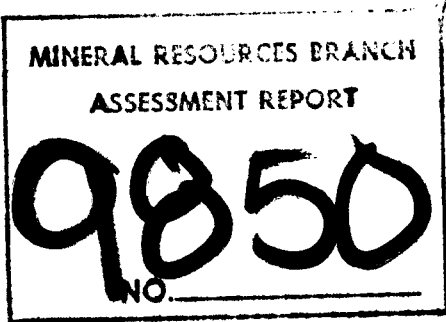


part 2  
of 2



PRELIMINARY GEOLOGY AND EVALUATION REPORT

PERRY CREEK GOLD PROPERTY

FORT STEELE MINING DIVISION

BRITISH COLUMBIA

NTS 82/F 8, 9

on behalf of

GALLANT GOLD MINES LTD.

Surrey, B.C.  
February 5, 1982



## TABLE OF CONTENTS

	Page
SUMMARY	
1-00 INTRODUCTION .....	1
2-00 LOCATION AND ACCESS.....	2
3-00 PROPERTY.....	2
4-00 HISTORY.....	3
5-00 PHYSIOGRAPHY.....	6
6-00 REGIONAL GEOLOGY.....	7
6-10 Stratigraphy.....	7
6-20 Structural Setting.....	8
6-30 Mineral Deposits.....	8
7-00 LOCAL GEOLOGY.....	8
7-10 Stratigraphy.....	9
7-20 Structural Setting.....	11
7-30 Mineral Deposits.....	12
8-00 DETAIL DESCRIPTION OF SHOWINGS.....	13
8-10 Petra Claims ( Area 1 ) Figure 4.....	13
8-20 Luke Mineral Claim ( Area 2 ) Figure 5 .....	16
8-30 Price Claim - Golden Egg Figure 6.....	19
8-40 Azlin Claims - Area 4 - Figure 7.....	20
8-50 Quartz Hill - Area 5 - Figure 8.....	21
9-00 CONCLUSIONS.....	23
10-00 RECOMMENDATIONS.....	24
11-00 CERTIFICATION.....	25
12-00 BIBLIOGRAPHY.....	26

MAPS

FIGURE 1	Location Map	Scale:	1: 50,000
2	Preliminary Geology South Half		1: 15,325
3	Preliminary Geology North Half		1: 15,325
4	Petra Claims - Geology		1: 5,000
5	Luke Claims - Geology		1: 5,000
6	Price Claims - Geology		1: 2,500
7	Azlin Claims - Geology		1: 5,000
8	Quartz Hill - Geology		1: 2,500

SUMMARY:

The Perry Creek mineral claim groups are located 18 km north west of Cranbrook in the Fort Steele Mining Division.

Perry Creek has been worked since the mid 1800's for placer gold. The search for gold bearing quartz veins followed shortly.

The area is underlain by sediments of Proterozoic age which are intruded by diorite dykes, sills or stock. The main structural features in the area are north easterly trending faults as represented by the Perry Creek fault.

Numerous large quartz ledges cut the sediments, striking north easterly. Re-mobilized quartz forming irregular lenses or stockwork appears to be associated with fracture zones. These zones or veins carry only extremely low gold values.

Geochemical sampling and VLF electromagnetic surveys located isolated areas of interest.

Geological mapping and sampling located north easterly trending shear zones parallel to the Perry Creek fault structure. These shear zones have associated hydrothermal alteration, quartz lenses or veins carrying erratic values in gold.

A follow up program consisting of mapping, trenching and sampling is recommended.

PRELIMINARY GEOLOGY AND EVALUATION

PERRY CREEK GOLD PROPERTY

FORT STEELE MINING DIVISION

BRITISH COLUMBIA

NTS 82/F 8,9

49° 29' N

116° 06' W

1-00 INTRODUCTION:

At the request of Mr. R.W. Hughes, president of Gallant Gold Mines Ltd. the writer, accompanied by Mr. D. Reinke, prospector and Mr. S. Parker, field assistant spent October 4, to October 25, on the property.

The purpose of the program was:

1. To clarify and reconnaissance map the geological setting of the Perry Creek mineral claims.
2. To investigate the geological setting of the known quartz veins and their mineral potential.
3. To investigate the possibility of discovering other potential ore bearing structures in the district.
4. Formulate a concept to explain the presence of placer gold in Perry Creek and its tributaries, hence, if possible locate the source of the gold.

A literature research was completed studying all available reports and data on the Perry Creek area to allow proper interpretation of field data.

The objective of this report is to summarize the findings and to recommend further action.

2-00 LOCATION AND ACCESS: ( FIGURE 1 )

The area investigated lies along Perry Creek about 18 km south west of Kimberley within the Moyie Range of the Purcell Mountains.

Elevations range from 1,220 meters to 1,980 meters above mean sea level.

The country is well timbered with pine, spruce, fir and tamarak (lark). Heavy underbrush is common along valley floors, but at higher elevation open stands of timber predominate.

The area is located within map sheets NTS 82F/8E, 9E and has center co-ordinates of N Latitude  $49^{\circ} 30'$ , W Longitude  $116^{\circ} 06'$ .

Access to the area is either from Cranbrook, B.C. or Kimberley, B.C. to Wycliffe and from hence by good logging roads to the individual claim groups.

3-00 PROPERTY: ( FIGURE 1 )

Gallant Gold Mines Ltd. holds the following crown granted and reverted crown granted and staked mineral claims, all located within the Perry Creek drainage system.

<u>Claim Name:</u>	<u>Units:</u>	<u>Record No.:</u>
Azlin	( 6 )	394 ( 11 )
Gold	( 10 )	148 ( 2 )
Birdie Load	( 1 )	395 ( 1 )
Janet	( 1 )	86 ( 10 )
Janet 1	( 4 )	87 ( 10 )
Golden Wolfe	( 4 )	396 ( 11 )
Tanis	( 4 )	149 ( 2 )
Peter Rock	( 9 )	397 ( 11 )
Lone Eagle	( 1 )	97 ( 11 )
Quartz Creek	( 1 )	98 ( 11 )
John	( 4 )	138 ( 11 )
Mark	( 6 )	136 ( 11 )
Luke	( 9 )	137 ( 11 )
Eclipse	( 1 )	343 ( 11 )
Anna	( 1 )	344 ( 11 )
Standard	( 1 )	345 ( 11 )
Agnes	( 1 )	346 ( 11 )
Pioneer	( 1 )	347 ( 11 )
Oyster	( 1 )	348 ( 11 )

<u>Claim Name:</u>	<u>Units:</u>	<u>Record No.:</u>
Evening Star	( 1 )	349 ( 11 )
Petra 9-15	( 7 )	799 ( 10 ) -
		805 ( 10 )
Carol 1-9	( 8 )	817 ( 11 ) -
		824 ( 11 )
Linda 1-8	( 8 )	809 ( 11 )
		816 ( 11 )
Ariadna 1-6	( 6 )	1057 ( 9 ) -
		1062 ( 9 )

4-00 HISTORY:

The first recorded mining activities along Perry Creek date back to the mid 1850's. During this time period extensive placer mining took place above Old Town. The main area of interest reportedly was located between Old Town and Perry Creek Falls and two miles above the falls.

Numerous shafts were sunk and pay streaks were not only worked by surface sluicing, but also by driving tunnels along pay streaks following a false bed rock.

No production record is available from this period. During 1903 new interest in the gold potential of Perry Creek cumulated in the establishing a steamshovel about 4.5 miles above the falls. About 1,000 yards of gravel were worked returning \$ 260.00 in gold ( 1903 gold prices ).

Several shafts were sunk ( Baker and Ridgeway shaft ), to depths of approximately 50 feet reaching bed rock. The Ridgeway shaft reportedly intersected gravels returning \$ 90.00 per yard and drifts started from the shaft paid about \$ 7.00 per day to the miner for a time.

At the foot of Perry Falls an old buried channel was investigated by driving a tunnel for a reported 1,000 to 2,000 feet - Montezuma Tunnel. The old channel is buried by gravels up to 400 feet thick above the floor of Perry Creek. The upper part of the fill consists mainly of clay and silt of glacial origin. The tunnel is reportedly not on bed rock or rim rock of the buried valley, but follows a pay streak in the gravels. Additional pay streaks were discovered, which led to an attempt by the Perry Creek Hydraulic Mining Co in 1904 to 1906 to mine the whole bank. The project was never completed.

Later efforts were concentrated on investigating the gold potential of the deeper gravels below the falls. About a ½ mile below the falls a 48 ft deep shaft and 700 ft further downstream a 65 ft deep shaft was sunk. Both encountered bed rock and some coarse gold was obtained.

During 1932, approximately 1½ miles below the falls, an attempt to sink a shaft was made but a thick layer of quicksand was encountered.

The shaft was abandoned at about 35 foot depth. A new shaft was collared in rimrock with the objective to sink to about the level of bed rock and cross cut into the creek channel. Three drill holes were completed to test the depth of the gravels. The drill hole below the abandoned shaft hit bed rock at a depth of 90 ft. The composition of the intersection reportedly included 60 ft of irregularly sorted sands, gravels and clays ( including quicksand ), underlain by 25 ft of regularly bedded loose sand and fine gravel, underlain in turn by 15 ft of clay, gravel and sand. The bed rock intersected was a strongly decomposed, possibly basic dyke. The lower 40 ft of gravel intersected reportedly has more the appearance of stream gravel than glacial deposits. The upper section is more likely of glacial origin.

A comparison with the Tertiary gravels of St. Mary River suggests the age possibly to be the same of the lower 40 ft.

After the initiation of placer mining in the Perry Creek District the search for the source of gold begun. By 1898 numerous claims had been located along the slopes of Perry Creek and the most prominent quartz ledges in the area have been investigated. The results obtained were erratic and for the most part disappointing. In general it was found that although selected samples having a tenor of \$ 4.00 to \$ 6.00 per ton in gold, the average was too low to be of economic interest.

During the early period of prospecting a California type stamp mill was erected to test the individual veins by using bulk samples. The results obtained were disputed by the local miners as being too low and this was blamed on the method of recovery employed.

Following these tests many claims were abandoned as uneconomic.

During 1916 renewed interest in gold bearing quartz vein structures on Perry Creek led to extensive investigations consisting of trenching, sinking shafts and drifting on the Homestake Claim Group. The objective of the work was to



delineate a large zone of possible low grade ore ( \$ 4.00 per ton at 1916 gold prices ). Assays from 0.05 oz/ton to a high of 0.30 oz/ton have been reported from a shear zone, impregnated with quartz lenses and veinlets. The large quartz ledges returned traces to 0.05 oz/ton.

The Yellow Metal Group, located to the south west of the Homestake and the Annie Claim, between the two groups, were also investigated at this time with the same results.

During 1932 the Homestake property was held by the Cranbrook Gold Mining Co. The investigations consisting of drifting and underground evaluation were centered on the Homestake Mine and the Columbia Mine, located between Liverpool and Manchester Creek. During this period two zones of shearing, associated with basic dykes were investigated. The width of the zone was not defined. The shear zone is impregnated by quartz veins and lenses carrying variable amounts of sulfides. A large, wide quartz vein outcrops in vicinity of the shear.

The best values reported appear to come from the narrower quartz stringers within the shear zones. Samples taken from the large quartz ledge have been found to be disappointing.

From 1932 to 1977 the exploration conducted was very sporadic, but re-staking or re-discovery of many of the old claims or showings are reported.

During 1973, 1,373 tons of quartz containing pyrite, chalcopyrite, galena and sphalerite were shipped to the smelter, yielding 352 oz gold, 275 oz silver, 2,363 lbs copper, 5,738 lbs lead and 2,746 lbs zinc from the Quartz Hill Showing.

Other properties were investigated during the period of 1950 to 1975, including the Wellington, Polaris, Price and Rome.

Meridian Resources Ltd. located a total of 35 claims containing 186 units, including crown granted and reverted crown granted mineral claims during 1977.

The property was transferred to Gallant Gold Mines Ltd. during 1978.

From 1977 to 1980 exploration programs consisting of prospecting, soil sampling along road cuts and on grid basis, VLF - electromagnetic surveys and trenching were completed.

Results of the above program, although producing sporadic high gold values in soils were considered inconclusive.

5-00 PHYSIOGRAPHY:

Perry Creek, a tributary of St. Mary River, is about 23 km long. From its head waters to about 12.5 km from its mouth it occupies a distinctly trough shaped valley. The valley slopes are steep to about 300 meters above the floor. Above this elevation the slopes flatten and tributary streams have well defined valleys of their own, below, the tributaries have extremely steep gradients and are confined to young appearing V- shaped valleys.

Glacial till, as thick accumulations masking bed rock and consisting of silt, clay sand and boulders forming remnant shelves, is confined to the steep, lower portion of the slopes. Where tributary streams cut through the accumulation of glacial debris, steep banks or cliffs are evident.

At 12.5 km from its mouth to its junction with the St. Mary River, Perry Creek cuts through the foot hills of the Purcell Range. Here the valley widens and is essentially filled with glacial debris which extend upwards to nearly the top of the low rounded hills.

Approximately 3.5 km above Old Town, about where Perry Creek enters the foot hills, the creek forms a steep narrow gorge, commencing from a 30 meter high waterfall. The creek flows on well exposed bed rock.

Below the waterfall an old creek channel filled with up to 100 meter glacial till is evident, suggesting re-routing of Perry Creek from its old course.

Glacial erratic can be found throughout the Perry Creek drainage basin, except at elevations above 2,500 meters, suggesting a thick ice sheet has occupied the area during the Pleistocene.

During 1903, approximately 6.5 km upstream from the falls, two shafts were sunk hitting bed rock at a depth of approximately 17 meters.

At about 1 km below the falls, during 1932, three drill holes were collared to test the gold potential across Perry Creek. All three drill holes intersected bed rock at about 30 meters, with the last 10 meters being interpreted as possible Tertiary gravels, correlatively to the St. Mary gravels. Further, from the drill data it was inferred that the drill holes entered the V-shaped remnant valley, cut by Perry Creek before glaciation.

