.9-Oct.16	1.00
		TOTAL	9.00

ROCK SAMPLE DESCRIPTIONS

	Au ppb	
DCR-018	8	grab o/c; contact area between massive granodiorite and andesite tuff; 50 m section within the granodiorite, rusty weathered with disseminated pyrite, contains siliceous bands with 5% diss pyrite and minor galena
DCR-019	8	grab o/c; andesite tuff, rusty weathered at contact with granodiorite, 5% diss pyrite, weak gneissic foliation
DVR-027	7	grab o/c; granodiorite, gneissic foliation, up to 5% diss pyrite and magnetite
DVR-029	<5	grab o/c; quartz veining and flooding in andesite tuff, disseminations and clots of pyrite, hematite stained
DVR-030	24	grab o/c; rhyolite porphyry
DVR-031	<5	grab o/c; 15 cm wide quartz vein with disseminated pyrite and pyrrhotite
DVR-032	<5	grab o/c; quartz-flooded rhyolite tuff, pyrite clots and crystals in the tuff and quartz
DVR-033	70	grab o/c; quartz veining and 2 x 10 m stockwork development with pyrite disseminations/crystals/clots up to 2%, minor magnetite stringers; in rhyolite tuff
KYR-017	9	grab o/c; gneissic well laminated quartzite, 2-10% diss Py (quartz-biotite gneiss with numerous quartz stringers parallel to foliation)
KYR-018	364	grab o/c; extensively gossaned schist, minor disseminated Mo, with light grey quartz stringers
KYR-019	16	float; quartz-feldspar vein, minor diss pyrite and magnetite, angular boulder

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
(604) 985-0681 Telex 04-352667

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Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 26-OCT-89

REPORT: V89-06967.0

PROJECT: UNUK

SAMPLE NUMBER		ELEMENT UNITS	Au PPB	Ag PPM	As PPM	Ba PPM	Be PPM	Bi PPM	Cd PPM	Ce PPM	Co PPM	Cr PPM	Cu PPM
R2 KY-R017	Gold Unuk		9	<0.2	6	[illegible]	<0.5	4	<1	<5	10	80	49
R2 KY-R018	↕		364	1.3	10	272	<0.5	6	<1	<5	3	169	171
R2 KY-R019	Gold Unuk		16	<0.2	8	103	<0.5	3	<1	5	21	162	109

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SAMPLE NUMBER	ELEMENT UNITS	Ga PPM	La PPM	Li PPM	Mo PPM	Nb PPM	Ni PPM	Pb PPM	Rb PPM	Sb PPM	Sc PPM	Sn PPM
R2 KY-R017		12	<1	12	20	6	14	5	64	8	11	<20
R2 KY-R018		9	<1	6	112	6	9	13	52	9	5	<20
R2 KY-R019		10	2	4	2	6	41	26	31	9	1	<20

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SAMPLE NUMBER	ELEMENT UNITS	Sr PPM	Ta PPM	Te PPM	V PPM	W PPM	Y PPM	Zn PPM	Zr PPM
R2 KY-R017		25	<10	<10	102	<10	6	48	<1
R2 KY-R018		13	<10	<10	39	14	3	33	<1
R2 KY-R019		35	<10	<10	17	<10	1	22	<1

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North Vancouver, B.C.
V7P 2R5
(604) 985-0681 Telex 04-352667

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-06887.0

DATE PRINTED: 13-OCT-89
PROJECT: DUNN-HOMER

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	As PPM	Ba PPM	Be PPM	Bi PPM	Cd PPM	Ce PPM	Co PPM	Cr PPM	Cu PPM
R2 89DC-R018	Gold Unuk	8	0.2	24	20	<0.5	2	<1	16	5	64	40
R2 89DC-R019	Gold Unuk	8	1.1	38	58	<0.5	<2	<1	10	20	100	74
R2 89DV-R027	Gold Unuk	7	2.6	30	43	<0.5	<2	<1	11	11	83	307
R2 89DV-R029	Gold Unuk	<5	1.0	13	200	<0.5	<2	<1	10	2	128	96
R2 89DV-R030		24	0.5	<5	64	<0.5	<2	<1	<5	14	63	67
R2 89DV-R031		<5	0.2	<5	12	<0.5	<2	<1	<5	3	233	15
R2 89DV-R032		<5	<0.2	11	248	<0.5	<2	<1	10	4	91	18
R2 89DV-R033	Gold Unuk	70	1.6	8	58	<0.5	<2	<1	6	4	207	746

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130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
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Geochemical
Lab Report

