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ESPERANZA EXPLORATIONS LTD.

ORE RESERVES  
for the  
TILlicUM MOUNTAIN PROJECT  
Southeastern British Columbia

15 November, 1989

C.R. Saunders, P.Eng.  
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Vancouver, Canada

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### SUMMARY

The Tillicum property, located in southeastern British Columbia, contains two skarn-hosted gold deposits, the East Ridge and the Heino-Money. Both have been extensively explored, the East Ridge principally by diamond drilling, and the Heino-Money by diamond drilling and a considerable amount of underground development.

Geological Reserves have been calculated for the East Ridge deposit and Mining Reserves for the Heino-Money deposit. The general procedures are as follows: interpretation of the configuration of the mineralized zones, determination of conceptual mining parameters, outlining of reserve blocks on cross-sections and longitudinal projections, classification of blocks by confidence levels, calculation/summation, sensitivity studies.

The parameters developed for the base case reserves are:

	<u>East Ridge</u>	<u>Heino- Money</u>
Dilution Grade	0.018 oz Au/ton	0.025 oz Au/ton
Cut-off Grade	0.200 oz Au/ton	0.400 oz Au/ton
Minimum Thickness	5.0 feet	5.0 feet
Mining Dilution	None	1.5 feet
Specific Gravity	2.7	2.7

The estimated reserves for the Tillicum property are:

East Ridge (Geological Reserves):

262,700 tons @ 0.394 oz Au/ton (103,520 oz gold)

Heino-Money (Mining Reserves):

16,830 tons @ 1.022 oz Au/ton (17,200 oz gold).

