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Owner/Operator: COMINCO LTD.

EXPLORATION
NTS 104K/12E

WESTERN CANADA

ASSESSMENT REPORT

GEOLOGY AND GEOCHEMISTRY OF THE THE TALON 1 and 2 MINERAL CLAIMS TULSEQUAH PROPERTY

ATLIN M.D.

LATITUDE 58°~~41'~~N 40'24"

LONGITUDE 133°35'W 12"

WORK PERFORMED:

JUNE 15 to SEPTEMBER 25, 1987

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,570

SEPTEMBER, 1987

T.J. TERMUENDE

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COMINCO LTD.

EXPLORATION
NTS 104K/12

WESTERN CANADA
24 September 1987

ASSESSMENT REPORT

GEOLOGY AND GEOCHEMISTRY OF THE TALON 1 and 2 MINERAL CLAIMS TULSEQUAH PROPERTY

SUMMARY

The Silver Talon property, located within the Atlin mining district at latitude 58°41'N, longitude 133°35'W consists of an intermediate to felsic volcanic package overlying pre-Permian limestones, and offset by the Tulsequah Chief Fault.

The property contains two significant mineral showings, namely the Sparling and Banker. These areas have received considerable attention since their discoveries earlier in the century, including mapping, geochemical sampling, trenching and drilling.

The Sparling showing consists of mineralization within narrow parallel shears offshooting from the Tulsequah Chief Fault. While generally yielding little gold, the area shows encouraging concentrations of lead and zinc.

The Banker showing, located within brecciated limestones near a sedimentary/volcanic contact, shows significant gold, silver, lead and zinc concentrations. Trenches have in the past produced samples of extraordinarily high silver content, in adddition to anomalous gold and base metal values. The area surrounding the Banker showing is low-lying and swampy, hindering geological and geophysical prospecting in the past, and causing some uncertainty as to the true size of the mineralized zone.

The felsic volcanic package on the east side of the property reveals an Au-anomalous area near an andesitic/dacitic contact, and may show some promise with respect to a volcanogenic massive sulphide target.

INTRODUCTION

The property, consisting of 14 Crown granted claims and 29 modified grid system claims, is owned by Silver Talon Mines Ltd. of Vancouver, British Columbia, and was evaluated in June and July, 1987. The property shows significant mineral concentrations, primarily in the area known as the Banker showing. Two other areas of anomalous mineralization include the Sparling showing, and a felsic volcanic package located on the east side of the property. A joint venture program between Cominco Ltd. and Silver Talon Mines Ltd. saw the placement of a small crew consisting of a geologist and geological assistant, with the objective being to extend the existing soil survey coverage, provide a detailed geologic map of the property, and to evaluate and interpret known showings for their economic potential. Over the course of the program, the above objectives were completed.

A 1983 report by G. Salazar was the source of some assay and geochemical data, while a 1986 report prepared by E. Ostensoe provided some information. Further work by Payne (1987) and Kerr (1948) was referred to regarding local geology.

This report provides information as to the location, history and geology of the property.

LOCATION AND ACCESS see Map, Figure 1

The property is located at the base of Mount Manville in the Atlin mining district, at latitude 58°41'N, longitude 133°35'W, on NTS map sheet 104K/12E. Its area spans the Tulsequah River near the confluence of the Taku and Tulsequah rivers. The area is within the Coast Mountains, approximately 8 km east of the B.C./Alaska border. The nearest supply points are Juneau, sixty km to the west, and Atlin, one hundred km to the northeast. The property is suitable for access by float or wheel equipped aircraft, or by helicopter or river boat. Mining operations have traditionally relied upon river access for heavy freighting requirements. During the 1987 field season however, brush clearing was completed on a one mile long gravel airstrip located on the west side of the Tulsequah River, enabling DC-3/Caribou-sized aircraft access to the area. The strip itself is located 1.5 km from the Banker showing, and is within the property boundary.

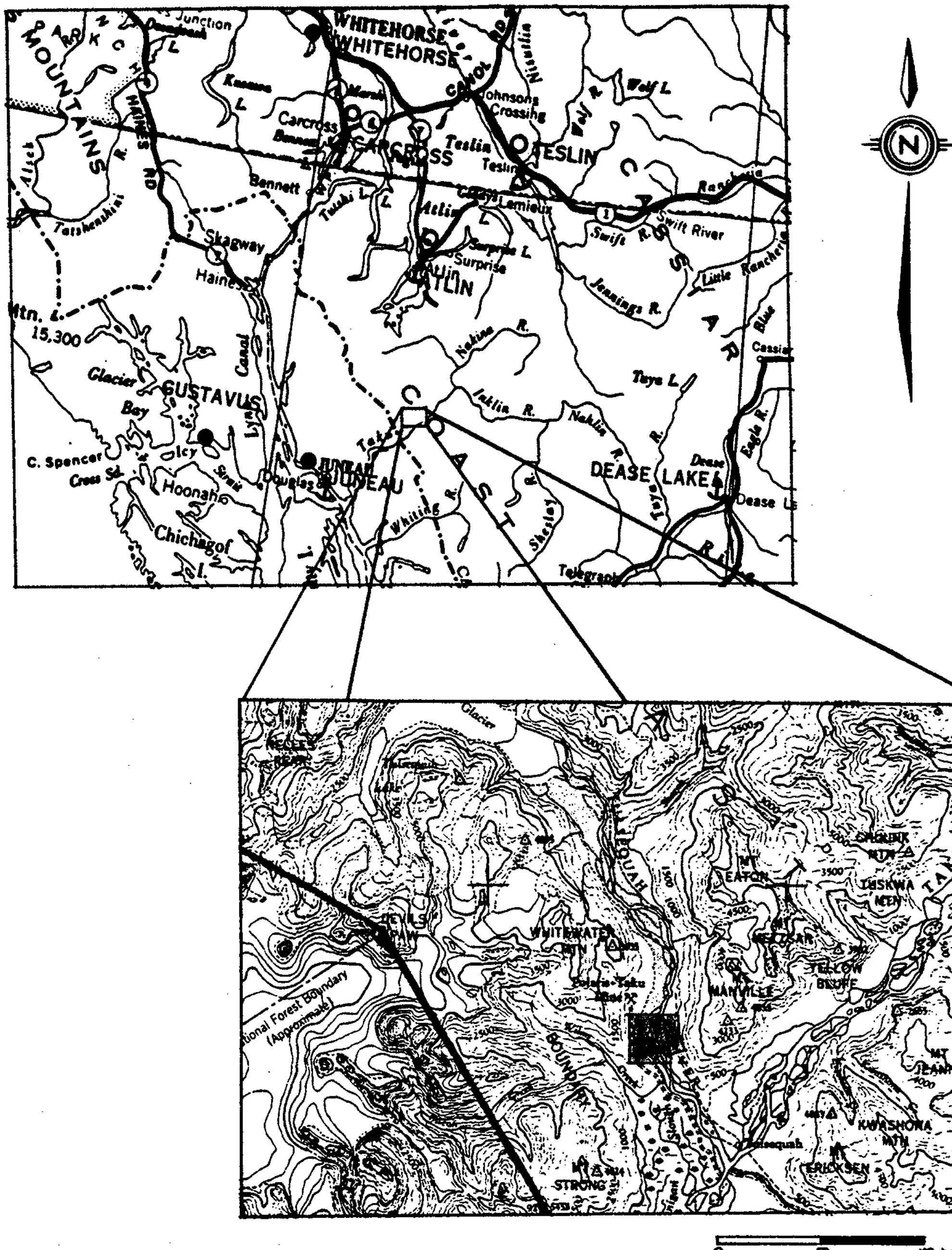
The property lies within elevations 90 to 400 m, and is free of snow from mid-May to October.

PHYSIOGRAPHY AND CLIMATE

The property, while situated at low elevations (90-400 m), is surrounded by glacier-capped 2000-2800 m peaks in all directions. The vegetation is dense with numerous fast running streams present in early summer.

To the southwest, and partially within the property boundary is the 12 km^2 Flannigan Slough. The confluence of the Tulsequah and Taku rivers lies 5 km to the south.

The area is subjected to typical coastal climates. F.A. Kerr reported annual precipitation between 1.91 and 3.81 metres, average snowfall as much as 2.9 metres, and winter temperatures between -3° and -5°C. Mines in the area generally operated year-round, with minor shut-downs in the summer during the flood season.



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Location Map

NTS 104K/12E

Figure 1 Sept.,1987

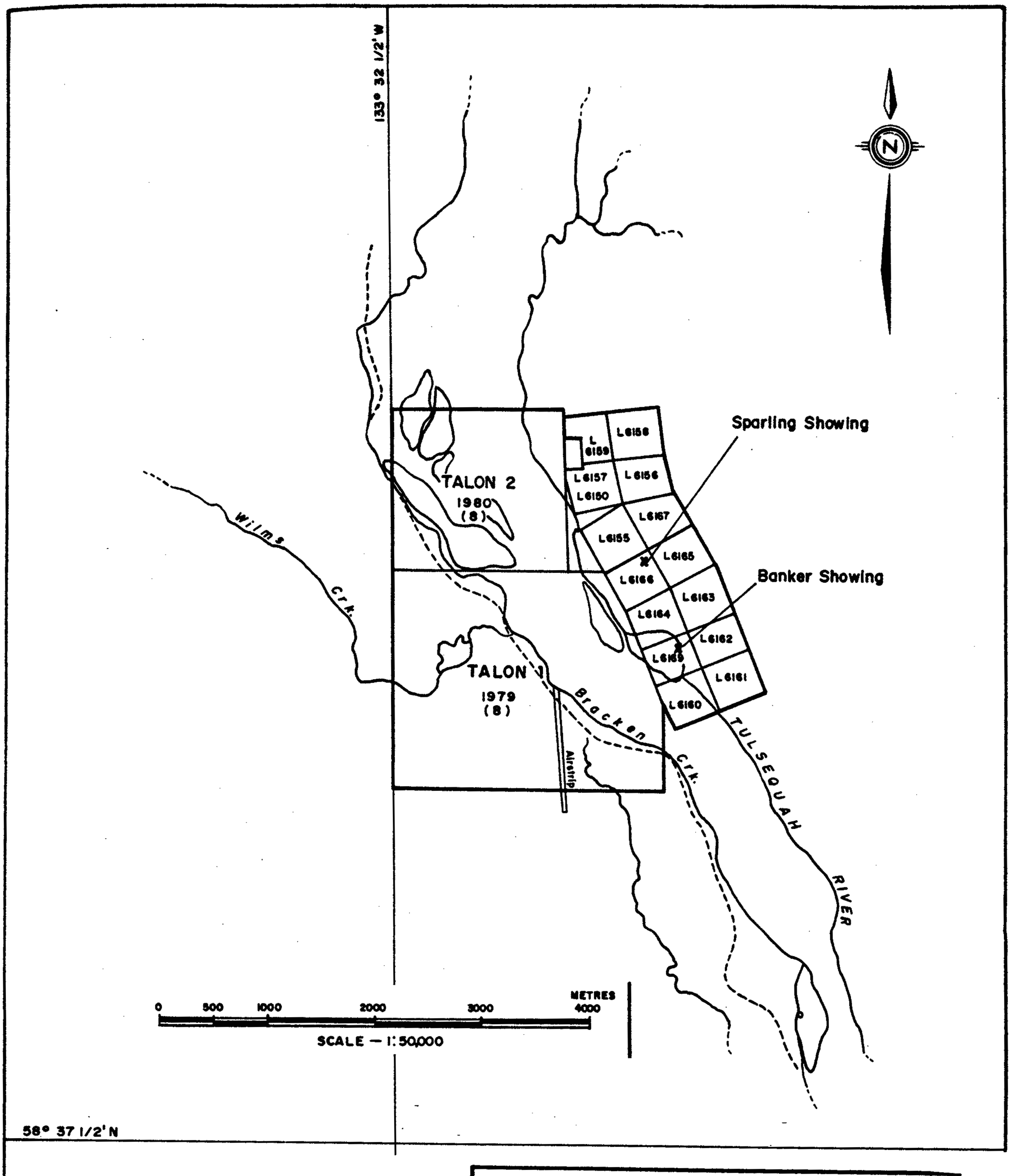
The Tulsequah River originates twenty kilometers to the north from the Tulsequah Glacier, a ten kilometer long valley glacier flowing to the southeast. The river flows in a low angle gravel-filled valley one to two kilometers wide. Normally the river is comparatively wide and stays within numerous channels along the flood plane. During the summer however, rising water levels in Tulsequah Lake cause a breach of ice dams, and drainage of the lake occurs rapidly, causing a valley-side flood for a period of roughly one week. During this time, the river is reported to rise twelve feet.

