83-#34 #11044

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DU PONT OF CANADA EXPLORATION LIMITED

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE GAUG PROPERTY

ATLIN MINING DIVISION

(BRITISH COLUMBIA)

LAT. 59°56'N, LONG. 134°53'W

NTS: 104-M-15W

OWNER OF CLAIMS: DU PONT OF CANADA EXPLORATION LIMITED

OPERATOR: DU PONT OF CANADA EXPLORATION LIMITED

Submitted by: H. J. Copland
Date : 1982 October

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INTRODUCTION

The GAUG 1, 2 and 3 claims were staked in June 1981 on the basis of an auriferous stream sediment sample. The sampling was undertaken as part of a large regional sampling programme known as the Kulta Project. This project covered rocks of the Intermontane Belt stretching from Carmacks, YT to Dease Lake, B.C. (Dwg. KU.81-1a).

Work on the property during the summers of 1981 and 1982 consisted of geochemical sampling and detailed geological mapping in an attempt to isolate the source of the gold found in the stream sediments.

LOCATION AND ACCESS

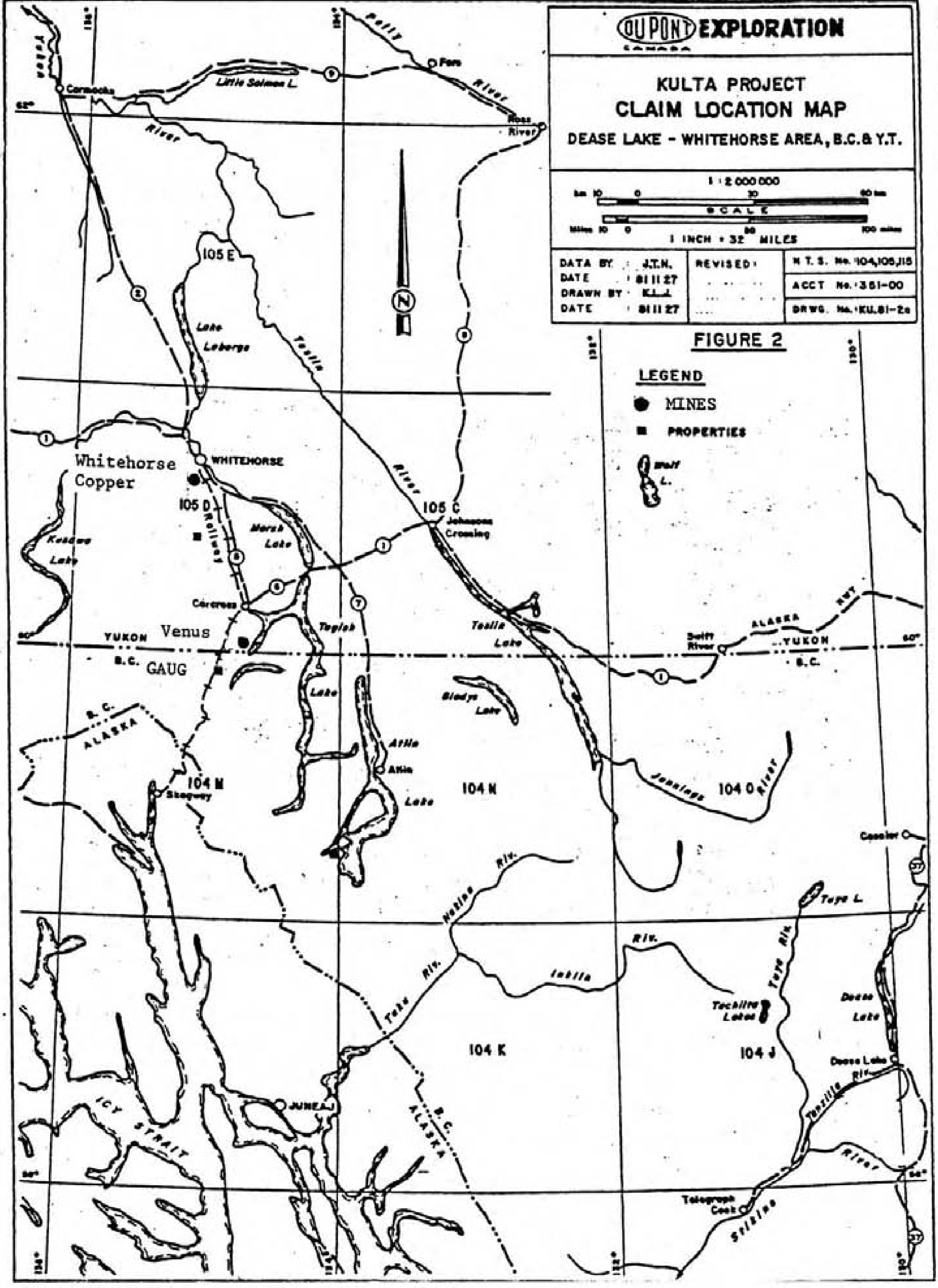
The GAUG claim is located within the Atlin Mining Division, NTS 104-M-15W (Lat. 59°56'N, Long. 134°53'W, Dwg. KU.81-2a, KU.81-244). The property is located on the east side of Bennett Lake, approximately 5 kilometres north of Paddy Pass. The nearest population centre is Carcross, YT, 28 kilometres to the north. The claims are accessible by helicopter from Carcross or by boat along Bennett Lake. The White Pass and Yukon Railroad passes along the east side of Bennett Lake and through the western portion of the claim. A very rough bulldozer road leads a few hundred metres up from the railroad tracks. Six kilometres to the east, the Carcross-Skagway Alaska highway runs along the western shore of Tutshi Lake.

TOPOGRAPHY AND VEGETATION

The property lies on the east side of Bennett Lake along the western slope of a small range of mountains separating Tutshi Lake from Bennett Lake. The western boundary of the claim is at Bennett Lake which is located at an elevation of 660 metres. These lower slopes have a cover of spruce and alders which give way to coniferous bushes and grasses above 1050 metre elevation. The eastern half of the claim consists of a grass covered plateau averaging 1400 metres in elevation. The centre of the plateau near the eastern limit of the claim marks the divide between water that flows west into Bennett Lake and water that flows east into Tutshi lake. The highest point on the claims occurs in the southwestern corner of GAUG 2 at an elevation of 1850 metres.

PROPERTY DEFINITION

The GAUG property consists of three claims: GAUG 1, 10 units; GAUG 2, 12 units; and GAUG 3, 6 units. See Dwg. No. KU.81-260 for claim location. The claims are in good standing until 1983 June 23.


DUPONT EXPLORATION
KULTA PROJECT
CLAIM LOCATION MAP
DEASE LAKE - WHITEHORSE AREA, B.C. & Y.T.
1 : 2 000 000
SCALE
1 INCH = 32 MILES
DATA BY: J.T.N.
DATE: 81 11 27
DRAWN BY: K.L.J.
DATE: 81 11 27
REVISED:
N.T.S. No. 104,105,115
ACCT No. 351-00
DRWG. No. KU.81-2a
FIGURE 2
LEGEND
MINES
PROPERTIES
Whitehorse Copper
Venus
GAUG
WHITEHORSE
Carmacks
Little Salmon L.
Faro
Ross River
Yukon
Pelly
River
Lake Laberge
Teslin
River
105 E
105 D
105 C
Johnsons Crossing
Marsh Lake
Carcross
Tagish
Lake
Teslin Lake
YUKON
B.C.
ALASKA
Swift River
ALASKA HWY
Atlin
Atlin Lake
104 M
104 N
104 O
104 K
104 J
Skagway
Jennings
Gladys Lake
Nakina Riv.
Taku Riv.
Inklin Riv.
Tuya Riv.
Tuya L.
Tachilta Lakes
Cassiar
Dease Lake
Tanzilla Riv.
Telegraph Creek
Stikine
River
JUNEAU
ICY STRAIT
Kusawa Lake
Railway
Wolf L.

Claim Name	Record No.	Tag No.	Date Recorded
GAUG 1	1462	75818	1981 June 23
GAUG 2	1463	75819	1981 June 23
GAUG 3	1461	75817	1981 June 23

PREVIOUS WORK

Previous work appears to be limited to a number of short exploratory adits since no trenches or drill platforms were located.

There are a total of three adits on the property. Two occur along the stream flowing through the central portion of the claim and the third along the upper slopes in the northern portion of the claim. Equipment found in one of the former adits suggests that it was worked during the 1920's or 1930's. Since then, old claim posts in the area confirm that the area has been staked at various times.

The area was staked in June 1981 by Du Pont of Canada Exploration Limited. Follow-up work in the summer and fall of that year included stream sediment sampling, soil and rock geochemistry and geological mapping on the scale 1:10,000. In the summer of 1982, an extensive soil grid was completed over a large portion of GAUG 1 and geological mapping on a 1:5,000 scale commenced.

PERSONNEL

Property work was performed by the following people on the dates indicated:

1982 June 7:	H. Copland (Geologist) J. Peter (Senior Geological Assistant) D. Hooper (Senior Geological Assistant)
1982 June 9-11:	H. Copland, J. Peter, D. Hooper L. Cunningham (Senior Geological Assistant)
1982 June 20-21:	H. Copland J.T. Neelands (Senior Geologist)
1982 June 24:	H. Copland, J. Peter B. Yamamura (Jr. Geological Assistant)
1982 June 25:	H. Copland, J.T. Neelands
1982 June 26-27:	H. Copland
1982 June 28:	H. Copland, D. Hooper, L. Cunningham

GEOLOGY

Regional Geology

The property lies within the Intermontane Belt of the western Cordillera. The belt, consisting mainly of sedimentary and volcanic rocks stretches from the Yukon to southern British Columbia, averages 150 kilometres in width and trends northwest-southeast. Bordering the belt to the west are the granitic rocks of the Coast Mountain Intrusions, which stretch along the entire B.C. coast into Alaska.