Within the portion of the Perry Creek valley located in the Purcell Range, the maximum relief is in the order of 1,500 meters,

with the highest point being Grassy Mountain, 2,400 meters above sea level.

Topography is rugged with numerous cliffs and bluffs occurring about 300 meters above the creek. Below this level outcrops are scarce. Above this level slopes become gentler, but outcrops occur more frequently.

At timberline evidence of mountain glaciation exhibited by cirques and tarns is common.

Large boulders or erratics up to nearly 2,000 meters a.s.l. suggest that during the height of glaciation only the highest peaks in the district were ice free, i.e. the ice sheet apparently was overriding the foot hills adjoining the wide valley, forming the Rocky Mountain Trench.

#### 5-00 REGIONAL GEOLOGY:

The district has been mapped by G.B. Leech of the Geological Survey of Canada and the information has been published as Map 15 - 1957, St. Mary Lake, Kootenay District, B.C., at a scale of 1 inch = 1 mile.

The map includes the north eastern part of the Perry Creek drainage basin. No geological information has been published on the south western part.

The area of interest is essentially underlain by the Kitchener-Siyeh formation and Creston formation, members of the Purcell Strata, Proterozoic in age.

#### 6-10 Stratigraphy:

Palaeozoic:	<u>Lower Cambrian:</u>	<u>Cranbrook Formation:</u> Siliceous quartzites, grit conglomerates.
Proterozoic:	<u>Purcell or Later:</u>	<u>Moyie Intrusions:</u> Meta diorite and meta - quartz diorite.
	<u>Purcell:</u>	<u>Kitchener Siyeh Formation:</u> Varicolored argillites, dolomitic argillites, mostly buff to brown weathering; buff and brown weathering dolomites, commonly sandy.
		<u>Creston Formation:</u> Green and grey weathering green

Purcell:

Creston Formation:

grey and purplish argillic. quartzites, quartzites and argillites; grey weathering, grey argillites; silty argillites, mud - cracked argillites.

6-20 Structural Setting:

The area investigated is bound to the north by the St. Mary Fault - a south westerly trending, steeply dipping strike - slip fault, showing breccia zones and lies within the Purcell Geanticline.

Longitudinal faults are represented by the Perry Creek fault which repeat the sedimentary strata westward.

Along the Perry Creek fault Creston formation sediments show a reversal of dip, i.e. westward on the west side to eastward on the east side of the fault.

6-30 Mineral Deposits:

Mineral deposits within the map sheet are of three distinct types:

1. Replacement deposits in sedimentary rocks not localized by fractures. The possibility of these deposits being syngenetic in origin is being considered.
2. Vein and replacement deposits localized along fracture zones.
3. Mineral deposits associated with the Moyie Intrusions.

Mineral deposits within the Perry Creek drainage basin appear to belong to the second type; i.e. are localized along fracture zones and are usually vein type, shear filling or stockwork related to fracturing.

Economic minerals are usually gold, silver, lead, zinc with occasional values in tungsten. Gangue consists chiefly of quartz, minor calcite or siderite. Pyrite and - or arsenopyrite are usually associated with gold.

7-00 LOCAL GEOLOGY: PERRY CREEK ( FIGURE 2 AND 3 )

Geological mapping completed during October 1981 consisted of preliminary mapping of the north west side of Perry Creek from

Lisbon Creek to south of Galway Creek.

Ground control was obtained mainly by chain and compass traverses along logging roads, airphotographs and chain and compass traverses between logging roads at about 3 km intervals, where possible. Further, all areas investigated in details were tied into the preliminary mapping by using pre-established survey points.

The objective of the work program was:

1. To clarify the distribution of individual rock types in the area.
2. To locate structural zones of possible interest.
3. To examine all known mineral deposits and to locate old showings described in the literature, but whose locations are unknown.
4. To formulate an opinion of the economic merits of the districts and design a follow up exploration program.

All rock names are field names only and no attempt has been made at establishing the stratigraphic position of the individual units.

Outcrops along logging roads at higher elevations are good, 40 % along road cuts. In the valley of Perry Creek, along the south side of Perry Creek and in the drainage basin of Sawmill Creek outcrops are poor to non existing. Some of these areas are covered by a thick layer of glacial till.

The geological mapping had to be abandoned along the north facing slopes because of early snow fall.

#### 7-10 Stratigraphy:

The rock units are in the order from the youngest to the oldest as observed in the field.

Unit 1: Undifferentiated siltstones, argillites, quartzites, in general grey to green in color.

Unit 2: Quartzite, grey to white, silty and argilleaceous in places interbedded with argillites.

Unit 3: Blue quartzites interbedded with limey argillites, green argillites and in places blue to buff limestones.

- Unit 4: Siltstone, thin bedded grey to purple, interbedded with minor grey quartzites.
- Unit 5: Green argillites, foliated with minor thin bands of quartzites. This unit shows strong phyllitic characteristics in places.
- Unit 6: Quartzites - grey to green, thick bedded, in places massive, minor thin quartzite beds.
- Unit 7: Quartzite - grey, thin bedded, showing cross bedding, interbedded with green argillites.

Comparing the mapped rock units with the stratigraphic sequence, differentiated by Leech ( Map 15 - 1957 ), it becomes apparent that the only carbonates occur along the lower section of the Kitchener - Siyeh Formation on the north slopes of Perry Creek but the location of the carbonates is shown on the map as following the top of the mountain range. Preliminary mapping by the writer showed that the blue grey quartzites interbedded with limestones can be found along the logging road following Perry Creek. Additional detailed mapping will be required to clarify the stratigraphic position of the individual units.

The area between the St. Mary fault, the Golden Egg and Lisbon Creek is extensively overburden covered. Glacial tills up to 20 ft thick can be observed in road cuts and trenches.

Rocks exposed along road cuts are essentially green, rusty, foliated argillites, showing more or less phyllitic characteristics. The relationship of this unit to other rock units is obscure. No contacts have been found, but faulting is indicated.

In the area of the Quartz Hill Mine grey quartzites, massive, interbedded with minor green argillite beds and showing quartz veinlets as stockwork is overlain by the green argillites to the west. The eastern contact appears to be faulted.

At Lisbon Creek a band of massive white quartzites cuts the green argillites. It appears to be a fault block. Leech mapped this unit as Cranbrook Formation of Cambrian age.

This unit is overlain by green argillites, similar in appearance to the argillites at Quartz Hill.

Diorites and meta diorites, possibly related to the Moyie Intrusions have been observed in several locations as small stocks or dykes.

At Lisbon Creek a large diorite dyke appears to change gradationally to the west into a 200 ft wide mass of amphibolitic rocks. In a north - south section the change from the amphibolite to green phyllitic argillites is sudden. The presence of a major fault structure suggests local metamorphic activities related to faulting. To the west at the Golden Egg fresh diorite float is abundant. Further, a lense of diorite has been observed as a drag block within the trenched fault structure.

Granitic boulders have been found as float along roads north of the amphibolitic zone, but small outcrops of green to grey argillites in the same area and the absence of granitic rocks in place make the presence of possible contact metamorphism highly unlikely.

Additional, more detailed mapping is required to elucidate the relationship of the individual rock units and to correlate them to units mapped to the south west.

#### 7-20 Structural Setting:

The main structural features within the area investigated are north easterly trending longitudinal faults. There are two major faults along Perry Creek. The first follows the upper portion of the valley to Walsh Creek, from there it cuts between two low hills into Sawmill Creek through the Golden Egg Mine. The second fault passes from east of Lisbon Creek through the northward bend of Perry Creek and continues south-west through the Rome Creek showing.

Numerous small parallel faults and shears have been identified north west of Perry Creek. The normal topographic expression of these structures are level shelves up to 50 ft wide on slopes having an inclination of up to 20°. In many instances large quartz veins from one meter to 20 meters wide, having a parallel strike, outcrop 5 to 10 meters uphill from the shelves.

Movement along the fault structures is indicated to be strike slip mainly. Repetition of stratigraphic units due to faulting is a possibility.

The Birdie Load showing is located along the strong northerly trending fault. Shearing over a width of at least 25 meters is indicated. This structure appears to cut the Perry Creek fault east of the Golden Egg, moving the east side to the south. The faulted off segment of Perry Creek appears to be shifted south and follows a tributary of Lisbon Creek north easterly.

This direction of movement of the Birdie Load fault is also

indicated by considering changes of strike and dip of the local strata. West of the Perry Creek fault rock units strike about N 20°E and dip 65 to 85° W; East of the fault strikes are about N 45° E, dips 60 to 70° east.

The block south of the Perry Creek fault segment ( Lisbon Creek) and east of the Birdie Load shows a northward deflection of strikes, but dips are easterly. North of the Perry Creek fault segment strikes and dips of the rock units are the same as west of Perry Creek.

A third fault structure, trending easterly and cutting the massive quartzite unit (Cranbrook Formation?) at Lisbon Creek, is cut by both major north east faults. The sense of movement is interpreted to be on the south side to the east in respect to the north side since the cut quartzite unit has not been found within the investigated area.

Leech in 1957 postulated that the area, based on a regional view, lies along the crest of the Purcell geanticline. Locally the only evidence of folding observed was on the Petra Claims. At this location isoclinal folds having amplitudes of up to 50 meters with axis plunging at 30° north, have been observed in unit 7 near north easterly trending fault structures. Further, in several locations it was observed that foliation of argillites, interbedded with thin bedded quartzite have attitudes perpendicular to the bedding planes in the quartzites. Close investigation showed zones of quartz re-mobilization, quartz veinlets and fractures cutting the quartzite continue upwards or downwards and are parallel to the foliation exhibit by the argillites.

The folds, orientation of foliation, re-mobilization of quartz and fractures appear to be definitely related to stresses, active along the Perry Creek fault. This interpretation is reinforced by the absence of similar structural features in the overlaying rock units and at a larger distance from Perry Creek fault.

At Quartz Hill a south - westerly plunging isoclinal fold is outlined within the mined portion of the quartz vein. Exposures are not sufficient to allow interpretation.

This area lies within or near the St. Mary fault zone. East of the fold a lense of diorite crops out.

#### 7-30 Mineral Deposits:

Exploration and development work in the past was concentrated on three types of deposits:



1. Large quartz veins up to 20 meters wide trending nearly parallel to the Perry Creek fault.
2. Zones of re-mobilized quartz forming irregular lenses, pods or veins of quartz.
3. Shear zones associated with wall rock alteration and quartz veins of irregular dimensions occurring as shear filling.

As of date type 1 and type 2, although forming the most prominent showings and attracting most of the attention, have failed to produce mineral deposits of economic merits.

Type three has been explored mainly on Quartz Hill, which has produced 1,373 tons during 1973, yielding gold, silver, lead zinc and copper in economic quantities. The ore was shipped as fluxing ore to Trail.

Trenching on the Price Claims uncovered a lense of quartz within the Perry Creek fault, giving spectacular gold assays. The exposure appears to be quartz blocks dragged along the fault.

The Columbia and Homestake Mine originally located on quartz veins of type 1, have nearly all workings concentrated on type three mineralization. The same appears to hold true for the Shakespear Mine, located on the Petra Claims.

All underground developments, i.e. drifts, cross cuts and shafts are caved and surface trenches and pits have been sloughed, making examination extremely difficult.

Economic minerals searched for are gold, silver, associated with galena, sphalerite, chalcopyrite in a quartz gangue, or associated with dykes.

8-00 DETAIL DESCRIPTION OF SHOWINGS:

8-10 Petra Claims - Shakespear (Areal):Figure 4

Mapping on the Petra Claim was executed at a scale of 1: 5,000. The main objective was to identify the rock units underlaying the claims, to clarify the geological setting of the large quartz veins located during prospecting in 1979 and to prospect for additional targets.

Sampling of the large vein structure during the past failed to outline areas carrying gold values greater than traces.

For the general geological setting and rock types the reader is referred to Figure 4.

Re-mobilized Quartz:

Within the western part of the claim an area of re-mobilized quartz occurring as lenses, pods or fracture filling has been found in general associated with fold structures.

The largest lense is about 2 meters wide, up to 60 meters long and shows definite gradational contacts from grey quartzites or green foliated argillites to a glassy or silicified zone to white quartz patches to quartz lenses. Silicification extends into fractures or along foliation planes. No shearing or fracturing is evident along the wall rock quartz contact.

No sulfides have been observed within the quartz lenses, but small reddish spots or streaks suggest the presence of minor hematite.

Large Quartz Ledges - 2.5 m to 18 m wide:

These ledges have been investigated in the past by trenching, short adits and have been extensively sampled.

The ledges consist of white bull quartz with occasional reddish discoloration indicating hematite. Pyrite is extremely scarce where veins are well exposed and limonite or rusty discoloration can be observed occasionally.

The veins dip steeply south easterly and strike nearly parallel to the bedding. Shearing and gouge occur in place along both the hanging wall and the footwall. Although individual outcrops are strong, they are usually of limited extent and the tracing of the ledges over distances larger than 75 m is extremely difficult.

The ledges occur in all rock types. In the centre of the Petra Claims two ledges striking north west and east are apparently not related to the usual north east trending structures. Insufficient exposure does not allow interpretation.

Shear Zones:

During the geological mapping it was noticed that the general topographic slopes in the eastern part of the Petra claim group is broken by level shelves up to 50 meters wide. The shelves trend northeasterly and although dissected by creeks, gullies or slides they can be traced for a distance of up to 1,000 meters before they lose their identity.

Numerous old pits and cuts were found to be located along the shelves. All old workings are sloughed and dumps are completely overgrown. Investigation of the pits by partly cleaning them, showed that the shelves are controlled by strong northeasterly trending shear zones. The wall rock, crushed and brecciated, is showing well developed hydrothermal alteration. Quartz veinlets, lenses or silicified zones are carrying pyrite which has been oxidized to martite. Limonite staining is abundant throughout the shear zone.