CLAIM STATUS see Figure 2

43 claims make up the property, with 18 of those being Crown Granted Mineral Claims (CG) and 29 being Modified Grid System (MGS) Mineral Claims, subjected to yearly assessment requirements. Assessment requirements were met and reports submitted for those MGS claims which would have expired August 1, 1987, securing them until August 2, 1993. Table 1, below summarizes existing claims and their status.

TABLE 1
SILVER TALON CLAIM STATUS

Claim	Type	Record (Lot) No.	Expiry Date	No. Of Units
Vega No. 1	CG	6155	N/A	1
Vega No. 2	"	6156	"	1
Vega No. 3	"	6157	"	1
Vega No. 4	"	6158	"	1
Vega No. 5	"	6159	"	1
Janet No. 1	"	6160	"	1
Janet No. 2	"	6161	"	1
Janet No. 3	"	6162	"	1
Janet No. 4	"	6163	"	1
Janet No. 5	"	6164	"	1
Janet No. 6	"	6165	"	1
Janet No. 7	"	6166	"	1
Janet No. 8	"	6167	"	1
Joker	"	6168	"	1
Talon No. 1	MGS	1979	August 2, 1993	20
Talon No. 2	"	1980	"	9
			TOTAL:	43



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Claim Map

NTS 104K/12E

Figure 2 Sept., 1987

HISTORY (excerpted from Mason, 1986; Salazar, 1983; Canadian Mining Journal, 1954)

Interest in the area dates back to 1923, when W. Kirkham of Juneau examined the rusty cliffs on the east wall of the Tulsequah Valley and discovered silver, lead, zinc and copper showings which he staked as the "Tulsequah Chief" claim. The same year the Alaska Juneau Gold Mining Company bonded the property, but dropped the option after a limited tunnelling program. Sporadic work was complete until 1946, when Cominco gained interest and carried out extensive work which saw production in 1951 of the Tulsequah Chief Mine. The mine, in operation until 1957, produced 1,029,089 tons of massive sulphide ore that yielded 94,254 ounces Au; 3,400,773 ounces Ag; 13,603 tons Cu; 13,463 tons Pb; 62,346 tons Zn and 227 tons Cd (Souther, p. 52).

Another nearby mine, the Polaris Taku or Whitewater Mine, is located 0.5 km west of the Tulsequah River, 3 km from the property boundary. During its period of operation, from 1937 to 1957, 231,000 ounces Au were removed from 719,336 tons of arsenopyrite ore extracted from sheared and carbonatized volcanic rocks (Hodgson, 1982).

During their periods of operation, ore from the Tulsequah Chief Mine was transported across the river and milled in the Polaris-Taku facility.

The discovery of the Banker and Sparling showings occurred in 1929, when some forty prospectors were attracted to the region by the Tulsequah Chief discovery. The Crown grants were staked in 1929 and optioned to the Alaska Juneau Gold Mining Company, who dropped them after a year's work had been done. During that period, a fifty foot tunnel, twenty foot shaft and several hand trenches were completed in the area of the Banker showing. J. Mason makes reference to a shallow 180 foot adit being completed on the claims at this time, but is not specific as to location.

The property lay idle until the late 1940's, when it was taken over by the Polaris-Taku Mining Co., a Rembrandt Gold Mines Ltd. predecessor and from whom Silver Talon Mines Ltd. acquired the property. Cominco optioned the property in 1957 and drilled three holes through the north end of the Sparling showing for a total of 1472 feet of drilling.

In 1964, a syndicate made up of New Taku Mines Ltd., Howe Oil Ltd. and the Homestake Mining Co. undertook further exploration of the Banker showing. The old trenches were blasted and deepened four or five feet and a number of short x-ray drillholes (5/8" core) were drilled near the original trenches. Total footage was of the order of 400 feet. According to Mason, this work proved that high grade mineralization, though erratic, continued to a depth of better than 30 feet.

In 1966, the New Taku Syndicate conducted an electromagnetic and self potential survey over the Banker and Sparling areas and determined a number of strong anomalies. Further work saw bulldozer stripping of the Banker area, but deep overburden and equipment problems hampered operations.

In 1983, G. Salazar and Associates were contracted, and a 5400 m flagged and blazed grid was completed with soil samples taken at 10 m intervals along crosslines. An 1140 m long baseline at 334° Az was cleared and flagged. These samples were analyzed for gold, silver, lead and zinc, with anomalous areas coinciding with Banker and Sparling showing locations. Further trench sampling was completed on the Banker showing, with 67 chip samples collected and assayed for gold, silver, lead and zinc.

1987 PROGRAM

The summer, 1987 program consisted of field work carried out by Cominco under agreement with Silver Talon Mines. The program ran from June 19 to July 31 and included detailed geological mapping of the Banker-Sparling areas, a northward extension of the soil grid, detailed mapping and sampling of the Banker trenches, systematic sampling of the Sparling trenches, and contour geochemical sampling of the felsic volcanics to the east of the Sparling showing.

REGIONAL GEOLOGY (excerpted from Canadian Mining Journal, 1954)

The Tulsequah area is on the eastern flank of the Coast Range batholith and is underlain by a thick succession of Paleozoic and Mesozoic volcanic and sedimentary rocks intruded by granitic outliers of the main batholith. The intrusive rocks have given rise to a diverse series of differentiates, including basic, intermediate and acid dykes and felsic injections. Sulphide deposition in the area, together with its accompanying siliceous and alkaline rock alteration, is also attributed to these intrusives. The Polaris-Taku and Tulsequah Chief deposits are located within the older core of a regional structural arch, near and between several large granitic batholiths. The underlying rocks consist of a thick series of pre-Permian and Permian limestone and schist, overlain conformably by the lower Triassic Stikine volcanics.

Ore deposits occur in these Mesozoic volcanic rocks which consist mainly of andesitic and rhyolitic flows and fragmentals and thin banded tuffs. The rocks are compressed into tight north-trending folds, which are revealed by elongated areas of the Permian and pre-Permian formations which represent the core of eroded anticlines. Two main systems of transcurrent faults occur, one set striking north, parallel to the Tulsequah valley, and the other northeast paralleling the Taku valley.

PROPERTY GEOLOGY AND MINERALIZATION see Figure 3

Detailed mapping of the property geology revealed that the property consists of a volcanic pile with narrow, discontinuous lenses of limestone suggested by Souther (1971) and Kerr (1948) to predate the Stikine volcanics which occur throughout the area. There also exists a series of faults of varying magnitude which are oriented generally north/south. The most significant and recent of these faults is the Tulsequah Chief Fault (formerly Big Bill), revealed by Payne (1987) to be continuous for a distance of over seven kilometers, visible as far north as the Tulsequah Chief workings, between the 5200 and 5400 adits. The fault is a major structural feature and serves to separate lithologies within the property, with dacites and rhyodacites to the east, and andesites and pyroxene/augite porphyry to the west. Further, less significant faulting is evidenced throughout the property area in the form of troughs and depressions, and are oriented in a north or northeastward direction, roughly parallel to the Tulsequah and Taku lineaments. These minor faults do not display significant displacements, and are truncated by the Tulsequah Chief Fault.

Throughout the property area are a series of felsite and specifically quartz monzonite dykes. These dykes appear to be Triassic or later in age, and invariably occur within fault zones and as fracture fillings.

Structurally, at least three phases of folding are evidenced in the andesites west of the Tulsequah Chief Fault. A tight fold nose is apparent north of the creek along crossline 7+00N. This nose is defined by a folded foliation, which itself shows minor crenulations. The orientation of fold axes of the most recent phase is found to be approximately 60 degrees toward 320 Az. These folds may be interpreted to be minor folds on the flank of a larger regional strucure. The fold axis orientations support this suggestion, as they agree with the trend and plunge of larger structures mapped by Payne (1987) and Kerr (1948).

Limestone is exposed on either side of the Tulsequah Chief Fault in limited exposures. To the southwest of the property, it hosts the Banker mineralization, and is massive or banded grey to white coloured, and locally sideritic. Due to deep overburden, its extension north or south cannot be determined, though there is a suggestion that it may be related to limestones discovered to the north near the Tulsequah Chief workings, or eastward, across the Tulsequah Chief Fault. It is impossible to ascertain however, without further palaeontological investigation. Located to the east of the "Banker" limestone is a thin argillaceous mudstone. This unit shows bedding attitudes similar to the limestone, and is interpreted to be a facies variation in the sediments. Tops were not determined.

Andesite mapped in the area is generally fine grained and massive, with some pyroxene and hornblende phenocrysts 3-10 mm in size, found in irregular distributions throughout the property. In some areas, phenocryst size and abundance is such that an intrusive character is suggested, though contacts are invariably gradational. The andesites are locally subjected to alteration, usually resulting in calcareous or siliceous overprinting . It has been observed that a siliceous alteration post-dates that responsible for the carbonatization, though the latter may be inherent to the rock itself. Apparently contemporaneous with the siliceous alteration is the placement of finely disseminated pyrite, which is visible throughout the area. The andesite generally shows a prominent foliation, most obvious towards the south end of the property.

Dacites, found only to the west of the Tulsequah Chief Fault, are generally fragmental in origin and grade locally to more felsic rhyodacitic compositions. There is a suggestion by Payne (1987) that these rocks are similar to those which host the Tulsequah Chief mineralization six kilometers to the north. Disseminated pyrite is common throughout the property area, but rarely in significant quantities, with the exception of minor shear zones, where sulphides are seen to occur in small veinlets. There exists a zone of more massive, aphanitic dacitic flows within the fragmentals, thought to be resultant of depositional factors. Alteration generally consists of carbonatization and silicification, again evidently in that order.

The Felsite dykes represent the latest rock units, and are generally of a quartz monzonite composition, with textures varying from finely crystalline to coarse-grained. Flow banding is visible in many exposures, as well as prominent jointing, generally in an orientation parallel to that of the dyke itself. It is suggested that the dykes predate or are contemporaneous with the latest phase of deformation, as evidenced by their curviplanar orientation seen throughout the Sparling area.

Significant mineralization within the property seems to be limited to the Sparling and Banker showings, though the dacitic pile to the east of the Tulsequah Chief Fault may hold some potential for a volcanogenic deposit. The mineralization found in the Banker and Sparling showings is of differing nature, therefore the geology of each will be treated separately.

SPARLING SHOWING

The Sparling showing is located near the top of a north/south oriented ridge between the Tulsequah River valley and the Tulsequah Chief Fault (see Figure 3). It represents a vein-type deposit within a shear zone system.

Lithologies generally consist of massive to porphyritic andesite and coarse grained pyroxene/hornblende porphyry (gabbro). Felsite dykes are frequent throughout the area and in some places occur directly adjacent to mineralization. The Sparling area lies at elevation 160-190 m, 70 m higher and 600 m northeast of the Banker showing. Prospect pits and trenches are distributed in a north-south orientation, over an area roughly 300 m x 100 m, and are numerous and easily recognized (see Trench Location Map, Figure 4(i)). Mineralization is limited to a north/south trending shear zone 25 m wide, which fingers into smaller individual shears over 200 m to the south. The zone is thought to represent a splay related to the Tulsequah Chief Fault. Its greatest width is observed proximal to the fault itself. Mineralization is found in both the massive andesites and the pyroxene/gabbro units (see Figure 3), suggesting that the mineralization event is contemporaneous with later faulting, and is not syn-genetic with the volcanic event responsible for the andesites.

Strong mineralization is found within a sericitic foliated, boudined quartz vein 20-50 cm in width within the shear zone. Sulphides include pyrite, galena, sphalerite, arsenopyrite and stibnite? in order of abundance. The vein appears continuous over 40 m, and forms a resistant spine where exposed in trenches. Mineralization occurs in bands 1-3 cm wide, parallel to walls. Samples taken from this vein showed values of 222 ppb Au and 24.5 ppm Ag, 518 ppm Pb, 10,250 ppm Zn and 632 ppm Cu. Twenty metres eastward in Trench 17, much higher values were seen: 2820 ppb Au, 510 ppm Ag, 66000 ppm Pb, 28800 ppm Zn and 309 ppm Cu. This vein is similar in appearance and orientation to veins throughout the showing area.

Systematic sampling was carried out in an attempt to determine continuity and location of significant mineralization. While Figure 4(i) reveals trench and sample locations, Appendix D shows analytical values. Results show that the Sparling trenches, while generally anomalous in Au, Ag, Pb, Zn and Cu concentrations, yield encouraging results only over narrow, sporadic intervals, confirming that mineralization is vein related, and is generally not continuous.