Physiographically, the region is part of the Yukon Plateau. This area is characterized by glaciated mountain peaks generally under 2000 metres in elevation and long narrow lake-filled valleys. To the west, the rugged extensively glaciated peaks of the Coast Mountains dominate.

The Tagish-Bennett Lake area is dominated by rocks of the Intermontane Belt which have small plutons (2-8 km in size) of Late Cretaceous Coast Intrusions scattered throughout. The main front of the Coast Mountains occurs immediately west of the property. The rocks of the Intermontane Belt comprise Palaeozoic metamorphic rocks (schists and gneiss), Pennsylvanian (?) and Permian volcanic and meta-volcanic rocks (Taku Group), Lower and Middle Jurassic sediments (Laberge Group), and Upper Cretaceous volcanic rocks (Hutshi Group). See Table of Formations (Table 1) and Dwg. No. KU.81-2c (Kulta Project Regional Geology).

The lithology generally conforms to northwest trending belts as part of a large regional synclinorium (Wheeler 1961, p. 103). All Pre-Cretaceous rocks show this trend. Locally tight folding has been observed, possibly due to intrusions.

Local Geology

The basement in the area consists of Mississippian to Pennsylvanian mafic volcanic flows considered to be the basal units of the Atlin Terrane (MTc). This is overlain by Triassic Lewes River volcanics of the Takla-Nicola Belt (TJT) which in turn are overlain by Lower Jurassic sediments of the Laberge Group (JL). Volcanic rocks of mainly intermediate to felsic composition occur along the western boundary of the trough formed by the older rocks. These rocks are either called the Hutshi Group (KK) of Middle or Late Cretaceous age or the Mount Nansen Group (KTo) of Cretaceous to Oligocene age. Since the Mount Nansen Group of volcanics, originally called the Hutshi

TABLE 1

Table of Formations

Miocene to Pleistocene (TQW)

Wrangell-Garibaldi: Basic to intermediate volcanics.

Late Tertiary

Intrusive: (LTg) granite, quartz monzonite, granodiorite, quartz diorite.

Upper Cretaceous-Oligocene (KTo)

Ootsa Lake-Mt. Nansen (Hutshi Group?): Intermediate to acidic volcanic flows, tuff; non-marine.

Late Cretaceous and Early Tertiary

Nisling Range Alaskite, Nanika (KTg): Granite, quartz monzonite lesser granodiorite.

Babine (KTg): Granodiorite, quartz diorite, quartz monzonite, lesser quartz monzonite, diorite, monzonite.

Cretaceous

Kingsvale-Spences Bridge (KK): Varicoloured intermediate and acid volcanics; lesser basalt; minor sediments.

Early and Mid-Cretaceous

Intrusives: Quartz monzonite, granite, granodiorite, lesser quartz diorite, quartz monzonite (EKg); Gabbro, minor norite, diorite (EKd).

Middle Jurassic-Lower Cretaceous

Bowser-Dewdney (JB): Siltstone, greywacke, shale, conglomerate, coal, marine and non-marine.

Lower and Middle Jurassic (JL)

Laberge-Quesnel (Stuhini Fmn): Greywacke, argillite, conglomerate; marine.

Upper Triassic - Lower Jurassic (TJT)

Takla-Nicola (Lewes River Group): Augite porphyry, basaltic volcanics; siltstone, shale, limestone, conglomerate.

Mississippian - Triassic (MTC)

Cache Creek - Anvil Range: Chert, argillite, carbonate, basalt, associated diabase, gabbro, alpine ultramafic; marine.

Proterozoic (PP)

Central Gneiss - Skagit: Granitoid Gneiss, migmatite schist, amphibolite, plutonic rocks.

Group (Roots, C. F.) host the Venus Mine as well as other mineral occurrences in the Dawson Range, the importance of felsic volcanic rocks on the property similar to the Mount Nansen rocks, may have significant economic importance.

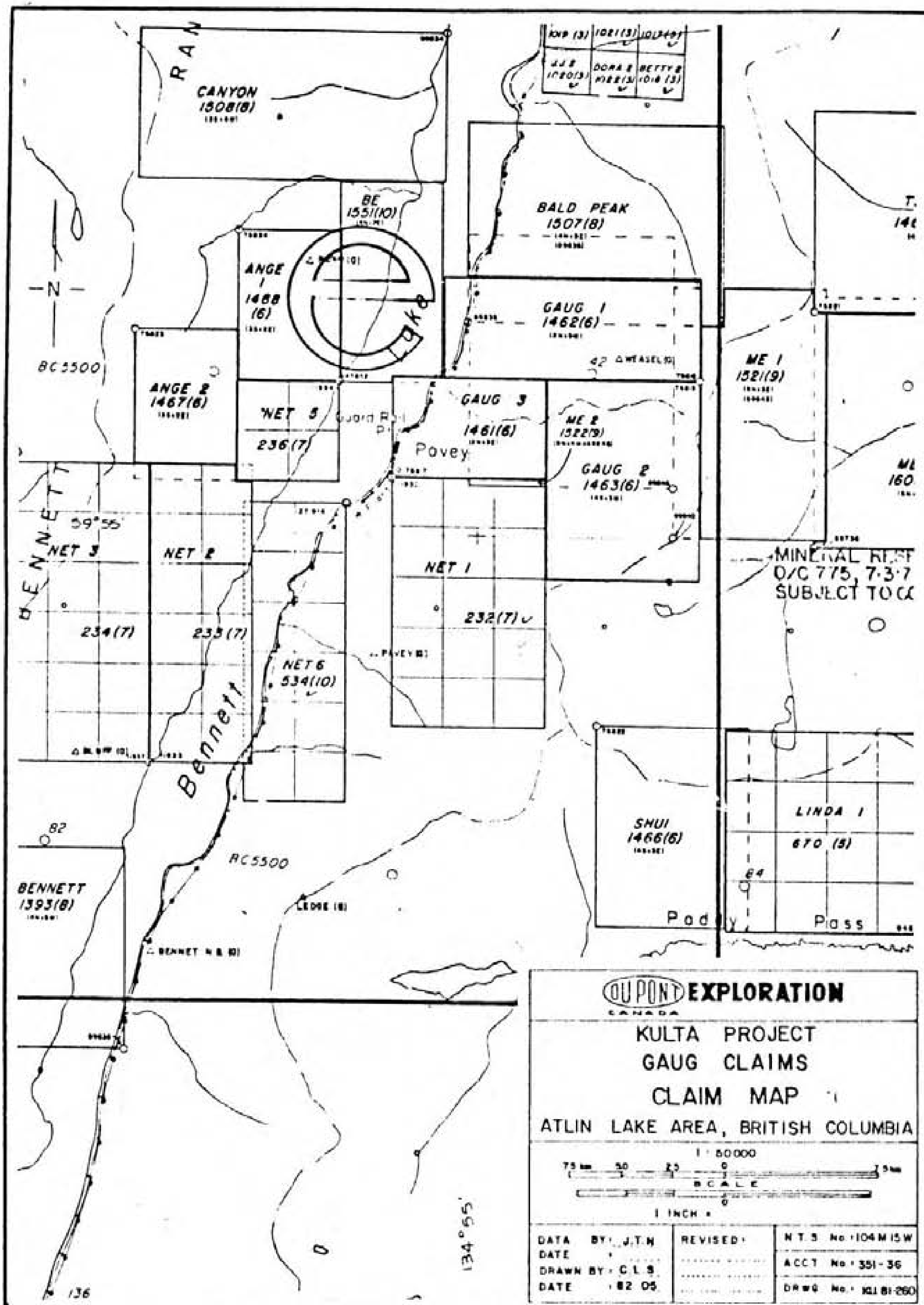
The Venus Mine, located 15 km northeast of the GAUG is reported to contain reserves of 77,600 tons grading 2.11% Pb, 1.38% Zn, 7.2 oz/ton Ag and 0.27 oz/ton Au across a width of 1.5 m. Morin (1981) has classified the Venus Mine as an epithermal deposit. The quartz vein cuts the Mount Nansen volcanics and syenite and follows sharp fractures of faults trending north and dipping west at 50°. The coarsely crystalline quartz veins have smooth walls, are gently sinuous and contain sulphide bodies that pinch and swell. According to Roots "the Venus vein shows characteristic symmetrical mineral zoning about the vein's centre with arsenopyrite on both walls followed by quartz and pyrite toward the centre and galena and sphalerite in the middle".

Property Geology

Approximately 50% of the GAUG claim has been geologically mapped on a scale of 1:5000. The mapped area centres on the original anomalous creek. The majority of the outcrop on the claims occurs on the upper mountain slope and in the creeks flowing west down this slope. No outcrop occurs on the large plateau region and rock is sparce near Bennett Lake.

The majority of the area mapped thus far is underlain by granodiorite of the Cretaceous Mountain Intrusions. This in turn, is cut by andesitic and dacitic dykes which so far have only been located in the intrusive unit. In contact with the intrusive along the main creek are sediments and metasediments. A zone of highly sheared and metamorphosed siltstone/phyllites suggests that the contact is faulted. Strong lineations on airphotos of the area support this fault contact theory and suggest it trends north-south across the entire claim. Indications of smaller shear zones are seen along the creek. A quartz eye porphyry rhyolite which hosts important quartz-arsenopyrite veins (discussed in detail under mineralization) occurs between the siltstones to the east and tuffaceous units to the west. There is evidence that this rhyolite is in fault contact with both the tuffs and the sedimentary rocks. Although not examined in detail, the southern portion of the claims appear to be dominated by rocks of basaltic composition.

