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10/84

GALLANT GOLD MINES LTD.

GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL SURVEYS

Report on the

PERRY CREEK PROPERTY

FORT STEELE MINING DIVISION

BRITISH COLUMBIA

NTS 82 F/84, 9E

November 1985

L. Dandy, B.Sc.
A.G. Troup, P.Eng.

FILMED

CLAIMS WORKED

CLAIMS

RECORDS

ANNIVERSARIES

PETRA 9 15	799 805	19 OCT
LUKE	137	24 NOV
QUARTZ CREEK	98	4 NOV
LONE EAGLE	97	4 NOV

GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,211

Location: ~~49°29' / 116°06'~~ 49°34' 116°03.5'
Owners: Gallant Gold Mines Ltd.
Operator: Gallant Gold Mines Ltd.
Consultant: A.G.Troup, P.Eng., Archean Engineering Ltd.
Project Geologist: L. Dandy, B.Sc., Mark Management Ltd.

GALLANT GOLD MINES LTD.
GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL SURVEYS
PERRY CREEK PROPERTY
FORT STEELE MINING DIVISION
NTS 82F/8,9

SUMMARY

The Perry Creek gold prospect is located 23 kilometres west of Cranbrook in southeastern B.C. The property consists of 96 units in several non-contiguous claim blocks paralleling Perry Creek in the Moyie Range of the Purcell Mountains. This area has been prospected for both placer and lode gold since the mid 1800's.

The property is underlain predominantly by sedimentary rocks of the Creston and Kitchener Formations. Microdiorite bodies belonging to the Moyie Intrusions have been emplaced along regional shear zones that crosscut these sediments. All three rock units belong to the Purcell Supergroup.

During the 1985 field programme, backhoe trenching, geological, geochemical and geophysical surveys were carried out over areas highlighted by previous surveys.

Results of the property work completed to date suggest that lode gold mineralization in the Perry Creek area is associated with quartz veins, quartz stockworks and siliceous zones in the vicinity of microdiorite bodies. Future exploration programmes should focus on further exposing these zones through geochemistry, geophysics, backhoe trenching and diamond drilling.

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PERRY CREEK PROPERTY
FORT STEELE MINING DIVISION
NTS 82F/8,9

1. INTRODUCTION

The Perry Creek property is a gold prospect comprised of several claim blocks located along the west side of Perry Creek, 23km southeast of Kimberley, B.C. In 1985, an exploration programme was carried out to search for the source of placer gold found in Perry Creek. Geological, geochemical and geophysical work was carried out by a Mark Management crew of two during the period October 7 - 28. The programme was supervised by Mark Management project geologist L. Dandy under the direction of Archean Engineering consulting geologist A.G. Troup.

1.1 Location and Access

The property is situated on the west side of Perry Creek approximately 20km south-southwest of Kimberley and approximately 23km west-southwest of Cranbrook. It centres on latitude $49^{\circ}29'N$ and longitude $116^{\circ}6'W$ (Map 1.1).

Access to the property is provided by a good, active logging road which leaves the Kimberley-Cranbrook highway at Wycliffe. Numerous new side-haulage roads and old pack trails provide good access to many of the areas of interest.

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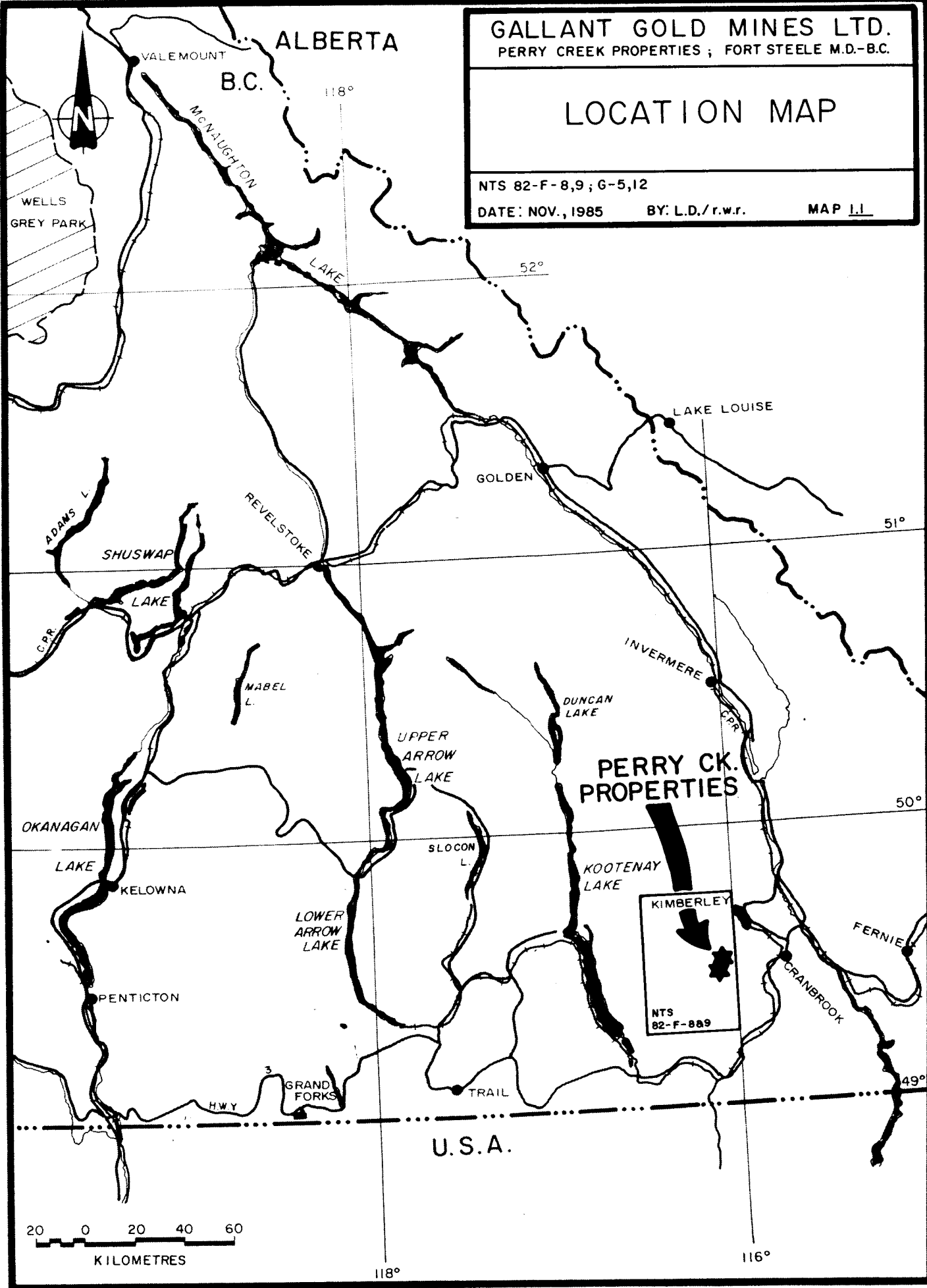
LOCATION MAP

NTS 82-F-8,9 ; G-5,12

DATE: NOV., 1985

BY: L.D./r.w.r.

MAP 1.1



20 0 20 40 60
KILOMETRES

U.S.A.

**PERRY CK.
PROPERTIES**

KIMBERLEY
NTS
82-F-889

1.2 Physiography

The property is situated in the Moyie Range of the Purcell Mountains. Maximum relief is approximately 3000 feet (914m) ranging from 4000 feet (1219m) to 7000 feet (2133m). The highest elevation in the immediate area is Grassy Mountain at 8174 feet (2491m). The major portion of the property is drained by northeasterly flowing Perry Creek and its associated east-southeasterly flowing side drainages. Lakes are scarce on the property, although small lakes reminiscent of tarns occur at higher elevations just outside of the property boundary.

Precipitation is high, from 16" to 72" (41 to 183cm). A moderate snow cover falls during normally severe winters. The mean daily temperature is 16° to 18° in July and -5° to -10° in January.

The claim area is well timbered with Engelmann spruce, alpine fir, lodgepole pine, white bark pine, alpine larch, limber pine, Douglas fir, western white pine and contains thinly dispersed growths of underbrush in the creek bottoms. Generally, travel by foot is pleasant and quick except in the steeper terrain.

The area has been glaciated and is covered by glacial material of variable thickness. Small drumlin-like features striking north-northeast are present in some areas, but no direction of ice movement can be discerned from these.

1.3 Claim Information

The claims on which work was conducted this year are listed on the title page of this report. The property consists of eleven modified grid mineral claims, 29 two-post claims and nine crown grants (Map 1.3) all within the Fort Steele Mining Division. Pertinent claim information including record numbers and expiry dates are given in Table 1.3.

TABLE 1.3

Claim Status

Claim Name	Units	Record No.	Expiry Date
Petra 9 - 15	7	799-805	Oct. 19, 1987
Linda 1 - 8	8	809-816	Nov. 5, 1987
Carol 1 - 8	8	817-824	Nov. 5, 1987
Eclipse (L10223)	1	343	Nov. 7, 1987
Anna (L10224)	1	344	Nov. 7, 1987
Standard (L10225)	1	345	Nov. 7, 1987
Agnes (L10226)	1	346	Nov. 7, 1987
Pioneer (L10227)	1	347	Nov. 7, 1987
Oyster (L10228)	1	348	Nov. 7, 1987
Evening Star (L10229)	1	349	Nov. 7, 1987
Mark	6	136	Nov. 24, 1988
Luke	9	137	Nov. 24, 1988
John	4	138	Nov. 24, 1987
Janet	1	86	Oct. 22, 1987
Janet 1	4	87	Oct. 22, 1987
Gold	10	148	Feb. 4, 1988
Azlin	6	394	Nov. 16, 1987
Birdie Load	1	395	Nov. 16, 1987
Golden Wolfe	4	396	Nov. 16, 1987
Ariadna 1 - 6	6	1057-62	Sept. 10, 1988
Tanis	4	149	Feb. 4, 1988
Peter Rock	9	397	Nov. 16, 1988
Lone Eagle (L14951)	1	97	Nov. 4, 1990
Quartz Creek (L14952)	1	98	Nov. 4, 1990

1.4 History

The Perry Creek area has been prospected for placer and lode gold since the mid 1800's. Most of the placer activity took place at Old Town, with only minor work done upstream. At present, the placer rights to Perry Creek are held by several different miners, most of whom work their claims seasonally. Mr. Zimmerman of Cranbrook, B.C. has the largest operation in progress. His placer claims overlap with Gallant's JOHN, MARK and BIRDIE LOAD mineral claims. In searching for lode gold, prospectors of the past explored quartz veins and ledges by putting in adits, shafts and hand trenches. Some of the veins carried gold and although no major deposit was discovered, several small ore shipments are reported.

Research of old literature and the discovery of old workings prompted Gallant Gold Mines Ltd. to restake the area. Since then, Gallant Gold Mines Ltd. has carried out programmes of prospecting, geologic mapping and rock chip sampling; soil, silt and heavy mineral concentrate sampling; VLF-electromagnetic, fluxgate and proton magnetometer surveys and bulldozer and backhoe trenching.

1.5 Work Done by Gallant Gold Mines in 1985

In 1985, field work was conducted by Gallant Gold Mines Ltd. from October 7 to 28. During this period the following work was completed:

- 1) Detailed soil sampling was carried out over sediment/intrusive contacts, shear zones and areas of mineralized quartz veins. Samples underwent a 30-element ICP analysis.
- 2) Bulk soil sampling (approx. 50lbs.) was carried out over sediment/intrusive contacts, shear zones and areas of mineralized quartz veins. These samples were concentrated by panning then underwent a heavy mineral separation and a 30-element ICP analysis.
- 3) Two detailed proton magnetometer surveys were conducted in an attempt to delineate shear zones and contacts between the microdiorite bodies and the sediments.
- 4) Backhoe trenching was carried out over the Petra, Luke and Quartz Hill claims in an attempt to locate mineralized shears and contacts between the microdiorite bodies and the sediments.
- 5) Heavy mineral sampling was done on the Quartz Hill claims and on the Luke claims along Manchester Creek, crossing shear zones and contacts.

2. GEOLOGY

2.1 General Geology

The regional geology of the Perry Creek area north of 44° 30' was mapped (1 inch = 1 mile scale) by G.B. Leech, of the Geological Survey of Canada, from 1950 to 1952. This data is compiled on Map 15 - 1957, St. Mary Lake Map Sheet. The geology south of 44° 30' was mapped (1:50,000 scale) by J.E. Reesor also of the Geological Survey of Canada in 1980 and 1981. This is available in Open File 820 (1981). A compilation of these two maps is presented on Map 2.1

The property is underlain predominantly by Proterozoic age rocks of the Purcell Supergroup. The Moyie Microdiorite dykes and stocks occur within argillite, siltstones, and quartzites of the Creston and Kitchener Formation. In the northeast corner of the property sediments belonging to the Lower Cambrian Cranbrook and Eager Formations lie unconformably on the Kitchener Formation sediments.

From youngest to oldest the stratigraphic sequence is as follows:

CENOZOIC:

Pleistocene and Recent tills and gravels.

MESOZOIC or CENOZOIC:

Granodiorite, quartz monzonite, and pegmatite.

PALEOZOIC:

Lower Cambrian: Eager Formation.

Lower Cambrian: Cranbrook Formation.

PROTEROZOIC:

Moyie Intrusions

Purcell Supergroup including:

Dutch Creek Formation.

Kitchener-Siyeh Formation.

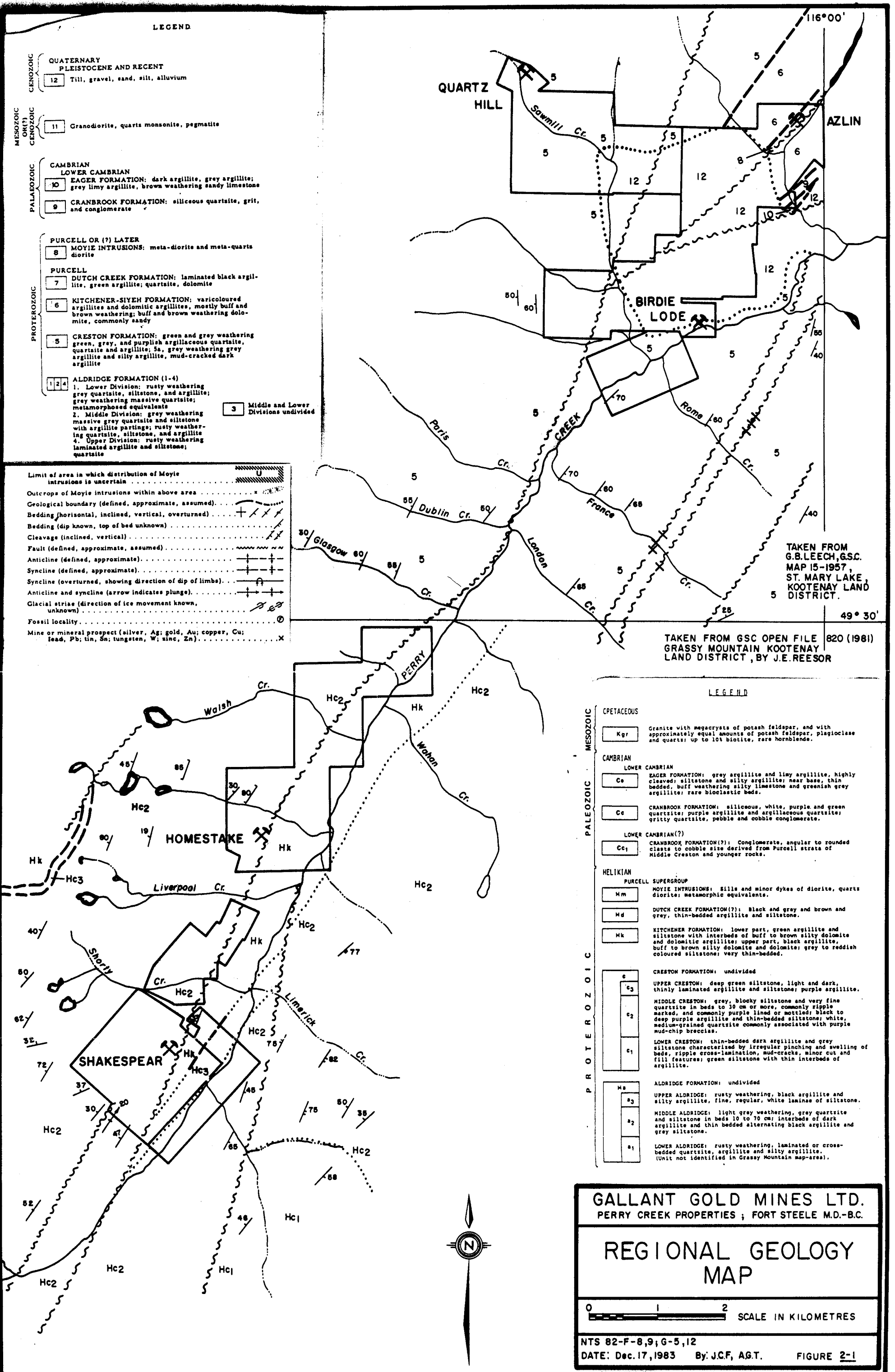
Creston Formation.

Aldridge Formation.

LEGEND

- QUATERNARY PLEISTOCENE AND RECENT**
 - 12 Till, gravel, sand, silt, alluvium
- MESOZOIC OR (?) GENOZOIC**
 - 11 Granodiorite, quartz monzonite, pegmatite
- CAMBRIAN LOWER CAMBRIAN**
 - 10 EAGER FORMATION: dark argillite, grey argillite; grey limy argillite, brown weathering sandy limestone
 - 9 CRANBROOK FORMATION: siliceous quartzite, grit, and conglomerate
- PURCELL OR (?) LATER**
 - 8 MOYIE INTRUSIONS: meta-diorite and meta-quartz diorite
- PURCELL**
 - 7 DUTCH CREEK FORMATION: laminated black argillite, green argillite; quartzite, dolomite
- PROTEROZOIC**
 - 6 KITCHENER-SIYEH FORMATION: varicoloured argillites and dolomitic argillites; mostly buff and brown weathering; buff and brown weathering dolomite, commonly sandy
 - 5 CRESTON FORMATION: green and grey weathering green, grey, and purple argillaceous quartzite, quartzite and argillite; 5a, grey weathering grey argillite and silty argillite, mud-cracked dark argillite
 - 124 ALDRIDGE FORMATION (1-4)
 - 1. Lower Division: rusty weathering grey quartzite, siltstone, and argillite; grey weathering massive quartzite; metamorphosed equivalents
 - 2. Middle Division: grey weathering massive grey quartzite and siltstone with argillite partings; rusty weathering quartzite, siltstone, and argillite
 - 3. Upper Division: rusty weathering laminated argillite and siltstone; quartzite
 - 3 Middle and Lower Divisions undivided

- Limit of area in which distribution of Moyie intrusions is uncertain
- Outcrops of Moyie intrusions within above area
- Geological boundary (defined, approximate, assumed)
- Bedding (horizontal, inclined, vertical, overturned)
- Bedding (dip known, top of bed unknown)
- Cleavage (inclined, vertical of bed)
- Fault (defined, approximate, assumed)
- Anticline (defined, approximate)
- Syncline (defined, approximate)
- Syncline (overturned, showing direction of dip of limbs)
- Anticline and syncline (arrow indicates plunge)
- Glacial striae (direction of ice movement known, unknown)
- Fossil locality
- Mine or mineral prospect (silver, Ag; gold, Au; copper, Cu; lead, Pb; tin, Sn; tungsten, W; zinc, Zn)



TAKEN FROM G.B. LEECH, G.S.C. MAP 15-1957, ST. MARY LAKE, KOOTENAY LAND DISTRICT.

TAKEN FROM GSC OPEN FILE 820 (1981) GRASSY MOUNTAIN KOOTENAY LAND DISTRICT, BY J.E. REESOR

LEGEND

- CRETACEOUS**
 - Kgr Granite with megacrysts of potash feldspar, and with approximately equal amounts of potash feldspar, plagioclase and quartz; up to 10% biotite, rare hornblende.
- CAMBRIAN LOWER CAMBRIAN**
 - Ce EAGER FORMATION: grey argillite and limy argillite, highly cleaved; siltstone and silty argillite; near base, thin bedded, buff weathering silty limestone and greenish grey argillite; rare bioclastic beds.
 - Cc CRANBROOK FORMATION: siliceous, white, purple and green quartzite; purple argillite and argillaceous quartzite; gritty quartzite, pebbles and cobble conglomerate.
- LOWER CAMBRIAN (?)**
 - Cc1 CRANBROOK FORMATION(?): Conglomerate, angular to rounded clasts to cobble size derived from Purcell strata of Middle Creston and younger rocks.
- HELIXIAN PURCELL SUPERGROUP**
 - Mm MOYIE INTRUSIONS: sills and minor dykes of diorite, quartz diorite; metamorphic equivalents.
 - Md DUTCH CREEK FORMATION(?): black and grey and brown and grey, thin-bedded argillite and siltstone.
 - Mk KITCHENER FORMATION: lower part, green argillite and siltstone with interbeds of buff to brown silty dolomite and dolomitic argillite; upper part, black argillite, buff to brown silty dolomite and dolomite; grey to reddish coloured siltstone; very thin-bedded.
- PROTEROZOIC**
 - CRESTON FORMATION: undivided
 - c UPPER CRESTON: deep green siltstone, light and dark, thinly laminated argillite and siltstone; purple argillite.
 - c2 MIDDLE CRESTON: grey, blocky siltstone and very fine grained siltstone in beds to 30 cm or more, commonly ripple marked, and commonly purple lined or mottled; black to deep purple argillite and thin-bedded siltstone; white, medium-grained quartzite commonly associated with purple mud-chip breccias.
 - c1 LOWER CRESTON: thin-bedded dark argillite and grey siltstone characterized by irregular pinching and swelling of beds, ripple cross-lamination, mud-cracking, minor cut and fill features; green siltstone with thin interbeds of argillite.
 - ALDRIDGE FORMATION: undivided
 - a3 UPPER ALDRIDGE: rusty weathering, black argillite and silty argillite, fine, regular, white laminae of quartzite.
 - a2 MIDDLE ALDRIDGE: light grey weathering, grey quartzite and siltstone in beds 10 to 70 cm; interbeds of dark argillite and thin bedded alternating black argillite and grey siltstone.
 - a1 LOWER ALDRIDGE: rusty weathering, laminated or cross-bedded quartzite, argillite and silty argillite. (Unit not identified in Grassy Mountain map-area).

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REGIONAL GEOLOGY MAP

0 1 2 SCALE IN KILOMETRES

NTS 82-F-8,9; G-5,12 DATE: Dec. 17, 1983 By: J.C.F., A.G.T. FIGURE 2-1

The following descriptions of the units present on the Perry Creek Properties are taken from G.S.C. publications.

PROTEROZOIC-Creston Formation: The Creston Formation has been subdivided into three units, provisionally called Lower (Hc₁), Middle (Hc₂) and Upper Creston (Hc₃). The Lower Creston is dominated by thin-bedded alternating argillite and siltstone, with a total thickness of about 1000 metres. Bedding varies in thickness from millimetres to centimetres and individual beds commonly vary rapidly in thickness from a few millimetres to 1 or 2 cm. Primary features are abundant; mudcracks, pull-apart structures, small cut and fill features, and ripple cross-laminations being the most common. Rocks are commonly green to greenish-grey; a weathering of this rock type often produces brown limonitic staining on joint faces. The contact with the underlying Upper Aldridge Formation is placed at the horizon where the red rusty, even bedded, black, white lined argillite grades into very uneven, pinching and swelling beds of green to greenish grey argillite and siltstone, commonly characterized by mudcracks and other shallow water features. None of the latter features exists in the Upper Aldridge Formation, within this map area; however, a few units, 5 to 10 metres thick, of black argillite typical of the Upper Aldridge, are found above the Lower Creston contact as mapped.

In the upper portion of the Lower Creston, is a green argillaceous siltstone, 10-15cm thick; this unit becomes increasingly more common even though much of the section remains typically thin bedded. The upper section of the Lower Creston is often a cliff forming unit when it occurs at higher elevations. This feature is not so much the result of increased competence of the silty layers, but rather, it is due to breakage along vertical to near vertical joint faces.

The contact with the overlying Middle Creston is marked by the beginning of thick-bedded, grey argillaceous siltstone commonly intercalated with thin-bedded units of deep-purple to almost black argillite. The grey argillaceous siltstone is characteristically marked with purple laminae or irregular purple mottling. This unit is also a cliff former and is characterized by blocky fractures within a relatively competent succession. Dip slopes and slabs commonly show extremely well-preserved symmetrical wave ripples. Thicker successions of black to deep purple argillite may show mud cracks, and thin beds or lenses of medium-grained

white quartzite are commonly topped with purple mud-chip breccias. The Middle Creston is about 1000 metres thick.

The transition to the Upper Creston is marked by deep green siltstone or very-fine quartzite interbedded with green argillite, purple argillite, light- and dark-green argillite or silty argillite. Although the deep green siltstone beds can be up to 20cm in thickness, most beds vary from a few millimetres to a maximum of 3 centimetres. This unit is at most 300 metres thick.