Gold values, reported in the literature as erratic in range and distribution have most likely been derived from these zones.

It was noted that the large quartz ledges have parallel strikes to these shears, but are usually outcropping approximately 30 to 50 meters uphill from the shears.

Sample Results:

Sample locations are shown on Figure 4.

<u>Sample #:</u>	<u>Ag oz/ton:</u>	<u>Au oz/ton:</u>	<u>Description:</u>
49126	0.01	- 0.003	Shear zone, soils.
49127	0.01	- 0.003	Shear zone, quartz fragm.
49129	0.04	- 0.003	Shear, wall of shaft, soil
49130	0.02	0.005	Shaft dump material, soil some quartz fragments.
49131	0.08	- 0.003	Shear, soil.
49132	0.01	- 0.003	As above.
49133	0.01	- 0.003	As above.
49145	0.20	- 0.003	Quartz lenses, remobiliz. 2 m wide.
49146	0.02	- 0.003	Quartz ledge, 3.6 m wide.
49147	0.04	- 0.003	As above.
49148	0.12	- 0.003	Selected sample fr. above
49149	0.04	- 0.003	Quartz ledge 8m, compos.

The sample results from the different types of quartz occurrences show uniform low values. All samples from quartz ledges and re-mobilized quartz zones taken were fresh quartz.

Samples from the shear zone were collected from dumps, sloughed pit walls or just soils in vicinity of the pits.

To establish the true tenor of the shear zone cleaning and sampling of fresh exposures will be necessary.

8-20 Luke Mineral Claim ( Area 2 ): Figure 5

The Luke mineral claim covers part of the old Homestake claim group. The Homestake Mine workings are located within the claim limits, but the Columbia Mine workings lie just outside the south west corner of the claim.

The geological setting is shown at Figure 5. Both, the old Homestake workings and the Columbia workings, although sloughed and inaccessible, have been mapped in detail and sampled.

A good horsetrail leads from the Perry Creek road upstream along Manchester Creek for a distance of about 1 km. At this point a partly sloughed flume follows the contour line, swinging around the hill. At creek level rails protruding from the hill side and an old cabin give evidence of caved underground workings. In the creek signs of placer mining are evident.

At the 1 km point the trail turns south westerly, climbing steeply for the first 250 meters and then swings gently around the contours.

The first sign of trenching is observable beside the main trail. Here a wide diorite dyke cutting blue limey quartzites and limestone in contact with thin bedded siltstone is exposed. The contact trends north easterly with a steep southerly dip. Hydrothermal alteration and contact metasomatism are evident. Quartz as stringers and lenses is exposed. Indication of shearing and gouge along the footwall is observable, but sloughing obliterates the structural features.

Approximately 500 meters from the trench, within a small creek the sloughed Homestake tunnels have been located. A large dump and some old rotten mine timber and rails can be found at the locality. The dump consists of a mixture of dioritic dyke rock, white quartz, quartzite and limey sediments. Minor sulfides occur as disseminations within the quartz and sheared dyke rock.

About 50 meters above the portal of the tunnel a line of sloughed trenches and a shaft about 20 meters deep mark the trace of a shear zone. From the old workings the indicated width of the shear is approximately 3 to 5 meters and trending north easterly.

Dump material at the shaft and from trenches shows the presence of strongly sheared limey sediments healed by quartz stringers, irregular quartz lenses. Boxwork structure, limonite and goethite, with the occasional martite pseudo morph after pyrite, are abundant in quartz vein material.

A second adit has been reported in the literature, about 300 meters uphill from the Homestake workings. This adit lies definitely on a parallel structure. Snow cover inhibited the search for this adit.

Geological mapping shows that the Homestake workings, the first trench and the caved tunnel in Manchester Creek are all located along the same structure, giving a strike length of at least 700 meters.

A large isolated quartz outcrop, 2 meters wide, suggests the presence of a similar quartz ledge as observed on the Petra claims.

The Columbia Mine lies at the end of the trail, approximately 800 meters south west from the Homestake Mine above Liverpool Creek. A large dump gives evidence of extensive underground development, but all workings are caved.

Approximately 70 meters downhill a tunnel is located reportedly, but it is completely sloughed and was not found.

The Columbia workings have been located on a parallel structure to the Homestake. Workings consist of two caved tunnels, numerous trenches and a shaft. The reader is referred to the detail geology sketch. ( Figure 5 ).

From dump material and poor exposure the shear zone shows similar characteristics to the Homestake Mine. The main difference is the absence of the diorite.

The tunnel uphill from the Homestake Mine lies apparently along the projection of the Columbia shear.

In the north west corner two large quartz ledges, 3 meters and 7 meters wide have been found. The general appearance is equivalent to the Petra ledges.

Due north of the Luke claims along a new logging road lenses of

irregular re-mobilized quartz are outcropping. The quartz is discontinuous, up to 5 meters wide and can be traced for about 50 meters. It is associated with green massive quartzites interbedded with green argillites. The quartzites show an apparent color change to grey with distance from the quartz lenses.

Part of the Columbia trenches are located along irregular lenses of apparently re-mobilized quartz or quartz stockwork occurring as limited fracture filling. All of these trenches lie northerly from the shear zone.

Sample Results:

Sample locations are shown on Figure 5.

<u>Sample #:</u>	<u>Ag oz/ton:</u>	<u>Au oz/ton:</u>	<u>Description:</u>
49134	0.01	-0.003	Trench on trail, skarn, F.W.
49135	0.01	-0.003	Trench on trail, diorite
49136	0.01	-0.003	Trench on trail, skarn H.W.
49137	0.01	0.084	Homestake shaft, dump
49138	0.25	0.016	Homestake shaft, dump.
49139	0.08	0.140	Homestake trench above drift, selected quartz with boxwork and goeth.
49140	0.01	-0.003	Columbia, portal 1 m H.W
49141	0.01	-0.003	Columbia,portal 1 m cent
49142	0.04	-0.003	Columbia portal,1m F.W.
49143	0.15	0.138	Shaft, quartz w. boxwork
49144	0.01	-0.003	Shaft, wallrock - dump.

Both, the Columbia and Homestake workings will have to be re-opened, cleaned and sampled before the economic value of the shear zones investigated can be assessed.

The large quartz ledges have been sampled during 1979 and did not indicate having economic values.

Soilsampling showed isolated high gold values, but the lines were established nearly parallel to the strike of the shear zone and hence the results are considered inconclusive.

Placer mining has been reported from Manchester and Liverpool Creeks. Both creeks cut the potentially gold bearing shear zone.

8-30 Price Claims - Golden Egg: Figure 6:

The Price claim group lies within the Sawmill Creek drainage, an area of extensive glacial till cover. Outcrops along the roads or creeks are completely absent.

Glacial erratic of extremely varied composition can be found along the slopes and low ridges. Thick clay, silt and sandy silts interbedded with poorly sorted gravel suggest outwash or possibly glacial lake type deposits which were re-worked by melt water channels criss-crossing the area randomly.

The main workings are located on the Paris mineral claims and consist of a large stripped and trenched area. A large segment was cut below the water table and hence is water filled.

Rock exposure consists of strongly sheared argillites, white, blue and grey gouge and large blocks of gold bearing quartz. The blocks of quartz show strong shearing, rotation and irregular outlines indicating dragging along a fault zone. A block of strongly sheared diorite has been recognized.

The main fault lies along the trace of Perry Creek fault. Topographic observation support this interpretation.

Approximately 500 meters north of the main trenching numerous small sloughed pits were found. These pits were sunk on what appears quartz float area. Between the two areas of trenching, fine grained, fresh diorite boulders are abundant along a north easterly trending line.

See Figure 3 for general and detailed geology.

No sampling was carried out during the investigation since the area had been sampled repeatedly during the past years ( 1975 to 1980 ) and economic gold values have been obtained each time. The main problem is not grade but size.

Mineralization found within the Price pit consists of two types:

1. Quartz lenses, sheared, carrying free gold and minor pyrite with traces of chalcopyrite.
2. Quartz, carrying galena, sphalerite, pyrite and chalcopyrite was found in an ore pile which reportedly originated from a shaft located within the pool of water.

Quartz fragments showing minor pyrite have been found on the Rome mineral claim in vicinity of an adit. The adit is completely caved and appears to have been driven along the trace of the main Perry Creek fault.

The importance of the Price pit is the implication that although no mineralized quartz veins are exposed within the Perry Creek fault, the presence of drag ore due to movement along the fault suggests the possibility of quartz veins or quartz filled shears in the general area having potential economic merits.

From the above it becomes important to establish the magnitude and direction of movement along the north easterly trending longitudinal fault system.

#### 8-40 Azlin Claims, Area 4: Figure 7

The Azlin claims are located along Lisbon Creek. The geological setting is shown on Figure 7.

The main geological features observed consist of two north easterly trending fault structures. The southern fault appears to be a segment of the Perry Creek fault, shifted south. An easterly trending fault is indicated along the southern margin of the claim group.

A wide diorite dyke affected by metasomatism lies between the two north easterly trending faults. Metamorphic grade observed is high - amphibole - over a width of 100 meters more or less.

North of the claims near the contact of diorites and phyllites irregular lenses, masses and stockwork of quartz have been investigated by short adits and several trenches. Occasional specks of galena and pyrite can be observed with the quartz.

Sampling completed between 1978 and 1979 did not show economic values. The distribution of quartz is too irregular to allow tracing for any distance.



8-50 Quartz Hill Mine, Area 5: Figure 8

The geological setting of the Quartz Hill claims is very distinct from the other showings investigated, see Figure 8.

Two stocks of diorite, the first east of the open pit, the second approximately 700 meters to the south west intruded an interbedded sequence of quartzites and argillites.

North and west of the claims the argillites are strongly sheared and rusty, pyritic. These features are definitely related to the St. Mary fault structure. A northerly trending fault separates the dioritic intrusions and movement is indicated by a change of rock types across the fault plane.

Within the open pit, a quartz vein, now largely mined out, suggests a westerly plunging fold structure. The geometry of this fold is not clearly understood, but field observation suggest isoclinal folding of a 0.75 to 1 meter thick quartz vein.

The footwall argillites show hydrothermal alteration, color change to tan, sericite development and calcite observed.

The east wall of the pit consists of sheared and chloritized diorite. Foliation outlining small scale secondary folds is present.

South east of the pit quartz veins cutting diorite are exposed in several partly sloughed trenches. The quartz veins show limonite, hematite stains and occasional pyrite and are associated with shears. Quartz stockwork and areas of quartz re-mobilization within thin bedded quartzites outcropping along the road leading to the old caved adit is prominent.

Approximately 500 meters to the north west of the pit are numerous small pits and trenches in quartzites. No quartz veins have been observed.

In vicinity of the south western diorite an area of quartz stock work cutting thin bedded quartzites has been investigated by a large deep trench. To the north west of this trench a shallow shaft has been sunk in diorite. No mineralization is evident.

Sample Results:

During 1973 a shipment of 1,373 tons of quartz vein material returned 352 oz gold, 275 oz silver and values in lead, zinc and copper.

<u>Sample #:</u>	<u>Ag oz/ton:</u>	<u>Au oz/ton:</u>	<u>Description:</u>
4901	0.01	0.004	Trench along contact with diorite, quartz
4902	0.02	- 0.003	As above, wall rock.
4903	0.01	0.004	East of pit, composite
4904	0.04	- 0.003	Base of pit vein, 2 m.
4905	0.01	- 0.003	Quartz in shear zone.
4906	0.01	- 0.003	As above
4907	0.01	- 0.001	Quarz plus gouge comp.
4908	0.01	- 0.003	Sheared argill. minor quartz.
4909	0.04	0.005	As above
4910	0.01	0.003	As above
4911	0.01	- 0.003	Quartz fragments shear.
4912	0.01	- 0.003	Quartz float
4913	0.01	- 0.003	Quartz stringers in quartzite.
4914	0.01	- 0.003	As above.
4915	0.01	- 0.003	Sheared argill., some quartz.
Sample outside of map area:			
4916	0.01	0.012	Limonitic quartz, west of adit.
4917	0.01	- 0.003	Wall rock - quartzite.
Chip samples from large trench near diorite - quartzite with quartz stockwork.			
4918 - 22	0.01	- 0.003	3 m wide each, quartzit plus quartz stockwork,
4923	0.01	- 0.003	Same as above fr. shaft

Sampling of the same area during 1979 reportedly returned 0.1 oz per ton gold over a length of 30 meters approximately. The writer cannot explain the reason for the discrepancy in values.

9-00 CONCLUSIONS:

1. Geological reconnaissance mapping of the Perry Creek Area showed that the area is underlain by interbedded quartzites, argillites, siltstones and minor limestones Proterozoic in age. The sediments are cut by diorite dykes, sills or stocks.

The rock units are possibly part of the Kitchener - Siyeh and Creston Formation.

The main structural feature is a set of north east trending longitudinal faults and associated shears.

Small scale drag folding with axis plunging north easterly are apparently related to the faulting.

2. Mineral deposits in the area investigated are usually associated with north easterly trending shears carrying quartz veins or lenses containing pyrite, minor galena and low gold values.

The mineralized shears are usually overburden covered and form shelves up to 50 meters wide on steep slopes.

Large quartz ledges, although abundant in the area do not carry metallic values. Exploration in the past was concentrated on these ledges.

3. During Field work it became apparent that the possibility of finding additional gold bearing shear zones, not outcropping is extremely good.
4. Placer gold in Perry Creek and along its tributaries mined in the past appears to have originated locally. The first gold accumulations, as indicated, are pre-glacial. During glaciation a certain amount of dilution of the pre - glacial placer deposit occurred due to erosion, followed by their burial under glacial till.

