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ESPERANZA EXPLORATIONS LTD.

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1983 EXPLORATION REPORT

on the
TILlicum GOLD PROPERTY

Slocan Mining Division
British Columbia

NTS: 82 F/13 & 82 K/4

Latitude: 49° 59' N

Longitude: 117° 43' W

By

Wayne Roberts

John McClintock

Claims: Hugh (2072)

Wolf (2071)

Sandy Too 3 (1445)

Owner: Esperanza Explorations Ltd.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12.269

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SUMMARY AND RECOMMENDATIONS

A comprehensive exploration program of geological mapping, trenching, road building, diamond drilling and underground development was completed on the Tillicum Property from August 1 through January 31, 1984. Access roads were constructed to drill sites on the Hugh and Wolf mineral claims. The Heino-Money and East Ridge Zones were extensively diamond drilled and prompted by favourable drill results, 200 feet of underground development was completed on the East Ridge Gold Zone. The cost of the 1983 program from August 1, 1983 through January 31, 1984 was \$313,081.50.

A total of 7,602 feet (2319 m) of diamond drilling in 38 holes was completed. Of this drilling, 12 holes totalling 2954 feet (901 m) was on the Heino-Money Zone with 4648 feet (1418 m) in 16 holes on the East Ridge Zone.

The Heino-Money drilling established a drill-indicated reserve of 40,000 tons, grading 0.6 oz/ton gold (gold assays cut to 2 ounces per ton). The East Ridge drilling outlined an auriferous zone over 1650 feet (503 m) in length, with thicknesses up to 100 feet (30 m), that has potential for a large reserve of gold, amenable to mining by open pit methods. This zone, which is open along strike and to depth, contains gold values to 0.14 oz/ton over 30 feet (10 m) with longer intervals grading .08 oz/ton gold over 80 feet (24.4 m).

Prompted by the encouraging results of the East Ridge drilling, a 200 foot (61 m) underground cross-cut was completed to obtain an accurate estimate of the bulk tonnage potential and overall grade. The results of muck and channel samples corroborated that of the drilling, and confirmed the presence of potentially economic gold values over significant thicknesses.

(ii)

Positive results from the 1983 program on the Tillicum Gold Property warrant a substantial ongoing exploration program to outline and delineate:

- (a) High-grade gold reserves available to support selective underground exploitation;
- (b) Large tonnage, lower-grade gold deposits amenable to open-pit mining techniques;

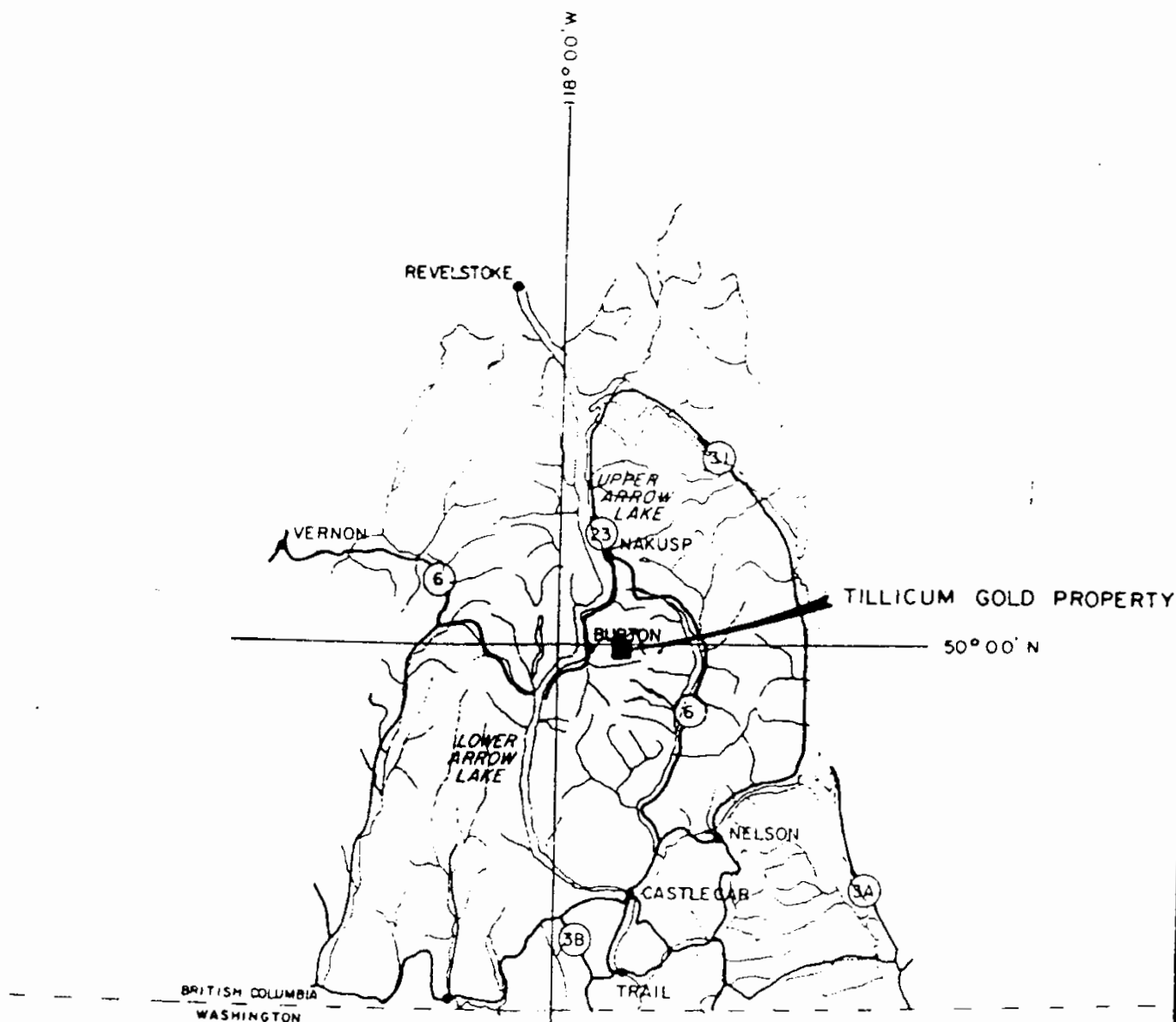
INTRODUCTION

This report by Esperanza Explorations Ltd., operator of the Tillicum Gold Property, describes the assessment work undertaken during the period August 1 through January 31, 1984 and is not intended to be a full documentation of the 1983 work program.

Exploration in 1983, for which assessment work was filed, consisted of geological mapping and sampling, bulldozer trenching and road building, 7,602 feet (2319 m) of diamond drilling and 200 feet (61 m) of underground development.

LOCATION AND ACCESS

The Tillicum Gold Property is situated in the Arrow Lakes Region of southeastern British Columbia, 10 km to the east of the Village of Burton (Figure 1). The property overlies Tillicum Mountain, on the western limits of the Valhalla Ranges, within the Slocan Mining Division. The approximate coordinates for the claim group are: Latitude 49° 59' N and Longitude 117° 43' W; NTS: 82 F/13 and 82 K/4. Elevations on the property range from 884 m (2,900 feet) to 2,317 m (7,600 feet). The peak of Tillicum Mountain stands at 2,231 m (7,326 feet).



ESPERANZA EXPLORATIONS LTD.
 TILlicum MOUNTAIN PROJECT
 LOCATION MAP - N.T.S. 82-K/4, 82-F/13

1:2,000,000

John W. O'Neil

FIG. 1

The known showings on the property occur on northerly-trending spurs of Tillicum Mountain and in the adjacent cirque valleys at elevations from 1,940 (6,360 feet) to 2,220 m (7,280 feet). The Silver Queen workings lie on the southern slope of Grey Wolf Mountain, between 1,990 m (6,525 feet) and 2,300 m (7,540 feet).

Evergreen forests extend to near the peaks, with the treeline being at about 2,200 m (7,200 feet). Rock outcroppings, for the most part, are confined to the ridge crests, and form approximately 5% of the surface area. The terrain is rugged, with steep to precipitous slopes that are covered by a thin veneer of overburden.

On the Heino-Money and East Ridge areas, water sufficient for diamond drilling, underground development and camp purposes is available below 1,900 m in elevation from either Elaine Creek or Sue Creek lying east and west of Tillicum Ridge respectively. Water for camp and drilling was obtained from Sue Creek in 1983, while water for the underground program was obtained from drill hole TS-83-58.

Snow conditions in the area limit surface exploration to the period June through October, however, localized activity such as drilling and underground work is feasible over a more extended period. Access to the property is from Burton via a network of logging and mine access roads up Caribou and Londonderry Creeks. Total distance from Burton to the camp on Tillicum ridge is 27 km (17 miles). During the summer months, the road is passable by 2-wheel drive truck to the camp, then by 4-wheel drive to the showings.

CLAIM STATUS

The Tillicum Gold Property is made up of 198 mineral claim units and 6 crown granted mineral claims. A description of the individual

claim groups comprising the Tillicum Gold Property follows (Figure 2):

(a) Tillicum

The following claims were acquired under an agreement dated September 20, 1980, with Arnold A. Gustafson and Elaine E. Gustafson, of Burton.

<u>Name of Claim</u>	<u>No. of Claim units</u>	<u>Record Number</u>	<u>Assessment Work Due Date</u>
AGE 1-4 incl.	4	2214-2217	Sept. 29, 1991
BLACK BEAR	1	780	Aug. 8, 1990*
GOLDEN HOPE	1	779	Aug. 8, 1990*
HUGH	1	2072	July 29, 1991
LITTLE JOE/MOLLY FRACTION	1	781	Aug. 8, 1990*
MOLLY	1	782	Aug. 8, 1990*
NEAR 1	1	1446	Sept. 20, 1990*
NEAR 2-4 Incl.	3	1447-1449	Sept. 20, 1990*
NEAR 5-7 Incl.	3	1450-1452	Sept. 20, 1990*
SANDY T00 1	1	1443	Sept. 20, 1990*
SANDY T00 2	1	1444	Sept. 20, 1990*
SANDY T00 3	1	1445	Sept. 20, 1990*
TIL 1-4 Incl.	72	2210-2213	Sept. 29, 1990*
WOLF	1	2072	July 29, 1991

* Certificate of Work not yet received.

Upon having made total cash payments of \$165,000 as aforesaid, Esperanza will own 100% right, title and interest in the Property, subject to the right of the Owners to receive Net Smelter Returns as follows:

3% of Net Smelter Returns until the first \$3,000,000 has been so paid;
2% of Net Smelter Returns until a further \$2,000,000 has been so paid;
1% of Net Smelter Returns until a further \$1,000,000 has been so paid;

Provided that if the average grade of ore in respect of which Net Smelter Returns are payable for a given calendar quarter exceeds 2 troy ounces per short ton, prior to any concentration thereof, the above percentage of Net Smelter Returns payable to the Owners during that calendar quarter shall be doubled. The obligation to make payments to the Owners under the agreement shall cease when the Owners have been paid the aggregate amount of \$6,000,000 by way of Net Smelter Returns. (N.S.R. Paid to Date = \$2,488.20. Proceeds derived from bulk sample sale was applied against September and December, 1985 cash option payments.)

Subject to agreement dated September 20, 1980, with Arnold A. and Elaine E. Gustafson (the "Owners"), of Box 10, Burton, B.C., Esperanza Explorations Ltd. has the right to acquire 100% right, title and interest in the aforementioned mineral claims on the following terms:

Cash payment - on signing agreement	\$ 15,000	(paid)
- on or before December 31, 1980	5,000	(paid)
- " " " March 31, 1981	10,000	(paid)
- " " " June 30, 1981	5,000	(paid)
- " " " September 30, 1981	5,000	(paid)
- " " " December 31, 1981	5,000	(paid)
- " " " March 31, 1982	6,000	(paid)
- " " " June 30, 1982	6,000	(paid)
- " " " September 30, 1982	6,000	(paid)
- " " " December 31, 1982	6,000	(paid)
- " " " March 31, 1983	7,000	(paid)
- " " " June 30, 1983	7,000	(paid)
- " " " September 30, 1983	7,000	(paid)
- " " " December 31, 1983	7,000	(paid)
- " " " March 31, 1984	8,000	(paid)
- " " " June 30, 1984	8,000	
- " " " September 30, 1984	8,000	
- " " " December 31, 1984	8,000	
- " " " March 31, 1985	9,000	
- " " " June 30, 1985	9,000	
- " " " September 30, 1985	9,000	(part-paid: \$4,051.90)
- " " " December 31, 1985	9,000	(paid)

(b) Juanita/Halifax/Esto

The Juanita and Halifax claims were acquired by staking in 1980, while the Esto claim was staked in 1983.

<u>Name of Claim</u>	<u>No. of Claim Units</u>	<u>Record Number</u>	<u>Assessment Work Due Date</u>
Halifax	20	2297	Oct. 28, 1990*
Juanita	20	2298	Oct. 28, 1984*
Esto	6	4031	July 29, 1984

* Certificate of Work not yet received

The Juanita, Halifax and Esto claims adjoin the north boundary of the Tillicum Property.

In accordance with the agreement dated September 20, 1980 with the Owners of the Tillicum Property, any portion of the Juanita/Halifax/Esto which falls within one-half mile of the boundary of the TIL claims, is subject to the provisions of the agreement with the Gustafsons.

(c) Caribou Creek

The Caribou Creek Property claims were acquired during 1981 under letter of agreement with Leslie Kiss, Prospector, of Vancouver, B.C:

<u>Name of Claim</u>	<u>No. of Claim Units</u>	<u>Record Number</u>	<u>Assessment Work Due Date</u>
Goat	20	2392	Feb. 12, 1986
Hail	20	2393	Feb. 12, 1986
Wolf	20	2391	Feb. 12, 1986

Under letters of agreement dated May 21, 1981 and July 27, 1981, with Leslie Kiss, Prospector, the company acquired 100% right, title and interest in the above noted claims in consideration for a payment of

\$6,000 and subject only to the Prospector's right to certain considerations under a Prospector Incentive Agreement with respect to the Caribou Creek Property.

(d) Silver Queen

The Silver Queen group of crown granted mineral claims, listed below, were acquired by Esperanza from the Penticton Hospital Society:

<u>Name of Claim</u>	<u>No. of Claim units</u>	<u>Grant Number</u>
Grey Wolf	1	D.L. # 2204 Cr. Gr.
Grey Wolf Fraction	1	D.L. # 2209 Cr. Gr.
Red Fox	1	D.L. # 2205 Cr. Gr.
Black Fox	1	D.L. # 2206 Cr. Gr.
Black Fox Fr.	1	D.L. # 2207 Cr. Gr.
Black Bear Fr.	1	D.L. # 2582 Cr. Gr.

Esperanza, by fulfilling the terms of the purchase agreement, acquired a 100% interest in the Crown Grants.

The Silver Queen Crown Grants are subject to the provisions of the agreement with the Gustafsons on the Tillicum property.

1983 WORK PROGRAM

Expenditures for the 1983 exploration from August 1, 1983 through January 31, 1984 on the Tillicum Gold Property amounted to \$313,081.50.

Work undertaken in 1983 included:

- (1) A total of 7,602 feet (2319 m) of diamond drilling in 38 holes of which 12 holes, totalling 2954 feet (901 m) were in the Heino-Money Zone (Wolf (2072) and Sandy Too 3 (1445)) and 4648 feet (1418 m) in 16 holes on the East Ridge Zone (Hugh 2071).

- (2) A 200 ft. (61 m) underground cross-cut in the East Ridge Zone (Hugh 2071)
- (3) Detailed, 1:500 scale, geological mapping on the Hugh (2071) and Wolf (2072) claims.
- (4) Construction of 325 m of drill access road on the Hugh (2071) mineral claim.
- (5) Surface rock-chip sampling on the Hugh (2071) and Wolf (2072) claims.

GEOLOGY

Overview

The region of the claims has been mapped by Hyndman (GSC Bulletin 161, 1968). Hyndman shows the claim area to be underlain by three principal rock types (Plate 1). From oldest to youngest, these are: Mississippian to Permian Milford Group metasedimentary rocks; Permo-Triassic Kaslo Group amphibolite and metavolcanic rocks; and quartz diorite to quartz monzonite of the Cretaceous Goat Canyon and Halifax Creek stocks.

The Milford Group rocks are described as fine to medium-grained clastic and volcanoclastic rocks that have been both regionally and thermally metamorphosed to pelitic and calc-silicate schists and hornfelses. The Kaslo Group rocks are predominantly mafic volcanic flows, tuffs and breccias that have been metamorphosed to amphibolite and hornblende-plagioclase schists and gneisses.

Structure in the metamorphosed rocks is complex, with conflicting interpretations by Hyndman (1968) and Parrish (C.J.E.S. p. 944, vol. 18, 1981).

The Goat Canyon and Halifax Creek stocks post-date regional metamorphism and intrude the older rocks in the north and west portion of the property. Both stocks are predominantly quartz monzonite with contaminated border phases of diorite, quartz-diorite and granodiorite.

Lithological Descriptions

Geological mapping of the property by Esperanza personnel has modified the geology put forward by Hyndman (1968) and has added additional rock units. (Figure 3, Plate 3). The principal modification is the inclusion of Hyndman's Kaslo Group rocks on the west slope of Tillicum Mountain into the Milford Group. The Permo-Triassic aged Kaslo Group should unconformably overlies the Milford Group, however, our mapping shows the contact to be gradational with some evidence that the formerly mapped Kaslo Group underlies the Milford Group rocks. We have concluded that these mafic metavolcanic rocks are more probably a volcanic package that possibly forms a basal unit of the Milford Group.

Rocks on the property have been divided, from oldest to youngest, into the following assemblages: Mississippian to Permian Milford group metasedimentary and metavolcanic rocks; diorite porphyry of uncertain age; Cretaceous-age quartz monzonite to diorite; and lamprophyre dykes of uncertain age (Figure 4). A lithostratigraphic column showing the relative relationships of the rock types is presented as Figure 5.

The Milford Group has been crudely subdivided into metavolcanic and metasedimentary packages. The contact between the two packages is conformable and marked by interbedded mafic tuffs and shale. The metavolcanics are composed of pillow flows, agglomerates, breccia, and tuffs of andesitic to basaltic andesitic composition. Metamorphism has transformed the original mineral constituents to plagioclase, hornblende, chlorite, actinolite, epidote-clinzoisite and minor garnets. Despite the metamorphism, except where sheared, the primary volcanic

LEGEND: TILlicum DISTRICT

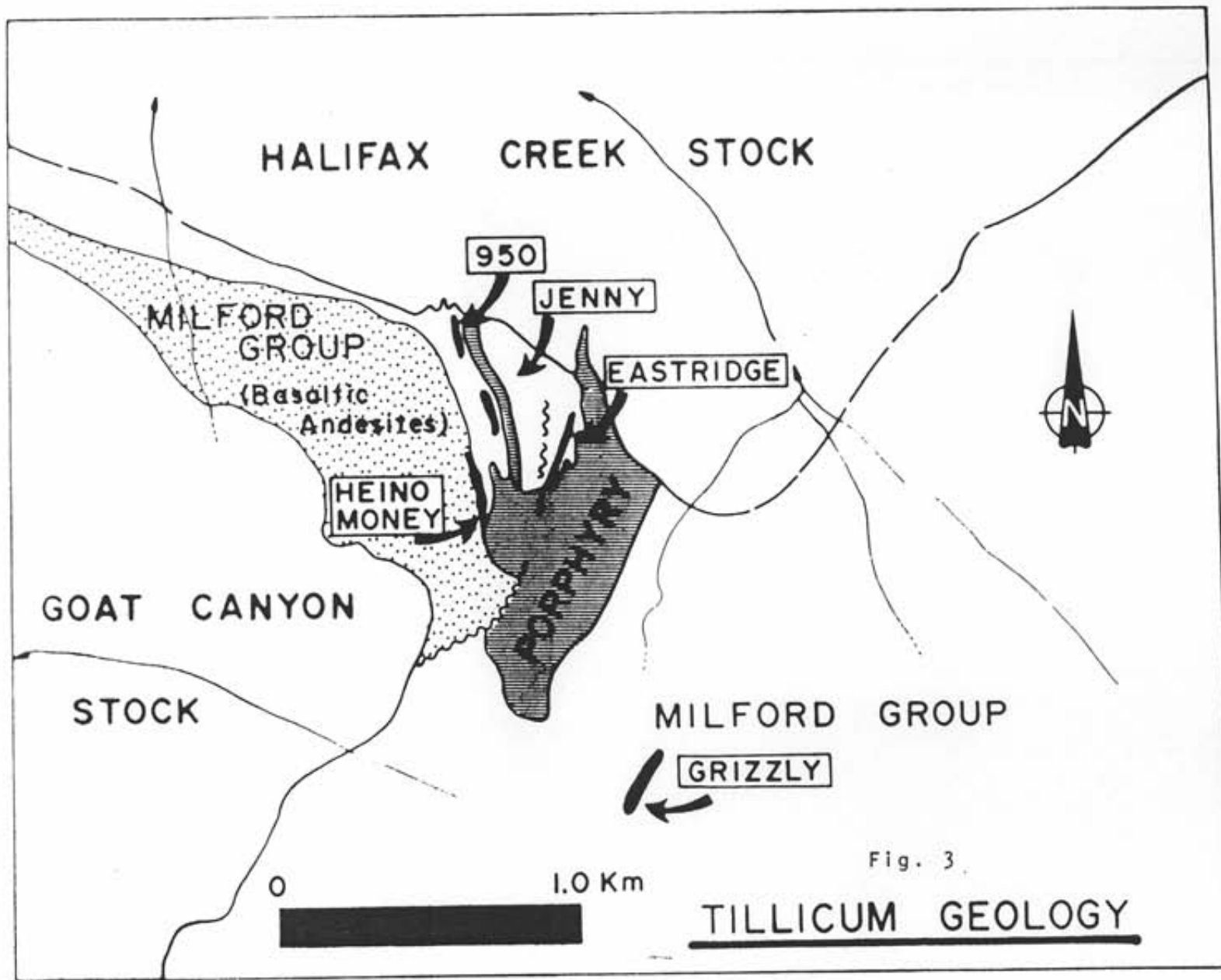
AGE	UNIT	DESCRIPTION	METAMORPHIC OVERPRINT	
			CALC-SILICATE SKARN	HORNFELS
UNKNOWN	LMP	LAMPORPHYRE DYKES DARK GREEN CARBONATE ALTERED, AUGITE-EPIDOTE BEARING LAMPORPHYRE	DIOPSIDE-TREMOLITE QUARTZ SKARN+GOLD QUARTZ SKARN+GOLD+PYRITE TREMOLITE-GROSSULARITE: K-FELD QUARTZ SKARN+PYRITE+GALENA+SPHALERITE+GOLD DIOPSIDE-TREMOLITE-CLINOZOISITE QUARTZ SKARN+PYRITE+GOLD TREMOLITE-EPIDOTE-CARBONATE-CHLORITE GARNET-K-FELDSPAR SKARN CLINOZOISITE-GARNET-DIOPSIDE-K-FELDSPAR QUARTZ SKARN+PYRITE+GOLD	
	LGR	LEUCOGRANITE DYKES		
	Kgmb	GOAT CANYON-HALIFAX CREEK STOCKS HORNBLende-BIOTITE QUARTZ MONZONITE; minor QUARTZ DIORITE, GRANODIORITE		
SKARN IMPREGNATIONS -GOLD MINERALIZATION				
UNKNOWN	DP	MASSIVE TO FOLIATED, GREY DIORITE PORPHYRY WITH SUBROUNDED PLAGIOCLASE PHENOCRYSTS IN MOTTLED APHANITIC GROUNDMASS WITH SPARSE ANHEDRAL GARNETS		
	DH	HYBRID DIORITE-HIGHLY DIORITIZED METASEDIMENTS		
MILFORD GROUP				
INCLUDES META-SEDS/META VOLC ASSEMBLAGES ORIGINALLY MAPPED AS MILFORD/KASLO GROUPS				
MISSISSIPPIAN OR YOUNGER	SM	DARK-GRAY-BLACK INDISTINTLY LAMINATED SHALE, LOCAL DEVELOPMENT OF SILTSTONE LAMINATIONS	CALC-SILICATED-HORNFELSED SHALE	BIOTITE-ACTINOLITE-CHLORITE SCHIST
	TS	BEIGE-TAN-DARK GREY, LAMINATED TUFFACEOUS SHALE	LAMINATED CALC-SILICATE BIOTITE-PLAGIOCLASE-CHLORITE-GARNET SCHIST	BIOTITE-CHLORITE-HORNBLende SCHIST
	TV	BEIGE, PALE GREEN TUFFACEOUS ANDESITE	QUARTZ-TREMOLITE-CLINOZOISITE IMPREGNATED TUFFACEOUS ANDESITE	BIOTITE-ACTINOLITE-CHLORITE SCHIST
	MA	DARK GREEN, FINE GRAINED META ANDESITE TO META-BASALTIC ANDESITE (BRECCIA, TUFFS, FLOWS)	ZEBRA ANDESITE, DIOPSIDE-TREMOLITE-ACTINOLITE-BIOTITE GARNETIFEROUS HORNFELS	PLAGIOCLASE-HORNBLende-AUGITE EPIDOTE AMPHIBOLITE
	MC	PINK-BEIGE, FINE GRAINED, SUGARY TEXTURED, ALTERED CLASTICS INCLUDING QUARTZITE, ARKOSE AND SILTSTONE.	BIOTITE-MUSCOVITE-GARNETIFEROUS SKARN	BIOTITE-HORNBLende-PLAGIOCLASE-CARBONATE HORNFELS
	HQ	YELLOW-BROWN, SUGARY TEXTURED, FINE GRAINED, ALTERED QUARTZITE	QUARTZ-TREMOLITE-SULPHIDE IMPREGNATED META QUARTZITE	QUARTZ-K-FELDSPAR-BIOTITE-CHLORITE SCHIST
	SS	WHITE TO YELLOW, QUARTZ-SERICITE SCHIST (POSSIBLY CAUSED BY SHEARING AND ALTERATION OF DH)		MUSCOVITE-ORTHOCCLASE-QUARTZ SCHIST

MODIFIERS

- I - FAULTED, SHEARED
- I - TUFFACEOUS
- py - PYRITIC
- I - LAMINATED
- m - MASSIVE
- q - QUARTZ VEINING
- v.g. - VISIBLE GOLD
- Py - PYRRHOTITE
- ms - MASSIVE SULPHIDE
- Pb - GALENA
- Zn - SPHALERITE
- i - INTERMITTANT
- w - WEAK

ALTERATION TYPES

- A - ALTERED, NOT DEFINED
- H - HORNFELS
- K - CALC-SILICATE
- C - CARBONITIZATION
- S - SILICIFICATION
- N - SKARN
- R - ARGILLIC ALTERATION (KAOLINITE, MONTMORILLONITE, PYROPHYLLITE)



Alfred H. L.

features remain recognizable.

The metasedimentary rocks are generally calcareous and consist of tuffaceous shale, siltstone, greywacke, minor quartzite and rare limestone that have been metamorphosed to fine to very fine-grained xenoblastic calc-silicate hornfels and schist. The mineralogical composition consists of plagioclase, quartz, microcline, biotite, tremolite-actinolite, garnets and variable amounts of calcite. Although metamorphosed, the sedimentary textures are also recognizable.

The diorite porphyry is intrusive into the Milford Group units, forming sills and dykes varying from 1 to over 50 m in thickness (Figure 5). The intrusive bodies have cores with medium-grained crowded porphyritic texture gradational into margins that are fine-grained and granular. Along the contacts, xenoliths of Milford Group units have been stoped into the porphyry. Stopping has been passive, with the xenoliths maintaining metamorphic fabrics that parallel the overall regional trend. Intense recrystallization and dioritization of the Milford Group units adjacent to the thicker porphyry sills has made contacts vague. Later metamorphism has recrystallized the original plagioclase phenocrysts in the porphyry to a mixture of oligoclase, calcite, sericite and chlorite in a groundmass of biotite, amphibole, sericite, microcline, quartz and anhedral porphyroblasts of pinkish-coloured garnet.

The Cretaceous-age Goat Canyon and Halifax Creek stocks are intrusive into the Milford Group and diorite porphyry. The stocks are compositionally similar and are fine to medium-grained, hypidiomorphic granular quartz monzonite, granodiorite and quartz diorites with contaminated border phases of monzonite and diorite. Leucocratic, coarse-grained dyke-like apophyses of the quartz-monzonite intrude the Milford Group and diorite porphyry. These dykes are usually less than 3 m thick and have shallow dips.

The youngest rocks on the property are narrow (less than 4 metres), northerly-trending, steeply-dipping lamprophyre dykes that are

TILLICUM GOLD PROPERTY LITHOSTRATIGRAPHIC COLUMN

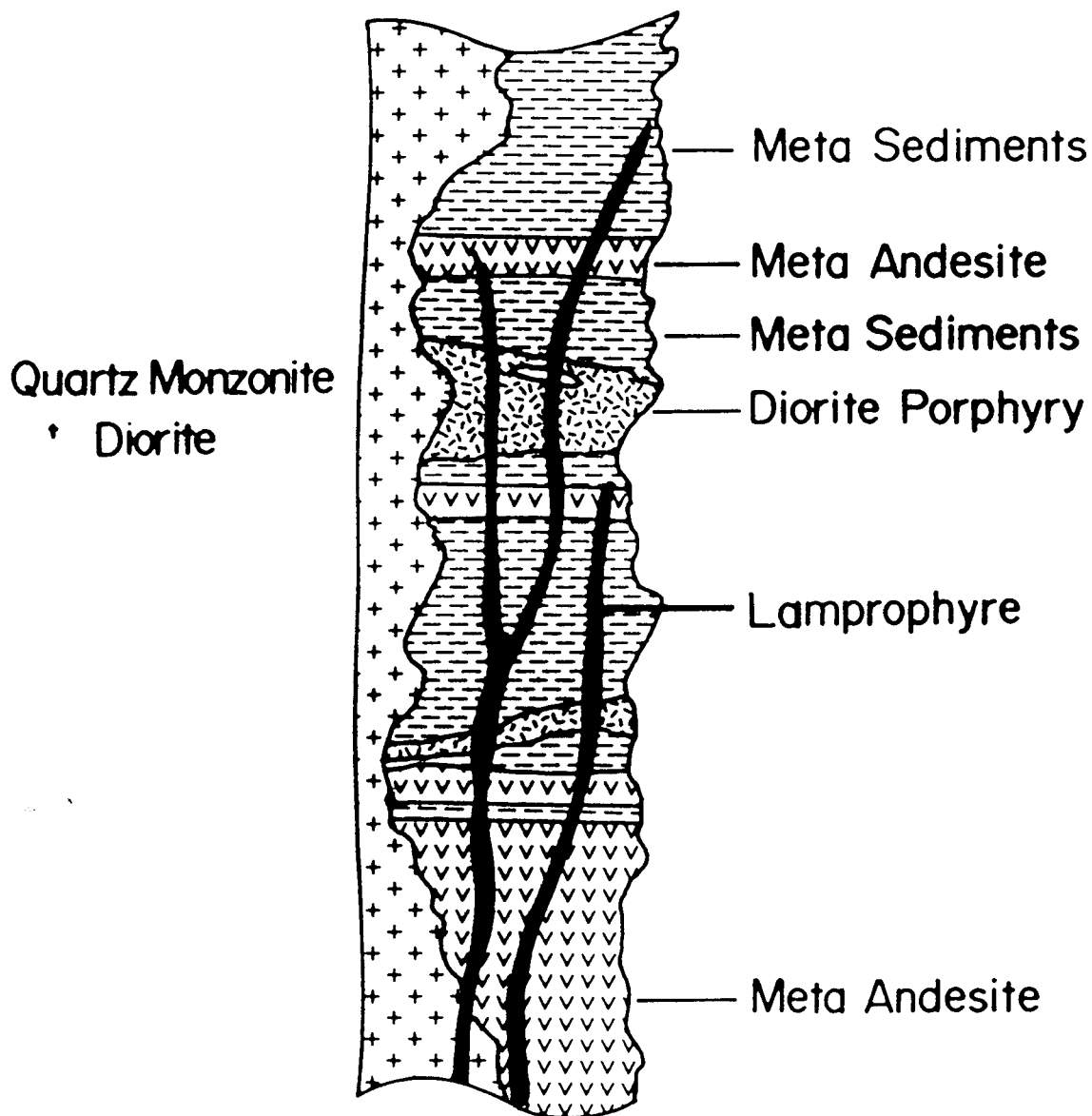


Fig. 5

SCALE



John McArthur

continuous along strike for hundreds of metres. Although present throughout the property, these dykes are concentrated in two swarms that cross through the East Ridge and Heino-Money gold zones.

Structural Setting

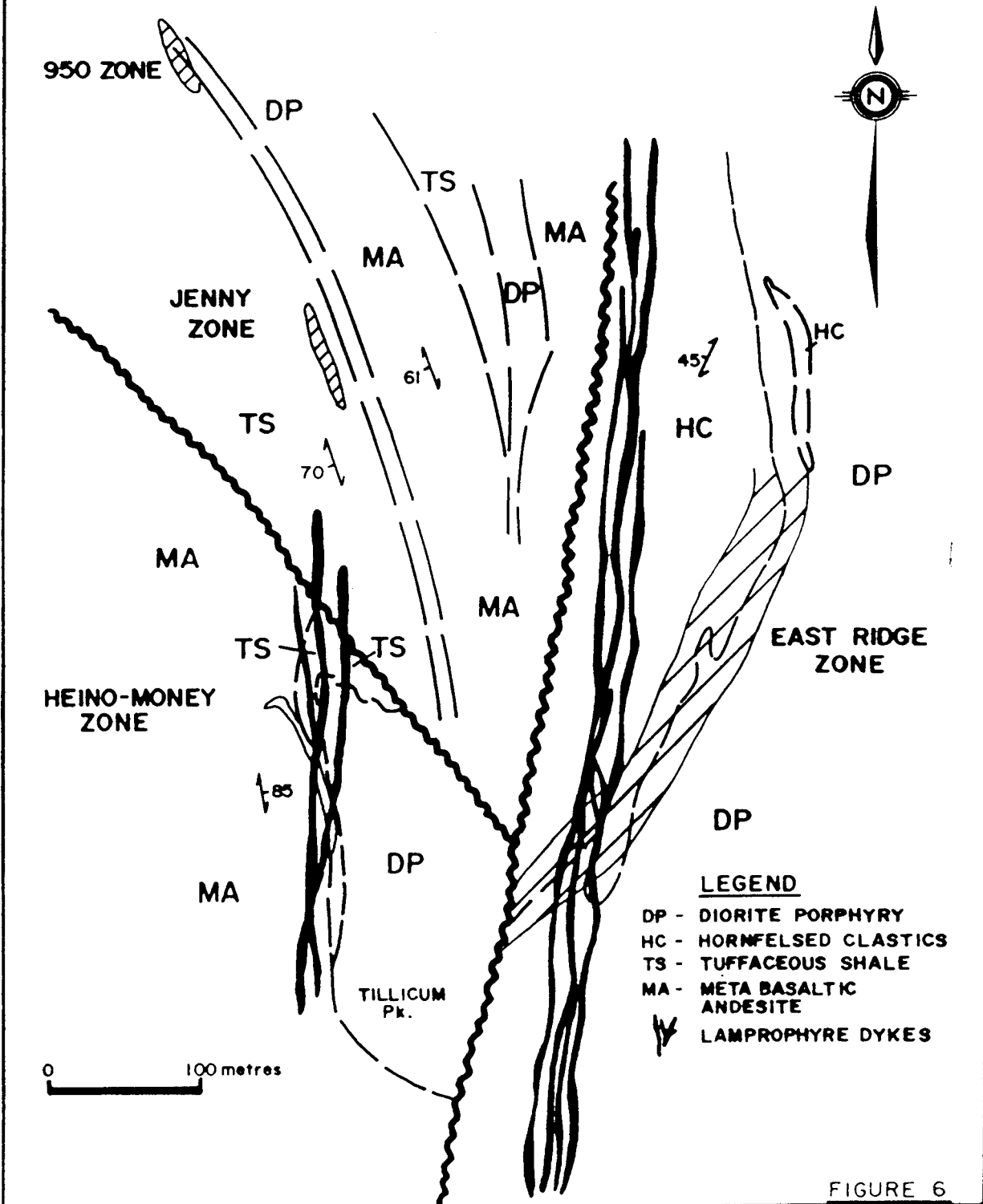
The geological structure is complex and requires further detailed mapping. As can be demonstrated by limited detailed structural mapping completed on the north slope, structural mapping is important for guiding exploration for extensions of mineralized zones down dip and on strike.

On the north slope, the geology has been mapped at 1:500 scale (Plate 5). Surface mapping combined with structural-stratigraphic logging of drill holes has indicated the existence of a complexly faulted and fractured terrane. Dominant structural features, steep angle faults, trend northeast, north and northwest. Most of the faults have little offset; however, two faults with major displacement, divide the north slope into three distinct fault-bounded blocks (Figure 6).

In the southwest fault-block, the Milford Group units are predominantly meta andesite and metasedimentary rocks comprised of tuffaceous shales and siltstones that form the westerly limb of a northerly-plunging synform. (Figure 7). The metamorphic fabric, which subparallels bedding, is steeply dipping in the west portion of the fault block and becomes progressively flatter towards the east.

The Milford Group units in the northern fault-block have a metamorphic foliation that strikes northwesterly and dips moderately to steeply to the southwest. Within the block, the Milford Group consists of a mixed assemblage of meta andesite, shale and tuffaceous siltstone. Although the rocks are similar to those southwest of the main fault, no marker beds were identified that could determine the fault offset.

GEOLOGY TILlicum PEAK AREA



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SCHEMATIC CROSS SECTION

W.

TILLICUM MTN.

E.

HEINO

EAST RIDGE

TS

DP

MA

MONEY

HC

KqD

DP

KqD

MA

HC

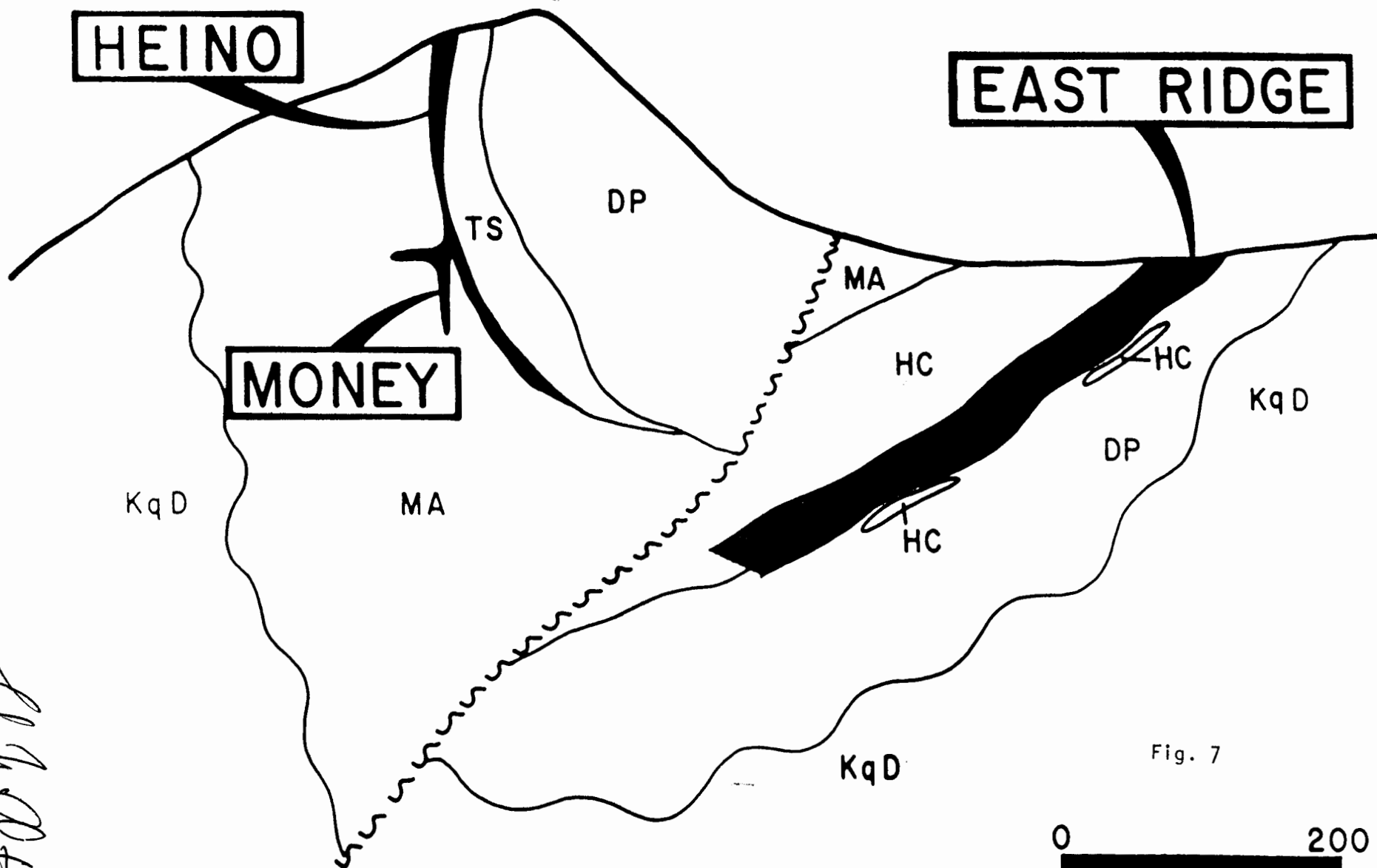
KqD

Fig. 7

0 200

METRES

John D. A.



In the eastern fault block, all units trend northeasterly with moderate northwesterly dips. Here, the Milford Group is predominantly metamorphosed siltstone, arkoses, quartzite and minor shale, that are in contact with a thick sill of diorite porphyry. The relationship between the diorite porphyry in the eastern fault block, and that in the southwestern fault block is unknown.

MINERALIZATION

Gold occurs in calc-silicate, quartz skarns developed in Milford Group metasedimentary and metavolcanics adjacent to or in close proximity to diorite porphyry sills. Skarn assemblages consist of quartz, plagioclase, tremolite-actinolite, clinozoisite, garnet, biotite and microcline. Skarns contain quartz-calc-silicate segregations, injections and veins that vary from less than 1 cm to 8 cm thick. These segregations are generally conformable to the metamorphic fabric although locally they display cross cutting features.

Native gold occurs within the skarn assemblages as 25 micron to 1 cm disseminations and fracture fillings within and along the margins of the quartz-calc-silicate segregations. Skarns also contain variable amounts of pyrrhotite, pyrite, sphalerite, galena, as well as traces of chalcopyrite and tetrahedrite. The sulphides occur as fine disseminations oriented within the plane of the metamorphic foliation and as coarse-grained aggregates within the segregations. A petrographic study of polished thin sections undertaken by Ken Northcote (Tillicum unpublished company report) indicates that the gold is contemporaneous with pyrrhotite, pyrite, sphalerite, galena mineralization and pre-dates arsenopyrite and tetrahedrite crystallization. Colin Godwin (pers. comm.) has obtained a Jurassic lead-isotope age for galena mineralization from the Money Pit.

The silver content of the skarns is highly variable. Gold-rich skarns commonly have very low silver contents with silver-gold ratios of less than 1:1. Silver-rich skarns, such as the Silver Queen zone contain very low gold values.

To date, 9 significant gold and/or silver-mineralized zones have been discovered. These are: Heino-Money, East Ridge, Silver Queen, Jenny, 950, Blue-BBB, Command, 1250 and Grizzly Zones (Plate 3).