The contact between the Creston and Kitchener Formation (Hk) is transitional over several tens of metres. The contact is mapped solely on the basis of the increasing proportion of carbonate-bearing rocks, dolomitic siltstone, or silty dolomite. Due to the lack of exposure or faulting, this contact is often difficult to identify.

Kitchener Formation: The Kitchener Formation is commonly exposed in thin fault slices or beneath the Lower Cambrian unconformity so that over most of the area only partial sections have been preserved. The lower portion of the Kitchener Formation contains abundant green weathered argillite and siltstone similar in character to the Creston Formation. In outcrop, it consists of very thin beds of green argillite, grey-green calcareous argillite, green siltstone and brown or buff weathering dolomitic siltstone. The upper portion of the Kitchener Formation weathers to a grey to black, brown, or buff coloured, thinly bedded succession which on a fresh surface consists of black argillite, silty dolomite, or dolomitic siltstone.

Moyie Intrusion: Moyie Intrusions (Hm) are found throughout the Purcell Supergroup, with the possible exception of the Dutch Creek(?) Formation. The intrusions consist mainly of sills and minor dikes that range up to 100 metres in thickness and are most common in the Middle Aldridge. Sills occur most generally in groups of several individuals and consist of metadiorite and metaquartz diorite, though in some localities original diabase interlocking textures may be found. In these zones the enclosing sediments show contact metamorphism with development of biotite up to 2 mm and in places garnet up to 1 mm.

PALAEZOIC-Lower Cambrian: Lower Cambrian strata are preserved along several fault slices in the region. This strata rests with profound unconformity on Purcell Supergroup rocks as far down as Middle Creston. The Cambrian rocks are subdivided into two units, Cranbrook (Cc) and Eager Formations (Ce).

Cranbrook Formation: The Cranbrook Formation typically consists of white, rarely pink or green, medium- to fine-grained, locally crossbedded quartzite in beds up to 1 metre thick. Near the base, are found some hematite-rich quartzite beds as well as purple or olive green argillite. Translucent purple coloured quartz grains up to 4 mm in size are dispersed in some beds. In places lenses or thin beds of pebble conglomerate occur near the base of the Cranbrook Formation, with angular to rounded clasts of quartzite, argillaceous siltstone, white milky quartz and argillite. Rarely, worm tracks can be found on shaley interbeds between quartzite beds and vertical worm burrows can be found in some quartzite beds.

In addition to abundant white quartzite, medium- to fine-grained quartzite, purple argillite and conglomerate are also present in this formation. Conglomerate consists of angular to rounded pebbles, cobbles and boulders of argillite, siltstone and fine-grained quartzite commonly purple lined or purple mottled and clearly derived from Middle Creston strata. Such conglomerate beds are found within a succession of purple quartzite, purple argillite and other rocks lithologically very similar to some horizons of the Middle Creston. For example, a few isolated exposures of conglomerate, tentatively mapped as Cranbrook Formation, are found east of Goat River and south of the main occurrences of this Lower Cambrian strata. Angular, sub-rounded and rounded clasts, occasionally greater than 10 cm in diameter and derived from Purcell Supergroup strata as old as Middle Creston, are often incorporated in the younger Cranbrook Formation. This conglomerate is lithologically similar to the westernmost occurrences of Lower Cambrian conglomerates and shows, if they are indeed of Lower Cambrian age, that Cranbrook Formation rested on Purcell strata well below the Kitchener Formation just as it does along its western exposures.

Eager Formation: The Lower Cambrian Eager Formation conformably overlies Cranbrook quartzite. It consists of thin bedded grey- to olive-grey argillite and grey siltstone with, near the base, silty limestone, carbonate bearing argillite

and slate, thin, bioclastic units and argillaceous limestone. These contain *Olenellus* (GSC Loc. 98008) and other fossil fragments of Early Cambrian age. A fossiliferous horizon has been found in each of the fault slices west of Mallandaine Creek and upper Goat River.

The true thickness of the Eager Formation is difficult to estimate because the rocks are highly cleaved, folded and probably faulted and consequently beds are often repeated. It is certainly not less than 1000 metres thick.

2.2.1 Property Geology

Backhoe trenching was carried out during the 1985 field programme on the Petra, Luke and Quartz Hill claims. Logging roads provided easy access to the area and ground control was obtained with the aid of a hip-chain, compass and altimeter. All areas mapped between logging roads were tied into reference points established along logging roads. See Maps 2.2.1 through 2.2.8 and Table 3.3.3 for assay values, locations and description of samples.

Bedrock is best exposed at elevations above 4900' and along road cuts. In the valley of Perry Creek outcrops are poor or non-existing.

The valley of Perry Creek, on the Petra claims, is underlain by the Middle Creston, a sequence of medium bedded, grey to maroon, fine grained quartzite. Intercalated within this quartzite are thin beds, up to 5cm wide, of grey phyllite. A stockwork of quartz veinlets, up to 7cm wide, is found within the quartzite. A few of these narrow stringers carry up to 2% hematite, minor chalcopryrite and galena.

To the west the latter sequence is overlain by the Upper Creston succession of thinly interbedded, light and dark green argillites and green siltstone. At some locations this package takes on a strong, phyllitic appearance. The sequence appears relatively unaltered throughout its entirety.

The Kitchener formation overlies the Upper Creston formation further to the northwest. The former consists of a black, calcareous, argillite intercalated with a thin-bedded, grey, phyllitic argillite. The black argillite is often cut by calcite veinlets which both parallel and crosscut bedding. At one location, on Shorty Creek, a 7cm wide quartz vein within the argillite parallels bedding and carries a minor amount of disseminated pyrite.

Above the Kitchener formation a sequence of interbedded black and green thin-bedded argillites and white, medium grained quartzite has been mapped. Beds within this unit show strong phyllitic characteristics in places. In addition, shallow water sedimentary features such as ripple cross-laminations and mud-cracks were observed within the sequence. These shallow water depositional structures place this sequence in the Middle Creston formation. A fault is inferred where the older Middle Creston overlies the younger Kitchener formation but no evidence of shearing has been mapped.

Microdiorite bodies, part of the Moyie Intrusions, have been mapped within the Kitchener and Middle Creston Formations. The microdiorite is generally medium grained but has porphyritic phases containing hornblende phenocrysts. One sample contained chalcopyrite and minor malachite mineralization. On the Petra claims and the Shorty Creek crown grants the microdiorite has been mapped in float only. It occurs within the Kitchener formation and has pervasive chlorite alteration.

Attempts to trench across the contact between the Moyie intrusive body and the Kitchener Formation argillites proved unsuccessful. Although three trenches were put in over and immediately uphill from the abundant microdiorite float, no microdiorite was encountered as bedrock. Since these trenches are on very steep terrain, the float does not appear to be a good indicator of bedrock type in this area.

On the Luke mineral claim a microdiorite body has been emplaced along the fault contact between the Middle Creston and Kitchener formations. The microdiorite has pervasive chloritization and quartz stockwork within it. The argillites on both the footwall and hanging wall are siliceous. This may be secondary silicification related to the intrusive event. Disseminated pyrite occurs in both the quartz stockwork within the microdiorite and the phyllite in the Kitchener formation.

On the John mineral claim a microdiorite dyke intrudes the Middle Creston formation. Intense chlorite alteration masks all primary textures and mineralogy within the dyke. Quartz stockwork occurs throughout much of this unit.

The Quartz Hill showing is located on an old Crown Grant (L14952) near the headwaters of Sawmill Creek, a tributary of Perry Creek.

The geological setting of the Quartz Hill showing and the surrounding Peter Rock Claim Block is very distinct from most of the other showings in the area. This area is underlain by Creston Formation sediments sandwiched between two diorite stocks. The two stocks, which may represent a repeated unit, are presently separated by the St. Mary Fault zone. Leech (1957) referred to this structure "...which is steep and, where exposed, marked by breccia, appears to represent dominantly vertical adjustment between tilting blocks but it has many of the characteristics of a strike-slip fault."

The Quartz Hill showings are scattered over a very large area and lie between the two stocks. Three centres of development work are known. The most important showing consists of a principal open pit and several small trenches. A second area, approximately 700 metres to the southwest, near the contact with one of the diorite stocks, consists of several shallow trenches, a shallow shaft collared in the diorite, and a large deep trench cutting a quartz stockwork. A third area, approximately 500 metres to the northwest of the open pit consists of numerous small pits and trenches in quartzites; however, no quartz veins have been observed.

In the open pit, a wide quartz vein appears to occupy a westerly plunging isoclinal fold structure. This quartz vein contains abundant pyrite, chalcopyrite, limonite and hematite, and lesser amounts of galena, malachite, bornite and free gold. Reports indicate that in 1973, 1,373 tons of quartz vein material were mined from this vein and returned 352 oz Au, 275 oz Ag and values in lead, zinc and copper. The "footwall" consists of argillite with hydrothermal alteration including bleaching, sericite and calcite development. The east wall of the pit consists of sheared and chloritized diorite; foliation outlining small scale secondary folds is present in the diorite. Southeast of this pit, quartz veins cutting diorite are exposed in several partially caved trenches. The veins contain limonite, hematite, minor pyrite and free gold which seems to be associated with local shearing.

2.2.2 Economic Geology

On this property gold mineralization is associated with quartz veins, quartz stockworks and siliceous zones in the vicinity of microdiorite bodies emplaced along regional shear zones in the sediments. The zones discovered to date run parallel to Perry Creek on the west side.

The shear zones are often filled by veins, irregular lenses and stringers of quartz containing boxwork, hematite, limonite, goethite, martite pseudomorphs after pyrite and occasionally gold, silver, galena, sphalerite, chalcopyrite, malachite and bornite. Hydrothermal alteration of the wall rocks occurs as chlorite, sericite and talc schists. Contact metasomatism may occur marginal to microdiorite bodies.

These shear zones are topographically recessive, occurring between resistant ledges of siliceous sediments. This may be explained by the ease at which breccia, gouge and hydrothermally altered materials found in and marginal to these shears are eroded. For this reason it is possible that much of the mineralization associated with these shear zones is yet to be uncovered.

3. GEOCHEMISTRY

3.1 Soil Sampling

3.1.1 Sampling, Sample Preparation and Analytical Procedures

A total of 113 soil samples were taken along selected lines to assess favourable geologic contacts and shear zones. Samples were taken at 20 metre intervals along 4 east-west grid lines on the Petra claims, and along generally east-west trending lines and over areas of exposed quartz veining on the Quartz Hill claims. All samples were collected from the 'B' soil horizon with the aid of a lightweight mattock and were sent to Chemex Labs Ltd. in North Vancouver for analysis.

In the laboratory, the samples were oven dried at approximately 60°C. The dried samples were sieved to minus 35 mesh and the resulting coarse fraction was analysed for Au by atomic absorption after digestion with hot concentrated nitric and hydrochloric acids and for 30 elements (Al, Ag, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Ti, Tl, U, V, W and Zn) by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES) analysis.

3.1.2 Treatment, Presentation and Discussion of Results

In assessing the soil geochemical results, graphical statistical methods were used to separate background from anomalous metal concentration. Threshold and anomalous levels were determined at the mean plus two standard deviations ($\bar{x}+2s$) and the mean plus three standard deviations ($\bar{x}+3s$) respectively, from log probability plots prepared for each element. The results of this statistical study are shown in Table 3.1.1. Correlation coefficients were computed for various elements and are presented in Table 3.1.2. Sample locations and analytical results are shown on Maps 3.1.1 through 3.1.9.

High correlation coefficients are common for most elements in the 'B' horizon soil samples, except for zinc. Gold shows an association with copper, iron, silver, bismuth, lead and manganese. Silver shows a very high association with bismuth, lead and copper. Surprisingly, lead and zinc show a lower correlation coefficient than is common in base metal deposits.

Soil samples taken over the Quartz Hill pit area were highly anomalous in most elements, notably Au (up to >10,000ppb), Ag (up to 21.0ppm), Cu (up to 6046ppm), and Pb (up to >9999ppm).

TABLE 3.1.1
Mean, Threshold and Anomalous Values
in 'B' Horizon soil samples.

Element	No. of Samples	Mean (x)	Threshold (x+2s)	Anomalous (x+3s)
Au	92	6 ppb	22 ppb	31 ppb
Ag	108	0.4 ppm	1.6 ppm	2.2 ppm
Cu	95	13 ppm	51 ppm	70 ppm
Pb	100	12 ppm	40 ppm	54 ppm
Zn	91	56 ppm	97 ppm	118 ppm
Al	91	2.94 %	4.92 %	5.91 %
As	91	9 ppm	67 ppm	97 ppm
Ba	91	117 ppm	276 ppm	326 ppm
Bi	91	0.4 ppm	2 ppm	3 ppm
Co	91	10 ppm	16 ppm	19 ppm
Cr	91	40 ppm	66 ppm	79 ppm
Fe	91	2.49 %	3.39 %	3.85 %
Mg	91	0.72 %	1.49 %	1.88 %
Mn	89	279 ppm	581 ppm	732 ppm
Ni	91	16 ppm	23 ppm	27 ppm
P	91	769 ppm	1792 ppm	2304 ppm
Sr	91	9 ppm	19 ppm	24 ppm

TABLE 3.1.2

Correlation Matrix

'B' HORIZON SOIL SAMPLES

Au, Ag, Cu, Pb, Zn, Mn, Fe, and Bi

	AU	AG	CU	PB	ZN	MN	FE	BI
AU	1.00							
AG	.76	1.00						
CU	.86	.87	1.00					
PB	.72	.95	.85	1.00				
ZN	.08	.16	.18	.14	1.00			
MN	.70	.67	.87	.61	.33	1.00		
FE	.84	.84	.96	.81	.18	.85	1.00	
BI	.75	.96	.87	.98	.14	.67	.86	1.00

3.2 Bulk Soil Sampling

3.2.1 Sampling, Sample Preparation and Analytical Procedures

Bulk soil sampling was carried out over shears, contacts between microdiorite bodies and sediments, and mineralized quartz veins.

A total of 44 bulk soil samples were collected from the Petra, Luke and Quartz Hill mineral claims. All samples were collected from the 'B' soil horizon with the aid of a shovel and lightweight mattock. To ensure truly representative results, 25kg samples were taken at each site. These samples were then sieved to minus ten mesh, the coarse fraction discarded, and the remaining fine fraction panned down to approximately 0.5kg. The panned concentrates were analysed by Chemex Labs Ltd. of North Vancouver.

Chemex further concentrated the samples by heavy liquid separation and magnetic mineral separation. Finally, the resulting concentrates were analysed for Au and Hg by atomic absorption and Al, Ag, As, Ba, Be, Bi, Cd, Ca, Cr, Co, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Ti, Tl, U, V, W, and Zn by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES) analysis.

3.2.2 Treatment, Presentation and Discussion of Results

In assessing the bulk soil geochemical results, graphical statistical methods were used to separate background from anomalous metal concentrations. Threshold and anomalous levels were determined at the mean plus two standard deviations ($x+2s$) and the mean plus three standard deviations ($x+3s$) respectively, from log probability plots prepared for each element. The results of this statistical study are shown in Table 3.2.1. Correlation coefficients were computed for various elements and presented in Table 3.2.2. Sample locations and analytical results are shown on Maps 2.2.2, 3.1.1, and 3.2.1 through 3.2.5.

High correlation coefficients are common for most elements in the concentrated bulk 'B' horizon soil samples, except for zinc. Gold shows an association with copper, molybdenum, iron, silver, bismuth and lead. Silver shows a very high correlation with bismuth, copper, lead, gold and molybdenum.

The values established by graphical statistics for anomalous concentrations were very high for most elements especially those samples taken over the Quartz Hill pit area. Some notable anomalous elements include Au (up to >99,999 ppb), Hg (up to 100 ppb), Ag (up to 124.0 ppm), Cu (up to 9999 ppm), Pb (up to 9999 ppm), Zn (up to 170 ppm) and As (up to 760 ppm). Comparing the standard 'B' horizon soil sample results with the concentrated bulk soil samples results suggests that the mineralization in this area occurs in heavy minerals which are not easily broken down and absorbed by the soils.

TABLE 3.2.1

Mean, Threshold and Anomalous Values from Panned Concentrates in 'B' Horizon Bulk soil samples.

Element	No. of Samples	Mean (x)	Threshold (x+2s)	Anomalous (x+3s)
Au	28	4,190 ppb	11,618 ppb	15,332 ppb
Hg	28	16 ppb	82 ppb	115 ppb
Ag	28	0.7 ppm	1.5 ppm	1.9 ppm
Cu	28	37 ppm	75 ppm	94 ppm
Pb	28	125 ppm	249 ppm	311 ppm
Zn	28	101 ppm	141 ppm	161 ppm
As	28	263 ppm	573 ppm	728 ppm
Ba	28	74 ppm	124 ppm	149 ppm
Bi	28	5 ppm	13 ppm	17 ppm
Co	28	238 ppm	430 ppm	526 ppm
Cr	28	72 ppm	96 ppm	108 ppm
Fe	28	27.23%	35.15%	39.11%
Mn	28	387 ppm	761 ppm	948 ppm
Mo	28	0.2 ppm	1.4 ppm	2 ppm
Ni	28	113 ppm	167 ppm	194 ppm
Sb	28	1 ppm	9 ppm	13 ppm
V	28	130 ppm	198 ppm	232 ppm

TABLE 3.2.2

Correlation Matrix
'B' HORIZON Bulk SOIL SAMPLES
Cu, Pb, Zn, Ag, Bi, Fe, Mo, Au

	CU	PB	ZN	AG	BI	FE	MO	AU
CU	1.00							
PB	.90	1.00						
ZN	.48	.35	1.00					
AG	.87	.84	.36	1.00				
BI	.89	.84	.40	.93	1.00			
FE	.80	.62	.42	.66	.65	1.00		
MO	.87	.82	.24	.80	.77	.68	1.00	
AU	.94	.77	.48	.80	.78	.84	.85	1.00

3.3 Rock Chip Sampling

3.3.1 Sampling, Sample Preparation and Analytical Procedures

Systematic rock chip samples were taken from each trench. Grab samples were taken across shears, contacts and areas of mineralization.

The samples were placed in numbered plastic bags and sent to Chemex Labs Ltd. in North Vancouver for analysis. In the laboratory, samples were put through primary and secondary jaw crushers and a tertiary cone crusher. A sub-sample of approximately 250 grams was then pulverized in a rotary pulverizer. Pulp for precious metal analysis was screened to minus 100 mesh and examined for 'metallics'. The pulp was then put through a fire assay preconcentration and analysed by atomic absorption for Au, as well as an Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES) analysis for Al, Ag, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Ti, Tl, U, V, W and Zn.

3.3.2 Presentation and Discussion of Results

In assessing the rock chip sample results, graphical statistical methods were used to separate background from anomalous metal concentrations. Threshold and anomalous levels were determined at the mean plus two standard deviations ($x+2s$) and the mean plus three standard deviations ($x+3s$) respectively, from log probability plots prepared for each element. The results of this statistical study are shown in Table 3.3.2. Correlation coefficients were computed for various elements and are presented in Table 3.3.3. Assay results, locations and descriptions of samples are given in Table 3.3.1 and on Maps 3.3.1 through 3.3.5.

High correlation coefficients are common for most elements in the rock chip samples, except for zinc and molybdenum. Gold shows an association with copper, silver and bismuth. Silver shows a very high correlation with lead and bismuth. Lead and zinc show a negative correlation which is uncommon in base metal deposits.

Chip samples from the trenches gave low values in most elements, but some grab samples from mineralized quartz veins from the Quartz Hill pit area gave very high values in Au (to 3.658oz/T), Ag (to 54.0 ppm), Cu (to 4465 ppm), Pb (to >9999 ppm), Zn (to 640 ppm), As (to 220 ppm), Mo (to 67 ppm) and Bi (to 242 ppm).

TABLE 3.3.1

Locations, Assay Values and Descriptions of Rock Samples

Sample Number	Located On Claim	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Bi ppm	Fe %	Mo ppm	Au ppb	Description
34380E	Petra	315	8	140	0.2	4	7.11	<1	<0.002	Microdiorite with chalcopyrite
34381E	Petra	31	136	140	0.2	<2	0.96	<1	<0.002	Quartz float with galena
66351E	Petra	2	2	20	0.2	<2	1.54	<1	<0.002	Quartzite with Fe and Mn oxides
66352E	Petra	10	2	60	0.2	8	2.87	<1	<0.002	Argillite with disseminated hematite box-works and Mn oxide
66353E	Petra	2	4	10	0.2	<2	1.57	<1	<0.002	Quartz float with Fe and Mn oxides
66354E	Petra	<1	<2	20	0.2	8	3.09	<1	<0.002	Rusty argillite with quartz stockwork
66355E	Petra	<1	6	20	0.4	4	1.77	<1	<0.002	Rusty green chert with Mn oxide
66356E	Petra	2	<2	<10	0.2	<2	0.98	<1	<0.002	Quartz float with Fe and Mn oxides
66357E	Petra	9	<2	130	0.2	6	6.80	<1	<0.002	Microdiorite
66358E	Petra	27	<2	230	0.2	4	9.48	<1	<0.002	Rusty microdiorite float
66359E	Petra	1	4	20	0.2	4	2.13	<1	<0.002	Rusty quartz float
66360E	Petra	1	2	<10	0.2	4	1.17	<1	<0.002	Rusty quartz float with Mn oxide
66361E	Luke	4	14	20	0.2	8	1.46	<1	<0.002	Rusty, vuggy quartz vein in argillite-quartzite
66362E	Quartz Hill	2662	1964	20	13.2	92	4.21	5	1.410	Quartz block with pyrite, chalcopyrite, malachite and galena
66363E	Quartz Hill	4234	404	40	9.2	30	4.85	8	1.368	Quartz with pyrite, bornite, malachite and abundant chalcopyrite

TABLE 3.3.1 Continued

Sample Number	Located On Claim	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Bi ppm	Fe %	Mo ppm	Au ppb	Description
66364E	Quartz Hill	1552	>9999	<10	54.0	102	1.50	5	0.052	Quartz with chalcop- pyrite, malachite and galena
66365E	Quartz Hill	85	1386	<10	2.8	4	1.74	<1	0.006	Quartz bleb with pyrite in siltstone
66366E	Quartz Hill	325	418	<10	16.0	18	4.28	3	2.660	Quartz with gold, galena hematite, chalcoppyrite and pyrite
66367E	Quartz Hill	34	142	60	2.2	6	16.85	<1	0.042	Siltstone and quartzite with 10% disseminated pyrite and Mn oxide
66368E	Quartz Hill	15	104	30	0.4	4	5.18	1	0.006	chloritized micro- diorite float with pyrite
66369E	Quartz Hill	950	1194	10	6.4	12	5.62	6	0.070	Phyllitic argillite with pyrite, in contact with quartz
66370E	Quartz Hill	3107	56	140	1.6	6	14.73	<1	0.010	Quartz/microdiorite contact, soft, altered
66371E	Quartz Hill	2107	1934	40	4.0	26	10.45	6	0.052	Rusty quartz breccia with Mn oxide
66372E	Quartz Hill	4465	5668	20	33.0	242	35.97	67	3.432	Hematite in quartz
66373E	Quartz Hill	822	1080	<10	18.4	26	4.04	5	3.685	Quartz block with finely disseminated gold and chalcoppyrite
66374E	Petra Trench 1	80	74	80	1.8	6	2.96	<1	0.110	Green argillite
66375E	Petra Trench 1	38	182	30	2.0	6	1.83	<1	0.120	Rusty, siliceous green argillite
66376E	Petra Trench 1	24	150	20	2.6	12	1.88	<1	0.030	Siliceous green argillite with calcite and minor pyrite
66377E	Petra Trench 1	14	68	60	2.0	12	2.25	<1	0.014	Siliceous green argillite with minor pyrite

TABLE 3.3.1 Continued

Sample Number	Located On Claim	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Bi ppm	Fe %	Mo ppm	Au ppb	Description
66378E	Petra Trench 1	16	26	20	1.0	4	1.33	<1	0.002	Siliceous green argillite with quartz and abundant pyrite
66379E	Petra Trench 2	15	20	380	1.6	6	9.03	<1	0.002	Rusty black argillite
66380E	Petra Trench 2	13	104	440	1.4	10	11.45	<1	<0.002	Rusty andesite tuff with pink quartz veinlets
66381E	Petra Trench 2	79	8	220	1.4	8	9.34	<1	<0.002	Rusty black argillite
66382E	Petra Trench 2	27	60	380	1.0	8	9.75	<1	0.002	Rusty black argillite
66383E	Petra Trench 2	4	50	640	1.8	8	13.70	<1	<0.002	Rusty shear gouge
66384E	Petra Trench 2	73	546	280	1.6	4	9.47	<1	<0.002	Andesite tuff inter-bedded with green argillite, minor quartz veinlets
66385E	Petra Trench 3	7	32	10	1.2	8	2.69	<1	<0.002	Cherty green argillite with Mn oxide and pyrite
66386E	Petra Trench 3	<1	6	20	0.8	6	2.76	<1	0.002	Very siliceous green argillite with pyrite and rusty quartz pods
66387E	Luke Trench 4	26	2	140	1.2	4	9.05	<1	<0.002	Rusty microdiorite
66388E	Luke Trench 4	15	<2	160	1.4	6	10.20	<1	0.002	Slightly rusty microdiorite
66389E	Luke Trench 4	2	6	60	0.4	6	2.63	<1	<0.002	Green and tan cherty argillite with minor quartz and Fe and Mn oxides
66390E	Luke Trench 4	20	20	60	0.2	4	2.75	<1	<0.002	Green cherty argillite and black slaty argillite
66391E	Luke Trench 4	11	10	60	0.2	2	2.61	<1	<0.002	Rusty black argillite