Summarized below are the major rock units observed thus far on the property:


CANYON
1508(8)
BE
1551(10)
BALD PEAK
1507(8)
ANGE
1
1468
(6)
GAUG 1
1462(6)
Lake
ANGE 2
1467(6)
NET 5
236(7)
GAUG 3
1461(6)
ME 2
1522(9)
ME 1
1521(9)
GAUG 2
1463(6)
Pavey
BENNETT
59°55'
NET 3
NET 2
NET 1
232(7)
234(7)
233(7)
NET 6
534(10)
MINERAL RESE
O/C 775, 7-3-7
SUBJECT TO C
Bennett
SHUI
1466(6)
LINDA 1
670 (5)
BC5500
BENNETT
1393(8)
Paddy
Pass
134°55'
DUPONT EXPLORATION
CANADA
KULTA PROJECT
GAUG CLAIMS
CLAIM MAP
ATLIN LAKE AREA, BRITISH COLUMBIA
1 : 50000
SCALE
1 INCH =
DATA BY: J.T.N.
DATE
DRAWN BY: C.L.S.
DATE: 82 05
REVISED:
N.T.S. No: 104M15W
ACCT No: 351-36
DRWG No: KG 81-260

1. Sedimentary Rocks

. Siltstone

This unit occurs as a well bedded, 60 metre thick sequence exposed in the main creek between the rhyolite and the intrusive rocks. The siltstone is typically fine grained and dark green on both the fresh and weathered surfaces. Bedding measurements define its orientation as striking south-southeast with near vertical dips (75-88°) towards the northeast. Where the siltstone contacts the granodiorite to the east, it has been sheared and metamorphosed to a phyllite. Well developed foliation follows the original bedding attitude and heavy alteration to chlorite has occurred. This phyllite zone averages 20 metres in width. The phyllitic nature of the rock decreases away from the intrusion. The sediments are irregularly intruded by basalt/andesite dykes in the creek bed.

. Limestone

The limestone occurs in two small isolated outcrops on the property. The first is a small wedge shaped zone, approximately 5 metres in thickness adjacent to the siltstones described above. The unit is white to light grey, weathering to a tan colour. It is thinly bedded, slightly argillaceous, with minor quartz stringers. Bedding attitude is similar to the adjacent siltstones (170/75°NE). Intense shearing occurs on the contact with the rhyolites which suggests a fault contact between the two units.

The second outcrop of limestone occurs at the far northern boundary of the claim. It occurs amongst the granodiorite although the contact with these rocks is not exposed. The limestone strikes north, northeast with a steep dip to the southeast. Lithologically, the unit is similar to the limestone in the main creek. A certain degree of recrystallization has occurred in the limestones.

2. Intrusive Rocks

. Granodiorite

The granodiorite is the most widely exposed unit on the property. In most cases it is highly altered and difficult to distinguish. In general, the rock is medium to coarse grained with anhedral to subhedral grains of feldspar (60%), quartz (20%) and mafic minerals (20%). The mafic minerals are altered almost entirely to chlorite. Chlorite may account for up to 60% of the rock in some cases. Fresh surfaces are difficult to obtain in the granodiorite, it tends to be grey with a pink and green tint weathering to a grey-brown colour. In one area the granodiorite has a xenolithic texture. Mafic rounded xenoliths up to 50 cm in size occurs in the upper portions of the main creek.

A zone of highly sheared, chloritized, and slickensided granodiorite occurs near the bottom of the slope. It has a northerly trend and may be evidence of a fault running through this area. The granodiorite is cut by numerous andesite and dacite dykes throughout the property.

. Quartz Diorite

Numerous small pods of this unit occur throughout the granodiorite. They do not appear to be dykes and in some cases a gradational contact occurs with the granodiorite. Generally, the rock is fine grained (<2 mm in size), equigranular with anhedral grains of plagioclase (45%), hornblende (30%), quartz (10%), and biotite (10%). Minor sulphides of pyrite, chalcopyrite and pyrrhotite (1%) are present in most cases.

. Aplite

Small dykes of aplite occur in the granodiorite at one location on the property. The colour of the aplite weathers either a light grey, a pale tan or a grey-white. The rock is fine grained with a high percentage of silica. Veinlets of calcite less than 1 mm in size cut the aplite.

3. Volcanic Rocks

. Rhyolite

The rhyolite occurs as an irregular shaped body in the centre of the property. The unit is very distinct weathering a bright tan to yellowish colour. On the fresh surface, the rock is either light grey or white. It contains K-spar and quartz phenocrysts. The groundmass is very fine grained and siliceous. Quartz "eye" phenocrysts are 5 mm in size, are subangular to subrounded and make up approximately 10-20% of the rock. K-spar phenocrysts are pale white, euhedral to subhedral, and have visible cleavage faces. The grains average 4 mm in size and comprise approximately 15% of the rock. Blebs to

2 mm in size of pyrite and pyrrhotite comprise less than 5% of the rhyolite.

An excellent exposure of the rhyolite/siltstone contact occurs in the main creek bed. The contact is very sharp and regular. The rhyolite near the contact is very fine grained and shows smooth deeply curving flow banding over a one metre wide area adjacent to the siltstone. The flow banded laminations average 0.5 to 5 mm in thickness. The lower contact of the rhyolite with tuffaceous units, to be discussed later, shows a highly sheared nature.

. Dacite

The dacite occurs as small dykes cutting the granodiorite along the main creek. The unit has typical medium to dark green colour and weathers a light green to grey. The rock is fine grained and contains dark green phenocrysts less than 1 mm in size. These phenocrysts constitute less than 10% of the rock.

Small dykes also cut the siltstones along the southern branch of the main creek. They are probably the youngest rock units on the property.

. Andesite

Andesite dykes occur in a similar manner to the dacites described above. The two appear only slightly different in hand specimen, the andesite being softer and a darker green colour.

. Basalt

Rocks of basaltic composition crop out in the southern zone of the property. Two distinct basalt units can be observed on the claims although each appears to be related to one another. The first is a medium to dark green rock weathering to a brownish green colour. The rock is fine grained with small tabular phenocrysts of plagioclase only 1 mm x 2 mm in size. These phenocrysts make up less than 5% of the rock.

The second unit which is gradational with the first, is a porphyritic basalt. It is similar to the first except for the presence of tabular plagioclase phenocrysts 3 mm wide x 10 mm long composing 20 to 30% of the rock. Both units are vesicular with subrounded cavities up to 1 cm in size. The basalt is probably related to the andesite and dacite dykes described previously. Excepting the tuff described below, no contacts with the basalt and other units have been observed.

. Tuff

The tuffaceous unit is exposed in the south and western limits of the claim. The rocks are generally dark grey to black, weathering to a dark brown. The rock is composed of siliceous grey angular to sub-angular clasts up to 1 cm in size. In general, these clasts are less than 5 mm in size. Evidence of flowing and stretching out of the clasts is seen in most areas. In one cliff face in the main creek, a 25 metre thick zone of bedded tuffs is clearly visible. Approaching the contact with the rhyolite, the groundmass of the tuff becomes more siliceous. The tuffs appear to be in fault contact with the rhyolites along the main creek.

STRUCTURE

Bedding orientations have been measured in the sedimentary units in the central portion of the property. The sediments have a consistent southeast strike with steep northeasterly dips. Bedded tuffs exposed in the main creek have a southeasterly strike but a shallow southwesterly dip.

These attitudes conform to the regional northwest trends observed in the area. All pre-Cretaceous rocks have been folded into broad northwesterly trending folds. GSC Map 19-1957 shows a series of anticlines and synclines occurring in Pennsylvanian to Triassic rocks three kilometres south of the property.

One large fault or shear zone runs north-south through the property. This corresponds approximately to the contact with the granodiorite and the volcanic and sedimentary rocks on the western portion of the claim. Numerous small shear zones and fault contacts are visible in the exposures along the main creek.

MINERALIZATION

General

Significant values of gold, silver, copper, lead and zinc are present on the GAUG property. Three different mineral associations have been observed on the property:

1) Chalcopyrite-magnetite in a shear zone

2) Arsenopyrite-quartz in veins
3) Stibnite-arsenopyrite-galena-sphalerite-quartz in veins.

Each will be discussed in detail below.

Copper Mineralization

A zone of copper mineralization occurs along the west facing slope in the northern half of GAUG 1. The zone is a four metre wide sheared and altered section of granodiorite. This sheared rock is traceable on the surface over a length of 10 metres. The zone strikes east-southeast with a moderate dip to the northeast. An adit has been driven horizontally into the lower portion of this altered zone. The adit is in good shape and is approximately 1.0 x 1.5 metres in section and 15 metres long. It has been driven east into the hill then jogs to the north for seven metres.

Mineralization in the sheared rock is limited to a 30 cm wide section of massive to disseminated chalcopyrite and magnetite. Minor pyrite and bornite has also been noted in the rock. A strong malachite/azurite stain extends outward from the mineralization for a distance of one metre. Malachite staining covers the walls of the adit but only minor chalcopyrite was observed inside. Grab samples from inside and outside the adit varied from 3.3 to 9.5% copper. A sheared ourcrop of malachite-stained granodiorite 450 metres below the adit ran 0.5% copper (grab sample). This suggests the mineralized shear zone may extend for several hundred metres across the property.

A summary of rock samples and their anomalous assay values for this copper zone is given in Table 2.