REPORT: V89-06887.0

DATE PRINTED: 13-OCT-89
PROJECT: DUNN-HOMER

SAMPLE NUMBER	ELEMENT UNITS	Ga PPM	La PPM	Li PPM	Mo PPM	Nb PPM	Ni PPM	Pb PPM	Rb PPM	Sb PPM	Sc PPM	Sn PPM
R2 89DC-R018		4	7	7	29	<1	3	<2	<20	7	1	<20
R2 89DC-R019		10	3	7	4	3	12	<2	43	7	22	<20
R2 89DV-R027		6	2	4	98	2	10	14	<20	7	3	<20
R2 89DV-R029		5	4	2	3	1	3	8	<20	6	1	<20
R2 89DV-R030		12	<1	17	6	2	12	<2	70	<5	10	<20
R2 89DV-R031		4	<1	1	2	<1	5	<2	<20	<5	<1	<20
R2 89DV-R032		8	4	7	<1	1	3	<2	41	<5	6	<20
R2 89DV-R033		3	3	4	2	<1	4	<2	<20	<5	2	<20

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130 Pemberton Ave.
North Vancouver, B.C.
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(604) 985-0681 Telex 04-352667

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Geochemical Lab Report

REPORT: V89-06887.0

DATE PRINTED: 13-OCT-89
PROJECT: DUNN-HOMER

SAMPLE NUMBER	ELEMENT UNITS	Sr PPM	Ta PPM	Te PPM	V PPM	W PPM	Y PPM	Zn PPM	Zr PPM
R2 89DC-R018		8	<10	<10	10	<10	2	15	3
R2 89DC-R019		10	<10	<10	156	<10	9	43	<1
R2 89DV-R027		7	<10	<10	34	<10	9	29	1
R2 89DV-R029		8	<10	<10	10	<10	<1	27	1
R2 89DV-R030		3	<10	<10	103	<10	5	106	<1
R2 89DV-R031		5	<10	<10	4	<10	<1	10	<1
R2 89DV-R032		10	<10	<10	38	<10	4	41	<1
R2 89DV-R033		7	<10	<10	13	<10	2	17	<1

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North Vancouver, B.C.
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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-06781.0 (COMPLETE)

REFERENCE INFO:

CLIENT: KEEWATIN ENGINEERING INC.
PROJECT: PARADIGM

SUBMITTED BY: TERRAMIN RES. LAB
DATE PRINTED: 4-OCT-89

ORDER		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold - Fire Assay	93	5 PPB	FIRE-ASSAY	Fire Assay AA
2	Ag	Silver	93	0.2 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
3	As	Arsenic	93	5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
4	Ba	Barium	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
5	Be	Beryllium	93	0.5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
6	Bi	Bismuth	93	2 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
7	Cd	Cadmium	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
8	Ce	Cerium	93	5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
9	Co	Cobalt	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
10	Cr	Chromium	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
11	Cu	Copper	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
12	Ga	Gallium	93	2 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
13	La	Lanthanum	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
14	Li	Lithium	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
15	Mo	Molybdenum	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
16	Nb	Niobium	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
17	Ni	Nickel	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
18	Pb	Lead	93	2 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
19	Rb	Rubidium	93	20 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
20	Sb	Antimony	93	5 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
21	Sc	Scandium	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
22	Sn	Tin	93	20 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
23	Sr	Strontium	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
24	Ta	Tantalum	93	10 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
25	Te	Tellurium	93	10 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
26	V	Vanadium	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
27	W	Tungsten	93	10 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
28	Y	Yttrium	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
29	Zn	Zinc	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma
30	Zr	Zirconium	93	1 PPM	HNO3-HCL HOT EXTR	Ind. Coupled Plasma

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
(604) 985-0681 Telex 04-352667

BONDAR-CLEGG

Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-06781.0 (COMPLETE)

REFERENCE INFO:

CLIENT: KEEWATIN 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 SEDIMENT,SILT	41	1 -80	41	DRY, SIEVE -80	41
R ROCK OR BED ROCK	52	2 -150	52	CRUSH,PULVERIZE -150	52

REPORT COPIES TO: KEEWATIN ENGINEERING INC.
TAIGA CONSULTANTS LTD.

INVOICE TO: KEEWATIN ENGINEERING INC.