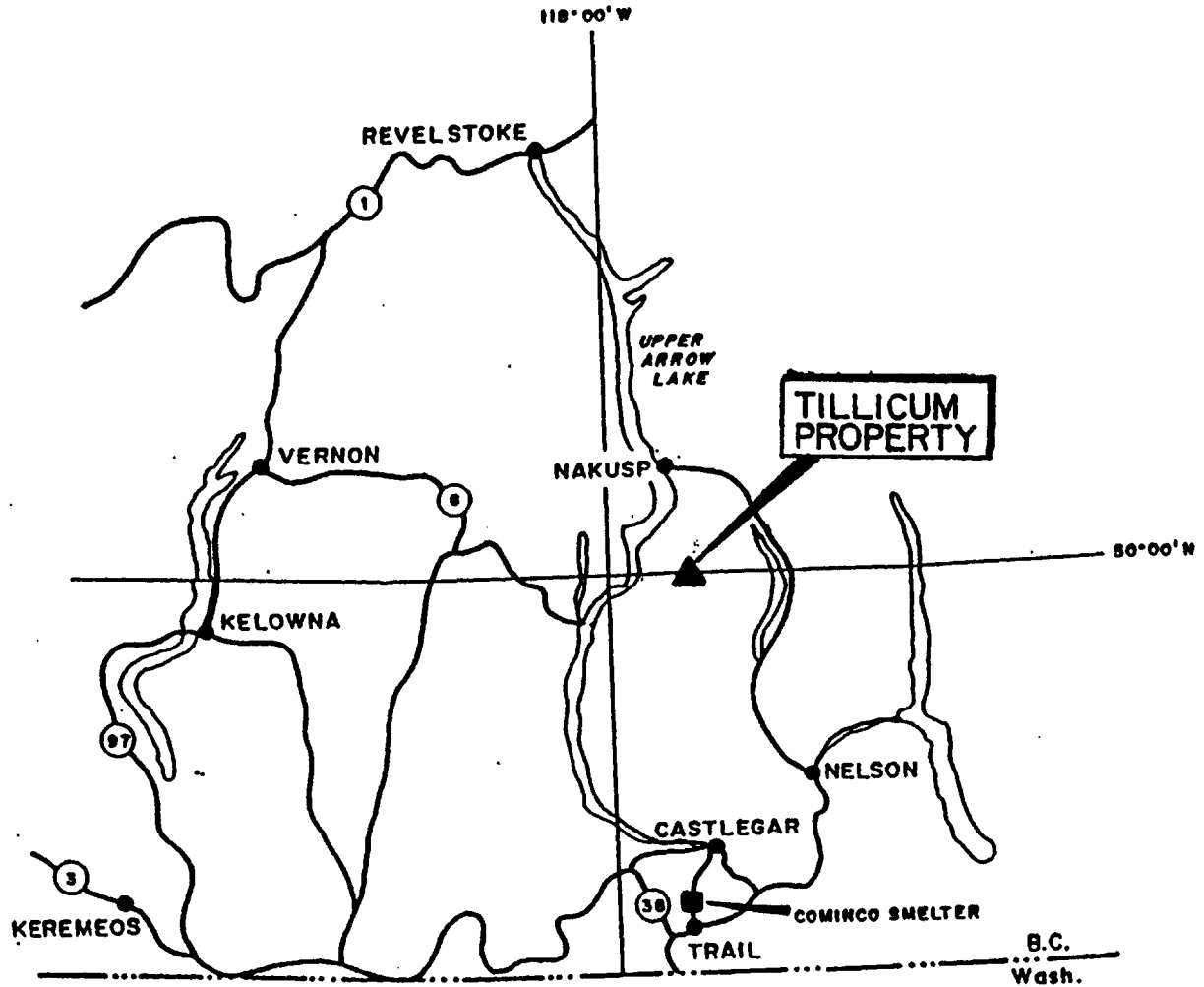
## INTRODUCTION

This study was commissioned by Mr. John Brock, president of Esperanza Explorations Ltd. It is based on extensive data provided by Esperanza that includes plans and sections of underground workings and drilling results, drill core logs, records of limited production, assay data, exploration summary reports, and other reports and data containing useful information. Several discussions and meetings with Esperanza personnel were helpful for orientation purposes. A short site visit to the property was made by Mr. Saunders on 10 January, 1989 at which time the 2060 Level of the East Ridge zone was examined.

The Tillicum property is situated in southeastern British Columbia, 11 miles by road east of the small community of Burton on the Arrow Lakes (Figure 1). The area is rugged and steep to precipitous with evergreen forests extending to elevations in excess of 2,000 metres (7,000 feet).

Esperanza optioned the property in September 1980. Since that time, exploration has comprised diamond drilling from surface and underground, driving several adits, raising and subdrifting (Heino-Money deposit), bulk sampling and metallurgical testing. This work has provided the data on which this ore reserve study is based.

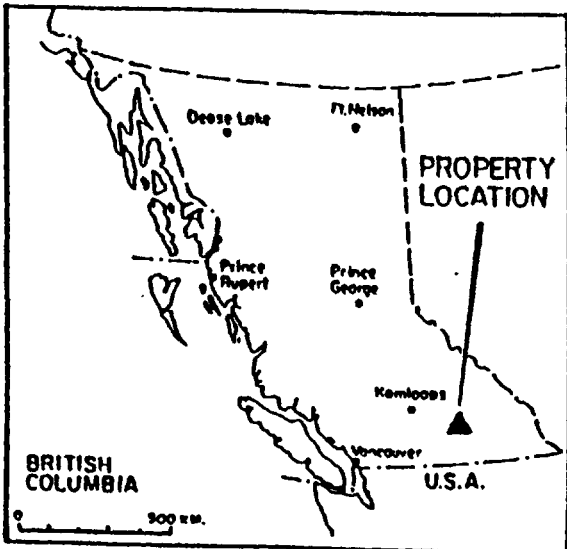
*C.R. Saunders*  
 REGISTERED PROFESSIONAL ENGINEER  
 OF  
 BRITISH COLUMBIA  
 C. R. SAUNDERS  
 BRITISH COLUMBIA  
 ENGINEER