Cominco, in 1957 drilled three holes from the top of the Sparling ridge at locations indicated on Figure 4(i). These holes were drilled from the west bearing 77° east with inclinations between -32° and -38°. The drilling objective was to test the mineralization at shallow depths. Each hole was roughly 450 feet long, with a total footage of 1,472 feet for the program. The northernmost hole was intended to test the area of alteration in the vicinity of the intersection of the Tulsequah Chief Fault and another north/south oriented fault. The two more southerly holes also tested the downward projection of mineralization on the west side of the main draw. The drilling confirmed the presence of a shear zone with associated sericite and quartz sericite alteration beneath the general area of the main draw. The zones of alteration were however, not accompanied by significant sulphide mineralization. The drilling did not indicate a downward extension of the mineralization exposed in the trenches.

BANKER SHOWING see Figure 5(i), 5(ii)

The Banker showing is located adjacent to low marshy ground along the floodplain of the Tulsequah River, one hundred metres from its most easterly channel. It consists of seven 2-3 m deep trenches 10-20 m long, oriented 040°, located on the grid between lines 2+80N and 3+40N. It sits at elevation 90 m, along a densely foliated road running northwest.

Banker mineralization occurs within silicified, thinly bedded grey and white limestone. Bedding strikes from 130° to 170° and dips 70°SW to 60°NE. An exception to this occurs in a rusty weathering limestone outcrop sixty metres to the southeast, near some old equipment. In this single exposure, attitudes of 090/80N were measured, suggesting that the Banker mineralization occurs near the nose of a synformal structure. Kerr (1948) suggested that the Banker mineralization was confined to the crest of an anticline plunging gently to the southeast. If this is correct, the deposit has been eroded to the northwest but should plunge beneath younger (?) volcanics to the southeast.

The limestone in the area is considered by previous workers to be Permian in age. Payne (1987) assigns a Pennsylvanian-Permian age to the unit. Conformably overlying the limestone is an argillaceous mudstone layer, located in a single outcrop exposure thirty five metres east of the trenches within a small creek draw. The nature of the contact with the volcanics is unclear due to limited outcrop exposure in this area.

The presence of an adit is suggested in Trench "C" along the eastern wall. Numerous old timbers litter the floor of the trench, and some hanging wall braces are in place in what appears to be a portal (sloughing of material makes it difficult to conclude with certainty). It is possible that the trench itself was at one time a shallow adit, and has since collapsed and been cleared during subsequent work.

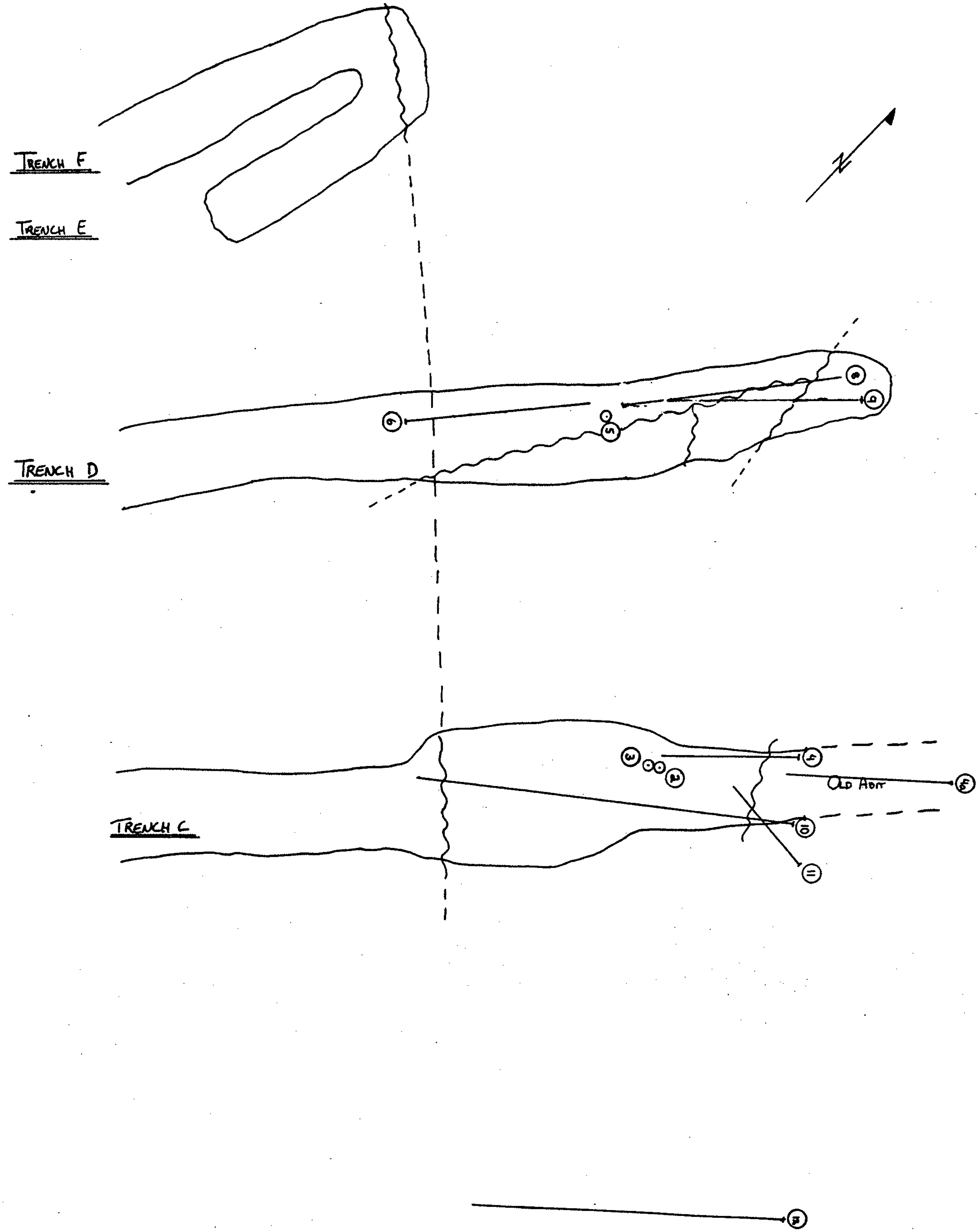
All mineralization in the Banker area is related to a quartz flooded shatter zone within the bedded limestone. Ore mineralization consists of mainly galena and sphalerite, with arsenopyrie, pyrite, tetrahedrite, chalcopyrite, and bornite occurring in minor proportions. Later pyrite and arsenopyrite occur in veinlets crosscutting earlier mineralization. Mineralization is restricted to a limestone breccia whose clasts range in size from 5 to 20 cm. There has been obvious rotation of blocks within the zone. A 20 cm wide, siliceously altered light green coloured, mariposite-rich dyke occurs 35 m to the southeast (see Figure 5(i)) and trends directly toward the trench area. Clasts of this same material are invariably associated with mineralization within the limestone breccia, suggesting that the dyke may be in part responsible for the mineralization itself. Mineralization in the trenches appears to surround these clasts in many instances, suggesting that the resistant fragments provided open spaces, facilitating the movement of mineralized solutions through the brecciated zone.

Significant to the understanding of the nature of the mineralization is the consideration of the numerous faults clearly evident in the trench area. Slickenslide examination, coupled with visible offsets, indicates that the area of the showing has experienced extensional strain in a southeast/northwest direction. There also appears to be strike-slip movement perpendicular to trench orientation, further offsetting mineralization.

Samples of Banker mineralization assay as high as 871.6 oz Ag/ton (Mason, 1983). Recent work by Salazar (1983) included collecting 63 rock chip samples from the trenches, from which the highest silver assays obtained were 87.02 and 64.42 oz/ton, with widths 0.25 m and 1.25 m respectively. Samples collected during the 1987 program indicate that mineralization is fault controlled. Assay results show that while trenches "C" and "D" yield anomalous Au, Ag, Pb, Zn and Cu values (up to 5920 ppb, 1460 ppm, 27000 ppb, 95500 ppm and 11470 ppm respectively), trenches further to the northwest show considerably lower concentrations. It is suspected that the extensional fault visible in trench "D" saw the downdropping of the mineralized zone northwestward, beneath the marsh. It may be significant to note the presence of a gossan on the gravel banks of the Tulsequah River 1 km to the northwest, adjacent to the marsh. This gossan may represent mineralization at depth which could be related to an extension of the Banker zone.

It is important to note that no reference is made to the presence of faults in the 1964 drill logs (see Appendix E). This implies that the geologists responsible for the spotting of the holes did not recognize the importance of faulting in their drilling decisions. This is reflected in the drill hole locations (see Figure 5(ii)). Drilling proved extension of mineralization to shallow depths only in a limited area. It is therefore possible that some aspects of the mineralization geometry have been overlooked or left unexamined.

The size of the Banker mineralization is unknown. Thick overburden to the north, west and south of the trenches has so far inhibited surficial and geophysical examination. Salazar's 1983 geochemical survey outlines a gold-, silver-, lead- and arsenic-anomalous area of size considerably greater than that seen in the trench area (see Figures 6(i), 6(ii), 6(iii)). Barren, bedded limestone occurs 60 m to the north and 5 m to the southeast of the trenches. There is evidence in trench "C" that a horizontal, near surface fault displaces the mineralization to the southeast, with the possibility of another downward extension of the body in that direction. There does exist a strong possibility that mineralization could continue to the northwest. This suggestion has not been adequately explored.



Silver Talon Project

Drawn by: TJT		Traced by:	
Revised by	Date	Revised by	Date

Banker Showing;
Drill hole Location Map–
1964 Program

Scale: 1:40 | Date: 10/08/87 | Plate: 5(ii)

FELSIC VOLCANICS (East Side of Tulsequah Chief Fault)

This package was prospected and sampled in an attempt to evaluate its potential as a "Tulsequah Chief" type volcanogenic deposit. It consists primarily of dacites and rhyodacties cut by later felsite dykes and overlain by andesites. 59 soil sample were collected along contours at 200 m and 300 m elevations. These samples were analyzed for gold, silver and arsenic content. Results showed that the package is generally barren of auriferous material, with the exception of an anomalous zone near an andesite/dacite flow contact along the 300 m contour. Subsequent surface examination was not carried out during this field season.

Elsewhere within the package, surface mapping has revealed pyrite is present throughout the package, but in very low concentrations (generally less than 2%).

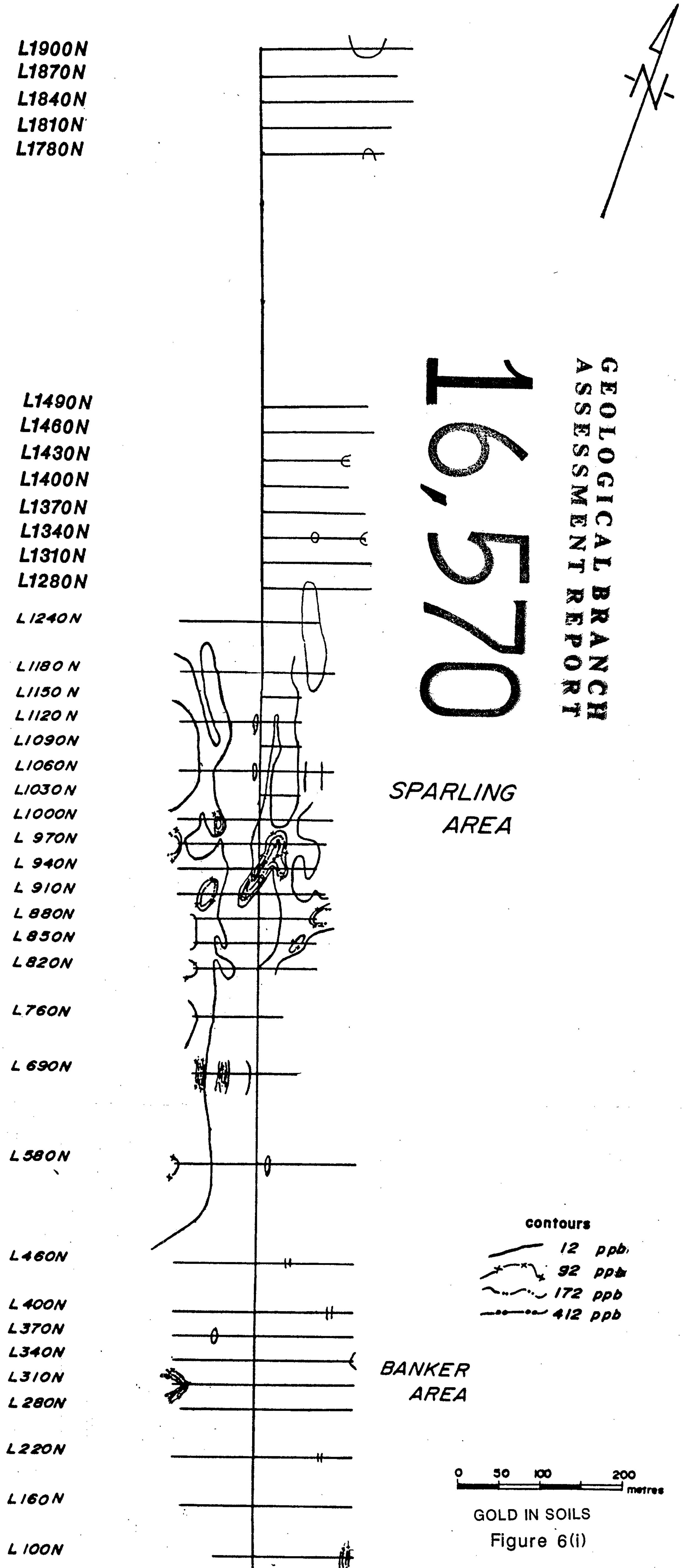
GEOCHEMISTRY

The existing grid was reflagged and the baseline extended to 1900N. Crosslines were established at 30 m intervals along the baseline from 1280N to 1490N and from 1780N to 1900N in hopes of recognizing an extension of Sparling mineralizaton to the north. A total of 82 samples were collected at 25 m intervals. Contoured results may be seen in Figures 6(i), 6(ii) and 6(iii), and data in Appendix D.