TABLE 3.3.1 Continued

Sample Number	Located On Claim	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Bi ppm	Fe %	Mo ppm	Au ppb	Description
66392E	Luke Trench 4	13	16	40	0.2	<2	2.26	<1	<0.002	Rusty black argillite
66393E	Luke Trench 4	40	12	50	0.2	2	2.59	<1	<0.002	Black and green argillite
66394E	Luke Trench 4	24	30	60	0.2	2	2.93	<1	<0.002	Soft, rusty contact between black and green argillite
66395E	Luke Trench 4	30	<2	50	0.2	<2	5.67	<1	<0.002	Rusty quartz veins to 1cm with minor pyrite and sericite
66396E	Luke Trench 4	17	<2	100	0.2	<2	9.87	<1	<0.002	10cm rusty shear zone with quartz fragments (panning yielded much magnetite and pyrite)
66397E	Luke Trench 4	17	4	60	0.2	2	3.77	<1	<0.002	15cm rusty, soft contact zone between green and black argillite
66398E	Luke Trench 5	10	10	20	0.2	2	1.90	<1	<0.002	Light green cherty argillite with abundant pyrite
66399E	Luke Trench 5	10	14	40	0.2	<2	2.31	<1	<0.002	Light green cherty argillite with minor pyrite
66400E	Luke Trench 6	24	32	60	0.2	<2	2.90	<1	<0.002	Rusty, siliceous black argillite
66301E	Luke Trench 6	40	18	180	0.2	<2	7.11	<1	<0.002	Black argillite and quartzite with quartz vienlets
66302E	Luke Trench 6	4	24	60	0.2	2	2.24	<1	<0.002	Rusty quartzite
66303E	Luke Trench 6	8	14	50	0.2	<2	2.18	<1	<0.002	Quartzite interbedded with siltstone and argillite
66304E	Luke Trench 6	7	4	70	0.2	<2	4.30	<1	<0.002	Rusty quartzite with quartz stringers and disseminated pyrite

TABLE 3.3.1 Continued

Sample Number	Located On Claim	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Bi ppm	Fe %	Mo ppm	Au ppb	Description
66305E	Luke Trench 6	5	8	50	0.2	2	2.34	<1	<0.002	Quartzite and light green argillite
66306E	Luke Trench 6	1	4	90	0.2	2	3.09	<1	<0.002	Crumbly argillite in contact with microdiorite
66307E	Luke Trench 6	10	4	50	0.2	<2	2.83	<1	<0.002	Rusty microdiorite
66308E	Luke Trench 6	3	<2	20	0.2	<2	3.34	<1	<0.002	3cm quartz vein in microdiorite
66309E	Luke Trench 6	7	16	70	0.2	2	2.24	<1	<0.002	Argillaceous phyllite and quartzite
66310E	Luke Trench 7	8	<2	120	0.2	<2	7.45	<1	<0.002	Rusty microdiorite with pyrite and magnetite
66311E	Luke Trench 7	22	<2	150	0.2	4	9.25	<1	<0.002	Rusty microdiorite with minor magnetite
66312E	Luke Trench 7	11	<2	160	0.2	4	10.04	<1	<0.002	Rusty microdiorite with abundant magnetite and minor pyrite
66313E	Luke Trench 7	13	4	40	0.2	<2	3.36	<1	<0.002	Rusty, vuggy quartz vein in microdiorite
66314E	Luke Trench 8	2	<2	80	0.2	2	5.47	<1	<0.002	Rusty shear contact with quartz fragments
66315E	Luke Trench 8	8	<2	130	0.2	4	9.47	<1	<0.002	Rusty microdiorite with minor quartz and calcite
66316E	Luke Trench 9	5	30	50	0.2	<2	0.99	<1	<0.002	Rusty, siliceous, green argillite with minor quartz and pyrite
66317E	Luke Trench 9	9	38	70	0.2	<2	0.76	<1	<0.002	Green, siliceous argillite with Mn oxide
66318E	Luke Trench 9	106	12	120	0.2	<2	2.84	<1	<0.002	Rusty, vuggy green argillite
66319E	Luke Trench 10	18	36	60	0.2	2	4.10	<1	<0.002	Contact - green argillite and microdiorite with minor pyrite

TABLE 3.3.1 Continued

Sample Number	Located On Claim	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Bi ppm	Fe %	Mo ppm	Au ppb	Description
66320E	Luke Trench 10	16	<2	100	0.2	4	7.58	<1	0.002	Rusty microdiorite
66321E	Lone Eagle Trench 11	10	<2	<10	0.2	<2	0.84	<1	<0.002	Fractured, soft, tan quartzite with fracture-filling quartz and minor Fe and Mn oxides
66322E	Lone Eagle Trench 11	5	2	<10	0.2	<2	0.43	<1	<0.002	Same as last sample
66323E	Lone Eagle Trench 11	5	<2	<10	0.2	<2	0.76	<1	<0.002	Same as last sample
66324E	Lone Eagle Trench 11	74	4	10	0.2	<2	0.92	<1	<0.002	30cm shear zone
66325E	Lone Eagle Trench 11	36	2	<10	0.2	<2	0.44	<1	<0.002	Same as 66321E
66326E	Lone Eagle Trench 11	24	6	60	0.2	2	3.87	2	0.002	Microdiorite with 1% pyrite
66327E	Lone Eagle Trench 11	1204	34	70	0.2	<2	15.91	6	0.002	Clayey gouge with boxworks
66328E	Lone Eagle Trench 11	50	<2	50	0.2	2	10.96	<1	<0.002	Microdiorite contact
66329E	Lone Eagle Trench 12	15	<2	10	0.2	<2	2.95	<1	<0.002	Fractured, silicified quartzite with minor pyrite
66330E	Lone Eagle Trench 12	8	<2	10	0.2	<2	1.73	<1	<0.002	Same as last sample
66331E	Lone Eagle Trench 12	10	2	60	0.2	2	6.62	<1	<0.002	Microdiorite
66332E	Lone Eagle Trench 12	<1	<2	50	0.2	4	7.67	<1	<0.002	Microdiorite
66333E	Lone Eagle Trench 12	4	<2	50	0.2	<2	7.59	<1	<0.002	Microdiorite
66334E	Lone Eagle Trench 12	<1	<2	50	0.2	2	8.16	<1	<0.002	Microdiorite
66335E	Lone Eagle Trench 12	4	<2	50	0.2	2	7.77	<1	<0.002	Rusty, altered microdiorite

TABLE 3.3.1 Continued

Sample Number	Located On Claim	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Bi ppm	Fe %	Mo ppm	Au ppb	Description
66336E	Lone Eagle Trench 12	47	<2	50	0.2	2	7.43	<1	<0.002	Altered, fractured microdiorite
66337E	Lone Eagle Trench 12	1	<2	20	0.2	<2	2.24	<1	<0.002	Siliceous siltstone
66338E	Lone Eagle Trench 12	3	6	10	0.2	<2	1.69	<1	<0.002	Brecciated quartz with minor pyrite
66339E	Lone Eagle Trench 12	1	<2	30	0.2	<2	3.09	<1	<0.002	Microdiorite
66340E	Lone Eagle Trench 12	3	<2	<10	0.2	<2	0.48	<1	<0.002	Fractured quartz
66341E	Quartz Ck Trench 13	<1	2	<10	0.2	<2	0.88	<1	<0.002	Silicified, fractured quartzite with pyrite and Mn oxide
66342E	Quartz Ck Trench 13	1	<2	30	0.2	<2	2.38	<1	<0.002	Shear gouge with 2cm quartz
66343E	Quartz Ck Trench 13	<1	<2	10	0.2	<2	1.12	<1	<0.002	Silicified, fractured quartzite with Mn oxide
66344E	Quartz Ck Trench 13	20	<2	20	0.2	<2	1.41	<1	<0.002	Rusty shear with clay gouge
66345E	Quartz Ck Trench 13	1	<2	10	0.2	<2	1.16	<1	<0.002	Siliceous, fractured quartzite with pyrite
66346E	Quartz Ck Trench 13	<1	8	10	0.2	<2	1.44	<1	<0.002	Same as 66345E
66347E	Quartz Ck Trench 13	3	<2	10	0.2	2	2.98	<1	<0.002	Microdiorite contact - rusty zone with pyrite
66348E	Quartz Ck Trench 13	7	<2	50	0.2	2	5.28	<1	<0.002	Contact
66349E	Quartz Ck Trench 13	3	<2	<10	0.2	4	6.82	<1	<0.002	Rusty microdiorite
66350E	Quartz Ck Trench 13	16	<2	<10	0.2	<2	1.24	<1	<0.002	Microdiorite and siliceous quartzite
66351E	Quartz Ck Trench 13	12	<2	10	1.8	<2	1.19	<1	<0.002	Altered, fractured quartzite with quartz veining

TABLE 3.3.1 Continued

Sample Number	Located On Claim	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Bi ppm	Fe %	Mo ppm	Au ppb	Description
34352E	Quartz Ck Trench 13	4	6	10	0.2	<2	1.39	<1	<0.002	White quartzite with quartz and Mn oxide
34353E	Quartz Ck Trench 13	2	2	20	0.2	<2	2.03	<1	<0.002	White quartzite and rusty siltstone
34354E	Quartz Ck Trench 13	2	4	10	0.2	<2	1.74	<1	<0.002	Same as 34353E
34355E	Quartz Ck Trench 13	6	2	20	0.2	<2	2.99	<1	<0.002	Same as 34353E
34356E	Quartz Ck Trench 13	5	<2	10	0.2	<2	2.28	<1	<0.002	Same as 34353E
34357E	Quartz Ck Trench 14	2	<2	10	0.2	<2	2.45	1	<0.002	Siliceous, rusty, green siltstone with disseminated pyrite
34358E	Quartz Ck Trench 14	3	<2	10	0.2	<2	2.33	<1	<0.002	Rusty shear zones
34359E	Quartz Ck Trench 14	3	2	10	0.2	<2	2.36	<1	<0.002	Rusty sheared contact
34360E	Quartz Ck Trench 14	8	<2	20	0.2	2	6.84	<1	<0.002	Siliceous siltstone with disseminated pyrite
34361E	Quartz Ck Trench 14	18	<2	20	0.2	2	6.97	2	<0.002	15cm wide rusty shear zone
34362E	Quartz Ck Trench 14	14	<2	10	0.2	<2	6.66	<1	<0.002	Siliceous siltstone with abundant disseminated pyrite
34363E	Quartz Ck Trench 14	14	<2	10	0.2	2	7.33	<1	<0.002	Siltstone with minor pyrite
34364E	Quartz Ck Trench 14	20	<2	30	0.2	2	8.28	<1	<0.002	Rusty shear zone
34365E	Quartz Ck Trench 14	22	<2	20	0.2	2	10.52	<1	<0.002	Siliceous siltstone with pyrite
34366E	Quartz Ck Trench 14	2	<2	10	0.2	<2	2.82	<1	<0.002	Rusty shear zone
34367E	Quartz Ck Trench 14	8	<2	20	0.2	2	6.23	<1	<0.002	Rusty siltstone with minor pyrite

TABLE 3.3.1 Continued

Sample Number	Located On Claim	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Bi ppm	Fe %	Mo ppm	Au ppb	Description
34368E	Quartz Ck Trench 14	<1	<2	10	0.2	<2	3.01	<1	<0.002	Fractured, quartz-rich siltstone
34369E	Quartz Ck Trench 14	6	<2	<10	0.2	<2	2.34	<1	<0.002	Altered, rusty, quartz-rich fractured quartzite
34370E	Quartz Ck Trench 14	7	<2	<10	0.2	<2	1.59	<1	<0.002	Same as 34369E
34371E	Quartz Ck Trench 14	1	<2	<10	0.2	<2	2.13	<1	<0.002	Fractured, siliceous siltstone with pyrite
34372E	Quartz Ck Trench 15	24	<2	<10	0.2	<2	3.44	<1	<0.002	Rusty blue chert with 1% pyrite
34373E	Quartz Ck Trench 15	10	<2	<10	0.2	<2	2.09	<1	<0.002	Same as 34372E but with quartz stockwork
34374E	Quartz Ck Trench 15	5	<2	<10	0.2	<2	1.24	<1	<0.002	Orange and blue chert with pyrite
34375E	Quartz Ck Trench 15	12	<2	<10	0.2	<2	3.22	3	<0.002	Same as 34374E
34376E	Quartz Ck Trench 15	13	<2	100	0.2	2	8.04	<1	<0.002	Sheared green siltstone
34377E	Quartz Ck Trench 15	8	<2	10	0.2	<2	1.35	<1	<0.002	Rusty quartz with Mn oxide in orange chert
34378E	Lone Eagle Trench 16	1	<2	<10	0.2	<2	0.59	<1	<0.002	1m quartz vein with Fe and Mn oxides
34379E	Lone Eagle Trench 16	<1	2	10	0.2	<2	1.76	<1	<0.002	Grey quartzite and green siltstone

TABLE 3.3.2

Mean, Threshold and Anomalous Values in Rock Chip Samples

Element	No. of Samples	Mean x	Threshold x+2s	Anomalous x+3s
Au	119	0.002 oz/T	0.050 oz/T	0.068 oz/T
Al	119	2.00 %	5.08 %	6.62 %
Ag	119	0.4 ppm	1.4 ppm	1.9 ppm
As	119	9 ppm	39 ppm	54 ppm
Ba	119	69 ppm	398 ppm	562 ppm
Bi	119	2 ppm	8 ppm	10 ppm
Co	119	19 ppm	53 ppm	70 ppm
Cr	119	39 ppm	173 ppm	240 ppm
Cu	119	26 ppm	254 ppm	368 ppm
Fe	119	4.14 %	10.76 %	14.07 %
Mg	119	1.93 %	5.57 %	7.39 %
Mn	119	566 ppm	1743 ppm	2331 ppm
Ni	119	29 ppm	93 ppm	124 ppm
P	119	565 ppm	1712 ppm	2285 ppm
Pb	119	16 ppm	130 ppm	187 ppm
Sr	119	10 ppm	42 ppm	57 ppm
V	119	57 ppm	199 ppm	270 ppm
Zn	119	61 ppm	247 ppm	341 ppm

TABLE 3.3.3

Correlation Matrix

ROCK CHIP SAMPLES

Cu, Pb, Zn, Ag, Bi, Fe, Mo, Au

	CU	PB	ZN	AG	BI	FE	MO	AU
CU	1.00							
PB	.54	1.00						
ZN	-.03	-.07	1.00					
AG	.58	.95	-.07	1.00				
BI	.74	.78	-.02	.79	1.00			
FE	.49	.26	.44	.27	.55	1.00		
MO	-.02	-.02	-.06	-.02	-.08	.01	1.00	
AU	.58	.37	-.10	.59	.65	.35	-.02	1.00

4. GEOPHYSICS

4.1 Proton Magnetometer Survey

4.1.1 Instrument and Survey Techniques

Proton magnetometer surveys were conducted both on the LUKE and QUARTZ HILL mineral claims. A total of 1.32 line kilometers were surveyed using a Geometrics Proton Magnetometer. On the LUKE mineral claims, readings were taken at 10 metre intervals along two northwest-southeast trending survey lines spaced 100 metres apart. On the QUARTZ HILL mineral claims, readings were taken at 10 metre intervals along three generally east-west trending lines spaced approximately 50 metres apart. Readings were taken with the sensor facing in a northerly direction at all stations.

4.1.2 Presentation and Discussion of Results

Magnetometer readings are in gammas and have been corrected for diurnal variations. Locations of the survey lines are shown on Maps 2.2.2 and 2.2.3 and the profiles of the corrected data are shown on Maps 4.1.1 and 4.1.2.

The purpose of the magnetometer survey was to delineate shears and microdiorite/sediment contacts in areas where outcrop exposure is poor. On the LUKE mineral claim, values range from 57702 to 57930 gammas. In this area, microdiorite/sediment contacts are visible in trenches or as outcrops. The results show some low peaks which may correspond with the contact. The survey carried out on the QUARTZ HILL mineral claims shows a range of values from 57602 to 60753 gammas. Much of this area has been stripped to bedrock so the diorite/sediment contact is very distinct. The survey picked up the contact accurately, jumping approximately 3000 gammas upon crossing the contact from sediment to diorite.

In summary, the magnetometer survey results do not appear to delineate the microdiorite unit accurately on the LUKE mineral claim. However, the results showed a good correlation with the diorite unit on the QUARTZ HILL mineral claims. Where the diorite is very fine grained (ie microdiorite) the magnetometer results appear to be poor, but on the QUARTZ HILL mineral claims where the diorite is coarser grained it gives a strong magnetic response.

5. CONCLUSIONS

The results of the present programme may be summarized as follows:

- 1) Geological and geochemical evidence suggest that gold mineralization in the Perry Creek area is associated with quartz veins, quartz stockworks and siliceous zones in the vicinity of microdiorite bodies emplaced along regional faults crosscutting sedimentary formations.
- 2) Traditional 'B' horizon soil sampling in this area is not as effective as concentrated bulk 'B' horizon soil sampling. In order to use geochemistry as a successful exploration tool, concentrated bulk 'B' horizon soil samples must be taken.
- 3) The Proton magnetometer is not very effective in delineating the diorite unit where it is very fine grained (ie microdiorite), but is an extremely effective tool in areas where the diorite is coarser grained.

6. RECOMMENDATIONS

Results of work completed to date suggest that further work is required to outline the microdiorite bodies, shears, quartz veins and associated mineralization. The following work is recommended:

PHASE I

- 1) Reconnaissance geological mapping over the entire property to trace important contacts, shears and quartz veins.
- 2) A proton magnetometer survey over areas with coarser grained diorite bodies, especially over the QUARTZ HILL mineral claims.
- 3) Heavy mineral concentrate sampling every 250 meters to follow up anomalies found along Perry Creek and its tributaries.
- 4) Concentrated bulk 'B' horizon soil sampling over shears and microdiorite/sediment contacts.
- 5) Systematic rock chip sampling and concentrated bulk 'B' soil sampling over the QUARTZ HILL mineral claims to outline the extent of the mineralization.
- 6) Bulk rock samples of 1000 tons of quartz vein material from the QUARTZ HILL pit area should be sent to the smelter at Trail, B.C. to determine the overall amounts of economic minerals present.
- 7) Backhoe trenching over anomalies found by concentrated bulk 'B' horizon soil sampling, and over favorable shears and microdiorite/sediment contacts.

ESTIMATED COST OF PHASE I = \$70,000.00

PHASE II

1) Diamond drilling of all important areas discovered by Phase I.

ESTIMATED COST OF PHASE II = \$100,000.00

Respectfully submitted,



L. Dandy, B.Sc.



REFERENCES

- Fraser, D.C., 1969, Contouring of VLF-EM Data: *Geophysics*, V.34, No. 6, p. 958-967.
- Holcapek, F., 1982, Preliminary Geology and Evaluation Report on the Perry Creek Gold Property: Engineer's Report.
- Leech, G.B., 1957, St. Mary Lake Map Sheet, G.S.C. Map 15-1957, Geological Survey of Canada.
- Madeisky, H.E., 1981, Geophysical and Geochemical Report on the JANET, JANET 1, BIRDIE LOAD, GOLDEN WOLFE, GOLD, TANIS, PETER ROCK, QUARTZ CREEK, LUKE, JOHN and PETRA Mineral Claims and Reverted Crown-Grants: Engineer's Report.
- Ridley, J.C. (now Freeze) and Troup, A.G., 1984, Geological, Geophysical, and Geochemical Surveys; Report on the Perry Creek Property: Assessment Report
- Symonds, D.F., 1980, Geophysical, Geochemical and Prospecting Report on the JANET, JANET 1, BIRDIE LOAD, GOLDEN WOLFE, GOLD, AZLIN, TANIS, PETER ROCK, LONE EAGLE, QUARTZ CREEK, LUKE, MARK, JOHN, ECLIPSE, ANNA, STANDARD, AGNES, PIONEER, OYSTER, EVENING STAR, PETRA, CAROL, LINDA Mineral Claims and Reverted Crown-Grants: Engineer's Report.
- Troup, A.G., 1984, Report on the Perry Creek Property: Engineer's Report.
- Wong, C. and Troup, A.G., 1981, Geochemistry and Geophysics Report on the Perry Creek Gold Property: Engineer's Report.

STATEMENT OF QUALIFICATIONS

A.G. TROUP, P.ENG.

ACADEMIC

1967	B.Sc. Geology	McMaster University, Ontario
1969	M.Sc. Geochemistry	McMaster University, Ontario

PRACTICAL

1981 -	3605 Creery Ave. West Vancouver, B.C	Consulting Geologist with Archean Engineering Ltd.
1977 - 1980	Geological Survey of Malaysia	Project Manager on a CIDA supported mineral explora- tion survey over peninsular Malaysia.
1969 - 1977	Rio Tinto Canadian Exploration Ltd. Vancouver, B.C.	Geologist involved in all aspects of mineral explora- tion in B.C., the Yukon and N.W.T.
1968	McMaster University Dept. of Geology Hamilton, Ontario	M.Sc. thesis work. Reconnaissance mapping and geochemical study, Lake Shubenicadia area, Nova Scotia.
1967 (summer)	Canex Aerial Exploration Ltd. Toronto, Ontario	Geologist in charge of detailed mapping and reconnaissance geochemical program in Gaspé, Quebec
1966 (summer)	McMaster University Dept. of Geology Hamilton, Ontario	Detailed and reconnaissance mapping in Northern Ontario.
1965 (summer)	International Nickel Co. of Canada Thompson, Manitoba	Detailed mapping in the Thompson area, Manitoba.
1964 (summer)	Geological Survey of Canada Ottawa, Ontario	Regional geochemical survey in the Keno Hill area, Yukon.

STATEMENT OF QUALIFICATIONS

LINDA DANDY, B.SC.

Academic

1981	B.Sc. Geology	University of British Columbia
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Practical

1985	Mark Management Ltd. Vancouver, B.C.	Detailed geological mapping, geophysical and geochemical surveys and backhoe trenching in the Yukon, southwestern B.C. and northwestern Washington.
1984	Mark Management Ltd. Vancouver, B.C.	Detailed geological mapping, geophysical and geochemical surveys, backhoe trenching and diamond drilling in northern B.C.
1983	Mark Management Ltd. Vancouver, B.C.	Geological mapping (1:50,000, 1:10,000, 1:1,000), geophysical and geochemical surveys in Central and Northern B.C. and the Yukon.
1982	Mark Management Ltd. Vancouver, B.C.	Geochemical and geophysical surveys in Central B.C.
1981	Mark Management Ltd. Vancouver, B.C.	Property work, detailed mapping geochemical and geophysical surveys in Central B.C.

COST STATEMENT
 GALLANT GOLD MINES LTD.
 GEOLOGICAL, GEOPHYSICAL, AND GEOCHEMICAL SURVEYS
 PERRY CREEK PROPERTY
7 - 27 October 1985

GENERAL COSTS

<u>FOOD & ACCOMMODATION</u>		
3 persons, 41 mandays @ \$29.64	\$	1,215.34
<u>FUEL</u>		346.69
<u>SUPPLIES</u>		354.64
<u>SHIPPING & POSTAGE</u>		134.24
<u>REPAIRS</u>		100.34
<u>FIELD TELEPHONE SERVICE</u>		180.00
<u>RENTALS</u>		
MARK 4wd Bronco, 22 days @ \$43	\$946.00	
GABRIEL Field/Camp Equipment, 41 mandays @ \$6	246.00	1,192.00
<u>CONSULTANT FEES, ARCHEAN ENGINEERING</u>		1,500.00
<u>FIXED WING</u>		
PWA, 15-22Oct, Vcr-Kmb, 2 Rtn	\$549.60	
Taxis	42.00	591.60
<u>EXPEDITING, DATA, & PROJECT PREPARATION</u>		1,451.45
<u>REPORT PREPARATION</u>		2,870.24
 <u>TOTAL GENERAL COSTS</u>		 \$9,936.54 =====

GEOLOGICAL SURVEY COST

<u>SALARIES & WAGES</u>		
3 persons, 8 mandays @ \$102.02	\$	816.15
<u>BENEFITS</u>		129.23
<u>GENERAL COSTS APPORTIONED</u>		
8/41 X \$9,936.54		1,938.84
 <u>TOTAL GEOLOGICAL SURVEY COST</u>		 \$2,884.22 =====

GEOPHYSICAL SURVEY COST

<u>SALARIES & WAGES</u>		
1 person, 3 mandays @ \$92.31	\$	276.92
<u>BENEFITS</u>		55.38
<u>RENTALS</u>		
KANGELD PROTON MAG, 2 days @ \$27		54.00
<u>GENERAL COSTS APPORTIONED</u>		
3/41 X \$9,936.54		727.06
 <u>TOTAL GEOPHYSICAL SURVEY COST</u>		 \$1,113.36 =====

GEOCHEMICAL SURVEY COSTSALARIES & WAGES

3 persons, 30 mandays @ \$91.24		\$2,737.31
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BENEFITS

		513.46
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ASSAYS & ANALYSES, CHEMEX LABS

135 Rocks for Au @ \$11.25	\$1,518.75	
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131 Rocks for 30-element ICP @ \$6.50	851.50	
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12 Rocks for Sn @ \$4	48.00	
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113 Soils for Au & 30-element ICP @ \$14.75	1,666.75	
---	----------	--

46 HMC for Au & 30-element ICP @ \$26.75	1,230.50	
--	----------	--

6 HMC for Au Hg & 30-element ICP @ \$30.75	184.50	
--	--------	--

1 HMC for Pt	6.50	
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Supplies	<u>110.00</u>	5,616.50
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BACKHOE TRENCHING CONTRACTORKENNELLY CONTRACTING

JD890, 14-27OCT, Mob/Demob, Moves	\$1,373.35	
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bachoeing 64.5 hrs @ \$132.50	<u>8,546.75</u>	9,919.60
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GENERAL COSTS APPORTIONED

30/41 X \$9,936.54		<u>7,270.64</u>
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TOTAL GEOCHEMICAL SURVEY COST

		\$26,057.51
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APPENDIX I

ASSAYS & ANALYSES

CERTIFICATES



Chemex Labs Ltd.