20 0 20 40 60 80 100 km



SCALE



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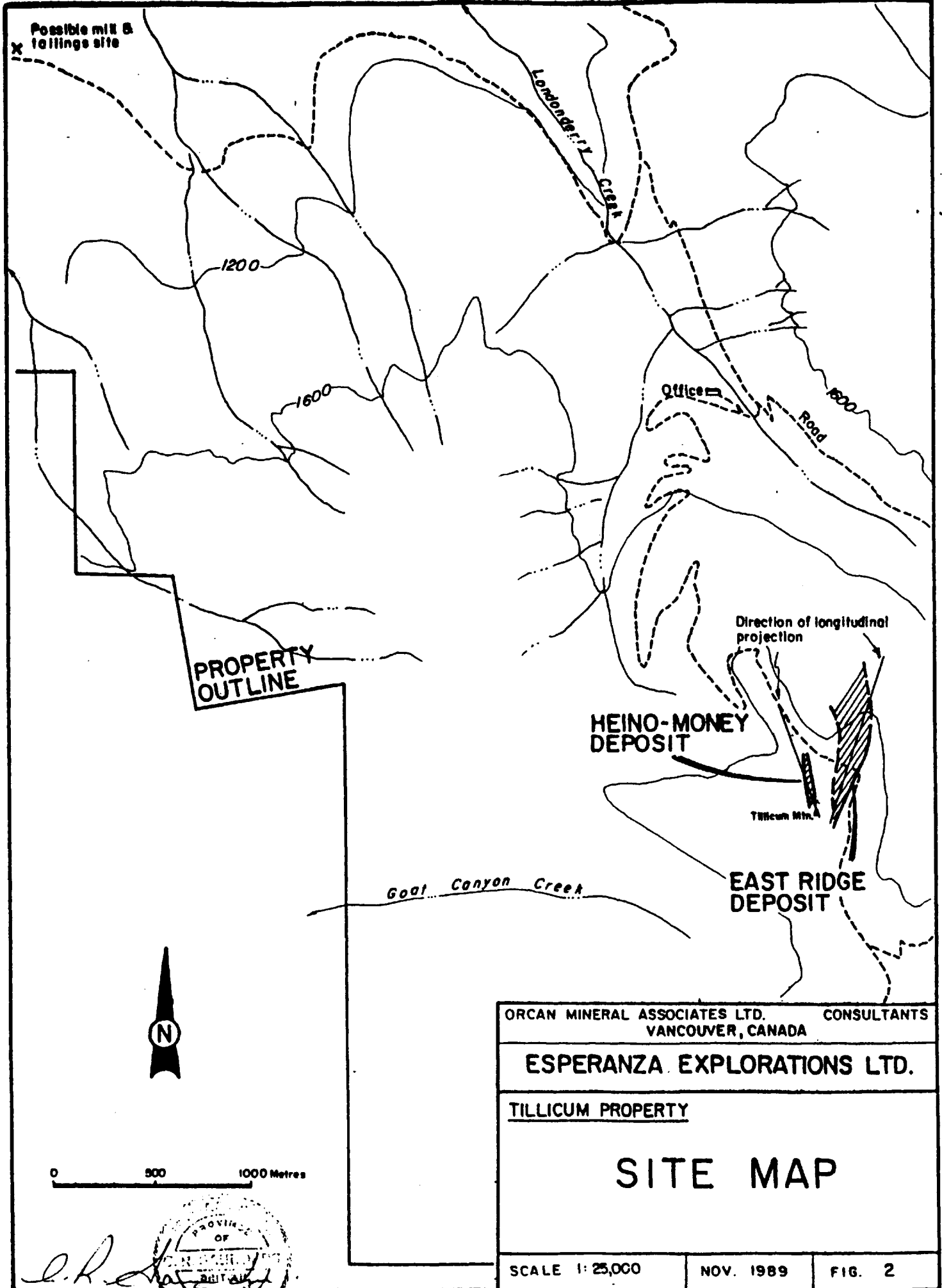
TILLICUM PROPERTY