As well, contour soil sampling was completed along 200 m and 300 m contour intervals within the felsic volcanic package to the east of the Tulsequah Chief Fault. As a result, an Au anomaly was detected along the 300 m interval near an andesitic/dacitic contact (see Figure 6(iv)).

CONCLUSION

Clearly the greatest potential of the property lies with the Banker showing mineralization. It has yielded consistantly encouraging assay values, and has not been adequately explored with respect to its true size at depth. The felsic volcanic package to the east of the Tulsequah Chief Fault has shown an anomalous area in a preliminary soil sampling program, and warrants further investigation. The Sparling showing, though yielding spectacular samples, appears narrow and discontinuous.



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GOLD IN SOILS
Figure 6(i)

Cominco Limited
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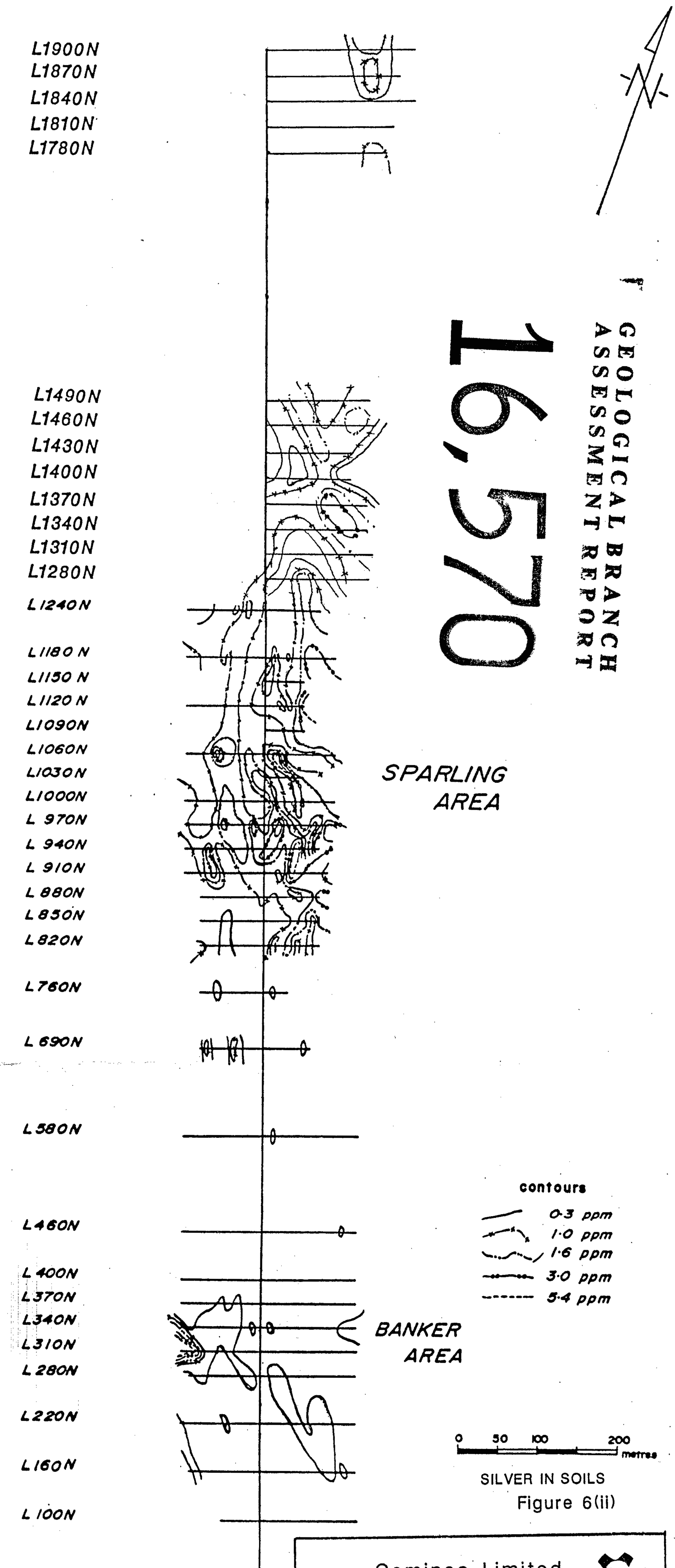
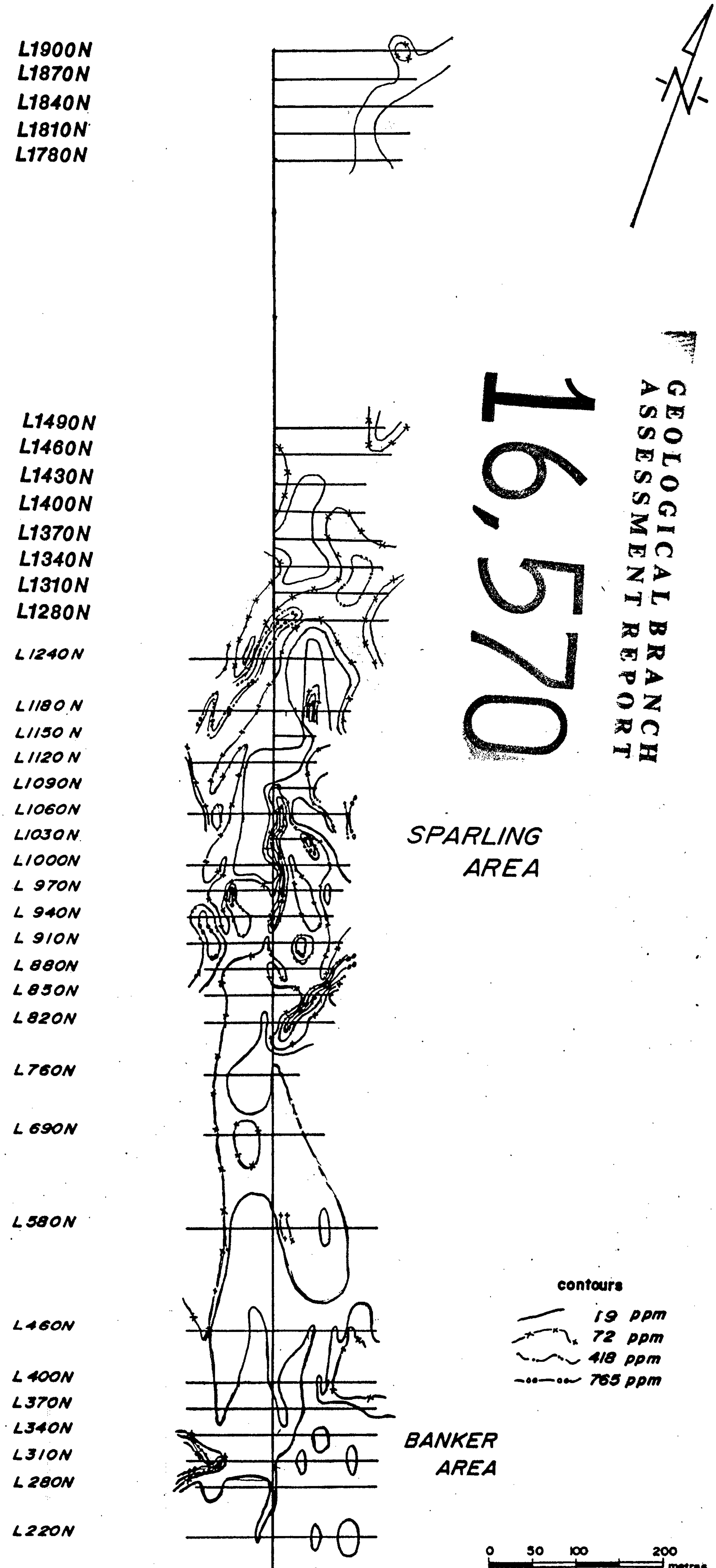
From: Salazar, 1983.



SILVER IN SOILS
Figure 6(ii)

Cominco Limited
Silver Talon Project

From: Salazar, 1983



ARSENIC IN SOILS
Figure 6(iii)

From: Salazar, 1983.

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Silver Talon Project

RECOMMENDATIONS

Additonal geophysical work should be carried out in the area northwest and southeast of the Banker showing. Due to the presence of swampy ground, the work should be carried out in late fall or winter, using a horizontal loop-EM technique. If encouraging results are obtained, drilling should be carried out using a portable, light weight drilling apparatus capable of reaching depths to 150 m, with the objective being to define the zone boundary to the northwest and southeast. Further work may be warranted within the felsic package to the west of the Tulsequah Chief Fault, in order to evaluate the Au anomaly discovered along the 300 m contour level.

REFERENCES

Canadian Mining Journal, May, 1954,
Tulsequah Mines Limited, Ch. 11, pp. 180-186.

Hodgson, C. Jay and others, 1982,
"Application of Exploration Crieteria for gold Deposits in the Superior Province of the Canadian Shield to Gold Exploration in Cordillera" in Precious Metals in the Northern Cordillera, editor A.A. Levinson, Assoc. of Exploration Geochemists, publishers: Univ. Chicagp Press, Chicago, U.S.A.

Kerr, F.A., 1948,
Taku River Map-Area, British Columbia, Geol. Surv. Can., Mem 248.

Mason, J.D., 1983,
Report on the Banker Silver Property, Tulsequah, B.C.

Ostensoe, E.A., 1984,
Report on Banker-Sparling Prospects, Tulsequah Mining District, Northwestern British Columbia for Silver Talon Mines Limited, Vancouver, B.C.

Payne, J.G. and Sisson, W.G., 1987,
Geological Report on the Tulsequah-Taku Property, private Cominco report.

Salazar, G., 1983,
"Property Report: Banker-Sparling Group of Claims," private report to Directors, Silver Talon Mines, Ltd.

Souther, J.G., 1971,
Geology and Mineral Deposits of the Tulsequah Map-Area, British Columbia, Geol. Surv. Can., Mem 362.

Reported by: ______________________
T.J. Termuende
Geologist

Endorsed by: ______________________
M.J. Casselman
Project Geologist

Approved for release: ______________________
W.J. Wolfe
Manager, Exploration
- Western Canada

TJT/jd

Distribution:

APPENDIX "A"

STATEMENT OF EXPENDITURES

Salaries		
T.J. Termuende - field	June 18 - July 30 @ $110/day	$4730.00
- report writing, drafting -	August 10-14, 17-21 @ $110/day	1100.00
R. Cameron - field	June 18 - July 30 @ $92.40/day	3973.20
Geology Miscellaneous		1537.00
Camp Cost (stayed at Cominco camp @ $85/manday		7310.00
Helicopter (15 hours @ $450/hour - Jet Ranger 206B		6750.00
Fixed Wing		5000.00
Geochemistry (soil and rock)		2100.00
Line cutting - helicopter pads and 3 km lines cut and blazed - 2 men @ $500/day for 3 days		1500.00
	TOTAL	$34,000.20

APPENDIX "B"

STATEMENT OF QUALIFICATIONS

I, TIMOTHY J. TERMUENDE of Hwy 93, Fort Steele, in the Province of British Columbia, hereby certify:

(1) THAT I am a geologist residing at Hwy 93, Box 7, Fort Steele, British Columbia.

(2) THAT I graduated with a B.Sc. (Geol.) degree from the University of British Columbia, in April, 1987.

(3) THAT I have practiced field Geology since 1976, specifically as a Cominco Geologist since May, 1987.