A discussion of the Heino-Money and the East Ridge Zones follows:

(a) Heino-Money Zone

Stratabound gold mineralization in the Heino Money Zone occurs in skarnified calcareous tuffaceous shale in a wedge-shaped package of metasedimentary rocks lying between diorite porphyry and meta andesite (Plate 7). Since discovery, this zone has been extensively trenched and evaluated by 51 drill holes, totalling 11,606 feet (3540 m). Locations of these holes are shown on Plate 4, with a summary of assay results presented in Table 1. Drill logs of those 1983 holes filed for assessment are included in Volume II as Appendix I. Cross sections of the drill holes have been projected on to both east-west and true sections and are presented in Plate 7a.

Drilling and trenching have outlined a northwesterly-trending tabular shaped gold deposit measuring 650 feet (200 m) in length, 150 feet (46 m) wide with an average true thickness of 8 feet (2.4 m). This deposit is vertical to steeply easterly dipping near surface, but becomes more shallow, easterly dipping with depth (Plate 7). Although drill hole results suggest diminishing grades with depth and northerly, the zone remains 'open' to the southeast. Structural mapping indicates the mineralized horizon is offset by a series of left-lateral, steep angle, northeasterly to easterly-striking faults that have displacements up to 30 feet (10 m).

TABLE I

Assay Results from Heino-Money Zone Diamond Drilling

Hole No.	Footage		Width		Gold oz/ton
	From	To	Feet	Metres	
S82-1	26.8	38.0	11.2	3.4	1.10
S82-2	48.8	59.3	10.5	3.2	0.63
S82-3	40.4	43.7	3.3	1.0	0.09
S82-4	80.3	89.0	8.7	2.7	0.07
S82-6	7.0	22.8	15.8	4.8	1.18
S82-7	14.4	37.6	23.2	7.1	0.25
S82-8	27.5	41.0	13.5	4.1	0.28
S82-9	10.0	17.0	7.0	2.1	0.24
S82-10	30.0	36.4	6.4	2.0	0.08
S82-11	51.8	60.0	8.2	2.5	0.12
S82-12	48.0	50.0	2.0	0.6	0.11
S82-13	77.0	83.0	6.0	1.8	0.12
S82-14	116.5	125.0	8.5	2.6	0.004
S92-15	166.0	173.5	7.5	2.3	0.04
S82-16	104.6	111.2	6.4	2.0	1.02
S82-21	144.0	147.5	3.5	1.1	0.11
TS83-26	75.0	81.5	6.5	2.0	0.26
TS83-27	55.0	64.0	9.0	2.7	0.21
TS83-28	122.0	130.5	8.5	2.6	No significant assays
TS83-29	200.0	209.0	9.0	2.7	0.14
TS83-31	190.5	209.8	16.2	4.9	0.20
includes	190.5	191.5	1.0	0.3	1.36
includes	207.0	209.8	2.8	0.9	0.33
TS83-35	74.0	80.5	6.5	2.0	No significant assays
	140.0	142.1	2.1	0.6	0.14
TS83-36	96.0	100.0	4.0	1.2	0.08
	127.8	132.0	4.2	1.3	0.06
TS83-37	13.0	19.0	6.0	1.8	0.06
TS83-38	124.8	130.0	5.2	1.6	No significant assays
TS83-39	170.0	176.4	6.4	2.0	0.06
TS83-40	33.8	36.7	2.9	0.9	0.10
TS83-41	54.8	62.0	7.2	2.2	0.07
	72.1	73.0	0.9	0.3	0.18
TS83-42	62.9	66.5	3.6	1.1	0.21
TS83-43	62.0	64.5	2.5	0.8	0.10
TS83-44, 46					No significant assays
TS83-48	76.7	79.0	2.3	0.7	0.26
TS83-50, 52, 54, 56, 56A					No significant assays
TS83-63	414.5	417	2.5	0.8	0.29
TS83-62, 64, 66, 68, 70, 72, 74, 76, 78					No significant assays
TS83-80	113.5	115	1.5	0.5	0.35

(b) East Ridge

Gold mineralization occurs in a blanket-like zone that straddles the contact between diorite porphyry and meta arkoses, quartzites, siltstones and minor shales of the Milford Group. The gold-bearing contact strikes northeasterly and dips moderately to the northwest, forming a dip slope with the ridge. (Plate 10). This zone has been tested by trenching and 21 diamond drill holes totalling 3865 feet (1179 m) along a strike length of 1600 feet (490 m). Locations of the drill holes are shown on Plate 4, with cross-sections displayed on Plates 11a through 11m. A summary of the assay results of the drilling is provided in Table 11. Prompted by encouraging drill results, a 200 foot (61 m) cross-cut was driven late in the year. Location of the adit is shown on Plate 4 with a plan and cross-section, with assay results shown on Plates 12 and 13.

The gold mineralization, which has widths to 100 feet (30 m) has been traced by drilling along strike for over 1,600 feet (490 m) and remains open to the northwest. The favourable prophyry-metasedimentary contact persists for a further 1400 feet (430 m) beyond the most north-westerly drill holes, and soil sampling highlights this contact as anomalous for gold. The potential strike length of the zone is, therefore, 3000 feet (920 m). Drilling has only tested the initial 100 feet (30 m) of the zone below surface, with the zone remaining open to depth.

In the East Ridge Zone, gold occurs in randomly distributed higher grade 'pockets' up to 2.85 oz/ton gold over 6 feet, separated by areas of lower grade material. All drill hole intersections produce an average gold grade of 0.05 oz/ton over a 40 feet average width. More drilling is required before tonnage and grade reserves can be assigned to the East Ridge Zone.

To determine if the high-grade areas in the East Ridge Zone were in discrete structures or rock-types amenable to selective underground mining, and to corroborate drill results, a 200 foot (61 m) underground

TABLE 11

Summary Assay Results - East Ridge Zone

Hole No.	Footage		Width		Gold Oz/ton
	From	To	Feet	Metres	
TS83-51	36.5	68	31.5	9.6	0.080
includes	44.5	51	6.5	2.0	0.100
includes	56	68	1.2	0.4	0.19
TS83-53	30.2	47.5	17.3	5.3	0.040
TS83-55	17.5	22.3	4.8	1.5	0.095
TS83-57	21.8	47.7	16.9	5.2	0.040
TS83-61	25.5	74	49.5	15.1	0.057
includes	50	74	24	7.3	0.10
includes	50	59	9	2.7	0.260
TS83-65	71	88.1	17.1	5.2	0.070
TS83-67	81	97.5	16.5	5.0	0.033
includes	82.5	94	11.5	3.5	0.042
	118.5	160	41.5	12.7	0.029
TS83-69	137.5	183	45.5	13.9	0.031
includes	159	175	16	4.9	0.045
includes	155	175	20	6.1	0.039
TS83-71	85	156	80	24.4	0.083
includes	134.2	165	30.8	9.4	0.14
includes	152	156	4.0	1.2	1.0
TS83-73	108	183	75	22.9	0.041
TS83-75	76	118	42	12.8	0.044
TS83-77	34	50.5	16.5	5.03	0.019
	72	82	10	3.0	0.026
includes	80	82	2	0.6	0.086
TS83-79	37.6	163	125.4	38.2	0.010
TS93-81	112	120	8	2.4	0.030
TS83-83	101.2	107.2	6	1.8	0.06
TS83-58	204.8	243.5	38.7	11.8	0.11
S82-17	130	180	50	15.2	0.036
S82-18	93	143	55	16.8	0.055
S82-19	51	69	18	5.5	0.070
S82-24	25.8	63	37.2	11.3	0.039
S82-25	88	115	33	10.1	0.030

cross-cut was driven through the zone. The underground work confirmed the erratic nature of the gold and showed drill, muck and channel sample results to be comparable when averaged over intervals greater than 20 feet (6 m).

The East Ridge Zone is a promising target for a low-grade, large tonnage deposit minable by open pit methods. Additional drilling is recommended to test for northeast strike and depth extensions as well as improved grades. A tonnage reserve calculation would be premature before the completion of the above recommended program.

PROPOSED 1984 WORK PLAN

The results of the 1983 exploration program fully justify additional work on the Tillicum Gold Property, and to this end a two phase exploration program has been recommended for 1984.

PHASE I is scheduled from April 1 through July 31, 1984, and will include underground development of the main Heino-Money Zone, diamond drilling of the East Ridge Zone and Jenny Zone. Included in the Phase I budget are metallurgical engineering and further environmental studies. The cost of Phase I exploration, the details of which are provided in the following pages, is estimated to be \$300,000.

A 200 ft (60 m) drift will be driven along the Heino-Money Zone beneath the lower Heino cut. This drift will provide bulk samples of the ore zone for metallurgical testing, and confirm the drill-indicated reserves and provide access sites for drilling of the still open southeast end of the ore shoot zone. Underground drilling would be part of Phase II.

The proposed diamond drilling will involve 5000 feet (1525 m) of NQ drilling with 3500 feet (1067 m) on the East Ridge Zone and 1500 feet (458 m) on the Jenny Zone. The East Ridge drilling would establish the strike length and down dip extent of the low-grade gold zone and search for areas of improved grade. Drilling on the Jenny Zone will explore for grades similar to the 2.36 oz/ton gold over 6.5 feet (2 m) found by trenching. Collar locations of the Phase I proposed drilling are shown on Plate 27.

Phase II of the 1984 program will include additional underground development of the Heino-Money Zone, diamond drilling of the East Ridge, Jenny and Heino-Money Zones. The estimated cost of Phase II is \$500,000.

DIAMOND DRILL LOG

Page 1 of 3

Collar:		Hole Survey		
NORTH	443.5N	Footage	Azimuth	Dip
EAST	349 W	200	210°	30°
ELEVATION				
LOGGED BY	S. McIntosh			
DATE LOGGED	Sept 10/83			
MAP REFERENCE		Method: Acid test		

PROJECT ESPERANZA EXPLORATIONS LTD.PROPERTY NAME TILlicumDRILLING CONTRACTOR DRILCORASSAYER MIN-EN LABORATORIES LTD.PURPOSE OF HOLE Test Down Dip extension of Maino-Money pit east to Ne east between lines 4455 and 4005HOLE NO. ST 83-111CLAIM NAME HughCOMMENCED Sept 7, 1983FINISHED Sept 9, 1983

From m-ft	To ft	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	
				DEPTH	% Dip to Dr.	Gr S. Dr.	From m-ft	To ft	Width	No.	Au %	Au ppb			
0	23.3	94	- M.D.R.P. pale grey to greenish white, mostly crowded porphyry matrix. To coarse grained. FLOP Phenocryst mostly argillically altered, and pale green, soft. Dissected by fine pyroclastic 1-2' fine gr. and black like aggregates. Irregular calc to varying, dissection to 2mm wide. Alteration more intense near faults. Fractures at 030° to CA.	0'											
			Post 18' poorly formed pinkish brown granate <5% sphalerite, pyroclastic, pyrite as dry fracture fillings.	15'			42 RFF								
				42'			69 RFF (line?)								
3	55.25	15%	M.P.O.M. (F, P, CO ₂) fine grained, medium grey, porphyry. Phenocryst have diffuse boundaries <2mm. Granate (pink) ~5%.	55.25'			43 Gater	24	28	2'	7781	-			
			act. leached, sphalerite + pyrite in fractures, small calc. argillically altered (envelopes for 2mm wide). Calc. in fractures 60° to 45° to CA.					25	25	2'	7782		20		
								32	34	2'	7783		80		
								34	36	2	7784		5		
								36	37.5	1.5	7785	.009			
								37.5	40	2.5	7786	.006			
								40	42	2	7787	.011			
3+5 43.5	43.5		Silica - enriched calcite - pyroclastic, coarse fragments.	42				42	44		7788	.018			
			py. pyrite, thin sph. inclusions. Some clay-calcite, calc. at 020° to CA.					44	46		7789	.019			
			46 - 7790 - py, qtz in frag.					46	48		7790	.01			
								48	50		7791	.001			
								50	52		7792	.001			
62	62		M.P.					52	54		7793	.001			
			dark grey-green laminated, buffaceous, silty, silty.					54	55.25		7795	.003			
			1' of variation in constitution. Co test conformable with					55.25	57		7796	.014			
			Sil. - phyl, py, pyrite, trace opy in a sp. like, conformable with					57	59		7797	.009			

Collar:	Hole Survey		
NORTH _____	Feetage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 5727-14
CLAIM NAME _____
COMMENCED 5/17/07
FINISHED 5/17/07

[illegible]

DIAMOND DRILL LOG

Page 1 of 3

WELL NO. _____	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method: _____		

PROJECT ESPERANZA EXPLORATIONS LTD.

PROPERTY NAME TILlicum

DRILLING CONTRACTOR DRILCOR

ASSAYER HIN-UN LABORATORIES LTD.

PURPOSE OF HOLE

HOLE NO. ST-83-44

CLAIM NAME

COMMENCED Sept 7/83

FINISHED Sept 9/83

			LITHOLOGY	STRUCTURE			Sample				Assays		Visual Log
From m	To m	RHY %		DEPTH	% Di. So. Dr.	C.S. Dia	From m	To m	Width	No.	Au oz/l	Au ppb	
96.5	97.5	95%	M.P.DH - slightly altered flow with calcite veining, constant quartz impregnations at 60° angle to SA	96.5		45 Calc.							
			193' Shale-side fracture - shale side 80°/10° to CA	97.5		50° Calc.							
						58 band.							
97.5	154	95%	MPTVA (K, R, Q) tuffaceous volcanic grey-green becoming increasingly mafic with depth Contact with PTHA gradational. Argillie alteration enveloped about calcite veins Pyrrhotite 1-2% pyrite trace along fractures.	100									
				154		60° band							
				155		15° Calc. Qtz							
				190		8#							
				193		fine silts.							
				235		20° RFF							
154			P.T.M.A. (Q, R, F) Banded, with alternately dark green lighter gray mafic chloritized, feldspars variably argillically altered. CHZ and impregnations, calcite veining often with argillie envelopes. Veins massive, with widths to 1 cm Numerous shale-side fractures @ 00°/10° to CA These often calcite filled to 1cm wide, most.										
250			End of Hole All casing removed										

DIAMOND DRILL LOG

Page 2 of 5

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 83-45
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From	To	Rcy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log
				DEPTH	1/4	1/2	3/4	From	To	Width	No.	Au %	Au ppb	
42.8	44	45	Lamprophyre Cuts core at -10" Alaskite 2" at upper contacts											
44	111	48	MPMA or MPMA (tuffaceous andesite) medium to dark green tuffaceous andesite sub rounded to subangular chloritic ash sized Prags in ^{vs} pale green chlorite-sericite-feldspar matrix. Massive Calcite veins and stringers with argillie envelopes through out. Qtz impregnations Sulphides 1-2% mainly pyrr with minor py. Alteration Si:st:qtz, rock pale green ^{cathep} Calcite veins, minor qtz impreg 2% pale green clay alteration (argillie) along calcite veins S ₁ foliation is undistinct through entire section	53				10° fault						
								85	87	2	7911		30	
								133.5	135.5	2	7912		-	
								135.5	137.5	2	7913		20	
								137.5	142	4.5	7914		10	
111	114	2	MPAR Cuts core at 10" to CA measuring along core for ~ 3' Well developed porphyry texture.					169	171	2	7915		20	
								171	173	2	7916		10	
114	115.3	13	MPMA or MPMA medium to dark green, tuffaceous andesite.					173	175	2	7917		10	
								175	177	2	7918		10	
								177	179	2	7919		5	



DIAMOND DRILL LOG

Page 3 of 5

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-45
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Revs %	LITHOLOGY	STRUCTURE					Sample				Assays		Visual Log
				DEPTH	% Dip to hor.	to hor.	to hor.	to hor.	From m	To m	Width	No.	Au g/g	Au ppb	
			132.5 to 140 qtz impregnations with minor py + pyrr along walls						179	181		7920	.007		
			152 multi directional calcite veinlets to 4mm with diffuse argillite alteration envelopes. Minor qtz impregnations. Pyrr + py ~ 2%.						181	183		7921	.002		
									183	185		7922	.008		
									185	187		7923	.001		
									187	189		7924	.001		
165.3	169	96	Lamprophyre dark green out core at 20°, lower contact 45°						189	191		7925	.001		
									191	193		7926	.001		
									193	195		7927	.006		
									195	197		7928	.008		
169	179	90	MPaa Braccia, angular clasts of tuffaceous siltstone to shale in a black graphitic matrix. Clasts pale green a. Form: ~ to 60% of the rock and one up to 2cm over 1.0cm. Sulphides to 15%, mainly pyrr with lesser py						197	199		7929	.002		
									199	201		7930	.001		
									201	203		7931		10	
									203	205		7932		5	
									205	207		7933	.01		
									207	209		7934	.002		
				179			90° slight side		209	211		7935	.004		
									211	213		7936	.001		
179	240	98	MPaa (C, Q minor) pale grey to grey green, schistose with very well developed S. Porphyritic texture not apparent. S. impure by calcite + dolomite. Feldspar pale green Py 36%, pyrr 10%, to 5mg, to 2ph in matrix	179			18° S.		213	215		7937	.003		
									215	217		7938	.01		
									217	219		7939	.02		
									219	221		7940	.016		
									221	223		7941	.021		

[illegible]

DIAMOND DRILL LOG

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCAR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-46
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]



DIAMOND DRILL LOG

Page 3 of 3

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-46
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rev	LITHOLOGY	STRUCTURE						Sample				Assays		Visual Log
				DEPTH	%	Di	So	Dr.	Op	Di	From	To	Width	No.	Au %	
79	84.7	95	MPDP cuts core at 50°, sharp contact angular + irregular inclusion of MPDs at 80' (hornfelsed) Carb veinlets with argillie envelopes throughout lower contact at 70° to core axis	86					43	S _i						
84.7	103.5	95	MPDV (H, Q, C) * laminated to banded Good hornfels part 91' - light reddish brown banded with light pale green. With depth rocks become more tuffaceous. Lower contact arbitrary. Carb veining at 20° to 45° becoming more common with depth Calcite veinlets ^{0.5cm} have argillie envelopes (pyrophyllite) ^{increasing with depth} pyr ~ 5% pyr ~ 1% very greenish * 6" of MPDV at 85.5'	92.5					45	S _i Carb Fault						
				93					61	S _i						
103.5		93	PTDra (C, R) Banded, Dark green to green-grey, mafic rock. mafic chloritized (hornblende) cut by amorphous calcite veins with argillie altered walls. Minor pyrophyllite occasional pyrite. Chloritization increases in intensity with depth. Becoming increasingly schistose with depth. Rock has relief features of 0.5m angular chlorite frags, pyrophyllite, calcite to lapilli tuff. End of Hole	120					55	S _i						
166			No casing left in hole.						52	S _i						

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCAR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. TS 83-47
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]

Page 6 of 10



DIAMOND DRILL LOG

Page 7 of 10

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILLICUM
DRILLING CONTRACTOR DRILCAR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-47
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rdy %	LITHOLOGY	STRUCTURE					Sample				Assays		Visual Log	M
				DEPTH	PA	DR	SD	DR	From	To	Width	No.	Au %	Au ppb		
			299.5 Fault zone ~ 45° to CA						300.5	302.5	2	8046		10		
299.5	303.5		MPs (C, R, chloritized)						303.5	305.5	2	8047		15		
			sheared, argillically altered, chloritized pale green						305.5	307.5	2	8048	.002			
									307.5	309.5	2	8049	.002			
									309.5	311.5	2	8050	.001			
									311.5	313.5	2	8051	.001			
			303.5 Fault zone						313.5	315.5	2	8052		10		
									315.5	317.5	2	8053		25		
303.5	330		MPs schistose						317.5	319.5	2	8054		20		
			Alternate layers of biotitic and sericitic rich laminae give the rock a green and reddish brown streaked appearance						319.5	321.5	2	8055		25		
			Total sulphide 10%, pyrr 5%, py 3%, sph 1% in wisp-like layers II to S ₁						321.5	323.5	2	8056		90		
			316-316.5 porphyritic texture						323.5	325.5	2	8057		10		
			317-322 reddish brown colour, caused by micro-cr. biotite at the expense of chlorite						325.5	327.5	2	8058		20		
			322-323 Shear - close spaced fracturing - rock in thin section pale green (chloritization of biotite)						327.5	330	2.5	8059		35		
			carb veins						330	332	2	8060		165		
									332	334	2	8061		70		
									334	336	2	8062		20		
									336	338	2	8063		15		
									338	340	2	8064		60		
									340	342	3	8065		540		
									342	346	3	8066		155		
									346	348	3	8067		235		
			330 - close spaced fractures carb veining						348	352	3	8068		190		



DIAMOND DRILL LOG

Page 8 of 10

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO.	<u>83-47</u>
CLAIM NAME	_____
COMMENCED	_____
FINISHED	_____

From m	To m	Revs %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	M.T.
				DEPTH	% Dip	So. Dr.	Gr. Dr.	From m	To m	Width	No.	Au %	Au ppb		
330	344.3		Horafels (biotite) (Q) reddish brown fine grain with occasional green streaks (chlorite?) actinolite? Total sulphide 30% - pyrr, pyrr 1-2% Arsenopyrite hematite or Magnetite 12° to CA Quartz impreg from 341					393.5	396.5	3	8049		95		
344.3	513		MPH schistose Contact breccia 2-4mm laminated at 10° to CA Alternate green and reddish brown layers. Quartz impregnations Sulphides: in bands to 2cm wide. Arseno- pyrite ~1%, sphalerite ~1%. Pyrr 10% Pyrrite 5% traces of chalcopyrite 354-356 sphal 2% 383 to 386 calc-silicate altered core mottled reddish-brown and pale green, etc. impreg. Pyrr, Arsenopyrite 386 to 395 Qtz impregnations 395 to 405 Coarse muscovite, core breccia, very schistose					425	428	3	8070		95		
								435	436	1	8071		485		
				350			13° S	439.5	442.5	3	8072		510		
								442.5	445.5	3	8073		340		
								451	454	3	8074		425		
								454	456	2	8075		145		
								476	479	3	8076		110		
								513	516	3	8077		50		
								516	519	3	8078		90		

DIAMOND DRILL LOG



DIAMOND DRILL LOG

Page 1 of 1

Collar:		Hole Survey		
NORTH	4435N	Footage	Azimuth	Dip
EAST	349W	769	210	-10°
ELEVATION	2000			
LOGGED BY	S. McClintock			
DATE LOGGED	Sept 11/83			
MAP REFERENCE		Method: acid test		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILLICUM
 DRILLING CONTRACTOR DRILCAR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test Heian-Hony Pit zone to the east

HOLE NO. T5-83-48
 CLAIM NAME _____
 COMMENCED Sept 9, 1983
 FINISHED Sept 10, 1983

From ft	To ft	Rwy %	LITHOLOGY	STRUCTURE				Sample			Assays		Visual Log	Notes
				DEPTH	% dip to hor.	dip to ver.	From ft	To ft	Width	No.	Ass %	Ass ppb		
0	59'	99	MPop (R, F) light to medium gray, medium grained. Dis. ppt Garnet porphyroblasts to 2mm. Feldspar phenocrysts in a f.g. matrix of chlorite and muscovite. ^{Si indistinct} Faulted fractured with calcite-pyrophyllite veins with argillie envelopes 18' to 20' Qtz impreg (irregular veins) with pyrr, lesser py and micac sph (tr) 20' fault - carbonate - clay filled ← cleavage 33' Qtz - calcite vein with walls lined with sph + pyrr.	33		40° S.								
51			Reddish-brown bands to 5cm, irregular to patchy, coarse grained biotite in matrix in place of chl + mica 25 to 59 well fractured and calcite veined, argillie altered envelopes around veins and fractures											
59	66	96	MPWA (E, SR) Contact in rubble zone of broken MPWA Pale green, siliceous with occasional reddish-brown patches (biotite) widely spaced fractures with pyrr, py and sphalerite. Pyrophyllite diss. through to 5'.	59		80° Cont.								
				65		65° N. 1								
							58.5	59	0.5	7973		190		
							59	61	2	7974		30		
							61	63	2	7975		200		



DIAMOND DRILL LOG

Page 2 of 4

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. TS 83-48
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rev	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	
				DEPTH	%	Dip	Dr.	Q ₁	Q ₂	From	To	Width	No.		Au %
66	76.7	931	MPTS (Q, C, R, S) laminated tuffaceous shale, light to dark gray, graphitic. Quartz in projections (bandings & veins?) 70-76.7 Well mineralized with pyrr, py, sphul, ^{10%} ^{2%} ^{17%} as wisplike bands // laminations: lesser pyrr, py and sphul in cross cutting fractures. Arsenopyrite also present. Lamination variable with or at 60° to CA	66'				68'	lam	66	68	2	7976	.016	100
				66'				60'	S ₁	68	70	2	7978	.012	
				70'				45'	Fault	70	72	2	7979	.01	
				72'				60'	S ₁	72	74	2	7980	.008	
				82'				58'	S ₁	74	76.7	2.7	7981	.03	
				86.5'				58'	S ₁	76.7	79	2.3	7982	.263	
				83'				45'	shar	79	81	2	7983	.051	
								45'	carb	81	83	2	7984	.007	
								45'	shar	83	85	2	7985	.002	
76.7	79		MPOB (C, R, Q) light gray, medium grained contact well mineralized with pyrr, py, sphul and traces As.	85.5'				45'	carb	85	87.5	2.5	7986	.098	
										87.5	89.5	2	7987	.02	
										89.5	91.5	2	7988	.003	
										91.5	93.5	2	7989	.023	
										93.5	95.5	2	7990	.002	
79	87.5		MPTS (R, C, Q) dark gray laminated tuffaceous shale pyrr, py, sphul in wisplike bands // to laminations fragile over print along fractures and carbonate veins. Becoming increasingly tuffaceous with depth Minor folds broken at hinges (sheared) with calcite-pyrophyllite infilling fractures (92')							95.5	97.5	2	7991		760
										97.5	99.5	2	7991		35
										102	104	2	8012	.003	
										104	106	2	8013	.007	
										106	108	2	8014		55
										108	110	2	8015	.001	

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCAR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. TS 83-48
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

LITHOLOGY			STRUCTURE				Sample				Assays		Visual Log
From	To	REV %	DEPTH	% Sp ² Dr.	Sp ² Dr.	From	To	Width	No.	Au %	Au ppb		
67	208		MPA				98	100.5	2.5	8096	10		
			Basaltic-andesite Tuffs, dark-green with				143	147	4	8097	1001		
			occluded areas of hornfelsing and calc-silicate alt.				214.5	218	3.5	8098	10		
			72 calcite + qtz veinlets @ 20° to CA										
			96.5 to 96 close spaced calcite + qtz veining (~1-2cm)										
			100 ~~2.5~~ 2.5cm wide quartz, calcite, feldspar veinlet										
			cuts CA at 48°										
			101.5 to 114 - hornfelsing - core pale reddish brown										
			and green, calcite veining and qtz veins										
			123 1cm qtz @ 45° to CA										
			142 to 149 qtz-feldspar veinlets to rim										
			pyrite to 2% on fractures and vein walls										
			150.8 to 158.8 Banded, hornfelsed calc-silicate centered										
			on calcite + qtz veins										
208	215		Albite - Klgm										
			white to gray-white cemented porphyry										
			Porphy $< 5\%$ (calcite) Dis py 4-5% ~ 2-3%										
			Contact @ 45° to CA										
215	217.8		Inclusion of tuffaceous basaltic andesite										



DIAMOND DRILL LOG

Page 3 of 3

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILLICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 63-49
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Revy %	LITHOLOGY	STRUCTURE					Sample				Assays		Visual Log	H m
				DEPTH	1/2 in	Dip °	Dr. °	1/2 in	From m	To m	Width m	No.	Au %	Au ppb		
217.8	218.7	98	Alaskite Klgm as at 208 to 215													
218.7			MPA dark green to dark brown-green basaltic andesite calcite and occasional Qtz veins. Av. spacing ~ 4cm. Fractures at 020° with slickensides Conjugate fractures @ 025° to CA * Textures include bombs and breccia fragments.													
			245. 9cm wide calcite-slag gouge zone. Prony cavities with calcite (fine) crystals.													
			282 Qtz inclusions (minor)													
377			End of Hole No casing left in hole. Hole made with part 150 bit													

20° to 60°
fractures
slickensides



DIAMOND DRILL LOG

Page 2 of 4

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY <u>J. M. Chisholm</u>			
DATE LOGGED <u>Sept 12/83</u>			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-BN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. TS-83-50
 CLAIM NAME _____
 COMMENCED 83
 FINISHED _____

From m	To m	Rwy %	LITHOLOGY	STRUCTURE				Sample			Assays		Visual Log	
				DEPTH	% Dip	Dr.	Sp. S. Dr.	From m	To ft	Width	No.	Au %		Au ppb
75	78.2	95	MPoa (R.C.) Pale gray-green, fine grained. Contact vague - arbitrary, diffuse planar boundaries. Minor argillie alteration about fractures and calcite veins. Traces pyrite raphid along hairline fractures widely spaced	70			35° S.	76	77.5	1.5	7993	.001		
								77.5	78.5	1	7994	.048		
								78.5	80	1.5	7995	.003		
								80	83.5	3.5	7996		20	
								83.5	85	1.5	7997		5	
								85	87	2	7998		10	
								87	89	2	7999		25	
78.2	79.7	95	MPoa (Q.) laminated tuffaceous shale, dark-gray Contact conformable to laminations Contact zone has 30% sulphide, 20% pyrr, 5% py, 3% sph, pyrr. gabbro trace. Quartz impregnations	77			45° lam	89	91	2	8000	.15		
								91	93	2	8001	.20		
								93	96	3	8002	.75		
								96	97.5	1.5	8003	.5		
								97.5	100	2.5	8004	.008		
								100	102	2	8005		110	
79.7	84	93	MPoa (C, RF) Gouge zone, pale green, strong carb + argillie alteration fract 45°, 10°					102	103	1	8006	.10		
								103	105	2	8007	.021		
								105	108	3	8008		170	
								108	111	3	8009	.004		
84	91	98	MPoa (C, Minor) Pale gray-green Fine grained tuffaceous rock, indistinct banding massive. Fine calcite veinlets spaced 2-4 cm. multi directional. Weakly hornfelsed (biotite) 1-2% dis pyrr					111	114	3	8010	.002		
								114	117	3	8011	.15		



DIAMOND DRILL LOG

Page 1 of 5

Collar:		Hole Survey		
NORTH	457 N	Footage	Arimuth	Dip
EAST	271 W	230	140	75
ELEVATION				
LOGGED BY	J. McClinton			
DATE LOGGED	Sept 17, 1983			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test Picnic Site Zone

HOLE NO. TS-83-51
 CLAIM NAME Hugh
 COMMENCED Sept 15/83
 FINISHED Sept 16/83

From	To	Rwy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Mn.
				DEPTH	% Dip	Str.	to S. in	From	To	Width	No.	Au %	Au ppt		
0'	16.5		Lamprophyre												
16.5	31		MPTs	16.5		45° lam		16.5	18.5	2	8173		260		
			dark-grey laminated tuffaceous silt stone					18.5	20.5	2	8174		210		
			contains 10' py, pyrc as fracture fillings and in					20.5	22.5	2	8175		280		
			conformable bands trace sp, sph	22		65 lam		22.5	24.5	2	8176		20		
			21'-25' Rock becomes light grey to grey-green with reddish					24.5	26.5	2	8177		40		
			brown bands					26.5	28.5	2	8178		95		
			argued porphyroblasts, Qtz impreg. and calc-sil impreg					28.5	31	2.5	8179	.001			
			25 to 31 calc-sil with Qtz impreg (pink green-red brown												
			banded												
			30 trace Ag, Coy					36.5	39.5	3	8180	.011			
								39.5	42.5	3	8181	.059			
31	36		hump					42.5	44.5	2	8182	.047			
			Contacts @ 45° to CA					44.5	46.5	2	8183	.052			
								46.5	49.5	3	8184	.103			
36.5	51		MPTs (H, Q Cal-sil).					49.5	51	1.5	8185	.119			
			Pinkish banded hornfels - may have been	40		45° band		51	56	5	4662	.006			
			intrusive, contains garnet porphyroblasts					56.1	58.5	2.5	8186	.534			
			Qtz veinlets Dis py + pyrc Trace sph on					58.5	60.9	2.4	8187	.05			
			fractures												
			47 to 48 Calc-sil impreg					63.2	65	1.8	8188	.028			
			50 to 51 Calc-sil impreg					65	68	3	8189	.037			

[illegible]

HOLE NO. 83-51
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]



DIAMOND DRILL LOG

Page 2 of 5

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MUN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-52
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rwy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	M
				DEPTH	PA	Dip	Str.	From	To	Width	No.	Au %	Au ppb		
			69 Occasional gtz impregnation					104.5	106.5	2	8033	.029			
			69.5 Conjugate fractures @ 20° to CA					106.5	108.5	2	8034	.002			
								108.5	110.5	2	8035	.001			
								110.5	112.5	2	8036	.001			
77	82.7		MPTs (Q)					112.5	114.5	2	8037	.001			
			Black laminated argillite (mudstone) * Contact	78	60°	SE	hdd.	114.5	116.5	2	8038		20		
			with overlying unit @ 75° to CA. Contains 25% sulphides as bands or wispy layers to 0.5 cm					116.5	118.5	2	8039		10		
			mainly pyrr, with up to 3% sph, 1% py, As 1% along S ₂					118.5	120.5	2	8040		45		
			78' Qtz vein					120.5	122.5	2	8041	.003			
			79 - 82.5 Colour is light gray - medium gray banded with light brown layers (biotite) weak horizontal at 81 gtz impregnations					122.5	125	2.5	8042		70		
82.5	89.1		MPTs (H Q, Calc-sil)					134	137	3	8043	.019			
			light gray to pale reddish brown banded calc-sil impreg, abundant Qtz impreg. Sulphides 20% - 10% pyrr, 3% sph, 1% As; Qtz impreg follow banding bedding (so?) to gtz												
			85 - 91 closely spaced fractures 1-4 cm. Argillite at bed Carbonate veining - light	89			45° from S ₂								

DIAMOND DRILL LOG

DIAMOND DRILL LOG

DIAMOND DRILL LOG



DIAMOND DRILL LOG

Page 1 of 3

Collar:		Hole Survey		
NORTH	445N	Footage	Azimuth	Dip
EAST	329 W	172	210	-10°
ELEVATION				
LOGGED BY	J. McClintock			
DATE LOGGED	Sept 14/83			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test Heino-Money Zone's eastern extension

HOLE NO. TS-83-54
 CLAIM NAME _____
 COMMENCED Sept 17, 1983
 FINISHED Sept 14, 1983

From	To	RQD %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Notes
				Depth	Strike	Dip	Remarks	From	To	Width	No.	Au %	Au ppb		
0	18		Casing in overburden												
18	88.5	92	MPOR	14'			20° Fac	25	27	2	8085	.001			
			medium grey, biotite matrix, well defined	19'			45° S.	27	29	2	8086	.001			
			S. through most of the intersection												
			18' to 24' core very broken average fragment size	25			17° fault								
			~ 4cm												
		70%	25-26 Major fault zone, 17° to CA, calcite-gtz												
			vein in zone, 20% sulphides mostly py.												
			with 3% sphalerite												
			35-29 core rubble with occasional ~~into~~ zone gtz					94	96	2	8087	.001			
			veins at 28', brecciated boundary with					102	104	2	8088	.002			
			stopped fragments of wall rock @ 23% to CA					104	106	2	8089	.002			
			sph + py.					106	108	2	8090	.01			
								108	110	2	8091	.011			
			27- 2" rubble + clay gouge					110	112.5	2.5	8092	.008			
			29- coarse porphyry texture - calcite veining					112.5	114.5	2	8093	.005			
			with "pyritic envelopes"	29			50° S.	114.5	115.8	1.3	8094	.026			
								115.8	117.8	2	8095	.011			
88.5	112.5		MPOR					117.8	119.8	2	8099	.001			
			rock becomes fine grained, pale green												
			to grey-green (biotite & chlorite + pyrite)	50'			30° S.	119.8	121.8	2	8100	.001			
			fractured @ 45° to CA. Ag + pyrite in fractures												

106-102 - hornblende, calc - silicate alteration
 115.5 - calcite-mud gouge @ 45° to CA



DIAMOND DRILL LOG

Page 1 of 4

Collar:		Hole Survey		
NORTH	468 N	Footage	Azimuth	Dip
EAST	243 W			
ELEVATION				
LOGGED BY	J. McClintock			
DATE LOGGED	Sept 17, 1983			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test East Ridge

HOLE NO. TS-83-55
 CLAIM NAME Hugh
 COMMENCED Sept 17/83
 FINISHED Sept 18/83

From	To	Rwy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Notes
				DEPTH	% Dip	Str.	Gr. S. in	From	To	Width	No.	Au %	Au ppb		
0	12'		MPs (H, calc-sil,) 0-1.5' black argillite with distinct laminations. Green 10% py in fine seams that laminations and dry fractures that cross cut. 1.5 to 1.8' Becomes pale green with occasional reddish brown laminae. Most of the core is white to light green banded, caused by silicification of beds. This layer alternating with chlorite-sericite layers from 1 to 2 mm Carries 10% pyrr, 5% py + 1-2% sphal. mainly in wisp-like fracture replacements to the lam and laminar cross cutting fractures. 7'-8.5' Core oxidized, limonite and jarosite					1	3	2	8227	.01			
				3'			80° bn	3	5	2	8228	.014			
								5	7	2	8229	.01			
								7	9	2	8230	.011			
								9	12	3	8231	.011			
								17.5	20	2.5	8232	.108			
								20	22.3	2.3	8233	.08			
								29.3	20	2.7	8234	.013			
								32	34.5	2.5	8235	.005			
12'	18.5'		Lamp - Contacts sheared and rubbley					38.7	40.5	1.8	8236	.03			
18.5'	22.3		MPs (H, calc-sil, Q) light grey laminated to banded hornfelsed tuffaceous shale. Qtz w/frag (silicification) 15% pyrr + py sph ~ 1-2% trace cpy. Rock is bleached (lighter near the lamp contact) and has a higher sulphide content.	19			70° S.	40.5	42.5	2	8237	.02			
								52.5	53.2	0.7	8238	.001			
								55.8	57.8	2	8239	.009			
								57.8	59.8	2	8240	.008			
								59.8	61.8	2	8241	.001			

DIAMOND DRILL LOG

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-55
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]



DIAMOND DRILL LOG

Page 4 of 4

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method: _____		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-25
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rwy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	
				DEPTH	%	Dip	Dr.	From	To	Width	No.	Au %	Au ppb		
71	83.5		MPDA (H, Calc-sil minor Q) laminated whitish to green-white, contains garnet porphyroblasts to 2mm. Occasion reddish-brown surface to 2.5' Sulphides to 30'. mostly pyrite, py but contains up to 5% sph, 1-2% galena, trace of clay. Qtz impreg with sulphides												
83.5	95		Mr Lamp Upper contact is a mud seam.												
95	117		MPDA (Hver) Initial Variably hornfelsed, with hornfelsing most common and intense in upper part of the section, decreasing with depth 98' Hornfels bands alternating with light gray to white layers. White layers have chloritized amphiboles. 107 to 108 hornfelsing. 99 to 117 - Porphyritic texture apparent. Matrix dark gray (diarite?) Sulphides, - mostly pyrite on dics with minor fracture filling												
117	123		Lamp. Contact @ 45° to CA												
123			MPDP (Htr) Diorite - gray matrix with white feldspar phenocrysts End of Hole.												