**LOCATION MAP**

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NOV. 1989

FIG. 1



Possible mill & tailings site

PROPERTY OUTLINE

HEINO-MONEY DEPOSIT

Direction of longitudinal projection

EAST RIDGE DEPOSIT



0 500 1000 Metres

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TILlicum PROPERTY

SITE MAP

SCALE 1:25,000

NOV. 1989

FIG. 2

*Chong*  
 PROVINCE OF  
 BRITAIN COLUMBIA  
 ENGINEER

CHONG

### GEOLOGICAL SETTING

The Esperanza gold property covers a portion of a roof pendent at the northwest end of a 150 mile-long arcuate belt of Rossland Group volcanics. This belt is host to several gold mines and prospects with total recorded production over the past 80 years in excess of four million ounces of gold.

The property is underlain by a sequence of Upper Paleozoic Milford Group volcano-sedimentary rocks that are overlain by Jurassic Rossland Group andesitic flows and tuffaceous siltstones. Intrusive into the above succession are stocks and sills of syenite to diorite porphyry. All units have been metamorphosed to lower greenschist facies and intruded by Cretaceous-age granodiorite of the Goat Canyon and Halifax Creek batholiths. Late lamprophyre dyke swarms intrude Jurassic and older assemblages.

Gold occurs in calc-silicate-quartz skarns developed in massive andesite, andesitic tuffs and tuffaceous sedimentary rocks. The skarns are spatially related to syeno-diorite porphyry sills and stocks. Skarn assemblages consist of quartz, plagioclase, tremolite-actinolite, clinozoisite, garnet, biotite and microcline. The skarns contain quartz-calc-silicate segregations, injections and veins that vary from less than one centimetre to ten feet in thickness. Skarn zones vary in thickness from a few feet to 200 feet.

Native gold occurs within the skarn assemblages in sizes ranging from 25 micron disseminations to one centimetre coarse flakes within and along the margins of the quartz-calc-silicate segregations. Skarns also contain variable amounts of pyrrhotite, pyrite, sphalerite and 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 quartz-calc-silicate segregations. Petrographic studies of polished thin sections indicate that the gold is contemporaneous with pyrrhotite, pyrite, sphalerite and galena, but predates minor amounts of arsenopyrite and tetrahedrite.



## METHODOLOGY

Reserves have been calculated for two deposits, the East Ridge and the Heino-Money. The deposits are similar in that both are comparatively narrow skarn-hosted gold deposits within the same host rocks. In other aspects, particularly in regard to reserve calculations, they are different. The Heino-Money has received a considerable amount of underground development (four main levels, several sub-levels, raises) whereas, except for one adit level, the East Ridge has been explored only by diamond drilling. The Heino-Money deposit is small, mostly steeply dipping ( $60^{\circ}$ - $90^{\circ}$ ) and high grade; the East Ridge is more extensive, has a shallower dip ( $30^{\circ}$ - $60^{\circ}$ ) and moderate grade.

The general procedures for determining ore reserves are the same for each deposit: interpretation, establishing conceptual mining parameters, outlining individual reserve blocks, classification, calculation/summation. However, the procedures differ somewhat in detail.

### East Ridge Deposit

Based on the type and density of available data, and on the nature of the deposit, it was decided that a 'geological reserve' was best suited for the East Ridge at this time. The data consist primarily of drill core intercepts that for much of the deposit are too widely spaced for the more confident projections required for a mining reserve. This factor is even more significant when considered in relation to the commonly erratic nature of skarn mineralization, along with the difficulties of exploring for gold by diamond drilling (nugget effect, erratic distribution, etc.).

The configurations of the zones comprising the East Ridge deposit were outlined on cross-sections spaced, for the most part, at 20 or 25-metre intervals. Several plans were used to help confirm the interpretations on the sections. Three zones, A, B and C were outlined; noncorrelatable intersections were termed 'P Zone' (prospective). Drill intercepts for all zones, including low grade and 'no value' results, were plotted on longitudinal projections. Reserve blocks were outlined on sections and transferred to the longitudinal projection, where the lateral limits of the blocks were determined.