SIGNED: T.J. Termuende

T.J. Termuende
Geologist

September 24, 1987

APPENDIX "C"

IN THE MATTER OF THE B.C. MINERAL ACT AND THE MATTER OF A GEOLOGICAL PROGRAMME CARRIED OUT ON THE SILVER TALON PROPERTY, NOTABLY THE TALLON 1 AND 2 CLAIMS LOCATED AT LATITUDE 58°41'N, LONGITUDE 133°35'W IN THE ATLIN MINING DISTRICT OF THE PROVINCE OF BRITISH COLUMBIA, MORE PARTICULARLY NTS 104K/12E.

AFFIDAVIT

I, TIMOTHY JAY TERMUENDE, of Hwy 93, Fort Steele in the Province of British Columbia, make oath and say:

(1) THAT I am employed as a Geologist by Cominco Ltd. and, as such have a personal knowledge of the facts to which I hereby depose;

(2) THAT annexed hereto is a true copy of expenditures incurred on a geological survey on the Tallon claims;

(3) THAT the said expenditures were incurred between June 15 and September 25 for the purpose of mineral exploration of the above noted claims.

SIGNED: [signature]

T.J. Termuende
Geologist

September 24, 1987

APPENDIX "D"

SOIL AND LITHOGEOCHEMICAL ANALYTICAL DATA

SILVER TALON-WD

JOB V 87-0277S
REPORT DATE 6 AUG 1987

LAB NUMBER	FIELD NO	MAP ZONE	EAST	NORTH	# MAT'L ORIG	SITE	COLOUR	SIZE	ORG	DEPTH WET	cm	WIDTH SLOPE	FLOW HORIZ	PPT	pH	Ag ppm	Au ppb	Wt Au gram	As ppm
04400	55090		+275	+1870	Soil	Dry	Gry-light	clay		Dry	10	Low	B		.	<.4	10	10	4
04401	55091		+250	+1870	Soil	Dry	Gry-light	clay		Dry	8	Low	B		.	<.4	14	10	3
04402	55092		+225	+1870	Soil	Dry	Gry-light	clay		Dry	15	Low	B		.	<.4	<10	10	5
04403	55093		+200	+1870	Soil	Dry	Gry-light	clay		Dry	25	Med	B		.	<.4	10	10	8
04404	55094		+200	+1840	Soil	Dry	Brn-med	silt		Dry	20	Med	B		.	<.4	<10	10	25
04405	55095		+225	+1840	Soil	Dry	Gry-light	clay		M'st	10	Low	B		.	<.4	<10	10	3
04406	55096		+250	+1840	Soil	Dry	Brn-dark	silt		M'st	10	Low	B		.	<.4	<10	10	3
04407	55097		+275	+1840	Soil	Dry	Gry-light	clay		Dry	25	Med	B		.	<.4	<10	10	9
04408	55098		+300	+1840	Soil	Dry	Brn-light	silt		Dry	20	Med	B		.	<.4	<10	10	11
04409	55099		+325	+1840	Soil	Dry	Brn-light	silt		Dry	25	Steep	B		.	<.4	<10	10	9
04410	55100		+375	+1840	Soil	Dry	Brn-dark	silt		M'st	55	Steep	B		.	<.4	<10	10	30
04411	55101		+350	+1810	Soil	Dry	Gry-med	silt		Dry	10	Steep	B		.	<.4	<10	10	3
04412	55102		+325	+1810	Soil	Dry	Gry-light	silt		M'st	20	Steep	B		.	<.4	<10	10	9
04413	55103		+300	+1810	Soil	Dry	Red-med	silt		Dry	25	Low	B		.	<.4	<10	10	29
04414	55104		+275	+1810	Soil	Dry	Gry-light	silt		Dry	25	Med	B		.	<.4	<10	5	4
04415	55105		+250	+1810	Soil	Dry	Gry-light	silt		Dry	10	Med	B		.	.4	10	10	9
04416	55106		+225	+1810	Soil	Dry	Gry-med	silt		M'st	10	Low	B		.	<.4	<10	10	6
04417	55107		+200	+1810	Soil	Dry	Gry-med	clay		M'st	20	Low	B		.	<.4	<10	10	3
04418	55108		+250	+1430	Soil	Dry	Brn-med	silt		Dry	25	Med	B		.	.5	<10	10	8
04419	55109		+275	+1430	Soil	Dry	Brn-light	silt		Dry	15	Med	B		.	2.8	<10	10	71
04420	55110		+300	+1430	Soil	Dry	Brn-dark	silt		M'st	10	Low	B		.	<.4	20	10	31
04421	55111		+200	+1780	Soil	Dry	Brn-med	silt		Dry	20	Low	B		.	<.4	10	10	24
04422	55112		+225	+1780	Soil	Dry	Brn-med	silt		M'st	15	Low	B		.	<.4	<10	10	4
04423	55113		+250	+1780	Soil	Dry	Brn-dark	silt		Dry	20	Med	B		.	<.4	<10	10	13
04424	55114		+275	+1780	Soil	Dry	Brn-med	silt		Dry	10	Flat	B		.	<.4	<10	10	5
04425	55115		+300	+1780	Soil	Dry	Red-med	silt		Dry	15	Flat	B		.	<.4	<10	10	25
04426	55116		+325	+1780	Soil	Dry	Brn-med	silt		M'st	25	Med	B		.	2.1	12	10	22
04427	55117		+341	+1780	Soil	Dry	Gry-light	clay		M'st	30	Med	B		.	<.4	10	10	3
04428	55121		+200	+1400	Soil	Dry	Gry-light	silt		Dry	10	Med	B		.	.6	<10	10	168
04429	55122		+225	+1400	Soil	Dry	Gry-light	silt		Dry	15	Low	B		.	<.4	<10	10	12
04430	55123		+250	+1400	Soil	Dry	Gry-light	clay		Dry	10	Low	B		.	<.4	<10	10	7
04431	55124		+275	+1400	Soil	Dry	Red-light	silt		M'st	15	Med	B		.	.8	<10	10	303
04432	55125		+300	+1400	Soil	Dry	Brn-dark	silt		M'st	10	Steep	B		.	<.4	<10	10	4

LAB NUMBER	FIELD NO	MAP ZONE	EAST	NORTH	#	MAT'L	ORIG	SITE	COLOUR	SIZE	ORG	WET	DEPTH CM	WIDTH SLOPE	FLOW HORIZ	PPT	pH	Ag PPM	Au PPB	Wt Au GRAM	As PPM
4433	55128		+200	+1900		SOIL		DRY	GRY-LIGHT	SILT	HIGH	DRY	20	MED	B		.	<.4	C160	10	2
4434	55129		+225	+1900		SOIL		DRY	RED-MED	SILT	MED	DRY	25	LOW	B		.	<.4	<10	10	17
4435	55130		+250	+1900		SOIL		DRY	RED-MED	SILT	MED	M'ST	25	FLAT	B		.	.5	<10	10	11
4436	55131		+275	+1900		SOIL		DRY	BRN-MED	SILT	HIGH	M'ST	30	LOW	B		.	<.4	<10	10	8
4437	55132		+300	+1900		SOIL		DRY	GRY-LIGHT	SILT	HIGH	DRY	20	LOW	B		.	<.4	14	10	4
4438	55133		+325	+1900		SOIL		DRY	BRN-MED	GRAVEL	HIGH	M'ST	20	MED	B		.	.6	14	10	156
4439	55134		+344	+1900		SOIL		ACTIVE	GRY-LIGHT	SILT	HIGH	M'ST	20	FLAT	B		.	<.4	<10	10	14
4440	55135		+356	+1900		SOIL		SWAMP	BRN-MED	SAND	HIGH	M'ST	10	FLAT	B		.	.6	<10	10	35
4441	55136		+375	+1900		SOIL		DRY	BRN-MED	SILT	HIGH	DRY	20	STEEP	B		.	<.4	<10	10	2
4442	55137		+375	+1870		SOIL		DRY	YEL-LIGHT	SILT	HIGH	DRY	15	MED	B		.	<.4	<10	10	20
4443	55138		+356	+1870		SOIL		SWAMP	BRN-DARK	SILT	HIGH	WET	30	FLAT	B		.	.5	<10	10	50
4444	55139		+344	+1870		SOIL		SWAMP	BRN-DARK	SILT	HIGH	WET	20	FLAT	B		.	.9	<10	10	20
4445	55140		+325	+1870		SOIL		DRY	GRY-LIGHT	SILT	HIGH	DRY	15	MED	B		.	<.4	<10	10	3
4446	55141		+300	+1870		SOIL		DRY	RED-MED	SAND	MED	DRY	20	LOW	B		.	1.4	<10	10	24
4447	55126		+200	+1430		SOIL		DRY	RED-MED	SILT		DRY	15	LOW	B		.	.9	<10	10	252
4448	55127		+225	+1430		SOIL		DRY	RED-MED	SILT		DRY	20	MED	B		.	<.4	<10	10	45
4449	55142		+200	+1490		SOIL		DRY	RED-MED	SAND	HIGH	DRY	20	LOW	B		.	.7	<10	10	72
4450	55143		+225	+1490		SOIL		DRY	RED-MED	SAND	HIGH	DRY	15	LOW	B		.	.9	<10	10	35
4451	55144		+250	+1490		SOIL		DRY	BRN-MED	SAND	HIGH	DRY	20	LOW	B		.	1.4	<10	10	56
4452	55145		+275	+1490		SOIL		DRY	RED-LIGHT	SAND	MED	M'ST	35	MED	B		.	.6	<10	10	30
4453	55146		+300	+1490		SOIL		DRY	RED-MED	SAND	HIGH	DRY	30	MED	B		.	.6	<10	10	66
4454	55147		+320	+1490		SOIL		DRY	BRN-MED	SILT	HIGH	M'ST	45	MED	B		.	1.4	<10	10	14
4455	55148		+328	+1460		SOIL		DRY	BRN-MED	SILT	MED	M'ST	20	MED	B		.	.7	<10	10	38
4456	55149		+300	+1460		SOIL		DRY	RED-MED	SAND	MED	DRY	25	MED	B		.	2.6	<10	10	92
4457	55150		+275	+1460		SOIL		DRY	RED-MED	SAND	MED	DRY	25	MED	B		.	.4	<10	10	36
4458	55151		+250	+1460		SOIL		DRY	RED-MED	SAND	MED	DRY	15	LOW	B		.	2.9	<10	10	35
4459	55152		+225	+1460		SOIL		DRY	RED-MED	SAND	MED	DRY	25	LOW	B		.	.8	<10	10	31
4460	55172		+200	+1460		SOIL		DRY	RED-LIGHT	SAND	LOW	DRY	20	LOW	B		.	.8	<10	10	116
4461	55173		+200	+1370		SOIL		DRY	RED-LIGHT	SAND	MED	DRY	25	LOW	B		.	1.5	<10	10	11
4462	55174		+225	+1370		SOIL		DRY	RED-MED	SAND	MED	DRY	18	MED	B		.	1.3	<10	10	32
4463	55175		+250	+1370		SOIL		DRY	RED-LIGHT	SAND	MED	DRY	35	LOW	B		.	1.5	<10	10	70
4464	55176		+275	+1370		SOIL		DRY	RED-LIGHT	SILT	MED	DRY	30	MED	B		.	3.5	<10	10	119
4465	55177		+300	+1370		SOIL		DRY	RED-LIGHT	SAND	MED	DRY	20	STEEP	B		.	1.8	16	10	132
4466	55178		+320	+1370		SOIL		DRY	BRN-MED	SILT	MED	M'ST	20	MED	B		.	<.4	10	10	22
4467	55179		+320	+1340		SOIL		ACTIVE	BRN-DARK	SILT	HIGH	M'ST	25	LOW	B		.	2.1	26	10	267
4468	55180		+295	+1340		SOIL		DRY	RED-MED	SAND	MED	DRY	40	STEEP	B		.	3	<10	7.5	434