-Analytical Chemists -Geochemists -Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Telephone: (604) 984-0221
Telex: 043-52597

Semi quantitative multi element ICP analysis

CERTIFICATE OF ANALYSIS

TO : GALLANT GOLD MINES LIMITED

1500 - 675 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1N2

CERT. # : A8517930-003-A
INVOICE # : 18517930
DATE : 8-NOV-85
P.O. # : NONE
PERRY CREEK

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :
ATTN: ART TROUP & LINDA DANDY

Sample description	Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	
3S 018	200	1.73	0.4	20	50	<0.5	<2	0.14	<0.5	25	35	720	4.51	<10	0.11	30	0.57	1231	<1	0.01	26	390	112	<10	9	0.02	<10	<10	46	<10	60	--
3S 019	250	2.29	0.4	20	70	<0.5	2	0.15	<0.5	42	48	824	6.24	<10	0.17	30	0.80	1315	<1	0.02	40	500	72	<10	12	<0.01	<10	<10	61	<10	60	--
3S 020	>10000	1.24	3.6	130	500	<0.5	18	0.13	0.5	79	33	3170	10.52	<10	0.13	20	0.31	9411	9	<0.01	60	620	582	10	23	0.01	<10	<10	66	<10	100	--
3S 021	>10000	1.14	5.0	130	250	<0.5	30	0.10	0.5	100	44	3544	11.81	<10	0.14	30	0.23	8246	11	<0.01	57	680	1234	10	24	<0.01	<10	<10	69	<10	90	--
3S 022	3700	1.45	2.6	70	170	<0.5	10	0.11	<0.5	61	38	2183	6.84	<10	0.14	30	0.26	4592	7	0.01	39	480	454	<10	16	<0.01	<10	<10	34	<10	60	--
3S 023	2000	0.76	2.4	100	90	<0.5	8	0.06	<0.5	59	22	2308	6.63	<10	0.21	20	0.14	4162	4	<0.01	40	480	226	10	13	<0.01	<10	<10	58	<10	40	--
3S 024	>10000	1.23	21.0	300	380	<0.5	136	0.08	0.5	120	40	6046	18.20	<10	0.13	20	0.25	>9999	20	<0.01	52	1260	6596	20	26	0.01	<10	<10	47	<10	100	--
3S 025	2450	1.45	1.4	60	50	<0.5	14	0.10	<0.5	23	101	1168	6.89	<10	0.18	50	0.22	1034	7	0.02	47	590	390	<10	9	0.01	<10	<10	19	<10	50	--
3S 026	6150	1.05	1.4	40	20	<0.5	16	0.10	<0.5	10	38	521	4.14	<10	0.09	20	0.22	240	3	0.01	17	420	148	<10	7	0.01	<10	<10	9	<10	30	--
3S 027	900	1.70	1.4	50	70	<0.5	8	0.16	<0.5	27	52	1237	5.92	<10	0.12	30	0.63	1663	2	0.01	34	480	308	<10	11	0.02	<10	<10	60	<10	60	--
3S 028	2250	1.14	2.4	40	90	<0.5	14	0.10	<0.5	45	31	1412	5.90	<10	0.12	30	0.21	2278	5	0.01	31	490	806	<10	10	<0.01	<10	<10	23	<10	50	--
3S 029	2400	1.02	1.2	10	20	<0.5	8	0.06	<0.5	38	45	864	5.10	<10	0.12	30	0.10	806	12	0.01	17	710	802	<10	6	<0.01	<10	<10	6	<10	20	--
3S 030	>10000	1.03	8.0	50	20	<0.5	54	0.05	<0.5	15	69	3053	8.12	<10	0.13	20	0.14	294	21	0.01	16	1090	3686	<10	5	<0.01	<10	<10	11	<10	40	--
3S 031	>10000	1.36	6.8	20	30	<0.5	24	0.10	<0.5	16	92	1258	6.31	<10	0.14	20	0.27	389	9	0.01	20	640	1248	<10	7	<0.01	<10	<10	18	<10	30	--
3S 032	35	4.27	0.4	<10	110	<0.5	<2	0.10	<0.5	10	28	23	2.39	10	0.08	10	0.19	330	<1	0.07	19	1800	28	<10	13	0.17	<10	<10	29	<10	100	--
3S 033	15	4.72	0.2	<10	140	<0.5	<2	0.16	<0.5	10	37	16	2.45	10	0.08	10	0.21	327	<1	0.06	17	1350	14	<10	19	0.18	<10	<10	30	<10	90	--
3S 034	<5	4.16	0.2	<10	120	<0.5	<2	0.13	0.5	11	32	12	2.45	10	0.09	10	0.20	334	<1	0.06	19	1190	19	<10	17	0.16	<10	<10	30	<10	130	--
3S 035	5	2.61	0.2	<10	100	<0.5	<2	0.15	<0.5	5	51	5	2.51	10	0.10	10	0.19	103	<1	0.04	11	980	14	<10	12	0.12	<10	<10	28	<10	70	--
3S 036	<5	4.45	0.2	<10	80	<0.5	<2	0.12	<0.5	7	23	3	2.44	10	0.06	<10	0.14	124	<1	0.08	13	2820	6	<10	15	0.17	<10	<10	28	<10	90	--
3S 037	<5	3.11	0.2	10	130	<0.5	<2	0.11	<0.5	9	80	10	2.61	<10	0.12	20	0.25	202	<1	0.05	16	830	6	<10	14	0.11	<10	<10	28	<10	80	--
3S 038	5	3.65	0.2	<10	100	<0.5	<2	0.07	<0.5	8	25	5	2.04	<10	0.06	10	0.14	307	<1	0.06	12	1050	6	<10	11	0.15	<10	<10	26	<10	100	--
3S 039	5	4.42	0.4	<10	70	<0.5	<2	0.09	<0.5	7	30	<1	2.63	10	0.05	<10	0.11	125	<1	0.07	12	1110	<2	<10	12	0.16	<10	<10	31	<10	80	--
3S 040	10	3.20	0.2	<10	150	<0.5	<2	0.18	<0.5	9	30	8	2.19	10	0.09	10	0.15	1086	<1	0.07	14	1080	14	<10	20	0.16	<10	<10	31	<10	90	--
3S 042	<5	5.16	0.2	<10	90	<0.5	<2	0.09	<0.5	7	25	6	2.19	10	0.04	<10	0.13	273	<1	0.07	14	1420	<2	<10	12	0.19	<10	<10	28	<10	70	--
3S 043	<5	4.00	0.2	<10	90	<0.5	<2	0.12	<0.5	7	29	9	2.13	<10	0.08	<10	0.16	217	<1	0.05	13	1350	4	<10	14	0.14	<10	<10	25	<10	70	--
3S 044	<5	1.63	0.2	<10	80	<0.5	<2	0.06	<0.5	7	106	5	2.17	<10	0.11	30	0.36	192	<1	0.02	14	270	8	<10	7	0.06	<10	<10	22	<10	70	--
3S 045	<5	2.96	0.4	10	80	<0.5	<2	0.15	<0.5	6	24	2	2.24	<10	0.05	<10	0.13	151	<1	0.05	11	1060	8	<10	17	0.16	<10	<10	29	<10	60	--
3S 046	<5	1.81	0.4	<10	80	<0.5	<2	0.11	<0.5	8	73	10	2.42	<10	0.09	40	0.56	145	<1	0.01	21	280	4	<10	13	0.04	<10	<10	17	<10	40	--
3S 047	<5	2.91	0.2	<10	100	<0.5	<2	0.06	<0.5	7	27	<1	2.35	<10	0.07	10	0.17	124	<1	0.02	12	890	6	<10	8	0.11	<10	<10	26	<10	50	--
3S 048	5	3.65	0.2	<10	110	<0.5	<2	0.05	<0.5	15	38	2	2.38	<10	0.07	10	0.23	194	<1	0.02	22	790	2	<10	7	0.10	<10	<10	21	<10	60	--
3S 049	<5	1.75	0.2	<10	50	<0.5	<2	0.03	<0.5	7	48	<1	2.27	<10	0.06	30	0.51	106	<1	0.01	14	270	<2	<10	3	0.03	<10	<10	19	<10	30	--
MD01	15	2.62	0.2	10	100	<0.5	<2	0.11	<0.5	7	51	<1	2.43	<10	0.08	20	0.82	198	<1	0.01	12	730	4	<10	8	0.06	<10	<10	20	<10	30	--
QTZ01	5	2.34	0.4	10	90	<0.5	<2	0.10	<0.5	9	42	<1	2.20	<10	0.07	20	0.56	719	<1	0.02	10	600	12	<10	10	0.09	<10	<10	27	<10	30	--

Certified by *Richard Dandy*



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Semi quantitative multi element ICP analysis

CERTIFICATE OF ANALYSIS

TO : GALLANT GOLD MINES LIMITED
1500 - 675 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1N2

CERT. # : A8517929-002-A
INVOICE # : I9517929
DATE : 14-NOV-85
P.O. # : NONE
PERRY CREEK

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :
ATTN: ART TROUP & LINDA DANDY

Sample description	Au ppb FA+AA	Hg ppb	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
3H 023	>99999	--	0.69	68.0	540	850	<0.5	152	0.11	1.5	314	41	9182	43.17	<10	0.08	30	0.19	>9999	36	<0.01	253	1580	7212	50	65	<0.01	<10	10	212	<10	170
3H 024	>99999	--	0.62	124.0	760	1050	<0.5	490	0.07	1.5	168	32	>9999	41.33	<10	0.07	20	0.11	>9999	55	<0.01	96	2380	>9999	40	56	<0.01	<10	10	104	<10	150
3H 025	>99999	--	0.86	44.0	550	30	<0.5	92	0.11	1.0	76	62	4764	43.61	<10	0.09	90	0.10	1521	45	<0.01	195	2410	1490	20	11	0.01	20	<10	45	<10	140
3H 026	>99999	--	0.82	52.0	580	20	<0.5	234	0.13	1.0	49	46	5823	47.06	<10	0.06	40	0.08	357	53	0.01	138	3130	760	110	15	0.03	<10	<10	12	<10	100
3H 027	>99999	--	0.60	46.0	670	310	<0.5	220	0.13	1.5	142	49	>9999	45.66	<10	0.08	30	0.21	8365	33	<0.01	159	1950	7198	60	28	0.01	<10	<10	196	<10	160
3H 028	>99999	--	0.66	12.8	340	370	<0.5	102	0.10	1.0	176	44	6854	44.17	<10	0.08	40	0.13	9109	43	<0.01	166	2490	5082	<10	28	<0.01	<10	<10	109	<10	120
3H 029	>99999	--	1.06	23.0	160	40	<0.5	76	0.09	0.5	134	47	6374	40.58	<10	0.08	70	0.07	2995	76	0.01	97	4110	6136	<10	14	<0.01	20	<10	29	<10	100
3H 030	>99999	--	0.84	59.0	310	10	<0.5	250	0.07	0.5	35	70	>9999	42.02	<10	0.08	40	0.05	566	110	0.01	51	4940	>9999	<10	8	<0.01	<10	<10	27	<10	110
3H 031	>99999	--	0.77	78.0	170	40	<0.5	154	0.08	<0.5	67	54	7469	40.95	<10	0.11	30	0.07	1450	57	0.01	62	3240	>9999	<10	7	<0.01	<10	<10	34	<10	90
3H 050	21800	--	0.93	22.0	200	220	<0.5	6	0.23	1.0	248	80	878	43.88	10	0.08	180	0.41	2025	<1	0.01	196	1660	362	<10	13	0.07	80	<10	197	<10	80
3H 051	2500	--	1.76	2.4	40	240	<0.5	4	0.87	<0.5	245	99	71	31.05	10	0.05	70	0.60	2022	2	0.02	93	1690	<2	<10	45	0.68	20	<10	347	<10	70
3H 052	3000	--	1.44	0.8	70	110	<0.5	2	0.48	<0.5	260	110	249	35.47	10	0.06	130	0.50	1370	4	0.02	126	2410	184	<10	23	0.29	50	<10	221	<10	60

Certified by: *Heidi Buchler*

SYSTEMS BUSINESS FORMS LIMITED VANCOUVER TR080808



Chemex Labs Ltd.

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CERTIFICATE OF ASSAY

TO : GALLANT GOLD MINES LIMITED

1500 - 675 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1N2

CERT. # : A8517927-001-A
INVOICE # : 18517927
DATE : 12-NOV-85
P.O. # : NONE
PERRY CREEK

ATTN: ART TROUP & LINDA DANDY

Sample description	Prep code	Au oz/T							
34351 E	207	<0.002	--	--	--	--	--	--	--
34352 E	207	<0.002	--	--	--	--	--	--	--
34353 E	207	<0.002	--	--	--	--	--	--	--
34354 E	207	<0.002	--	--	--	--	--	--	--
34355 E	207	<0.002	--	--	--	--	--	--	--
34356 E	207	<0.002	--	--	--	--	--	--	--
34357 E	207	<0.002	--	--	--	--	--	--	--
34358 E	207	<0.002	--	--	--	--	--	--	--
34359 E	207	<0.002	--	--	--	--	--	--	--
34360 E	207	<0.002	--	--	--	--	--	--	--
34361 E	207	<0.002	--	--	--	--	--	--	--
34362 E	207	<0.002	--	--	--	--	--	--	--
34363 E	207	<0.002	--	--	--	--	--	--	--
34364 E	207	<0.002	--	--	--	--	--	--	--
34365 E	207	<0.002	--	--	--	--	--	--	--
34366 E	207	<0.002	--	--	--	--	--	--	--
34367 E	207	<0.002	--	--	--	--	--	--	--
34368 E	207	<0.002	--	--	--	--	--	--	--
34369 E	207	<0.002	--	--	--	--	--	--	--
34370 E	207	<0.002	--	--	--	--	--	--	--
34371 E	207	<0.002	--	--	--	--	--	--	--
34372 E	207	<0.002	--	--	--	--	--	--	--
34373 E	207	<0.002	--	--	--	--	--	--	--
34374 E	207	<0.002	--	--	--	--	--	--	--
34375 E	207	<0.002	--	--	--	--	--	--	--
34376 E	207	<0.002	--	--	--	--	--	--	--
34377 E	207	<0.002	--	--	--	--	--	--	--
34378 E	207	<0.002	--	--	--	--	--	--	--
34379 E	207	<0.002	--	--	--	--	--	--	--
34380 E	207	<0.002	--	--	--	--	--	--	--
34381 E	207	<0.002	--	--	--	--	--	--	--
66301 E	207	<0.002	--	--	--	--	--	--	--
66302 E	207	<0.002	--	--	--	--	--	--	--
66303 E	207	<0.002	--	--	--	--	--	--	--
66304 E	207	<0.002	--	--	--	--	--	--	--
66305 E	207	<0.002	--	--	--	--	--	--	--
66306 E	207	<0.002	--	--	--	--	--	--	--
66307 E	207	<0.002	--	--	--	--	--	--	--
66308 E	207	<0.002	--	--	--	--	--	--	--
66309 E	207	<0.002	--	--	--	--	--	--	--

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Registered Assayer, Province of British Columbia





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CERTIFICATE OF ASSAY

TO : GALLANT GOLD MINES LIMITED

1500 - 675 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1N2

CERT. # : A8517927-002-A
INVOICE # : I8517927
DATE : 12-NOV-85
P.O. # : NONE
PERRY CREEK

ATTN: ART TROUP & LINDA DANDY

Sample description	Prep code	Au oz/T							
66310 E	207	<0.002	---	---	---	---	---	---	---
66311 E	207	<0.002	---	---	---	---	---	---	---
66312 E	207	<0.002	---	---	---	---	---	---	---
66313 E	207	<0.002	---	---	---	---	---	---	---
66314 E	207	<0.002	---	---	---	---	---	---	---
66315 E	207	<0.002	---	---	---	---	---	---	---
66316 E	207	<0.002	---	---	---	---	---	---	---
66317 E	207	<0.002	---	---	---	---	---	---	---
66318 E	207	<0.002	---	---	---	---	---	---	---
66319 E	207	<0.002	---	---	---	---	---	---	---
66320 E	207	0.002	---	---	---	---	---	---	---
66321 E	207	<0.002	---	---	---	---	---	---	---
66322 E	207	<0.002	---	---	---	---	---	---	---
66323 E	207	<0.002	---	---	---	---	---	---	---
66324 E	207	<0.002	---	---	---	---	---	---	---
66325 E	207	<0.002	---	---	---	---	---	---	---
66326 E	207	0.002	---	---	---	---	---	---	---
66327 E	207	0.002	---	---	---	---	---	---	---
66328 E	207	<0.002	---	---	---	---	---	---	---
66329 E	207	<0.002	---	---	---	---	---	---	---
66330 E	207	<0.002	---	---	---	---	---	---	---
66331 E	207	<0.002	---	---	---	---	---	---	---
66332 E	207	<0.002	---	---	---	---	---	---	---
66333 E	207	<0.002	---	---	---	---	---	---	---
66334 E	207	<0.002	---	---	---	---	---	---	---
66335 E	207	<0.002	---	---	---	---	---	---	---
66336 E	207	<0.002	---	---	---	---	---	---	---
66337 E	207	<0.002	---	---	---	---	---	---	---
66338 E	207	<0.002	---	---	---	---	---	---	---
66339 E	207	<0.002	---	---	---	---	---	---	---
66340 E	207	<0.002	---	---	---	---	---	---	---
66341 E	207	<0.002	---	---	---	---	---	---	---
66342 E	207	<0.002	---	---	---	---	---	---	---
66343 E	207	<0.002	---	---	---	---	---	---	---
66344 E	207	<0.002	---	---	---	---	---	---	---
66345 E	207	<0.002	---	---	---	---	---	---	---
66346 E	207	<0.002	---	---	---	---	---	---	---
66347 E	207	<0.002	---	---	---	---	---	---	---
66348 E	207	<0.002	---	---	---	---	---	---	---
66349 E	207	<0.002	---	---	---	---	---	---	---

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Registered Assayer, Province of British Columbia





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CERTIFICATE OF ASSAY

TO : GALLANT GOLD MINES LIMITED

1500 - 675 W. HASTINGS ST.
 VANCOUVER, B.C.
 V6B 1N2

CERT. # : A8517927-003-A
 INVOICE # : I8517927
 DATE : 12-NOV-85
 P.O. # : NONE
 PERRY CREEK

ATTN: ART TROUP & LINDA DANDY

Sample description	Prep code	Au oz/T							
66350 E	207	<0.002	--	--	--	--	--	--	--
66351 E	207	<0.002	--	--	--	--	--	--	--
66352 E	207	<0.002	--	--	--	--	--	--	--
66353 E	207	<0.002	--	--	--	--	--	--	--
66354 E	207	<0.002	--	--	--	--	--	--	--
66355 E	207	<0.002	--	--	--	--	--	--	--
66356 E	207	<0.002	--	--	--	--	--	--	--
66357 E	207	<0.002	--	--	--	--	--	--	--
66358 E	207	<0.002	--	--	--	--	--	--	--
66359 E	207	<0.002	--	--	--	--	--	--	--
66360 E	207	<0.002	--	--	--	--	--	--	--
66361 E	207	<0.002	--	--	--	--	--	--	--
66362 E	207	1.410	--	--	--	--	--	--	--
66363 E	207	1.368	--	--	--	--	--	--	--
66364 E	207	0.052	--	--	--	--	--	--	--
66365 E	207	0.006	--	--	--	--	--	--	--
66366 E	207	2.660	--	--	--	--	--	--	--
66367 E	207	0.042	--	--	--	--	--	--	--
66368 E	207	0.006	--	--	--	--	--	--	--
66369 E	207	0.070	--	--	--	--	--	--	--
66370 E	207	0.010	--	--	--	--	--	--	--
66371 E	207	0.052	--	--	--	--	--	--	--
66372 E	207	3.432	--	--	--	--	--	--	--
66373 E	207	3.658	--	--	--	--	--	--	--
66374 E	207	0.120	--	--	--	--	--	--	--
66375 E	207	0.120	--	--	--	--	--	--	--
66376 E	207	0.030	--	--	--	--	--	--	--
66377 E	207	0.014	--	--	--	--	--	--	--
66378 E	207	0.002	--	--	--	--	--	--	--
66379 E	207	0.002	--	--	--	--	--	--	--
66380 E	207	<0.002	--	--	--	--	--	--	--
66381 E	207	<0.002	--	--	--	--	--	--	--
66382 E	207	0.002	--	--	--	--	--	--	--
66383 E	207	<0.002	--	--	--	--	--	--	--
66384 E	207	<0.002	--	--	--	--	--	--	--
66385 E	207	<0.002	--	--	--	--	--	--	--
66386 E	207	0.002	--	--	--	--	--	--	--
66387 E	207	<0.002	--	--	--	--	--	--	--
66388 E	207	0.002	--	--	--	--	--	--	--
66389 E	207	<0.002	--	--	--	--	--	--	--

GREEN SILICEOUS ARGILLAR REASSAY THE REJECTS

B. Stewart

.....
 Registered Assayer, Province of British Columbia





Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Telephone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ASSAY

TO : GALLANT GOLD MINES LIMITED

1500 - 675 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1N2

CERT. # : A8517927-004-A
INVOICE # : I8517927
DATE : 12-NOV-85
P.G. # : NONE
PERRY CREEK

ATTN: ART TROUP & LINDA DANDY

Sample description	Prep code	Au oz/T						
66390 E	207	<0.002	--	--	--	--	--	--
66391 E	207	<0.002	--	--	--	--	--	--
66392 E	207	<0.002	--	--	--	--	--	--
66393 E	207	<0.002	--	--	--	--	--	--
66394 E	207	<0.002	--	--	--	--	--	--
66395 E	207	<0.002	--	--	--	--	--	--
66396 E	207	<0.002	--	--	--	--	--	--
66397 E	207	<0.002	--	--	--	--	--	--
66398 E	207	<0.002	--	--	--	--	--	--
66399 E	207	<0.002	--	--	--	--	--	--
66400 E	207	<0.002	--	--	--	--	--	--

.....
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Canada V7J 2C1

Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ASSAY

TO : GALLANT GOLD MINES LIMITED

1500 - 675 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1N2

CERT. # : A8518478-001-A
INVOICE # : I8518478
DATE : 4-DEC-85
P.O. # : NONE
PERRY CREEK

*Per
re-assay*

ATTN: ART TROUP & LINDA DANDY

Sample description	Prep code	Au oz/T						
66374 E REJECT	207	0.104	--	--	--	--	--	--
66375 E REJECT	207	0.022	--	--	--	--	--	--
66376 E REJECT	207	0.010	--	--	--	--	--	--
66377 E REJECT	207	0.008	--	--	--	--	--	--

W. Stenfoniani

 Registered Assayer, Province of British Columbia



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Canada V7J 2C1

Telephone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : GALLANT GOLD MINES LIMITED

1500 - 675 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1N2

CERT. # : A8518623-001-A

INVOICE # : I8518623

DATE : 29-NOV-85

P.O. # : NONE

PERRY CREEK

ATTN: ART TROUP & LINDA DANDY

Sample description	Prep code	Sn ppm						
66362 E	214	1	--	--	--	--	--	--
66363 E	214	1	--	--	--	--	--	--
66364 E	214	1	--	--	--	--	--	--
66365 E	214	1	--	--	--	--	--	--
66366 E	214	1	--	--	--	--	--	--
66367 E	214	1	--	--	--	--	--	--
66368 E	214	1	--	--	--	--	--	--
66369 E	214	1	--	--	--	--	--	--
66370 E	214	1	--	--	--	--	--	--
66371 E	214	1	--	--	--	--	--	--
66372 E	214	1	--	--	--	--	--	--
66373 E	214	1	--	--	--	--	--	--



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Telephone: (604) 984-0221
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CERTIFICATE OF ANALYSIS