133

133

DIAMOND DRILL LOG

Page ____ of ____

Collar:		Hole Survey		
NORTH	449 N	Footage	Azimuth	Dip
EAST	303.5 W	36	210°	-50
ELEVATION				
LOGGED BY	J. McClinton			
DATE LOGGED	Sept. 14/84			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE Test eastern extent Heino Zone

HOLE NO. 15-83-56
CLAIM NAME Hugh
COMMENCED Sept 14 /83
FINISHED Sept 14 /83

[illegible]



DIAMOND DRILL LOG

Page 1 of 5

Collar:		Hole Survey		
NORTH	449 N	Footage	220	210
EAST	303.5 W			-50
ELEVATION				
LOGGED BY	J. MacIntosh			
DATE LOGGED	Sept 17/83			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCAR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE Test East extension of Heino-Honey Zone

HOLE NO. TS-83-56A
CLAIM NAME Hugh
COMMENCED Sept 15/83
FINISHED Sept 17/83

From	To	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Notes
				Depth	° Dip	° Dr.	° S. Dr.	From	To	Width	No.	Au %	Au ppb		
0	5.08		MPOH light grey, indistinct porphyry texture, fine grained with garnet porphyroblasts. 2-3% disc pyr. fracture filling py-pyr and minor sphalerite					4.5	6.5	2	8116		15		
								6.5	7.8	1.3	8117	.001			
								7.8	9.8	2	8118	.002			
								9.8	11	1.2	8119	.001			
								11	13	2	8120	.001			
6.08			6.08 Inclusion of MPAs in MPOH, hornfelsed, calcite veined	12'			57° S ₁	13	15	2	8121	.001			
								15	17	2	8122	.001			
								17	20	2	8123		10		
8	19.5		MPV (H, Calc-Si/F) light green, with reddish areas of botitic hornfelsing Calc-silicate - Texture Hornfels	15'			52° S ₁								
			15 to 20 - becoming reddish brown with calc-sil impreg. 5% disc pyr, fine grained py-pyr and sph on fracture c.	16'			35° 30' Fault	43.5	45.5	2	8124		125		
								45.5	48.5	3	8125		20		
19.5	20	20%	Fault - broken rock and clay - steep and dip	15'			38°	48.5	51.5	3	8126		35		
								53.5	56	2.5	8127	.031			
20	24		MPV (H, F, Q) dark grey-green, with quartz impreg. Porc. is v. fig to fig hornfels texture. Barrois appearance Hornfelsing decreases in intensity with depth.	20			45° Barrois								
				22'			28° S ₁								
	22'		Fault - 1/2 inches												
24	31		MPop light grey to grey-green, well developed porphyritic texture	24'			18° S ₁								
				30'			10°								



DIAMOND DRILL LOG

Page 3 of 5

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. TS-B3-564
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rcy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log
				Depth	% Py	% Sch	% Sph	From	To	Width	No.	Au %	Au ppb	
111	124 ~~122~~	70	Mpts (H, Calc-Sil) Pale pinkish gray to red brown laminated to banded 115 - 124 Pyrr, py, sph, cpy, arseno combined to 20% 122 6" massive pyrr, py, sph & arseno. trs gal + cpy	120			34 th band S. 2	105	108	3	8128		75	
								108	110	2	8127		5	
								110	112	2	8130	.001		
								112	114	2	8131	.001		
								114	116	2	8132	.001		
								116	118	2	8133	.02		
								118	120	2	8134	.04		
124	126 ~~124~~		Fault zone ground rock, and clay sulphide mud. Broken calcite vein @ 20° to CH in fault zone, width ~4" Minor amounts of lampydic frag on the lower side of the fault.					120	122	2	8135	.002		
								122	124	2	8136	.031		
								124	126	2	8137	.003		
								126	128	2	8138	.001		
126	131		MPTV (H, Cal-Sil) pale green - reddish brown banded pinkish red-brown					128	130.4	2.4	8139	.002		
								130.4	132.4	2	8140	.01		
								132.4	134.4	2	8141	.022		
								134.4	136.4	2	8142	.015		
131	149.5 ~~135~~		MPTs (H, Cal-sil, Q) pinkish light to dark gray laminated Tuffaceous contains tiny rocks with lam @ 20° to CH. Well hornfelsed & recrystallized. Calc-sil impreg. Pyrr, ~15% Arseno ~1-2%, sph ~1-1% 149.5 Qtz impregnated with pyrr + schol along walls Lampy.	131			20 th lam	136.4	138.4	2	8143	.018		
								138.4	140.4	2	8144	.009		
								140.4	142.5	2.1	8145	.005		
								142.5	144.5	2	8146	.01		
				136			25 th S. 1	144.5	146.5	2	8147	.008		
								146.5	148.5	2	8148	.011		
149.5	151.2							148.5	149.5	1	8149	.01		



DIAMOND DRILL LOG

Page 4 of 5

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 83-56A
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From	To	REV	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	MT
				DEPTH	PA	DP	SW	From	To	Width	No.	Au %	Au ppb		
151.2	153		MPE (H, Calc-Sil, Q) Dark-brown-green banded, splinty 1-3% pyrite 10% fine grained hornfelsed texture. Qtz impreg, calc-sil					149.5	151.2	1.7	8150		65		
								151.2	153	1.8	8151	0.05			
								153	157.5	4.5	8152		5		
								157.5	160.5	3	8153		115		
								160.5	162.5	2	8154		60		
153	157.5		Lump					162.5	164.5	2	8155		125		
								164.5	166	1.5	8156		90		
157.5	166		MPE (H, Calc-Sil) with pinkish Gray to dark gray mudstone, hornfelsed to a v. lg dense massive rock. Pyrite, sph in wisplike bands and on fracture surfaces. Well banded with calc-sil impregnations	157.5			3/8 Bndg	166	168	2	8157		60		
								168	170	2	8158		260		
								170	173	3	8159		15		
								173	175	2	8160		70		
								175	178	3	8161		10		
								178	180	2	8162		20		
166	205		MPE (H, Qtz-miner) light Dark Green and brown banded, hornfelsed tuffs. Minor calc-sil impreg. Hornfelsing decreasing with depth 184-185 Calc-sil impreg, with quartz					180	183	3	8163		15		
								183	186	3	8164		50		
								186	189	3	8165		40		
								189	192	3	8166		50		
								192	194	2	8167		40		
205	215		MPE (H, C) mudstone, and hornfelsed with pinkish gray colour banded. 5% pyrite, calcite veining at 15-20° to CA. Strongly fractured (1-2cm spacing) calcite veining along these	210°			2 1/8	194	196	2	8168		60		
								196	198	2	8169		70		
								198	200	2	8170		60		
								200	202	2	8171		20		
								202	205	3	8172		90		

DIAMOND DRILL LOG



DIAMOND DRILL LOG

Page 1 of 4

Collar:		Hole Survey		
NORTH	468 N	Footage	Azimuth	Dip
EAST	243 W	115	120°	-10
ELEVATION				
LOGGED BY	J. M. McIntosh			
DATE LOGGED	Sept 20/83			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE Test East Ridge Zone

HOLE NO. TS-83-57
CLAIM NAME Hugh
COMMENCED Sept 19/83
FINISHED Sept 19/83

From	To	Rpy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	UNIT
				DEPTH	°	to Dr.	to Dr.	From	To	Width	No.	AN %	AN ppb		
0	18'	90	MPTS (H, Calc-sil)					0	3	3	6755		130		
			laminated gray to gray black argillite with pyrite 11 to					3	6	3	6756		110		
			laminations and in cross-cutting fractures. by 5'					6	9	3	6757	.009			
			rock becomes hornfelsed to a light green, reddish	12'			50° S.	9	12	3	6758	.024			
			brown banded to laminated rock. Subhides 10% py + pyrr					12	15	3	6759	.025			
			9' to 10' black argillite 1-1/2 sph.					15	18	3	6760	.002			
			11 to 12' oxidized (limonite)												
			14' to 15' Qtz impregnations accompanied by fracture												
			filling sph, pyrr, py					21.8	24	2.2	6761	.13			
18	21.8		Lamp					25	27	2	6762	.077			
			Upper contact broken - rubble zone.					27	29	2	6763	.049			
			lower contact @ 50° to CA					29	31	2	6764	.051			
								31	33	2	6765	.019			
21.8	24		MPTS (H, Calc-sil, Q)					33	34.5	1.5	6766	.016			
			Siliceous, white to gray white banded to												
			laminated, hornfelsed calc-sil altered. Total					37	39	2	6767	.111			
			sulphide ~.5%. Pyrr with pyrite ~.2% Sphal ~.2%					39	40.6	1.6	6768	.049			
			As tr, Cpy tr					41.4	43.4	2	6769	.039			
24	25		Lamp contacts @ 45° to CA					43.4	45	1.6	6770	.061			
								45	45.5	0.5	6771	.002			
								45.5	47.2	1.7	6772	.019			

DIAMOND DRILL LOG

DIAMOND DRILL LOG



DIAMOND DRILL LOG

Page 4 of 4

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method: _____		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-53
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rpy %	LITHOLOGY	STRUCTURE				Sample			Assays		Visual Log	
				DEPTH	%	to Dr.	to Dr.	From	To	Width	No.	Au %		Au ppb
67	79.8		MPon (H, calc-sil) Schistose, pinkish-brown layers or streaks alternating with pale gray green 3-5% dis py + pyer. logged to 70' 72-75 Pyer, pyer, sph in dark bands and wisp-like layers associated with qtz impregnations											
79.8	80.1		Qtz Vein cuts core axis @ 50° massive pyer along the lower contact											
80.1	101.7		MPon (H) Less hornfelsed, porphyry texture recognizable Alternately light gray to gray-green and reddish brown 95- rock becomes dark gray	80.1			5% S.							
101.7	109.3		Lamp Contact @ 50° to CH											
109.3			MPop Lith: medium gray, medium grained porphyry End of Hole No more left in Hole.											

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DIAMOND DRILL LOG



DIAMOND DRILL LOG

Page 4 of 5

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MUN-BN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. TS-83-58
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From m	To m	Rcy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log
				DEPTH	% Dr.	% Dr.	% Dr.	From m	To m	Width	No.	Au %	Au ppb	
114	196		PTMA (H, Calc-sil, C, Q minor) Zoned Andesite occasional dry pyrrhotite fracture, These are often gash-like. Contain traces of sphalerite. Hornfelsing locally becomes intense and rock has MPV appearance. 137 to 153 pinkish-brown hornfels, 4-6% pyrrh 149 calcite veining 153 169 strong hornfelsing (biotite)	127'			20' S ₁	125'	127'	2	6786		50	
196	200.8		MPV (R, C, Q minor) light gray to gray green fine grained, hornfelsed. 5-8% pyrrh, calcite veined at 25° to CA 3-4% pyrrh sphal 1-2% and	170'			18' S ₁	198.8	200.8	2	6787		30	
				178			22' S ₁	200.8	202.8	2	6788	.002		
								202.8	204.8	2	6789	.009		
								204.8	206.8	2	6790	.051		
				190			24' S ₁	206.8	208.8	2	6791	.009		
								208.8	210.8	2	6792	.018		
200.8	201		Fault zone // S ₁					210.8	212.8	2	6793	.023		
				200.8			18' F	212.8	214.8	2	6794	.017		
201	243.5		MPV (Calc-sil minor, C, R Q minor) with Gneiss, gray mudstone, calcite veined. This quickly changes into light-gray to gray green tuffs 5-8% pyrrh, 3-4% pyrrh fracture, sphal gal ~ 1/2 from 208'	212'			11' S ₁	214.8	216.8	2	6795	.04		
								216.8	218.8	2	6796	.033		
								218.8	220.8	2	6797	.029		
				212'				220.8	222.8	2	6798	.01		
				205'				222.8	224.8	2	6799	.02		
			230' pale-gray green with reddish-brown hornfels					224.8	226.8	2	6800	.008		



DIAMOND DRILL LOG

Page 5 of 5

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-58
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rwy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Notes
				DEPTH	% Dip	to hor.	to S. N.	From	To	Width	No.	AN %	AN ppb		
			bands - drusy calcite veins and argillite overprint					226.8	228.8		6801	.008			
			234-240 Sphal, gal + pyrr replacements along					228.8	230.8		6802	.038			
			fractures - up to 3cm wide ^{10% sph.} galena ~ 5%, 1/16 py					230.8	232.8		6803	.184			
			Total sulphides ~ 40%. most fractures					232.8	234.8		6804	.788			
			@ 32° to CA. Associated with Qtz impreg					234.8	236.8		6805	.430			
			240 pale green calc-sil altered					236.8	238.8		6806	.251			
								238.8	240		6807	.144			
243.5	252		MPDP					240	242		6808	.02			
			Light-gray green with pink garnet porphyroblasts					242	243.5		6809	.017			
			medium grained porphyritic												
			2-3% pyrr as disc, occasional pyrrite fracture												
			fillings Contacts @ 22° to CA					262	264		6810	.038			
252	263.5		MP+V (H, calc-sil)												
			possibly could be classed as Zebrin Andesite	260'			12° S.								
			strong biotite hornfelsing with calc-silicate impreg												
			// to S.												
263.5			MPDP												
			contact at ~20° to CA. Thin 4mm seam of												
			arsen + sph ^{along} the contact. Rock is medium												
			grained porphyritic. Light gray to green-gray												

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End of Hole
Necessity, Hole making water.



DIAMOND DRILL LOG

Page 1 of 6

Collar:		Hole Survey		
NORTH	478N	Footage	536	Depth
EAST	188W	Azimuth	110°	Dip
ELEVATION				
LOGGED BY	J. McCulloch	494'	110°	70°
DATE LOGGED	Sept 27/83			
MAP REFERENCE		Method: Acid at 494'		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILLICUM
 DRILLING CONTRACTOR DRILCAR
 ASSAYER HUN-BN LABORATORIES LTD.
 PURPOSE OF HOLE Test east extension of 65D Zone.

HOLE NO. TS 83-54
 CLAIM NAME Hugh
 COMMENCED Sept 19/83
 FINISHED September 27, 1983

From	To	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	MIN
				DEPTH	1/4" Dia	3/8" Dia	1/2" Dia	From	To	Width	No.	Au %	Au ppb		
0	6		Casing												
6	68	Post 10m 100%	MPDP (Hornbl., Calc-silic., Rhyolite) S _i indistinct medium grey, medium to coarse grained diorite porphyry of 3-4mm feldspar in a dark grey ground mass of biotite + amphibole (actinolite?) + Phenocrysts compose 30% of rock. Occasional bleaching (pale grey-green) argillite alteration off fractures. Minor red-brown (biotite) hornfelsed sections. Occasional calc-sil impreg (Pld + actinolite) Post 25' calc-sil + hornfels sections more common												
	94		36-68 garnet porphyroblasts to 3mm.												
	90		53' Fault zone - rubble @ 55° to CA												
	98		54' 16mm qtz impreg, irregular contact ~45° to CA wall rocks bleached, pyritic (S _i) with pyrite along margins also chlorite at contacts					53.5	54.6	1.1	4176		100		
			58 6mm qtz vein irregular contact @ ~45° to CA					57.5	58.5	1	4177		.008		
			58.5 4mm " " " " " "												
			Contact with below rock gradational over 3'					65.9	66.9	1	4178		.005		
68	121	95	Hornfels: MPDP? MPDP? (Calc-sil, Q, H)												
			Pale green to grey-green with reddish brown biotite hornfelsed zones. Rock is fine grained with garnet porphyroblasts with 1 to 5mm calc-sil impreg (actinolite + Pld) at 40° to 55° to CA. Original rock may have been fine grained (diorthite) or tuffaceous volcanic. Hornfelsing (red brown)	70			58° S _i								

discolored volcanic

DIAMOND DRILL LOG

Collar:	Hole Survey		
	Feetage	Azimuth	Dip
NORTH _____			
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-59
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]

DIAMOND DRILL LOG

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCAR
ASSAYER MUN-IN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 87-59
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]

DIAMOND DRILL LOG



DIAMOND DRILL LOG

Page 5 of 6

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 83-59
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Min.
				DEPTH	% Dr	% Dr	% Dr	From m	To m	Width	No.	Au %	Au ppb		
								349	350	1	4183		20		
353	353.6		Alaskite												
353.5	434.5		MPDP gray, dioritic porphyritic medium grained to medium grained, occasionally hornfelsed and calc-sil impregnations 376.5-437.5 Calc-sil in gray, hornfelsing 390.5 15cm calc-sil in gray					375.5	377.5	2.5	4184		950		
434.5	457.5		MPDA (H, Calc-sil, Q) Fine grained reddish-brown and pale green banded to mottled hornfelsed & diorite. Containing Feldspar-actinolite impregnations up to 3cm wide. minor bleaching off fractures. Qtz impregnations with associated sp. over and/or fracture fillings 451.5 to 457.5 weakly hornfelsed amphibolite texture, 455 to 457 horn,					434.5	437	2.5	4185		5		
								437	441	4	4186		400		
								441	444	3	4187		110		
								444	447	3	4188		180		
								447	450	3	4189		5		
								450	451.5	1.5	4190		30		
451.5	457.5		MPDP Medium gray, medium to coarse grained porphyritic diorite. Feldspar plumes form 20% of rock, matrix is fine to very fine grained mixture of amphibole, biotite and feldspar. Occasional actinolite -Feldspar impregnations with some Qtz impregnations becoming more coarse					475	478	3	4191		5		
								478	481	3	4192		5		
								481	484	3	4193		5		
								484	487	3	4194		5		
								487	490	3	4195		5		
								490	491.5	1.5	4196	1001			
								491.5	492.5	1.0	4197		100		

DIAMOND DRILL LOG



DIAMOND DRILL LOG

Page 1 of 6

Collar:		Hole Survey		
NORTH	449 N	Footage	Azimuth	Dip
EAST	303.5 W	251	210°	-85°
ELEVATION				
LOGGED BY	J. McClintock			
DATE LOGGED	Sept 20, 1983			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILLICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test East Extension of Heine Zone

HOLE NO. ES-60
 CLAIM NAME Hugh
 COMMENCED Sept 17, 1983
 FINISHED Sept 20, 1983

From	To	REV	LITHOLOGY	STRUCTURE				Sample			Assays		Visual Log	M
				DEPTH	% Di	% Sph.	% Sph.	To	Width	No.	Au %	Au ppb		
								7	9	2	6811	30		
0'	10		MPDd Pale grey-green, fine grained porphyry texture is indistinct 3.5 sphul, pyrr. & py. in fractures filling											
10	18		MPTv (H, Q minor, S minor, R minor) light green, fine grained, hornfelsed with minor quartz impreg. Fracture filling sulphides pyrr. & py., tr. sph., S ₁ is indistinct 16 Qt impreg, pyrr. in fractures											
18	46		MPDp (H minor) Contact rubble zone Light grey-green, medium grained with pink granat porphyroblasts. Local 1-2' sections with biotite hornfelsing (reddish-brown) 26-46 Hornfelsed (biotite) 34-36 Qtz impreg with pyrr. & pyrr. along walls by faulting adjacent	28			40 S ₁							
				46			52 S ₁							



DIAMOND DRILL LOG

Page 2 of 6

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-60
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rwy %	LITHOLOGY	STRUCTURE					Sample				Assays		Visual Log
				DEPTH	%	Dip	Sw.	Gr.	From	To	Width	No.	Au %	Au ppb	
46	48.5		Lamp Contact @ 52° upper " " 40° lower lower contact angularized with jasperoid infilling ~ 4% finely dis pyrite												
48.5	51.5		MPDP (Hmines) Contact @ 40° at 51.5 Light to dark grey green												
51.5	53		PTMA (H, Cal-sil, C) dark green to green brown f.g. hornfelsed and calc-sil implog. rock 1-3% pyrite on fracture filling. Rock mottled to banded.												
53	54		Black Porphyry Whitish green angular to sub-angular feldspar in a black vfg matrix. Plagioclase ~ 20% of rock. Strong lineation S ~ 50°	53					53						

[illegible]



DIAMOND DRILL LOG

Page 5 of 6

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 83-60
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	
				DEPTH	W	W	W	From m	To m	Width	No.	Au %	Au ppb		
118	126		lamp. Contacts 25° to CA												
126	139		MPDP (H, Calc-sil (R. miner)) similar to 111 to 118, with better developed porphyry texture. Finely dis. pyrr., occasional pyrr. along fractures.	127			3' S.	129	131		6815		80		
								142	144		6816		115		
139	140		Hornfels? v. f.g. pyritic both dis. and fracture filling @ 20° to CA (looks black and dense enough to be a lamp.)					155	156.5		6817	.011			
140	142		MPDP (H, Calc-sil)					156.5	158.5		6818	.011			
								158.5	160		6819	.009			
142	145		Hornfels, black v.f.g. pyritic as at 139 to 140					165	167		6820		560		
145	152		lampophyre contacts 45°					167	169		6821		385		
								169	171		6822		210		
	146		Clay-talc shear zone @ 20° to CA - Fault.					171	172		6823		230		
								172	174		6824		235		
152 153.3	153.3		Hornfels - black v.f.g.					174	176		6825		425		
								176	178		6826		450		
153.3	160		Hornfels (K, Calc-sil, Q) Noted cream, pink and green, possibly was MPDP 10% pyrr., 5-10% pyrr. as fracture fillings, 2% sph 1% Ars. to of gals. Because graphitic and laminated by 160'	155			3' S.	182	184		6829		190		
								184	186		6830		15		



DIAMOND DRILL LOG

Page 6 of 6

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 83-60
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From	To	REV	LITHOLOGY	STRUCTURE						Sample				Assays		Visual Log
				DEPTH	% Py	% Dr.	% S	% Bn	From	To	Width	No.	Au %	Au ppb		
160	164.5		Lump: Fault gouge 1" c 45° to ca													
165	206		MP12 (Hematite, Q)								186	188	2	6831		765
			sphilitic medium gray to dark-gray laminated tuffaceous	186					42" lam		188	190	2	6832		145
			Pyrite, py, + sphalerite as layers and								190	192	2	6833		25
			discontinuous wispy like replacements along laminations								193	195	2	6834		5
			Sph 1-2% spg to, Arc to.								195	197	2	6835		80
			166 to 167 5% sph								197	199	2	6836		30
			172-174 bleached (light gray) weakly hornblende								199	201	2	6837		350
			Carbonate veining								201	202	1	6838	0.038	
			178-179 close spaced calcite veining (3-run)								202	204	2	6839	0.044	
			178 - shear, carbonate-chlorite veins								204	206	2	6840		
			181 10cm gte vein with Arc (discontinuous)								206	208	2	6841	0.001	
			180 → 206 Hornblende, Calc-sil impreg + Q impreg								208	210	2	6842	0.001	
			202 → 206. Massive sulphide bands 1cm to 12cm								210	212	2	6843	0.001	
			generally becoming thicker and more closely spaced								212	214	2	6844	0.001	
			with depth. Av. sulphide content 30%, 5% sph													
			1% gal, 1% spg, 1% Arc Strong Q impreg													
			esp. near the more massive sulphides													
			206 10cm of massive pyrrhotite, brown sph, Arc													
			gal + spg													
206			MPDP (Hematite, Barium Carbonate)													
			Good medium grained green to gray green													
			porphyry with local sections of hornblende													
			1-5% pyrr as diss. occasional pyrrhotite fracture													
			End of Hole													

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DIAMOND DRILL LOG



DIAMOND DRILL LOG

Page 2 of 7

Collar:	Hole Survey		
NORTH _____	Footage	Arimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 23-61
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rwy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log
				DEPTH	% Py ₂ SiO ₅	% Py ₂ SiO ₅	% Py ₂ SiO ₅	From	To	Width	No.	AN %	AN pob	
37.2	42.5		MPDA (H) very fine grained schistose with pinkish gray and gray green calc-silicate containing inclusions of partially assimilated MPDs. MPDs frags are angular with diffuse contacts MPDA is siliceous Py + Pyrr disseminated to a lesser extent along fractures. Sph 1-2% 40.5 Frags of MPDs form 50% of the core. Py + Pyrr content increasing towards lower contact					50	52	2	4299	.036		
								52	54.1	2.1	4300	.02		
								54.1	55.1	1	4301	1.6		
								55.1	57	1.1	4302	.145		
								57	59	2	4303	.061		
								59	61	2	4304	.018		
								61	62	1	4305	.001		
								62	64	2	4306	.029		
								64	69	5	4307	.002		
42.5	46.5		MPDs (H, Calc-sil) Brecciated, dark gray, fine grained, hornfelsed mudstone cut by green calc-silicate impregnations					69	71.5	2.5	4308	.013		
								71.5	74	2.5	4309	.042		
								74	76	2	4310	.004		
								76	78	2	4311	.005		
								78	80	2	4312		60	
								80	81.8	1.8	4313		160	
								81.8	83	1.2	4314		80	
46.5	50		Hornfels (MPDs?) (Calc-sil) Fine grained, steel-gray and reddish-brown banded hornfels. Contains 20% sulphide, 3-4% sph					83	85	2	4315		720	
								85	87	2	4316		290	
				43			47 S ₁	87	89	2	4317		100	
								89	91	2	4318	.002		
50	54.5		MPDA (H) schistose, fine to very fine grained clastic, limonitic staining along fractures, reddish brown to gray					91	93	2	4319		120	
				50			50 Calc	93	95	2	4320	.012		
				50			50 S ₁	95	97	2	4321	.081		



DIAMOND DRILL LOG

Page 3 of 7

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MUN-IN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-61
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log
				DEPTH	°	Dip	Dr.	From	To	Width	No.	Au oz/g	Au ppb	
			Pyrr + sph green on fresh surface. 10% sulphides, with 2% sph mainly in 1-2mm fractures to S, lesser amounts in dissem.					97	99	2	4322	.016		
								99	101	2	4323	.034		
								101	103	2	4324	.013		
								103	105	2	4325	.017		
								105	107	2	4326	.015		
								107	108.5	1.5	4327	.057		
								108.5	110.5	2	4328	.08		
								110.5	112.5	2	4329	.045		
								112.5	114.5	2	4330	.012		
								114.5	116	1.5	4331	.015		
								116	117	1	4332	.002		
								117	119	2	4333	.009		
54.1	55.1		Qtz Vein, conformable to S. contains 2% gal 10% sph, 2% Arsg 15% pyrr. "V.G."					119	120	1	4334		30	
								120	121	1	4335	.014		
								121	123	2	4336	.027		
								123	125	2	4337	.018		
								125	127	2	4338	.078		
								127	129	2	4339	.005		
								129	130.5	1.5	4340	.001		
								130.5	132.5	2	4341	.006		
								132.5	135.2	2.7	4342	.016		
								135.2	137.2	2	4343		50	
								137.2	138.5	1.3	4344		190	
55.1	57		Hornfels (Q Calc-sil) "Sharn" pale grey-green to yellowish green, qtz-trondhjemite skarn hornfels. Qtz impregnations through out. 6-7% sph, as dis. blebs, 9% galena, 2% Arsg, 10% pyrr. "V.G."											
57	62		MPGA (H) fig. schistose dacite reddish-brown - with pale green layers Pyrr + py in fractures and as disseminations. Fractures the S. sph with pyrr forms 1-2.1											
62	81.8		Hornfels (unknown) (Q) yellowish brown, fine grained hornfels with qtz impregnations. Rock laminated, with sph sph, pyrr + galena along fractures also Arsg to 1.1 79 - yellow-brown layers alternating with pink-brown layers 79.2 - 6mm section of near massive pyrr, py, sph, Arsgal in a siliceous to qtz impregnation conformable to S.	63			50	6mm						



DIAMOND DRILL LOG

Page 4 of 7

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILLICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO.	<u>83-61</u>
CLAIM NAME	_____
COMMENCED	_____
FINISHED	_____

From m	To m	Rwy %	LITHOLOGY	STRUCTURE				Sample			Assays		Visual Log	
				DEPTH	% Dip	So Dr.	So S Dn	From m	To m	Width m	No.	Au %		Au ppb
81.8	83	98	Hornfels (MPTV?) (Calc-sil, Q) light gray green to green fine grained hornfels contains actinolite, chlorite and lesser biotite cut by calc-sil and qtz impregnations.	82			50° S1	138.5	139.7	1.2	4345		30	
								139.7	141.2	1.5	4346		40	
								141.2	143.3	2.1	4347		275	
								143.3	145.3		4348		60	
								145.3	147.3		4349		115	
								147.3	149.3		4350		65	
83	107	98	Hornfels (Q, Calc-sil) yellowish brown fine grained sugary textured quartzose hornfels becoming banded with reddish brown lenses with depth. Impregnated by qtz and calc-sil along the S ₁ laminations. Sulphides assoc. with qtz impreg.					149.3	151.3	2	4351		125	
			94 pale green and reddish brown mottled					151.3	153.3		4352		320	
			96 coarse qtz impreg with sph 8%, Act 2%, gal 1% and 20% pyrr "V.G."					153.3	155.3		4353		100	
			97.5 3mm qtz impregnation, sph 10%, galena 1%					155.3	157.3		4354		85	
			101 to 102 coarse reddish brown with calc-sil + qtz impreg pyrr 15% sph 4%,					157.3	159.3		4355		235	
								159.3	161.3		4356		70	
								161.3	163.3		4357		130	
								163.3	165.3		4358		95	
								165.3	167.3		4359		20	
								167.3	169		4360		40	
								169	170		4361	.07	10	
107	108.8	48	Hornfels intense calc-sil + qtz impreg Pink-gray and white banded - 10% sph, 20% pyrr	107			58° S1	170	172		4362		30	
								172	174		4363		70	
								174	176		4364		85	
108.8	116	98	Hornfels (Q, Calc-sil) yellowish-brown f.g. sugary textured, quartzose					176	178		4365		320	
								178	180		4366		210	

DIAMOND DRILL LOG



DIAMOND DRILL LOG

Page 1 of 6

Collar:		Hole Survey		
NORTH	352N	Footage	Azimuth	Dip
EAST	349W	320	300	-60
ELEVATION				
LOGGED BY	J. McClinton			
DATE LOGGED	Sept 23, 1983			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test south end of Hains-Money Zone

HOLE NO. T3-83-62
 CLAIM NAME Shingle Twp 3
 COMMENCED Sept 21/83
 FINISHED Sept 23/83

From m	To m	Rpy %	LITHOLOGY	STRUCTURE						Sample				Assays		Visual Log
				DEPTH	P %	Dip °	Dr. °	P %	Dip °	From m	To m	Width	No.	Au %	Au ppb	
0	35		MPOR (H minor, R) grey-green with areas of red-brown. Monocryt of Pdp to 4mm. Argillie overprint along fractures. local calcite veining. Red-brown areas are hornfelsed zones 20.5' Qtz vein 1" limonitic, dispy in wall rock 27' Qtz vein 4" " " " " " Both veins at 55° to CA							20	21	1	6841	1001		
				15				30°	S.	26	27	1	6842	1001		
										32.5	33	0.5	6843	1001		
35	74		MPOR (C, R, Q, calc-sil) Pale grey green, porphyry texture indistinct Occasional areas of hornfelsing (red-brown colour) 36-37' 48.5 to 49.5 porphyritic texture Sulphides 1-3% dispyrr, pyrr, sph to cpy form w/ep like layers to 2mm conformable to S ₁ and replacement along fractures, usually associated with quartz in preg. occasional ext pale-green calc-sil -progenations). 36.5 pyrr, sph, to cpy 39.8 pyrr on fracture fillings following S ₁ associated with areas of argillie alteration. 47-48' carbonate - argillieally altered shear-fracture zone 2-3% dispyrrite fract on C 50° to CA 49.5-51' calc - argillie altered zone associated with.							50	52	2	6844	5		
				35				35°	S.							

DIAMOND DRILL LOG

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-62
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]



DIAMOND DRILL LOG

Page 5 of 6

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-62
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	REV %	LITHOLOGY	STRUCTURE					Sample				Assays		Visual Log	M m
				DEPTH	% Dip	Dr.	Gr.	Pa.	From m	To m	Width	No.	Au %	Au ppb		
176.5	177.5		Alaskite						174	175.8	1.8	4108		10		
177.5	180.5		MPrv or MA biotite hornfels with calc-sil impregnations light brown to green banded.						175.8	179.5	3.7	4109		5		
									179.5	180.5	1	4110		10		
180.5	188		Alaskite													
188	189		MPrs - dark grey, poorly laminated graphitic mudstone													
189	193		MPrv (H, R, C.) Hornfels biotite hornfelsed mafic tuff with carbonate veining and argillite overprint. Gradation into the underlying Zebra - Andesite.													
193			PTMA (calc-sil, Hornf, C.) Zebra andesite - banded pale green - dark green. becoming localized with depth. Local sections of biotite hornfelsing and carbonate veining.	185				50	S.							
			218.5 1" Alaskite dyke													
			239 2" quartz - pyrite veins, associated with fragments of massive sulphide in a qtz gangue. for 1 foot either side of the vein is hornfelsing	239				50	qtz band							



DIAMOND DRILL LOG

Page 1 of 5

Collar:	Hole Survey		
NORTH 291N	Footage	Azimuth	Dip
EAST 4334	0	030°	+15
ELEVATION	419'	030°	-19
LOGGED BY J. McClintock			
DATE LOGGED October 3, 1983			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILLICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE Test up dip from TS-83-4746, 48

HOLE NO. TS-83-63
CLAIM NAME Sandy Tan 3
COMMENCED Sept 30/83
FINISHED October 3/83

From m	To m	Rwy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log
				DEPTH	% Dip	50 Dr.	0.5 S. Dip	From m	To m	Width	No.	Au %	Au ppb	
0	23	95	PTma (H, Calc-sil, Q-miner) dark green, biotite hornfelsed meta andesite - pale green calc-sil impreg along S. Qtz impreg 2% dis p. gr.	10'			25° S.							
23	36	95	Albite - biotite gran. to biotite & sil lower contact @ 30° to CH.											
36	71.5	98	PTma (H, Calc-sil, Q-miner) Dark green - relict tuffaceous texture (ash-lapilli) or biotite zebra andesite											
71.5	74	95	Lamp											
	173.7'	95	PTma (H, Calc-sil, Q-miner, C-miner) dark green, hornfelsed (biotite) with pale green calc-sil impreg along S. logged to 120'	75 89 110 133 154 166 173			25° 27° " " " " "							

HOLE NO. TS B3-63
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]



DIAMOND DRILL LOG

Page 3 of 5

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO.	<u>TS 83-63</u>
CLAIM NAME	_____
COMMENCED	_____
FINISHED	_____

From	To	Rwy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Mnt.
				DEPTH	% R ₂ S ₂ D ₂	% R ₂ S ₂ D ₂	% R ₂ S ₂ D ₂	From	To	Width	No.	Au %	Au ppb		
	389'	95	PTUA (meg H ₂ K) - med green to purplish green - laminated med andite with inturb. in 2 m of 3 above Andrite	381											
	400.5'	98	MPTV (minig meg H ₂ K) - Fine grained, med - dark green - light green andesite fully becoming laminated with minig dark grey shale interbeds (< 10m) with depth.	404'	62										
								408.5	410.5	2	4601		140		
								410.5	413	2.5	4602	.007			
								413	414.5	1.5	4603	.001			
413	952		MPTV interbedded with MPCH+TS - tan green buffaceous andite interbedded with dark green - black laminated shale, poss. buffaceous. - Fine filling of qb, carbonate, apose. calc-silicate. Fine dry fracture < 1mm of Py+Pyrr 409.5 - 410.5. Or varying intense 412.5 - 413.0'	409	85										
								414.5	417	2.5	4604	.288			
								417	419	2	4605	.03			
								419	422	3	4606	.007			
								422	424	2	4607	.007			
								424	425.5	1.5	4608	.009			
								425.5	427.2	1.7	4609	.042			
								427.2	430	1.8	4610	.007			
414'	80		MP TSCH, ? - dark grey - black graphitic shale, with buffaceous horizons cut by pale green - white mottled porphyry dyke. upper contact 20' C.A.	430											
								430	432	2.0	4611		220		

HOLE NO. T282-63
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]



DIAMOND DRILL LOG

Page 1 of 3

Collar:	Hole Survey		
NORTH 352 N	Footage	Azimuth	Dip
EAST 349 W	183	270	-40
ELEVATION			
LOGGED BY J. MacIntosh			
DATE LOGGED Sept 26, 1983			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MUN-BN LABORATORIES LTD.
PURPOSE OF HOLE Test South end of Hinge - Flaring Zone

HOLE NO. TS-83-64
CLAIM NAME Sandy Toe 3
COMMENCED Sept 23/83
FINISHED Sept 25/83

From m	To m	Rwy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Notes
				DEPTH	% Dip	50 Dir.	50 Dir.	From m	To m	Width	No.	Au %	Au ppb		
0	30.5	0-13 50%	MPop												
		13-30.5 92%	weathered and fragmented. Grey-green, medium grained porphyritic, with pink garnet perchochite. 1-3% diopside					38	40	2	4111		200		
								40	42	2	4112		50		
				40'			45° S	42	44	2	4113		80		
								44	46	2	4114		65		
30.5	56	93	MPoa (Q)					46	48	2	4115		5		
			Generally indistinct porphyry, with minor sections of porphyry. Colour Calcare grey-green except where hornfelsed (Red-brown). Hornfelsing restricted to 30.5 to 40'					48	50	2	4116		30		
								50	52	2	4117		30		
								52	54	2	4118		55		
								54	56	2	4119		5		
			38-53 quartz impregnations with associated pyrite 1-2% sph in fracture fillings 3% 5% 10% 48-53 sph + pyrite in fractures					56	57	1	4120		5		
								57	59	2	4121		20		
56	57	95	MPts (Q)												
			black, buffaceous mudstone, qtz impregnated calcareous mudstone 20% calciferous as calciferous mudstone layers and cross cutting fractures	56			48° E								

DIAMOND DRILL LOG

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCAR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-64
CLAIM NAME _____
COMMENCED _____
FINISHED _____

LITHOLOGY			STRUCTURE					Sample				Assays		Visual Log
From M	To M	REV %	DEPTH	% Dip	So Dr.	Dip S	Dip	From	To	Width	No.	Au %	Au ppb	
57'	77'	78	MPOA (Q, RC)											
			pale gray-green, occasional sections of biotite hornfelsing. Pz. indistinct porphy texture											
			65-66 Carbonate - argillically altered about close spaced fracturing											
			75-76 Calc-sil imprecipitations											
77	78	70	Rubble iron ore lens frags (Fault?)											
78	80.3	95	MPs (H, Q, Calc-sil)											
			laminated dark-gray, to gray-green hornfelsed tuffaceous mudstone. Sphalerite in conformable layers to 3mm and in cross cutting fractures 4% sphalerite					50' km						
			6% py, 1% Arsenic 10% pyrite. Quartz + calc-sil impreg. Over print of Argillie alteration in envelopes about fractures											
			77.8 to 80.3 hornfels											
80.3	82	98	Feldspar Porphyry (PAP?)											
			Contacts @ 45° to CA. large 4mm tabular Al ₂ SiO ₅ in a fine grained light green groundmass. Phenocrysts form 25% of rock											
								78	80.3	2.3	4122	.002		
								80.3	82	1.7	4123		5	
								82	83.1	1.1	4124	.01		
								83.1	85.1	2	4125	.001		
								85.1	87.1	2	4126	.017		
								87.1	89.1	2	4127	.012		
								89.1	91.1	2	4128	.002		
								91.1	93.1	2	4129	.002		
								93.1	95.1	2	4130	.006		
								95.1	96.5	1.4	4131	.001		
								96.5	97.5	1	4132	.015		
								97.5	99.5	2	4133	.016		
								99.5	101	1.5	4134	.004		
								101	103	2	4135	.023		
								103	105	2	4136		35	



DIAMOND DRILL LOG

Page 1 of 8

Collar:		Hole Survey		
NORTH	488AJ	Footage	Azimuth	Dip
EAST	268W	157	110°	-40
ELEVATION				
LOGGED BY	J. McClintock			
DATE LOGGED	Oct 1, 1983			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test Eastridge between hole 61 and 57-55

HOLE NO. T3-83-65
 CLAIM NAME Hugh
 COMMENCED Sept 30, 1983
 FINISHED 5, October 1, 1983

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Notes
				DEPTH	% Dip	° Dip	Dir.	From m	To m	Width	No.	Au %	Au ppb		
0	5.5	50%	PTMA (H, Calc-sil) Dark-green meta andesite - calc-sil impreg along S ₁ (calc gray-green) 1-2% dis pyrr	4'			30° S.								
5.5	13	20%	Rubble - 1-3m fragments of biotite hornfelsed siltstones (MPss)												
13	14	95%	MPts (H, Calc-sil/F) dark medium to dark gray laminated mud tuffaceous mudstone with pale green, red brown bands (calc-sil impreg + hornfelsed) impreg // lamination	13.5			67° 1m								
14	15.5	50%	Rubble - rem fragments of MPts (mudstone) in to 1m.												
15.5	21	70%	MPts (H, Calc-sil/F) red-brown and pale green, laminated py. hornfelsed tuffaceous siltstone - Pyrr are diss. and with py and traces of sph in fractures and conformable 1-2mm layers // to S ₁					12	14	2	5407	.003			
21	25.1	70%	MPDA? (QF) Schistose - sericite-feldspar schist, light gray to light gray-green, 1cm or less gl. impurities widely spaced 30cm - 5% pyrr and dis and discontinuous bands // to S ₁ , trace sph.	22			65° S ₁	14	17	3	5408	.009			
								17	19	2	5409	.007			
								19	21	2	5410	.01			
								21	23	2	5411	.003			



DIAMOND DRILL LOG

Page 2 of 8

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILLICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 93-65
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Notes
				DEPTH	% Dip	So Dip	So Dip	From m	To m	Width	No.	Au oz/g	Au ppb		
25.1	31.5	98/	MPts (H, Calc-sil, Q) fine grained to v. f. pink-gray to red brown hornfels/ calc-sil impreg. siltstone to mudstone. Qtz impreg near upper contact with ass pyrr + sph + py. From 25.1 to 27' or 20% py 4% sph 5% py.					23	24						
								24	26						
								26	28						
								28	30						
								30	31.5						
								31.5	33.5						
								33.5	35.7						
								35.7	37.7						
								37.7	39.7						
31.5	35.7		MPss (Q, Calc-sil) fine grained whitish green siltstone or tuff cut by wisp-like layers of laminae of pyrr, sph and py. These sulphide bands or layers often are biotite (reddish brown). The ground mass is v. f. gls + fld + sericite - Rock is obviously schistose. Av. sulphide cont. 10% pyrr, 2-3% sph 5% py. 35' from Qtz injection - 20% ^{pyrr} ^{pyrr} 5% sph in wisps + fro blasts and fracture fillings. Gradational contact (upper over lens)	34			20' S.	39.7	41.7						
								41.7	44						
								44	46						
								46	48						
								48	50.8						
								50.8	52.5						
35.7	39.7		MPss or MPss? schistose; sericite - feldspar + gls schist, light to pale gray green. Probably was a tuffaceous siltstone but now is more dacite composition. 20% ^{pyrr} ^{pyrr} 5% sph. Upper contact gradational over lens.					52.4	58.4						
								58.4	60.3						
								61.8	63.5						
								63.5	65						
								65	67						

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-65
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]

DIAMOND DRILL LOG



DIAMOND DRILL LOG

Page 6 of 8

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 83-65
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

			LITHOLOGY	STRUCTURE				Sample				Assays		Visual			
From	To	Rev		DEPTH	%	Dip	So Dir.	Op	S	Dir	From	To	Width	No.	Au oz/g	Au ppb	Log
67	67	98	Lamp Dyle contacts @ 80° to CA														
67	79.8	98	MPs (Calc-sil, H, K?) "Calc-sil Hornfels" pink-gray and pale gray-green, laminated to mottled fine gr. hornfelsed siltstone Actinolite-sph infrag. throughout. Pink Epidiorthic sections (Kagun?) or megacrysts. Pyrr + py in wisp-like layers and discontin bands to cm. Total sulphides 15% pyrr 5% py 37 sph 78° "V.G."														
79.8	84.1		Lamp														
84.1	90		MPs (H, Calc-sil, R.) light gray to pale green-gray mudstone to silty siltstone - weakly schistose (sorient). Thin calc-sil infrag. Argillite (pale green) alt. envelopes along fracture. pyrr and calc-sil fracture fillings. Pyrr 5% on fract & thin.														
90	95		Lamp dyle - inclusion of MPs (H) 194'														
95	96.5		MPs (qtz inject, Calc-sil) laminated toffee mudstone-siltstone. Thin to	96.5				6.5	S.								



DIAMOND DRILL LOG

Page 11 of 2

Collar:	Hole Survey		
NORTH 352N	Footage	Azimuth	Dip
EAST 349W	120	270	-70
ELEVATION 2233m			
LOGGED BY J. McChesley			
DATE LOGGED Sept 26, 1983			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test South extension Haina Zone

HOLE NO. TS-B3-66
 CLAIM NAME SANDY TON 3
 COMMENCED Sept 25/83
 FINISHED Sept 25/83

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Min.
				DEPTH	% Dip	So Dir.	Op Si Dir.	From m	To m	Width	No.	Au %	Au ppb		
0	29	0-10 80%	MPop (H, R.) Ridish-brown, medium grained porphyritic rocks with medium grained garnet porphyroblasts. S. undistinct. 1-2% dis. pyrr. Argillite alteration envelopes around fractures (pale green)												
		10-15 85%						28	30	2	4137		210		
								30	32	2	4138		50		
								32	34	2	4139	1002			
		15-20 90%						34	36	2	4140		5		
28	77	20-21 95%	MPop (Q) light gray green, fine grained with a moderately developed S. Local areas of biotite hornfelsing (red-brown colour)					36	38	2	4141		20		
				38			30° S.	38	40	2	4142		10		
								40	42	2	4143		10		
								42	44	2	4144		20		
								44	46	2	4145		5		
			30-38' 1% 3% 8% sph + py + pyr infilling fractures associated with quartz impreg.					46	48	2	4146		20		
			42-46 quartz impreg with calc sph-py-pyr fracture filling.	50			31°	48	50	2	4147		25		
			52-58 quartz impreg appears 26cm apart					50	52	2	4148		20		
			58-77 Inclusions of MPop in dacite (dark green) cut by calc-sil + Qtz impreg with sulphide fracture fillings Sph 1-2% av.					52	54	2	4149		160		
			61-63 medium green hornfelsed MPop					54	56	2	4150		5		
								60	62	2	4151	1003			
								62	64	2	4152	1009			
77	89.7		MPop (H, Calc-sil, QF) dark gray, laminated, hornfelsed tuffaceous mudstone Calcite veins, pink hornfels around quartz impreg.					64	66	2	4153	1001			
								66	68	2	4154	1002			



DIAMOND DRILL LOG

Page 2 of 2

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILLICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO.	<u>83-66</u>
CLAIM NAME	_____
COMMENCED	_____
FINISHED	_____

From m	To m	Revs %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	M
				DEPTH	1/4 Dip	3/8 Dip	1/2 Dip	From m	To m	Width	No.	Au g/g	Au ppb		
			20% sulphides, 10% pyrite, 5% py 4% pph 1% arsenic												
			83 Fault Zone					68	70		4155				
			87-88 Hornfelsed MPTr? medium green (mafic)					70	72		4156				
			88-89 unmetamorphosed mudstone					72	74		4157				
								74	76		4158				
89.9	95.1		MPaa (Q,R)					76	77		4159				
			light gray-green, quartz impregnated 2-3 % sph in fractures with py + pyrr and trace of arsenic					77	79		4160				
								79	81		4161				
95.1	106		MPts (Q, C)					81	83		4162				
			banded to laminated med-gray ^{tuff} mudstone	96			38° lam	83	85		4163				
			with 25% combined sulphides as continuous layers, and cross cutting fractures. 4-5% sph, 7% py, 10% pyrr					85	87		4164				
			1% Arsenic					87	89		4165				
			97-105 Qtz impregnations					89	99.9		4166				
			105-106 hornfelsed tuffs - original textures not preserved					99.9	92		4167				
								92	94		4168				
								94	95.1		4169				
106			PTma (H, Calc-Sil)					95.1	97.1		4170				
			Zebra andesite - dark green - light gray-green striped local areas of biotite hornfelsing.					97.1	99.1		4171				
								99.1	101.1		4172				
								101.1	103.1		4173				
								103.1	106		4174				
								106	108		4175				
	120		End of Hole												

No casing left in hole.