LAB NUMBER	FIELD NO	MAP ZONE	EAST	NORTH	# MAT'L ORIG	SITE	COLOUR	SIZE	ORG	WET	DEPTH CM	WIDTH SLOPE	FLOW HORIZ	PPT	pH	Ag PPM	Au PPB	Wt Au GRAM	As PPM
04469	55181		+275	+1340	Soil	Dry	Red-Light	Sand	Med	Dry	40	Med	D		.	1	20	10	39
04470	55182		+250	+1340	Soil	Dry	Red-Light	Sand	High	Dry	40	Med	D		.	.5	<10	10	15
04471	55183		+225	+1340	Soil	Dry	Red-Light	Sand	Med	Dry	25	Med	D		.	<.4	<10	10	17
04472	55184		+200	+1340	Soil	Dry	Red-Med	Sand	Med	Dry	25	Low	D		.	1.1	<10	10	215
04473	55185		+200	+1310	Soil	Dry	Red-Med	Silt	Med	Dry	25	Low	D		.	1.5	<10	10	39
04474	55186		+225	+1310	Soil	Dry	Red-Light	Sand	Med	Dry	20	Flat	D		.	.4	<10	10	78
04475	55187		+250	+1310	Soil	Dry	Red-Med	Sand	Med	Dry	30	Low	D		.	1	<10	10	74
04476	55188		+275	+1310	Soil	Dry	Red-Light	Sand	Med	Dry	25	Med	D		.	2.5	<10	10	348
04477	55189		+300	+1310	Soil	Dry	Red-Light	Sand	Med	Dry	30	Flat	D		.	1.1	<10	10	524
04478	55190		+325	+1310	Soil	Dry	Brn-Med	Silt	High	M'st	25	Low	D		.	.4	<10	10	10
04479	55191		+325	+1280	Soil	Dry	Brn-Light	Silt	High	Dry	20	Steep	D		.	.5	<10	10	16
04480	55192		+300	+1280	Soil	Dry	Red-Med	Sand	Med	Dry	20	Low			.	1.7	<10	10	316
04481	55193		+275	+1280	Soil	Dry	Red-Med	Sand	Med	Dry	40	Med			.	.4	<10	10	114
04482	55194		+250	+1280	Soil	Dry	Red-Dark	Silt	Med	Dry	35	Low			.	5.1	20	10	1424
04483	55195		+225	+1280	Soil	Dry	Red-Light	Sand	Med	Dry	30	Med			.	.6	<10	10	278
04484	55196		+200	+1280	Soil	Dry	Red-Light	Sand	High	Dry	20	Low			.	.5	<10	10	00

NSUFFICIENT SAMPLE X=SMALL SAMPLE E=EXCEEDS CALIBRATION C=BEING CHECKED R=REVISED

REQUESTED ANALYSES ARE NOT SHOWN /RESULTS ARE TO FOLLOW

LYTICAL METHODS

Ag 20% HNO3 DECOMPOSITION / AAS

Au AQUA REGIA DECOMPOSITION / SOLVENT EXTRACTION / AAS

Wt Au THE WEIGHT OF SAMPLE TAKEN TO ANALYSE FOR GOLD (GEOCHEM)

As PYROSULPHATE FUSION / COLORIMETRIC

SILVER TALON-WD

JOB V 87-0276R
REPORT DATE 7 AUG 1987

JANET-VEGA

LAB NO	FIELD NUMBER	Au PPB	Wt Au GRAM	Ag PPM	Pb PPM	Zn PPM	Cu PPM
R8706911	1-0.0-1.0	32	5	2.2	103	186	230
R8706912	1-1.0-2.0	<10	5	6.5	378	471	232
R8706913	1-2.0-3.0	<10	5	3.7	212	173	269
R8706914	1-3.0-4.0	40	5	11.4	617	201	204
R8706915	3-0.0-2.0	<10	5	.6	6	128	73
R8706916	5-0.0-0.5	<10	5	.5	<4	120	135
R8706917	5-0.5-0.7	1326	5	E436	E93500	E32200	2260
R8706918	5-6.0-8.0	<10	5	.5	89	140	64
R8706919	5-8.0-10	<10	5	1.4	266	131	101
R8706920	6-0.0-2.5	20	5	.9	44	156	106
R8706921	10-9-9.9	<10	5	2.9	164	122	284
R8706922	10-10.9-11.3	122	5	E248	E16900	5730	900
R8706923	10-11.3-13.3	62	5	3.5	212	2760	111
R8706924	10-13.3-13.8	386	5	19.6	2190	409	62
R8706925	10-14.5-16.5	52	5	13.9	814	455	114
R8706926	10-16.5-17	140	5	71	6460	1430	187
R8706927	10-17.0-17.6	<10	5	.7	14	2050	82
R8706928	11-4.0-6.0	<10	5	.7	40	37	25
R8706929	11-6.0-8.0	<10	5	.5	<4	53	45
R8706930	12-3.1-3.8	102	5	E165	E25200	E21500	2480
R8706931	13-0.0-1.0	<10	5	<.4	11	85	116
R8706932	13-1.0-1.8	20	5	.9	65	156	178
R8706933	13-1.8-2.3	222	5	24.5	518	E10250	632
R8706934	13-2.3-2.8	40	5	6.7	526	3690	271
R8706935	13-2.8-3.3	32	5	2.8	244	1070	221
R8706936	13-3.3-3.8	48	5	4.5	291	674	211
R8706937	13-3.8-4.3	20	5	.5	<4	116	87
R8706938	15-1.0-3.0	22	5	2.9	269	133	118
R8706939	15-3.0-5.0	<10	5	.7	14	95	99
R8706940	15-20-22	<10	5	<.4	<4	83	48
R8706941	17-0	124	5	106	E13200	4700	390
R8706942	17-5	2820	5	E570	E66000	E28800	168
R8706943	17-10	1912	5	132	7000	2240	309
R8706944	17-15	664	5	27.2	408	1990	513
R8706945	17-20	<10	5	1.2	65	117	138
R8706946	19-1.0-2.0	56	5	14.7	1630	588	242
R8706947	19-2.0-3.0	40	5	36.8	5160	1540	259
R8706948	20-2.0-3.0	312	5	19.7	2160	2120	475
R8706949	20-3.0-4.0	776	5	92	7400	7340	830
R8706950	20-4.0-5.0	64	5	23.9	2590	2140	612
R8706951	ST-17-1	3600	5	E248	E20000	703	124
R8706952	ST-46	<10	5	1.4	104	79	42
R8706953	ST-74	<10	5	1.3	68	64	10
R8706954	ST-83	646	5	E420	E68000	E52200	3820
R8706955	ST-85	344	5	E184	E25500	E37400	961
R8706956	ST-156	176	5	2.4	267	234	26
R8706957	ST-22-1	1604	5	E246	E11300	1530	325

I=INSUFFICIENT SAMPLE X=SMALL SAMPLE E=EXCEEDS CALIBRATION C=BEING CHECKED R=REVISED
IF REQUESTED ANALYSES ARE NOT SHOWN /RESULTS ARE TO FOLLOW

ANALYTICAL METHODS

Au AQUA REGIA DECOMPOSITION / SOLVENT EXTRACTION / AAS
Wt Au THE WEIGHT OF SAMPLE TAKEN TO ANALYSE FOR GOLD (GEOCHEM)

SILVER TALON-WD

JANET/VEGA

Job V 87-0311R
Report date 7 AUG 1987

LAB NO	FIELD NUMBER	Au PPB	Wt Au GRAM	As PPM	Pb PPM	Zn PPM	Cu PPM
R8708116	C-6-7	52	5				
R8708117	C-7-8	<10	5				
R8708118	C-8-9	<10	5				
R8708119	C-9-10	<10	5				
R8708120	C-10-11	20	5				
R8708121	C-11-12	<10	5				
R8708122	C-12-13	36	5				
R8708123	C-13-14	46	5				
R8708124	C-14-15	34	5				
R8708125	C-15-16	1336	5				
R8708126	C-16-0-.6	3400	5				
R8708127	C-16-.6-1.6	484	5				
R8708128	C-16-1.6-2.6	1062	5				
R8708129	C-16-17	1152	5				
R8708130	C-17-18	388	5				
R8708131	C-18-19	40	5				
R8708132	C-19-20	60	5				
R8708133	D-9-10	<10	5				
R8708134	D-10-11	1426	5				
R8708135	D-11-12	2000	5				
R8708136	D-12-13	2110	5				
R8708137	D-13-14	5920	5				
R8708138	D-14-15	314	5				
R8708139	D-15-16	3000	5				
R8708140	D-16-17	4200	5				
R8708141	D-17-18	2950	5				
R8708142	D-18-19	24	5				
R8708143	D-19-20	1306	5				
R8708144	D-20-21	3210	5				
R8708145	D-21-22	2090	5				
R8708146	G-5.4-6	32	5				
R8708147	G-6-6.8	20	5				
R8708148	G-6.8-7	24	5				
R8708149	G-7-8	<10	5				
R8708150	F-4-5	<10	5				
R8708151	F-5-6	<10	5				
R8708152	F-6-7	32	5				
R8708153	F-7-8	30	5				
R8708154	F-8-9	240	5				
R8708155	F-9-10	356	5				
R8708156	F-9-0-.9	166	5				
R8708157	F-9-.9-2	170	5				
R8708158	E-7-8	<10	5				
R8708159	E-8-9	20	5				
R8708160	E-9-10	<10	5				
R8708161	E-10-11	22	5				
R8708162	E-11-12	<10	5				
R8708163	ST253	20	5				
R8708164	ST257	<10	5				
R8708165	ST259	24	5				
R8708166	ST213	226	5				

AG AQUA REGIA DECOMPOSITION / AAS
PB AQUA REGIA DECOMPOSITION / AAS
ZN AQUA REGIA DECOMPOSITION / AAS
CU AQUA REGIA DECOMPOSITION / AAS

APPENDIX "E"

1964 DRILL LOGS - BANKER SHOWING

DIAMOND DRILL HOLE No. 3

SHEET NO. 1 of 1

LOCATION: LAT. Trench #1
DEP. B1 + 50.5
ELEVATION OF COLLAR 152
DATUM B1 = 150.0
DIRECTON AT START: BEARING 0
DIP 90°

STARTED 26 Aug 1964
COMPLETED 26 Aug 1964
ULTIMATE DEPTH 10.0
PROPOSED DEPTH

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE				ANALYSIS										REMARKS (LOG)
							SLUDGE				CORE						
			FROM	TO	FEET	NUMBER	AU.	AG.	PB.	ZN.	AU.	AG.	PB.	ZN.	SB.	AS.	
26 Aug	10	10	0	5	5.0	2822					0.12	16.1	4.3	0.1			flat lying stringers, inter banded bk & green alt.
			5	10	5.0	2823					0.12	7.2	1.3	0.7			banded sulphides in bk.-green mariposite alteration
																	Hole lost at 10' due to shifting of drill

DIAMOND DRILL HOLE No. 3

SHEET NO. 1/1

LOCATION: LAT.	Trench 3
DEP.	B1 + 51.0
ELEVATION OF COLLAR	152
DATUM	B1 = 150
DIRECTION AT START: BEARING	0
DIP	Vertical

STARTED	27 Aug 1964.
COMPLETED	28 Aug 1964
ULTIMATE DEPTH	42'
PROPOSED DEPTH	

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE				ANALYSIS										REMARKS (LOG)
							SLUDGE				CORE						
			FROM	TO	FEET	NUMBER	AU.	AG.	PB.	ZN.	AU.	AG.	PB.	ZN.	SB.	AS.	
			0	5	5.0	2831					.06	15.0	3.13	0.75			fair mineralization
			5	10	5.0	2833					.09	6.0	1.83	1.00			" "
			10	14	4.0	2825					.08	1.12	0.2	0.1			silicified ls. fine mineralization FeS & PbS
			14	17	3.0	2826					.07	3.90	0.3	0.5			" " scattered " " "
			17	20.5	3.5	2827					.07	0.28	nil	nil			silicified zone material, brecciated, Heavy FeS
			20.5	25.5	5.0	2836					.10	2.0	tr	.12			" " "
			25.5	30.0	4.5	2839					.10	4.9	tr	.22			poor mineralization
			30	37	7.0	2832					.02	6.1	.57	.30			spotty "
			37	42	—	—											unaltered limestone

DIAMOND DRILL HOLE No. 4

SHEET NO. 1of1

LOCATION: LAT. Trench No 1
DEP. B1 + 51
ELEVATION OF COLLAR 152
DATUM B1 = 150
DIRECTON AT START: BEARING N 39° E
DIP − 75°

STARTED 28 Aug 1964
COMPLETED 28 Aug 1964
ULTIMATE DEPTH 36
PROPOSED DEPTH

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE				ANALYSIS										REMARKS (LOG)
							SLUDGE				CORE						
			FROM	TO	FEET	NUMBER	AU.	AG.	PB.	ZN.	AU.	AG.	PB.	ZN.	SB.	AS.	
28 Aug	36	36	0	6	6.0	2834					0.10	37	0.42	0.27			minor mineralization
			6	10	4.0	2840					0.08	0.8	0.21	0.07			heavy pyrite
			10	14.5	4.5	2835					0.10	2.6	0.31	0.25			" "
			14.5	16.0	1.5	2837					0.02	0.5	tr	tr			limestone, traces of mineralization
			16.0	21.8	5.8	2838					0.18	5.3	tr	.37			heavy pyrite
			21.8	25.7	3.9	2843					0.01	tr	tr	0.17			scattered sulphides, mainly limestone
			25.7	30.7	5.0	2845					0.06	21.6	1.88	1.56			25.8 - 1" band of mineral, mostly sphalerite
																	25.9-28 limestone, occasional sulphide stringers
																	28 - 30.7 " " " "
			30.7	36.0	5.3	2842					0.01	0.1	tr	0.12			loose limestone, minor sphalerite stringers

NEW TAKU MINES LTD.