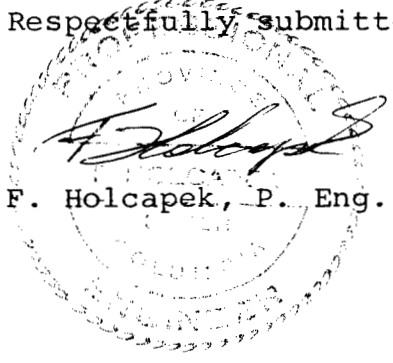
Shallow placer deposits on clay layers were formed by re-concentration of gold, disbursed throughout the glacial till.

10-00 RECOMMENDATIONS:

1. Trenching and - or opening of old workings on the known shear zones.
2. Geological mapping and sampling of mineralized zones.
3. Regional geological mapping and prospecting.
4. Diamond drilling of results if warranted.

Surrey, B.C.  
February 5, 1982

Respectfully submitted


  
F. Holcapek, P. Eng.

11-00 CERTIFICATION:

I, Ferdinand Holcapek of 15871 - 102 A Avenue, Surrey, B.C. hereby certify that:

1. I am a graduate of the University of British Columbia, with a B.Sc. in Geology in 1969.
2. I am a registered member in good standing of the Association of Professional Engineers of British Columbia.
3. I have been engaged in mining exploration since 1961.
4. This report is based on field work executed on behalf of Gallant Gold Mines Ltd. under my supervision from October 4, 1981 to October 25, 1981.

Surrey, B.C.  
February 5, 1982

  
F. Holcapek, P. Eng.

12-00 BIBLIOGRAPHY:

1. Rice, H.M.A. ( 1956 ) - "Nelson Map-Area, East Half, British Columbia.  
  
G.S.C. Memoir 228.
2. Cairnes, C.E. ( 1933 ) - Some Mineral Occurrences in the vicinity of Cranbrook, B.C. Summary Report 1932, Part A II.
3. Schofield, S.J. ( 1915 ) - Geology of Cranbrook Map-Area, British Columbia," G.S.C. Memoir 76.
4. B.C. Department of Mines - Minister of Mines Annual Reports:  
1915 ( p. 108, p. 113 ), 1930 ( p. 242 ), 1932 ( p. 162 ), 1933 ( p. 201 ), 1934 ( p. E 30 )  
1967 ( p. 271 ), 1898 ( p. 1014 ), 1903 ( p. 208 ).
5. B.C. Department of Mines - "Geology, Exploration and Mining, B.C. " for the years: 1971 ( p.405 ), 1972 ( p. 53 ), 1973 ( p. 85 ).
6. Rice, H. M. A. ( 1937 ) - "Cranbrook Map-Area, British Columbia, "G.S.C.  
  
Memoir 207
7. Leech, G.B. ( 1957 ) - G.S.C. Map 15 - 1957, St. Mary Lake, Kootenay District, British Columbia.
8. J.H. Montgomery ( July 1978 ) - Report on Perry Creek Gold Prospect - Fort Steele Mining Division on behalf of Meridian Resources Ltd.
9. D.F. Symonds ( December 1978 ) - Geological and Geochemical reports on the JANET, JANET 1, BIRDIE LOAD, QUARTZ CREEK, LONE EAGLE, ECLIPSE, ANNA, STANDARD, AGNES, PIONEER, OYSTER, EVENING STAR, LUKE, MARK, JOHN, PETERROCK, TANIS, GOLDEN WOLFE, AZLIN mineral claims, situated in the Ft. Steele Mining Division on behalf of Meridian Resources Ltd.
10. H.E. Madeisky ( January 15, 1981 ) - Geophysical and Geochemical Report on the JANET, JANET 1, BIRDIE LOAD, GOLDEN WOLFE, GOLD, TANIS, PETERROCK, QUARTZ CREEK, LUKE, JOHN and PETRA mineral claims and Reverted Crown Grants, Fort Steele Mining Division on behalf of Gallant Gold Mines Ltd.



COST STATEMENT  
 PERRY CREEK MINERAL CLAIMS, B.C.  
 GEOLOGY, GEOCHEMISTRY AND GEOPHYSICS  
 24 September through 4 November 1981

GENERAL COSTS

Food & Accomodation

4 men, 1 Oct.-22 Nov., 121 man days  
 @ \$17.56 \$2,125.08

Supplies 1,348.25

Shipping 59.92

Fuel 907.68

Rental Equipment

Mark Management - 4 WD Blazer,  
 9 Oct. - 4 Nov.,  
 27 days @ \$31.57 \$ 852.39

Ezekiel Exploration - SBX 11A,  
 9 Oct. - Nov. 4,  
 27 days @ \$21.74 586.98

Ezekiel Exploration Camp Equipment,  
 121 man days @ \$6.00 726.00

Budget - 5 ton box, 8 - 12 Oct.,  
 30 Oct. - Nov. 3,  
 10 days @ \$117.99 1,179.92

Tilden - 4 WD Jimmy,  
 25 - 27 Sept.,  
 3 days @ \$42.31 126.94

Gabriel Resources - 4 WD Bronco,  
 17 - 22 Nov.,  
 6 days @ \$31.57 189.42

3,661.65

Consultants Fees

Archean Engineering, 1 Jan. - 4 Nov.  
13 days @ \$225.00 2,925.00

Fixed Wing

Reeds Travel, 25 Sept. - 24 Oct.,  
5 VCR/CBK Rtn. @ \$198.70 993.50

Report Preparation 1,948.37

TOTAL GENERAL COSTS \$13,969.45  
=====

GEOCHEMISTRY COSTS

Salaries & Wages

4 men, 1 Oct. - 4 Nov.,  
18 man days @ \$55.93 1,006.74

Benefits @ 20% 201.35

Geochemical Analysis

Chemex Labs, 1 HMC for Cu,Pb, Zn,  
Ag, Au, WO3, As \$ 27.50  
35 HMC for Cu,Pb, Zn,  
Ag, Au, As, Sn, W @ \$31.25 1,093.75  
1,121.25

Rock Assays

Chemex Labs, 10 for Au, WO3 @ \$17.50  
175.00  
1 for Au 9.50  
184.50

General Costs

18/106 x \$13,969.45 2,372.17

TOTAL GEOCHEMISTRY COSTS \$4,824.56  
=====



GEOPHYSICS COSTS

Salaries & Wages

4 men, 1 Oct. - 22 Nov.,  
88 man days @ \$55.93 \$ 4,921.84

Benefits @ 20% 984.37

Rental Equipment

Gallant Gold Mines - EM-16,  
33 days @ \$17.33 \$571.89

Gallant Gold Mines - MF-2 Mag,  
27 days @ \$35.00 945.00

1,516.89

General Costs

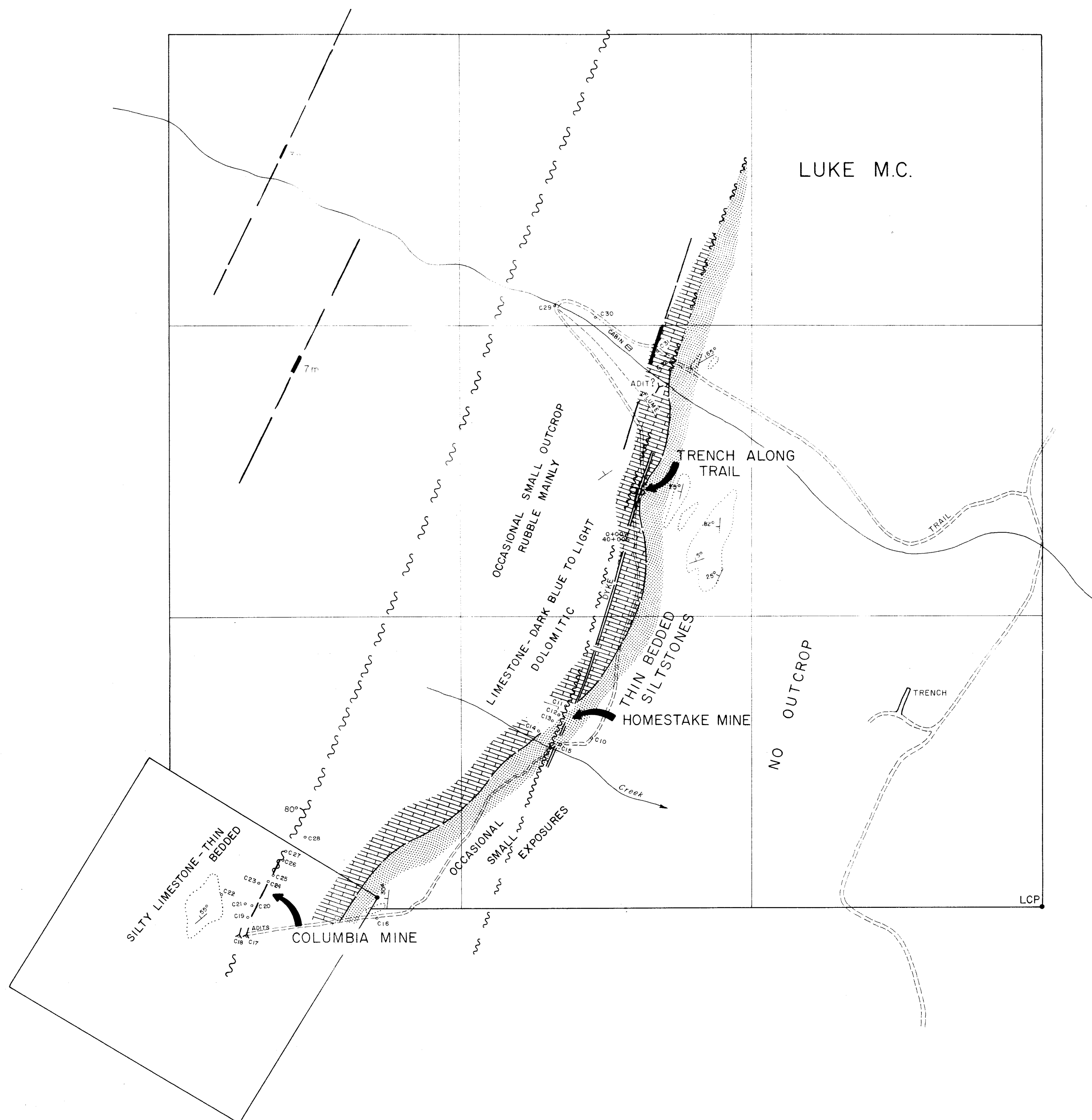
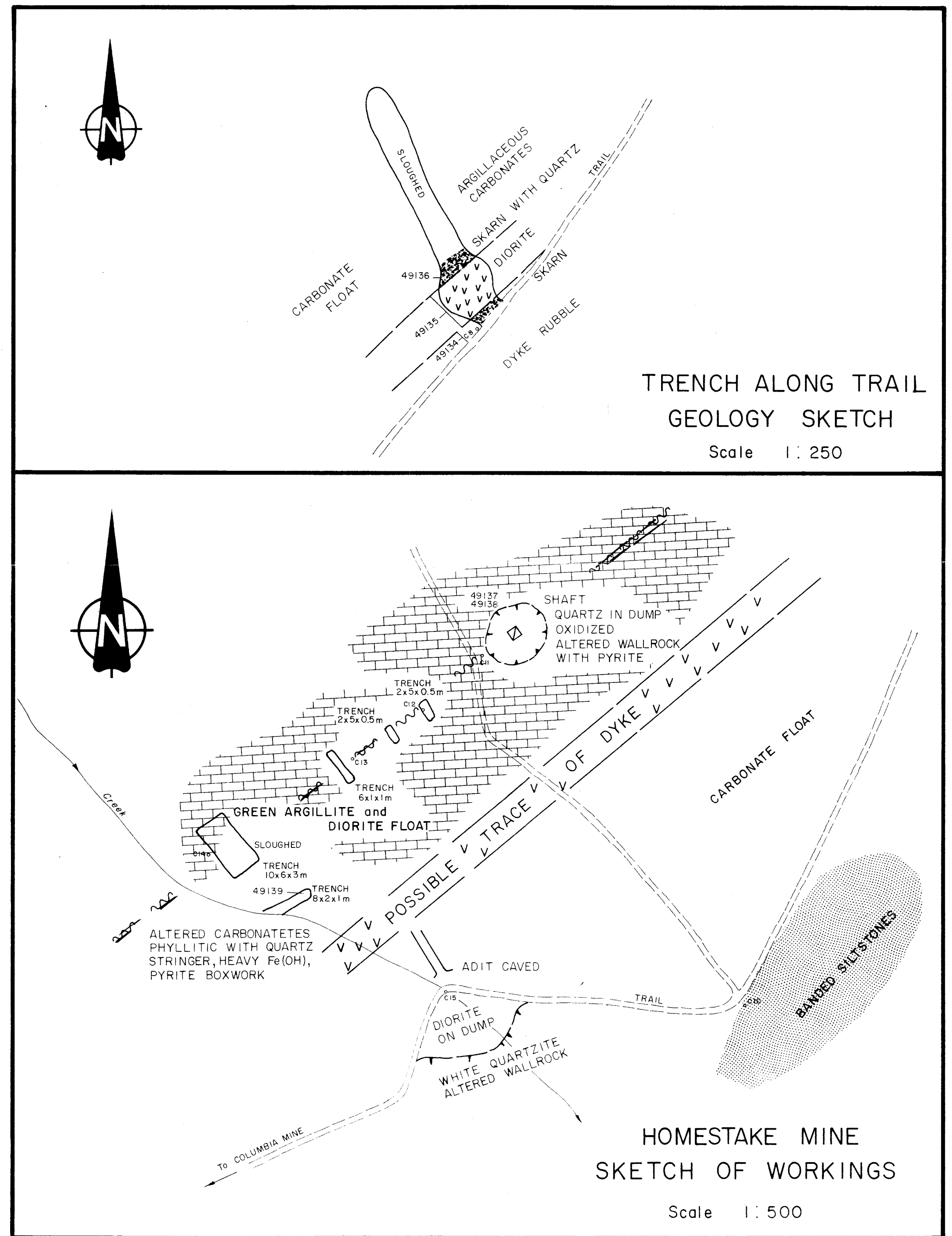
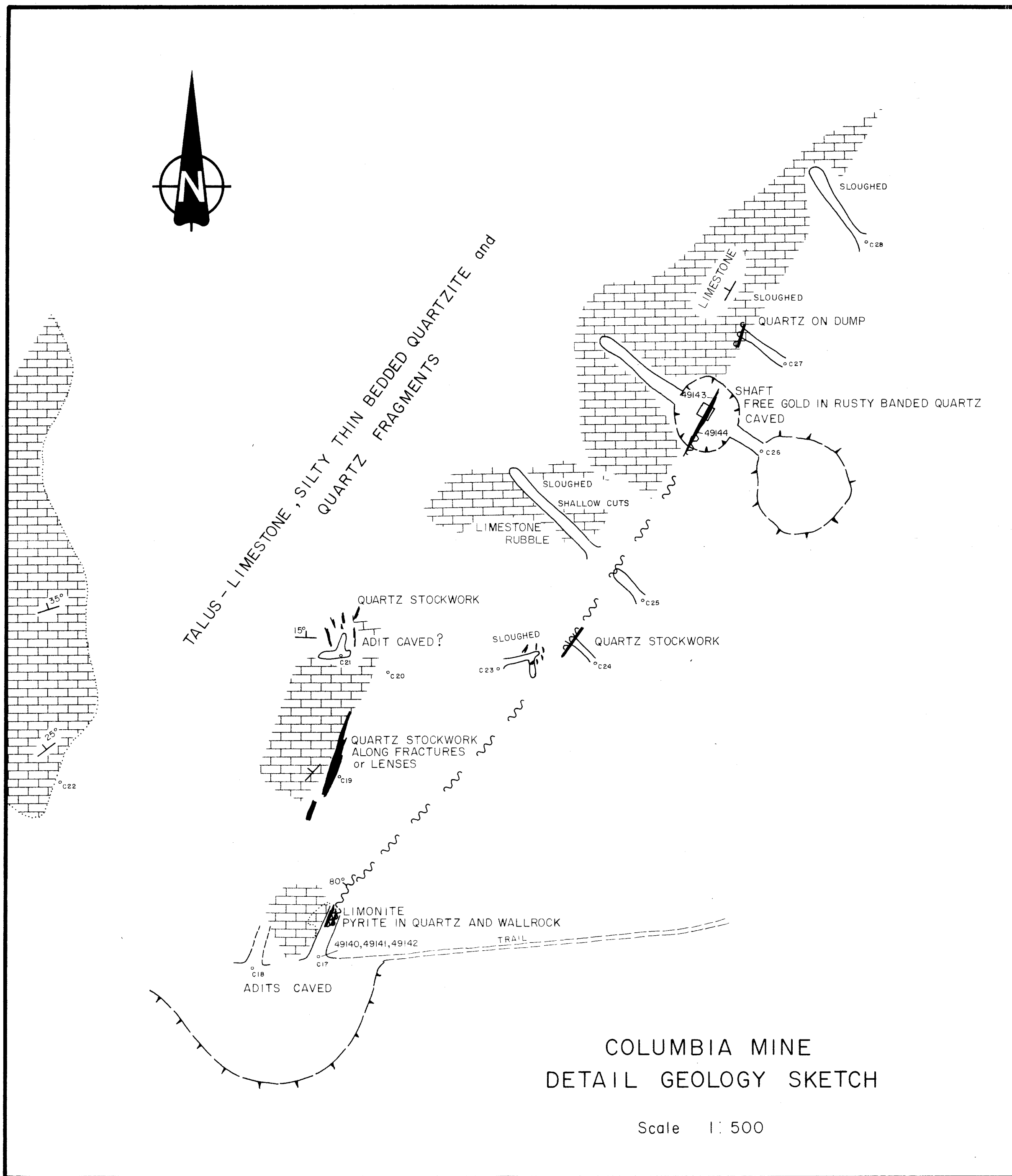
80/106 x\$13,969.45 11,597.28