Page 1 of 9

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-IN LABORATORIES LTD.
PURPOSE OF HOLE Test gold zone in DDH-83-61 down dip

HOLE NO. T3-B3-67
CLAIM NAME Hugh
COMMENCED October 1, 1983
FINISHED October 4, 1983

From m	To m	Revs %	LITHOLOGY	STRUCTURE						Sample				Assays		Visual Log
				DEPTH	% D ₁	% D ₂	% D ₃	% D ₄	% D ₅	From m	To m	Width	No.	Au %	Au ppb	
0	8		Casing													
8	15	90	MPDH (Q) fine grained schistose, light-gray-green, d. 5-1.57 pale and pink garnets. Pyroxene staining (orange) - Pyrite in fracture fillings - granular; Pyrite in fractures and dissemination. Sphal ~1% in fracture fillings with sphalerite.							7	10	3	5412	.011		
										10	13	3	5413	.002		
										13	15	2	5414	.002		
										18.5	20	1.5	4404	.009		
15	18.5	90	Lump							37.5	39.5	2	4405		50	
										39.5	41.5	2	4406		120	
18.5	20	95	MPDH (Q, R) light gray-green, weakly schistose and argillaceous offered. clots of chloritoid biotite? 1-2' pale pink garnet porphyroblasts. Rose qtz inclusions. Pyrite fracture filling. 1-2% sphal in fractures (discontinuous) Pyrite and/or, lesser in fracture fillings (with sph).	22				55	5	41.5	43.5	2	4407	.008		
										43.5	45.5	2	4408		85	
										45.5	48	2.5	4409		45	
										52	54	2	4410		340	
20	21.3	90	Lump ~~pale~~ med green gray-siliceous with argyl. plagioclase Contact @ 50° to CA cross cuts S ₁ (mainly conjugate)							57	59	2	4411		280	
										59	61	2	4412	.002		
21.3	21.8	95	MPDH (R) light-gray-green, dark, bright chloritoid in lamellae							61	62	1	4413	.032		
										62	64	2	4414	.008		

light gray green densely hirsute. chlorotic in anagallis aff.
attached is var. with in lango.



DIAMOND DRILL LOG

Page 2 of 9

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 83-67
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

LITHOLOGY				STRUCTURE					Sample				Assays		Visual Log
From	To	Rwy %		DEPTH	% Dip	Dr.	Sp	Si	From	To	Width	No.	Au %	Au ppb	
21.8	33	95	Lamp. argite porphyry with med green groundmass contact would give lamp a 170°/75°W attitude.						64	66	2	4415		325	
									66	68	2	4416		105	
									68	70	2	4417		110	
33	37.5	98	MPOM (H, Calc-silicate) medium grey to pink grey, hornfelsed fig. desite with inclusion of grey MPts at 35'. Garnet porphyroblasts to 37'. Sph ~ 1% in dis and fracture fillings	35			65°	S ₁	70	72	2	4418		155	
									72	74	2	4419		90	
									74	76	2	4420	.006		
									76	78	2	4421	.022		
									78	80	2	4422	.002		
									80	81	1	4423	.001		
37.5	48	98	MPOM (R, Q) light grey-green, weakly schistose with poorly developed porphyry texture. Close spaced fractures @ 40° to CH strong argillite - argillite envelopes off fractures. - One short bright hornfelsed section at 43'. Qtz injections along S ₁ to rem. Sph + py + per in fractures and along walls of Qtz injections. Av 1% sph.	40'			65°	S ₁	81	82.5	1.5	4424	.02		
									82.5	84	1.5	4425	.036		
									84	86	2	4426	.09		
									86	88	2	4427	.021		
									88	90	2	4428	.03		
									90	92	2	4429	.045		
									92	94	2	4430	.029		
									94	96	2	4431	.009		
48	52	98	Lamp med green argite porphyry - upon contact broken lower contact 70° cuts S ₁ at low angle (semi-conformable)	61			45°	S ₁	96	97.5	1.5	4432	.007		
				70			40°	S ₁						70	

Page 3 of 9



DIAMOND DRILL LOG

Page 4 of 9

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO.	<u>83-67</u>
CLAIM NAME	_____
COMMENCED	_____
FINISHED	_____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	M
				DEPTH	% G	% S	% D	From m	To m	Width	No.	Au % Au ppb			
			py + pyrr with 10 to 15% sphal along fractures, 2% dispyrr.												
91	97.5	98	MPH? (Q, Calc-Sil, Hauser)					102	104		4436	.01			
			light-grey-green sericite - feldspar schist complex					104	106		4434	.01			
			minor folds, with a grey mudstone inclusion at 99'					106	108		4435	.002			
			Porphyry texture becoming evident by 91'. Qtz injections					108	109		4437		320		
			throughout generally in the plane of S. Pyrr-sph-py	92			44° S.	109	111		4438		160		
			replacements + fracture fillings associated with the st-injections.					111	113		4439		135		
			Calc-sil impreg also seen & stained. Sulphides 20%, sph 2-4%					113	115		4440		450		
			and 1% to 2% pyrr, 12% pyrr, 2% pyrr. Colour red-brown when heated					115	117		4441		230		
			91-92 pyrr - 25% sph 10% (in grey mudstone).					117	118.5		4442		270		
								118.5	120		4443	.02			
92.5	102	95	hump					120	122		4444	.06			
			dark grey-brown, argill. porphyry. Suspended					122	124		4445	.003			
			in mudstone. Upper contact L to S.					124	126		4446	.003			
								126	128.5		4447	.004			
								128.5	130.2		4448	.112			
102	104	98	MPH (Calc-sil, H)					130.2	132.2		4449	.01			
			red-brown, fig. horn-filled arkosic elastic fracture					132.2	134.2		4450	.002			
			• lime-pale green envelopes. Two thin Calc-sil impreg - 4 mm					134.2	136.2		4451	.004			
			11 to S.					136.2	138.2		4452	.019			
								138.2	140		4453	.241			
104	109	90	MPHs (Calc-sil-mine, Qtz-mine R.)					140.8	143		4454	.008			

DIAMOND DRILL LOG

DIAMOND DRILL LOG

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCAR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-67
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]

light gray green and pink gray banded hypid
diolite. Faint porphyrotexture. Qz injections to 6"
thick, actually - feldspar, meet along S

Collar: _____ NORTH _____ EAST _____ ELEVATION _____ LOGGED BY _____ DATE LOGGED _____ MAP REFERENCE _____	Hole Survey		
	Footage	Azimuth	Dip
	Method: _____		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-67
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

[illegible]



DIAMOND DRILL LOG

Page 9 of 9

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. TS 83-67
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	
				DEPTH	% Dip	So Dir.	% S ₁	Dip	From m	To m	Width	No.	Au oz%		Au ppb
184.5	188.0	982	MP DH to sen sch (H, Q) - cream to reddish brown hornblende, qtz veined, silicified DH. Late fractures of Py, low Po, qtz veining assoc with hornblende-intervals. Sd - 4-6% Py, < 5% Po 189.3 982 Quartz vein cut'd 15% Py, 8% Po, < 22% S - top contact 25° Cid, bottom - 75° Cid.												
196.5	989		- MP DH (low) with intervals of qtz-feld sen. schist - cream to reddish brown inter. hornblende hybrid dacite with intervals sericite schist. qtz, sil. feld. l., hornblende boudins, and assoc. with Py, Po, minor Znl. Sd - 10% S ²	190			63	S ₁	RG.						
				194'			55	S ₁							
205.7	987		- MP DH (H) - Shandy, hornblende dark reddish brown dacite with sparse diss. garnets. Late Fract. of poss. calc-sil. hornblende mixed to pale green, S = low.						RG.						
208	95		- MP DH to sen. sch. - pale cream - white mottled DH with intervals of sericite schist.	208			63	S ₁	RG.						

F.O.H.

DIAMOND DRILL LOG



DIAMOND DRILL LOG

Page 3 of 6

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-ON LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 83-68
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From m	To m	Rwy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Min
				DEPTH	% A	% S	% D	From m	To m	Width	No.	Au ppb	Au ppb		
105	111.3	98	MPDA (Quinor) Fine grained, light gray-green with indistinct porphyry texture. Cut by occasional qtz in v. py. Hr. Sulphide content low < 10%, mainly pyrr. nodules and fracture fillings. Lesser amounts of py in fractures and traces of sph. 110 to 111.3 Argillically altered + calcite veined					111.3	113.1	2	4212		45		
								113.1	113.5	0.4	4213	.002			
								113.5	114.5	1	4214		16		
								116.5	117.5	1	4215		5		
								117.5	119.5	2	4216		5		
								119.5	120.5	1	4217		10		
								120.5	122	1.5	4218		5		
								122	123.5	1.5	4219	.075			
113.3	113.1	95	MPDs Dark gray to buffaceous mudstone. Laminations indistinct. Sulphides ~20% mainly pyrr. with lesser pyrr. as fracture fillings and conformable 1-2mm bands. Sphalerite ~1%. Contact with above which has lower units @ 30° to CA					123.5	125.8	2.3	4220		190		
								125.8	127.8	2	4221		10		
								127.8	129.8	2	4222		5		
								129.8	131	1.2	4223	.002			
								131	133	2	4224	.001			
								133	135	2	4225	.001			
								135	137	2	4226	.002			
113.1	113.5	95	MPDA light gray-green f.g. porphyry contains 30% sulphides, 5-6% sph, 1% Ars.					137	139	2	4227	.001			
								139	141.5	2.5	4228	.023			
								141.5	143.5	2	4229	.002			
								143.5	145.5	2	4230	.043			
								145.5	147.5	2	4231	.002			
113.5	114.5	98	Feldspar Porphyry: white tubular feldspar in a green to brown-green groundmass. Contacts @ 53° to CA					147.5	149.5	2	4232	.001			



DIAMOND DRILL LOG

Page 4 of 6

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILLICUM
DRILLING CONTRACTOR DRILCAR
ASSAYER MIN-ON LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 93-68
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Rwy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log
				DEPTH	1/2 Dip	3/4 Dip	5/8 Dip	From m	To m	Width	No.	Au g/g	Au ppb	
114.5	122	95	MPDA (Q) light gray-green f.g. with indistinct porphyry Texture. + 116.5 to 116.8 Qtz vein @ 55° to CA. has pyrr and basal pyrrite along walls and no swell in gtz. 120 Qtz vein, irregular boundaries ~ 4cm wide cuts core @ 35° to CA. Py + pyrr along walls, pyrr in swells in gtz.					149.5	151.5		4233	.009		
								151.5	153.5		4234	.07		
								153.5	155.5		4235		350	
								155.5	157.5		4236	.003		
								157.5	159.5		4237		35	
								159.5	161.5		4238		10	
								161.5	163.5		4239		160	
								163.5	165.5		4240		125	
								165.5	167.5		4241		5	
								167.5	169.5		4242		5	
								169.5	171.5		4243		5	
								171.5	173.5		4244	.001		
								173.5	175.5		4245		5	
122	125.8	95	MPTs (Calc-sil minor) dark gray buff mudstone containing 25% sulphide mainly pyrrite with sphalerite in fractures, also + conchoidal lumps Contact @ 18° to CA. (unmineralized) Calc-sil impreg to 6cm in width. Widely spaced (20cm) becoming more common with depth.					175.5	177.5		4246	.001		
								177.5	180		4247		10	
								180	182		4248		5	
								182	183.5		4249		5	
								183.5	185.5		4250		10	
								185.5	187.5		4251		15	
								187.5	188.5		4252	.002		
125.8	131	95	MPDA (H minor, Q minor) mainly light gray green with minor ~~mineralization~~ reddish brown spha. (biotite hornfelsing) Qtz impregnations, irregularly spaced through section. Usually with associated pyrr, py and morph in fractures.					188.5	190.5		4253		5	

DIAMOND DRILL LOG

DIAMOND DRILL LOG

Collar:		Hole Survey		
NORTH	508 N	Footage	Azimuth	Dip
EAST	230 W	0	110°	-45°
ELEVATION		137'	?	-48°
LOGGED BY	J. McClinton			
DATE LOGGED	October 6/83			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.

PROPERTY NAME TILlicum

DRILLING CONTRACTOR DRILCAR

ASSAYER MIN-EN LABORATORIES LTD.

PURPOSE OF HOLE Test East Ridge

HOLE NO. TS 83-69
CLAIM NAME Hugh
COMMENCED October 4 /83
FINISHED October 5 /83

[illegible]



DIAMOND DRILL LOG

Page 2 of 5

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST		0	110°	-45
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. TS 83-69
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample			Assays		Visual Log	Z m
				DEPTH	% Dip	So. Dir.	Co. S. Dir.	Prop.	To %	Width	No.	Au % Au ppb		
31.5	42	952	- MP DH (Qtz, Py, Po. silicified) pale green - to white highly silicified & g. mineral und (poss DH?) with abundant Py + Po. minor ZnS. - shall be good bearing!	35'			72	Si?	31.5	33	1.5	4482	10	
									33	35		4483	.103	
									35	37		4484	.011	
				42'	down cont'd 62'									
53.5	98.9		- Lamp Dyke - pale green angular spotted lampstone dyke.											
→ 62	95		- MP DH - green - purplish brown mottled dolomite mass brecciating, late aegirine alter? sparse granite, low S ²						53.3	55.3		4485	65	
									55.3	57.3		4486	45	
									57.3	59.3		4487	100	
									59.3	61.3		4488	50	
									61.3	62.8		4489	80	
62	67.7	98	MPHc (H, K, Q) banded to laminated red brown and pale grey-green with 1-2% garnet porphyroblasts. ~~to~~ (possible MPHc) low S ²						62.8	64.8		4490	130	
				65'			55	9.	64.8	67.2		4491	.008	
67.7	72	98	Lamp. med. green ang. porphyry						uppr. Cont'd 35'					
									lower Cont'd 35'					

DIAMOND DRILL LOG

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 87-69
CLAIM NAME _____
COMMENCED _____
FINISHED _____

LITHOLOGY			STRUCTURE				Sample				Assays		Visual Log				
From	To	Revy %	DEPTH	% Py Sph.	% Sph	From	To	Width	No.	Au oz	Au ppb						
72	78		MPDH (Huek, Qm) Faint porphyry texture, pale gray-green and pink gray mottled. rare Qtz in py. Argillie alt along fractures Low S ² mainly fracture filling.				75'		58'	S ₁	75	78	3	4492	.034		
78	83		Lamp. med-green argite porphyry.				upper contact	60'	C. fault to S.								
							lower contact	60'									
83	88.5		MPDH (Q, Py, PoR) Gray-green, to pale green, subcrystalline, with argillie overprint. Intense Qtz in py from 87-88.5. Py + Po minor Sph. Total sulphide 15% (mainly Po). as fracture fillings + replacements.								83	85		4493	.025		
											85	87		4494	.008		
											87	88.5		4495	.03		
											88.5	90.5		4496	.05		
											90.5	92.5		4497	.009		
											92.5	93.5		4498	.02		
											93.5	95.5		4499	.018		
88.5	93.5		MPDH - Sordite Schist (Q, R) sh pale whitish-green to pale grey, laminated Hue Qtz in py. Po + Py replacements and fracture filling. Argillie alteration along fractures.								95.5	97.5		4500	.013		
											97.5	100		4612		470	
											100	102		4613		340	
											102	104		4614		330	
											104	106		4615		260	
											106	108		4616		180	
											108	110		4617		145	



DIAMOND DRILL LOG

Page 4 of 5

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILLICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 83-69
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log
				DEPTH	% Py	% Sp	% So	From ft	To ft	Width	No.	Au %	Au ppb	
93.5	100	98	MPort (Hms, Qm, R, Kmicac) gray-green with occasional red-brown mottled. faint porphyritic texture fig. low S°. local Q+K impreg. Argillite alt along fractures.					110	112	2	4618		86	
								112	114	2	4619		400	
								114	116	2	4620		180	
								116	118	2	4621		75	
								118	120	2	4622		70	
								120	122	2	4622		260	
100	123	98	MPHC (Py, Pa, Q, R) Red-brown with dark gray-green sections of hornfelsed fig. elastic. Generally low S° 113-114 Py+Qtz impreg.					122	123	1	4623		180	
				110'			60' S.	123	125	3	4624		80	
								126	129	3	4625		100	
								129	131	2	4626		450	
								131	133	2	4627		620	
122	129	98	MPort (K, Qm) med gray green, faint porphyry texture, with mottled redbrown (hornfelsed) sections S° low.					133	135	2	4628		40	
								135	137.5	2.5	4629		90	
								137.5	140	2.5	4630		190	
								140	141	1	4631	.02		
								141	142.5	1.5	4632	.051		
125	126		lamp Dark green fig. argillite porphyry; upper contact irregular @ 60° to CA parallel S. Lower contact @ 50° irregular					142.5	144	1.5	4633	.048		
								144	145	1	4634	.009		
								145	147	2	4635	.05		
								147	149	2	4636	.01		
								149	151	2	4637	.013		
126	140		MPHC (H, Q, K) banded to laminated, dark reddish-brown, and green fig. hornfelsed elastic rocks, possibly tillaceous.					151	153	2	4638		160	
								153	155	2	4639		90	

Page 5 of 5



DIAMOND DRILL LOG

Page ____ of ____

Collar:		Hole Survey		
NORTH	352N	Footage	240°	Dip
EAST	349W	122	240°	-35°
ELEVATION				
LOGGED BY	J. McClintock			
DATE LOGGED	Sep 28, 1983			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MUN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test South End Heave Honey Zone

HOLE NO. TS-83-70
 CLAIM NAME Sandy Ten 3
 COMMENCED Sep 26/83
 FINISHED Sep 27/83

From m	To m	Rpy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	H S
				DEPTH	N	E	S	From m	To m	Width	No.	Au %	Au ppb		
0	18'	90%	MPDP <i>light gray to gray green Medium grained porphyry, gray green with 1 foot or less sections of hornfelsing (red-brown) Garnet Porphyroblasts 1-3% pyrr as dis. Core rubble and luminous</i>												
								30.5	32.5	2	4254		95		
								32.5	34.5		4255		75		
18	59	90%	MPDA (Quartzified, Calc-sil scattered) <i>fine grained, poorly developed porphyritic texture. Garnet Porphyroblasts. Colour light gray-green. Occasional areas up to 6cm of biotite hornfelsing. Qtz impregnations and calc-sil impreg intermittently along the section. Sph, pyrr, py in Qtz in adjacent fractures. 31.5 to 32 20" 5' 33 Qtz impreg 33-35 1.0cm of calc-sil + Qtz impreg. 38-40 Calc-sil + Qtz impreg. 46 1.0cm section with Qtz impreg + sph, pyrr 49 to 57 Qtz impreg, calcite veining argillite at base Sph 1-2% or 57.5 to 59 clay + carbonate gangue</i>												
								38	40	2	4256		30		
								40	42	2	4257		5		
								48	50		4258		5		
								50	52		4259		20		
								52	54		4260		25		
								54	57		4261		35		
								59	61		4262	.004			
								61	63		4263		50		
								63	65		4264	.005			
								65	67		4265	.001			
								67	69		4266		10		
58.9	75'	95	MPDs (Calc-sil, C, R, Q) <i>dark to medium gray, graphitic banded mudstone with section hornfelsed to medium gray-green - Calc-sil</i>					69	71		4267		5		
								71	73		4268		5		
								73	75		4269		5		



DIAMOND DRILL LOG

Page ____ of ____

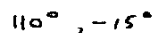
Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILLICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 83-70
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample			Assays		Visual Log			
				DEPTH	% Dip	Dr.	% S Dip	From m	To m	Width	No.	Au %		Au ppb		
			upreg to 3m, 11 to 12m. Calcite veining associated with argillite silt (polysom). Thin sandy to impure sand 25' to 30m. Contact ^{Faulted (upward)} _{~ 100' for 100'} lower ~ 65°							75	77		4270		10	
			58 to 59 20% pyrr, 5% sph.							77	78		4271		55	
			64 to 67 hornfelsed 1/2 sph							78	80		4272		40	
			73 to 75 Carbonate - argillite 1/2 sph							80	82		4273	0.048		
										82	84		4274	0.041		
										84	85		4275	0.02		
										85	86.5		4276	0.01		
75	77	95	Feldspar, Peridotite - white Feldspar green to brown green ground mass.							86.5	88.5		4277		65	
77	78	90	Fault gouge + limonite rubble													
78	86.5	98	MPA (Q, R Calc-silicate) light grey-green f.g. mostly porphyritic. Qtz impreg with fracture filling pyrr, py + sph. and to gulf and Ar. Qtz impreg + sulphides from 80 to 86.7' at 2% sph, trid 1% Ar.	80			25° 5'	S.								
86.5	89.5	98	MPV (M, Calc-sil.) medium buff, f.g. hornfelsed red-brown and red-green banded. Pyrr ~ 5%, 1% sph.					10° band								
89.5		98	PMA (Calc-sil.) Zebra Andesite. Stripped dark and pale green.	107			45° band									

12-2
 End of Hole.

Page 1 of 5

Collar:		Hole Survey		
NORTH	546 N	Feetage	Azimuth	Dip
EAST	188 W	174	110°	-5
ELEVATION				
LOGGED BY	J. M. Clintock			
DATE LOGGED	October 7/83			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE TEST EAST RIDGE

HOLE NO. T3-B3-71
CLAIM NAME Hugh
COMMENCED October 6, 1983
FINISHED October 8, 1983

[illegible]



DIAMOND DRILL LOG

Page 2 of 55

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 53-71
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE						Sample				Assays		Visual Log	Min
				DEPTH	% Dr	% Dr	% Dr	% Dr	% Dr	From m	To m	Width	No.	Au oz	Au ppb		
38.5	43.5	95	MPH (K, H, intercalated) Mottled grey-green and red brown, thin calc-sil/marg and some qtz m. 3% garnets. Loss 5"							14	19	5	5425	.02			
										19	22	3	5426	.028			
										22	25	3	5427	.019			
										25	28	3	5428	.011			
43.5	53	90	MPH (M, Q, K, F) reddish-brown with occasional dark green bands v.f.g. localities. Po + sph in fractures and as replacements non qtz m. g. Broken and fragmented core from 48.5 - 53							28	29	1	5429	.01			
										21	32	3	5430	.012			
										32	35	3	5431	.009			
										35	38.5	2.5	5432	.019			
										38.5	41	2.5	5433	.009			
										41	43.5	2.5	5434	.008			
53	60.5	98	MP gneiss schist (Q, Po, Sph + Gal) yellow-brown gneiss schist, probably MPH Sph, gal + Po, Py replacement + fracture fillings from 53 to 56' becoming less frequent from 52' Sph 3% gals 1%							43.5	45.4	2	4674	.013			
										46.4	47.5	2.1	4675	.034			
										47.5	49.5	2	4676	.02			
										49.5	53	2.5	4677	.005			
										53	55	2	4678	.028			
60.5	74	98	MPH (H, Qm) laminated reddish-brown and grey-green with pale green schistose bands. Pot sph fracture fillings - Argillite all along fractures 1-2% f.g. pink garnets							55	57	2	4679	.019			
										57	59	2	4680	.03			
										59	60.5	1.5	4681	.011			
74	79	201	only 2' of core recovered "mistake"							60.5	62.5	2	4682	.01			
										62.5	64.5	2	4683	.002			
				81'					24' lam S ₁	64.5	66.5	2	4684	.002			
79	90.3		MP schist (Q, Po, Py, Sp)							66.5	68.5	2	4685		250		



DIAMOND DRILL LOG

Page 3 of 5

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method: _____		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILLICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-MN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 83-71
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From m	To m	Rcv %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log
				DEPTH	% Dip	to Dr.	% Dip	From	To	Width	No.	Au %	Au ppb	
			dark gray, gray-green laminated mudstone. Qtz impreg with Fe, sph + py replacements along fractures & to lam. and in cross cutting fractures. Po ~ 25% Sph 2% Py 5%, 1% Arsenic - Argillite alt along some fractures.					68.5	70.5	2	4696		260	
								70.5	72.5	2	4697		150	
								72.5	74	1.5	4698		90	
								74	79	5	4699		80	
								79	81	2	4700	.015		
90.3	92		MPom (schistose schist, Q, Po, Sp,) white-gray to whitish gray-green schist. Minor folds Intert. cont. with 8 lam in MPom Po ~ 15%, sph 2% Arsenic 1.2% py 3% in fractures. Pyrite and replacement.	96			5, 45	81	83	2	4691	.03		
								83	85	2	4692	.008		
								85	87.5	2.5	4693	.021		
								87.5	89.3	1.8	4694	.038		
								89.3	90.3	1	4695	.009		
92	93		Massive Po, Sp, - Remnant frag. of MPom to rem. Mainly Po with 10% sph. 2% Arsenic to gal.					90.3	92	1.7	4696	.148		
								92	93	1	4697	.011		
93	109.5		MPom (schistose, Po, Sp, Q, R) light gray-green to whitish gray-green. Minor bld. Qtz impreg. Through out. locally, arsenic.					93	95	2	4698	.139		
								95	97	2	4699	.019		
								97	99	2	4700	.07		
								99	101	2	4701	.102		
								101	103	2	4702	.019		
								103	105	2	4703	.071		
								105	107	2	4704	.109		
			with increased Po + Sph. Total S ~ 30%, mainly Po with 35% sp and 5% Py local argillite overprint.	107			53, 51	107	109.5	2.5	4705	.04		
								109.5	112.1	2.6	4706	.041		
								112.1	115	2.9	4707	.102		
								115	119	4	4708	.027		

DIAMOND DRILL LOG

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-MIN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-71
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]

DIAMOND DRILL LOG

Page 5 of 5

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCAR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-71
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]



DIAMOND DRILL LOG

Page 1 of 6

Collar:	Hole Survey
NORTH 352 N	Footage
EAST 349 W	0
ELEVATION	030
LOGGED BY W Roberts	Dip -80
DATE LOGGED October 8/83	
MAP REFERENCE	Method:

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MUN-EN LABORATORIES LTD.
PURPOSE OF HOLE Test south extension Heine Zone

HOLE NO. TS 83-72
CLAIM NAME SANDY TIGER 3
COMMENCED Oct 4/83
FINISHED Oct 7/83

From m	To m	Rev %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Ht m
				DEPTH	N %	Dip °	Dr. %	From m	To m	Width	No.	Au g/t	Au ppb		
0'	9'	402	MPDP - highly weathered, oxidized, broken core of dense porphyry.												
20'	702		MPDH (H, K) - mottled reddish brown - pale green, mottled dark with sparse garnets. Several fac. fillings of ls, ls, Zn	17											
36.2	852		MPDP - greenish grey mottled ophanitic groundmass with diffuse white = Sum plagioclase. - appears as dark porphyry rather than light porphyry. sparse garnet throughout. Broken core, midsection @ 24-25.5', 30.5-31.5' & 34-35'.												
43.8	902		MPNA (H) ? - dark green massive, non laminated, fine grained pale calcite? with borders highly karstified to purplish brown.	36.2				30							
				43.8				25							



DIAMOND DRILL LOG

Page 2 of 6

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILLICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO.	<u>TS 83-72</u>
CLAIM NAME	_____
COMMENCED	_____
FINISHED	_____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Z m
				DEPTH	% Dip	to Dip	to Dip	From m	To m	Width	No.	Am oz/g	Am ppb		
43.8'	45'	90%	- MPDH (H, K) - mottled purplish brown to grey dacite with sparse dark garnets up to 3mm late Frac A le, py, actin?												
61.5'	95%		- MPDP (H,) - reddish brown - greenish grey dacite porphyry - matrix of very chloritized plagioclase phenocrysts < 5mm aligned // S ₁	55'				50 S ₁							
63.5'	50%		Fault Zone - oxidized rubble of MPDP - shear surfaces - 0-30° / c. H.												
78'	95%		- MPDP (H,) - reddish brown - green shaly, knifed porphyry with alignment of plagioclase phenocrysts // to S ₁ - sparse garnet throughout.	70'				48 S ₁							
82'			MPDH (K, H) - pale green, mottled, dacite with calc-silicate knifed along overprinted with argillite schist that a grey knifed rock intercalating, dark garnet low S ₂ ,	80'	38	1cm	38								

DIAMOND DRILL LOG

Collar:	Hole Survey		
	Footage	Azimuth	Dip
NORTH _____			
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-IN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. _____
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]



DIAMOND DRILL LOG

Page 4 of 6

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MUN-BN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. TS 83-69
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From			To	Revy	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	
m			m	%		DEPTH	%	Dip	Dr.	Op.	S	Dip	From	To	Width		No.
95			96	95.2	MPTs + MPop - Dark grey shale intersected within MPop forming 1/2 shale discontinuous, irregular, displaced, Frac low, S= low.	95'		30				R 95	96	1'	4652		75
102'			902		MPDH + MPop - pale greenish grey mottled porphyritic brown porphyritic dolite. Few dark grey whisky shale inter laminae.												
107'			702		MP TVGH (pass MPDH) - pale green lines reddish brown humiferal pass. Tuffaceous with or doctite? garnets absent.												
107.5'			302		- Fault Zone - grey gouge,												
112'					- MP TSCH) - dark grey to brownish grey to pale green laminated horn (black) tuffaceous shale - laminae 10-12 cm, frac low, S= low.							R 107.5	110		4653		45
												R 110	112		4654		45



DIAMOND DRILL LOG

Page 5 of 6

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILLICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. TS-23-
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From	To	Rev	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Min
				DEPTH	% R _p	% S _p	% D _p	From	To	Width	No.	Au %	Au ppb		
112'	117'	905	- MPTV (H) - pale green, to reddish brown mass hornbladed ophanitic fuffaceous m. Fr. low S ² low					R 112	114	2	4655		50		
								R 114	116	2	4656		55		
								R 116	117	1	4657		153		
	121'	902	- MPTV (K, H) to PTMA (K, H) - pale green, dark green, pink laminated silicified, hornbladed, calc-silicate meta andesite to fuffaceous andesite. Fractured with dal green chloritized material, R _p & S _p .	123'		35	Qam	A 117	119	2	4658	.012			
								A 119	121	2	4659	.003			
	129.2'	952	- Kg LG - mottled white to pale grey med. to coarse grained leucogranite	121'			Ep contact 26								
	131.0	902	PTMA (low K, S) - dark green meta andesite, low calc-silicate alter ⁿ appears silicified adjacent to leucogranite												
	143.5'	852	Kg LG - same as 121 - 129.2'												
	176'	952	PTMA (low K, H) - dark green, meta andesite, zones of purple and hornbladed m.A., calc-silicate alter ⁿ low	150'		20	S ₁ ?								
				165'		63	S ₁								
				170'		55	"								



DIAMOND DRILL LOG

Page 5 of 6

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILLICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. TS 83-72
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From	To	Rev	LITHOLOGY	STRUCTURE					Sample				Assays		Visual Log	Min
				DEPTH	%	to	to	to	From	To	Width	No.	Au %	Au ppb		
176'	179'	982	PTMA (K, sil, low CO_2) - pale greenish gray, calc-silicate altered meta- andesite, possible silicification, S= low, CO_2 low						R 176'	179'	3	4660		15		
239.5	972		PTMA (K, mag H) - dark to red green meta andesite with mag intervals up to 1m of heavy calc-silicate alteration and very purple hornblende, - 3rd zone of zebra andesite, gbs - CO_2 veins, increased @ 205-210' * minor dark gray shale interbed 195.5-197.0' (MP T84)	196'	43											
				203			85	S?								
248.6	852		PTMA (K, sil, gbs, low CO_2) - pale gray, calc-silicate altered, silicified, minor pink K-feld, few quartz veins with minor carbonates, pale carbonate veins. Sulphides low	243'	32				R							
255	952		PTMA (K, H) - dark green partially calc-silicated meta andesite with short intervals of zebra andesite	250'			15									
260'	702		PTMA (sil, CO_2 , K,) - pale gray silicified, pos carbonatized, calc-silicated meta andesite - highly frac, CO_2 fillings, broken core						R							



DIAMOND DRILL LOG

Page 1 of 6

Collar:		Hole Survey	
NORTH		Footage	Azimuth
EAST			110°
ELEVATION			-30
LOGGED BY	J. McClinton		
DATE LOGGED	October 9/83		
MAP REFERENCE		Method:	

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILLICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test East Ridge

HOLE NO. TS-83-73
 CLAIM NAME Hugh
 COMMENCED Oct 8, 1983
 FINISHED

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	UN
				DEPTH	% Dip	So. Dr.	So. Dr.	From	To	Width	No.	Au %	Au ppb		
0	5'	0	Casing												
5	11	90	MPDH (F, light grey to pink grey and fresh surface Rubbly with fragments seldom more than 2cm. Inclusions of silicified whitish pink MPDs by 10'. Po + Py in fracture fillings to 10%. S ₁ undistinct					10'	11	1	4718				
								11	15		4719				
								15	17		4720				
								17	19		4721				
								19	21		4722				
								21	23		4723				
								23	25		4724				
								25	27		4725				
								27	29		4726				
								29	31		4727				
								31	33		4728				
								33	34.5		4729				
								34.5	36.5		4730				
								36.5	38.5		4731				
								38.5	40.5		4732				
								40.5	42.5		4733				
								42.5	45.5		4734				
								45.5	48		4735				
								48	50		4736				
								50	52		4737				

with inclusions of silicified stuffs
 2.6' to 20.5' within MPDH zone - on Po + Py - total 20%



DIAMOND DRILL LOG

Page 2 of 6

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-73
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE						Sample				Assays		Visual Log	Min.
				DEPTH	% A	% B	% C	% D	% E	From m	To m	Width	No.	Au %	Au ppb		
34.5	45.5	95	MPTV or HC (H, K, Qm) fine grained, red brown gneissiferous, biotite-hornfels ~3% dis. Po, Thin widely spaced Kmprey, rare poorly developed Q. These Q impreg with Sp, Py + Po.							52	55		4738		70		
										55	59		4739		220		
										59	59		4740		65		
										59	61		4741		180		
										61	63		4742		200		
45.5	48		MPTs (Q, K, Po, Sp, Ga, H) vfg siliceous tuffaceous mudstone - light pinky gray to whitish gray - with Q + K impreg // to S. 15% Po, 5% Sp 1% Ga.							63	65		4743		245		
										65	67		4744		170		
										67	69.5		4745	.01			
										69.5	72.2		4746	.001			
										72.2	74.2		4747	.001			
										74.2	75.2		4748	.009			
										75.2	78		4749	.004			
										78	80		4750	.025			
48	55		MPTs (H, Qm, Rm) Faint porphyritic texture. Colour red-brown to pink-gray (biotite hornfelsing). Contains occasional inclusions of MPTs (red-brown hornfelsed). Argillitic overprint along fractures. Po as clissom. fracture filling. Minor Sp with Po in fractures.	50				52	S,	80	82		4751	.002			
										82	84		4752	.01			
										84	86		4753	.001			
										86	88		4754	.003			
										88	90		4755	.011			
										90	92		4756	.024			
55	59.5		MPTV or HC (H, K, Rm) Red-brown and grey-green mottled f.g. biotite-schist garnet-feldspar hornfels. More mafic than at 34.5 to 45.5 has some tuffaceous component. Calc. sil. impreg. to Gem but spread soon. Resid. are feldspar-hornfels bands //							92	94		4757	.01			
										94	96		4758	.015			
										96	98		4759	.014			
										98	100		4760	.039			

but spread soon. Resid. are feldspar-hornfels bands //



DIAMOND DRILL LOG

Page 3 of 6

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. TS-83-73
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	K S
				DEPTH	P %	D %	S %	From m	To m	Width	No.	Au %	Au ppb		
			Over all low S"					100	102	2	4761	.007			
								102	104	2	4762	.04			
99.5	74.2	98	MPTS or SH (Q, K, Silicified) usually laminated pink gray to whitish gray green mudstone. Recrystallized + silicified. Mottled colour from glau- phage. Po, Ars, tr sp mainly dis. Low total S"	70'			60' S.	104	106	2	4763	.013			
								106	108	2	4764	.01			
								108	110	2	4765	.02			
								110	112	2	4766	.048			
								112	114	2	4767	.02			
								114	116	2	4768	.093			
71.2	75.2	98	MPTS Gray laminated mudstone - contact conformable has pink gray hornblende impregnations. Minor dis Po.					116	118	2	4769	.099			
								118	120	2	4770	.013			
								120	122	2	4771	.02			
								122	124	2	4772	.031			
75.2	78		MPTS or SH (H, K) Reddish brown and green mottled f.g. biotite actinolite hornblende. High mafic content (actinolite) suggests tuffaceous component. Low S". mottled colour due to K impregn.					124	126	2	4773	.052			
								126	128	2	4774	.02			
								128	130	2	4775	.01			
								130	132	2	4776	.008			
								132	134.2	2.2	4777	.009			
78	134.2		MPTS (H, Q, K, Po, Sp) laminated tuffaceous mudstone + siltstone with occasional tr. to band. Colour light grey and pink-grey banding - Pot Sp replacements throughout. Av 25% Po 5-8% Sp. to gray. Most sulphides are replacement along fractures and along S.	85'			5' lam S.	134.2	135.7	1.7	4778	.02			
								135.7	137.2	2	4779	.19			
								137.2	141.5		4780	.142			
								141.5	143		4781	.017			
								143	145		4782		150		

logged to 115'



DIAMOND DRILL LOG

Page 4 of 6

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILLICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MW-BN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-73
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	M.
				DEPTH	% Dip	% S.Dr.	% S.Dr.	From	To	Width	No.	Au %	Au ppb		
134.2	137.2	98	MPh to Ts (H, Q Perm.) laminated red-brown and gray Pg banded tuffaceous chert, calcareous rock. Po in replacements along lam. with Q impreg (minor) Sp 1%	135			80° E	146.5	148	1.5	4784		285		
								148	150	2	4785	.022			
								150	152	2	4786	.075			
								152	154	2	4787	.055			
								154	156	2	4788	.012			
137.2	140.5	98	MPTs (Po, Spm) Gray laminated mudstone to siltstone - 15% Po in wisp-like replacements along the laminations					156	158.5	2.5	4789		90		
								158.5	159.5	1	4790	.023			
								159.5	161.5	2	4791		140		
								161.5	163.5	2	4792	.01			
								163.5	165.5	2	4793	.111			
140.5	141.5	98	MPh - schistose (Q, K, Po, Sp, Ars.) light gray-green to whitish green ^{sericite} schist Qtz impreg to 1cm Po ~ 20%, Sph 4%, Ars 2% Pg 5% Argillie alt along fractures.					165.5	168	2.5	4794	.003			
								168	170	2	4795	.124			
								170	173	3	5445	.009			
								173	175	2	5446	.009			
								175	177	2	5447	.018			
141.5	143.3	98	MPOP Pale gray-green, porphyritic texture - medium grained. Argillie alterations along fractures. Low S"					177	179	2	4796	.01			
								179	181	2	4797	.05			
								181	183	2	4798	.011			
								183	185	2	5448	.007			
142	148	98	MPTs to MC (Hinterit, Q, Km) light gray to pink gray banded (intermittent H) siltstone Calcite-argillie nodules. Po + to Sp in S" bands associated with Q impreg.	144			band 70°	185	188	2	5449	.002			
								188	191	3	5450	.001			
								191	194	3	5451	.002			
								194	197	3	5452	.005			

DIAMOND DRILL LOG

Page 6 of 6



DIAMOND DRILL LOG

Page ____ of ____

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method: _____		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILLICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-74
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE						Sample				Assays		Visual Log	Min.
				DEPTH	% A	% S	% Ox.	% S	% D	From m	To m	Width	No.	Au %	Au ppb		
										87	90				450		
127	137		MPs (C)							90	93				65		
			Grey to grey-black v. p. g. mudstone. Carb veining							93	96		4823		300		
			Contact sharp @ 45° to CH.														
137	149		MPv (K, H)							99	101		4824		90		
			dark green f. g. to fl (basaltic-andesite comp.)							101	103		4825		10		
			becoming coarser grained with depth. - has 140 bchs (Lw							103	105		4826		65		
			zohra andesite							105	107		4827		50		
										107	109		4828		135		
149			Pima (C, K)							109	111		4829		55		
			Lapilli tuff, med-green to dark green earthy							111	113		4830		15		
			calc veining and minor calc-sil impreg.							113	115		4831		295		
			158.5 - B.H.H.							115	117		4832		20		
										117	119		4833		25		
160			End of Hole							119	121		4834		270		
			No casing left - hole							121	123		4835		55		
										123	125		4836		40		
										125	127		4837		10		
										127	129		4838		5		
										129	131		4839		15		
										131	133		4840		5		
										143	145		4841		100		
										145	147		4842		510		



DIAMOND DRILL LOG

Page 1 of 4

Collar:		Hole Survey	
NORTH	57°N	Footage	30
EAST	153W	Azimuth	125
ELEVATION		Dip	30
LOGGED BY	J. McClintock		
DATE LOGGED	October 17, 1983		
MAP REFERENCE		Method:	

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test East Ridge

HOLE NO. TS-B3-75
 CLAIM NAME Hugh
 COMMENCED October 10, 1983
 FINISHED October 13, 1983

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE						Sample				Assays		Visual Log
				DEPTH	% S ₁	% S ₂	% S ₃	% S ₄	% S ₅	From m	To m	Width	No.	Au %	Au ppb	
0	76	95	MPHC (H, K, Q) ~~mottled red-brown~~ ^{fine grained} biotite + actinolite hornfels, cut by calc-sil wipreg, occasional Qtz impregnation. Occasional Po replacements along fractures. S1.3 Fault - gray mud over 6cm.													
76	89	95	Sericite Schist MPCH? (Q, K, Po, Sp) White-Grey to grey-green, sericite schist - contoured schistosity - contains up to 10cm inclusions of red-brown - Hc. (may in part be MPts) Po + Py + Sp in replacements along S ₁ and cross cutting fractures. Occasional Arz, spy and rare galena	77'					68	S ₁						



DIAMOND DRILL LOG

Page 4 of 4

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. TS-83-75
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Revy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Min.
				DEPTH	% Dip	Dr. Dir.	Dr. Dir.	From m	To m	Width	No.	Au g/g	Au ppb		
104	120	98	MPH (H, K) - light-grey with local sections of red-brown (hornfelsing) slightly schistose at top becoming finely porphyritic with depth. Low S" mainly Po as dy fracture replacements, with rare Sp					66	69	3	4940		65		
								69	72	3	4941		60		
								72	74	2	4942	.004			
								74	76	2	4943	.018			
								76	78	2	4944	.032			
								78	80	2	4945	.02			
								80	82	2	4946	.049			
120	150		MPDP (H, Km) Reddish-brown, porphyritic, Hornfelsed with widely spaced calc-sil impregnations. Occasional iron ore lens inclusions of MPHe. Low S"					82	84	2	4947	.059			
								84	86	2	4948	.079			
								86	88	2	4949	.07			
								88	89	1	4950	.152			
								89	91	2	4951	.019			
150	152		MPHe (H, K) Red-brown f.g. biotite hornfels with calc-sil impreg. Low S" as replacements along fractures					91	93	2	4952	.02			
								93	96	3	4953	.021			
								96	99	3	4954	.005			
								99	102	3	4955	.005			
								102	104.5	2.5	4956		275		
152	165		MPDP (H, Km) Porphyritic, reddish-brown hornfelsed. Occasional calc-sil impreg. Low S"					104.5	106.5	2	4957		465		
								106.5	109	2.5	4958		70		
								109	112	3	4959	.015			
								112	115	3	4960	.003			
								115	118	3	4961	.267			
								118	120	2	4962	.006			

DIAMOND DRILL LOG

Page 3 of 4

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-78
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]