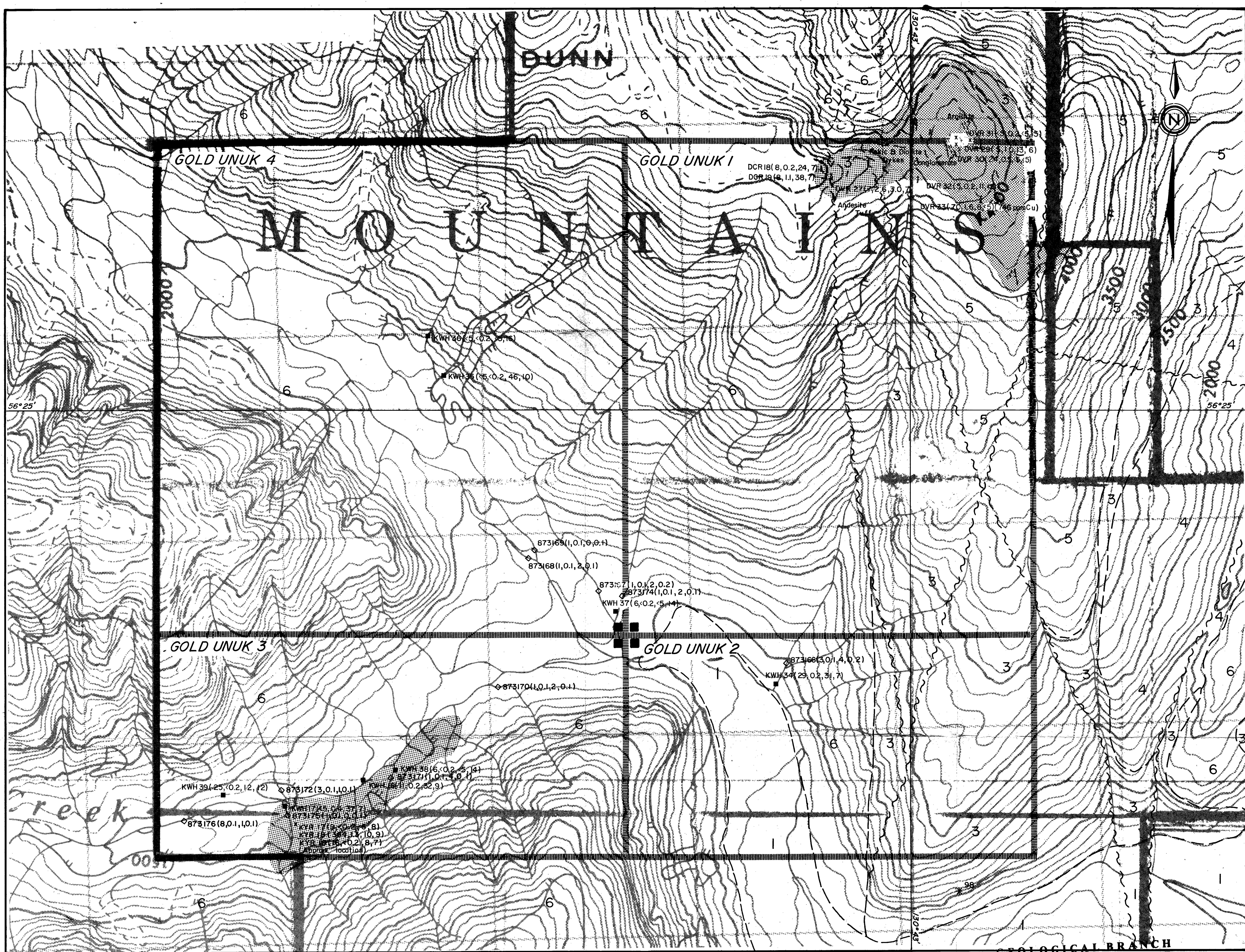
GOLD UNUK PROPERTY
HEAVY MINERAL RESULTS