TO : GALLANT GOLD MINES LIMITED

1500 - 675 W. HASTINGS ST.
VANCOUVER, B.C.
V6B 1N2

CERT. # : A8517928-004-A
INVOICE # : I8517928
DATE : 6-NOV-85
P.O. # : NONE
PERRY CREEK

Semi quantitative multi element ICP analysis

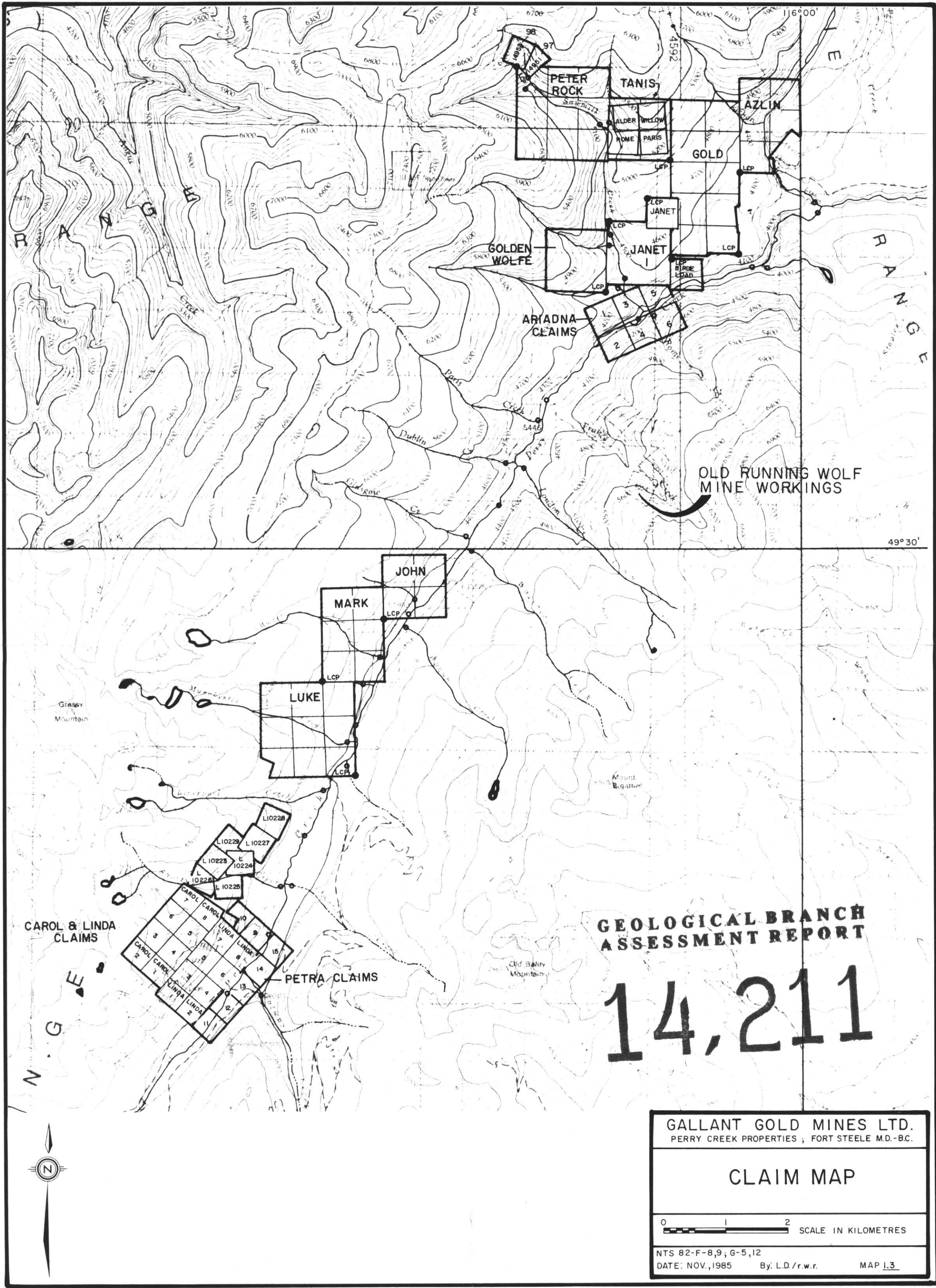
Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :
ATTN: ART TROUP & LINDA DANDY

Sample description	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Hg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm		
66390 E	2.96	0.2	10	70	<0.5	4	0.20	<0.5	20	26	20	2.75	10	0.33	30	3.45	342	<1	0.01	20	490	20	<10	4	0.01	<10	<10	21	<10	60	--	--
66391 E	2.45	0.2	20	130	<0.5	2	0.35	<0.5	9	23	11	2.61	10	0.55	40	2.07	412	<1	0.01	18	490	10	<10	4	0.01	<10	<10	14	<10	60	--	--
66392 E	1.62	0.2	10	110	<0.5	<2	3.49	<0.5	8	15	13	2.26	10	0.42	30	1.63	579	<1	<0.01	14	440	16	<10	11	0.01	<10	<10	10	<10	40	--	--
66393 E	2.23	0.2	20	170	<0.5	2	0.54	<0.5	9	18	40	2.59	10	0.47	40	2.12	438	<1	<0.01	17	520	12	<10	3	0.01	<10	<10	11	<10	50	--	--
66394 E	1.88	0.2	10	150	<0.5	2	0.14	<0.5	11	16	24	2.93	<10	0.40	40	1.50	684	<1	0.01	17	600	30	<10	2	0.01	<10	<10	10	<10	60	--	--
66395 E	0.77	0.2	<10	70	<0.5	<2	0.20	<0.5	21	11	30	5.67	<10	0.19	10	0.34	1358	<1	0.01	10	1130	<2	<10	9	0.07	<10	<10	35	<10	50	--	--
66396 E	0.94	0.2	20	120	<0.5	<2	0.18	0.5	26	11	17	9.87	<10	0.21	10	0.41	3364	<1	<0.01	12	1330	<2	<10	19	0.03	<10	<10	83	<10	100	--	--
66397 E	2.66	0.2	10	180	<0.5	2	0.19	<0.5	13	22	17	3.77	10	0.48	40	1.71	1334	<1	0.01	20	490	4	<10	10	0.01	<10	<10	20	<10	60	--	--
66398 E	0.47	0.2	20	80	<0.5	<2	9.11	<0.5	6	4	10	1.90	20	0.20	<10	2.52	571	<1	<0.01	11	310	10	10	42	<0.01	<10	<10	7	<10	20	--	--
66399 E	1.17	0.2	20	60	<0.5	<2	2.91	<0.5	6	16	10	2.31	10	0.22	30	2.29	391	<1	0.01	13	400	14	10	15	<0.01	<10	<10	8	<10	40	--	--
66400 E	1.87	0.2	20	140	<0.5	<2	0.15	<0.5	10	18	24	2.90	10	0.38	40	1.53	708	<1	<0.01	19	640	32	<10	2	<0.01	<10	<10	10	<10	60	--	--

Certified by *H. B. Bichler*

SYSTEMS BUSINESS FORMS LIMITED VANCOUVER TRIDODAR



OLD RUNNING WOLF MINE WORKINGS

GEOLOGICAL BRANCH ASSESSMENT REPORT

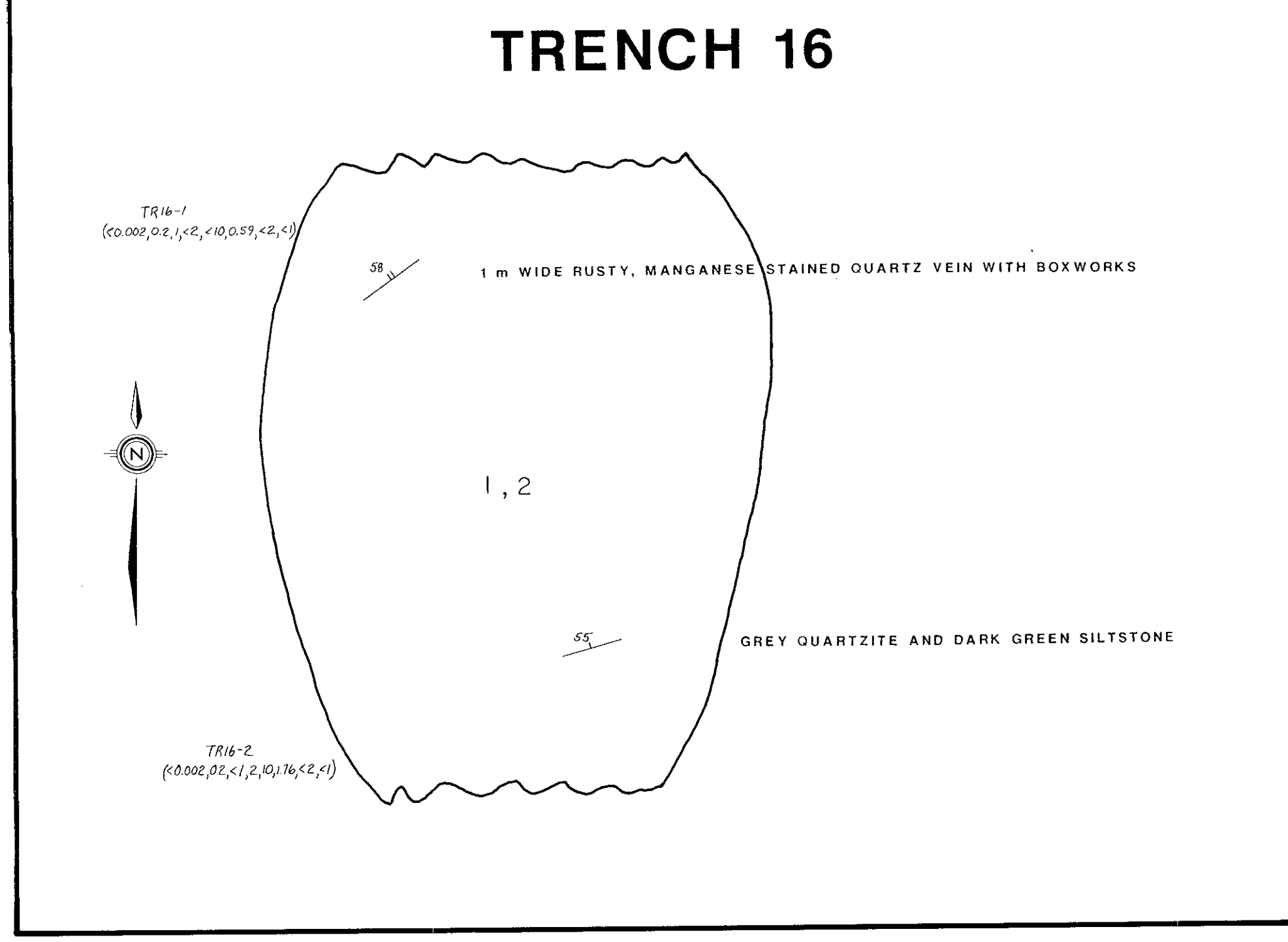
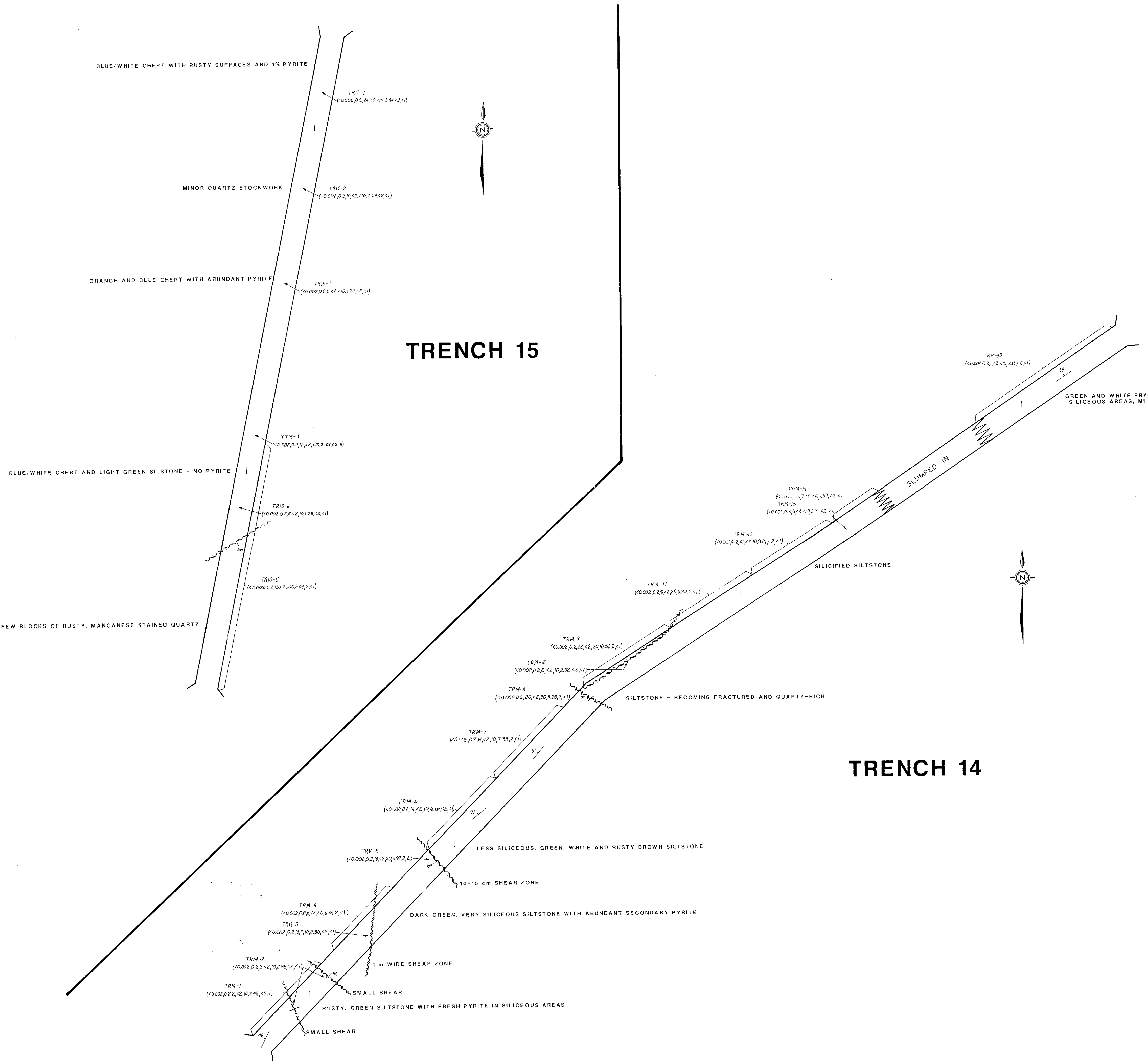
14,211

GALLANT GOLD MINES LTD.
 PERRY CREEK PROPERTIES ; FORT STEELE M.D.-B.C.

CLAIM MAP

0 1 2 SCALE IN KILOMETRES

NTS 82-F-8,9; G-5,12
 DATE: NOV., 1985 By: L.D./r.w.r. MAP 1.3



- LEGEND:**
- MOYIE INTRUSIONS**
 - 3 SILLS AND MINOR DYKES OF DIORITE, QUARTZ DIORITE; METAMORPHIC EQUIVALENTS.
 - KITCHENER FORMATION**
 - 2 VARICOLORED ARGILLITES AND DOLOMITIC ARGILLITES, MOSTLY BUFF AND BROWN WEATHERING; BUFF AND BROWN WEATHERING DOLOMITE, COMMONLY SANDY.
 - CRESTON FORMATION**
 - 1 GREEN AND GREY WEATHERING GREEN, GREY AND PURPLISH ARGILLACEOUS QUARTZITE, QUARTZITE AND ARGILLITE; ALSO GREY WEATHERING GREY QUARTZITE AND SILTY ARGILLITE, MUDCRACKED DARK ARGILLITE.
- BEDDING STRIKE AND DIP
 - FOLIATION/CLEAVAGE DIRECTION
 - SHEAR
- SAMPLE LOCATION AND RESULTS**
 Au oz/ton, Ag, Cu, Pb, Zn, Fe %, Bi, Mo (in p.p.m.)

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

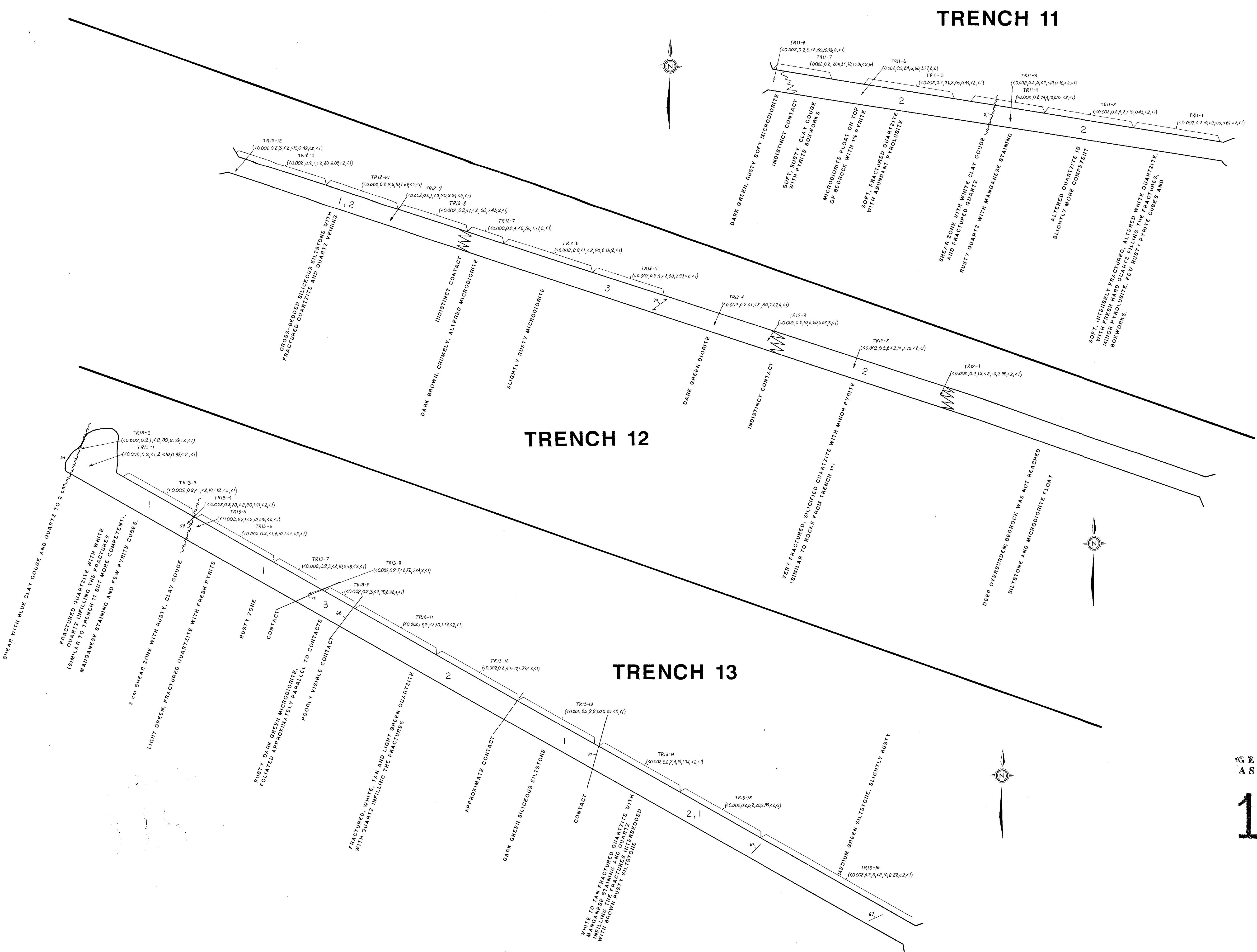
14,211

GALLANT GOLD MINES LTD.
 PERRY CREEK PROPERTY
 FORT STEELE MINING DIVISION - B.C.

QUARTZ HILL MINE
GEOLOGY OF
TRENCHES 14, 15 & 16

0 5 10 metres
 SCALE 1:100

NTS: 82 F/8
 BY L.D./r.w.r. OCT., 1985 MAP NO. 2.2.8



- LEGEND:**
- MOYIE INTRUSIONS**
- 3** SILLS AND MINOR DYKES OF DIORITE, QUARTZ DIORITE; METAMORPHIC EQUIVALENTS.
- KITCHENER FORMATION**
- 2** VARICOLORED ARGILLITES AND DOLOMITIC ARGILLITES, MOSTLY BUFF AND BROWN WEATHERING; BUFF AND BROWN WEATHERING DOLOMITE, COMMONLY SANDY.
- CRESTON FORMATION**
- 1** GREEN AND GREY WEATHERING GREEN, GREY AND PURPLISH ARGILLACEOUS QUARTZITE, QUARTZITE AND ARGILLITE; ALSO GREY WEATHERING GREY QUARTZITE AND SILTY ARGILLITE, MUDCRACKED DARK ARGILLITE.
- BEDDING STRIKE AND DIP
- FOLIATION/CLEAVAGE DIRECTION
- SHEAR
- SAMPLE LOCATION AND RESULTS
Au oz/ton, Ag, Cu, Pb, Zn, Fe %, Bi, Mo (in p.p.m.)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

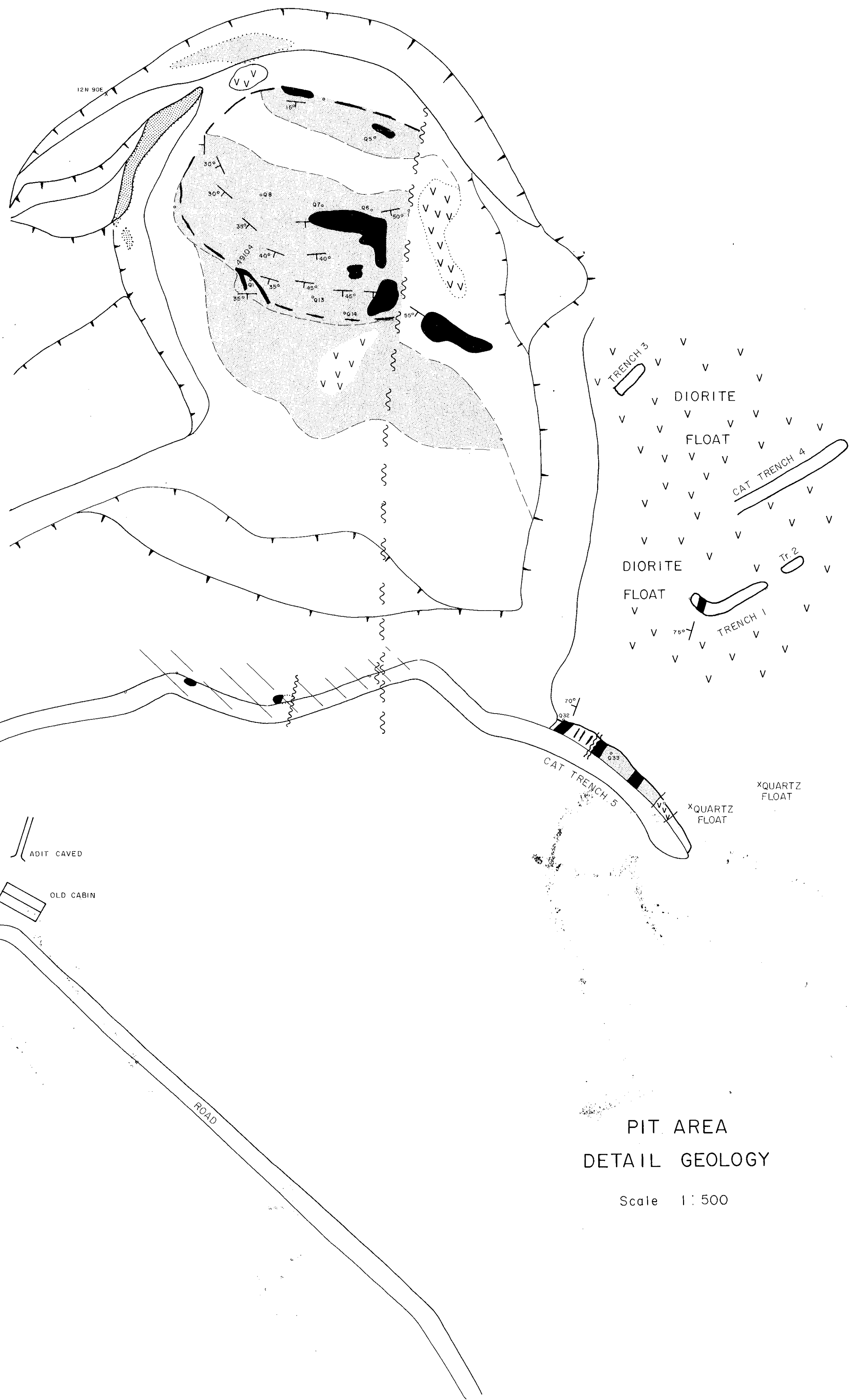
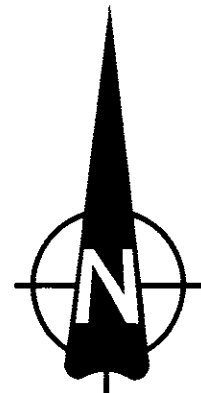
14,211

GALLANT GOLD MINES LTD.
PERRY CREEK PROPERTY
FORT STEELE MINING DIVISION - B.C.