TABLE 2

Copper Zone, Rock Descriptions and Assays

Sample #	Location	Description	Assay
7700A	Above adit	Massive chalcopyrite, magnetite, malachite	Cu 9.49% Ag 2.74 oz/t
9952A	Inside adit	Altered granodiorite malachite/azurite	Cu 3.26% Ag 0.83 oz/t
9953A	600 metres northwest of adit	altered granodiorite heavily chloritized malachite	Cu 0.585% Ag 0.50 oz/t

TABLE 3

Arsenopyrite-Quartz Veins, Descriptions and Assay Results

Sample #	Location	Description	Assay
9951A (grab)	Inside adit	Width 2 to 30 cm qtz aspy, py; strike approx - 030°	Au: 0.685 oz/t Ag: 1.70 oz/t As: 20.50 %
8900A (grab)	10 m west of adit	Exposed area 150 cm x 30 cm qtz, aspy, py, jarosite; orientation - 040°/60SE	Au: 0.255 oz/t Ag: 0.66 oz/t As: 9.25%
8901A (grab)	20 m east of adit	Width 10 to 40 cm exposed length 10 m; orientation 55°/45SE qtz, aspy, jarosite	Au: 0.805 oz/t Ag: 1.42 oz/t As: 17.6%
8196D (chip across 70 cm)	15 metres above adit	Width, average 70 cm aspy, qtz, jarosite; strike approx. 060°	Au: 0.234 oz/t Ag: 6.19 oz/t * As: 4.75%
8197D (chip across 30 cm)	15 metres above 8196D	Width, average 30 cm aspy, qtz	Au: 0.104 oz/t Ag: 6.92 oz/t As: 5.55% Pb: 1.08%
8190D	South branch main creek EL: 1120 m	15 cm wide, qtz-aspy vein, exposed over 10 metres; orientation - 000/10E	Au: 0.695 oz/t Ag: 0.90 oz/t

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Arsenopyrite - aspy
Pyrite - py
Quartz - qtz
Chalcopyrite - cpy
Sphalerite - ZnS
Stibnite - Sb

TABLE 4

Stibnite-Arsenopyrite Quartz Veins, Descriptions and Assay Results

Sample #	Location	Description	Assay
8938A (grab)	North side creek, 1+76m EL: 1410 m	Shear zone in granodiorite 3 cm thick vuggy qtz 10% combined py, cpy, sb	Au: 0.034 oz/t Ag: 1.57 oz/t Cu: 0.710% Sb: 0.28%
8941A (grab)	South side creek, 4+28m EL: 1425 m	3 cm wide, qtz-py-aspy -sb vein; striking 050°	Au: 0.069 oz/t Ag: 4.19 oz/t Pb: 3.53% Zn: 1.18%
8942A (grab)	North side creek, 4+28m EL: 1375 m	3 to 40? cm wide, qtz-sb-ZnS-py vein; orientation 074/80SE	Au: 0.670 oz/t Ag: 26.45 oz/t Pb: 6.44% Zn: 5.94% Cu: 0.110%
8943A (grab)	South side creek, 5+20m EL: 1355 m	Altered granodiorite wall rock of vein described under 8944A taken 10 cm from vein	Ag: 0.29 oz/t all others low
8944A (grab)	South side creek, 5+20m EL: 1355 m	40 cm wide, qtz(25%)-aspy(50%)-cpy(10%)-py(10%)- ZnS(minor); orientation 084/15S	Au: 0.052 oz/t Ag: 9.60 oz/t Pb: 0.44% Zn: 0.24%
9950A (grab)	South side creek, 5+10m EL: 1370 m	1 m wide, qtz-sb(60%)-aspy (10%)-ZnS (10%)-cpy(5%) vein; orientation 058/76 NW	Au: 0.215 oz/t Ag: 11.20 oz/t Pb: 2.36% Zn: 4.93%
8945A chip sample over 1m	South side creek 5+15m EL: 1345 m	1 m wide, qtz-sb(10%) -aspy(25%)-cpy (5%)-py(10%) vein swarm orientation: 083/82 NW	Au: 0.352 oz/t Ag: 9.55 oz/t Zn: 0.32% Cu: 0.101%

Sample #	Location	Description	Assay
8946A (grab)	South side creek 4+90 m EL: 1355 m	10 cm wide, qtz-aspy py vein, extension of vein in 8945A, 25 m east of 8945A	Au: 0.178 oz/t Ag: 0.20 oz/t
8947A (grab)	South side creek, 5+60m EL: 1330 m	10 cm wide, qtz-py(10%) -cpy(10%)-aspy(5%) vein, traceable over 20 m; striking: 098°	Au: 0.064 oz/t Ag: 9.95 oz/t Pb: 0.33% Zn: 0.89%
8948A (grab)	South side creek, 6+22m EL: 1345 m	50-100 cm wide qtz-py-galena-aspy-sb stringer vein zone strike: 090°	Au: 0.080 oz/t Ag: 7.08 oz/t Pb: 4.96%
8937A (grab)	South side creek	1 m wide, qtz-sb-aspy-ZnS vein; orientation - 090/45S	Au: 0.358 oz/t Ag: 6.51 oz/t Pb: 0.30% Zn: 0.41%
8851A (talus)	South side creek, 8+27m	Talus from inaccessible qtz vein, exposed over approx. 10 metres qtz boxwork strong goethite stain, minor py	Au: 0.142 oz/t Ag: 0.37 oz/t Pb: 0.26%
8852A (grab)	North side creek, 8+27m EL: 1205 m	Silicified zone in granodiorite py and boxwork to 20%, jarosite & goethite stain	Au: 0.016 o/t
8853A Chip over 1m	South side creek, 9+23m EL: 1170 m	Altered zone in granodiorite silicified and feldspar altered, jarositic & hematitic soil	Au: 0.016 oz/t Ag: 0.085 oz/t Pb: 046%
8854A Chip over 1m	South side creek, 9+25m EL: 1180 m	Silicified zone in granodiorite 10 m above 8853A, jarosite stain, disseminated py	Ag: 0.10 oz/t

Sample #	Location	Description	Assay
8856A chip over 1m	South branch main creek near adits EL: 1230 m	1 m wide, qtz-aspy-sb-py vein; orientation - 090/55S	Au: 0.032 oz/t * Ag: 0.12 oz/t
8857A talus grab	South branch main creek near adits	Talus sample of massive coarse bladed sb, 10 cm thick	Au: 0.233 oz/t Ag: 63.00 oz/t Cu: 0.955% Pb: 2.48% Zn: 1.39%
8858A (grab)	Above south branch main creek	10-100 cm wide, qtz-sb-aspy-py vein; striking approximately 090°	Au: 0.512 oz/t Ag: 19.85 oz/t Cu: 0259% Pb: 0.90% Zn: 0.76%

present in amounts less than 10% each. Gangue in the form of quartz is usually vuggy and medium to coarse grained. The veins have a distinct weathering pattern which allows them to be observed on the slopes from creek level. The sulphides are generally recessive leaving a sharp depression where the vein cuts the granodiorite. A deep hematitic red coloured soil is developed around the veins. Table 4 summarizes the veins, mineralogy and assay results.

GEOCHEMISTRY

Procedure

A total of 203 soil and 33 rock samples were collected during 1982. The rock samples have been discussed previously under "Mineralization". Soil sampling was carried out over a large grid covering the entire eastern half of GAUG 1 and portions of GAUG 2. In total, 15,700 metres of lines were completed. Soil lines were 100 metres apart with an average sample spacing of 100 m on each line. The samples were collected from the "B" soil horizon and placed in a kraft paper envelope. A length of flagging bearing the grid location and sample number was secured at the site.

All samples were shipped to Min-En Laboratories Ltd., North Vancouver for preparation and analysis. The soils were dried and sieved to -80 mesh and tested for Sb, Hg, Cu, Pb, Zn, Ag, As and Au. Rock samples were crushed to -100 mesh and assayed for Cu, Pb, Zn, Ag, Au and in a few cases U, Sb and As.

Treatment of Data

The results of the analysis are tabulated on the Frequency Distribution Table, Table 5. From the distribution of each element a normal population was selected and from this, the background and anomalous values were calculated as 50% and 95% respectively of the total population. These values are compared with the regional geochemical values, Table 6. In general lead, silver, mercury?, gold and antimony compare with the regional results. Copper and zinc are higher regionally and this is attributed to the copper-zinc anomalies sampled. Two soil samples were collected near mineralization to compare the effectiveness of the rock and soil sampling, Table 7. Very few of the grid soil samples collected contained values as high which suggests that a closer sampling or prospecting pattern may be more effective in locating veins.

Table 5

Frequency Distribution of Elements

Sample Medium Soil

Class Interval PPM/PPB	Cu	Pb	Zn	Ag	Hg	As	Au	Sb
	ppm	ppm	ppm	ppm	ppb	ppm	ppb	ppm
0.1								
0.2				1				
0.3				2				
0.4				8				
0.5				14				
0.6				22				
0.7				21				
0.8				23				
0.9				22				
1.0				19				
1.1				16				
1.2				18				
1.3				8				
1.4				6				
1.5				9				
1.6-1.7				7				
1.8-1.9				4				
2.0-2.1								
2.2-2.4				3				
2.5-2.7				1				
2.8-3.0				2				
3.1-3.5								
3.6-4.0	1			2			24	
4.1-5.0				1			72	9
6 -10	3	1		2	2		26	7
11-15	13	2	2		1	3	13	12
16-20	40	16	4		7	1	10	7
21-25	37	38	3		1	3	8	5
26-30	29	47	2		11	3	9	8
31-35	17	24	4		7	3	4	2
36-40	17	19	5		13	3	3	3
41-45	13	6	6	2	9	5	4	3
46-50	7	9	16		11	3	2	2
51-55	1	4	22		8	4	1	1
56-60	4	6	27		9	6	2	1
61-65	3	3	25		7	8		
66-70	2	2	18		10	5	5	
71-75	3	2	11		6	5	2	2
76-80		3	5		12	7		
81-85	1	3	10		7	3		2
86-90			8	1	11	7		
91-95		1			3	5	2	1
96-100			4		9	8	1	
101-110	1		6		3	15		
111-120		1	2		8	14		
121-130	1	1	1		3	9		
131-140	1		4			9	1	
141-150	1	3			2	2	1	
151-160			2		2	4		1
161-170	2	1	2	1	1	1		
171-180		1	1		2	2	1	
181-190		1	1		3			
191-200					1			
201-220	2	1	5		1	1		
221-240	2	1			1	2	2	
241-260					1	2	1	
261-280						2		
281-300			1			1		
301-320		1	1			4		
321-340		1	1			1		
341-360					1	4	1	
361-380						1	1	
381-400								
401-420			1					
421-440								
441-460		1					1	
461-480	1					1		
481-500								
501-600						2	1	1
601-700			1				3	
701-800							1	
801-900			1			2		
901-1000		1						
1001-1100								
1101-1200							1	
1201-1300								
1301-1400								
1401-1500								1
1501-2000		1						1
2001-3000								
3001-4000	1	1			1			
4001-5000		1					1	
> 5000			1			2	1	