DIAMOND DRILL HOLE No. 4a

SHEET NO. 1 of 1

LOCATION: LAT. Trench No 1
DEP. Face
ELEVATION OF COLLAR 1523±
DATUM
DIRECTON AT START: BEARING N29°E
DIP −30°

STARTED 27 Aug 1964
COMPLETED
ULTIMATE DEPTH 20'
PROPOSED DEPTH

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE FROM	SAMPLE TO	SAMPLE FEET	SAMPLE NUMBER	SLUDGE AU.	SLUDGE AG.	SLUDGE PB.	SLUDGE ZN.	CORE AU.	CORE AG.	CORE PB.	CORE ZN.	CORE SB.	CORE AS.	REMARKS (LOG)
27 Aug	20	20	0	2.5	2.5	2841					.08	7.1	tr	1.97			narrow stringer in FW of fractured
			2.5	20	17.5	—											limestone.

DIAMOND DRILL HOLE No. 5

SHEET NO. 1 of 1

LOCATION: LAT. Trench No. 2
DEP. B10 + 48.5 feet
ELEVATION OF COLLAR 148
DATUM B1 = 150'
DIRECTON AT START: BEARING —
DIP Vertical

STARTED 29 Aug 1964
COMPLETED 30 Aug 1964
ULTIMATE DEPTH 47
PROPOSED DEPTH

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE FROM	SAMPLE TO	SAMPLE FEET	SAMPLE NUMBER	ANALYSIS SLUDGE AU.	SLUDGE AG.	SLUDGE PB.	SLUDGE ZN.	CORE AU.	CORE AG.	CORE PB.	CORE ZN.	CORE SB.	CORE AS.	REMARKS (LOG)
29 Aug	30	30	0	2	2	—											marcasite alteration, slight mineralization
30 Aug	17	47	2	29	27	—											unaltered limestone
			29	39	10	—											some alteration in limestone
																	29.4 - tight fracture, some oxides @ 30° to core
																	35.5 " " " " 20° " "
			39	47	8	—											unaltered limestone

DIAMOND DRILL HOLE No. 6

SHEET NO. 1 of 1

LOCATION: LAT. Trench No 2
DEP. B 10 + 47.4 feet
ELEVATION OF COLLAR 148
DATUM B1 = 150
DIRECTON AT START: BEARING S 39° W
DIP -70°

STARTED 30 Aug 1964
COMPLETED 31 Aug 1964
ULTIMATE DEPTH
PROPOSED DEPTH

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE FROM	SAMPLE TO	SAMPLE FEET	SAMPLE NUMBER	SLUDGE AU.	SLUDGE AG.	SLUDGE PB.	SLUDGE ZN.	CORE AU.	CORE AG.	CORE PB.	CORE ZN.	CORE SB.	CORE AS.	REMARKS (LOG)
			0	6.8	6.8	—											limestone, 6.8 = fracture at 50° to core
			6.8	8.0	1.2	—											mariposite alteration
			8	11.5	3.5	—											limestone
			11.5	13	1.5	—											mariposite alteration, fracture at 11.5 (50°)
			13	25	12	—											unaltered limestone

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DIAMOND DRILL HOLE No. 7

SHEET NO. 1 of 1

LOCATION: LAT. Trench No 2
DEP. B10 + 57 feet
ELEVATION OF COLLAR 148
DATUM B1 = 150
DIRECTON AT START: BEARING N 39° E
DIP -45°

STARTED 31 Aug 1964
COMPLETED 1 Sept 1964
ULTIMATE DEPTH 38
PROPOSED DEPTH

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE FROM	SAMPLE TO	SAMPLE FEET	SAMPLE NUMBER	SLUDGE AU.	SLUDGE AG.	SLUDGE PB.	SLUDGE ZN.	CORE AU.	CORE AG.	CORE PB.	CORE ZN.	CORE SB.	CORE AS.	REMARKS (LOG)
			0	3.5	—	—											unaltered limestone
			3.5	4.5	—	—											green alteration, fractures @ 45°
			4.5	8.6													limestone
			8.6	10.0	1.4	2846					.08	94.7	9.97	11.53			fair mineralization
			10	38	—												limestone, sporadic alteration
																	36.1 = oxidized fracture 25° to core.

DIAMOND DRILL HOLE No. 8

SHEET NO. 1 of 1

LOCATION: LAT.	Trench No 2
DEP.	B10 + 49 feet
ELEVATION OF COLLAR	148
DATUM	B1 = 150
DIRECTON AT START: BEARING	N 37° E
DIP	-65°
STARTED	1 Sept 1964
COMPLETED	2 Sept 1964
ULTIMATE DEPTH	33
PROPOSED DEPTH	

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE FROM	SAMPLE TO	SAMPLE FEET	SAMPLE NUMBER	SLUDGE AU.	SLUDGE AG.	SLUDGE PB.	SLUDGE ZN.	CORE AU.	CORE AG.	CORE PB.	CORE ZN.	CORE SB.	CORE AS.	REMARKS (LOG)
1 Sept	5	5	0	3.2	—	—											altered limestone, traces of mineral
2 Sept	28	33	3.2		—	—											3 fractures at 45°
			3.2	5.5	2.3	2844					.08	0.5	tr	.07			pyrite & PbS · ZnS in limestone
			5.5		—	—											fractures at 45°
			5.5	16.5	—	—											unaltered limestone
			16.8	19	—	—											green alteration in limestone
			19	28	—	—											limestone

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DIAMOND DRILL HOLE No. 9

SHEET NO. 1 of 1

LOCATION: LAT.	Trench No 2
DEP.	B10 + 50.7 feet
ELEVATION OF COLLAR	148
DATUM	B1 = 150
DIRECTON AT START: BEARING	N 42° E
DIP	-45°
STARTED	3 Sept 1964
COMPLETED	3 Sept 1964
ULTIMATE DEPTH	
PROPOSED DEPTH	

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE FROM	SAMPLE TO	SAMPLE FEET	SAMPLE NUMBER	SLUDGE AU.	SLUDGE AG.	SLUDGE PB.	SLUDGE ZN.	CORE AU.	CORE AG.	CORE PB.	CORE ZN.	CORE SB.	CORE AS.	REMARKS (LOG)
3 Sept	20	20	0	20	20	—											limestone, slight traces of alteration
				16.5	—	—											1/8" stringer of sphalerite
				19.3	—	—											1/8" " " " at 25°

DIAMOND DRILL HOLE No. 11

SHEET NO. 1 of 1

LOCATION: LAT. Trench No 1
DEP. B1 + 56'
ELEVATION OF COLLAR 152
DATUM B1 = 150
DIRECTON AT START: BEARING S 83° E
DIP −60°

STARTED 6 Sept 1964
COMPLETED 6 Sept 1964
ULTIMATE DEPTH 13'
PROPOSED DEPTH

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE FROM	SAMPLE TO	SAMPLE FEET	SAMPLE NUMBER	SLUDGE AU.	SLUDGE AG.	SLUDGE PB.	SLUDGE ZN.	CORE AU.	CORE AG.	CORE PB.	CORE ZN.	CORE SB.	CORE AS.	REMARKS (LOG)
6 Sept	13	13	0	2		—											badly broken ground, sparse mineralization
			2	3		—											green alteration in limestone.
			3.0	3.15	0.15	2858					.24	47.65	13.40	9.70			2" sulphide stringer at 35° to core
			3.15	4.7		—											green altered limestone
			4.7	5.5	0.8	2861					.23	108.55	8.32	5.12			heavy sulphide stringer in limestone
			5.5	6.2		—											limestone, slight mineralization
			6.2	9.5	3.3	2864					.09	18.0	3.78	0.26			fair mineralization in white limestone
			9.5	13.0		—											barren limestone, some alteration.

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DIAMOND DRILL HOLE No. 10

SHEET NO. 1 of 1

LOCATION: LAT. Trench No 1
DEP. B1 + 37.3 feet
ELEVATION OF COLLAR 152
DATUM B1 = 150
DIRECTON AT START: BEARING N 54° E
DIP −75°

STARTED 4 Sept 1964
COMPLETED 5 Sept 1964
ULTIMATE DEPTH 37.5
PROPOSED DEPTH

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE FROM	SAMPLE TO	SAMPLE FEET	SAMPLE NUMBER	SLUDGE AU.	SLUDGE AG.	SLUDGE PB.	SLUDGE ZN.	CORE AU.	CORE AG.	CORE PB.	CORE ZN.	CORE SB.	CORE AS.	REMARKS (LOG)
4 Sept	5	5	0	8.8		—											limestone with occasional mineral stringer
5 Sept	32.5	37.5	8.8	11		—											several rusty shears at 75°
			11	16		—											limestone with occasional stringer of sulphides
			16.0	21.0	5.0	2860					0.12	8.16	1.00	0.67			pyrite, ZnS, PbS, limestone
			21.0	26.0	5.0	2862					0.20	9.20	1.17	tr			brecciated limestone, scattered sulphides
			26.0	30.1	4.1	2863					0.21	35.65	6.80	3.75			grey limestone, fair mineralization
			30.1	30.9		—											barren limestone
			30.9	32.5	1.6	2859					0.11	49.4	3.90	5.25			white limestone carrying PbS and ZnS
				32.5		—											Shear at 60°, some alteration
			32.5	37.5		—											barren limestone

DIAMOND DRILL HOLE No. 12

SHEET NO. 1 of 1

LOCATION: LAT. 25' south of Trench #1
DEP. B 11 + 18' feet
~~ELEVATION OF COLLAR~~ 150
DATUM B1 = 150
DIRECTON AT START: BEARING N 50° E
DIP − 40°

STARTED 6 Sept 1964
COMPLETED 7 Sept 1964
ULTIMATE DEPTH 48
PROPOSED DEPTH

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE FROM	SAMPLE TO	SAMPLE FEET	SAMPLE NUMBER	SLUDGE AU.	SLUDGE AG.	SLUDGE PB.	SLUDGE ZN.	CORE AU.	CORE AG.	CORE PB.	CORE ZN.	CORE SB.	CORE AS.	REMARKS (LOG)
6/7 Sept	48	48	0	48													limestone.
				17.2													fracture 45°
				19.0													" 35°
				22.0													25°
				24.0													45°
				26													several fractures
				42													fracture at 60°

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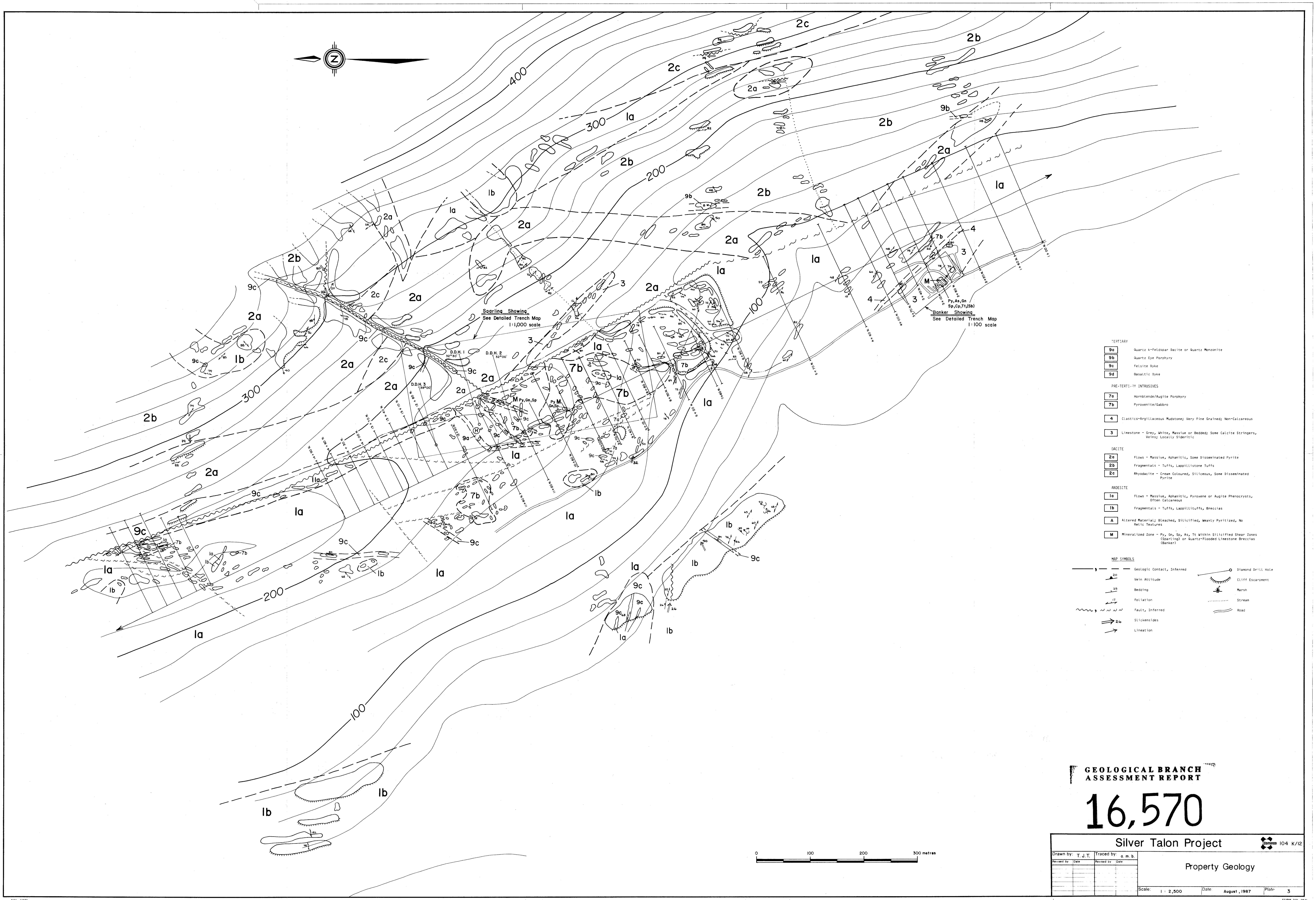
DIAMOND DRILL HOLE No. 13