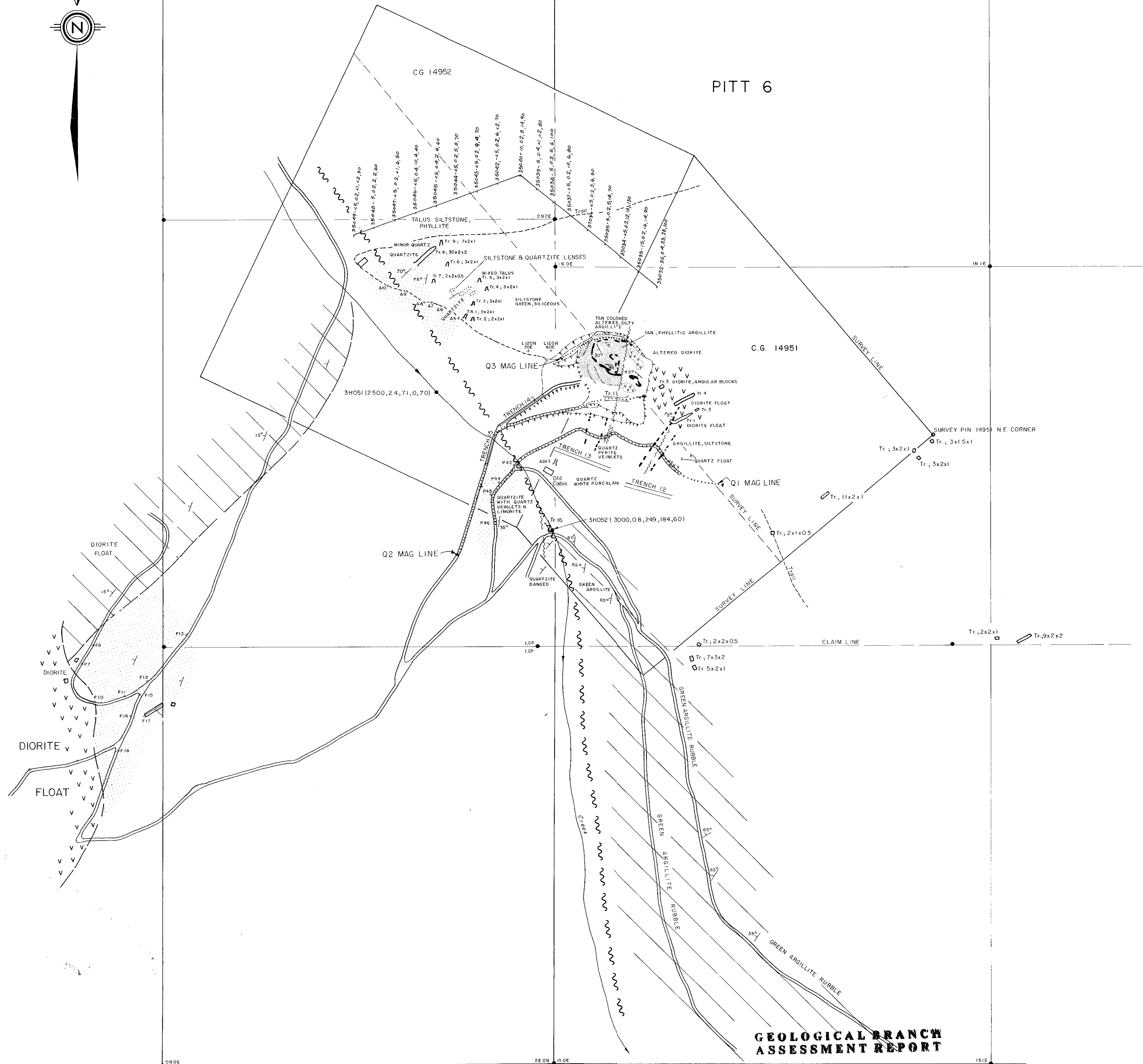
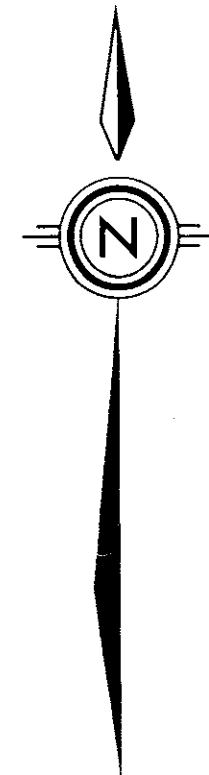
QUARTZ HILL MINE
GEOLOGY OF
TRENCHES 11, 12 & 13

0 5 10 metres
SCALE 1:100

NTS: 82 F/8
BY L.D./r.w.r. OCT., 1985 MAP NO. 2.27



PIT AREA
DETAIL GEOLOGY
Scale 1:500



GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,211

LEGEND:

- | | | | |
|--|---|--|---|
| | Siltstone - grey to tan, argillaceous. | | Outcrop |
| | Quartzites - grey, in places with veinlets as stockworks. | | Bedding strike and dip |
| | Argillite - green | | Fault |
| | Argillite - tan, phyllitic, alteration near fault zones or quartz veins | | Tr. |
| | Quartz veins | | Trenches 11 to 16 dug in 1985 |
| | Diorite, in place altered including float areas | | Heavy Mineral Concentrate Sample Site
Results (Au p.p.b., Cu, Pb, Zn)
ppm |
| | | | Soil sample no. - Au p.p.b., Ag, Cu, Pb, Zn p.p.m |

GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT

QUARTZ HILL MINE
FORT STEELE MINING DIVISION, B.C.

DETAIL AREA GENERAL GEOLOGY
AND TRENCH LOCATION MAP

0 100m 200m 300m
Scale 1:2,500

NTS 82-F-9
DATE NOV. 27, 1985
BY L.D. r.w.r.







MAP No. 2.2.3



GEOCHEMICAL LEGEND:

1934 ■ Pb in p.p.m.
THRESHOLD $x+2s = 130$ p.p.m.
ANOMALOUS $x+3s = 187$ p.p.m.

LEGEND:

-  Siltstone - grey to tan, argillaceous
-  Quartzites - grey, in places with veinlets as stockworks
-  Argillite - green
-  Argillite - tan, phyllitic, alteration near fault zones or quartz veins
-  Quartz veins
-  Diorite, in place altered including float areas

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

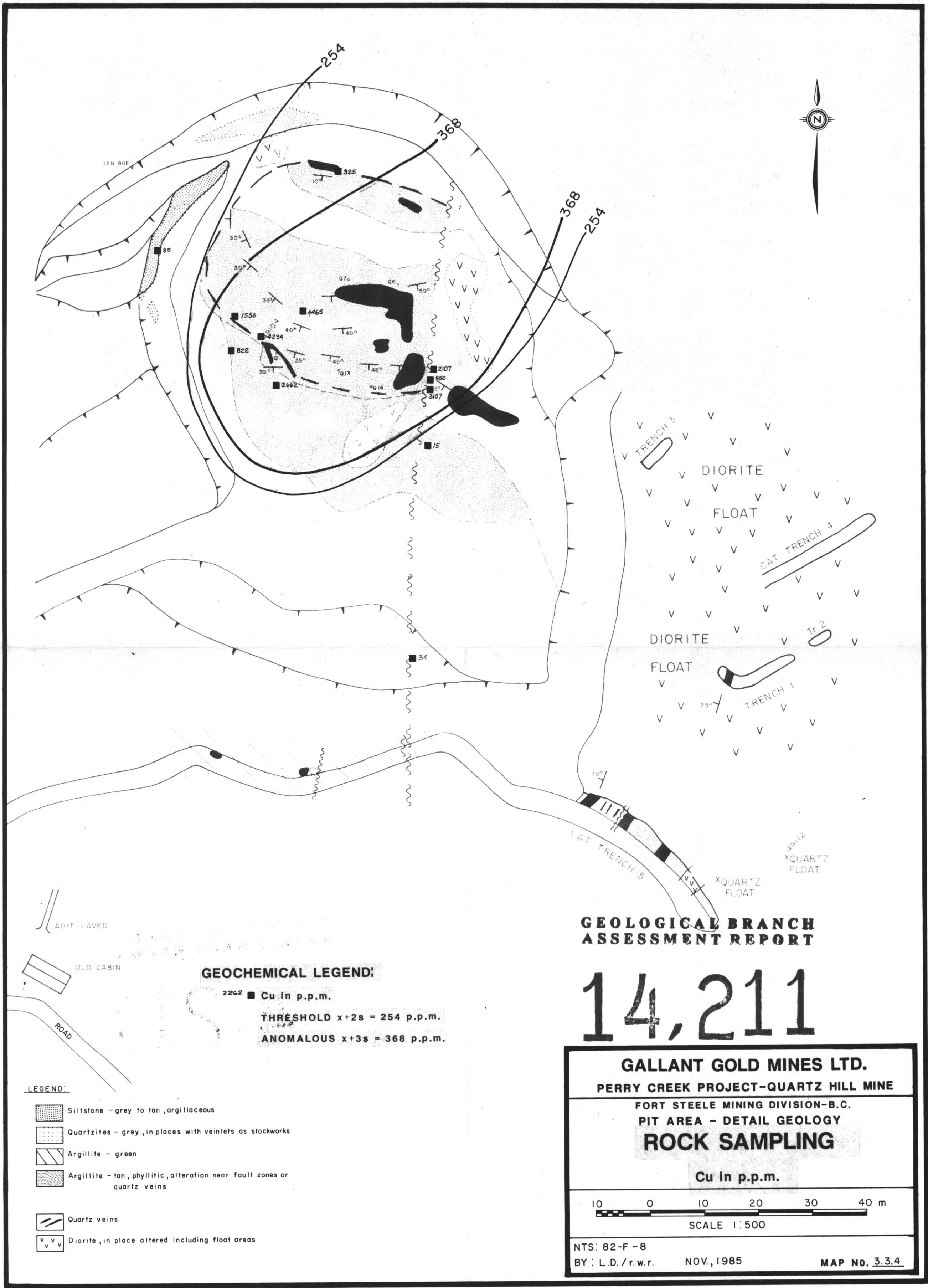
14,211

GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE
 FORT STEELE MINING DIVISION-B.C.
 PIT AREA - DETAIL GEOLOGY
ROCK SAMPLING

Pb in p.p.m.

10 0 10 20 30 40 m
 SCALE 1:500

NTS: 82-F-8
 BY: L.D./r.w.r. NOV., 1985
 MAP NO. 3.3.5



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

14,211

GALLANT GOLD MINES LTD.

PERRY CREEK PROJECT-QUARTZ HILL MINE

FORT STEELE MINING DIVISION-B.C.

PIT AREA - DETAIL GEOLOGY

ROCK SAMPLING

Cu in p.p.m.

10 0 10 20 30 40 m

SCALE 1:500

NTS: 82-F-8

BY: L.D./r.w.r.

NOV., 1985

MAP NO. 3.3.4







GEOCHEMICAL LEGEND:

2262 ■ Cu in p.p.m.

THRESHOLD $x+2s = 254$ p.p.m.

ANOMALOUS $x+3s = 368$ p.p.m.

LEGEND:

-  Siltstone - grey to tan, argillaceous
-  Quartzites - grey, in places with veinlets as stockworks
-  Argillite - green
-  Argillite - tan, phyllitic, alteration near fault zones or quartz veins
-  Quartz veins
-  Diorite, in place altered including float areas

ADIT CAVED

OLD CABIN

ROAD

CAT TRENCH 5

X QUARTZ FLOAT

X QUARTZ FLOAT

DIORITE
FLOAT

DIORITE
FLOAT

TRENCH 3

CAT TRENCH 4

TRENCH 1

Tr 2

12 N 90 E

254

368

368

254

Q7

Q6

Q5

Q4

Q3

Q2

Q1

Q13

Q14

Q15

Q16

Q17

Q18

Q19

Q20

Q21

Q22

Q23

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Q35

Q36

Q37

Q38

Q39

Q40

Q41

Q42

Q43

Q44

Q45

1556

4465

822

4234

2662

2107

950

3107

15

34

70°

49/112

X QUARTZ
FLOAT

75°

85

15

30

30

39

40

35

35

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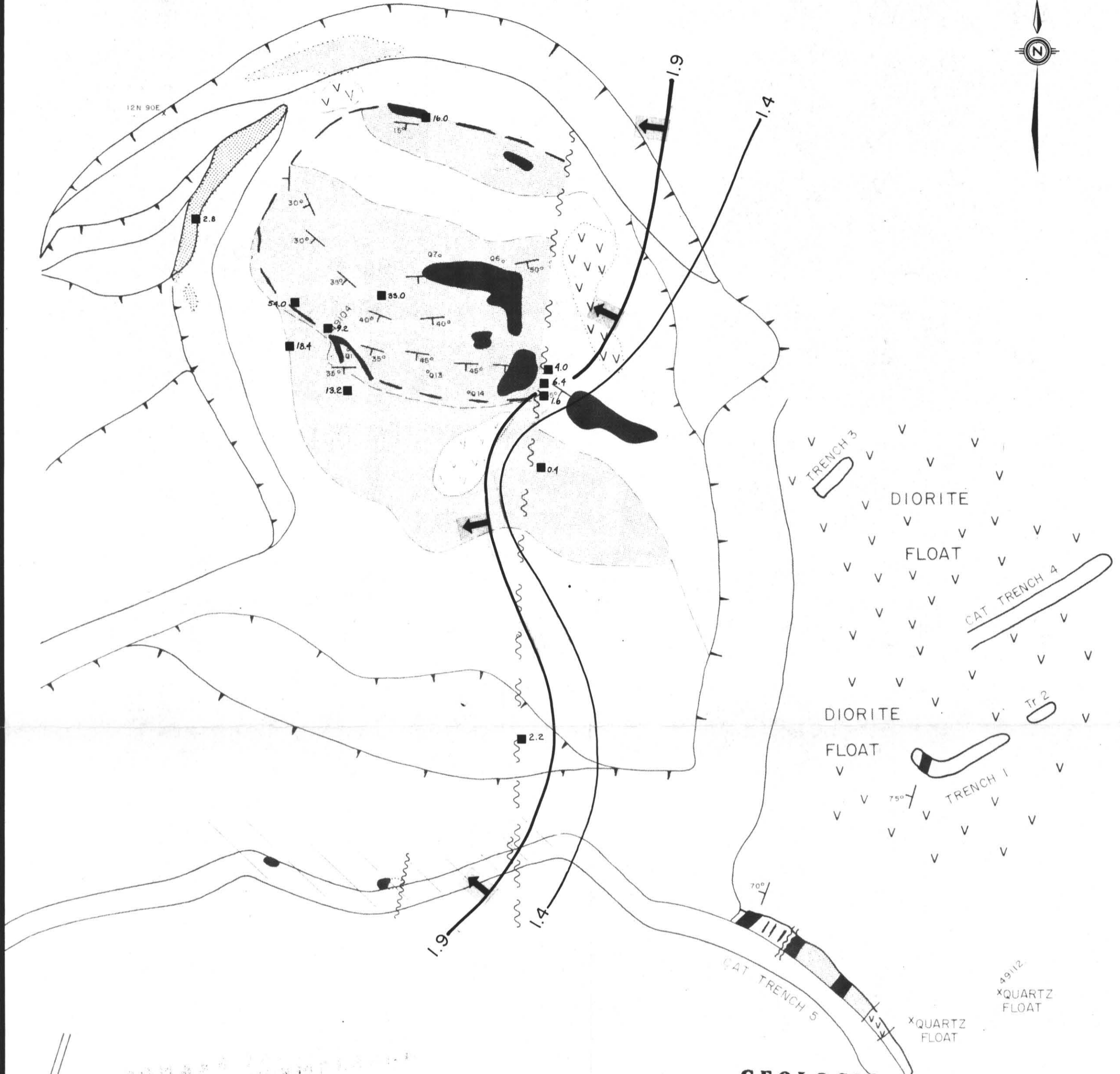
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**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

14,211

GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE
 FORT STEELE MINING DIVISION-B.C.
PIT AREA - DETAIL GEOLOGY
ROCK SAMPLING

Ag in p.p.m.

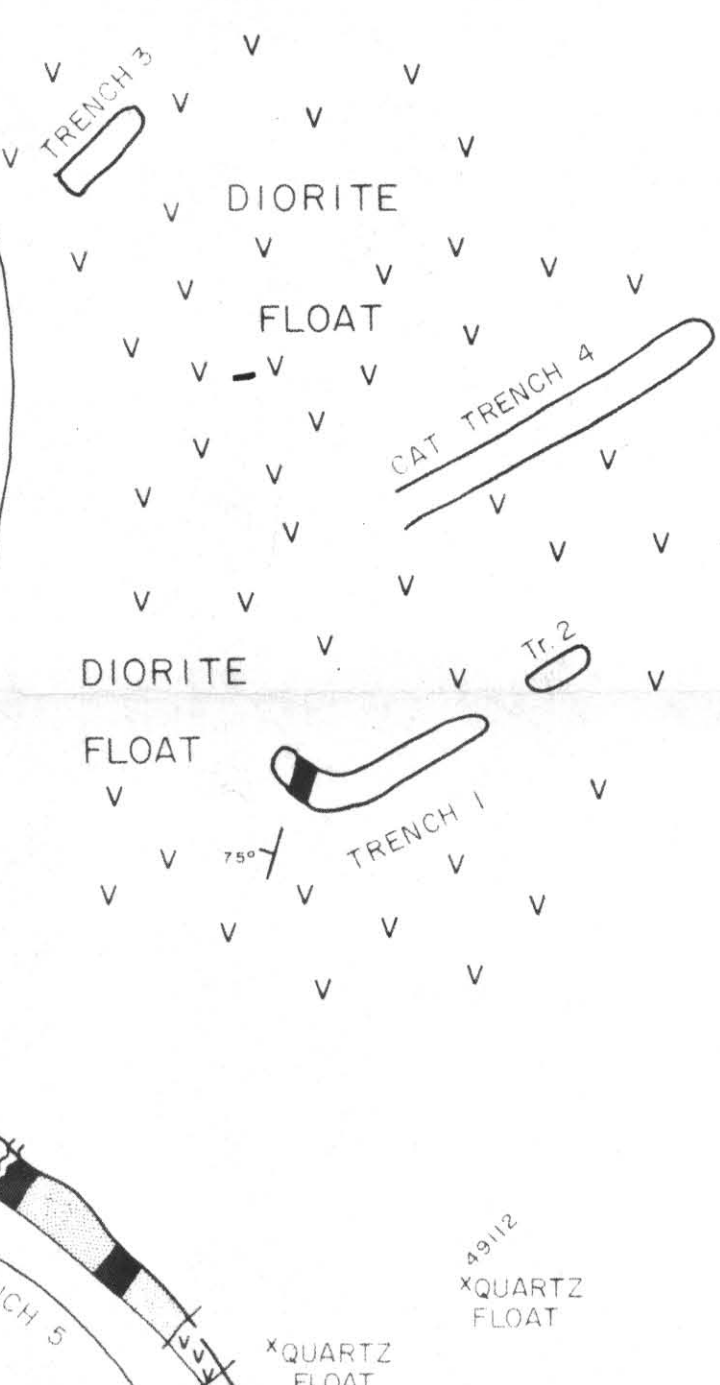
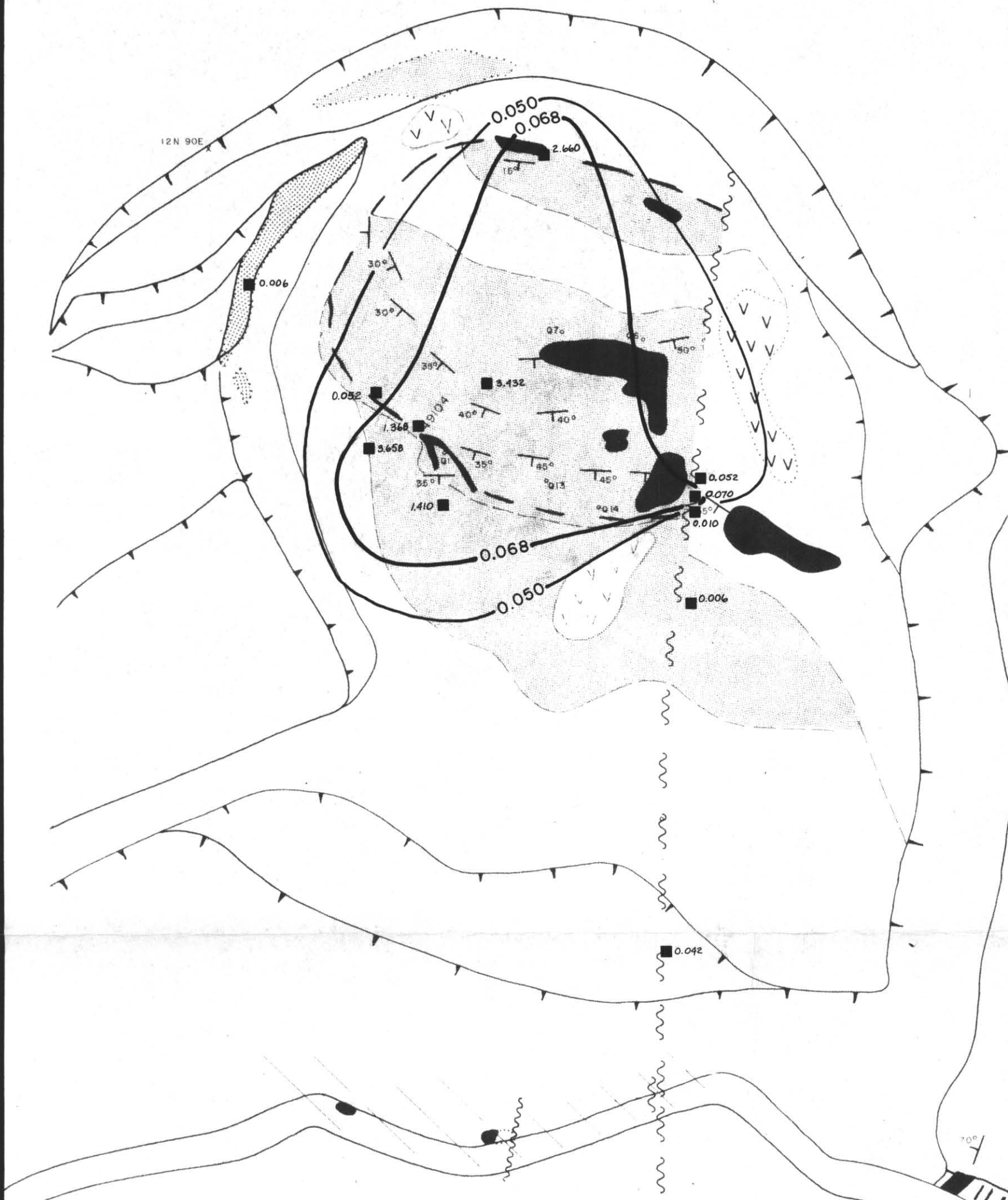
10 0 10 20 30 40 m
 SCALE 1:500

NTS: 82-F-8
 BY: L.D./r.w.r. NOV, 1985
 MAP NO. 3.3.3

GEOCHEMICAL LEGEND:
 35.0 ■ Ag in p.p.m.
 THRESHOLD $x+2s = 1.4$ p.p.m.
 ANOMALOUS $x+3s = 1.9$ p.p.m.