[illegible]



DIAMOND DRILL LOG

Page 1 of 3

Collar:		Hole Survey		
NORTH	559N	Footage	Azimuth	Dip
EAST	445W			
ELEVATION				
LOGGED BY	J. McClinton			
DATE LOGGED	October 4, 1983			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILICUM
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test Honey Pit Down-dip

HOLE NO. TS-B3-76
 CLAIM NAME Wolf
 COMMENCED Oct 10, 1983
 FINISHED October 11, 1983

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE					Sample				Assays		Visual Log	IN 5m
				DEPTH	% Dip	So. Dr.	S. S. Dr.	Di	From m	To m	Width	No.	Au %	Au ppb		
0	33	95	PTMA - lapilli tuft, dark green. Minor silt veining 32-33 K impreg + hornfelsed.													
29	33															
33	50.5	98	MPsh to ts (K, H, Q) Gray, laminated to massive mudstone to shale with pale red-green and pink-gray bands. Minor py foliation and along walls of qtz impreg.	40				42° lam								
50.5	53	98	Lampr Dark green argill. porphyry, contact sharp @ 45° semi conformable to laminations						50.5	53	2.5	4843		5		
									53	55	2	4844		<5		
									55	57	2	4845		10		
53	58	98	MPsh (Q, K) Gray laminated slate-mudstone with Q impreg and minor sph + Po + Py - siliceous at upper contact.						57	58	1	4846		15		
									58	61	3	4847		20		
									61	63.5	1.5	4848		30		
									63.5	65.5	2	4849	1013			
									65.5	67.5	2	4850	1018			
58	63.5	98	MPsh (H, K, Q) light gray green. Comminuted as a green qtz impreg. Strong hornfelsing, calc-sil impreg. Lesser Q impregnations.						67.5	69.5	2	4851	1018			
									69.5	71.5	2	4852	1059			
									71.5	73.5	2	4853	102			

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCAR
ASSAYER MUN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-76
CLAIM NAME _____
COMMENCED _____
FINISHED _____

LITHOLOGY			STRUCTURE				Sample				Assays		Visual Log
From	To	REV	DEPTH	% Dip	20' Dr.	0.5' Dr.	From	To	Width	No.	Au %	Au ppb	
63.5	77	78	RTMA (H, K, Q) medium green, fine grained tuff. Pale red-brown bands (lenticles) and calc-sil impreg. 70 - 75m g/lz impreg with py, po, sp. gal.					73.5	77	3.5	4854	.001	
77	78		Fault gouge @ 45° to CA. laminar mud + fig. rock fragments										
78	107.5		PTMA (H, K) Zebra - enderite fig. grained dark green with mottled pale green (calc-sil) impreg. Minor dis. po. Alternatively fine and coarser textured tuff. Generally becoming Pg by 100'					107.5	109.5	2	4855		290
								109.5	111.5	2	4856		285
								111.5	113.5	2	4857		15
								113.5	115.5	2	4858		15
								115.5	117.5	2	4859		25
								117.5	119.5	2	4860		80
107.5	123		MPTS (H, K) and MPRV interbedded. Pale Grey brown to dark green, laminated tuffaceous and siltstone to v. lg tuff. Contacts are arbitrary and interbedding occurs at contacts.	121.5		46' lam		122	124	2	4862		90

DIAMOND DRILL LOG

Collar:	Hole Survey		
NORTH <u>486N</u>	Footage	Azimuth	Dip
EAST <u>268W</u>			
ELEVATION _____			
LOGGED BY <u>J. McChaleck</u>			
DATE LOGGED <u>Oct 15, 1982</u>			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE Test East Ridge

HOLE NO. 15-83-77
CLAIM NAME Hugh
COMMENCED October 13, 1983
FINISHED October 15, 1983

			LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log
From m	To m	Rcvy %		DEPTH	% Dip	Sr Dr.	Sp S _i Pia	From m	To m	Width	No.	Au %	Au ppb	
0	11	60	PTMA - (F) Mostly laminar gneiss with fragments of green chloritoid and schistose basaltic andesite.											
11	14	70	MPOH (H, K) pale gray-green and red-brown mottled with garnet porphyroblasts. Faint porphyritic texture. Contact with PTMA-sill zone. 1-3% dia Pa. Argillite all along fractures.	12'			30 S _i							
								11	14	3	4959		5	
								14	17	3	4960		620	
								17	19	2	5467	.01	.	
								19	22	3	5468	.002		
								22	24.5	2.5	5469	.008		
14	19	90	MPHS (H, K Qm) possibly TV. mottled red-brown and gray-green with garnet porphyroblasts. Variably textured from f.g. to medium-grained gneiss. Possible MPV or MPOH. 5% dia Pa where gneiss is Actinolite-feldspar gneiss. Q + K impreg have Pa and minor Sp.					24.5	29	4.5	4961	.01	170	
19	24.5	90	MPDP (H) red-brown with mottled gray-green patches medium-grained porphyritic with well developed S _i . contact is broken zone. - low S'' mainly fracture filling Pa.	21 25			60 S _i							



DIAMOND DRILL LOG

Page 2 of 7

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILLICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. TS-82-27
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Min
				DEPTH	% Dip	% Dip	% Dip	From m	To m	Width	No.	Au g/g	Au ppb		
24.5	29	35	MPhe (H, K, Q) laminated red-brown, green and grey-green hornfelsed mudstone to siltstone - becomes grey in colour with depth Contact over 8cm - appears to be partial assimilation of the HS over this interval. Qtz impregn 3mm or less Calc-sil impregnation over first 2' from upper contact Becoming bubbly towards lower contact.	26'											
29	34	50	Fault. Laminaritic gouge with lower part of the interval being mudstone rubble.												
34	38.5	95	MPts (H, Q, K, Pa Sp) laminated to banded grey, light grey and pinkish grey to buffaceous mudstone - Sp + Pa in wisp-like layers 11 to 16mm and in cross cutting fractures. 1-2% Sp. trace Sp + gal. Arsenopyrite to 1%	35											
								34	36		4962				
								36	38						
								38	40						
								40	42						
								42	44						
								44	46						
38.5	49.5	48	Schist (MPhe?) (Q, K, H) (Pa, Sp) light grey-green to greenish-white feldspar ss. c.t. schist. Minor folding. High S, mainly Pa and Pa filling and replacements. Pa ~ 15%, Sp ~ 5%, gal to cpg to Ars 1-2%. Contains dark grey mudstone bands (inclusions?) - Also has pink-grey bands (hornfelsing)												
								48.5	50.5						
								50.5	52.5						
								52.5	53.8						
								53.8	54.8						



DIAMOND DRILL LOG

Page 4 of 7

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 52-77
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m			To m	REVY %	LITHOLOGY	STRUCTURE						Sample				Assays		Visual Log
From m			To m	REVY %		DEPTH	% Dip	So Dr.	% Dip	So Dr.	From m	To m	Width	No.	Au %	Au ppb		
54			54.8	98	MPHs (H, K, Qm) pink-gray to gray-green banded to mottled maybe more altered MPHs Po + Sp along dyg fractures.													
54.8			58		MPDH (K) Gray green - gneissic textured composed of feldp, actinolite, sericite and minor garnets. Very thin (3mm) Kampsey 2% dis Po Minor Sp and Po as thin fracture fillings.													
58			72		Lamp med-green augite porphyry. Upper contact @ 60° to CH. Cuts S ₁ at shallow angle. Lower contact ⊥ to CA.													
72			74		MPDs (H, K, Q, Po Sp) tan pink-gray and light green 15% Po, 5% Py 2% Sp mainly as host fillings and replacements.						72	74	2	4975	.038			
											74	77.8	3.8	4976		5		
											77.8	79	1.2	4977		380		
74			77.8		Lamp. Upper contact broken. lower contact 30° to CA  S ₁ ⊥ to strike of S ₁						79	80	1	4978		5		
											80	82	2	4979	.086			
											82	84.2	2.2	4980	.007			

HOLE NO. 83-24
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]

[illegible]

DIAMOND DRILL LOG

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-IN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-77
CLAIM NAME _____
COMMENCED _____
FINISHED _____

			LITHOLOGY	STRUCTURE						Sample				Assays		Visual	
From m	To m	Rovv %		DEPTH	% A	Dg %	So %	Dir. %	Sr. %	Di. %	From m	To m	Width	No.	Au oz	Au ppb	Log
97	104	98	Lamp Upper contact 05° to CA. lower contact @ 25° to CA.														
104	118		MPOP (Hw, K, Qm) matrix light gray-green and reddish brown mottled. Good porphyritic texture - B + minor Sp as fracture filling. - Strong K at lower contact.														
118	119.2		Lamp Upper contact 30° to CA cross cuts S. lower contact 35° " " " " "														
119.2	129.8		MPOP (H, K) mottled reddish brown and gray-green Qtz impreg + upper contact. Very low S"														
129.8			Lamp contact @ 35° to CH. med fine grain augite porphyry														
173			End of Hole No casing left in hole.														



DIAMOND DRILL LOG

Page 1 of 2

Collar:		Hole Survey		
NORTH	559 N	Footage	Azimuth	Dip
EAST	445W	157	125°	70
ELEVATION				
LOGGED BY	J. McChatack			
DATE LOGGED	October 12, 1983			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test Honey Pit Down Dip Extension

HOLE NO. T5-83-78
 CLAIM NAME Wolf
 COMMENCED October 11, 1983
 FINISHED October 12, 1983

From	To	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Mts
				DEPTH	% Dip	To Dr.	Dip	From	To	Width	No.	Au %	Au ppb		
0	30	95	PTMA lapilli tuff, dark green with occasional calcite veining 29-30 calc-sil impreg. ^{Carbonate} strong veining												
30	43	95	MP PT-sh (H, K) laminated hornfelsed tuffaceous siltstone to mudstone Red-brown and grey banded. 2-3% dis pp Calc-sil impreg // laminations.	35'			52°	30	33	3	4869		30		
								33	36	3	4870		10		
								38	39	3	4871		10		
								39	41	2	4872		5		
								41	44	3	4873		5		
43	46.8	80	Lamp - coal Contacts broken					44	46.8	2.8	4874		45		
								46.8	52	5.2	4875		5		
								52	59	7	4876		80		
			*4 LB → 47 Fault Gouge					59	61	2	4877		150		
46.8	59.9	35°	11PTs-sh (F, Q) Grey siliceous mudstone, laminar schistose by 48.5 (sericite, graphite fldsp)	48'			53°	61	63	2	4878		45		
								63	65	2	4879		155		
								65	67	2	4880		200		
								67	70		5488	.002			
48.5	50							70	73		5489	.001			
59	100		PTMA (H, K, C) Dark green to brownish green hornfelsed and calc-sil impreg. ash tuffs, becoming finer grained and interbedded with MPts by 90' Minor dis. Po + Py near base of hole.					73	76		5490	.001			
								76	79		5491	.002			
								79	82		5492	.001			

Collar: _____ NORTH _____ EAST _____ ELEVATION _____ LOGGED BY _____ DATE LOGGED _____ MAP REFERENCE _____	Hole Survey		
	Footage	Azimuth	Dip
Method:			

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCAR
ASSAYER MN-MN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 82-78
CLAIM NAME _____
COMMENCED _____
FINISHED _____

			LITHOLOGY	STRUCTURE					Sample				Assays		Visual Log
From m	To m	Rcvy %		DEPTH	% A	D _g D _r	S _d S _r	P _d P _r	From m	To m	Width	No.	Au oz/t	Au ppb	
100	114.5	98	MPS totv interbedded (H, K, Q) Grey-green to brown-green banded tuffaceous siltstone and ash tufts. Dis Pa to z.	110				53° dm	100	102	2	4881		35	
									102	104	2	4882		15	
									104	106	2	4883		30	
114.5	149.5	98	PTMA (H, K) Zebra Andesite - Dark green and pale green mottled. - Pale green are calc-sil impregnations. Minor Pa as dis.						106	108	2	4884		10	
									108	110		4885		15	
									110	112		4886		40	
									112	114.5		4887		15	
									114.5	116.5		4888		20	
149.5		98	PTMA (H) Green ash tufts, locally brecciated to brownish green.						135	137	2	4889		25	
									137	139	2	4890		10	
	157		- End of Hole - No casing left in hole						139	141	2	4891		20	
											</				



DIAMOND DRILL LOG

Page 1 of 5

Collar:		Hole Survey		
NORTH	526 N	Footage	Azimuth	Dip
EAST	209 W			
ELEVATION				
LOGGED BY	J. McIntosh			
DATE LOGGED	October 10/83			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test East Ridge

HOLE NO. TS-83-77
 CLAIM NAME Hugh
 COMMENCED October 15, 1983
 FINISHED October 16, 1983

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Min
				DEPTH	% Dip	Struc.	Dip	From m	To m	Width	No.	Au %	Au ppb		
0	3.5	95	MPic (H, K) red-brown to pinkish-gray f.g. hornfelsed elastic mottled green where K-impregnated					0	3.5	3.5	4589		290		
								3.5	4.5	1.0	4590	.009			
								4.5	7.5	3.0	4591		465		
								7.5	14.5	7.0	4592		115		
								14.5	16.5	2	4593		150		
3.5	4.5	95	MPts (H, K) laminated to schistose tuffaceous mudstone pink-gray, pale green and gray banded. Po, Sp, Py in K-impreg and wing-like replacements along lam.	4'		9	65° lam	16.5	18.5	2	4594		140		
								18.5	20.9	2.4	5063	.002			
								20.9	25	4.1	5470	.001			
								25	27	2	4595		165		
								27	30	3	5471	.002			
								30	33	3	5472	.002			
4.5	18.5		MPDH (schistose, H, Km) pale gray-green and red brown banded to laminated occasionally faintly porphyritic. 10% Po with lesser py, in thin bands of disc. f.g. ll to S.					33	36.1	3.1	5473	.001			
								36.1	37.6	1.5	5474	.001			
								37.6	40.4	2.8	4596	.002			
								40.4	42.4	2	4597		165		
								42.4	44.4	2	4598	.021			
18.5	36.1		MPDH (H, K, R _w) faintly porphyritic, mottled gray-green and red brown 4% disc. po. Garnet porphyroblasts. Po + Sp + Als in K-impreg.					44.4	46.4	2	4599	.008			
								46.4	48.4	2	4600	.01			
								48.4	50.4	2	5751		75		
								50.4	52.4	2	5752	.01			
								52.4	54.4	2	5753	.019			
36.1	37.6		MPtv (H, K) Gneissic textured feldspar actinolite. pale gray-green.					54.4	56.4	2	5754	.02			
								56.4	58.5	2.1	5755	.009			
								58.5	60.5	2	5756	.006			



DIAMOND DRILL LOG

Page 2 of 5

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCAR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 23-79
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m			To m	RCY %	LITHOLOGY	STRUCTURE						Sample				Assays		Visual Log		
						DEPTH	% A	P _g	S ₂	Dv.	P _g	S ₂	Dv.	From m	To m	Width	No.	Au oz/g	Au ppb	
37.6			40.4	98		40					68°	S ₁								
					faint porphyry texture, inclusions of #1Prc.															
					Generally red-brown except where mottled gray-green by Kimpreg. P _g + Sp + Ars in Kimpreg and in fracture + replacements in HC inclusions.															
40.4			52.5	98		45					65°	S ₁								
					#1Prc (H, K)															
					Red-brown and gray-green mottled. Well integrated with K. P _g with lenses of sp + sp in fracture fillings and replacement - irregular shaped. Total S ² 15% mostly P _g . Trace - 1% Ars.															
58.5			64	98		60'					68°	S ₁	60.5	62	1.5	5457	1007			
					#1Prc (schistose, K, Hw)															
					light gray-green to greenish-white sericite schist with occasional hornblende sections (inclusions?)															
					P _g + Sp + P _g in fracture fillings and in Kimpreg.								62	64	2	5458	1022			
													64	65	1	5459	1002			
64			65	90									65	68	3	5460	101			
					#1Prc (F)								68	69	1	5461	1019			
					Heavily fractured and lignite stained rubble								69	69.9	0.9	5462	1011			
													69.9	71	1.1	5463	1018			



DIAMOND DRILL LOG

Page 3 of 5

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-79
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rovv %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	M
				DEPTH	% Dr	% Dr	% Dr	From	To	Width	No.	Au %	Au ppb		
65	68	98	MPH (schistose, Km, Qm) yellow brown to grey schistose (sacrist) porphyry Yellow brown maybe a weathering effect Po+Sp in fracture fillings												
68	69	70	MPH (unble) (E) limestone stained rubble												
69	69.9	90	Lump Faulted contacts dark grey argill. porphyry												
69.9	71	95	MPH (Q, K) light grey weakly schistose, spts Po in fractures lucous dis	70			Sp 5	71	73	2	5964	.01			
								73	75	2	5965	.01			
								75	77	2	5966	.009			
71	83	95	MPH (HQ) (Qm) yellow brown fly weakly schistose breccia weathering conc of malic + quartz coarse colour? Minor Q impreg. PE 15% mainly fracture filling Dis Sp fracture fillings 76' 6" massive Po+Sp minor Acs occurs on the lower contact of MPH inclusion (~6")	70			3	77	79	2	5967	.01			
								79	81	2	5968	.019			
								81	83	2	5969	.01			
								83	84	1	5970	.008			
								84	86	2	5971	.008			
								86	88	2	5972	.019			
								88	89.5	1.5	5973	.015			



DIAMOND DRILL LOG

Page 4 of 5

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method: _____		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-79
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	RCVY %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Mm
				DEPTH	% S	Dip °	Dr. °	From m	To m	Width	No.	Au % Au ppb			
83	90.5	98	M.P.H. (Qm) light gray to green-gray - faintly porphyritic and weakly schistose 5% dis. Po - minor spin fracture fillings with lesser andis.												
								89.5	90.5	1	5974	.02			
								90.5	92.5	2	5975	.013			
90.5	119.5	98	M.P.H. (Ma) (Q) yellow-brown big hornbls. - well developed s. possibly D.H. & Sulphides ~ 10% Po, minor Sp in fractures and bands // to S.	95		50°	S ₁	94.5	96.5	2	5977	.01			
								96.5	98.5	2	5978	.008			
								98.5	100.5	2	5979	.01			
								100.5	102.5	2	5980	.003			
								102.5	104.5	2	5981	.002			
119.5	115	98	M.P.H. (F, H, K) banded to laminated light to med gray and pinkish gray siltstone + mudstone. Core broken frag to 3cm. Dis. Po + Py tr Sp.	112'		46°	lam	104.5	106.5	2	5982	.006			
								106.5	108.5	2	5983	.021			
								108.5	110.5	2	5984	.001			
								110.5	111.5	1	5985	.008			
								111.5	113.5	2	5986	.006			
115	129	98	M.P.H. (Q, K, Po, Sp) yellow brown - brecciated (mottled gray) with K, Po in frag, 15% Po 3% Sp. Tr. Als					113.5	115	1.5	5987	.004			
								115	117	2	5988	.012			
								117	119	2	5989	.01			
								119	121	2	5990	.01			
								121	123	2	5991	.014			

129 - 130

gray-green actinolite gneiss
M.P.H. gray - weakly porphyritic



DIAMOND DRILL LOG

Page 5 of 5

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method: _____		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-74
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Min
				DEPTH	N	E	S	From m	To m	Width	No.	Au %	Au ppb		
130	149	97	MPH (S.l. f. t. s. e.) Q, K, Po, Sp yellow-brown, lig. horn bls - usually schistose Qtz imping 11 to S, 15% Po, 2% Sp to Ars					123	125	2	5992	.012			
								125	127	2	5993	.019			
								127	129	2	5994	.008			
								129	131	2	5995	.01			
								131	133	2	5996	.009			
147	161	98	MPH (Q, K, Po, Sp) - locally schistose yellow-brown, sericite - feldspar schist to gneiss - colour in weathering affect. - Qtz imping with Po+Sp lesser Ars also S ⁺ in bands 11 to S.				50° S ₁	133	135	2	5997	.008			
								135	137	2	5998	.009			
								137	139	2	5999	.008			
								139	141	2	6000	.01			
								141	143	2	5051	.01			
								143	145	2	5052	.03			
161		48	MPop (Kf, Qm) Red-brown - pale grey-green to mottled ground porphyry - Occasional Qtz imping with Po+Sp widely spaced.					145	147	2	5053	.012			
								147	149	2	5054	.02			
								149	51	2	5055	.009			
								151	153	2	5056	.008			
								153	155	2	5057	.002			
175			End of Hole No casing left in hole.					155	157	2	5058	.001			
								157	159	2	5059	.034			
								159	161	2	5060	.012			
								161	163	2	5061	.011			
								163	165	2	5062	.002			
								165	168	3	5475	.003			
								168	171	3	5476	.001			
								171	173	2	5477	.007			
								173	176	3	5478	.004			

DIAMOND DRILL LOG

Page 1 of 3

Collar:		Hole Survey		
NORTH	559 W	Footage	Azimuth	Dip
EAST	445 W	160	165°	70°
ELEVATION				
LOGGED BY	J. MacIntosh			
DATE LOGGED	October 12/83			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN. LABORATORIES LTD.
PURPOSE OF HOLE Test Heavy Pit

HOLE NO. TS 83-80
CLAIM NAME Hugh
COMMENCED October 12/83
FINISHED October 12/83

			LITHOLOGY	STRUCTURE						Sample				Assays		Visual Log
From m	To m	Rcvy %		DEPTH	% D _p	% S _p	% Q _v	% C _v	% K _v	From m	To m	Width	No.	Au %	Au ppb	
0	46		P.T MA (c) dark green breccia and tuff Carbonate veining - textures well preserved.							37	40	3	4893			
										40	43	3	4894		50	
										43	46	3	4895		10	
										46	49	3	4896		5	
										49	52	3	4897		5	
46	73		MPTs-sh (H,K,Q) medium gray to gray tuffaceous shale to siltstone calc-sil impreg to laminations Qtz impreg decreases in frequency with depth. Traces of PotPy in Qtz impreg.							52	55	3	4898		5	
										55	58	3	4899		10	
										58	61	3	4900		<5	
										61	64	3	4901		5	
										64	66	2	4902		5	
73	78		Lamprophyre (F) med-green amygd porphyry.													
78	79		MPTs-sh (C,R) as at 46-73. Carbonizing with clay altered walls.													

DIAMOND DRILL LOG



DIAMOND DRILL LOG

Page 1 of 4

Collar:		Hole Survey		
NORTH	453 N	Footage	Azimuth	Dip
EAST	289 W	153	140°	±
ELEVATION				
LOGGED BY	J. V. Nicholas			
DATE LOGGED	October 19, 1983			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE Test East Ridge

HOLE NO. TS-83-81
 CLAIM NAME Hugh
 COMMENCED Oct 16, 1983
 FINISHED October 18, 1983

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE					Sample				Assays		Visual Log	T.M.
				DEPTH	% Dip	% So. Dr.	% S. Dr.	% S. Dr.	From m	To m	Width m	No.	Au % Au ppb	Au ppb		
0	15	60	PTMA or TV (F, C) pale green to dark green subbley andesitic tuffs mainly calcic zone													
15	20 240	30	MPOM grey, weakly porphyritic - 1-2% dis. Po													
20	25	0	Core lost Mislatch.													
25	30		MPOM grey weakly porphyritic, 1-2% dis. Po													
30	38	95	MPtv (K, C, Hw) pale green with light green mottling (Kimpreg) Colored veinings: Occasional pink-grey bands (Kimpreg) Po 3% dis and occasional fracture filling	40'				50% Si	36	38	2	5064		630		
									38	40	2	5065	.002			
									40	42	2	5066		275		
									42	45	3	5067		25		
38	57	98	MPts minor interbedded MPtv (K, Qm, C) Gray Pg mudstone and siltstone with occasional interbedded MPtv Sulphides content variable, mainly as neopitile bands 11 to laminations, lower as fracture fillings													

1 replacement Sulphides mainly Po with lesser Sp.

54'-55' calcic breccia with Kimpreg

DIAMOND DRILL LOG

Page 2 of 4

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE _____

HOLE NO. 93-81
 CLAIM NAME _____
 COMMENCED _____
 FINISHED _____

From m	To m	Rev %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Notes
				DEPTH	% A	Dip °	So Dir.	From m	To m	Width	No.	Au %	Au ppb		
57	66	98	MPH (K, Q, C) drk grey laminated sandstone - shale, becoming graphitic towards 66'. Cut by calcite veins with wiggly envelopes. Sulphides: Po, Py, Sp along margins of Q impreg. 65.5-66 1/2' vein, ragged, contains graphitic shale.					57	60	3	5068	8	460		
								60	62	2	5069		220		
								66	68	2	5070		40		
								68	70	2	5071		230		
66	85.5	98	MPHC (H, K) red brown with pale green lam. & mottling. Low S" mainly Po, lesser Py, trace of Sp & Acs	50		50°	S	70	72	2	5072	.003			
								72	74	2	5073	.001			
								74	76	2	5074	.001			
								76	78	2	5075	.001			
								78	80	2	5076	.002			
85.5	88.5	98	MPHC (H, K) Pale grey-green with red brown mottling. Pink granat porphyroblasts low S" 1-2% Po, lesser Py.					80	82	2	5077	.002			
								82	84	2	5078	.003			
								84	85.5	1.5	5079	.001			
								85.5	88.5	3	5080	.001			
								88.5	90.5	2	5081	.001			
								90.5	92.5	2.5	5082	.008			
88.5	97.6		MPHC (H, K, Q) Red brown with pale grey-green laminations. 1% with less py in K and less Q impregnations					92.5	95	2.5	5083	.018			
								95	97.6	2.6	5084	.009			

DIAMOND DRILL LOG

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-81
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]

24.5 5" inclusion of SH.



DIAMOND DRILL LOG

Page 4 of 4

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MUN-BN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-81
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Mm
				DEPTH	% S	Dr. S	Dr. S	From m	To m	Width	No.	Au %	Au ppb		
129.7	130	98	MPH (C, R) inclusion of mylonitically altered shale												
130	135	78	Lump dark green Vp contacts rubble zone lower contact rubble zone												
135	139	98	MPH (H, K) red-brown - pale green mottled. Faint porphyry texture - 1-2% garnet porphyroblasts 5% Py + Po in Q matrix					135	137	2	5094	.003			
								137	139	2	5095	.007			
								139	141	2	5096	.002			
139	141	98	Lump light green argill. porphyry faulted contacts												
141	146	98	MPH (H, K, Q) red-brown - green mottled Porphyroblasts of pink garnet. Low S	142		55	S ₁								
146	147	98	Lump dk green. Contact sharp d to S ₁												
147			MPH (H, K, Q) as at 141-146												

153

E of H.



DIAMOND DRILL LOG

Page 1 of 4

Collar:		Hole Survey		
NORTH	449N	Footage	Azimuth	Dip
EAST	303W	257	200°	-10
ELEVATION				
LOGGED BY	J. McIntosh			
DATE LOGGED	October 6, 1983			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
 PROPERTY NAME TILlicum
 DRILLING CONTRACTOR DRILCOR
 ASSAYER MIN-EN LABORATORIES LTD.
 PURPOSE OF HOLE TEST EAST EXTENSION OF Old
mineralization in Hole TS 83-58.

HOLE NO. TS-83-82
 CLAIM NAME Hugh
 COMMENCED Oct 13, 1983
 FINISHED October 16, 1983

From m	To m	Rcv %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Min
				DEPTH	% Dip	So. Dr.	to S. Dr.	From	To	Width	No.	Au %	Au ppb		
0	7	0	Casing												
7	14	70	MPAH (F) Light grey-green faintly porphyritic												
14	34	95	MPtv (C, B, H) grey-green f.g. tuff - could almost be classed as Ptm. Calcite tangentially altered veins weak hornfelsing.	20'			20° S.								
34	59.5	98	PTm (K, H) fine grained tuff, dark green. Calcite veins to 4mm Occasional zebra texture. 10% combined Po + Py mainly dis. & replacements along fractures 51 - carbonate gouge zone. 64 - clay gouge. Lower P	50'			20° S.								
59.5	94.5	98	dark grey-green f.g. upper contact 35° to CH ⊥ to S. lower contact @ 45° to CH												
94.5	111	98	PTm to MPtv (H, K, C) dark green with lighter green mottling (K) more hornfelsed than before	100'			3° S.		1						
								108	101	3	4992				

DIAMOND DRILL LOG

Page 2 of 4

Collar:	Hole Survey		
	NORTH _____	Footage	Azimuth
	EAST _____		Dip
	ELEVATION _____		
	LOGGED BY _____		
	DATE LOGGED _____		
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCAR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 63-82
CLAIM NAME _____
COMMENCED _____
FINISHED _____

[illegible]



DIAMOND DRILL LOG

Page 3 of 4

Collar:	Hole Survey		
NORTH	Footage	Azimuth	Dip
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MUN-BN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-82
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Notes
				DEPTH	°	°	°	From	To	Width	No.	Au %	Au ppb		
147	163	98	MPtv (H, K, C) dark green to grey-brown horafolised tuff (ash) Py + Po + tscpy in replacements off fractures. Para Q impreg.												
163	182	98	MPts (H, K) Interbedded tuffaceous siltstone (green) and grey mudstone. Po + Py wisp. like layers // to S. Occasional traces of cpy.	165			20° S.	166	169	3	4562		10		
								169	172	3	4563		5		
								172	175	3	4564		5		
								175	178	3	4565		10		
								178	180	2	4566		70		
								180	182	2	4567		5		
182	186	98	MPtv P ₁ (H, K) Zebra andesite - extensive development.	182			25° S.	182	184	2	4568		15		
								184	186	2	4569		10		
								186	189	3	4570		5		
186	202	98	MPtv (H, K) low intense K impreg. minor TS interbeds. logged to 202					189	192	2	4571		10		
202	222	98	MPts (H, K, R) med green to grey green tuffaceous siltstone minor calcite veining, argillite all along fractures. Po in replacements along fractures 5-10%. Becoming more tuffaceous by 224'	215			20° S.	208	211	3	4572		40		
								211	214	3	4573				
								214	217	3	4574				
								217	220	3	4575				

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-82
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From	To	Revs	LITHOLOGY	STRUCTURE					Sample				Assays		Visual Log
				Depth	Di	Dr	Dr	Dr	From	To	Width	No.	Au %	Au ppb	
227		98	MPTV (H, K)						220	223	3	4576		25	
			Zebra andesite - fine grained (early) tuff	245				15 S.	223	226	3	4577		15	
			2. Colours dark green mottled pale green						226	227	1	4578		40	
			Sulphides 10% Po as di's + frust filling + replacement						227	229	2	4579		20	
			239 3cm band massive Po, Sp, Gr. Arg.						229	232	3	4580		135	
			in calc-sil impreg.						232	235	3	4581		410	
									235	238	3	4582		145	
257			End of Hole						238	240	2	4583	.017		
			No casing left in Hole.						240	242	2	4584		10	
									242	244	2	4585		15	
									244	246	2	4586		15	
									246	248	2	4587		10	
									248	250	2	4588		5	



DIAMOND DRILL LOG

Page 1 of 5

Collar:		Hole Survey		
NORTH	495 N	Footage	Azimuth	Dip
EAST	245 W	120	110	-15
ELEVATION				
LOGGED BY	J. H. McIntosh			
DATE LOGGED	Oct 20/83			
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-MN LABORATORIES LTD.
PURPOSE OF HOLE TEST EAST Ridge

HOLE NO. TB-83-83
CLAIM NAME Hugh
COMMENCED October 19, 1983
FINISHED October 20, 1983

From m	To m	Rwy %	LITHOLOGY	STRUCTURE						Sample				Assays		Visual Log	Notes
				DEPTH	% Dip	to Dip	to Dip	to Dip	to Dip	From m	To m	Width	No.	Au oz	Au ppb		
0	2.5'	60	Lamp Contact @ 50° to CA														
2.5	4.5	95	MPsh (Q, K) light grey to pinkgrey with pale green mottling Py + Po on fracture filling + replacements	3'			70°	S ₁		2.5	4.5		5097		100		
										4.5	7.5		5098	101			
										7.5	9		5099		5		
										9	11		5100		150		
										11	13		5101		175		
4.5	7.5	95	MPsh (Q, K) Grey laminated mudstone occasional thin Q + K w/ grey with py + po. Trace Sp				70°	lam		13	15		5102		220		
										15	17.2		5103		755		
										17.2	20		5104		10		
										20	22		5105		310		
										22	24		5106		495		
7.5	9	95	Lamp con upper contact @ 70° to CA. ⊥ to S ₁ (lam.) lower " " " " " " "							24	26		5107		100		
										26	28		5108		235		
										28	29.5		5109		85		
										29.5	31.5		5110		350		
9	16		MPsh (Q, K) Grey lam mudstone cont 4.5-7.5							31.5	32.8		5111		245		
										32.8	34.3		5112		365		
										34.3	37.5		5113		10		
16	17.2		MPsh (Q, K, H) redbrown. Pink grey f.g. biotite hornfels							37.5	42.9		5114		370		
										42.9	48.9		5115		155		



DIAMOND DRILL LOG

Page 3 of 5

Collar:	Hole Survey		
NORTH _____	Footage	Azimuth	Dip
EAST _____			
ELEVATION _____			
LOGGED BY _____			
DATE LOGGED _____			
MAP REFERENCE _____	Method: _____		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILLICUM
DRILLING CONTRACTOR DRILCOR
ASSAYER MIN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO. 83-82
CLAIM NAME _____
COMMENCED _____
FINISHED _____

From m	To m	Rcvy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	Min
				DEPTH	% Dip	to Hor.	to S. Dip	From m	To m	Width	No.	Au % Au ppb			
34.3	39.5	98	Lamp dyke. Contact @ 55° to CA (lower) " " 70° to CA upper (conformable to S.)					42.9	45.3	0.6	5116		195		
								45.3	47.3	2	5117		20		
39.5	42.3	98	MPDH (H, K, Qm) light grey to grey-green with red-brown and med-green mottling. Pink garnet porphyroblasts 5% S" mainly Py with lesser Py - fracture filling and in Q+K w/peg	40'			63° S.								
42.3	42.9		Lamp Contacts - rubble zone.												
42.9	45.3		MPDH (H, K, Qm) as at 39.5-42.3 but contains inclusions of MPDH to 1"												
45.3	56.7		Lamp upper contact @ 70° to CA lower contact @ 60° " "												
56.7	57.7		MPDH grey mudstone - 5% py in discontinuous frct. and fig. dissem					56.7	57.7	1	5118		10		



DIAMOND DRILL LOG

Page 4 of 5

Collar:		Hole Survey		
NORTH		Footage	Azimuth	Dip
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE		Method:		

PROJECT ESPERANZA EXPLORATIONS LTD.
PROPERTY NAME TILlicum
DRILLING CONTRACTOR DRILCOR
ASSAYER MUN-EN LABORATORIES LTD.
PURPOSE OF HOLE _____

HOLE NO.	<u>83-83</u>
CLAIM NAME	_____
COMMENCED	_____
FINISHED	_____

From m	To m	Rpy %	LITHOLOGY	STRUCTURE				Sample				Assays		Visual Log	
				DEPTH	N	Dip	So. Dr.	N	From m	To m	Width	No.	Au %		Au ppb
57.7	77.5	95	Lamp Upper contact @ 68° to CA lower " @ 55° + irregular												
77.5	85	98	MPH (Q, K, Hmt) light-gray green with red-brown + green mottling occasional inclusions of Qtz + Ts. Sulphides ~ 5-10% mainly P ₂ with lesser P ₁ - in Q + K and as fracture filling	80		65°	S.	77.5	79.5	2	5120		300		
								79.5	81.5		5121		310		
								81.5	83.5		5122	.041			
								83.5	85		5123		220		
85	89		Lamp upper contact conformable to S, lower contact conformable to S.					89	91		5124		25		
								91	92.5		5125		20		
								92.5	95.2		5126		5		
								95.2	97.2		5127		175		
89	92.5		MPH (K, Hmt) light-gray to gray-green. Partly porphyritic 5% P ₂ + P ₁ as fracture filling					97.2	99.2		5128		100		
								99.2	101.2		5129	.005			
								101.2	103.2		5130	.032			
								103.2	105.2		5131	.014			
92.5	95.2		Lamp dyke Contact @ 50° (steeper than S. with same strike					105.2	107.2		5132	.118			
								107.2	110		5133	.002			
								110	112		5134	.001			

COST STATEMENT - TILlicum GOLD PROPERTY

August 1, 1983 through January 31, 1984

GENERAL COSTS

Report preparation, Data compilation

J. McClintock (geologist)	30 days @ \$150	4,500
W. Roberts (geologist)	10 " " \$150	1,500

Drafting

200 hrs @ \$15.00/hr	3,000
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Printing

250

Travel

1,200

Truck Rental

4 months @ \$850/mo

3,400

Fuel

Camp and vehicles

500

Supplies

Lumber, flagging, acid, hip chain
thread, spray paint, sample bags, etc.

500

TOTAL

\$14,850

PHYSICAL

(a) Underground Program October 26 through December 1, 1983

Salaries

Geologist (J. McClintock)	Nov 10 - Dec 1	20 days	
	@ \$150/day		3,000
Surveyor (A. Radcliffe)	Oct 26 - Dec 1	35 days	
	@ \$50/day		1,750

Food and Accommodation

55 days @ \$20/day	1,100
--------------------	-------

Adit

200 ft @ \$ 250/ft	50,000
--------------------	--------

Site Preparation Tractor D6D Cat

16 hrs @ \$85/hr (includes swamper)	1,360
-------------------------------------	-------

Assaying

170 samples @ \$17.50/sample	2,975
------------------------------	-------

Snow Plowing Tractor D6D Cat

16 hrs @ \$85/hr (includes swamper)	1,360
-------------------------------------	-------

Shipping

200

Sub Total	61,745
-----------	--------

General Costs ($\frac{4}{10} \times \$14,850$)	5,940
--	-------

TOTAL	67,685
-------	--------

100% on HUGH = \$67,685

(b) Road Construction HUGH Claim

325 m long by 4 m wide on precipitous north
slope of Tillicum Mountain

Tractor D6D (1979)	50 hrs @ \$85	4,250
Powder		200
Jack Leg compressor rental		300

TOTAL	4,750
-------	-------

100% on HUGH = \$ 4,750

DRILLING - September 1 to October 30, 1983

\$

Diamond Drilling 7602 feet @ \$22/ft (all inclusive) 167,244

Room & Board - Drillers

Sept. 1 through Oct. 20, 1983

9 men - 50 days @ \$20/man/day 9,000

Salaries September 1 through October 30, 1983

Geologist (J. McClintock) 60 days @ \$150/day 9,000

Asst. Geologist (A. Radcliffe) 60 days @ \$50/day 3,000

Core Splitter (S. Seney) 60 days @ \$45/day 2,700

Cook 60 days @ \$60/day 3,600

Room & Board - Esperanza Staff

180 days @ \$20/day 3,600

Drill Moves and Site Preparation

Tractor: D6D Cat

Regular - 54 hrs @ \$85/hr (incl. swamper) 4,500

Stand by 80 hrs @ \$40/hr 3,200

Shipping 750

Assaying

305 samples for assay @ \$17.50/sample 5,337.50

1240 samples for rock geochem @ \$9.70/sample 12,125.00

Sub Total 224,056.50

General costs (⁶/10 of \$14,850) 8,910.00

TOTAL COST \$ 232,966.50

=====

Drilling done on HUGH (2072), WOLF (2071) and SANDY TOO (1445)
as follows: 2606 feet on HUGH 1721 feet on SANDY TOO 3
1233 feet on WOLF

Cost divided: WOLF 1233/7602 of 232,966.50 = \$ 37,785.80
SANDY TOO 3 1721/7602 of 232,966.50 = \$ 52,740.77
HUGH 4648/7602 of 232,966.50 = \$142,439.93

GEOLOGY - Surface Sampling

Salaries

Geologist (W. Roberts)	30 days @ \$150/day	4,500
Prospector (D. Heino)	30 days @ \$110/day	3,300

Assaying

50 samples @ \$17.50/sample (assay)	875
100 samples @ \$9.70/sample (geochem)	970

Food and Accommodation

2 men for 30 days @ \$20/man/day	1,200
----------------------------------	-------

Shipping

100

Sub Total	10,945
-----------	--------

General Costs ($\frac{1}{10}$ of \$14,850)	1,485
---	-------

TOTAL COST - GEOLOGY	\$ 12,430
----------------------	-----------

Cost divided: HUGH (2072) $\frac{1}{2} \times 12,430 = \$6,215.00$
 WOLF (2071) $\frac{1}{2} \times 12,430 = 6,215.00$

STATEMENT OF QUALIFICATIONS

I, WAYNE J. ROBERTS, geologist, with business address in Vancouver, British Columbia, and residential address in Coquitlam, British Columbia, hereby certify that:

- 1) I graduated from the University of British Columbia in 1968 with a B.Sc. majoring in Geology.
- 2) From 1968 to the present I have been actively engaged as a geologist in mineral exploration in British Columbia and the Yukon Territory.
- 3) I am a Fellow of the Geological Association of Canada.
- 4) I personally participated in the field work on the Tillicum Gold Property and have interpreted all data resulting from this work.

A handwritten signature in black ink, appearing to be 'WJ Roberts' with a stylized flourish at the end.

WAYNE J. ROBERTS, F.G.A.C.

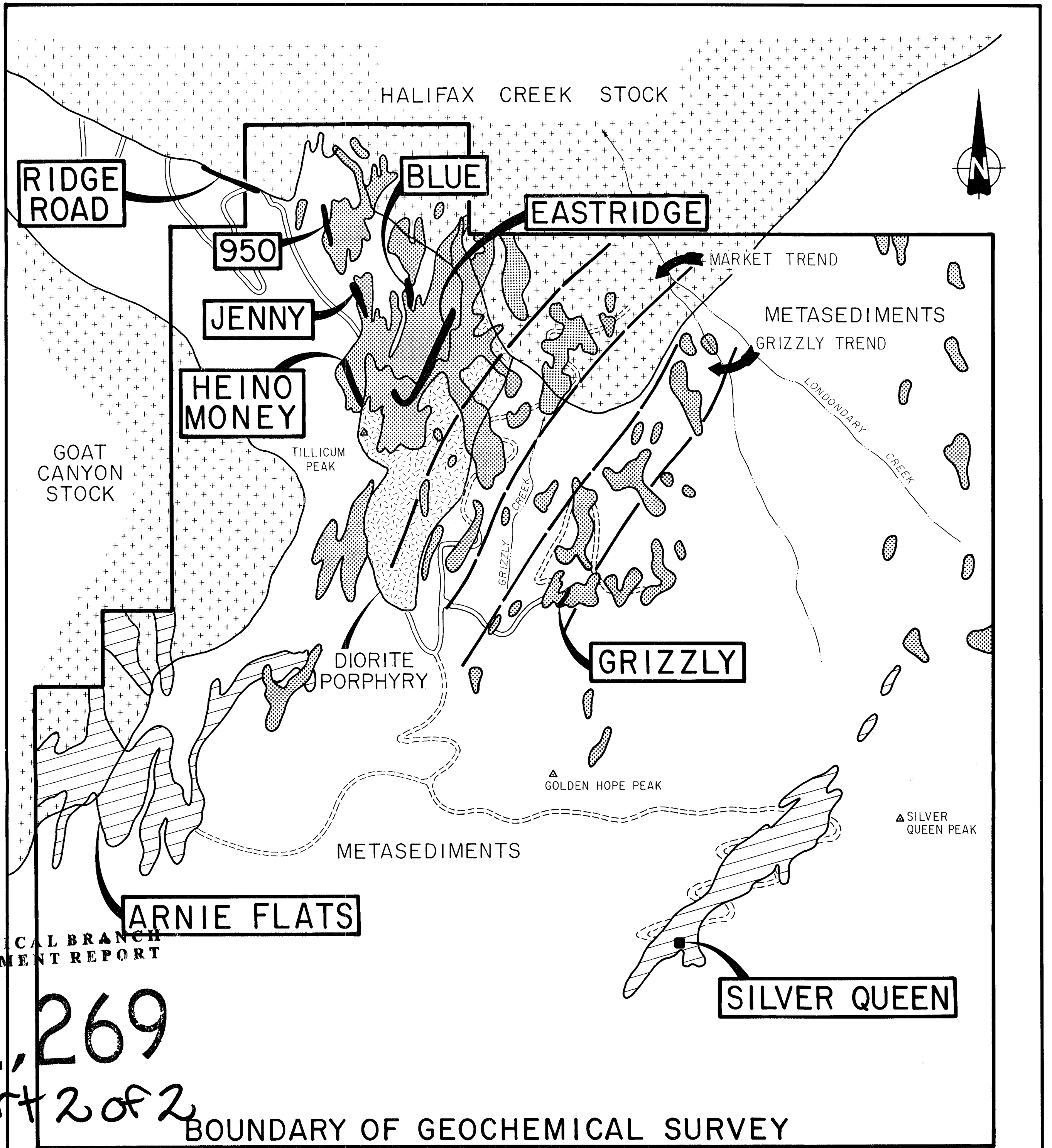
STATEMENT OF QUALIFICATIONS

John A. McClintock

- 1) I am a geologist residing at 32841 Ashley Way, Clearbrook, British Columbia and am currently employed by Welcome North Mines Ltd, 1027-470 Granville Street, Vancouver, British Columbia.
- 2) I graduated from the University of British Columbia in 1973 with a B.Sc (Honours) degree in Geology and have practised my profession continuously since that time.
- 3) I supervised and directed the physical and diamond drilling field work carried out on the Tillicum Gold Property.
- 4) I am an active member in good standing of the Association of Professional Engineers of the Province of British Columbia.