TABLE 6

Kulta Follow-Up

Background and Anomalous Values

Element	Medium					
	Heavy Mineral (227 samples)		Silt (43 Samples)		Soil (461 samples)	
	Median	Anomalous	Median	Anomalous	Median	Anomalous
CuF*	30.0	90.0	70.0	160.0	40.0	250.0
PbF	20.0	60.0	20.0	30.0	20.0	50.0
ZnF	60.0	160.0	80.0	100.0	90.0	200.0
AgF	0.8	1.5	0.9	1.2	0.8	1.7
AsF	10.0	50.0	15.0	45.0	15.0	120.0
AuF	5.0	30.0	5.0	15.0	5.0	20.0

F - Mines 80 fraction

Gaug Property

Background and Anomalous Values

Cu	25	45
Pb	25	55
Zn	60	85
Ag	0.8	1.4
Hg	60	100
As	80	130
Au	5	30
Sb	15	35

TABLE 7

Maximum Values of Elements in Soils - GAUG 1982

(compared to rocks from which soil derived)

	Sample	Au (oz/t) ppb	Ag (oz/t) ppm	Cu (%) ppm	Pb (%) ppm	Zn (%) ppm	As (%) ppm	Sb (%) ppm	Hg ppb
Rock:	9950A	0.215	11.20	.035	2.36	4.93	5.26	10.40	-
Soil:	GH-003	4900	86.0	126	4000	12,000	71,200	1570	350
Rock:	9951A	0.685	1.70	.006	0.22	0.07	20.50	0.17	-
Soil:	GH-013	9200	164.0	140	38,000	724	5800	550	3750

GH-003 - Soil developed directly on top of a weathered auriferous quartz-stibnite-arsenopyrite vein, East of L2W, 3+75S.

GH-013 - Soil in rubble from an adit driven on an auriferous quartz vein, West of L7W, 5+30S.

Results and Interpretation

Complete soil geochemical results and rock assays for 1982 are tabled on Dwg. Nos. KU.82-6 and KU.82-5 respectively. Anomalous gold in soils was found in 44 samples. Disregarding the two "high grade" samples above, the highest value occurs on line 7+00W at 3+50S (1150 ppb Au). A series of samples over a length of 300 metres on this line were all anomalous. This line follows what is believed to be a large fault or shear zone cutting varying lithologies across the main creek bed. Other anomalous gold samples are scattered over the remainder of the grid. High gold values along the northern edge of the claim suggest a possible continuation of the anomaly to the north.

Silver anomalies in the soils correspond closely to gold. Two concentrations of high silver values occur in the two lines cutting across the gorge of the main creek. The highest values aside from the high grade soils were at 2+00W, 2+25S (44.0 ppm) and 2+00W, 3+50S (46.0 ppm) which occur in the gorge on both sides of the creek. All other anomalous silver were all less than 10.0 ppm and scattered mainly in the north central portion of GAUG 1 along line 5+00W where relief and erosion is extreme.

High copper in soils is centred about the chalcopyrite-magnetite zone and continues to the north and west off the grid. The highest copper value in soils was 3830 ppm (GL-02) which occurs directly downslope of the adit into the copper mineralization. The remaining 12 anomalous values average 200 ppm.

The lead anomaly in the soils follows very closely to that of gold and silver. The highest value excepting the two samples taken directly over the veins was 1950 ppm on line 2+00W, 2+25S. This occurs on the north side of the gully where no veins have been observed. There are 31 anomalous samples which all average between 60 to 1000 ppm. All these occur in the creek gully or on the west facing slope of GAUG 1. No anomalous values occur on the plateau in the eastern portion of the claim.

High zinc correlates very closely with lead. There are 11 anomalous samples, the highest being 900 ppm occurring at the same location as the highest lead mentioned above. The pathfinder elements Hg, As and Sb all correlate with the Au anomaly.

In general, it can be said for the distribution of anomalous elements in the soils on GAUG, that the highest concentration of them occur in the gorge carved by the main creek. Not only do they occur in the vicinity of visible mineralized quartz veins on the south slope of the gorge but the high values extend up to the north side of the gorge where no veins are visible. This, along with the extension of various anomalies to the north along the west facing slope, suggests the presence of more mineralized quartz veins north of the main creek. The plateau region in the eastern portions of GAUG 1 & 2 is barren of any anomalous values except for spotty gold and silver values, and mercury anomalies.

An examination of the assay results from the various veins on the property indicate a strong correlation between gold and arsenopyrite and between silver and stibnite. The highest gold assay (0.805 oz/ton) occurred in a quartz-arsenopyrite vein in the rhyolites and the highest silver (63.00 oz/ton) occurred in a talus sample of massive stibnite. Silver/gold ratios showed no pattern and range from a low of 1.7 to a high of 270. In general, high lead and zinc occur together. The highest combined value was 12.4% (8942A). There are no correlations between high lead zinc and any other of the metals in the rock.

CONCLUSIONS AND RECOMMENDATIONS

Numerous auriferous quartz-arsenopyrite and quartz-stibnite-arsenopyrite veins have been outlined on the GAUG property. Exposed on the surface, these veins are narrow and discontinuous. In addition to gold, these veins contain significant values of silver and in some cases, copper, lead and zinc. A mineralized shear zone of chalcopyrite and magnetite also occurs on the property. The exact extent of this is not known at the present time.

Geology on the scale of 1:5000 should be completed in those areas to the south and west of the zone covered in 1982. In addition, it is recommended that selected veins be trenched to expose fresh rock. This will allow better understanding of the size and orientation of the veins and provide an opportunity to collect chip samples over the entire width of the exposed veins. Additional soil and rock samples should be undertaken on the north side of the main gorge in an attempt to discover veining in that area. Soil geochemistry suggests the possibility of mineralized veins in this area. Geophysical techniques including VLF-EM and magnetometer over the present grid would aid in tracing subsurface contacts and delineation of the chalcopyrite-magnetite zone. Any attempts to define a geochronological sequence of events for the mineralization would require more geological mapping.

Hugh J. Copland
Geologist
1982 October

HJC/krl

COST STATEMENT (for period 1982 June 23-28)

			Cost
1. Wages			
1 Senior Geologist,	1 manday	(1982 June 25)	$ 187.74
1 Geologist,	5 mandays	(1982 June 24-28)	391.70
3 Sr. Geol. Assistants	3 mandays	(1982 June 24-28)	210.55
			$ 789.99

2. Room & Board

Location	Daily Rate	Date	No. of Days	
Pooley Pt. on Windy Arm	$30.00	1982 June 24-28	9	$ 270.00

3. Transportation

a. Truck Rental (Avis-Whitehorse, YT):
3 days @ $40/day — $ 120.00

b. Helicopter in support of field work @ $475.00/hr including fuel (Flying by Airlift Corp. of Pitt Meadows)

Dates (1982): June 24-28 — No. of Hrs.: 2.2 — $ 1,045.00

$ 1,165.00

4. Analytical Services

Type of Sample	No. of	Fraction Analyzed -100	Fraction Analyzed -80	Mo	Cu	Pb	Zn	Ni	Ag	Hg	As	Mn	Au	Sb	U	Unit Price	
Soil	104		X		X	X	X		X	X	X		X			17.20	1,788.80
Rock	19	X			X	X	X		X				X		X	49.50	940.50

Preparation	- Rock	19 @ $0.85/sample	$ 16.15
	- Soil	104 @ $1.10	114.40
Digestion	- Soil	104 @ $0.85/sample	88.40
			$ 2,948.25

Price Per Element:

Geochemical - Mo($0.90), Cu($0.90), Pb($0.90), Zn($0.90), Ag($0.90/ $2.00), Hg($4.50), As($3.00), Mn($0.90), Au($5.00), Sb($3.75)

Assay - Cu($6.50), Pb($7.00), Zn($7.50), Ag($7.50), As($10.00) Au($9.00), Sb($10.00), U($12.00)

5. Report Preparation

Drafting, 4 days @ $100/day	$ 400.00
Typing, 1 day @ $95/day	95.00
Map preparation 6 maps @ $0.20/square foot	10.80
	$ 505.80
GRAND TOTAL:	$ 5,679.04

REFERENCES

Christie, R. L.; "Geology: Bennett (104M)", G.S.C. Preliminary Series Map No. 19-1957, 1957.

Holmgren, L., Neelands, J.T.; "Geological and Geochemical Report on the GAUG Property", B.C. Assessment Report, 1982 May.

Morin, J. A.; "Element Distribution in Yukon Gold-Silver Deposits" pp. 68-80 in "Geology and Exploration 1979-80" Indian and Northern Affairs Canada, 1981.

Roots, C. F.; "Geological Setting of Gold-Silver Veins of Montana Mountain", pp. 116-123 in "Geology and Exploration 1979-80", Indian and Northern Affairs Canada, 1981.

QUALIFICATIONS

I, Hugh J. Copland Jr., do hereby certify that:

1. I am a geologist residing at 5250 Ash Street, Vancouver, British Columbia and employed by Du Pont of Canada Exploration Limited.
2. I am a graduate of the University of British Columbia with a B.Sc. (Honours) degree in Geology and McMaster University with a B.Eng. (Mechanical).
3. I have practised my profession in geology for the past three years in British Columbia and the Yukon Territory.
4. In the summer of 1982, I participated in the field programme described in this report on behalf of Du Pont of Canada Exploration Limited.

H. J. Copland
1982 October

QUALIFICATIONS

I, John Thomas Neelands, do hereby certify that:

1. I am a geologist residing at 118-B W. 14th Ave, Vancouver, British Columbia and employed by Du Pont of Canada Exploration Limited.

2. I am a graduate of Carleton University (1971) in Ottawa, Canada, and hold a B.Sc., degree in Geology.

3. I am a member of the Geological Association of Canada and of the Association of Exploration Geochemists.

4. I have been practising my profession for the past twelve years and have been active in the mining industry for the past eighteen years.