- LEGEND:**
- Siltstone - grey to tan, argillaceous
 - Quartzites - grey, in places with veinlets as stockworks
 - Argillite - green
 - Argillite - tan, phyllitic, alteration near fault zones or quartz veins
 - Quartz veins
 - Diorite, in place altered including float areas



GEOCHEMICAL LEGEND:

0.042 ■ Au in oz/ton
THRESHOLD $x+2s = 0.050$
ANOMALOUS $x+3s = 0.068$



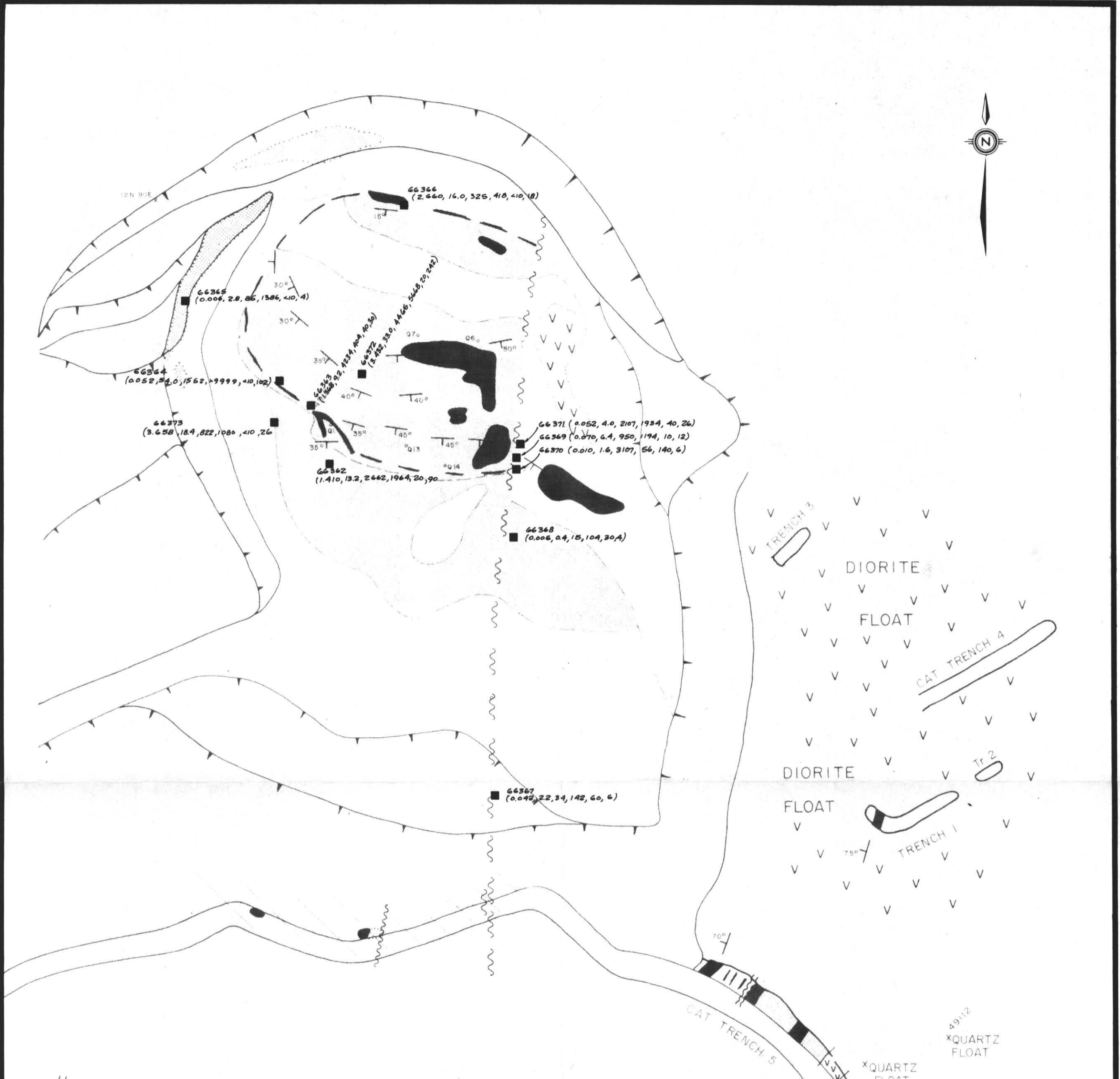
LEGEND:

- Siltstone - grey to tan, argillaceous
- Quartzites - grey, in places with veinlets as stockworks
- Argillite - green
- Argillite - tan, phyllitic, alteration near fault zones or quartz veins
- Quartz veins
- Diorite, in place altered including float areas

GEOLOGICAL BRANCH ASSESSMENT REPORT

14,211

GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE
FORT STEELE MINING DIVISION-B.C.
PIT AREA - DETAIL GEOLOGY
ROCK SAMPLING
Au in oz./ton
10 0 10 20 30 40 m
SCALE 1:500
NTS: 82-F-8
BY: L.D./r.w.r. NOV, 1985
MAP No. 3.3.2



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

14,211

GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE
 FORT STEELE MINING DIVISION-B.C.
 PIT AREA - DETAIL GEOLOGY

ROCK SAMPLE RESULTS

10 0 10 20 30 40 m
 SCALE 1:500

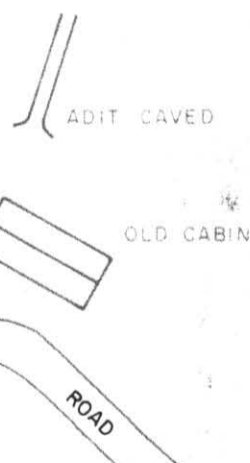
NTS: 82-F-8
 BY: L.D./r.w.r. NOV., 1985 MAP NO. 3.3.1

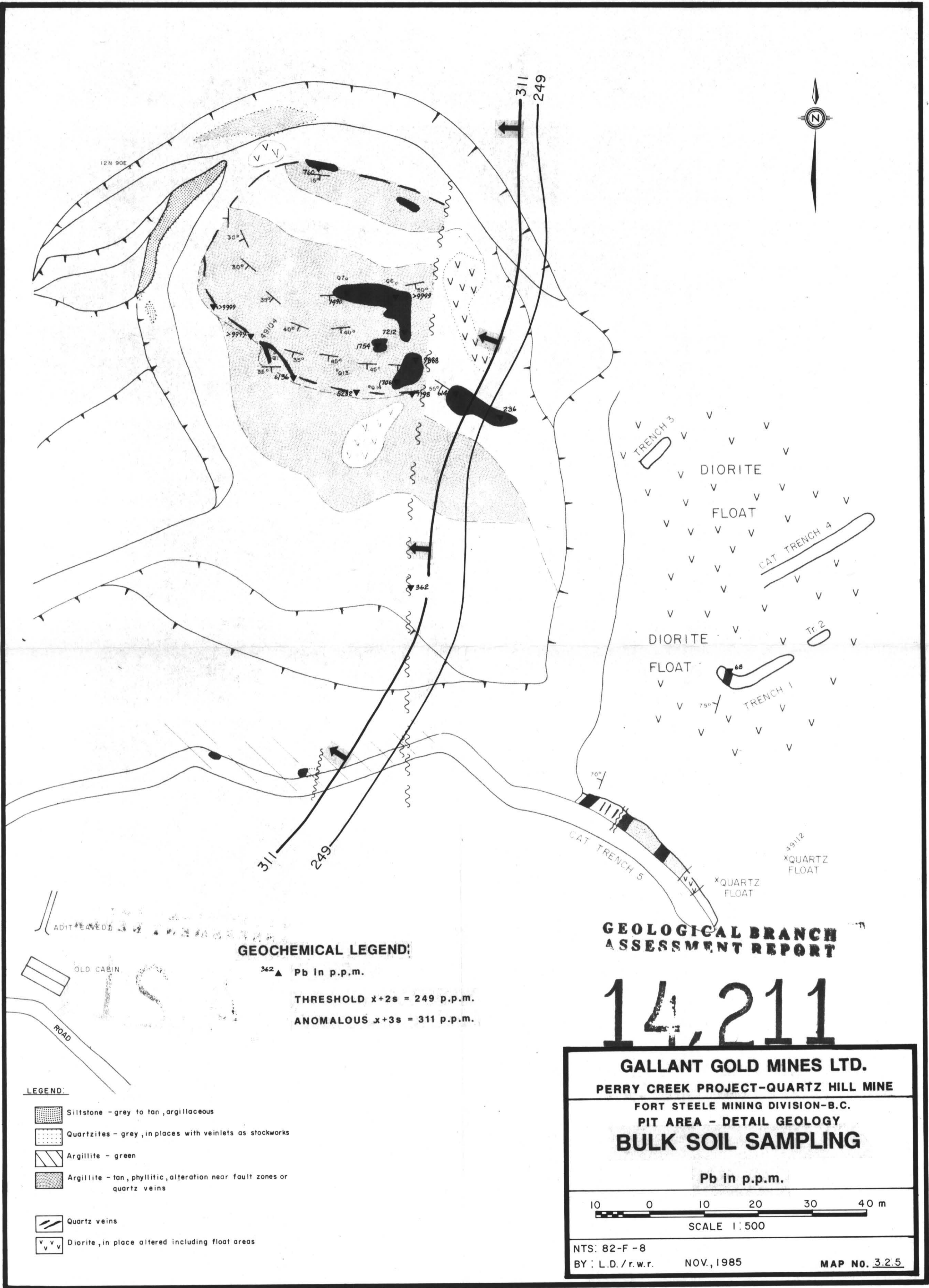
GEOCHEM. LEGEND:

■ ROCK SAMPLE LOCATION
RESULTS: Au IN oz/T, Ag, Cu, Pb, Zn IN ppm

LEGEND:

- Siltstone - grey to tan, argillaceous
- Quartzites - grey, in places with veinlets as stockworks
- Argillite - green
- Argillite - tan, phyllitic, alteration near fault zones or quartz veins
- Quartz veins
- Diorite, in place altered including float areas





GEOCHEMICAL LEGEND:

362 ▲ Pb in p.p.m.
 THRESHOLD $x+2s = 249$ p.p.m.
 ANOMALOUS $x+3s = 311$ p.p.m.

LEGEND:

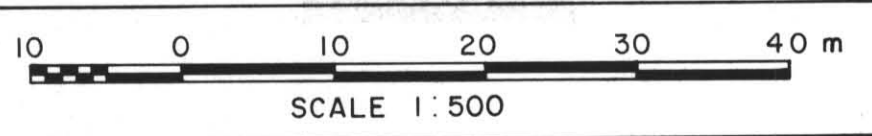
- Siltstone - grey to tan, argillaceous
- Quartzites - grey, in places with veinlets as stockworks
- Argillite - green
- Argillite - tan, phyllitic, alteration near fault zones or quartz veins
- Quartz veins
- Diorite, in place altered including float areas

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

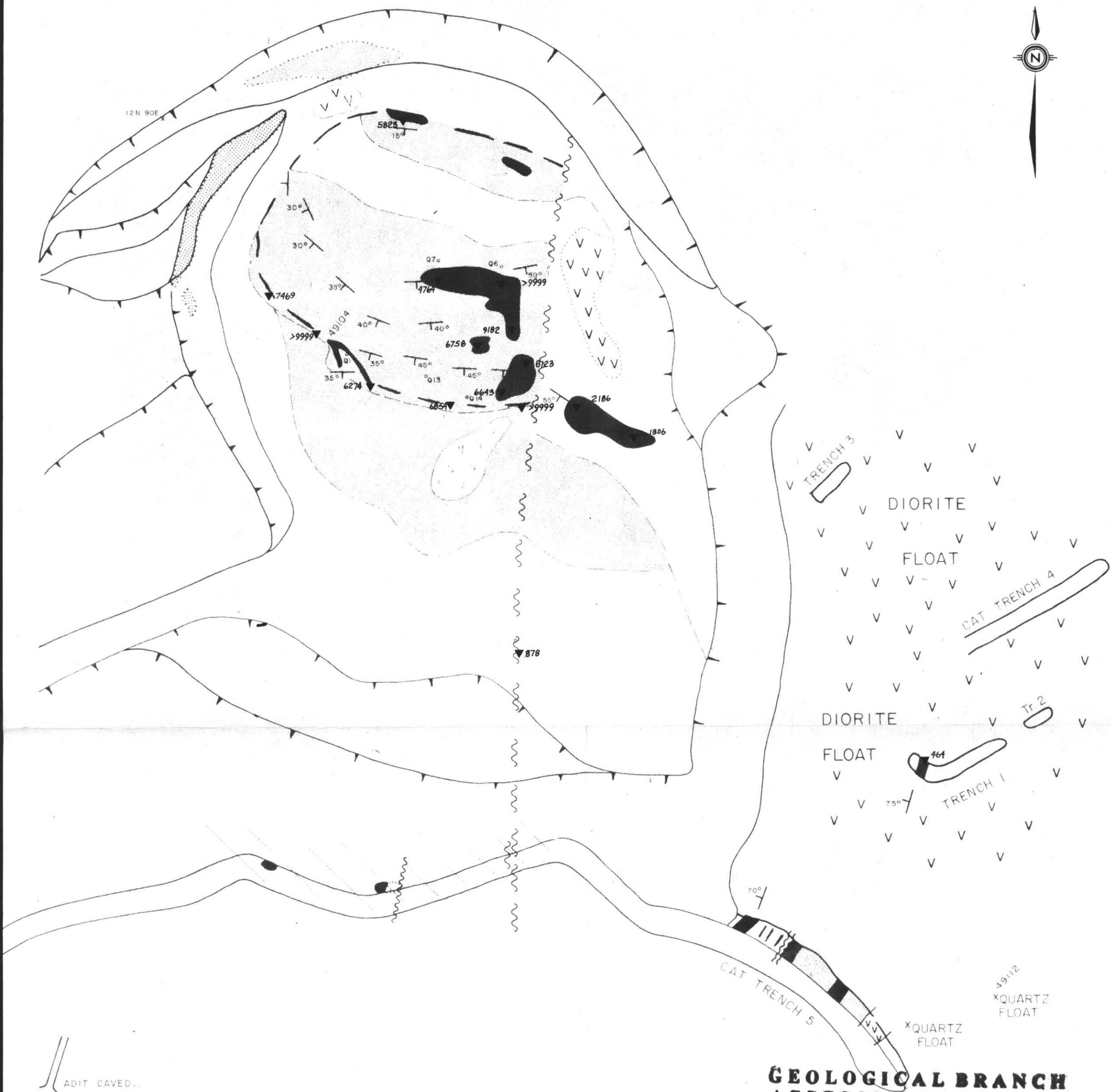
14,211

**GALLANT GOLD MINES LTD.
 PERRY CREEK PROJECT-QUARTZ HILL MINE
 FORT STEELE MINING DIVISION-B.C.
 PIT AREA - DETAIL GEOLOGY
 BULK SOIL SAMPLING**

Pb in p.p.m.



NTS: 82-F-8
 BY: L.D./r.w.r. NOV., 1985
 MAP NO. 3.2.5



GEOCHEMICAL LEGEND:







▲ Cu in p.p.m.

THRESHOLD $x+2s = 75$ p.p.m.

ANOMALOUS $x+3s = 94$ p.p.m.

NOTE: ALL SAMPLES ARE ANOMALOUS

LEGEND:

-  Siltstone - grey to tan, argillaceous
-  Quartzites - grey, in places with veinlets as stockworks
-  Argillite - green
-  Argillite - tan, phyllitic, alteration near fault zones or quartz veins
-  Quartz veins
-  Diorite, in place altered including float areas

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE
 FORT STEELE MINING DIVISION-B.C.
PIT AREA - DETAIL GEOLOGY
BULK SOIL SAMPLING

Cu in p.p.m.

10 0 10 20 30 40 m

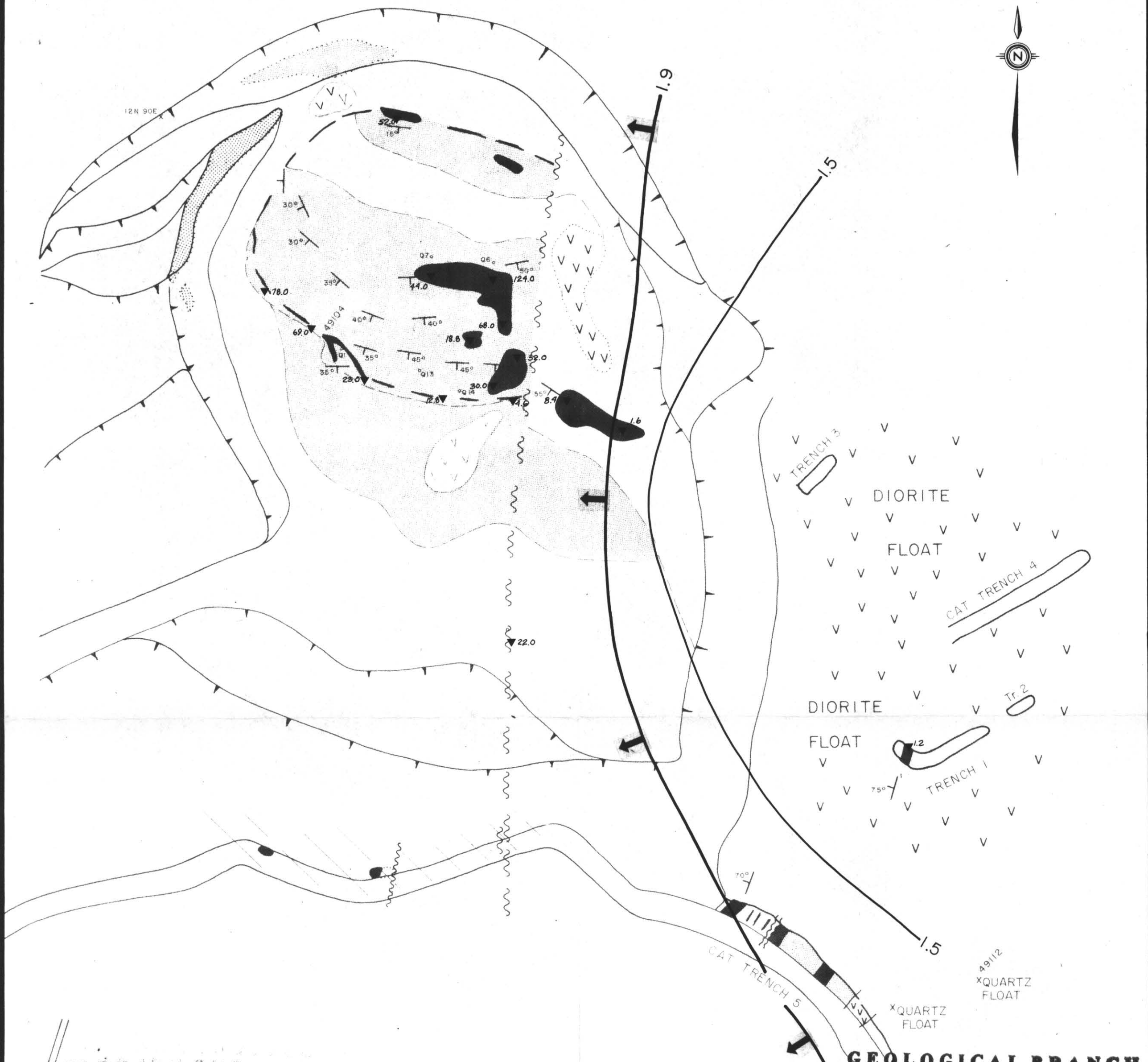
SCALE 1:500

NTS: 82-F-8

BY: L.D./r.w.r.

NOV., 1985

MAP NO. 3.2.4









GEOCHEMICAL LEGEND:

▲ Ag. In p.p.m.

THRESHOLD $x+2s = 1.5$ p.p.m.

ANOMALOUS $x+3s = 1.9$ p.p.m.

LEGEND:

-  Siltstone - grey to tan, argillaceous
-  Quartzites - grey, in places with veinlets as stockworks
-  Argillite - green
-  Argillite - tan, phyllitic, alteration near fault zones or quartz veins
-  Quartz veins
-  Diorite, in place altered including float areas

GEOLOGICAL BRANCH ASSESSMENT REPORT

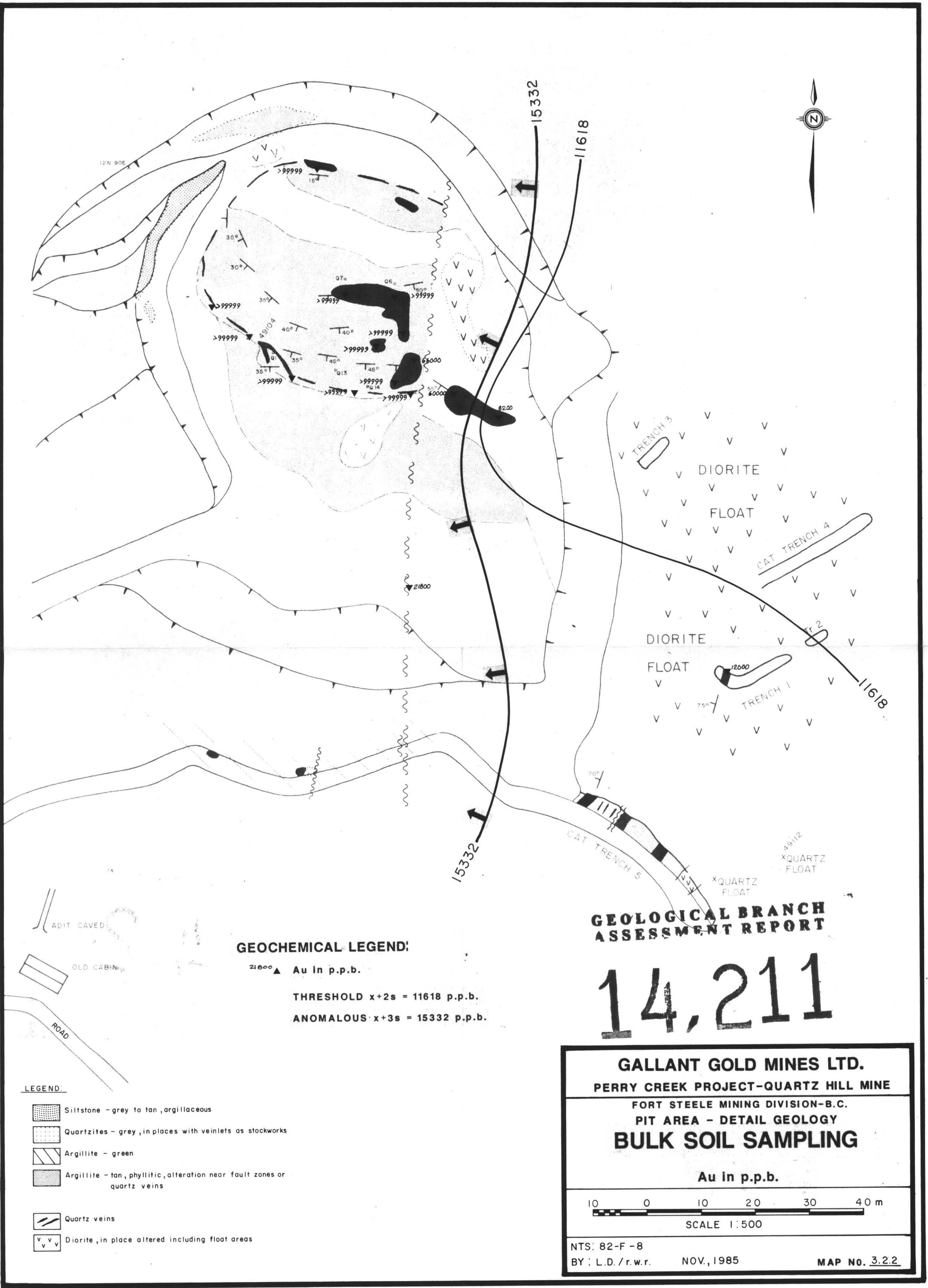
14,211

GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE
 FORT STEELE MINING DIVISION-B.C.
PIT AREA - DETAIL GEOLOGY
BULK SOIL SAMPLING

Ag in p.p.m.

10 0 10 20 30 40 m
 SCALE 1:500

NTS: 82-F-8
 BY: L.D./r.w.r. NOV, 1985
 MAP NO. 3.2.3



12N 90E

15332

11618

TRENCH 3

DIORITE
FLOAT

CAT TRENCH 4

DIORITE
FLOAT

TRENCH 1

11618

CAT TRENCH 5

X QUARTZ
FLOAT

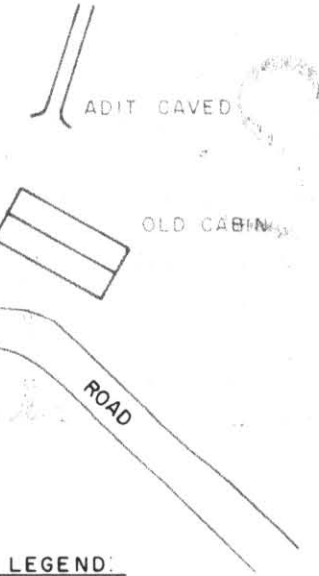
4912
X QUARTZ
FLOAT

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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GEOCHEMICAL LEGEND:

21000 ▲ Au in p.p.b.
 THRESHOLD $x+2s = 11618$ p.p.b.
 ANOMALOUS $x+3s = 15332$ p.p.b.



LEGEND:

- Siltstone - grey to tan, argillaceous
- Quartzites - grey, in places with veinlets as stockworks
- Argillite - green
- Argillite - tan, phyllitic, alteration near fault zones or quartz veins
- Quartz veins
- Diorite, in place altered including float areas

GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE
 FORT STEELE MINING DIVISION-B.C.
 PIT AREA - DETAIL GEOLOGY
BULK SOIL SAMPLING

Au in p.p.b.