A handwritten signature in black ink, appearing to read 'John A. McClintock', written in a cursive style.

John A. McClintock, P.Eng.



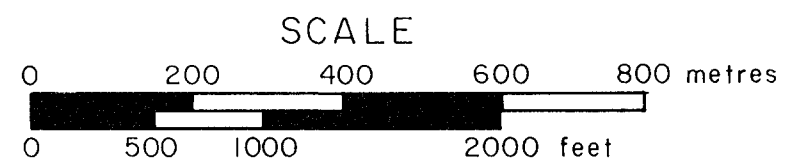
GEOLOGICAL BRANCH
ASSESSMENT REPORT

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LEGEND:

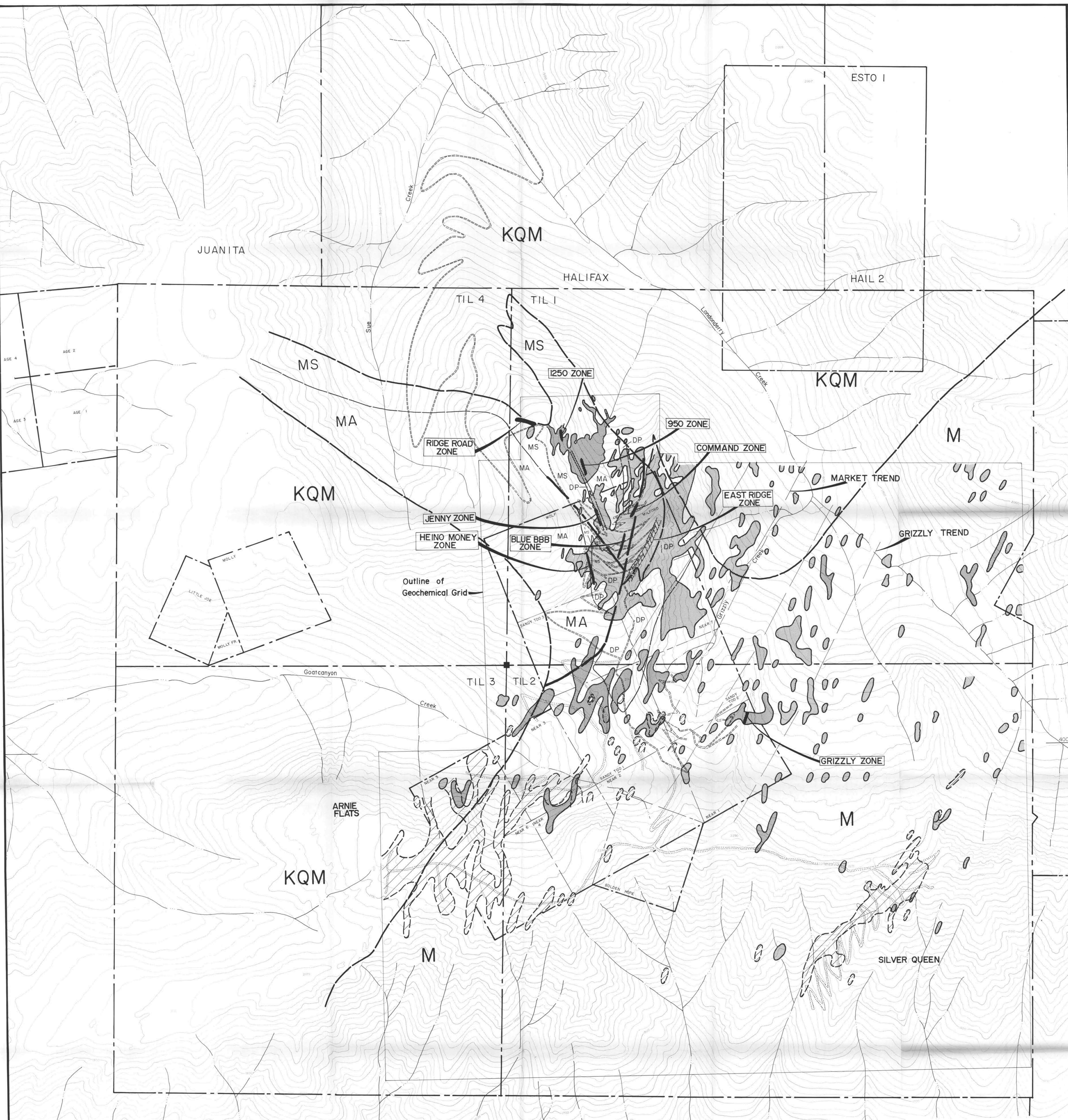
- GOLD ZONES
- GOLD GEOCHEMICAL ANOMALY (+50 p.p.b.)
- SILVER " " (+3 p.p.m.)
- EXISTING ROADS
- PROPOSED ROADS



TILlicum
GOLD PROPERTY
ESPERANZA-LA TEK0

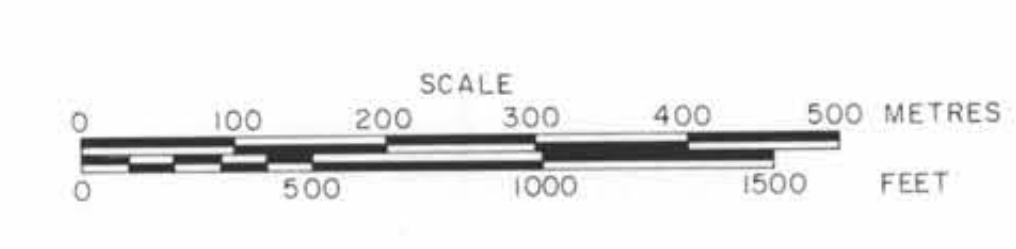
PLATE 2

John W. Chisholm



LEGEND

KQM	GOAT CANYON, HALIFAX CREEK STOCKS	GOLD ZONES
DP	DIORITE PORPHYRY	GOLD GEOCHEMICAL ANOMALIES (+50 ppb)
M	MILFORD GROUP, UNDIVIDED	SILVER GEOCHEMICAL ANOMALIES (+3 ppm)
MS	MILFORD GROUP METASEDIMENTS	EXISTING ROADS
MA	MILFORD GROUP METAVOLCANICS	PROPOSED ROADS
		CLAIM BOUNDARY
		GEOLOGICAL CONTACT
		FAULT

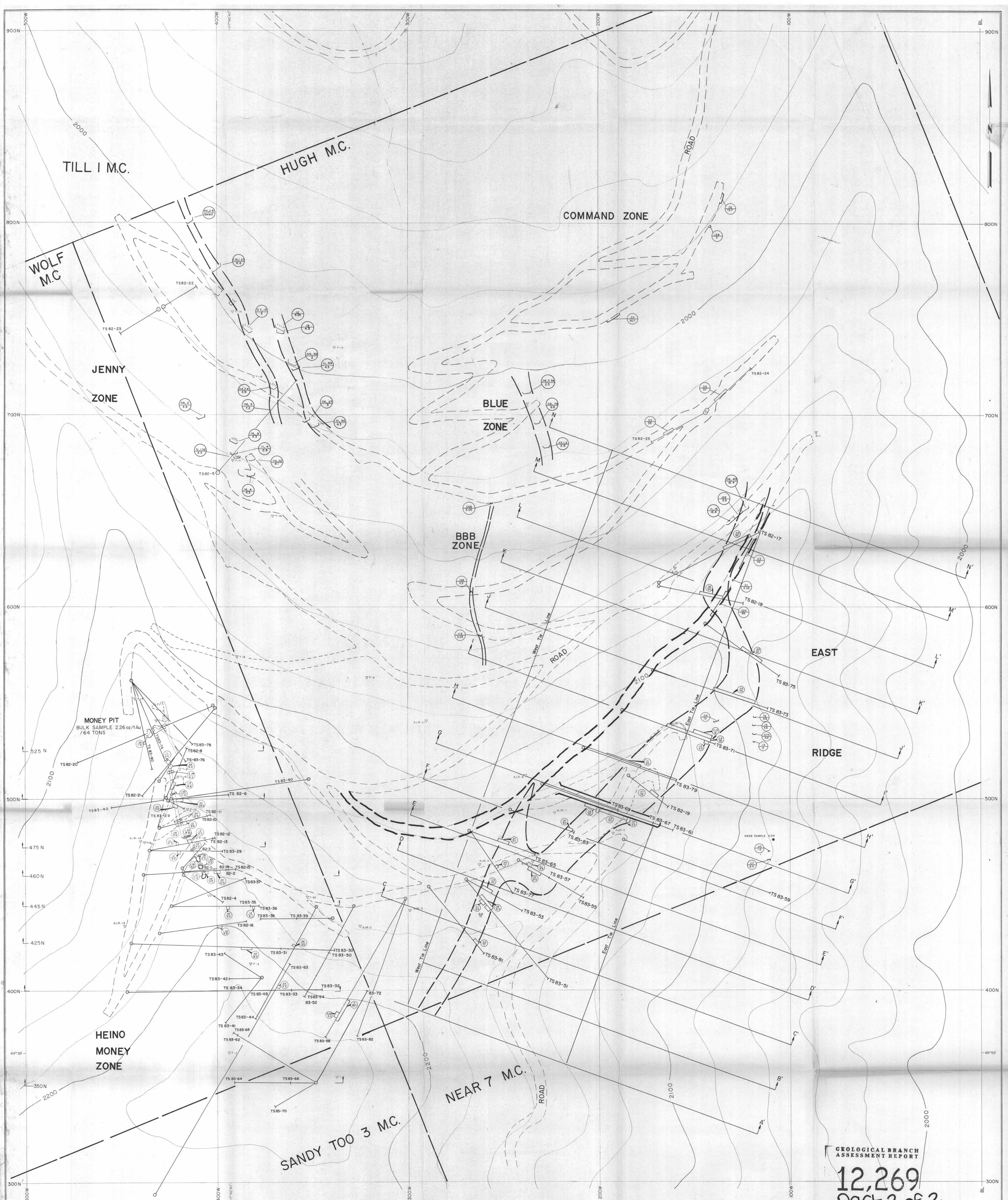


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ESPERANZA EXPLORATIONS LTD.
TILlicum GOLD PROPERTY

COMPILATION GEOLOGY
GEOCHEMISTRY & ROADS

NTS: 82 F/13
DATE: APRIL, 1984
SCALE: 1:5000
DRAWN: J.M./J.W.
PLATE: 3



GEOLOGICAL BRANCH
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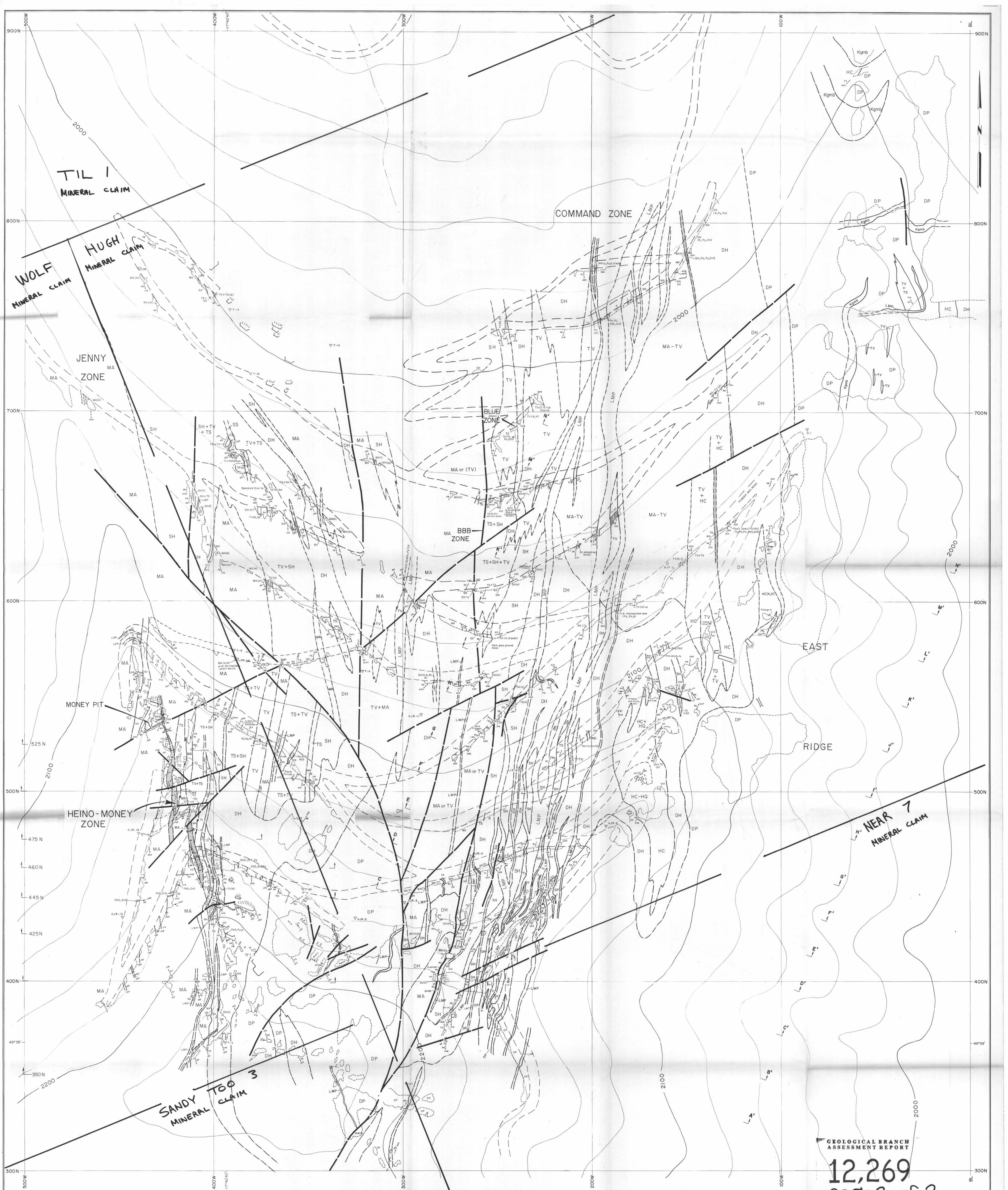
ESPERANZA EXPLORATIONS LTD.		
TILICUM GOLD PROPERTY		
NORTH SLOPE AREA		
COMPILATION		
DRILL SITES, ASSAY BLOCKS		
N.T.S. 82 F/13	DATA	SCALE: 1:500
DATE: MARCH, 1984	DRAWN: J.M./	PLATE 4
REVISED		

LEGEND:
○ DRILL HOLE WITH ASSAY BLOCK
○ ASSAY BLOCK, VALUE Au oz./t. / INTERVAL IN FEET
○ SURFACE TRENCH, ASSAY Au, Ag oz./t. / INTERVAL IN FEET
— ADIT, Nov to Dec 1983
— SURFACE TRACE OF GOLD MINERALIZATION

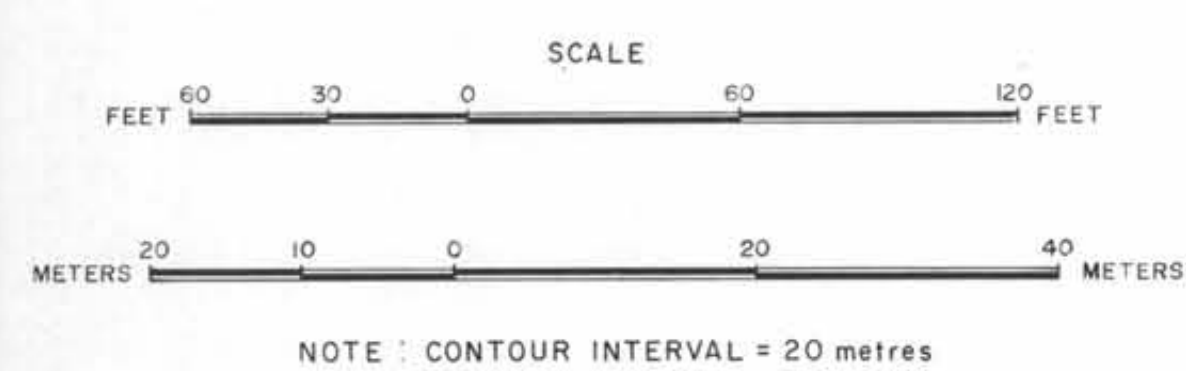
== Road Construction August to October 1983

SCALE
0 20 40 60 80 100 FEET
0 10 20 30 40 METERS
NOTE: CONTOUR INTERVAL = 20 METRES

John D. Hall



- LEGEND
- LIMIT OF OUTCROP
 - CONTACTS—DEFINED, ASSUMED
 - FAULTS—DEFINED, ASSUMED
 - BEDDING—STRIKE & DIP
 - FOLIATION—STRIKE & DIP
 - JOINTING—STRIKE & DIP
 - HAND TRENCH



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ESPERANZA EXPLORATIONS LTD.
TILlicum GOLD PROPERTY

NORTH SLOPE AREA
GEOLOGY

N.T.S. 62 F/13	DATE: APRIL 1984	SCALE: 1:500
REVISED	DRAWN: m.r.	PLATE: 3

Handwritten signature

LEGEND: TILlicum DISTRICT

			METAMORPHIC OVERPRINT	
AGE	UNIT	DESCRIPTION	CALC-SILICATE SKARN	HORNFELS
UNKNOWN	LMP	LAMPROPHYRE DYKES DARK GREEN CARBONATE ALTERED, AUGITE-EPIDOTE BEARING LAMPROPHYRE	DIOPSIDE-TREMOLITE QUARTZ SKARN+GOLD. QUARTZ SKARN+GOLD+PYRITE TREMOLITE-GROSSULARITE: K-FELD QUARTZ SKARN+PYRITE+GALENA+SPHALERITE+GOLD. DIOPSIDE-TREMOLITE-CLINOZOISITE QUARTZ SKARN+PYRITE+GOLD TREMOLITE-EPIDOTE-CARBONATE-CHLORITE GARNET-K-FELDSPAR SKARN CLINOZOISITE-GARNET-DIOPSIDE-K-FELDSPAR QUARTZ SKARN+PYRITE+GOLD.	
	LGR	LEUCOGRANITE DYKES		
	Kgmb	GOAT CANYON-HALIFAX CREEK STOCKS HORNBLENDE-BIOTITE QUARTZ MONZONITE; minor QUARTZ DIORITE, GRANODIORITE.		
SKARN IMPREGNATIONS -GOLD MINERALIZATION				
UNKNOWN	DP	MASSIVE TO FOLIATED, GREY DIORITE PORPHYRY WITH SUBROUNDED PLAGIOCLASE PHENOCRYSTS IN MOTTLED APHANITIC GROUNDMASS WITH SPARSE ANHEDRAL GARNETS.		
	DH	HYBRID DIORITE-HIGHLY DIORITIZED METASEDIMENTS		
MILFORD GROUP				
INCLUDES META-SEDS/META VOLC ASSEMBLAGES ORIGINALLY MAPPED AS MILFORD/KASLO GROUPS				
MISSISSIPPIAN & YOUNGER	SH	DARK-GREY-BLACK INDISTINTLY LAMINATED SHALE, LOCAL DEVELOPMENT OF SILTSTONE LAMINATIONS	CALC-SILICATED-HORNFELSED SHALE	BIOTITE-ACTINOLITE-CHLORITE SCHIST
	TS	BEIGE-TAN-DARK GREY, LAMINATED TUFFACEOUS SHALE	LAMINATED CALC-SILICATE BIOTITE-PLAGIOCLASE-CHLORITE-GARNET SCHIST	BIOTITE-CHLORITE-HORNBLENDE SCHIST
	TV	BEIGE, PALE GREEN TUFFACEOUS ANDESITE	QUARTZ-TREMOLITE-CLINOZOISITE INPREGNATED TUFFACEOUS ANDESITE	BIOTITE-ACTINOLITE-CHLORITE SCHIST
	MA	DARK GREEN, FINE GRAINED META ANDESITE TO META-BASALTIC ANDESITE (BRECCIA, TUFFS, FLOWS)	ZEBRA ANDESITE. DIOPSIDE-TREMOLITE-ACTINOLITE-BIOTITE GARNETIFEROUS HORNFELS	PLAGIOCLASE-HORNBLENDE-AUGITE EPIDOTE AMPHIBOLITE. BIOTITE-HORNBLENDE-PLAGIOCLASE-CARBONATE HORNFELS
	HC	PINK-BEIGE, FINE GRAINED, SUGARY TEXTURED, ALTERED CLASTICS INCLUDING QUARTZITE, ARKOSE AND SILTSTONE.	BIOTITE-MUSCOVITE-GARNETIFEROUS SKARN	QUARTZ-K-FELDSPAR-BIOTITE-CHLORITE SCHIST.
	HQ	YELLOW-BROWN, SUGARY TEXTURED, FINE GRAINED, ALTERED QUARTZITE	QUARTZ-TREMOLITE-SULPHIDE INPREGNATED META QUARTZITE	MUSCOVITE-ORTHOCLASE-QUARTZ SCHIST
	SS	WHITE TO YELLOW, QUARTZ-SERICITE SCHIST (POSSIBLY CAUSED BY SHEARING AND ALTERATION OF DH)		
MODIFIERS			ALTERATION TYPES	
f - FAULTED, SHEARED			A - ALTERED, NOT DEFINED	
t - TUFFACEOUS			H - HORNFELS	
py - PYRITIC			K - CALC-SILICATE	
l - LAMINATED			C - CARBONITIZATION	
m - MASSIVE			S - SILICIFICATION	
q - QUARTZ VEINING			N - SKARN	
v.g. - VISIBLE GOLD			R - ARGILLIC ALTERATION (KAOLINITE, MONTMORILLONITE, PYROPHYLLITE)	
Po - PYRRHOTITE				
ms - MASSIVE SULPHIDE				
Pb - GALENA				
Zn - SPHALERITE				
i - INTERMITTANT				
w - WEAK				

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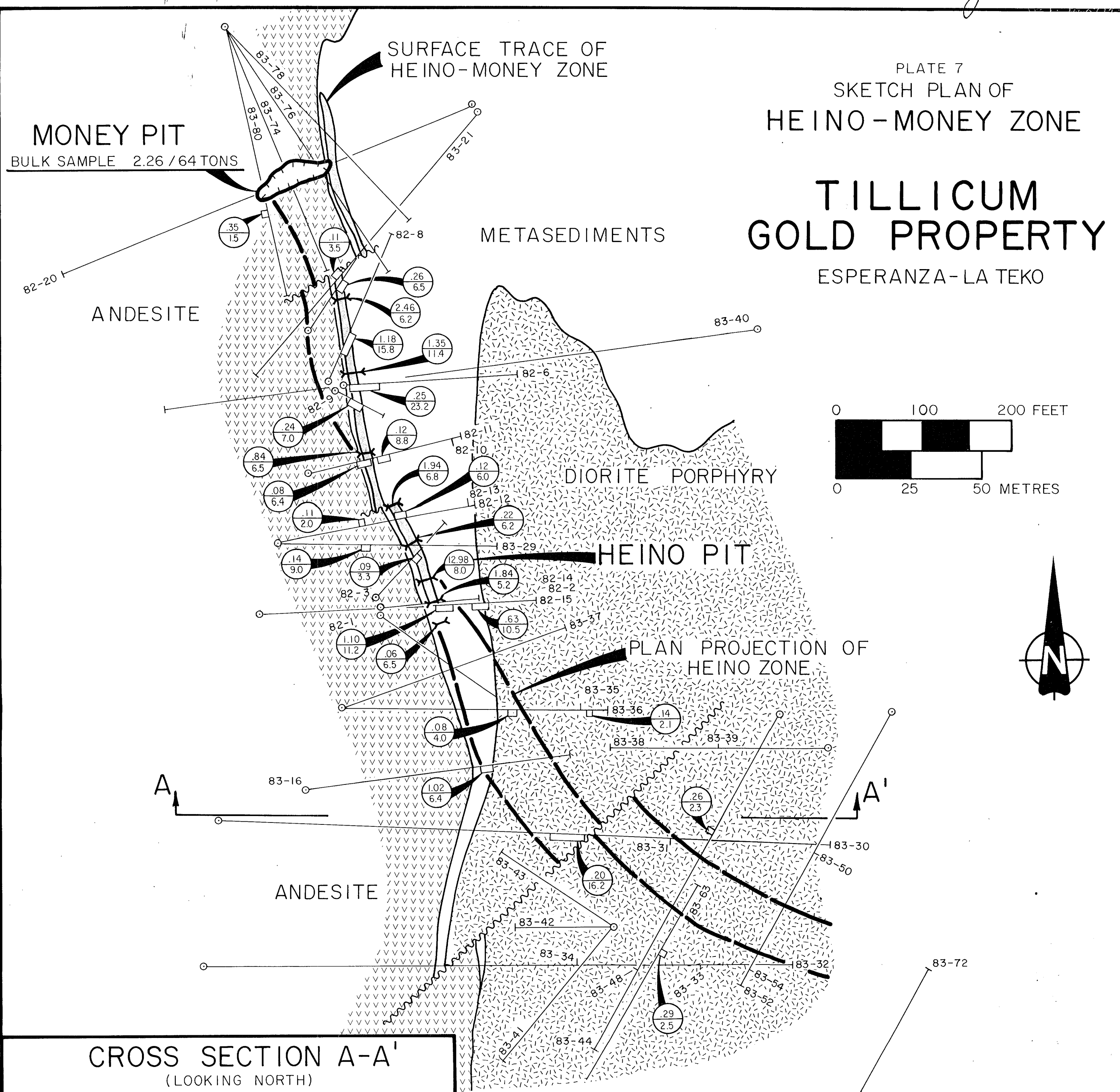
ESPERANZA EXPLORATIONS LTD.		
TILlicum GOLD PROPERTY		
LEGEND		
NTS: 82 F/13	SCALE: 1:200	PLAT: <i>John R. O'Neil</i>
DATE: APR. 4, 1984	DRAWN: WR./r.w.r.	

John H. D. Steel

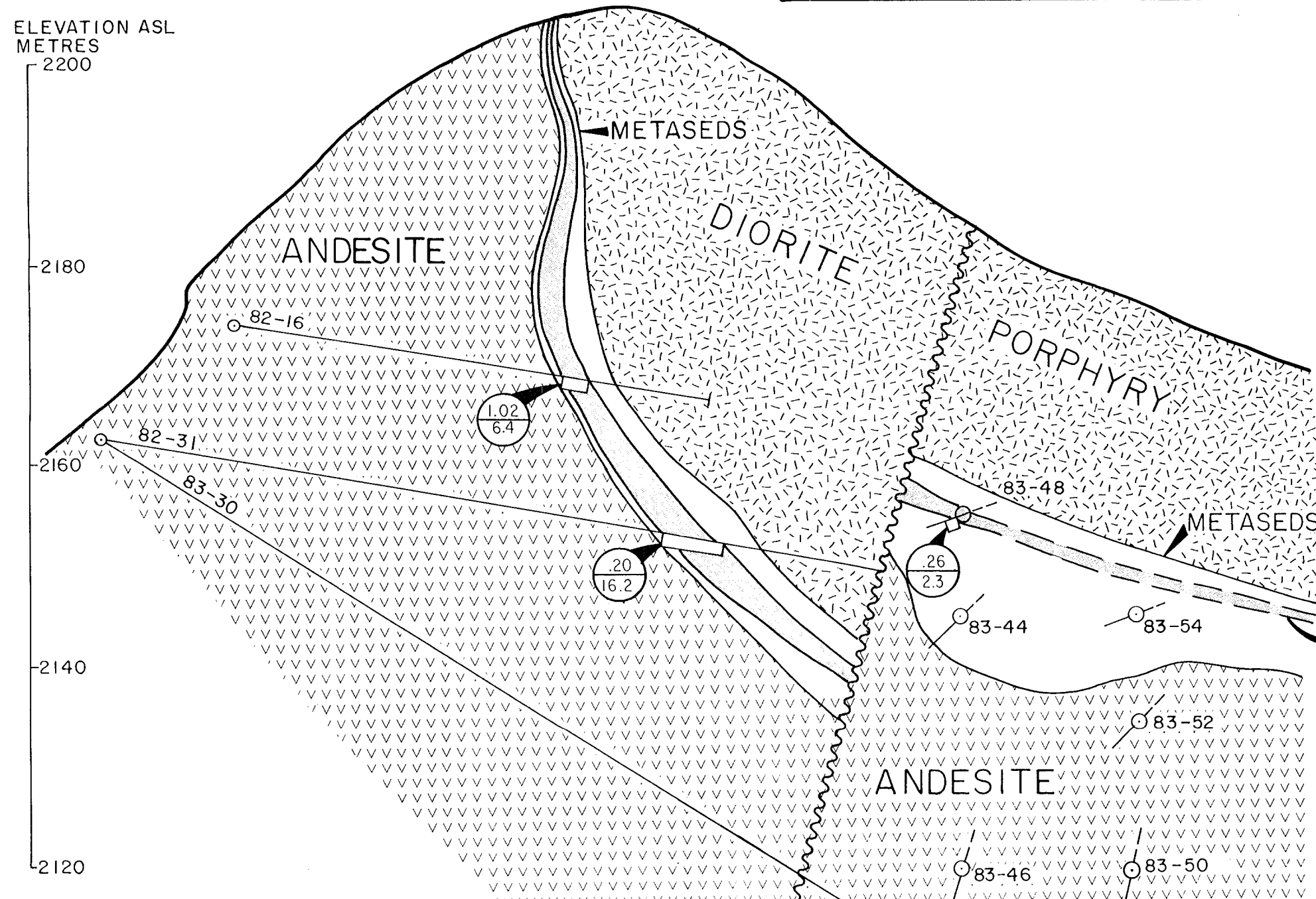
PLATE 7
SKETCH PLAN OF
HEINO-MONEY ZONE

TILLICUM
GOLD PROPERTY

ESPERANZA-LA TEKO



CROSS SECTION A-A'
(LOOKING NORTH)



LEGEND:

$\frac{.11}{38.7}$ GOLD (oz. / Ton)
FEET

—X— HAND TRENCH

○— DRILL HOLE

GEOLOGICAL BRANCH
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E



— 2240



2220

2210

2200

2190

2180

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ESPERANZA EXPLORATIONS LTD.		
TILlicum Gold Property		
Heino - Money Zone		
Section 350N		
NTS: 82 F/13	SCALE: 1:200	PLATE: 80 <i>117</i>
DATE: JAN. 1984	DRAWN: J.M./r.w.f.	

SW

NE

ELEVATION ASL
METRES

ELEVATION ASL
METRES

2240

2240

2230

2230

2220

2220

2210

2210

2200

2200

2190

2190

2180

2180

2170

2170

2160

2160

2150

2150

2140

2140

2130

2130

2120

2120

2110

2110

TILlicum PEAK

MA

MA

TV

DP

DP

TS 83-63

TV

TS 83-48

MA

DP

TS

MA

TS 83-46

TS 83-44

GEOLOGICAL BRANCH
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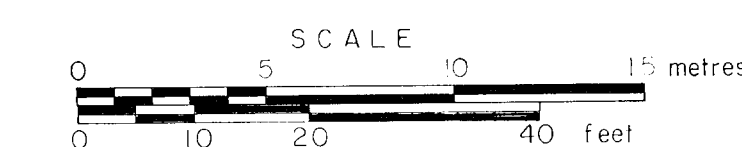
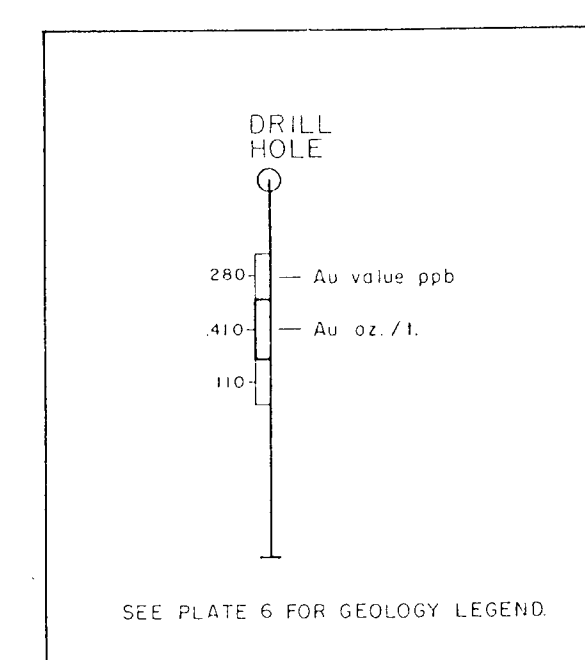
ESPERANZA EXPLORATIONS LTD.

TILlicum GOLD PROPERTY

HEINO - MONEY ZONE

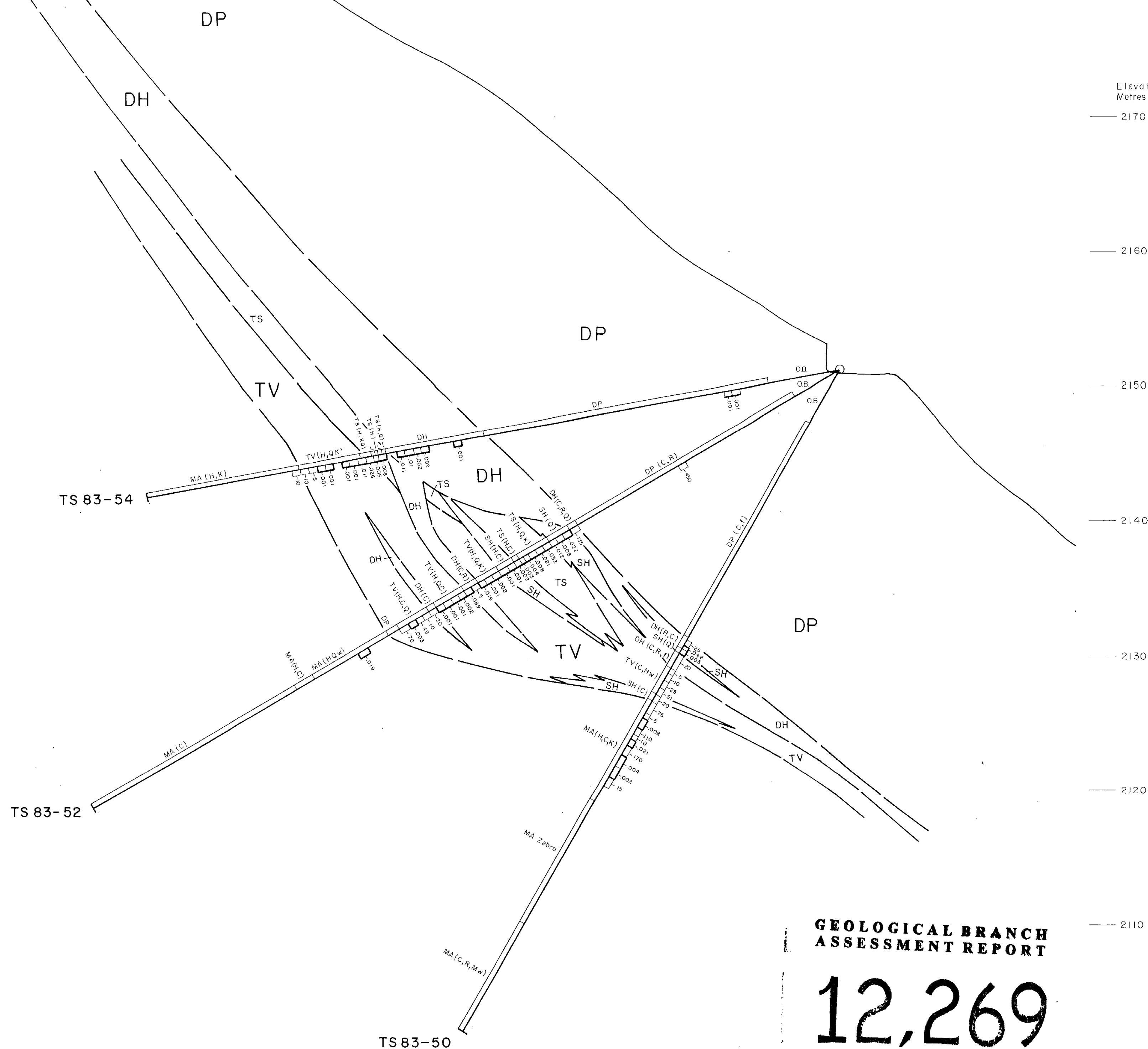
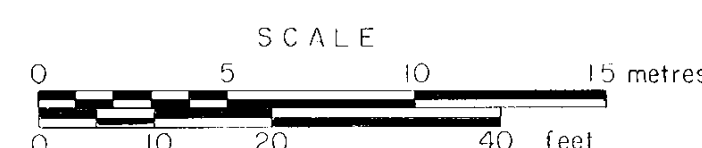
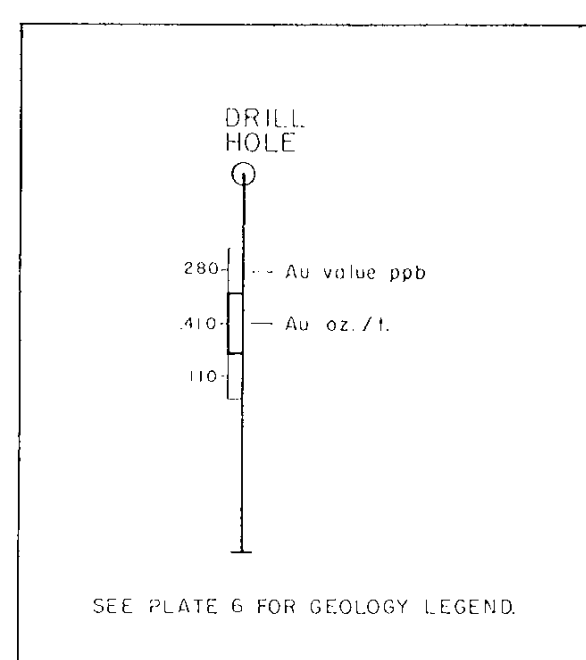
SECTIONS TS 83-44,46,48,63

NTS: 82 F/13 SCALE: 1:200 PLATE 8
DATE: JAN ,1984 DRAWN: J.M./r.w.f.



SW

NE

Elevation ASL
MetresElevation ASL
MetresGEOLOGICAL BRANCH
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ESPERANZA EXPLORATIONS LTD.

TILlicum GOLD PROPERTY

HEINO - MONEY ZONE
SECTION TS 83-50,52,54

NTS: 82 F/13

SCALE: 1:200

PLATE 8

DATE: JAN. ,1984

DRAWN: J.M./r.w.r.

SW

NE

ELEVATION ASL
METRES
2220

ELEVATION ASL
METRES
2220

2210

2210

2200

2200

2190

2190

2180

2180

2170

2170

2160

2160

2150

2150

2140

2140

2130

2130

2120

2120

2110

2110

2100

2100

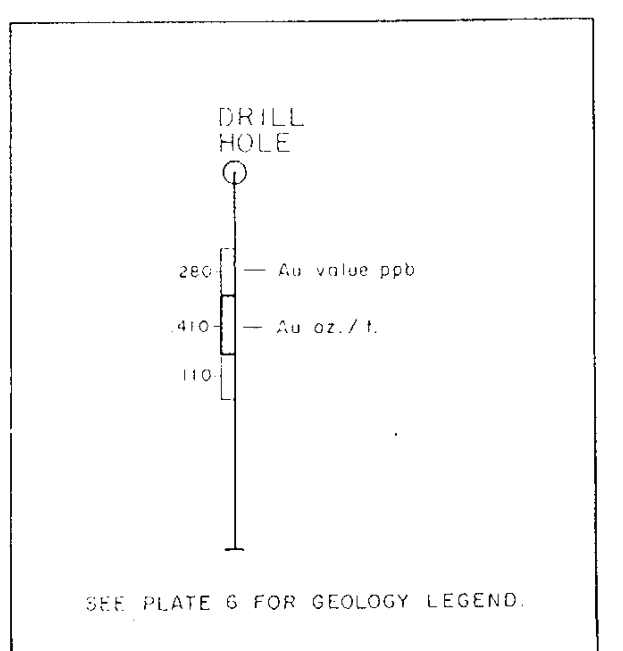
2090

2090

2080

GEOLOGICAL BRANCH
ASSESSMENT REPORT

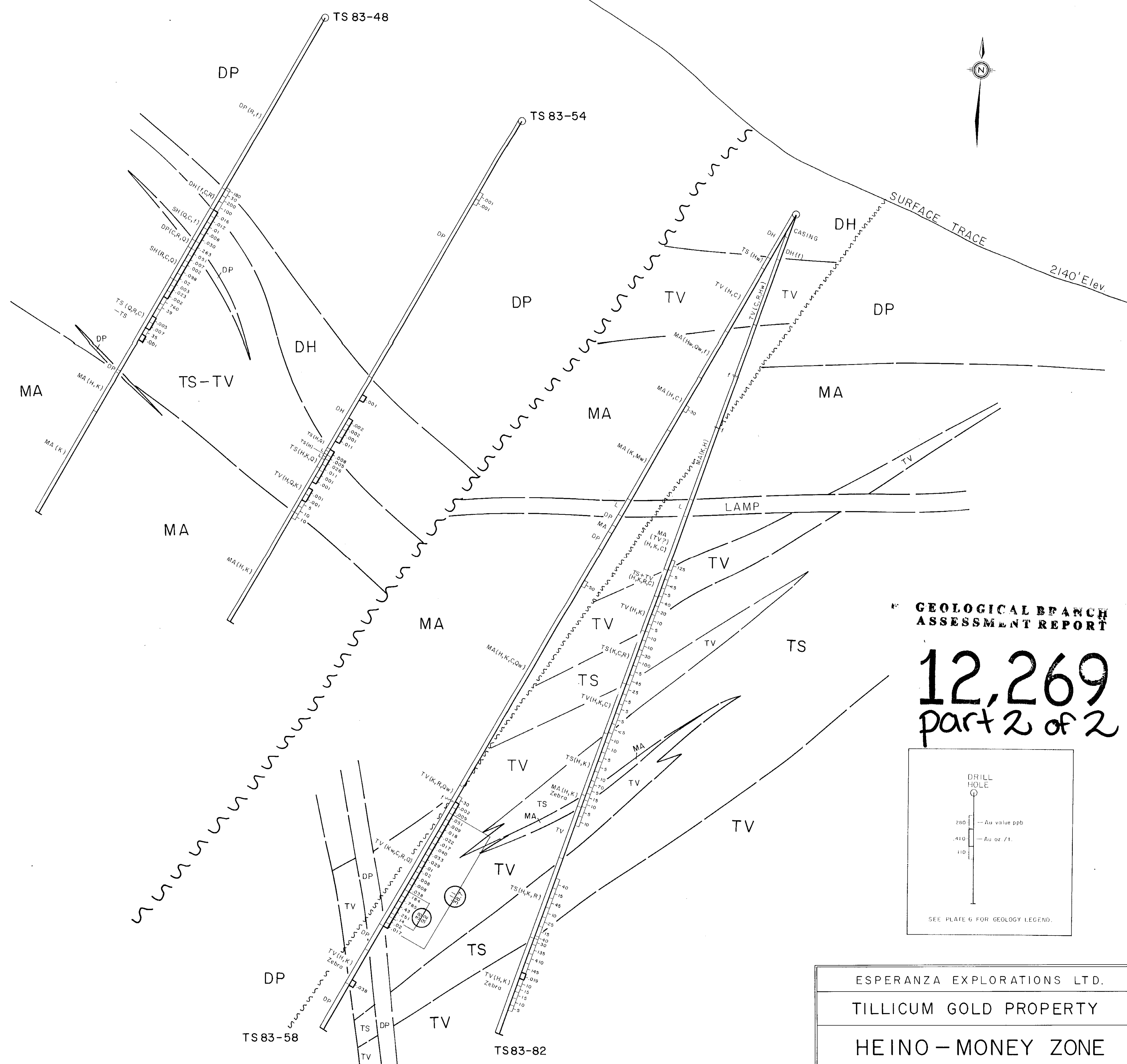
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of 2



ESPERANZA EXPLORATIONS LTD.		
TILlicum GOLD PROPERTY		
HEINO - MONEY ZONE		
SECTIONS TS 83 56A, 58, 60, 72		
NTS: 82 F/13	SCALE: 1:200	PLATE: 8N
DATE: FEB 28, 1984	DRAWN: J.M. / r.w.f.	