TOTAL GEOPHYSICS COSTS \$19,020.38  
=====

GEOLOGICAL MAPPING

Contractor

Fred Holcapek, 1 Sep. - 4 Nov. \$20,400.00  
=====



MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**9855**  
part 2  
of 2

PROFESSIONAL  
ENGINEER  
OF  
BRITISH COLUMBIA

GALLANT GOLD MINES LTD.  
PERRY CREEK PROJECT

LUKE CLAIM AREA  
FORT STEELE MINING DIVISION, B.C.

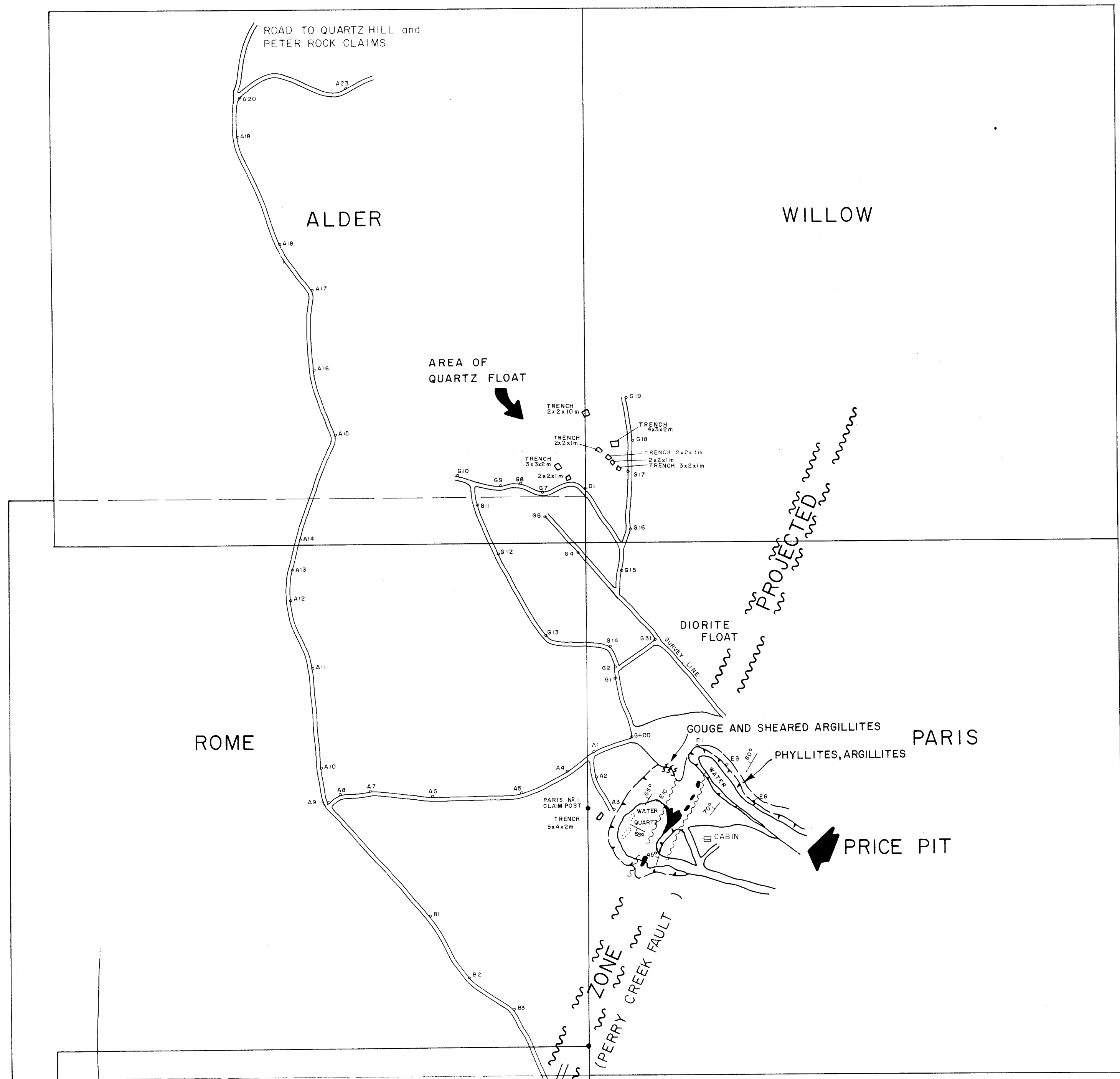
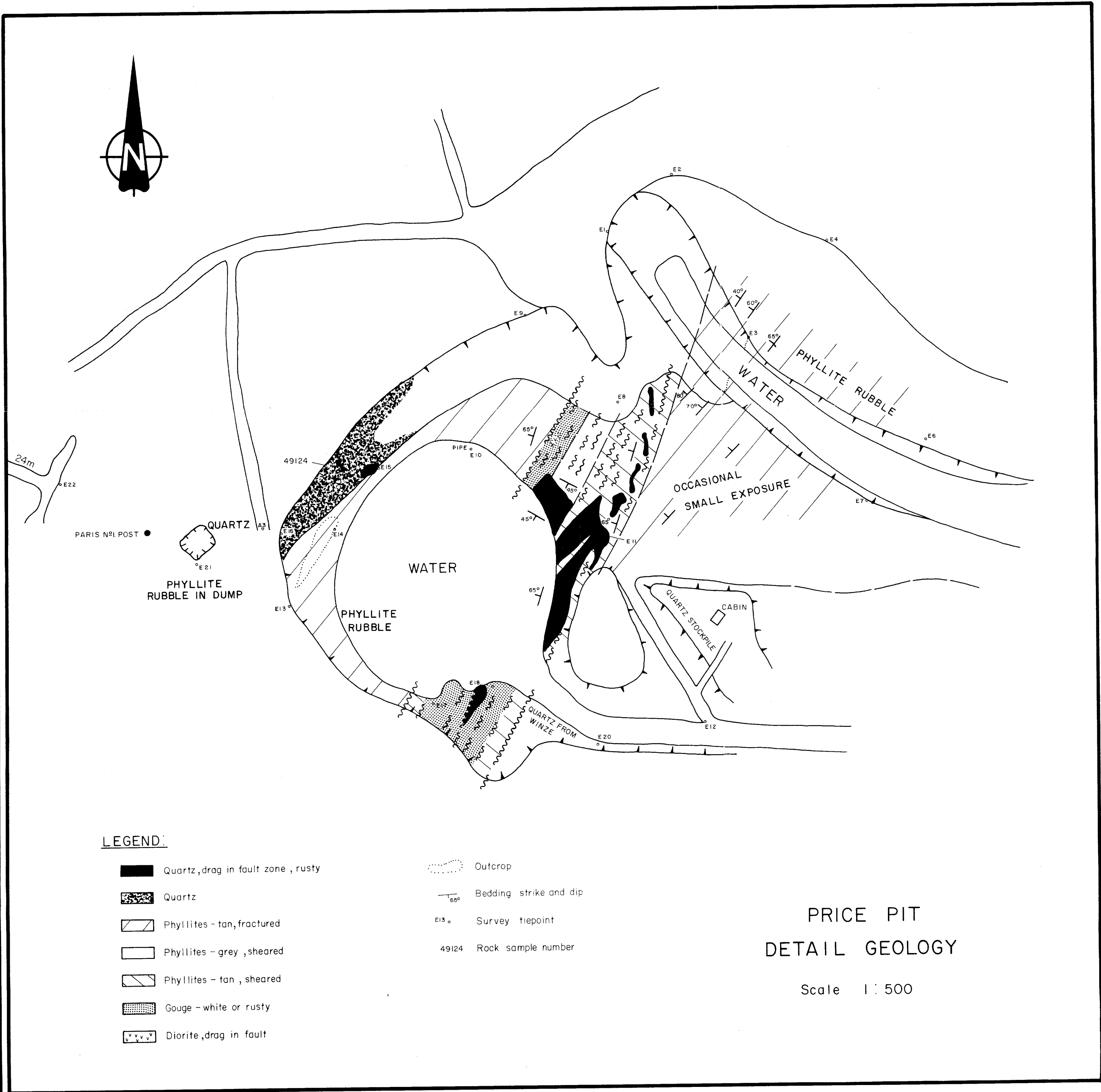
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GEOLOGICAL MAP

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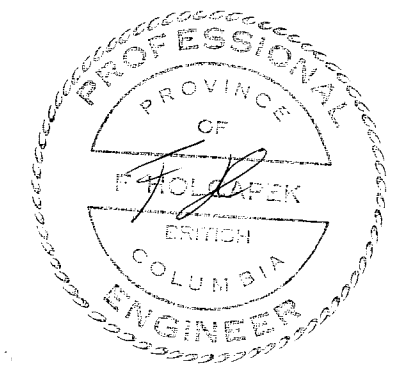
NTS 82-F-8  
DATE: JAN 23, 1982  
BY: F.HOLCAPECK / r.w.r.