10 0 10 20 30 40 m
 SCALE 1:500

NTS: 82-F-8
 BY: L.D./r.w.r. NOV, 1985
 MAP NO. 3.2.2



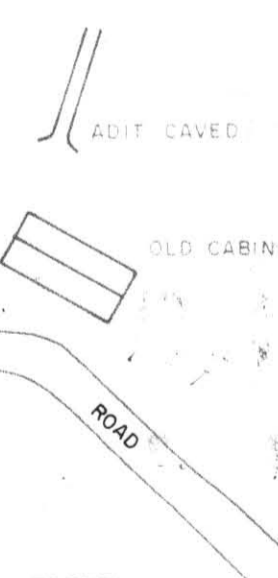
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

14,211

**GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE**

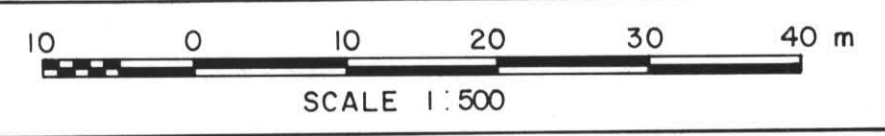
**FORT STEELE MINING DIVISION-B.C.
PIT AREA - DETAIL GEOLOGY**

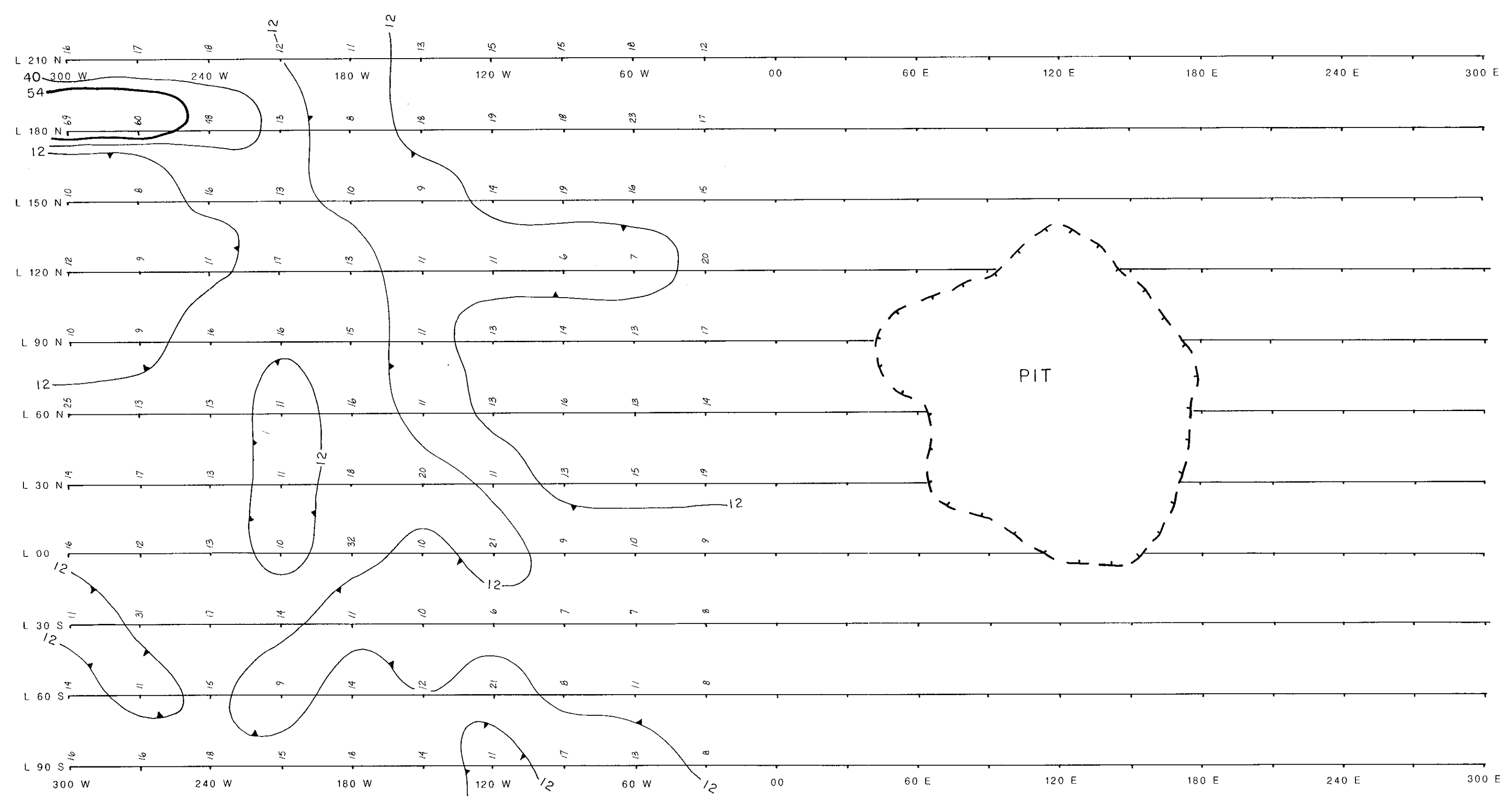
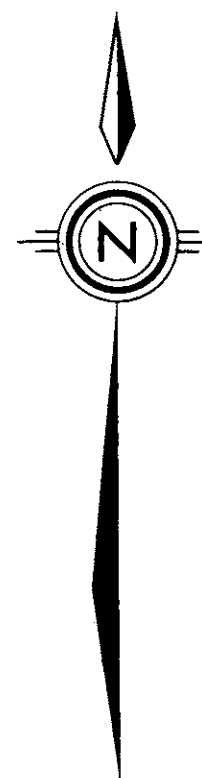
BULK SOIL SAMPLE RESULTS



GEOCHEM. LEGEND:
 ▼ BULK SOIL SAMPLE LOCATION
 RESULTS: Au IN ppb, Ag, Cu, Pb, Zn IN ppm

- LEGEND:**
- Siltstone - grey to tan, argillaceous
 - Quartzites - grey, in places with veinlets as stockworks
 - Argillite - green
 - Argillite - tan, phyllitic, alteration near fault zones or quartz veins
 - Quartz veins
 - Diorite, in place altered including float areas





LEGEND:
MEAN \bar{x} = 12 p.p.m. Pb
THRESHOLD $\bar{x} + 2s$ = 40 p.p.m. Pb
ANOMALOUS $\bar{x} + 3s$ = 54 p.p.m. Pb

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

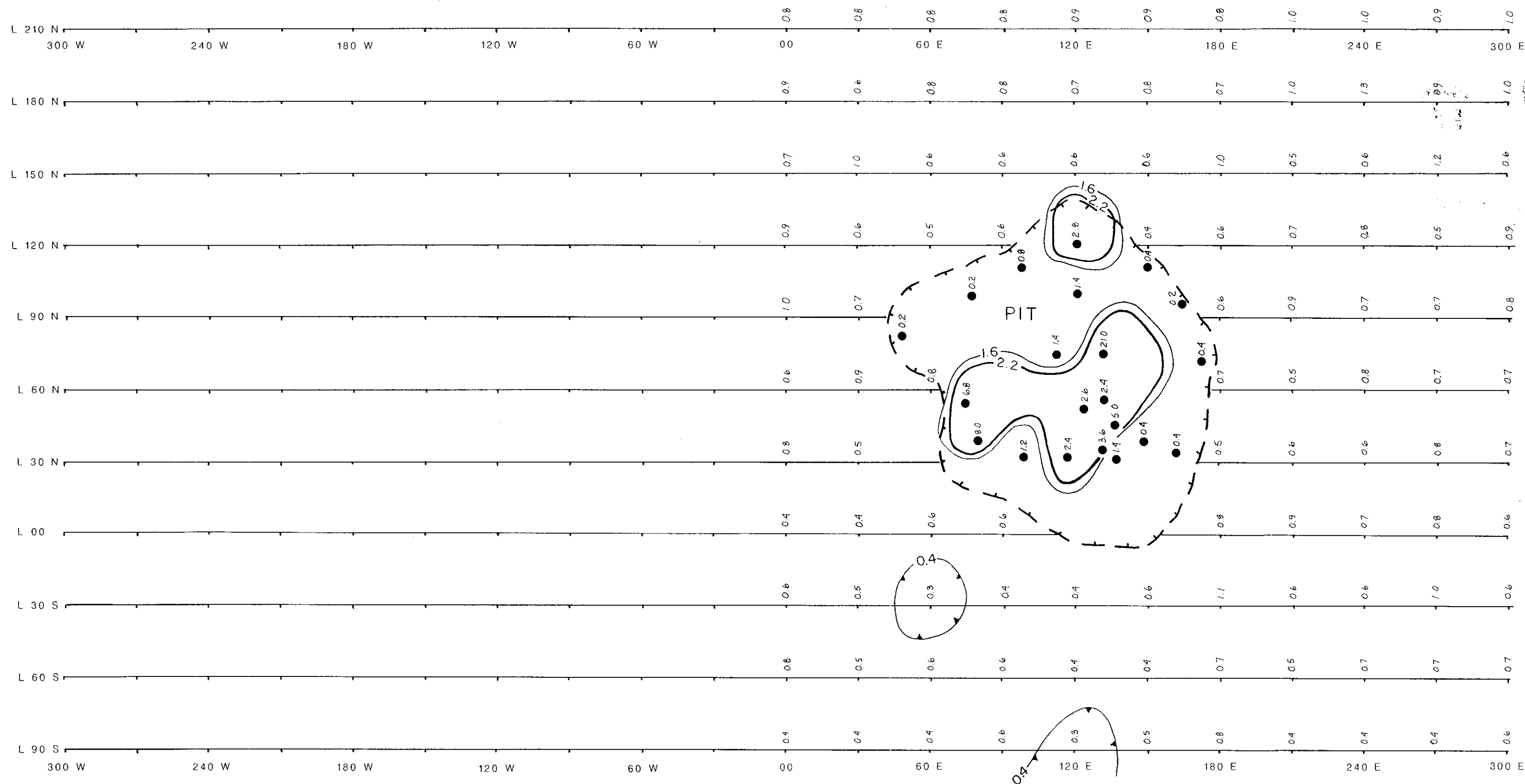
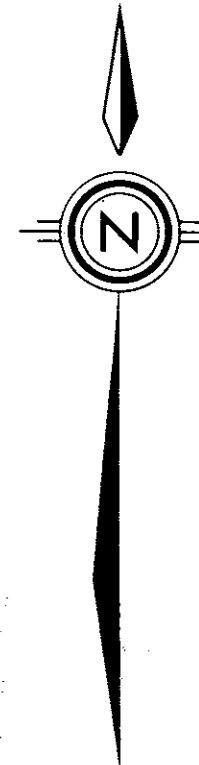
14,211

GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT - QUARTZ HILL MINE
FORT STEELE MINING DIVISION - B.C.
PIT AREA - GEOCHEMISTRY

LEAD RESULTS IN P.P.M.
(SOILS)

0 50 100 150m
SCALE 1 : 1500

NTS: 82 F/8
BY L.D./r.w.r. NOV., 1985 MAP NO. 3.1.9



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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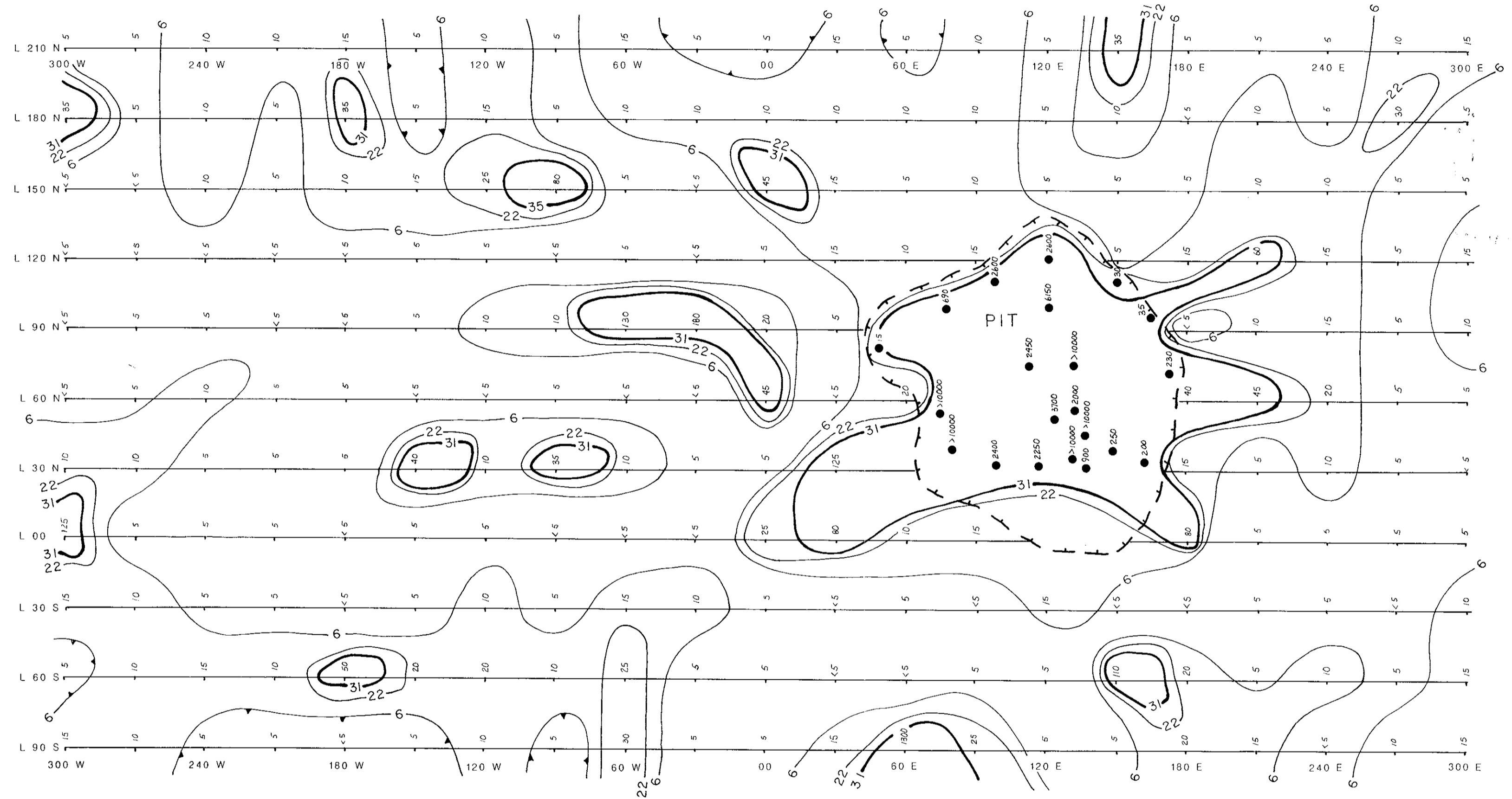
LEGEND:

MEAN \bar{x} = 0.4 p.p.m. Ag

THRESHOLD $\bar{x} + 2s$ = 1.6 p.p.m. Ag

ANOMALOUS $\bar{x} + 3s$ = 2.2 p.p.m. Ag

GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT - QUARTZ HILL MINE
FORT STEELE MINING DIVISION - B.C.
PIT AREA - GEOCHEMISTRY
SILVER RESULTS IN P.P.M.
(SOILS)
0 50 100 150m SCALE 1 : 1500
NTS: 82 F/8
BY L.D./r.w.r. NOV., 1985
MAP NO. 3.18



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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LEGEND:
 MEAN \bar{x} = 6 p.p.b. Au
 THRESHOLD $\bar{x} + 2s$ = 22 p.p.b. Au
 ANOMALOUS $\bar{x} + 3s$ = 31 p.p.b. Au
 NOTE: 1981 & 1985 RESULTS ARE PLOTTED.

GALLANT GOLD MINES LTD.		
PERRY CREEK PROJECT - QUARTZ HILL MINE		
FORT STEELE MINING DIVISION - B.C.		
PIT AREA - GEOCHEMISTRY		
GOLD RESULTS IN P.P.B.		
(SOILS)		
SCALE 1:1500		
NTS: 82 F/8		
BY L.D./r.w.r.	NOV., 1985	MAP NO. 3.1.7



GEOCHEMICAL LEGEND:

● Pb in p.p.m.

THRESHOLD $x+2s = 40$ p.p.m.

ANOMALOUS $x+3s = 54$ p.p.m.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE
 FORT STEELE MINING DIVISION-B.C.
PIT AREA - DETAIL GEOLOGY
SOIL SAMPLING

Pb in p.p.m.

10 0 10 20 30 40 m
 SCALE 1:500

NTS: 82-F-8
 BY: L.D./r.w.r. NOV, 1985
 MAP NO. 3.1.6

ADIT CAVED

OLD CABIN

ROAD

LEGEND:







- Siltstone - grey to tan, argillaceous
- Quartzites - grey, in places with veinlets as stockworks
- Argillite - green
- Argillite - tan, phyllitic, alteration near fault zones or quartz veins
- Quartz veins
- Diorite, in place altered including float areas



GEOCHEMICAL LEGEND:

720 ● Cu in p.p.m.
 THRESHOLD $x+2s = 51$ p.p.m.
 ANOMALOUS $x+3s = 70$ p.p.m.

LEGEND:

-  Siltstone - grey to tan, argillaceous
-  Quartzites - grey, in places with veinlets as stockworks
-  Argillite - green
-  Argillite - tan, phyllitic, alteration near fault zones or quartz veins
-  Quartz veins
-  Diorite, in place altered including float areas

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

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GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE
 FORT STEELE MINING DIVISION-B.C.
PIT AREA - DETAIL GEOLOGY
SOIL SAMPLING

Cu in p.p.m.

10 0 10 20 30 40 m
 SCALE 1:500

NTS: 82-F-8
 BY: L.D./r.w.r. NOV, 1985
 MAP NO. 3.1.5



GEOCHEMICAL LEGEND:

● Ag in p.p.m.
THRESHOLD $\bar{x}+2s = 1.6$ p.p.m.
ANOMALOUS $\bar{x}+3s = 2.2$ p.p.m.

LEGEND:

- Siltstone - grey to tan, argillaceous
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- Argillite - green
- Argillite - tan, phyllitic, alteration near fault zones or quartz veins
- Quartz veins
- Diorite, in place altered including float areas

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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**GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE**

FORT STEELE MINING DIVISION-B.C.

PIT AREA - DETAIL GEOLOGY

SOIL SAMPLING

Ag in p.p.m.

10 0 10 20 30 40 m

SCALE 1:500

NTS: 82-F-8

BY: L.D./r.w.r.

NOV., 1985

MAP NO. 3.1.4



GEOCHEMICAL LEGEND:
 2200 ● Au in p.p.b.
 THRESHOLD $x+2s = 22$ p.p.b.
 ANOMALOUS $x+3s = 31$ p.p.b.

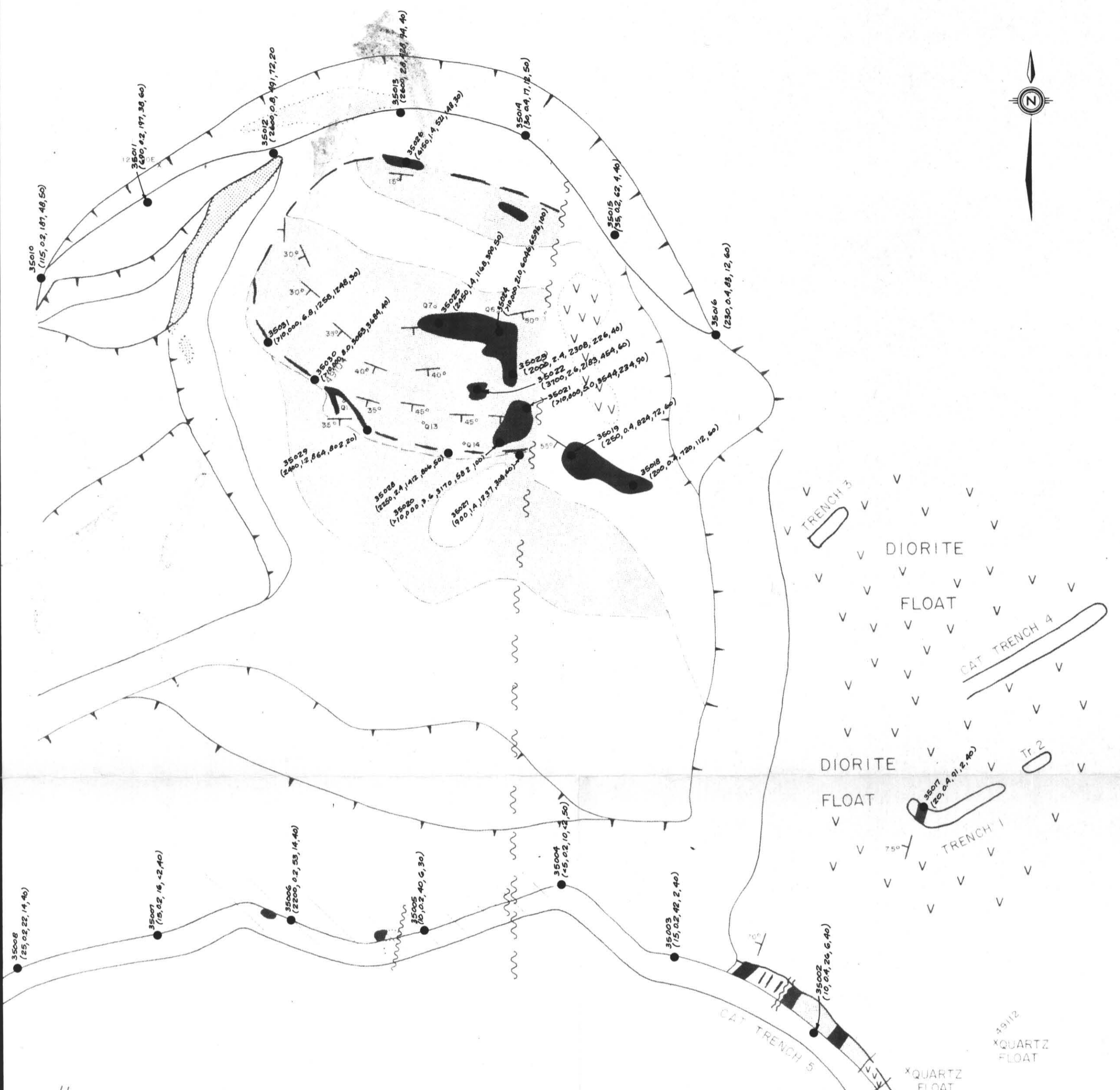
**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

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GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE
 FORT STEELE MINING DIVISION-B.C.
PIT AREA - DETAIL GEOLOGY
SOIL SAMPLING
 Au in p.p.b.
 10 0 10 20 30 40 m
 SCALE 1:500
 NTS: 82-F-8
 BY: L.D./r.w.r. NOV, 1985
 MAP NO. 3.1.3

LEGEND:

- Siltstone - grey to tan, argillaceous
- Quartzites - grey, in places with veinlets as stockworks
- Argillite - green
- Argillite - tan, phyllitic, alteration near fault zones or quartz veins
- Quartz veins
- Diorite, in place altered including float areas



GEOCHEM. LEGEND:

● SOIL SAMPLE LOCATION
RESULTS: Au IN ppb, Ag, Cu, Pb, Zn IN ppm

LEGEND:

- Siltstone - grey to tan, argillaceous
- Quartzites - grey, in places with veinlets as stockworks
- Argillite - green
- Argillite - tan, phyllitic, alteration near fault zones or quartz veins
- Quartz veins
- Diorite, in place altered including float areas

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

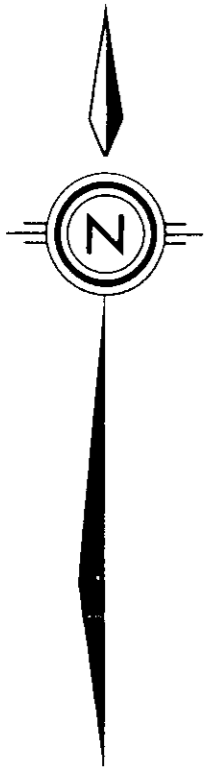
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GALLANT GOLD MINES LTD.
PERRY CREEK PROJECT-QUARTZ HILL MINE
 FORT STEELE MINING DIVISION-B.C.
 PIT AREA - DETAIL GEOLOGY

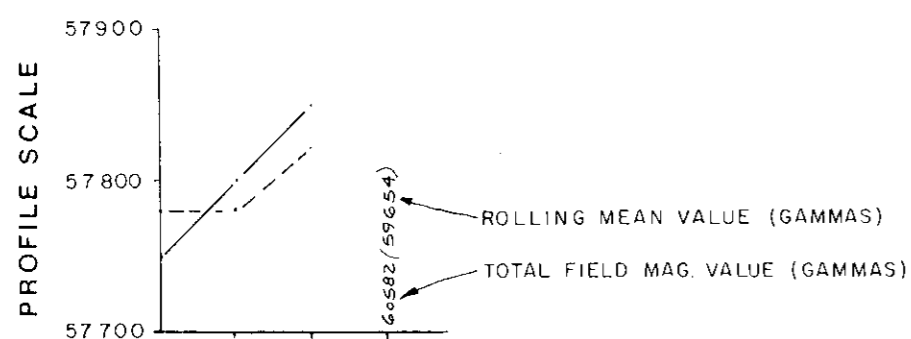
SOIL SAMPLE RESULTS

10 0 10 20 30 40 m
 SCALE 1: 500

NTS: 82-F-8
 BY: L.D./r.w.r. NOV, 1985
 MAP NO. 3.1.2



LEGEND:



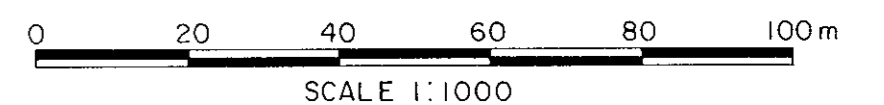
- TOTAL FIELD MAGNETOMETER PROFILE
- - - ROLLING MEAN MAGNETOMETER PROFILE

INSTRUMENT: GEOMETRICS PROTON MAGNETOMETER

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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GALLANT GOLD MINES LTD.
PERRY CREEK PROPERTY

FORT STEELE MINING DIVISION - B.C.
**QUARTZ HILL GRID
PROTON MAGNETOMETER SURVEY
PROFILES**



NTS: 82 F/8

BY L.D./r.w.r.

OCT., 1985

MAP NO. 4.1.2