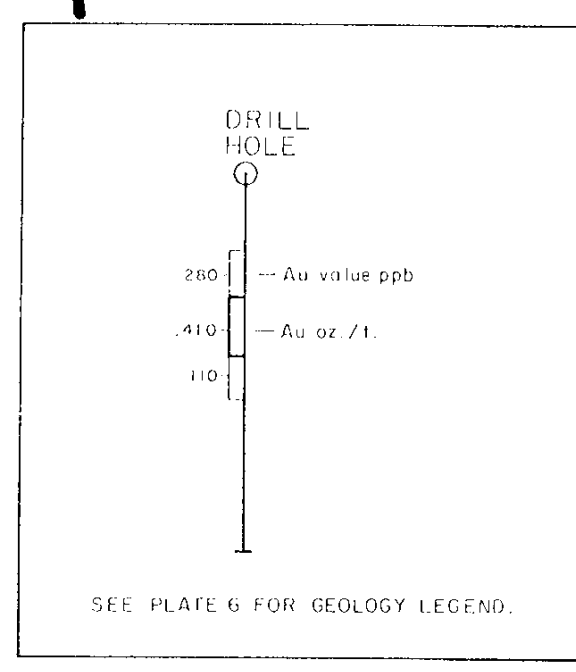
SCALE
0 10 20 30 40 50
metres

300 W



**GEOLOGICAL BRANCH
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ESPERANZA EXPLORATIONS LTD.		
TILlicum GOLD PROPERTY		
HEINO - MONEY ZONE		
PLAN 2140 m LEVEL		
NTS: 82 F/13	SCALE: 1:200	PLATE 30
DATE: FEB. 28, 1984	DRAWN: J.M./r.w.r.	

John McArthur

NW.

SE.

ELEVATION ASL
METRES
2240

ELEVATION ASL
METRES
2240

2230

2230

2220

2220

2210

2210

2200

2200

2190

2190

2180

2180

2170

2170

2160

2160

2150

2150

MA

TS 83-68

DH

SH

TS

DH

MA

MA

TV

Klgn

MA (K,H,C)

MA

TV-MA

Klgn

Klgn

DP

DH

DH

DRILL
HOLE

280 Au value ppb
410 Au oz./t
110

SEE PLATE 6 FOR GEOLOGY LEGEND.

SCALE
0 5 10 15 metres
0 10 20 40 feet

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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ESPERANZA EXPLORATIONS LTD.

TILlicum GOLD PROPERTY

HEINO - MONEY ZONE

SECTION TS 83-62 - TS 83-68

NTS: 82 F/13

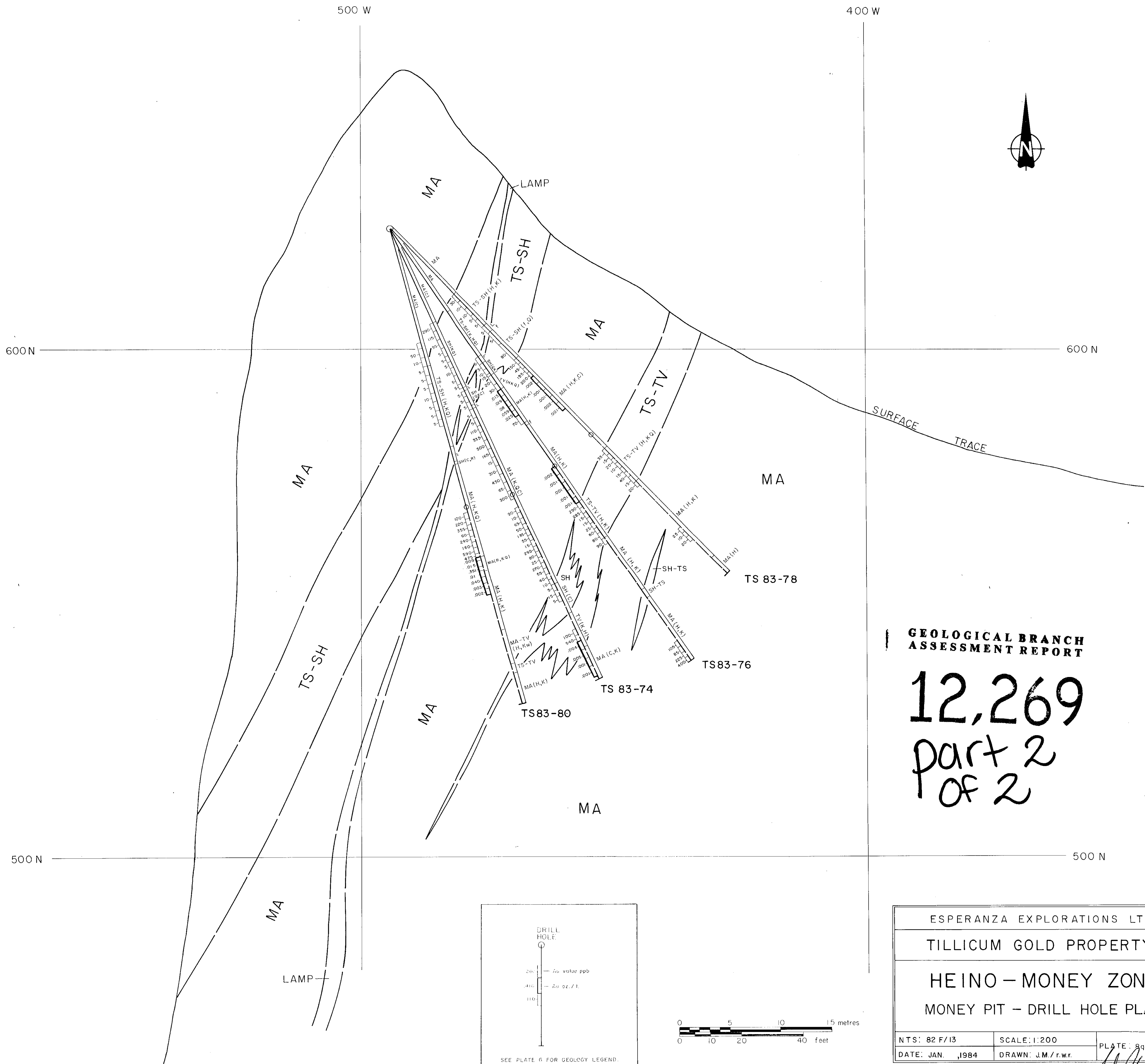
SCALE: 1:200

PLATE 8p

DATE: JAN. ,1984

DRAWN: J.M./r.w.r.

John H. H. H.



N

S

ELEVATION ASL
METRES

2170

ELEVATION ASL
METRES

2170

2160

2160

2150

2150

2140

2140

2130

2130

2120

2120

2110

2110

MONEY PIT

MA

MA

MA

SH

MA

MA

MA

TV

TS

MA

TS83-80

MA

TV

TS

MA

SH

SH

MA

MA (C)

SH (H, K, Q)

LAMP

LAMP

TS-SH (C, R)

MA (H, K, Q, W)

MA (H, K, Q)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

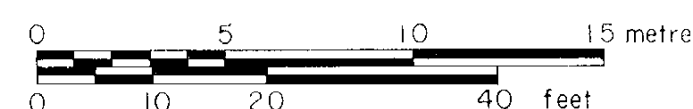
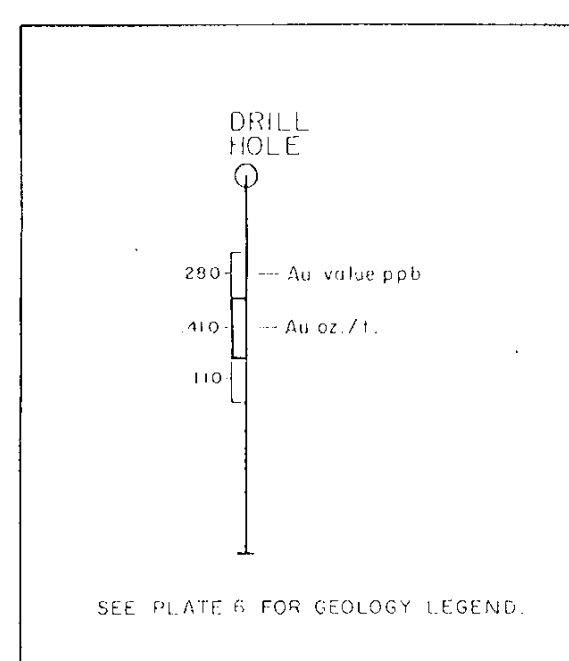
MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

MA (H, K, Q, W)

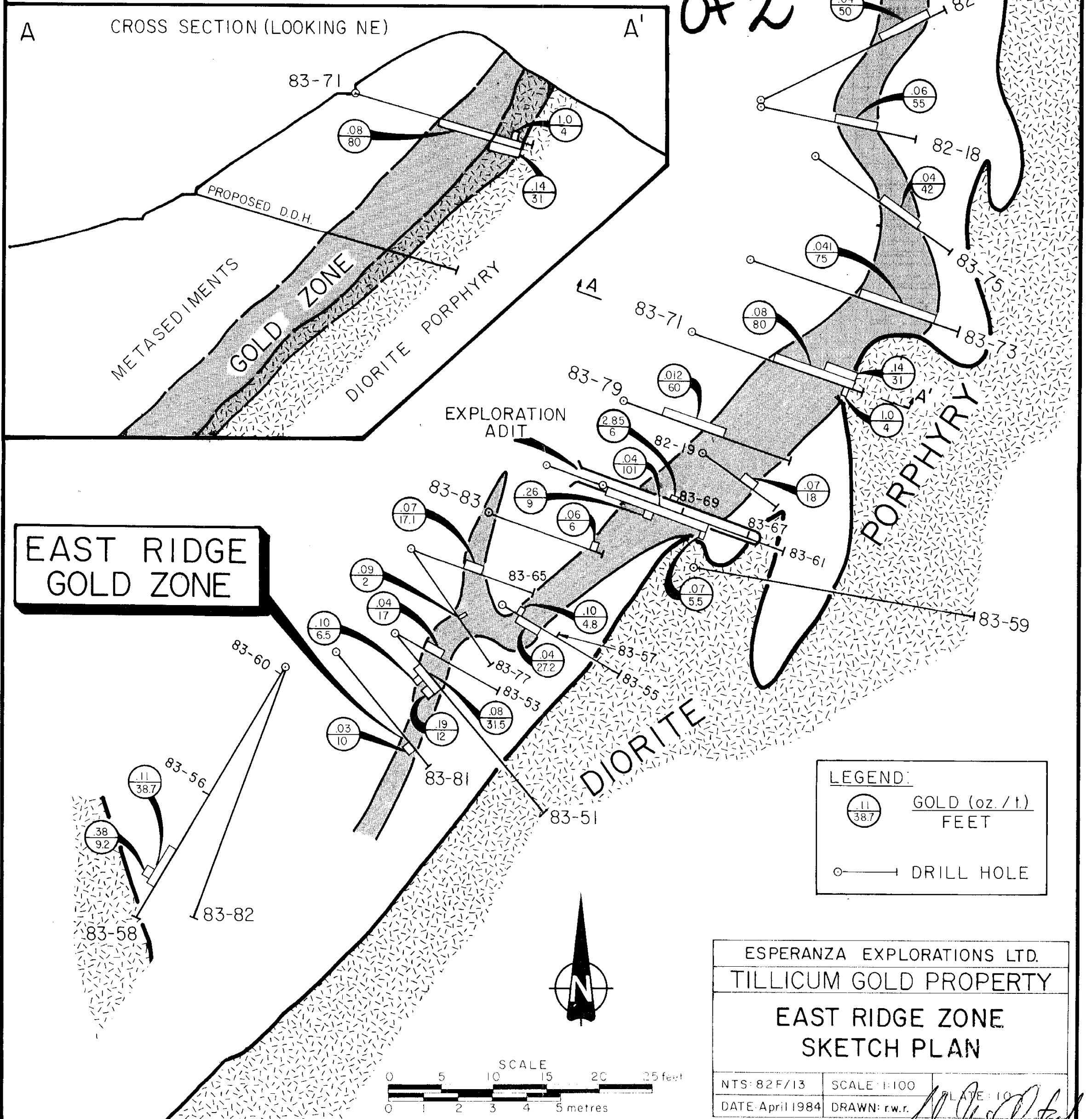
MA (H, K, Q, W)

GEOLOGICAL BRANCH
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ESPERANZA EXPLORATIONS LTD.		
TILlicum GOLD PROPERTY		
HEINO - MONEY ZONE		
MONEY PIT - TS83-80		
NTS: 82 F/13	SCALE: 1:200	PLATE: 8
DATE: FEB. 28, 1984	DRAWN: J.M./r.w.r.	

EAST RIDGE ZONE TILlicum GOLD PROPERTY

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C

EAST TIE LINE

GEOLOGICAL BRANCH
ASSESSMENT REPORT

C'

Elevation ASL
Metres
2160 -Elevation ASL
Metres
-216012,269
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2150 -

-2150

2140 -

-2140

2130 -

-2130

2120 -

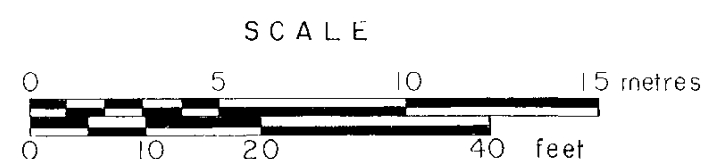
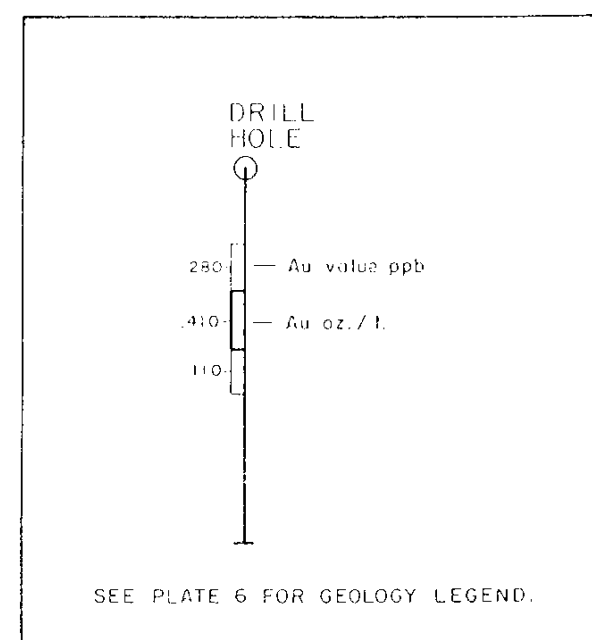
-2120

2110 -

-2110

Collar 12 m NE of
section
TS83-81

TS83-51



ESPERANZA EXPLORATIONS LTD.

TILlicum GOLD PROPERTY

EAST RIDGE GOLD ZONE

CROSS SECTION C-C'

NTS: 82 F/13

SCALE: 1:200

DATE FEB. 1984

DRAWN: J.M./r.w.r.

PLATE 11a

John M. Ditch

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2110 -

- 2110

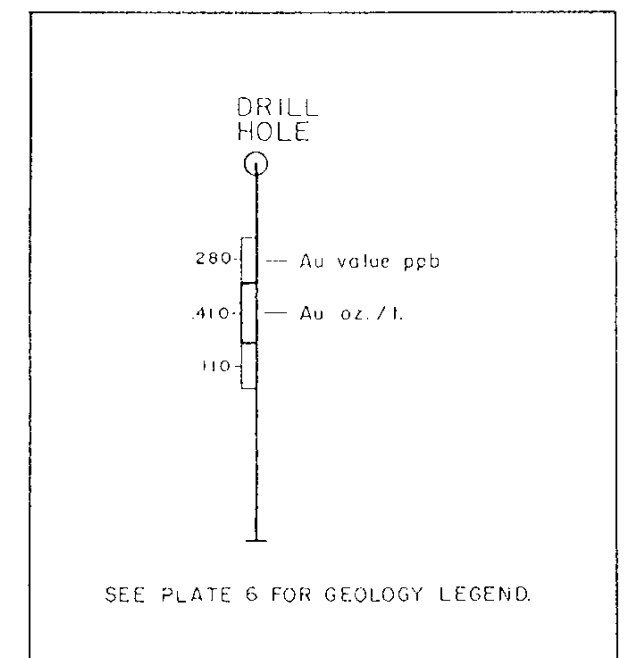


PLATE 11b

PLATE 116

John H. Chute

D₁ EAST TIE LINE

GEOLOGICAL BRANCH
ASSESSMENT REPORT

D₁

Elevation ASL
Metres
2160 -

Elevation ASL
Metres
- 2160

12,269
part 2 of 2

2150 -

- 2150

2140 -

- 2140

2130 -

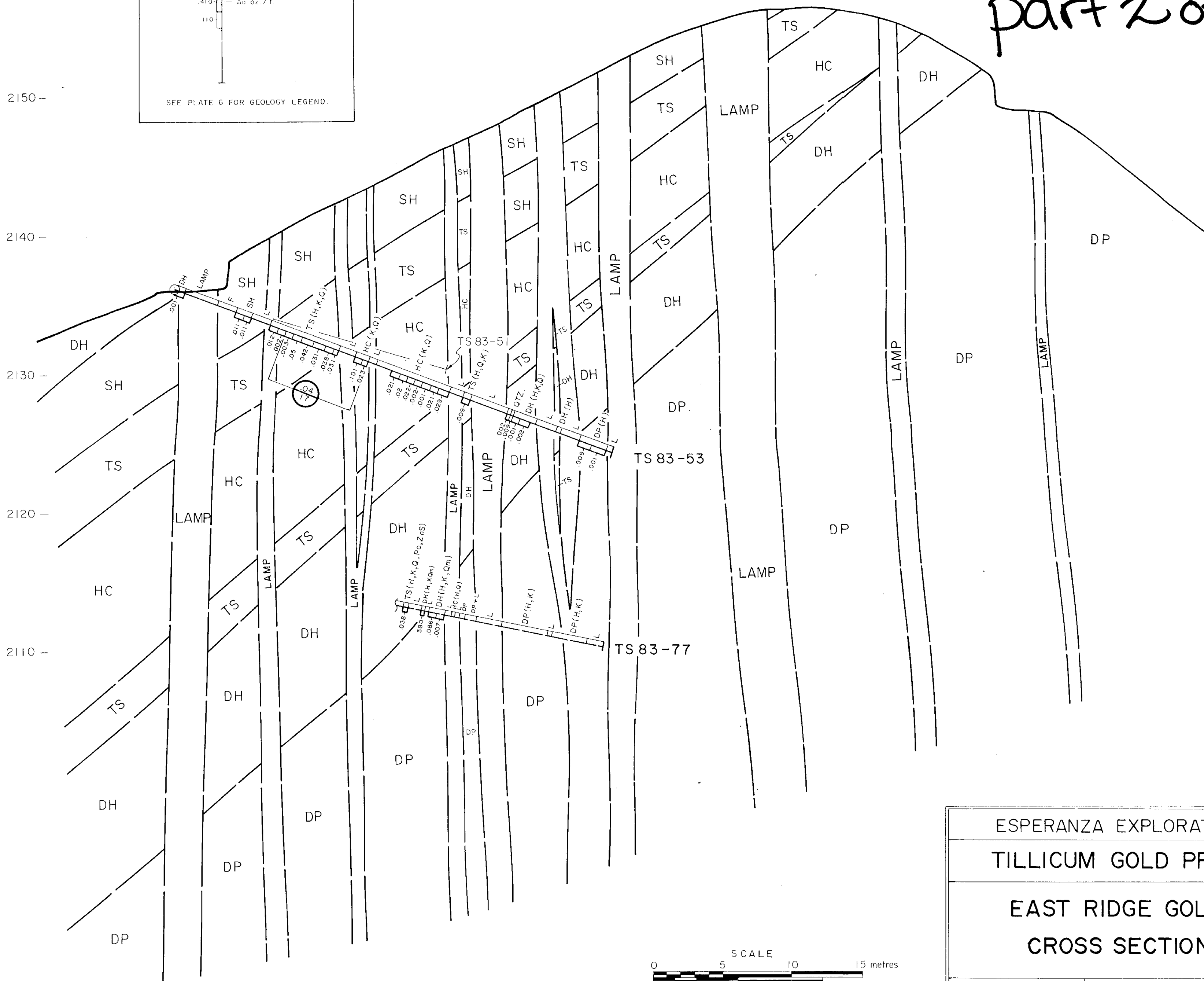
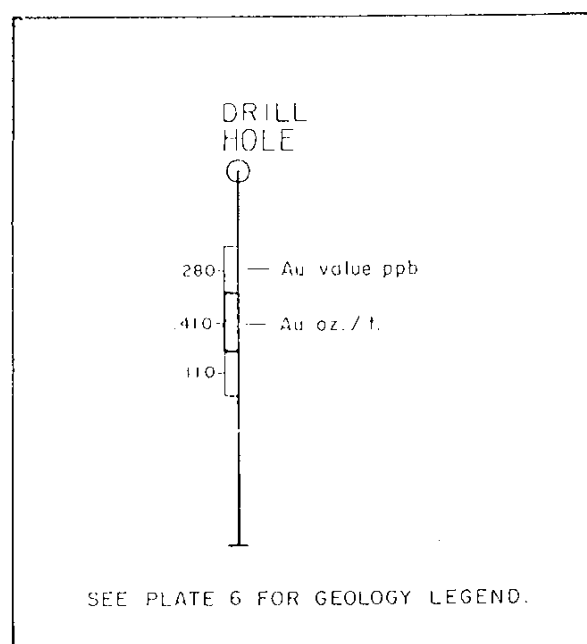
- 2130

2120 -

- 2120

2110 -

- 2110



ESPERANZA EXPLORATIONS LTD.

TILlicum GOLD PROPERTY

EAST RIDGE GOLD ZONE

CROSS SECTION D₁-D₁'

NTS: 82 F/13

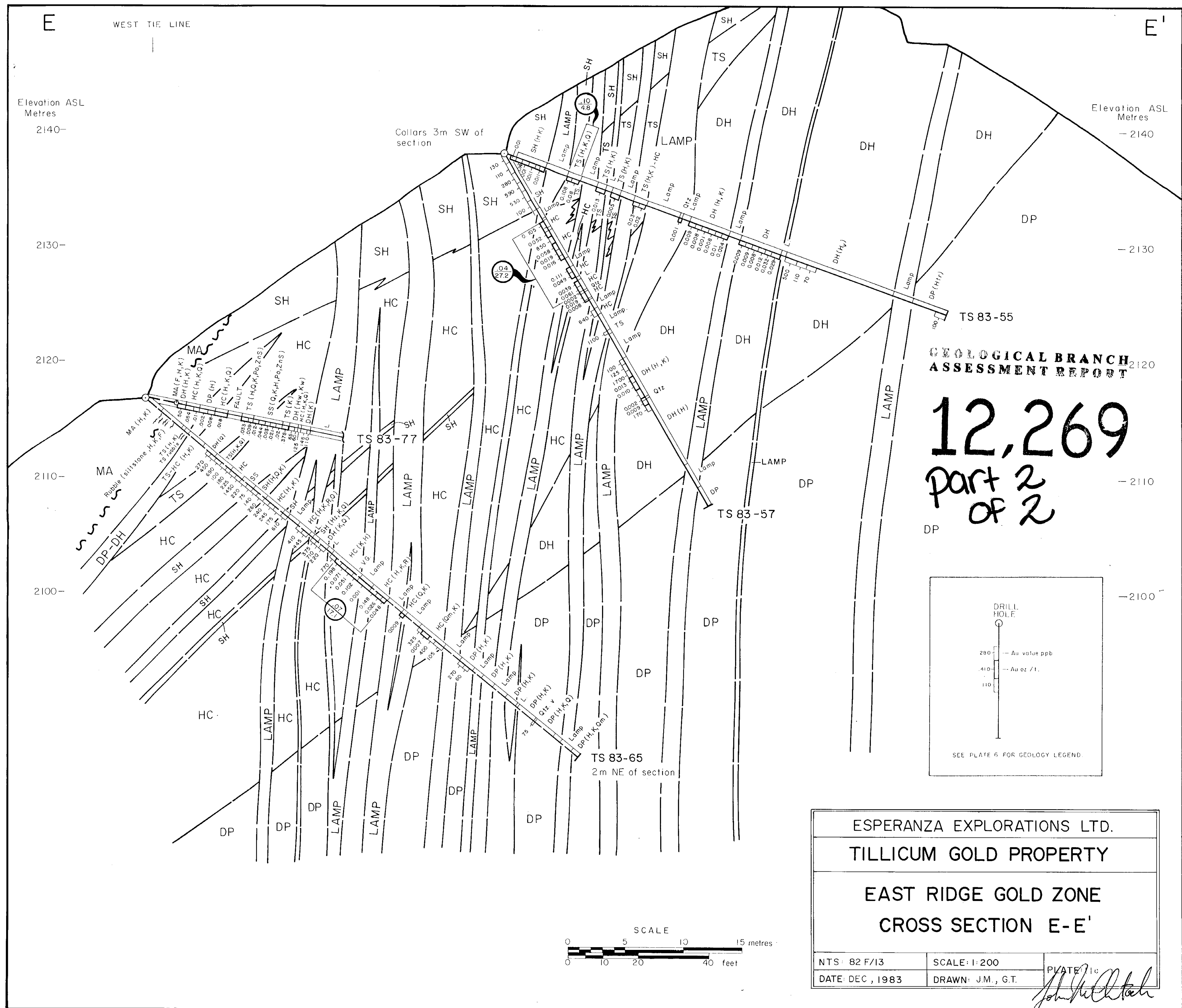
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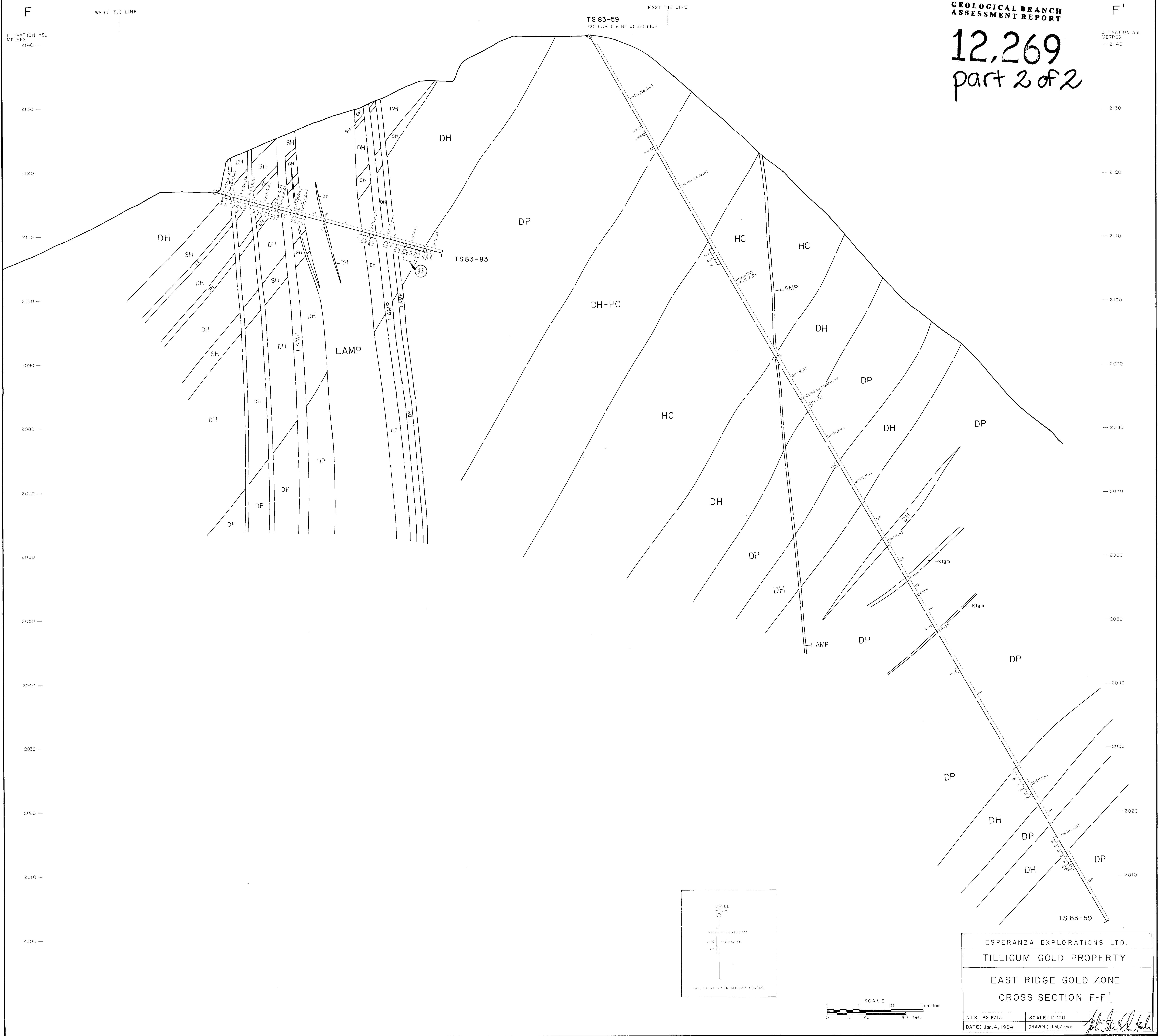
PLATE: 1112

DATE: FEB. , 1984

DRAWN: JM / r.w.r.

John H. Mitchell





EAST TIE LINE

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,269
Part 2
of 2

Elevation ASL
Metres
2130 -

Elevation ASL
Metres
- 2130

2120 -

- 2120

2110 -

- 2110

2100 -

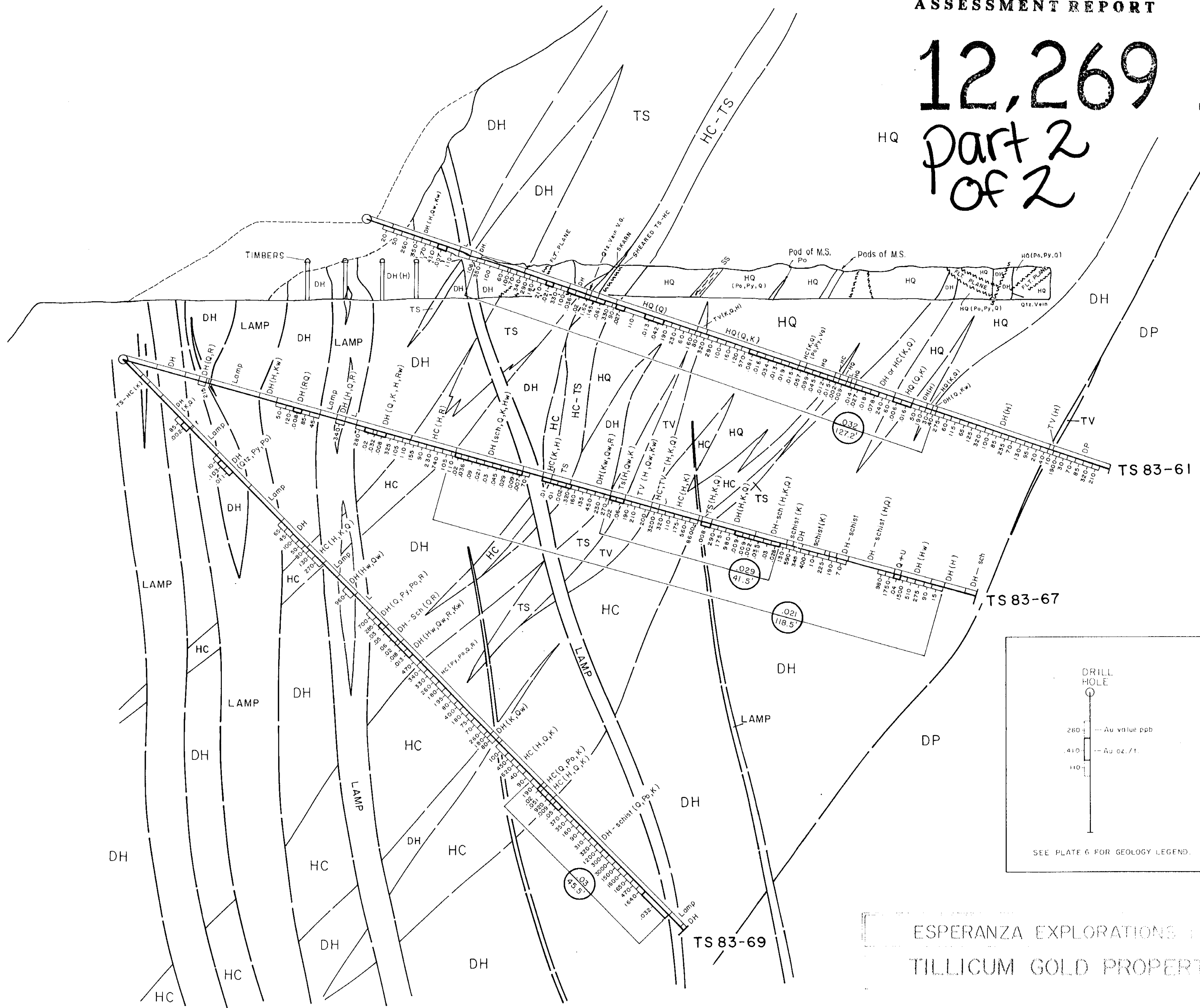
- 2100

2090 -

- 2090

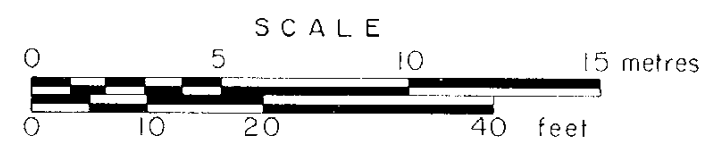
2080 -

- 2080



ESPERANZA EXPLORATIONS LTD
TILlicum GOLD PROPERTY

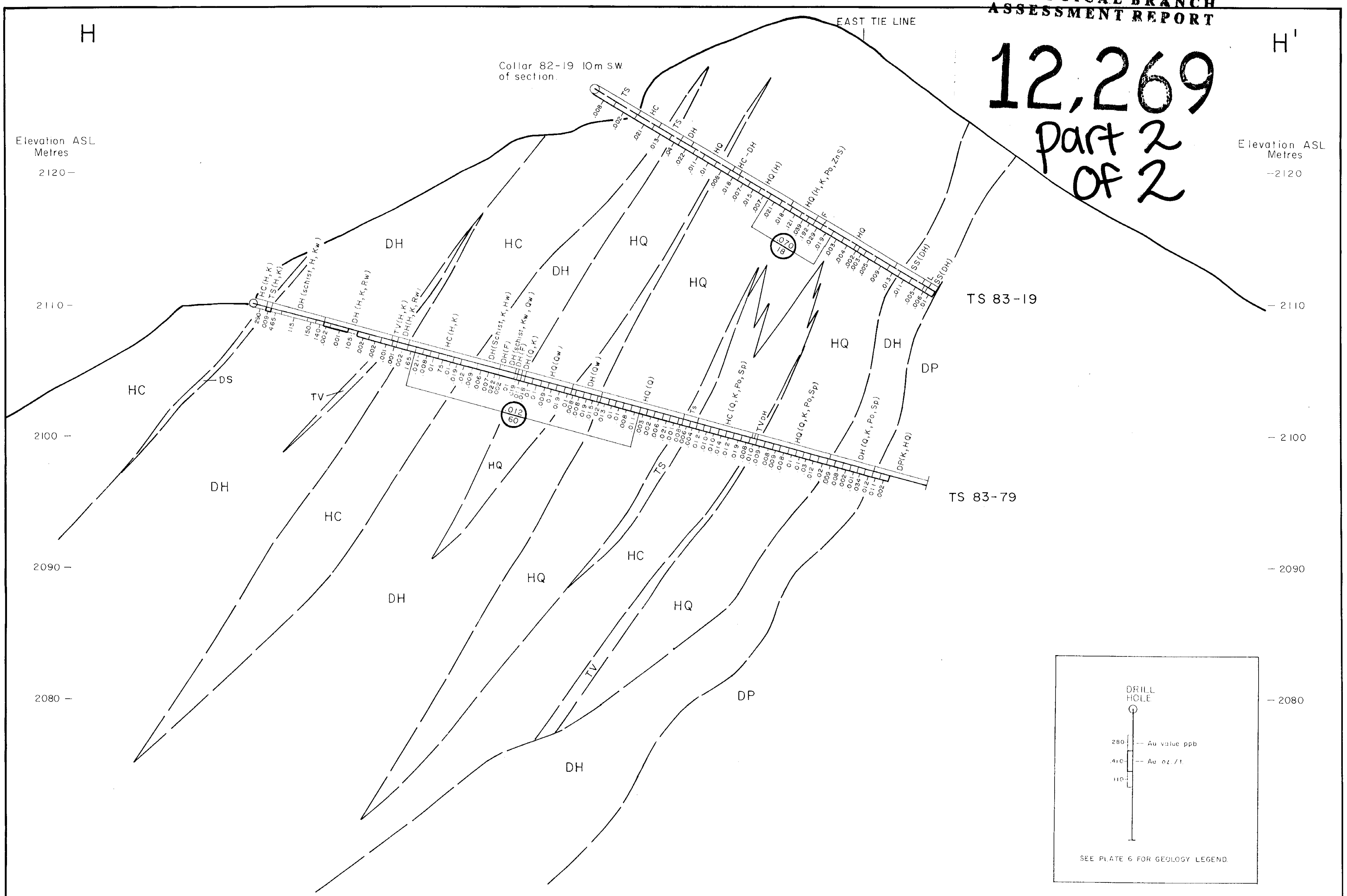
EAST RIDGE GOLD ZONE
CROSS SECTION G-G'



DATE MAR. 1984
DRAWN R.W.R.

John W. R. R.

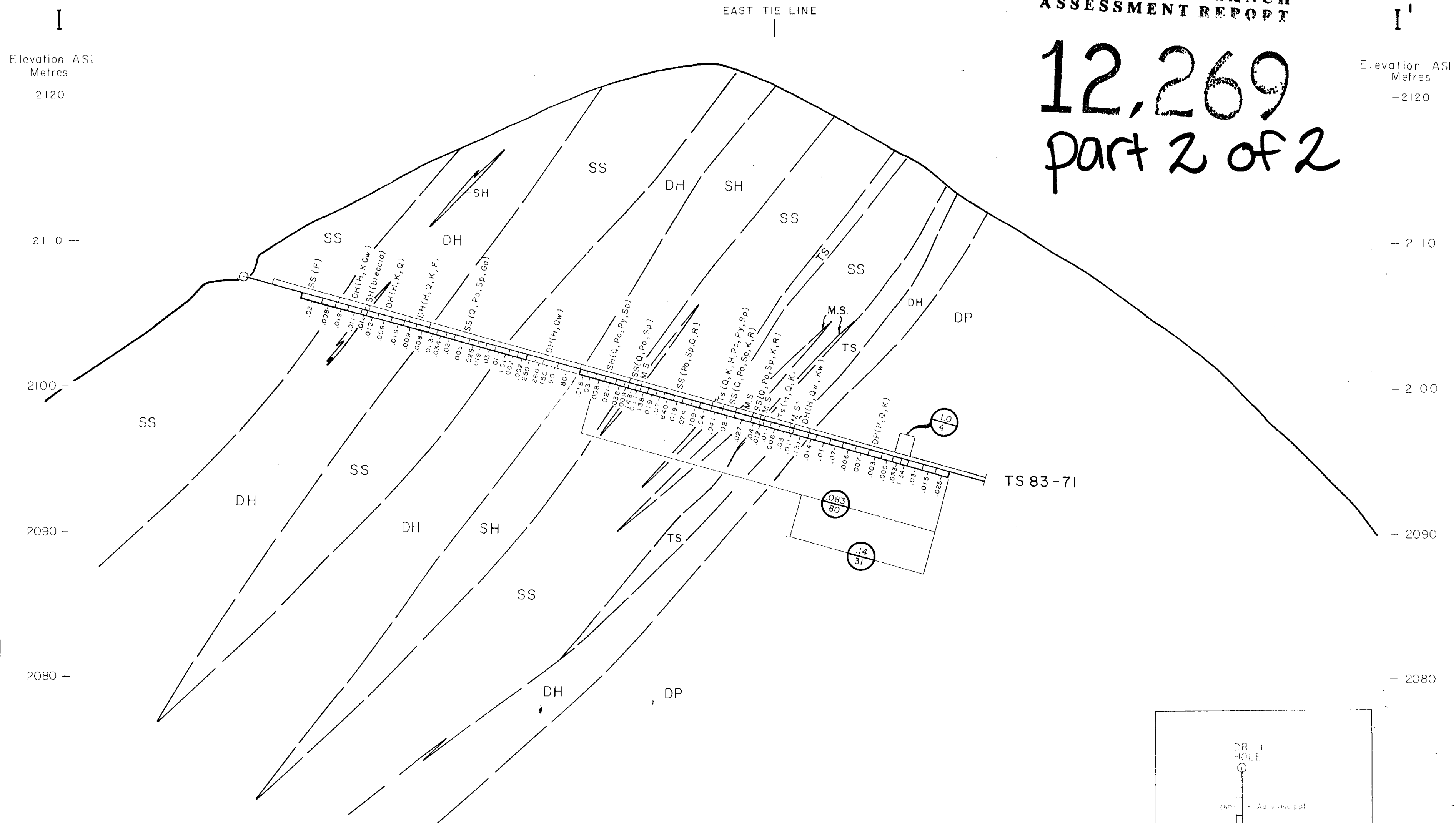
12,269
part 2
of 2



ESPERANZA EXPLORATIONS LTD.		
TILlicum GOLD PROPERTY		
EAST RIDGE GOLD ZONE		
CROSS SECTION <u>H-H'</u>		
NTS: 82 F/13	SCALE: 1:200	PLATE: III
DATE: DEC. 1983	DRAWN: LGD	

John A. Chisholm

12,269
part 2 of 2



J

J'

EAST TIE LINE

Elevation ASL
Metres

2100—

Elevation ASL
Metres

— 2100

2090—

— 2090

2080—

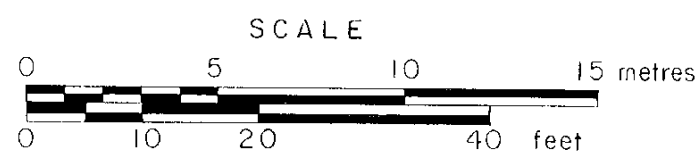
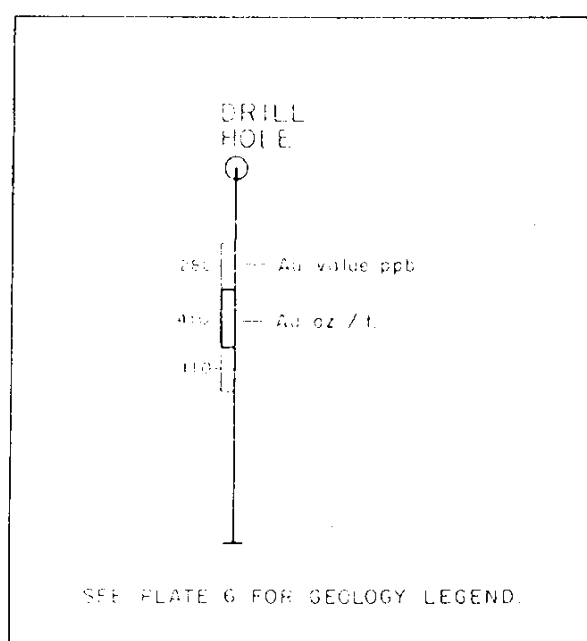
— 2080

2070—

— 2070

2060—

— 2060

GEOLOGICAL BRANCH
ASSESSMENT REPORT12,269
part 2
of 2

ESPERANZA EXPLORATIONS LTD.