FIGURE 5

49140 Rock sample location



MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**9850**  
part 2  
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GALLANT GOLD MINES LTD.  
PERRY CREEK PROJECT

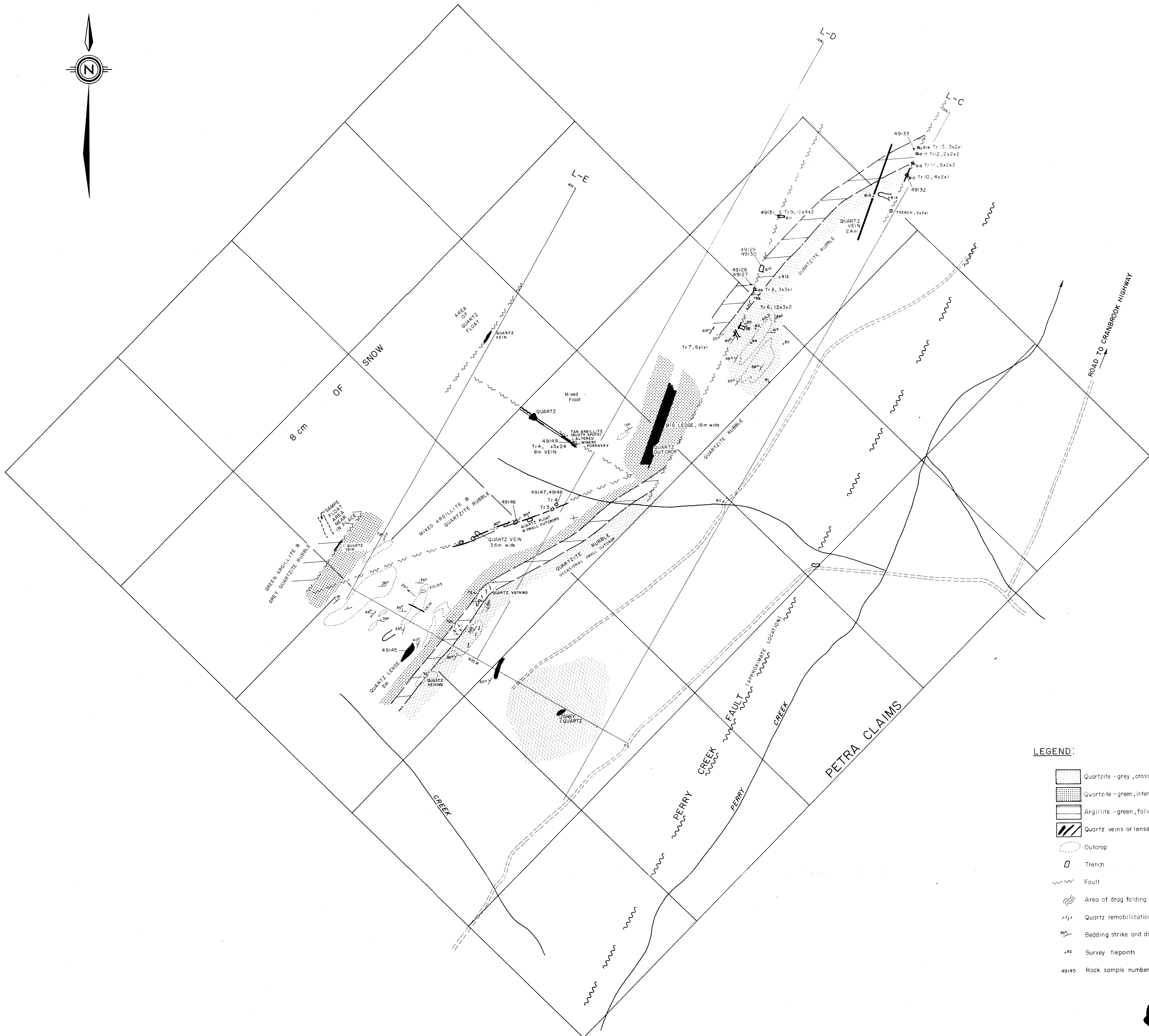
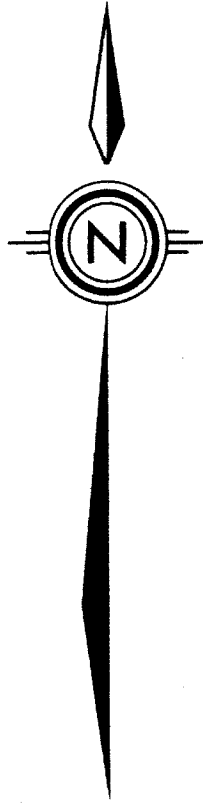
PRICE CLAIM GROUP  
FORT STEELE MINING DIVISION, B.C.

DETAIL AREA 3  
GENERAL GEOLOGY

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

NTS 82-F-9  
DATE: JAN 22, 1982  
BY: F. HOLCAPECK / r.w.

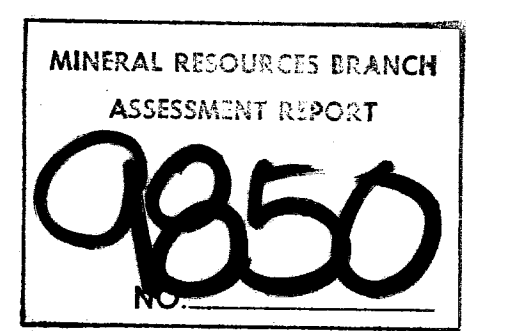
FIGURE 6



LEGEND:

- Quartzite - grey, cross bedding
- Quartzite - green, interbedded with green foliated argillite
- Argillite - green, foliated
- Quartz veins or lenses
- Outcrop
- Trench
- Fault
- Area of drag folding
- Quartz remobilization
- Bedding strike and dip
- Survey tiepoints
- Rock sample number

NOTE: Three types of quartz  
1. remobilized quartz in fold areas as veinlets, stockworks & lenses  
2. quartz "ledges" white Bull quartz, fractured  
3. quartz veins, stringers with pyrite or malrite as fault filling.  
- Hydrothermal alteration



part 2  
of 2

GALLANT GOLD MINES LTD.  
PERRY CREEK PROJECT

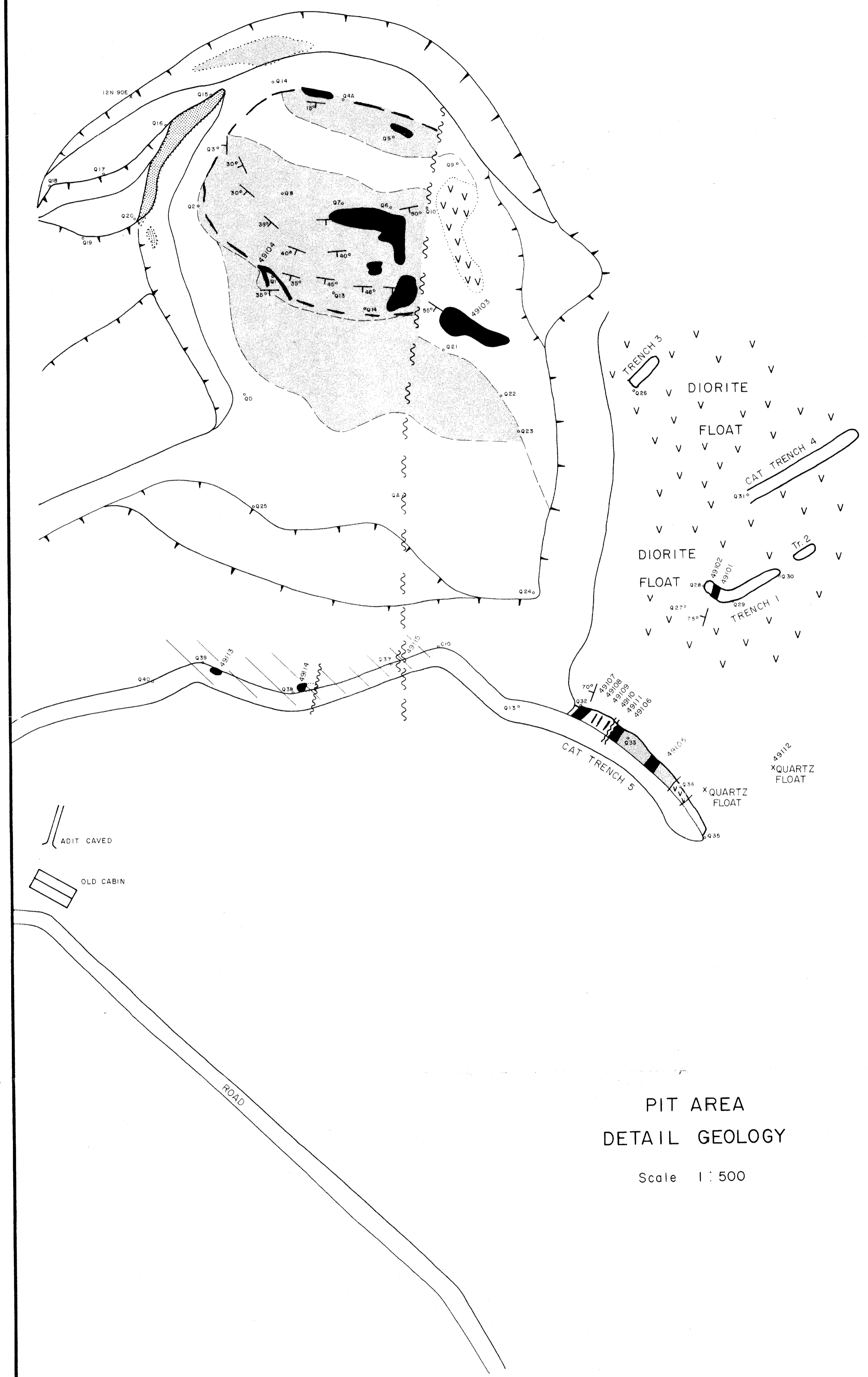
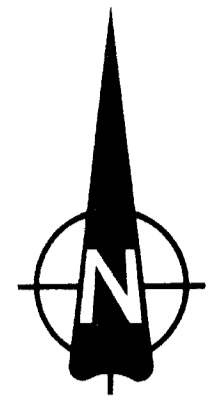
PETRA CLAIM GROUP  
FORT STEELE MINING DIVISION, B.C.

DETAIL AREA I  
PRELIMINARY GEOLOGY

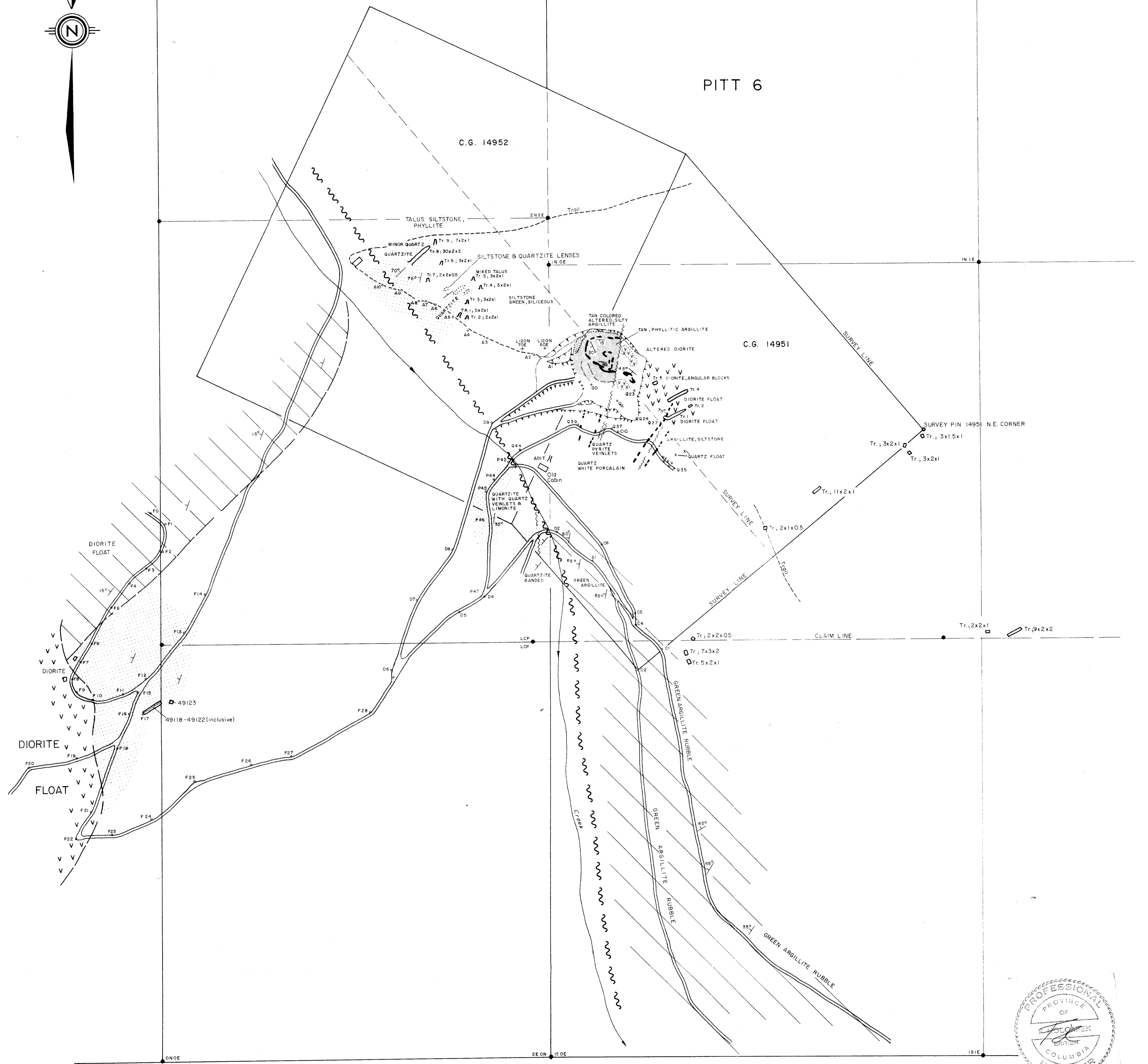
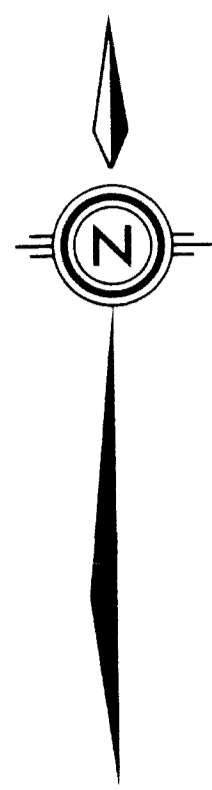
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Scale: 1:5,000

NTS 82-F-8  
DATE: JAN 24, 1982  
BY: F. HOLCAPECK /rwr.