5. In June 1982, I supervised and particapted in the field programme described in this report on behalf of Du Pont of Canada Exploration Limited.

J.T. Neelands
1982 February

PHONE 980-5814

APPENDIX A

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
Corner 15th Street and Bewicke
705 WEST 15th STREET
NORTH VANCOUVER, B.C.
CANADA

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

PROCEDURES FOR Mo, Cu, Cd, Pb, Mn, Ni, Ag, Zn, As, F

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO_3 and $HClO_4$ mixture.

After cooling samples are diluted to standard volume. The solutions are analyzed by Atomic Absorption Spectrophotometers.

Copper, Lead, Zinc, Silver, Cadmium, Cobalt, Nickel and Manganese are analysed using the CH_2H_2-Air flame combination but the Molybdenum determination is carried out by C_2H_2-N_2O gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

For Arsenic analysis a suitable aliquote is taken from the above 1 gram sample solution and the test is carried out by Gutzit method using Ag $CS_2N(C_2H_5)_2$ as a reagent. The detection limit obtained is 1. ppm.

Fluorine analysis is carried out on a 200 milligram sample. After fusion and suitable dilutions the fluoride ion concentration in rocks or soil samples are measured quantitatively by using fluorine specific ion electrode. Detection limit of this test is 10 ppm F.

PHONE 980-5814

APPENDIX A

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CANADA

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

PROCEDURE FOR GOLD GEOCHEMICAL ANALYSIS.

Geochemical samples for Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

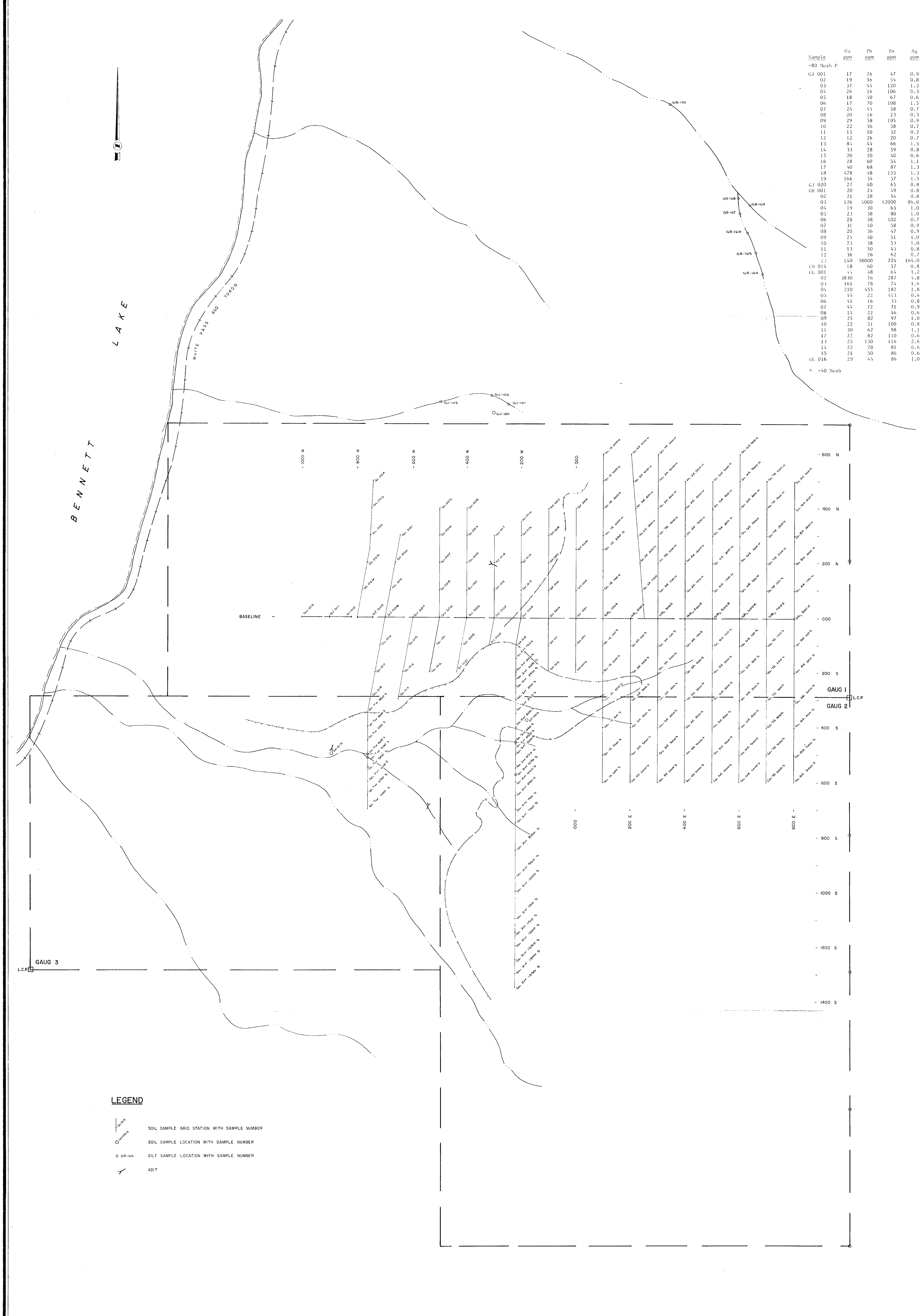
A suitable sample weight 5.0 or 10.0 grams are pre-treated with HNO_3 and $HClO_4$ mixture.

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

At this stage of the procedure copper, silver and zinc can be analysed from suitable aliquote by Atomic Absorption Spectrophotometric procedure.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 5 ppb.



1982 GEOCHEMICAL RESULTS

Sample	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Hg ppb	As ppm	Au ppb	Sb ppm
-80 Mesh F								
GJ 001	17	26	47	0.9	70	62	5	5
02	19	56	54	0.8	55	137	10	6
03	37	44	120	1.3	95	108	5	72
04	26	16	106	0.3	150	27	5	5 *
05	18	40	67	0.6	55	100	30	5
06	17	70	108	1.5	75	133	5	7
07	24	44	58	0.7	70	62	5	15
08	20	16	23	0.3	125	12	5	5 *
09	29	58	105	0.9	40	260	45	26
10	22	56	58	0.7	85	101	30	15
11	15	10	32	0.2	100	14	5	5 *
12	12	26	20	0.7	35	69	10	5
13	84	44	66	1.5	95	79	95	35
14	33	28	59	0.8	60	31	10	29
15	20	20	40	0.6	50	159	20	8
16	28	60	54	1.1	85	63	175	26
17	40	68	87	1.3	100	14	35	30
18	478	48	155	1.3	50	81	60	10
19	166	34	57	1.5	80	22	30	30
GJ 020	27	40	65	0.8	65	230	20	20
GH 001	20	24	49	0.8	80	117	20	11
02	21	28	54	0.8	100	141	20	14
03	126	4000	12000	86.0	350	71200	4900	1570
04	19	30	65	1.0	60	220	15	21
05	23	38	80	1.0	85	250	35	13
06	28	38	102	0.7	75	132	15	17
07	31	40	58	0.9	90	156	10	14
08	20	36	47	0.9	100	104	5	12
09	24	40	51	1.0	75	109	20	20
10	23	38	53	1.0	35	245	10	18
11	13	50	45	0.8	45	175	25	8
12	36	26	62	0.7	45	350	5	28
13	140	38000	724	164.0	3750	58000	9200	550
GH 014	18	60	57	0.8	115	360	5	25
GL 001	44	48	64	1.2	260	44	70	45
02	3830	76	287	4.8	190	77	30	34
03	161	78	74	1.6	70	111	10	36
04	210	455	182	1.8	175	98	25	54
05	44	22	413	0.6	165	29	5	5 *
06	41	16	33	0.8	160	23	5	15
07	44	72	71	0.9	30	95	5	37
08	14	22	46	0.6	15	135	5	26
09	25	82	97	1.0	90	105	5	20
10	22	51	100	0.8	70	320	5	22
11	30	62	98	1.1	185	72	5	14 *
12	22	82	110	0.6	55	250	560	48
13	25	150	116	2.6	125	375	30	29
14	22	78	81	0.6	30	240	240	42
15	21	50	86	0.6	65	260	5	15
GL 016	29	44	86	1.0	70	116	50	12