TILlicum GOLD PROPERTY

EAST RIDGE GOLD ZONE

CROSS SECTION J-J'

NTS: 82 F/13

SCALE: 1:200

PLATE 11h

DATE: MAR. 1984

DRAWN: r.w.r.

John McArthur

K

K'

EAST TIE LINE

2090—

—2090

2080—

—2080

2070—

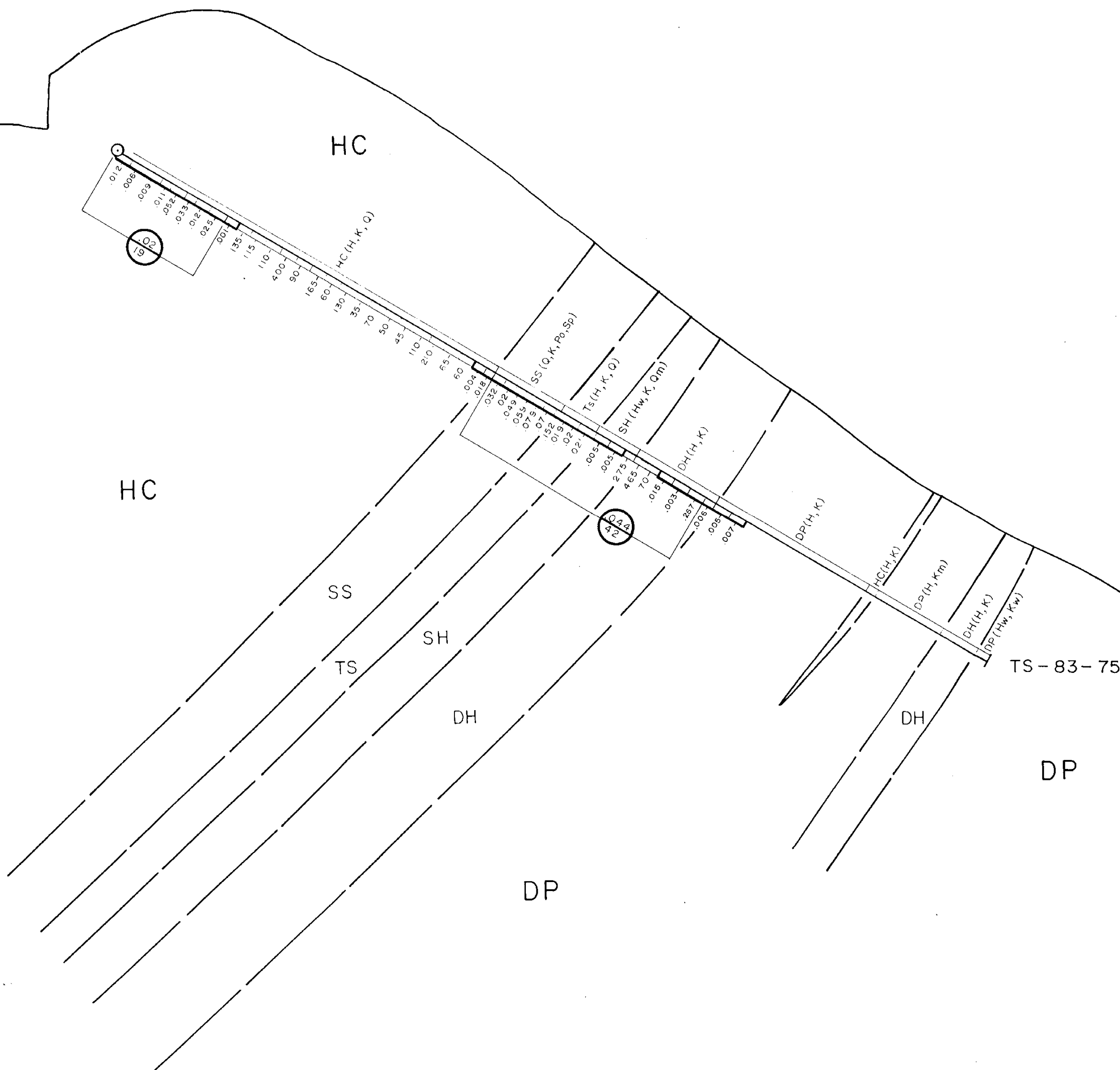
—2070

2060—

—2060

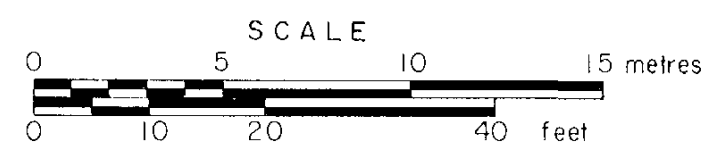
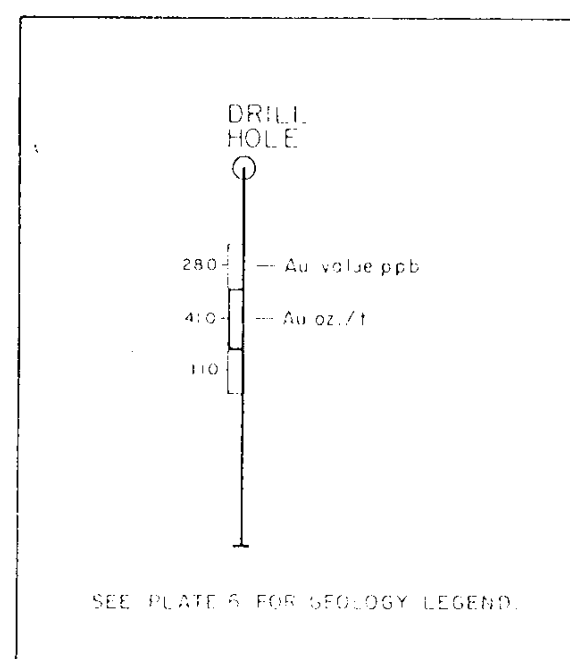
2050—

—2050



GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,269
part 2 of 2



ESPERANZA EXPLORATIONS LTD.

TILlicum GOLD PROPERTY

EAST RIDGE GOLD ZONE

CROSS SECTION K-K'

NTS: 82 F/13

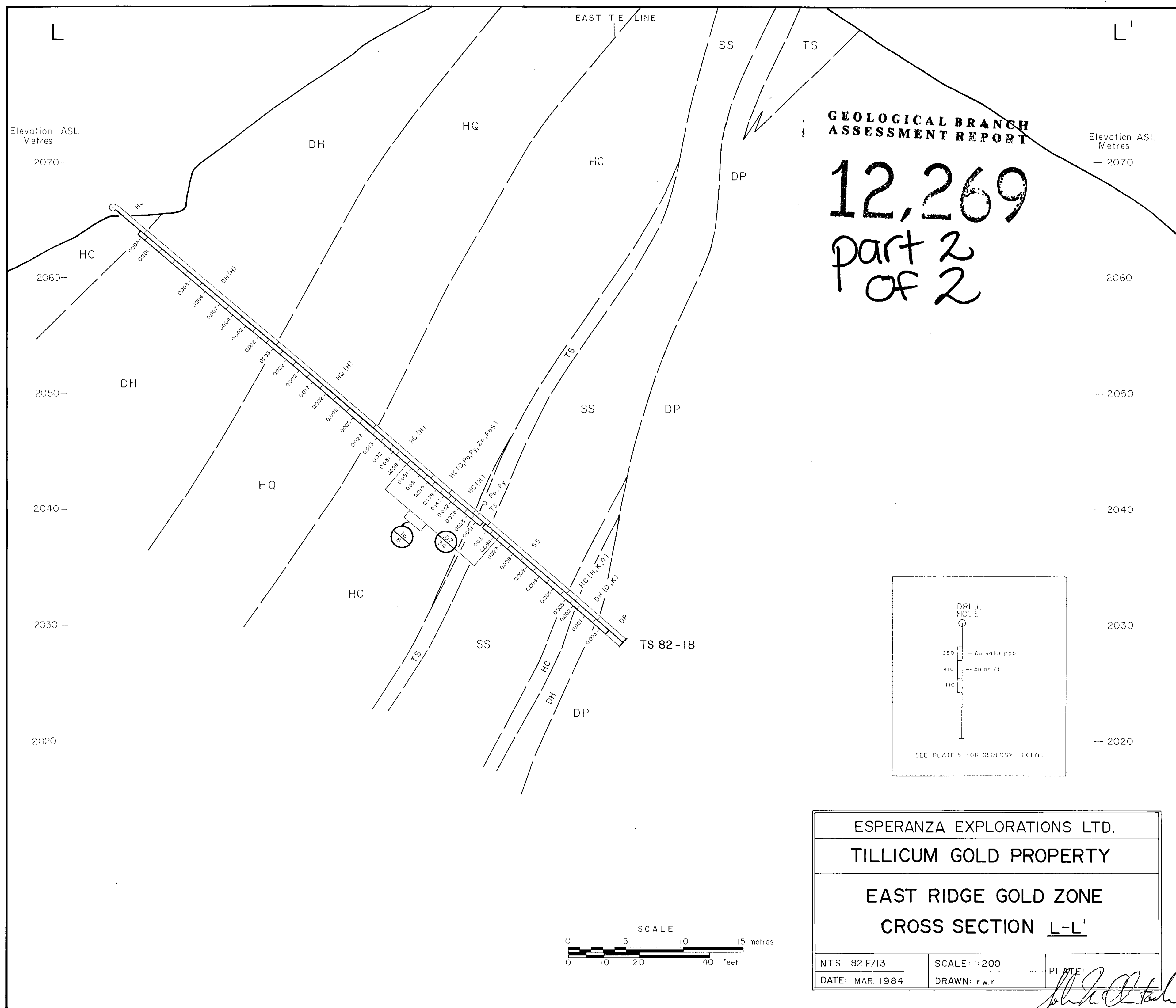
SCALE: 1:200

PLATE: 11e

DATE: DEC. 1983

DRAWN: LGD

John McArthur



M

ELEVATION ASL
METRES

2090 —

2080 —

2070 —

2060 —

2050 —

2040 —

2030 —

2020 —

2010 —

EAST TIE LINE

GEOLOGICAL BRANCH
ASSESSMENT REPORT

M'

ELEVATION ASL
METRES

2090 —

2080 —

2070 —

2060 —

2050 —

2040 —

2030 —

2020 —

2010 —

12,269

part 2
of 2

MA

TS

HC

TS

DH

HC

DH

HC

DP

HC

HC

TS 82-17

DP

DRILL
HOLE

280 — Au value ppb
410 — Au oz / t.
110

SEE PLATE 6 FOR GEOLOGY LEGEND.

36
50 Au. OZ. / TON
WIDTH IN FEET

0 5 10 15 metres
0 10 20 40 feet

ESPERANZA EXPLORATIONS LTD.

TILlicum GOLD PROPERTY

EAST RIDGE ZONE
CROSS SECTION M-M'

NTS: 82 F/13

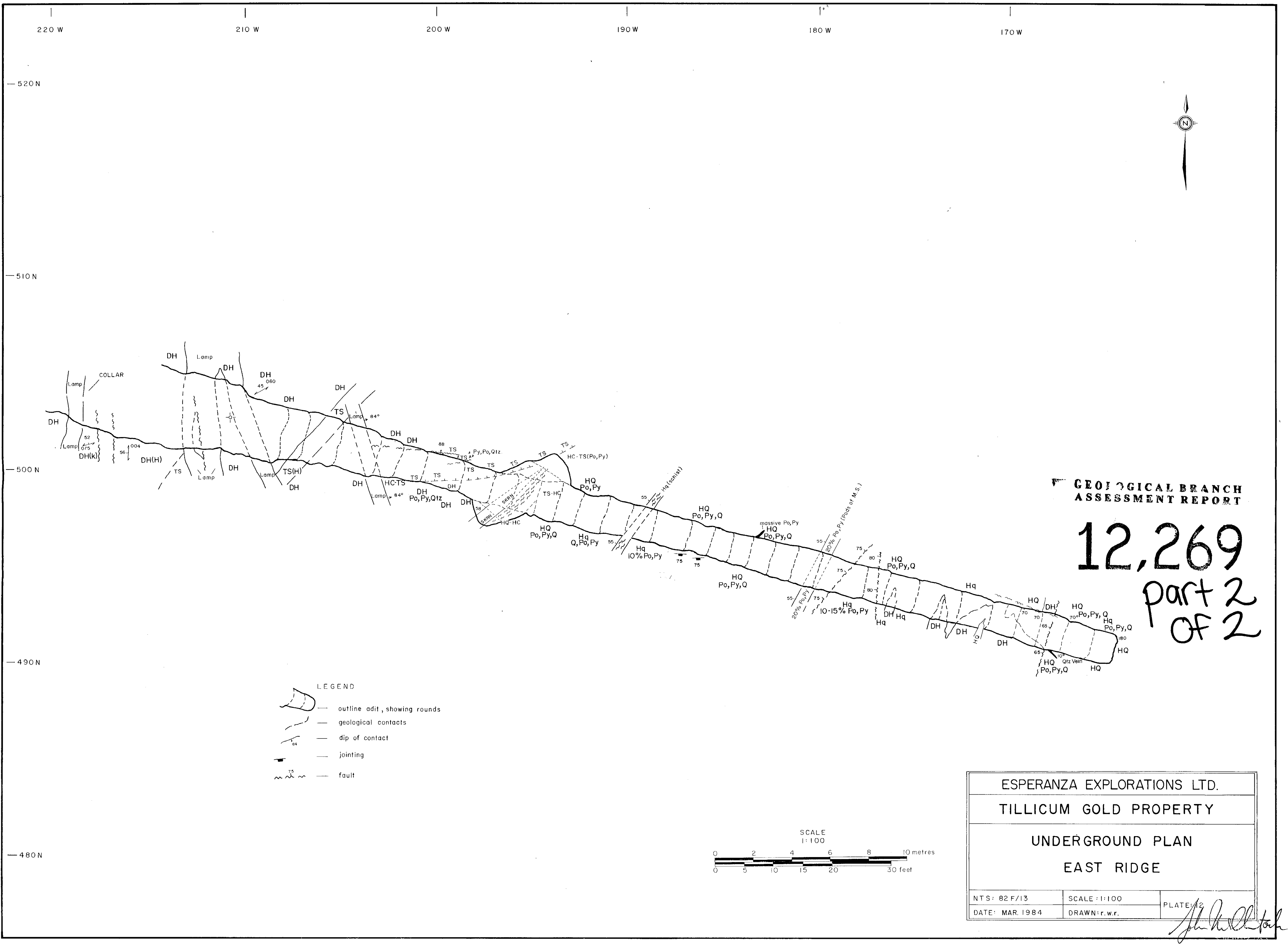
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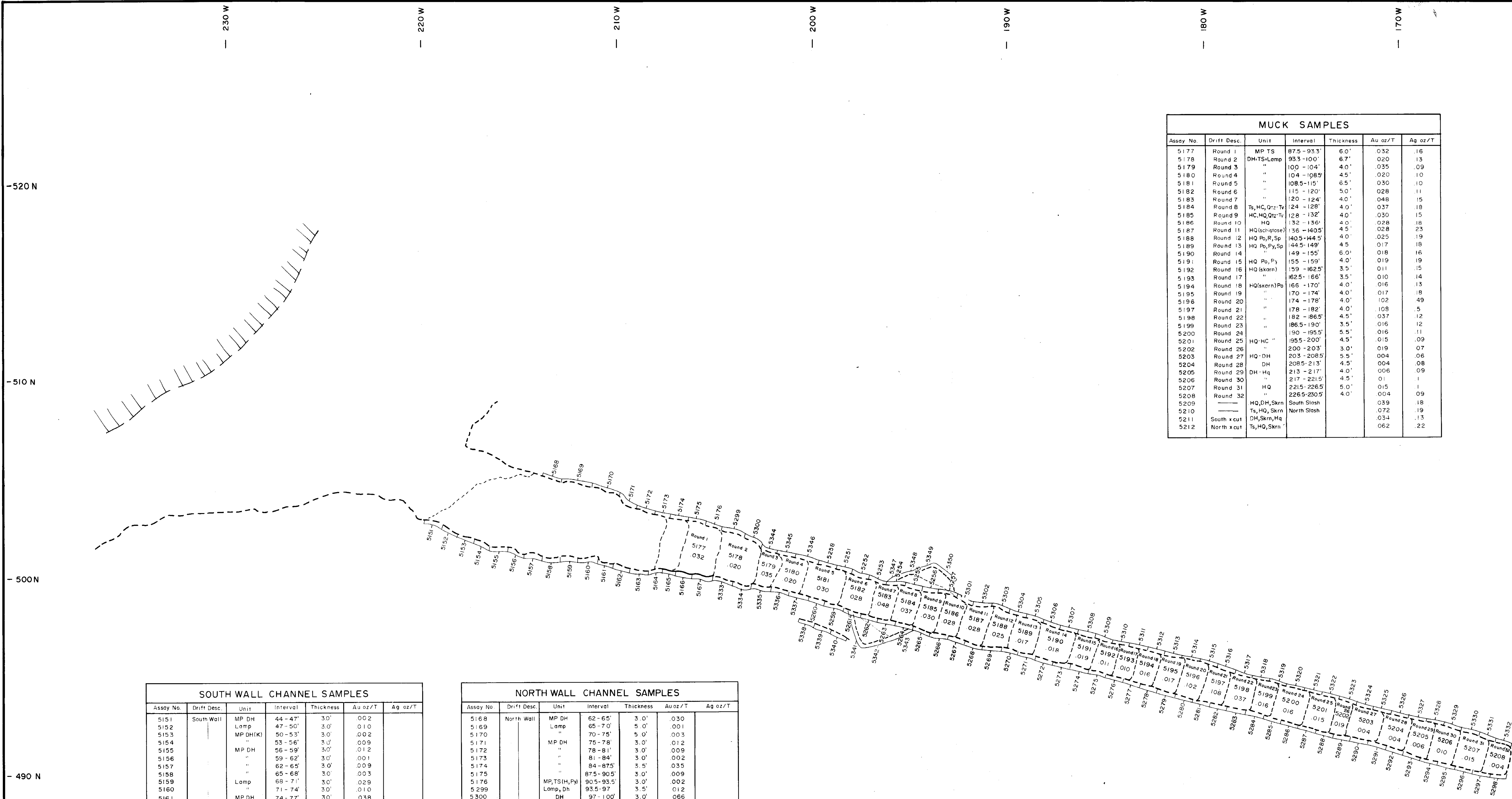
PLATE 11

DATE: APR. ,1984

DRAWN: J.M./r.w.r.

John W. R. W.





MUCK SAMPLES						
Assay No.	Drift Desc.	Unit	Interval	Thickness	Au oz/T	Ag oz/T
5177	Round 1	MP TS	87.5-93.3	6.0'	0.32	.16
5178	Round 2	DH/TS/Lamp	93.3-100'	6.7'	0.20	.13
5179	Round 3	"	100-104'	4.0'	0.35	.09
5180	Round 4	"	104-108.5	4.5'	0.20	.10
5181	Round 5	"	108.5-115'	6.5'	0.30	.10
5182	Round 6	"	115-120'	5.0'	0.28	.11
5183	Round 7	"	120-124'	4.0'	0.48	.15
5184	Round 8	TS, HC, Qz, Tv	124-128'	4.0'	0.37	.18
5185	Round 9	HQ, HQ, Qz, Tv	128-132'	4.0'	0.30	.15
5186	Round 10	HQ	132-136'	4.0'	0.28	.18
5187	Round 11	HQ (schistose)	136-140.5'	4.5'	0.28	.23
5188	Round 12	HQ, Po, R, Sp	140.5-144.3'	4.0'	0.25	.19
5189	Round 13	HQ, Po, Py, Sp	144.3-149'	4.5'	0.17	.18
5190	Round 14	"	149-155'	6.0'	0.18	.16
5191	Round 15	HQ, Po, Py	155-159'	4.0'	0.19	.19
5192	Round 16	HQ (exposed)	159-162.5'	3.5'	0.11	.15
5193	Round 17	"	162.5-166'	3.5'	0.10	.14
5194	Round 18	HQ (exposed) Po	166-170'	4.0'	0.16	.13
5195	Round 19	"	170-174'	4.0'	0.17	.18
5196	Round 20	"	174-178'	4.0'	0.12	.49
5197	Round 21	"	178-182'	4.0'	0.18	.5
5198	Round 22	"	182-186.5'	4.5'	0.37	.12
5199	Round 23	"	186.5-190'	3.5'	0.16	.12
5200	Round 24	"	190-195.5'	5.5'	0.16	.11
5201	Round 25	HQ HC	195.5-200'	4.5'	0.15	.09
5202	Round 26	"	200-203'	3.0'	0.19	.07
5203	Round 27	HQ DH	203-208.5'	5.5'	0.04	.06
5204	Round 28	DH	208.5-213'	4.5'	0.04	.08
5205	Round 29	DH HQ	213-217'	4.0'	0.06	.09
5206	Round 30	"	217-221.5'	4.5'	0.1	.1
5207	Round 31	HQ	221.5-226.5'	5.0'	0.15	.1
5208	Round 32	"	226.5-230.5'	4.0'	0.14	.09
5209	"	South Slush	"	"	0.39	.18
5210	"	TS, HQ, Skn	North Slush	"	0.72	.19
5211	South x cut	DH, Skn, HQ	"	"	0.34	.13
5212	North x cut	TS, HQ, Skn	"	"	0.62	.22

SOUTH WALL CHANNEL SAMPLES						
Assay No.	Drift Desc.	Unit	Interval	Thickness	Au oz/T	Ag oz/T
5151	South Wall	MP DH	44-47'	3.0'	0.02	
5152	"	Lamp	47-50'	3.0'	0.10	
5153	"	MP DH (K)	50-53'	3.0'	0.02	
5154	"	"	53-56'	3.0'	0.09	
5155	"	MP DH	56-59'	3.0'	0.12	
5156	"	"	59-62'	3.0'	0.01	
5157	"	"	62-65'	3.0'	0.09	
5158	"	"	65-68'	3.0'	0.03	
5159	"	Lamp	68-71'	3.0'	0.29	
5160	"	"	71-74'	3.0'	0.10	
5161	"	MP DH	74-77'	3.0'	0.38	
5162	"	"	77-80'	3.0'	0.01	
5163	"	Lamp	80-83'	3.0'	0.01	
5164	"	MP DH	83-85.5'	2.5'	0.06	
5165	"	MP TS (H)	85.5-88'	2.5'	0.10	
5166	"	"	88-91'	3.0'	0.27	
5167	"	"	91-94'	3.0'	0.02	
5333	"	DH	94-97'	3.0'	0.20	
5334	"	DH-Lamp	97-100'	3.0'	0.06	
5335	"	Lamp, TS	100-103'	3.0'	0.01	
5336	"	TS	103-106'	3.0'	0.21	
5337	"	TS-DH	106-109'	3.0'	0.06	
5338	"	DH	109-112'	3.0'	0.18	
5339	"	"	112-115'	3.0'	0.56	
5340	"	"	115-118'	3.0'	0.19	
5260	"	"	110-113'	3.0'	0.25	
5269	"	"	113-116'	3.0'	0.16	
5261	"	"	116-119'	3.0'	0.14	
5262	"	Skn DH	118-122'	3.0'	0.27	
5263	"	HQ, SKN	122-125'	3.0'	0.61	
5264	"	HQ (Py, Po, Q)	125-128'	3.0'	0.10	
5265	"	"	128-131'	3.0'	0.09	
5266	"	"	131-134'	3.0'	0.08	
5267	"	"	134-137'	3.0'	0.53	
5268	"	"	137-140'	3.0'	0.22	
5269	"	"	140-143'	3.0'	0.09	
5270	"	HQ, Schistose	143-146'	3.0'	0.07	
5271	"	HQ (Po, Py, Q)	146-149'	3.0'	0.15	
5272	"	"	149-152'	3.0'	0.05	
5273	"	"	152-155'	3.0'	0.11	
5274	"	"	155-158'	3.0'	0.04	
5275	"	"	158-161'	3.0'	0.08	
5276	"	"	161-164'	3.0'	0.12	
5277	"	"	164-167'	3.0'	0.05	
5278	"	"	167-170'	3.0'	0.04	
5279	"	"	170-173'	3.0'	0.78	
5280	"	HQ (20% Py, Q)	173-176'	3.0'	0.24	
5281	"	"	176-179'	3.0'	0.59	
5282	"	HQ (Po, Py, Q)	179-182'	3.0'	0.20	
5283	"	"	182-185'	3.0'	0.08	
5284	"	"	185-188'	3.0'	0.29	
5285	"	HQ (minor DH)	188-191'	3.0'	0.11	
5286	"	HQ (Po, Py, Q)	191-194'	3.0'	0.13	
5287	"	"	194-197'	3.0'	0.14	
5288	"	DH (Po, Q)	197-200'	3.0'	0.03	
5289	"	HQ, DH	200-203'	3.0'	0.04	
5290	"	DH (Po, Q)	203-206'	3.0'	0.01	
5291	"	DH (minor HQ)	206-209'	3.0'	0.01	
5292	"	DH (Po, Q)	209-212'	3.0'	0.02	
5293	"	"	212-215'	3.0'	0.02	
5294	"	"	215-218'	3.0'	0.01	
5295	"	HQ (Po, Py, Q)	218-221'	3.0'	0.08	
5296	"	"	221-224'	3.0'	0.02	
5297	"	"	224-227'	3.0'	0.10	
5298	"	"	227-230'	3.0'	0.02	
5341	"	S Slush west face	"	4.5'	0.09	
5342	"	S Slush	"	4.0'	0.54	
5343	"	S Slush	"	4.0'	0.03	

NORTH WALL CHANNEL SAMPLES						
Assay No.	Drift Desc.	Unit	Interval	Thickness	Au oz/T	Ag oz/T
5168	North Wall	MP DH	62-65'	3.0'	0.30	
5169	"	Lamp	65-70'	5.0'	0.01	
5170	"	"	70-75'	5.0'	0.03	
5171	"	MP DH	75-78'	3.0'	0.12	
5172	"	"	78-81'	3.0'	0.09	
5173	"	"	81-84'	3.0'	0.02	
5174	"	"	84-87.5'	3.5'	0.35	
5175	"	"	87.5-90.5'	3.0'	0.09	
5176	"	MP, TS (H, Py)	90.5-93.5'	3.0'	0.02	
5299	"	Lamp, DH	93.5-97'	3.5'	0.12	
5300	"	DH	97-100'	3.0'	0.66	
5344	"	"	100-103'	3.0'	0.2	
5345	"	"	103-106'	3.0'	0.67	
5346	"	"	106-110'	4.0'	0.29	
5258	"	"	110-113'	3.0'	0.19	
5251	"	"	113-116'	3.0'	0.27	
5252	"	"	116-119'	3.0'	0.109	
5253	"	"	119-122'	3.0'	0.12	
5254	"	TS, DH	122-125'	3.0'	0.2	
5255	"	Skn	125-128'	3.0'	0.65	
5256	"	HQ	128-131'	3.0'	0.52	
5257	"	"	131-134'	3.0'	2.995	
5301	"	HQ (Po, Py, Q)	134-137'	3.0'	2.71	
5302	"	"	137-140'	3.0'		
5303	"	"	140-143'	3.0'	0.11	
5304	"	"	143-146'	3.0'	0.19	
5305	"	HQ Schist	146-149'	3.0'	0.25	
5306	"	HQ (Po, Py, Q)	149-152'	3.0'	0.19	
5307	"	"	152-155'	3.0'	0.25	
5308	"	"	155-158'	3.0'	0.08	
5309	"	"	158-161'	3.0'	0.11	
5310	"	"	161-164'	3.0'	0.10	
5311	"	Peas of M.S.	164-167'	3.0'	0.09	
5312	"	HQ (Po, Py, Q)	167-170'	3.0'	0.10	
5313	"	"	170-173'	3.0'	0.09	
5314	"	"	173-176'	3.0'	0.2	
5315	"	HQ (20% Py, Q)	176-179'	3.0'	0.82	
5316	"	HQ (Po, Py, Q)	179-182'	3.0'	0.36	
5317	"	"	182-185'	3.0'	0.12	
5318	"	"	185-188'	3.0'	0.12	
5319	"	"	188-191'	3.0'	0.02	
5320	"	"	191-194'	3.0'	0.22	
5321	"	"	194-197'	3.0'	0.02	
5322	"	"	197-200'	3.0'	0.1	
5323	"	"	200-203'	3.0'	0.05	
5324	"	"	203-206'	3.0'	0.07	
5325	"	"	206-209'	3.0'	0.01	
5326	"	"	209-212'	3.0'	0.01	
5327	"	"	212-215'	3.0'	0.05	
5328	"	HQ (DH, Py, Q)	215-218'	3.0'	0.01	
5329	"	HQ (Po, Py, Q)	218-221'	3.0'	0.18	
5330	"	"	221-224'	3.0'	0.01	
5331	"	"	224-227'	3.0'	0.02	
5332	"	"	227-230'	3.0'	0.02	
5347	"	N Slush west face	"	3.0'	0.39	
5348	"	"	"	3.0'	0.26	
5349	"	"	"	3.0'	0.7	
5350	"	N Slush Drift face	"	4.0'	0.56	

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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ESPERANZA EXPLORATIONS LTD.

TILlicum GOLD PROPERTY

UNDERGROUND ASSAY PLAN
EAST RIDGE

NTS: 82 F/13

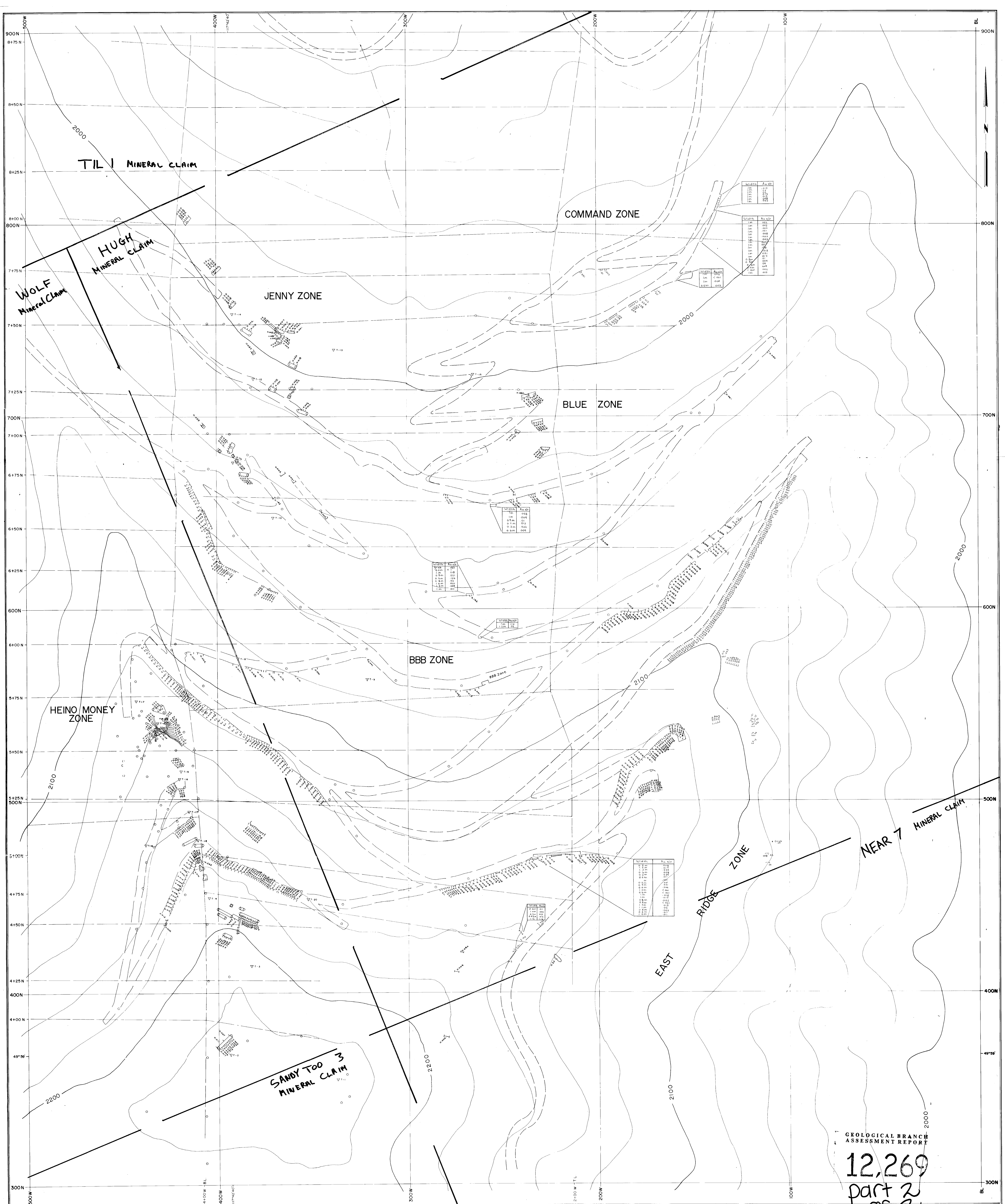
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DATE: MAR. 1984

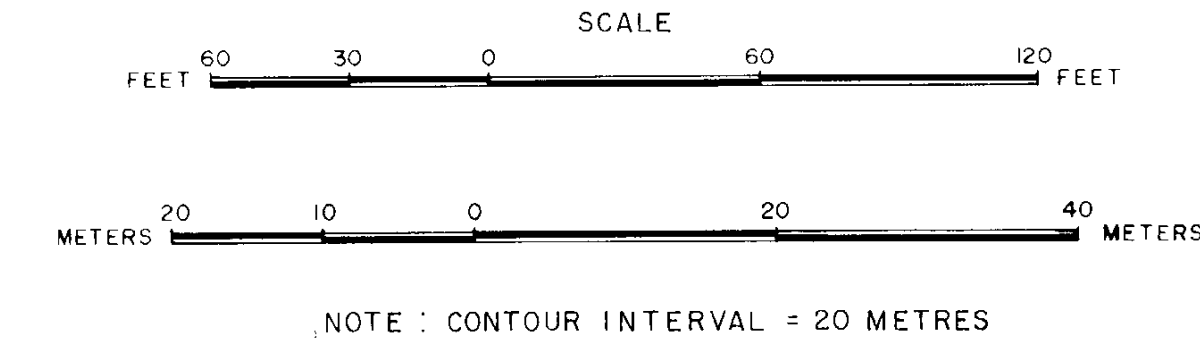
DRAWN: r.w.r.

PLATE: 13

[Signature]



1:0.021 Au oz/ton = sample interval



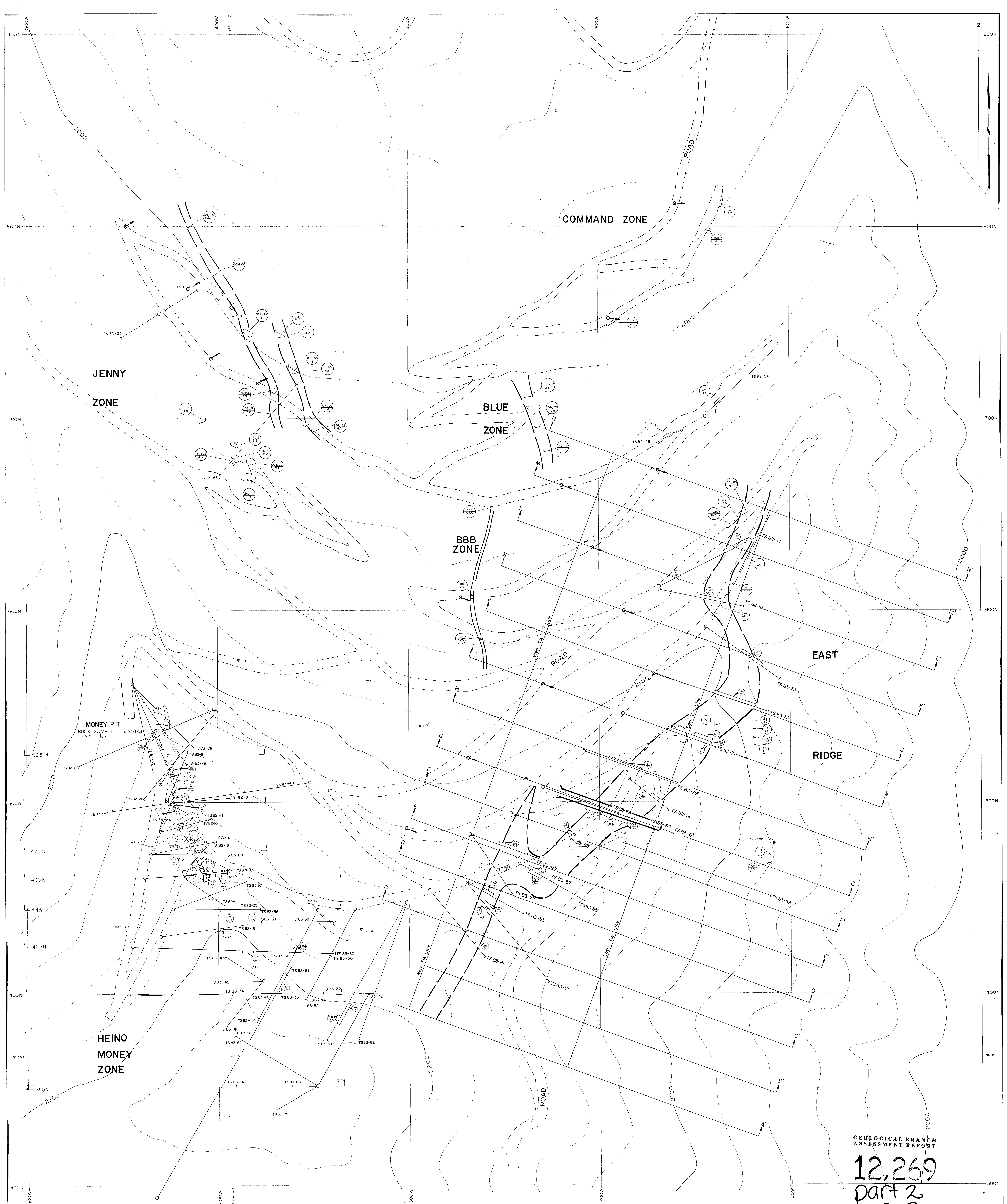
12,269
part 2
of 2

ESPERANZA EXPLORATIONS LTD.
TILLICUM GOLD PROPERTY

NORTH SLOPE
SURFACE ASSAY PLAN - GOLD
(SOUTH PLATE)

N.T.S. 82 F/13	DATE: FEB, 1983	SCALE: 1:500
DATA	DRAWN	PLATE 14
REVISED		

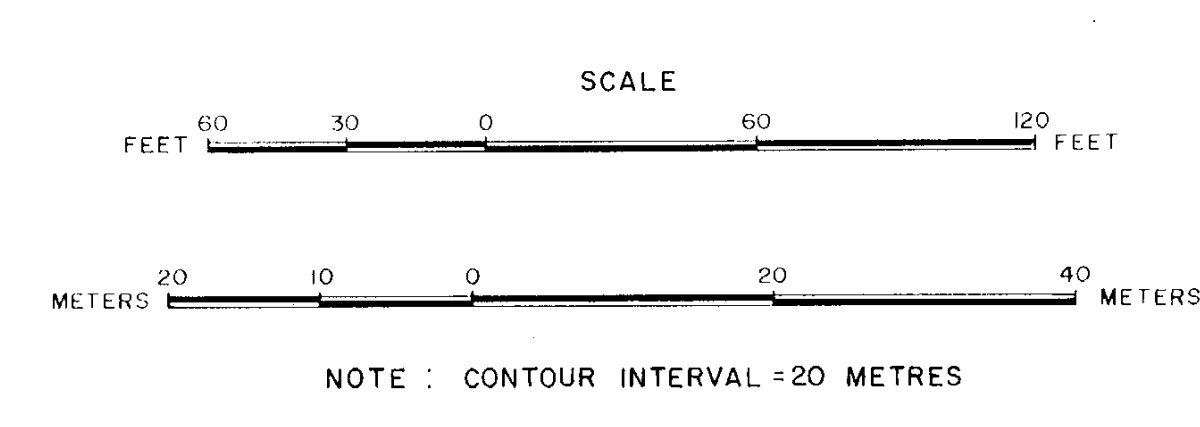
1000 900N 800N 700N 600N 500N 400N 300N 500W 400W 300W 200W 100W



GEOLOGICAL BRANCH
ASSESSMENT REPORT

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of 2

- LEGEND
- DRILL HOLE WITH ASSAY BLOCK
 - ASSAY BLOCK, VALUE Au oz./t. / INTERVAL IN FEET
 - SURFACE TRENCH, ASSAY Au, Ag oz./t. / INTERVAL IN FEET
 - ADIT
 - SURFACE TRACE OF GOLD MINERALIZATION
 - PROPOSED DRILL HOLE



ESPERANZA EXPLORATIONS LTD.		
TILlicum GOLD PROPERTY		
NORTH SLOPE AREA		
1984 PROPOSED DRILL SITES		
N.T.S. B2 F/13	DATE: MARCH, 1984	SCALE: 1:500
REVISED:	DRAWN: J.M./rwr	PLATE 27

John McCall