FIGURE 4



PIT AREA  
DETAIL GEOLOGY  
Scale 1:500



- 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.
  - Outcrop.
  - Bedding strike and dip.
  - Fault.
  - Trench.
  - Survey station.
  - Sample number.

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**9850**  
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*part 2 of 2*

GALLANT GOLD MINES LTD.  
PERRY CREEK PROJECT

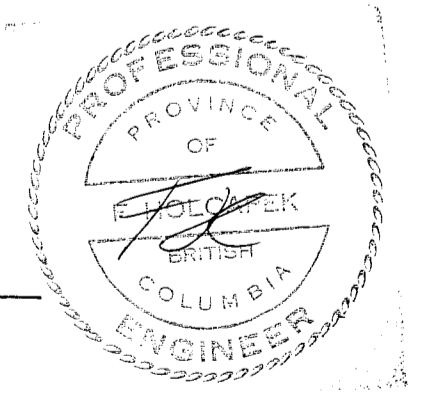
QUARTZ HILL MINE  
FORT STEELE MINING DIVISION, B.C.

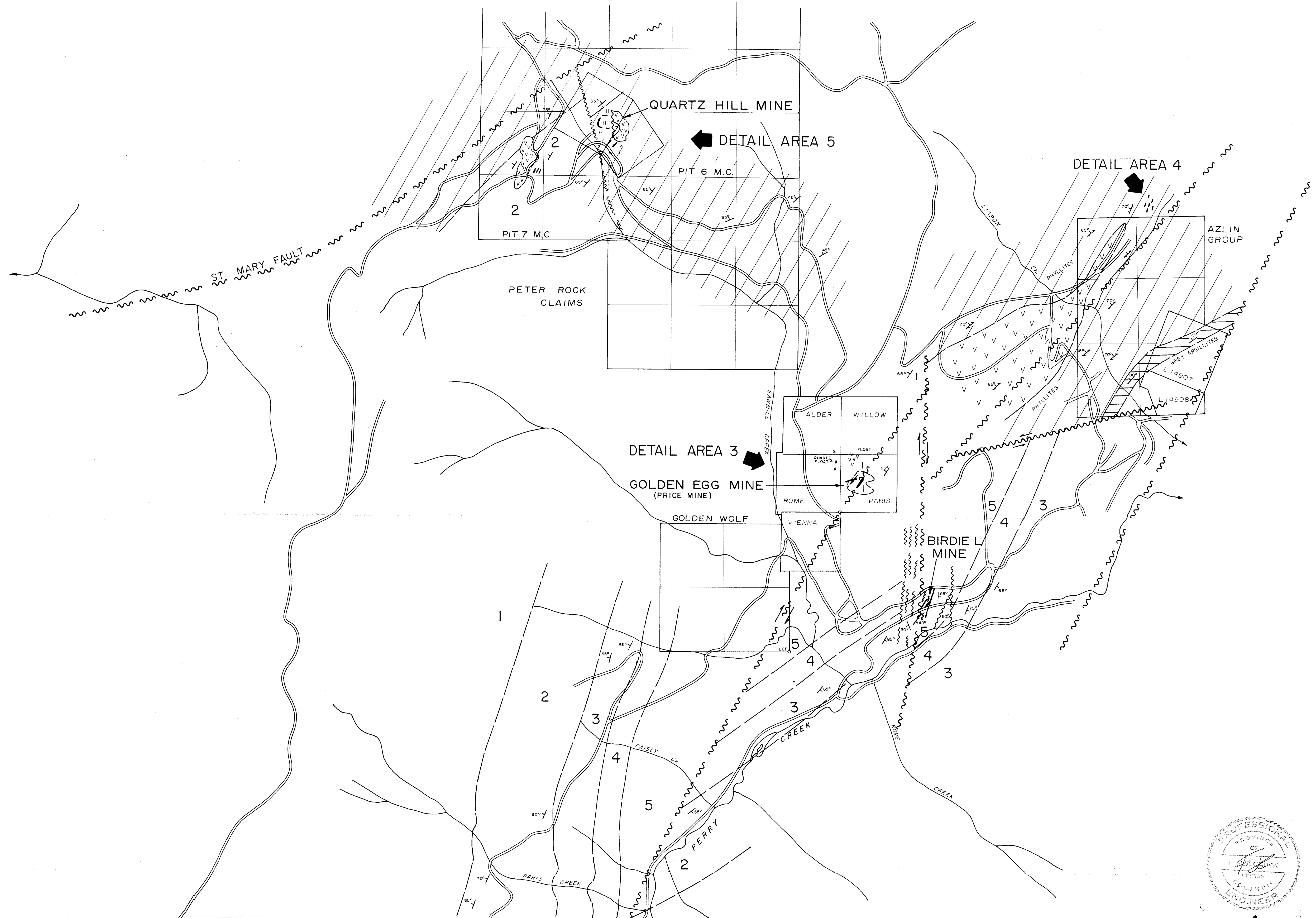
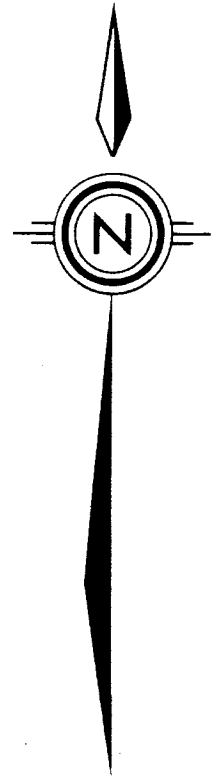
DETAIL AREA 5  
GENERAL GEOLOGY

Scale 1:2,500

NTS 92-F-9  
DATE: JAN 24, 1982  
BY: F.HOLCAPECK / r.w.r.

FIGURE 8





**LEGEND**

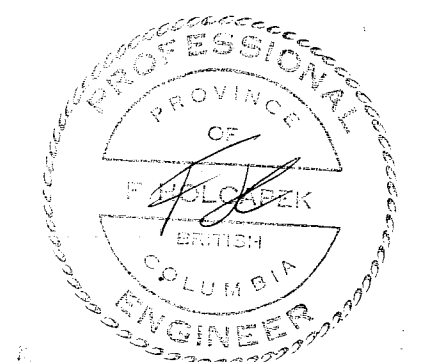
- 1 Undifferentiated siltstones, argillites, quartzites - grey or green
- 2 Quartzites - grey to white, silty in places, occasional argillite.
- 3 Blue quartzites interbedded with limey argillites and green argillite
- 4 Siltstone - thin bedded, minor grey quartzites.
- 5 Argillites - green, foliated and minor thin quartzite beds.

- Quartzites - massive
- Argillites - green, foliated, rusty.
- Grey quartz - quartz stockwork in places, quartz veins.
- Diorite & metadiorite - serpentinized & foliated in places near fault structures.

- Mineralized secondary structures.
- Outcrop
- Bedding strike & dip
- Foliation strike & dip
- Drag folds
- Faults
- Hydrothermal alteration near quartz vein

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**9850**

*part 2 of 2*



GALLANT GOLD MINES LTD.  
PERRY CREEK PROJECT

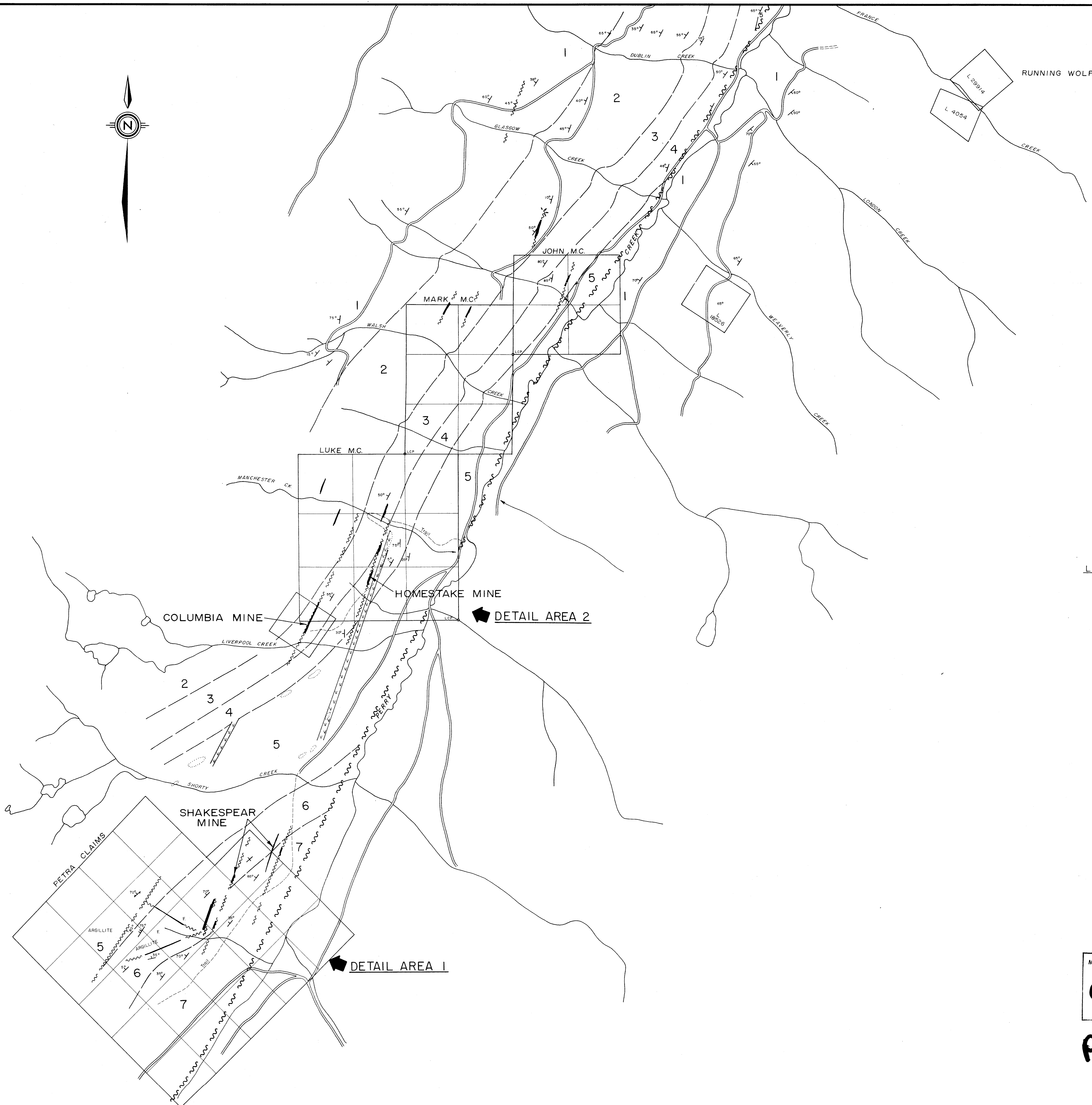
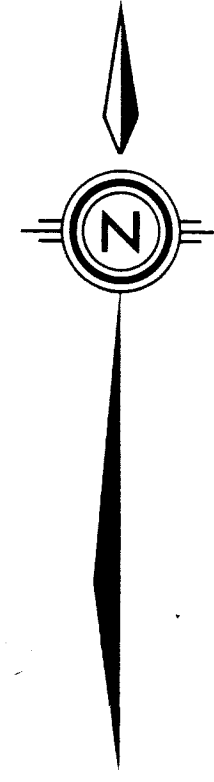
NORTH SHEET,  
FORT STEELE MINING DIVISION, B.C.

PRELIMINARY  
REGIONAL GEOLOGY

0 500 m 1000 m 1500 m 2000 m  
SCALE 1" = 15,325

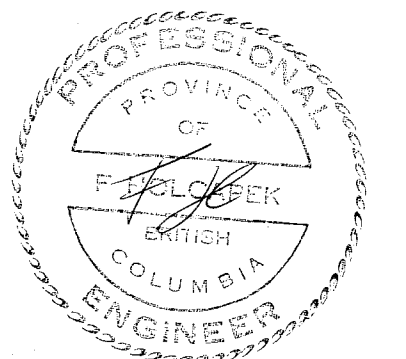
NTS 82-F-89  
DATE JAN 19, 1982  
BY F. HOLCAPECK / r.w.r.