* -40 Mesh

Sample	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Hg ppb	As ppm	Au ppb	Sb ppm
GL 017	31	73	214	1.3	75	320	5	36
18	42	28	80	1.4	40	162	150	20
19	24	146	89	0.6	45	76	<5	19
20	65	176	86	0.8	90	65	5	21
21	205	320	132	3.9	190	330	615	85
22	62	24	176	1.6	180	36	5	5*
23	67	25	69	0.7	85	95	5	25
24	28	20	41	0.9	45	151	5	13
25	60	56	62	1.2	100	41	5	10*
GL 026	25	45	128	0.7	100	59	5	5
GJ 100	239	91	134	7.2	210	850	650	
01	103	165	317	2.8	230	520	75	
02	50	64	110	2.3	110	89	100	
GJ 103	36	64	134	2.2	50	470	40	
BL100E	17	28	72	0.9	100	109	15	
200	19	29	69	0.9	50	94	5	
300	34	34	67	1.2	110	130	15	
400	45	33	68	1.3	20	130	<5	
500	35	26	52	1.2	50	97	5	
600	17	28	66	1.4	80	55	5	
700	21	24	58	1.0	90	45	5	
BL800E	8	15	19	0.9	50	22	<5	
GL1E100N	22	34	67	1.2	30	280	<5	
250N	17	32	56	1.1	40	310	5	
300N	18	24	65	1.2	30	137	5	
400N	15	30	52	1.6	40	84	<5	
500N	18	26	72	1.2	80	94	<5	
GL1E600N	15	29	50	1.0	20	116	5	
GL1E100S	18	35	67	1.3	70	320	<5	
200S	19	30	59	1.0	90	600	5	
300S	21	32	59	1.2	50	128	5	
400S	29	30	69	0.8	70	117	10	
500S	50	32	90	0.8	40	140	5	
GL1E600S	26	24	61	0.4	55	96	5	
GL2E100N	12	22	24	0.4	95	69	<5	*
200N	24	34	65	0.5	30	131	5	
300N	16	32	41	0.6	75	130	<5	
400N	17	25	49	0.5	60	67	5	
500N	18	32	60	0.4	50	117	5	
GL2E600N	28	30	82	0.6	70	99	5	
GL2E100S	43	50	85	0.8	45	870	5	
200S	20	34	67	1.0	40	270	45	
300S	27	32	76	1.0	30	89	5	
400S	37	38	85	1.4	35	260	10	
500S	37	40	84	0.8	45	300	5	
GL2E600S	33	38	72	0.9	40	245	10	
GL3E100N	22	34	56	0.4	45	113	10	
200N	19	26	57	0.7	30	88	5	
300N	15	34	38	0.5	80	76	10	
GL3E400N	19	24	61	0.8	60	116	25	
GL3E500N	19	26	51	0.6	40	122	5	
GL3E600N	28	40	52	0.7	35	142	<5	
GL3E100S	32	42	100	1.0	50	122	5	
200S	25	30	60	1.2	80	87	10	
300S	25	26	47	1.1	40	64	5	
400S	39	28	68	1.2	55	112	5	
500S	39	30	62	0.9	70	121	5	
GL3E600S	36	32	82	1.0	85	350	5	
GL4E100N	30	26	59	0.7	60	88	<5	
200N	30	25	63	0.5	40	98	5	
300N	14	24	25	0.7	60	44	5	
400N	24	38	65	1.0	115	77	15	
GL4E500N	25	26	69	0.9	80	116	20	
GL4E100S	50	29	59	1.2	60	105	30	
300S	27	25	53	0.9	75	126	40	
400S	26	18	20	0.6	100	160	5	
500S	46	27	75	1.2	90	173	25	
GL4E600S	55	29	69	1.1	90	131	15	
GL5E100N	44	24	65	0.9	65	109	10	
200N	26	23	52	1.1	80	75	20	
300N	29	22	56	1.4	110	67	25	
400N	18	16	50	0.9	90	29	5	
GL5E500N	37	28	60	1.1	65	96	70	
GL5E100S	46	29	46	1.6	145	61	15	
200S	38	25	61	1.2	55	73	140	
300S	31	18	58	0.7	30	37	25	
400S	59	31	68	0.9	60	140	25	
500S	56	27	73	1.1	35	109	15	
GL5E600S	41	24	63	0.9	20	103	30	
GL6E100N	17	26	30	1.4	160	41	55	
200N	30	24	63	0.9	35	64	20	
300N	33	23	58	0.8	65	59	35	
400N	27	19	53	0.8	80	60	5	
500N	36	25	49	0.9	80	78	30	
GL6E600N	21	22	46	0.7	85	70	45 *	
GL6E100S	29	23	60	1.0	35	50	40	
200S	58	28	65	1.3	10	109	70	
300S	49	24	46	1.4	50	75	15	
400S	64	39	51	1.2	60	340	15	
500S	40	24	58	1.0	20	104	10	
GL6E600S	48	26	63	1.2	30	255	5	
GL7W350S	230	150	162	2.9			1150	72
400S	146	50	81	1.2			70	44 *
450S	36	185	208	1.8			235	49
469S	44	210	215	1.6			380	82
530S	74	330	338	7.6			350	1410 *
550S	72	125	220	2.4			635	160
600S	67	84	201	1.8			95	92
GL7W650S	34	34	69	0.8			20	9
GL7W700S	42	52	152	0.9			35	57
GL7E100N	25	22	53	1.1	45	60	<5	
200N	24	21	51	0.7	10	52	5	
300N	26	24	53	0.6	20	59	5	
400N	17	20	42	0.8	40	128	<5	
GL7E500N	16	20	37	0.7	65	53	<5	
GL7E100S	16	20	15	1.9	195	34	<5	
200S	14	30	50	0.7	30	53	<5	
300S	20	24	20	0.7	110	49	5	
400S	17	24	38	0.7	85	71	<5	
500S	42	30	54	0.8	25	110	10	
GL7E600S	29	34	67	1.0	55	116	<5	
GL8E100N	13	22	31	1.3	90	39	<5	
200N	10	18	29	0.5	105	46	5	
300N	17	24	52	0.6	80	76	10	
400N	13	22	37	0.5	90	57	5	*
GL8E500N	13	20	32	0.7	90	32	5	
GL8E100S	32	26	55	1.2	70	62	10	
200S	4	14	12	0.8	65	18	<5	
300S	33	28	49	1.7	45	94	15	
400S	36	25	52	1.0	55	112	5	
500S	26	26	57	0.9	20	90	5	
GL8E600S	25	25	44	0.9	80	81	5	
GL2W150S	21	46	75	1.2			15	19**
200S	31	240	131	1.6			10	33*
225S	75	1950	900	44.0			450	89**
250S	7	30	57	1.1			5	47**
300S	33	116	164	3.6			50	52*
350S	42	920	625	46.0			740	329
400S	20	40	63	0.7			30	18
450S	18	52	52	0.6			45	17
500S	21	51	79	0.6			255	11
550S	20	47	90	0.7			60	7*
575S	24	48	83	0.6			10	12*
600S	19	36	47	0.5			25	6
650S	23	28	56	0.6			5	17
700S	20	35	65	0.4			10	33
750S	31	28	70	0.4			10	21
850S	36	33	73	0.6			5	24
950S	27	30	64	0.4			<5	20
1000S	35	37	85	0.5			10	53
1100S	21	28	50	0.5			5	9
1150S	28	36	58	0.4			15	11
1200S	28	29	57	0.5			5	9
1250S	31	35	65	0.5			10	19
1300S	28	32	65	0.5			10	24
GL2W1350S	39	39	80	0.5			5	31
GL2W440S	24	34	85	0.7			110	10
GB 164	21	20	44	0.5	40	111	70	
65	23	22	62	0.6	40	118	5	
66	24	26	71	1.0	20	109	<5	
67	20	25	71	0.8	100	100	20	
68	23	28	88	1.1	50	108	10	
69	17	20	64	0.8	30	88	75	

* -40 Mesh ** -20 Mesh

GEOLOGICAL BRANCH
ASSESSMENT REPORT

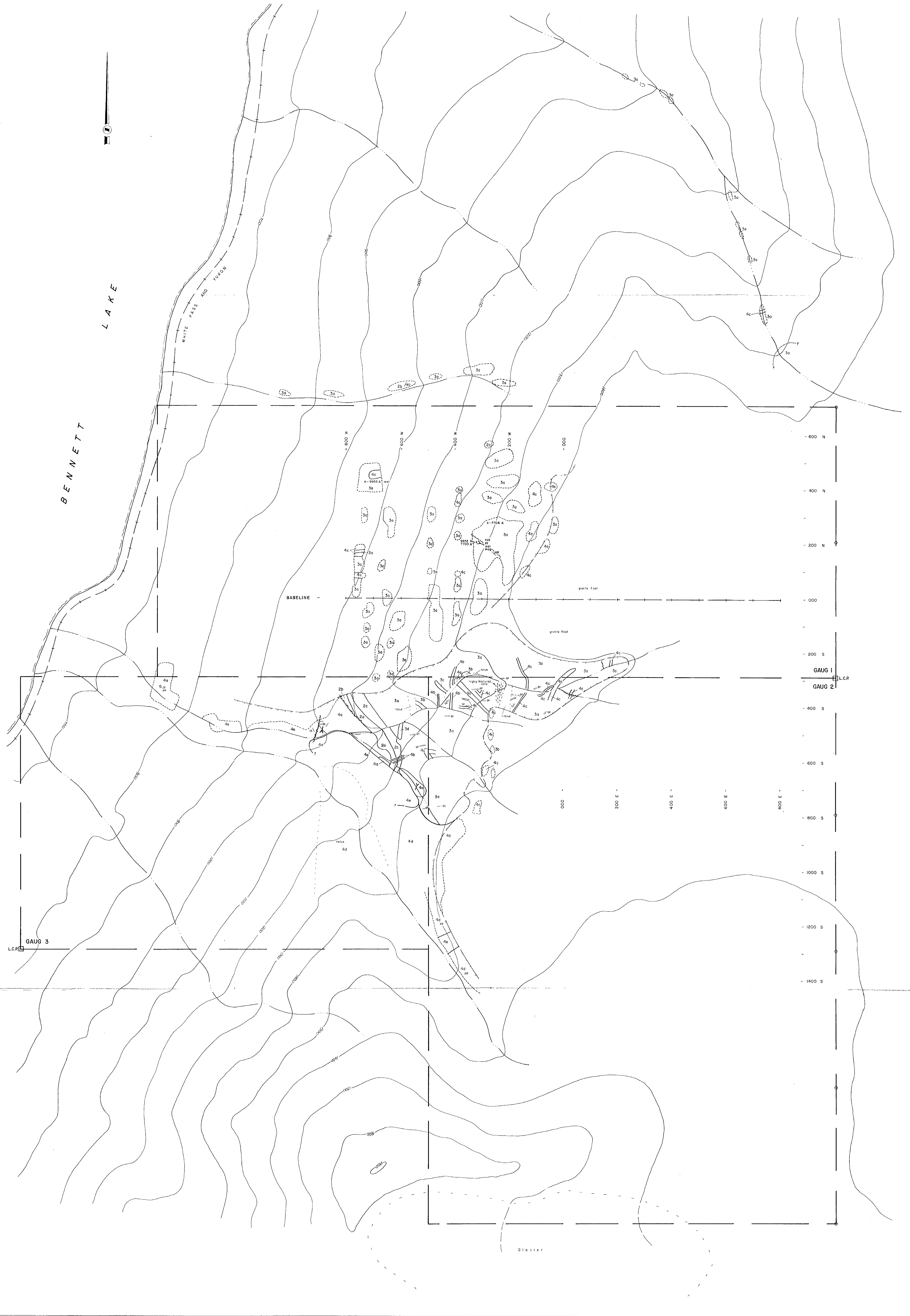
11,044

DUPONT EXPLORATION
CANADA

KULTA PROJECT
GAUG CLAIMS
GEOCHEMISTRY
Au, Ag, As, Cu, Hg, Pb, Sb, & Zn
ATLIN LAKE AREA, BRITISH COLUMBIA

SCALE 1 : 5000
m 150 100 50 0 150 300 m
1 INCH = FEET

MAPPED BY	JTN HC	REVISED	N T S No.	104 M 15W
DATE	JUNE 1982		ACCT No	351 - 36
DRAWN BY	CLS			
DATE	JANUARY 1983		DRWG No	KU. 82-7



LEGEND

CRETACEOUS

MOUNT NANSEN GROUP (?)