LAB NUMBER	FIELD NUMBER	LOCATI	Au(30g (ppb)	Ag (ppm)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Cd (ppm)	Ce (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Ga (ppm)	La (ppm)	Li (ppm)	Mo (ppm)	Nb (ppm)	Ni (ppm)	Pb (ppm)	Rb (ppm)	Sb (ppm)	Sc (ppm)	Sn (ppm)	Sr (ppm)	Ta (ppm)	Te (ppm)	V (ppm)	W (ppm)	Y (ppm)	Zn (ppm)	Zr (ppm)
75770018	89 K WH34	GOL	29	0.2	31	557	-0.5	4	-1	31	29	97	97	5	16	8	12	-1	45	-2	74	7	4	-20	57	-10	-10	156	-10	8	73	3
75770019	89 K WH35	GOL	-5	-0.2	46	595	-0.5	4	-1	102	24	140	20	3	74	12	4	1	58	-2	88	10	3	-20	26	-10	-10	277	-10	12	81	3
75770020	89 K WH36	GOL	-5	-0.2	-5	780	-0.5	13	-1	83	30	132	19	14	79	32	6	6	48	-2	115	16	5	-20	31	28	-10	267	-10	10	116	5
75770022	89 K WH37	GOL	6	-0.2	-5	430	-0.5	9	-1	99	21	132	16	11	81	16	4	7	41	-2	115	14	5	-20	30	20	-10	266	-10	14	83	4
75770023	89 K WH38	GOL	6	-0.2	6	213	-0.5	12	-1	72	17	190	26	10	55	7	7	4	23	-2	55	17	6	-20	33	24	-10	379	36	14	65	5
75770024	89 K WH39	GOL	25	-0.2	12	189	-0.5	6	-1	66	22	114	23	10	45	6	6	6	22	-2	37	12	7	-20	26	24	-10	220	-10	15	66	5
69690018	89 K WH17	GOL	-5	0.4	37	444	-0.5	13	-1	56	18	98	36	6	30	14	7	5	20	-2	100	7	9	-20	58	-10	-10	207	-10	14	94	3
69690019	89 K WH18	GOL	11	0.2	32	244	-0.5	7	-1	120	17	158	23	8	60	9	3	9	20	-2	129	9	10	-20	35	-10	-10	283	-10	26	76	3

SUMMARY OF EXPENDITURES

Gold Unuk 1-4

Personnel and Crew	$ 3,648.64
Transportation - helicopter/fixed wing/fuel	3,132.66
Camp - food/accommodation	659.18
Assay/Report/Drafting/Secretarial	1,153.37
TOTAL EXPENDITURES:	**$ 8,593.85**



GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,722

LEGEND

Volcanic Sedimentary Rocks

Pleistocene to Recent

1 — Basalt flows and tephra: dark brown to black, minor pillow lavas

Lower Jurassic (Pliensbachian to Toarcian)

2 — Betty Creek Formation: pyroclastic-epiclastic sequence, heterogeneous, grey-green, massive to bedded, pyroclastics and sedimentary rocks (black, thinly bedded siltstone, shale, and argillite)

Upper Triassic to Lower Jurassic (Norian to Sinemurian)

3 — Unuk River Formation: andesite sequence, green and grey, intermediate to mafic volcaniclastics and flows, with locally thick interbeds of fine-grained immature sediments, minor conglomerates, and limestone

Upper Triassic (Carnian to Norian)

4 — Stuhini Group: brown, black, grey; mixed sedimentary rocks (siltstone, shale, argillite, limestone, chert), with minor mafic to intermediate volcanics and volcaniclastic rocks

Intrusive Rocks

Tertiary

5 — Post-Tectonic Dykes

King Creek Dyke Swarm: feldspar porphyry dacite, andesite, diabase, and hornblende to quart diorite; limits of the unit shown indicate where the dykes exceed 50% of the exposed bedrock

9 — Hawilson Monzonite - fine grained monzonite

6 — Coast Plutonic Complex: hornblende-biotite-quartz diorite to granodiorite.

Jurassic

7 — Unuk River Diorite Suite:
- a) Max: biotite-hornblende diorite, quartz diorite, granodiorite
- b) Melvelle: hornblende-biotite diorite, quartz diorite

Metamorphic Rocks

8 — Metamorphic equivalents of Units 1, 2, or 3
- a) hornblende, mylonite gneiss, mylonite
- b) Unuk-Harrymel Fault Zone, strongly sheared rock within fault zone

SYMBOLS

- Geological contact (observed, assumed)
- Bedding with dip
- Foliation
- Regional anticline
- Fault (defined, assumed)
- Airphoto lineament
- Regional stream silt sample site (Au ppb, Ag ppm, As ppm Sb ppm)
- 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 sample - float (Au ppb, Ag ppm, As ppm, Sb ppm)
- Stream silt sample (Au ppb, Ag ppm, As ppm, Sb ppm)
- Heavy mineral sample (Au ppb, Ag ppm, As ppm, Sb ppm)
- Trench
- 1989 Prospecting Coverage

CANADIAN CARIBOO RESOURCES LTD.

GOLD UNUK PROJECT
GEOLOGY & 1989 EXPLORATION
SAMPLE LOCATIONS & RESULTS

DATE: NOV. 1989	NTS: 104B/7
PROJECT: GOLD UNUK	
SCALE: 1:10,000	0 100 200 300 400 500 METRES
KEEWATIN ENGINEERING INC.	MAP No. 1