FIGURE 3



**LEGEND**

- 1 Undifferentiated siltstones, argillites, quartzites - grey or green.
- 2 Quartzites - grey to white, silty in places, occasional argillite
- 3 Blue quartzites interbedded with limy argillites and green argillite
- 4 Siltstone - thin bedded, minor grey quartzites
- 5 Argillites - green, foliated and minor thin quartzite beds
- 6 Quartzites - grey to green, thick bedded, in places massive minor thin quartzite beds.
- 7 Quartzites - grey, thin bedded showing cross bedding, interbedded with green argillite.
- Quartzites - massive
- Argillites - green, foliated, rusty.
- Grey quartz - quartz stockwork in places, quartz veins
- Diorite & metadiorite - serpenitized & foliated in places near fault structures.
- Mineralized secondary structures.
- Outcrop
- Bedding strike & dip
- Foliation strike & dip
- Drag folds
- Faults
- H Hydrothermal alteration near quartz vein



MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**9850**  
part 2  
of 2

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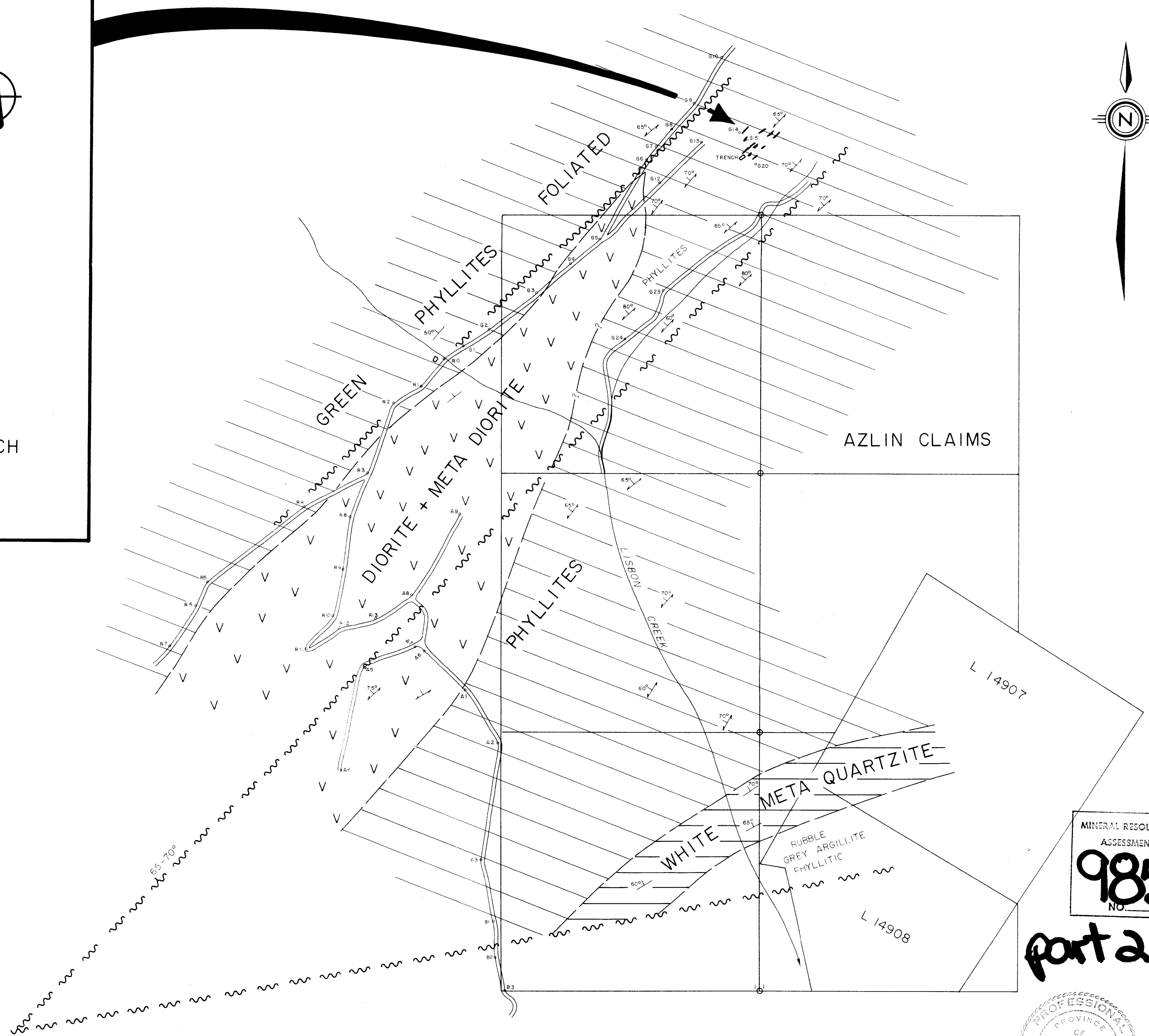
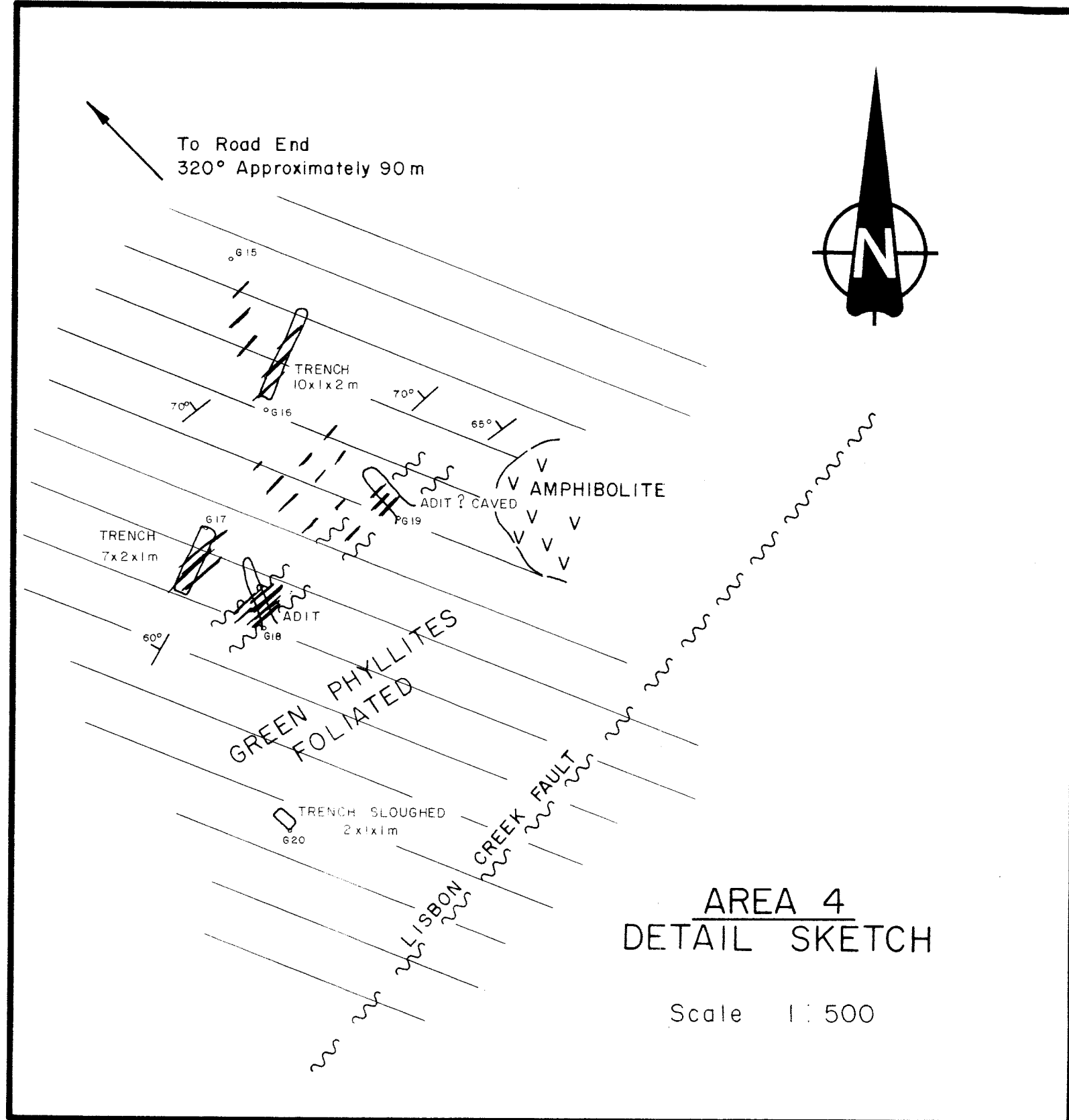
SOUTH SHEET  
FORT STEELE MINING DIVISION, B.C.

PRELIMINARY  
REGIONAL GEOLOGY

0 500m 1000m 1500m 2000m  
SCALE 1:15,325

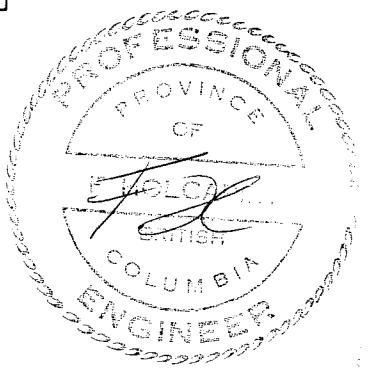
NTS 82-F-8,9  
DATE JAN 19, 1982  
BY F. HOLCAPECK / J.W.R.

FIGURE 2



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*part 2 of 2*



- LEGEND:**
- Quartz veining.
  - Foliation strike and dip.
  - Faulting and shearing

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AZLIN CLAIM AREA  
FORT STEELE MINING DIVISION, B.C.

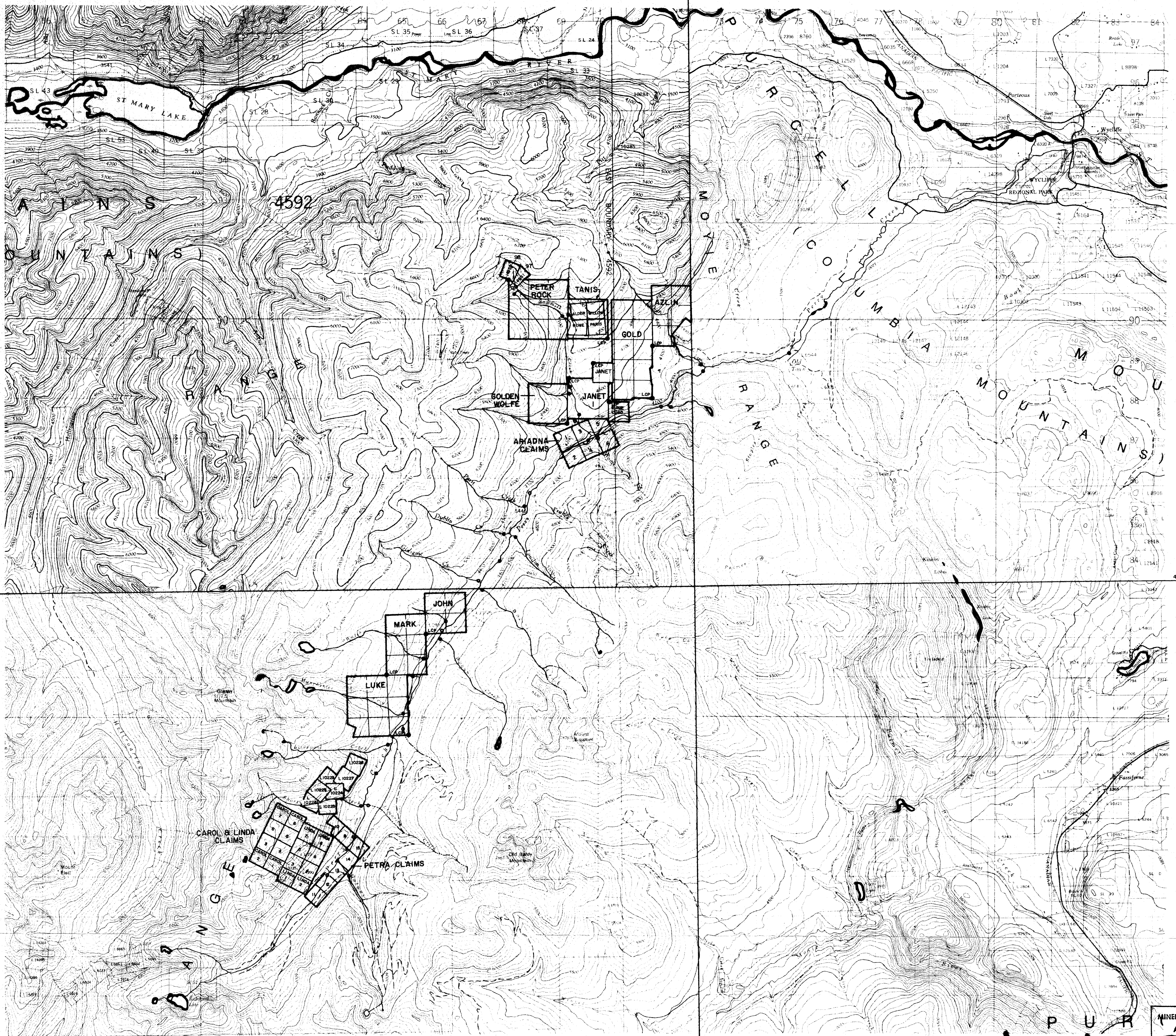
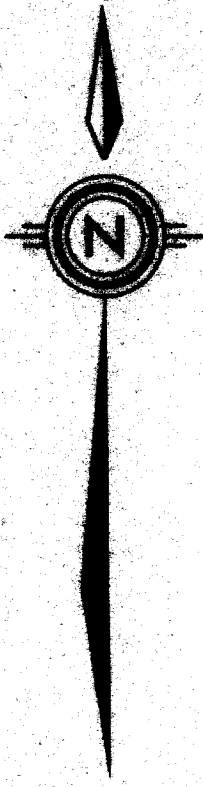
DETAIL AREA 4  
GEOLOGICAL MAP

0 100m 200m 300m 400m 500m  
SCALE 1:5,000

NTS 82-F-9  
DATE JAN 20, 1982  
BY F. HOLCAPECK / r.w.r.

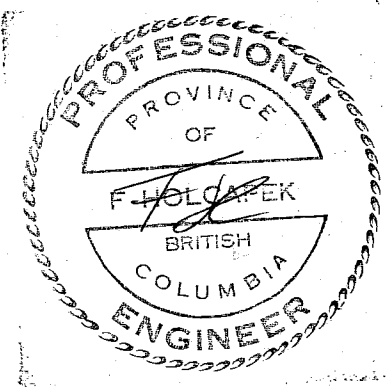
FIGURE 7





□ CLAIM OUTLINE

part 2 of 2  
MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
No. 9850



GALLANT GOLD MINES LTD.  
PERRY CREEK PROPERTIES ; FORT STEELE MD, B.C.

CLAIM MAP

0 1000 2000 3000 4000 5000  
1:50,000

NTS B2-F-8,9;G-5,12  
DATE: Dec 4 /81 By: C.W /r.w.r. Figure 1