4
- a. rhyolite
- b. dacite
- c. andesite
- d. basalt
- e. tuff

COAST MOUNTAIN INTRUSIONS

3
- a. granodiorite
- b. quartz diorite
- c. diorite
- d. aplite dyke

LOWER JURASSIC

LABERGE GROUP

2
- a. siltstone
- b. limestone
- c. phyllite (derived from 2a)

OUTCROP

CONTACT

ASSUMED CONTACT

FAULT OR SHEAR

75 BEDDING — STRIKE AND DIP

68 VEIN — STRIKE AND DIP

ADIT

X—7700 A ROCK SAMPLE LOCATION WITH SAMPLE NUMBER

G GOSSAN

cpy CHALCOPYRITE

py PYRITE

po PYRRHOTITE

pp PORPHYRITIC

mal MALACHITE

mag MAGNETITE

qv QUARTZ VEIN

top ESCARPMENT

ELEVATION CONTOURS IN 100 METRE INTERVALS

1982 ASSAY RESULTS

Sample	Cu %	Pb %	Zn %	Ag oz/T	As %	Au oz/T	Sb %
7700 A	9.490	.01	.10	2.74	.05	.004	.01
9952	3.260	.01	.10	.83	.16	.002	.01
9953 A	.585	.01	.02	.50	.08	.003	.01

Sample	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
7706 A	1670	47	116	4.3	100

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,044

DUPONT CANADA EXPLORATION

KULTA PROJECT
GAUG CLAIMS

GEOLOGY

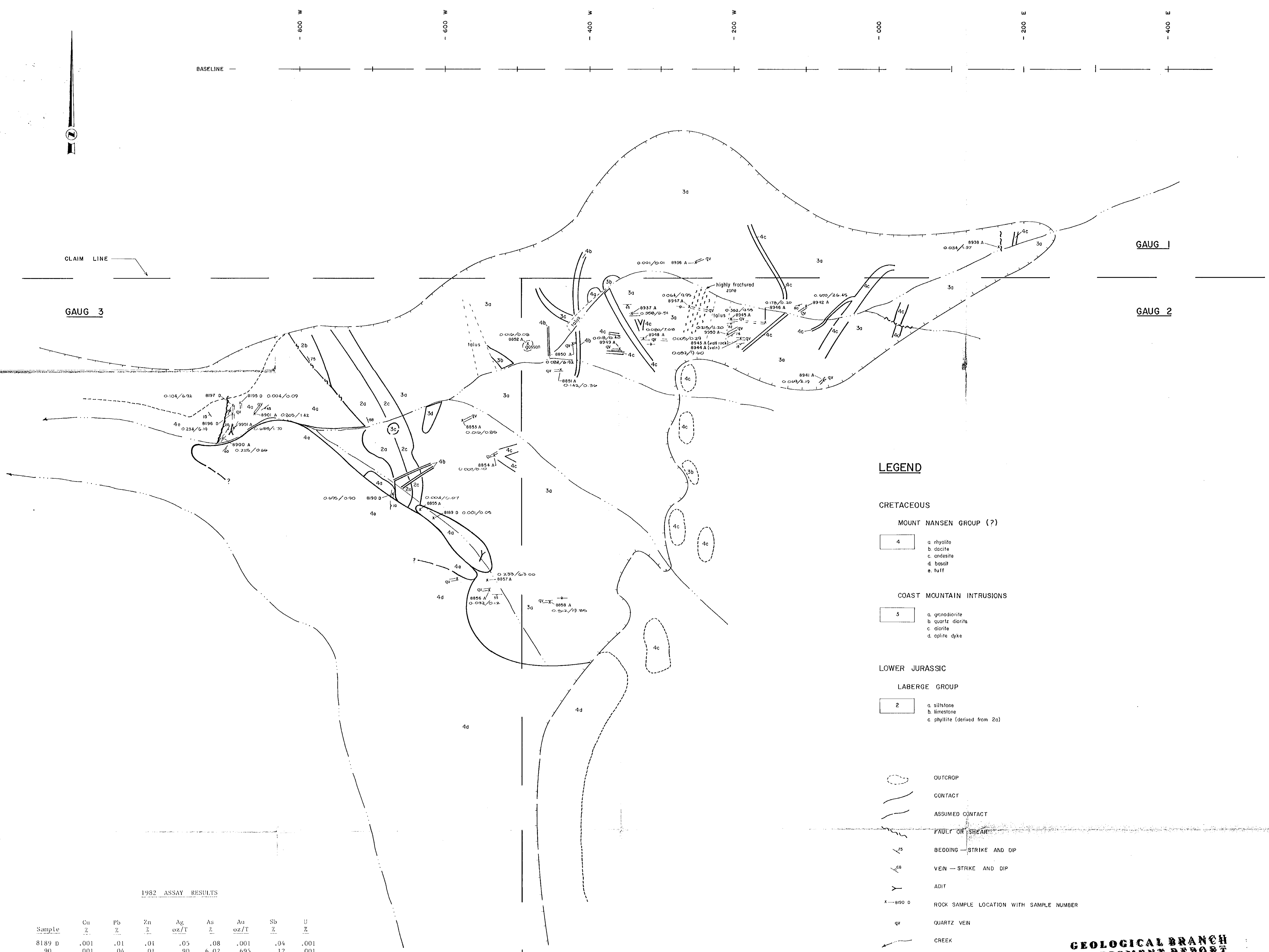
ATLIN LAKE AREA, BRITISH COLUMBIA

SCALE 5000

m 150 100 50 0 150 300 m

1 INCH = FEET

MAPPED BY	JTN HC	REVISED	N.T.S. No 104 M 15W
DATE	JUNE 1982		ACCT No 351 - 36
DRAWN BY	CLS		DRWG No KU. 82-5
DATE	JANUARY 1983		



LEGEND

CRETACEOUS

MOUNT NANSEN GROUP (?)

4
- a. rhyolite
- b. dacite
- c. andesite
- d. basalt
- e. tuff

COAST MOUNTAIN INTRUSIONS

3
- a. granodiorite
- b. quartz diorite
- c. diorite
- d. aplite dyke

LOWER JURASSIC

LABERGE GROUP

2
- a. siltstone
- b. limestone
- c. phyllite (derived from 2a)

OUTCROP

CONTACT

ASSUMED CONTACT

FAULT OR SHEAR

BEDDING — STRIKE AND DIP

VEIN — STRIKE AND DIP

ADIT

ROCK SAMPLE LOCATION WITH SAMPLE NUMBER

QUARTZ VEIN

CREEK

ESCARPMENT

0.034/1.57 Au/Ag VALUE IN OZ/T

1982 ASSAY RESULTS

Sample	Cu %	Pb %	Zn %	Ag oz/T	As %	Au oz/T	Sb %	U %
8189 D	.001	.01	.01	.05	.08	.001	.04	.001
90	.001	.04	.01	.90	6.02	.695	.12	.001
95	.001	.02	.01	.09	.89	.004	.04	.001
96	.001	.45	.02	6.19	4.75	.234	.09	.001
8197 D	.001	1.08	.01	6.92	5.55	.104	.08	.001
8900 A	.090	.05	.04	.66	9.25	.225	.01	
8901	.021	.09	.01	1.42	17.60	.805	.05	
8936	.013	.01	.01	.01		.001	.01	
8937	.069	.30	.41	6.51		.358		.001
8938	.710	.01	.13	1.57		.034	.28	
8941	.016	3.53	1.18	4.19		.069		.001
42	.110	6.44	5.94	26.45		.670		.001
43	.004	.05	.13	.29		.005		.001
44	.092	.44	.24	9.60		.052		.001
45	.101	.02	.32	9.55		.352		.001
46	.002	.01	.02	.20		.178		.001
47	.043	.33	.89	9.95		.064		.001
48	.010	4.96	.07	7.08		.080		.001
8949	.003	.13	.08	.40		.018		.001
8850 A	.060	.95	.66	6.92		.082		.001
51	.001	.26	.01	.36		.142		.001
52	.001	.02	.01	.08		.016		.001
53	.005	.46	.16	.85		.016		.001
54	.002	.02	.06	.10		.007		.001
55	.002	.01	.01	.07		.004		.001
56	.005	.03	.01	.12		.032		.001
57	.955	2.48	1.39	63.00		.233		.001
8858	.259	.90	.76	19.85		.512		.001
9950	.035	2.36	4.93	11.20	5.26	.215	10.40	
51	.006	.22	.07	1.70	20.50	.685	.17	

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,044

DUPONT CANADA **EXPLORATION**

KULTA PROJECT
GAUG CLAIMS

DETAILED GEOLOGY

ATLIN LAKE AREA, BRITISH COLUMBIA

1 : 2500

m 75 50 25 0 75 150 m

SCALE

0
1 INCH = FEET

MAPPED BY :	JTN HC	REVISED :	N.T.S. No. : 104 M 15 W
DATE :	JUNE 1982		ACCT No. : 351 - 36
DRAWN BY :	CLS		
DATE :	JANUARY 1983		DRWG. No. : KU. 82-6