SHEET NO. 1 of 1

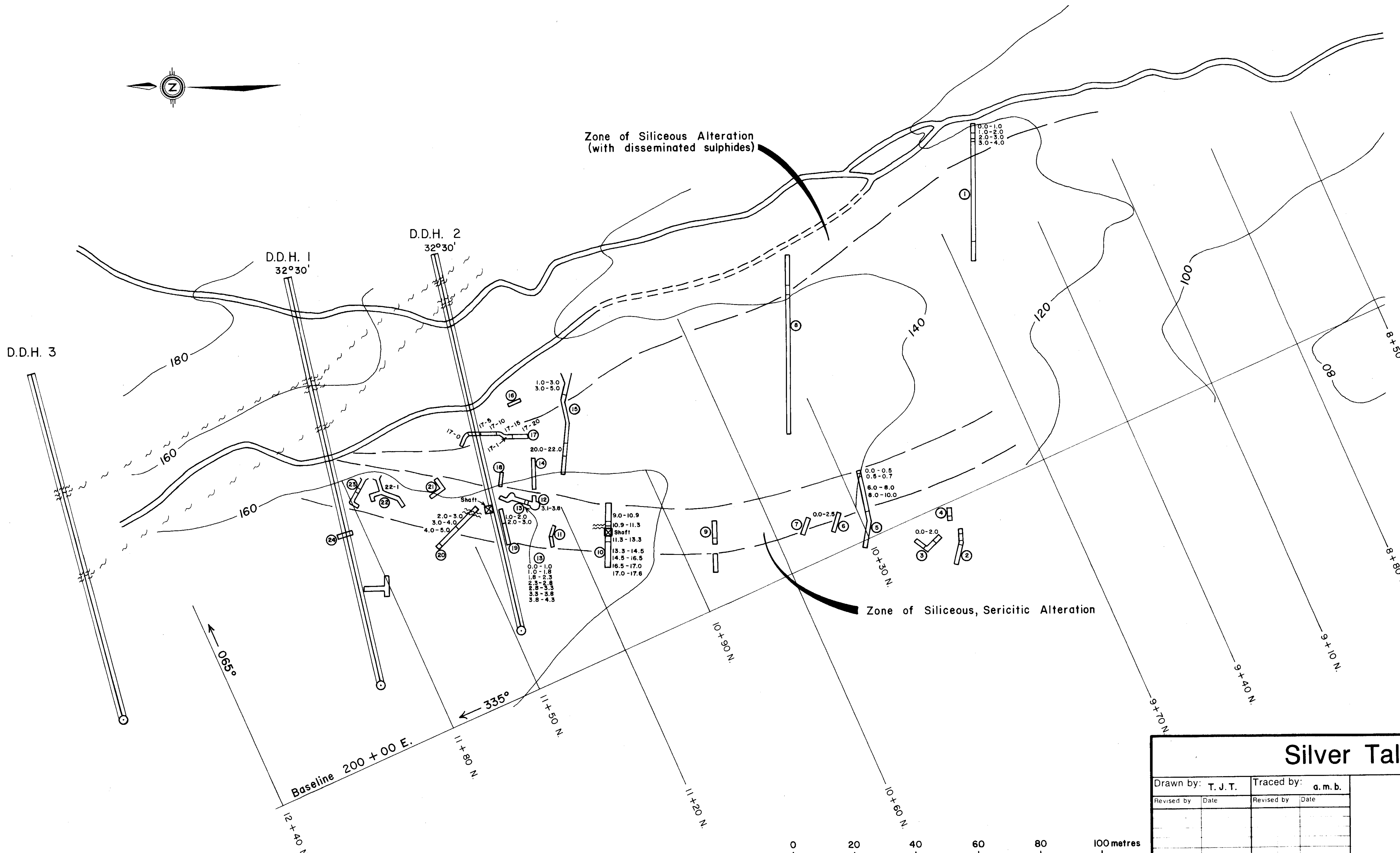
LOCATION: LAT. North of Trenches
DEP. B13 + 5 feet S16° W
ELEVATION OF COLLAR 189
DATUM B1 = 150
DIRECTON AT START: BEARING N 16° E
DIP −30°

STARTED 7 Sept 1964
COMPLETED 8 Sept 1964
ULTIMATE DEPTH 45'
PROPOSED DEPTH

DATE	FEET DRILLED	TOTAL DEPTH	SAMPLE FROM	SAMPLE TO	SAMPLE FEET	SAMPLE NUMBER	SLUDGE AU.	SLUDGE AG.	SLUDGE PB.	SLUDGE ZN.	CORE AU.	CORE AG.	CORE PB.	CORE ZN.	CORE SB.	CORE AS.	REMARKS (LOG)
			0	30	—												barren limestone, badly broken.
			28	29	—												green alteration in limestone
			39	43.5	—												barren limestone
			43.5	44	—												altered limestone
			44	45	—												white limestone
																	Hole stopped due to lack of hose and rods.


Sparling Showing
See Detailed Trench Map
1:1,000 scale
Banker Showing
See Detailed Trench Map
1:100 scale
D.D.H. 1
D.D.H. 2
D.D.H. 3
400
300
200
100
TERTIARY
9a Quartz k-Feldspar Dacite or Quartz Monzonite
9b Quartz Eye Porphyry
9c Felsite Dyke
9d Basaltic Dyke
PRE-TERTIARY INTRUSIVES
7a Hornblende/Augite Porphyry
7b Pyroxenite/Gabbro
4 Clastics-Argillaceous Mudstone; Very Fine Grained; Non-Calcareous
3 Limestone - Grey, White, Massive or Bedded; Some Calcite Stringers, Veins; Locally Sideritic
DACITE
2a Flows - Massive, Aphanitic, Some Disseminated Pyrite
2b Fragmentals - Tuffs, Lappillistone Tuffs
2c Rhyodacite - Cream Coloured, Siliceous, Some Disseminated Pyrite
ANDESITE
1a Flows - Massive, Aphanitic, Pyroxene or Augite Phenocrysts, Often Calcareous
1b Fragmentals - Tuffs, Lappillituffs, Breccias
A Altered Material; Bleached, Silicified, Weakly Pyritized, No Relic Textures
M Mineralized Zone - Py, Gn, Sp, As, Tt Within Silicified Shear Zones (Sparling) or Quartz-Flooded Limestone Breccias (Banker)
MAP SYMBOLS
Geologic Contact, Inferred
Vein Attitude
Bedding
Foliation
Fault, Inferred
Slickensides
Lineation
Diamond Drill Hole
Cliff Escarpment
Marsh
Stream
Road
0 100 200 300 metres
GEOLOGICAL BRANCH
ASSESSMENT REPORT
16,570
Silver Talon Project
Cominco 104 K/12
Drawn by: T.J.T.
Traced by: a. m. b.
Revised by Date
Revised by Date
Property Geology
Scale: 1 : 2,500
Date: August, 1987
Plate 3


Au Anomaly
Sparling Showing
See Detailed Trench Map 1:1,000 scale
Banker Showing
See Detailed Trench Map 1:100 scale
D.D.H. 1
D.D.H. 2
D.D.H. 3
Py,As,Gn Sp,Cp,Tt,(Sb)
400
300
200
100
TERTIARY
9a Quartz K-Feldspar Dacite or Quartz Monzonite
9b Quartz Eye Porphyry
9c Felsite Dyke
9d Basaltic Dyke
INTRUSIVES
7a Hornblende/Augite Porphyry
7b Pyroxenite/Gabbro
4 Mudstone; Very Fine Grained
3 Limestone - Grey, White, Massive or Bedded; Some Calcite Stringers, Veins; Locally Siderit
2a Flows - Massive, Aphanitic, Some Disseminated
2b Fragmentals - Tuffs, Lappillistone
2c Cream Coloured, Siliceous, Some Disseminated Pyrite
ANDESITE
1a Flows - Massive, Aphanitic, Pyroxene or Augite Often Calcareous
1b Fragmentals - Tuffs, Lappillituffs
A Altered Material; Bleached, Silicified, Pyritized, No Relic Textures
M Mineralized Zone - Py, Gn, Sp, As, Tt Within Silicified Shear Zones (Sparling) or Quartz-Flooded Limestone (Banker)
MAP SYMBOLS
Geologic Contact, Inferred
Vein Attitude
Bedding
Foliation
Fault, Inferred
Lineation
Stream
0 100 200 300 metres
GEOLOGICAL BRANCH ASSESSMENT REPORT
16,570
Silver Talon Project
Cominco 104 K/12
Drawn by: T. J. T.
Traced by: a. m. b.
Revised by
Date
Soil Geochemistry
Contour Sampling; 200 and 300m. Elevations
(Au;ppb, Ag;ppm, As;ppm)
Scale: 1 : 2,500
Date: August, 1987
Plate: 6 (iv)
FORM 210 - 0670



Silver Talon Project

Cominco 104 K/12

Drawn by: T. J. T.	Traced by: a. m. b.
Revised by / Date	Revised by / Date

Sparling Showing

Trench and Sample Locations

Scale: 1 : 1,000 | Date: August, 1987 | Plate: 4 (i)

NCI - 114 - CL

#210-0640

Line 310 N.
1+40 E.
1+30 E.
1+20 E.
1+10 E.
1+00 E.
0+90 E.
Line 280 N.
1+10 E.
1+20 E.
1+30 E.
ST 172
Trench 'A'
9c
ST 156
3
ROADWAY
Massive white L'st
ADIT
Adit portal
Mineralization, including blocks of rotated L'st frags and dyke material
Trench 'B'
ST 156
Py, Ga, As, Sp, Tt, (Sb?)
Contact with mineralized L'st : 080/285
Calcite veins
ST 176
Numerous low angle faults (both sides of trench) - dip ~ 16° → N
Highly fractured rusty weathering
Fault gouge
Trench 'C'
Mottled weathered surface
ST 175
'Chevron' folded calcite veinlet
Rusty weathering
Shear zone
Subcrop
Trench 'D'
Trench 'E'
Large dyke clasts
3a
Dyke - fractured, but intact
Trench 'F'
Trench 'H'
Trench 'G'
LEGEND
9c ALTERED FELSIC DYKES
3 LIMESTONE
GREY-BEDDED or MASSIVE
M MINERALIZED ZONE
WITH DYKE, LIMESTONE CLASTS
WITH Pb, Zn MINERALIZATION
3a CALCAREOUS BRECCIA
ANGULAR, EQUIDIMENSIONAL L'st
FRAGMENTS (~/cm) IN CALCAREOUS GROUNDMASS
BEDDING
FAULT, INFERRED
VEIN/DYKE (ATTITUDE)
FRACTURE SURFACE
SLICKENSIDES
FOLD AXIS LINEATION
SUBCROP EXPOSURE
TRACE OF AXIAL PLANE, INFERRED
GEOLOGICAL BRANCH
ASSESSMENT REPORT
16,570
0 2 4 6 8 10 metres
Silver Talon Project
104 K/12
Drawn by: T. J. T.
Traced by: a. m. b.
Banker Showing
Detailed Trench Geology
Scale: 1 : 100
Date: August, 1987
Plate: 5 (i)