Block dimensions were calculated from (apparent) true thickness on cross-sections (perpendicular to the zone), dip length on cross-sections and horizontal length on longitudinal section. The apparent true thickness was determined from drill intercepts by applying the appropriate angle corrections related to hole dip, apparent zone dip, hole strike, zone strike and strike of the longitudinal projection. Dilution to minimum width was applied to true zone width.

No high assays were cut because none were considered to have a disproportionate effect on overall individual block grades. However, in a few cases (less than a dozen) the grade of individual samples was increased where visible gold had been noted during the core logging but the resulting assay was less than 0.20 oz gold per ton. In such cases, the sample grade was deemed to be 0.50 oz gold per ton. The visible gold samples were all one foot in length. The effect on average grade is minimal.

Dilution grade was estimated by averaging sample results adjacent to most mineralized intersections.

### Heino-Money Deposit

The Heino-Money deposit has been well explored by surface and underground diamond drilling and by drifting, subdrifting and raising. Although no formal stoping has been done, the available information about location and grade of mineralization is sufficient for calculation of a 'mining reserve'. A mining reserve, as herein defined for the Heino-Money deposit, is a reserve incorporating estimated mining parameters that are adequate for conceptual mine planning, scheduling and costing, but which may be somewhat too generalized for detailed mine planning (ie., specific details of stope development). It is not a 'production reserve' such as that calculated at operating mines where the unique conditions related to ore continuity, ground stability, dilution, and so forth, are well known.

The configuration of the mineralized zone was interpreted on cross-sections, spaced at ten-metre intervals, by Esperanza personnel familiar with the deposit. Underground workings on the zone, and drill hole intersections of the zone, were

plotted on a longitudinal projection. Reserve blocks were outlined on the longitudinal using geological and assay data from all available sources. Wherever possible, muck assays were used to determine zone location and grade. (Muck sampling, as described by Esperanza personnel, was done in a thorough manner and should have resulted in reasonably representative grades.)

Block dimensions were measured from the longitudinal (length, height) and from plans or cross-sections (horizontal width perpendicular to the longitudinal projection). Possible stope outlines, based on geology and chip sample results, were drawn for all mineralized sections in drifts and subdrifts. The average chip sample grade within a 'stope' outline and the average outside the outline (ie., in the hanging wall and footwall sides of the 'stope') were used as a ratio to modify the average grade of the muck samples for that section of drift. In a few places this procedure resulted in an increase in the apparent stope grade.

Only one drill core assay was cut because of its very high grade (59.25 oz Au/ton). On the basis of the highest grade of several drift muck rounds, this assay was reduced to 10 oz Au/ton across a mining width.

## CALCULATION PARAMETERS

### Specific Gravity

Because the host skarns at East Ridge and Heino-Money are similar, the same specific gravity is used for each deposit. Specific gravity tests were not available but based on the composition of the skarn and adjacent wall rocks, it was decided that a value of 2.7 would be appropriate. The effects of slightly different specific gravities are shown in sensitivity tables.

### Minimum Thickness

The minimum thickness, perpendicular to the strike and dip of the zones, used in the volume calculations was 5.0 feet (1.52 metres) for both the East Ridge and Heino-Money. Where drill core intersections were used (almost exclusively for East Ridge), any intersections less than five feet true zone width were recalculated to five feet by use of a standard dilution grade.

### Mining Dilution

For purposes of this study, mining dilution is defined as waste (or low grade) on the hanging wall and footwall of an ore zone that gets incorporated into the stope muck during the course of the mining operation. It is primarily a result of erratic ore boundaries and local rock competency.

Mining dilution was not used during calculation of the East Ridge 'geological reserves'.

For the Heino-Money reserves, mining dilution of approximately 1.5 feet was applied only to drill core intercepts. Where muck grades were used, it was assumed that mining dilution was already incorporated in the grade.

**Dilution Grade**

The calculated dilution grades used in this study are:

East Ridge deposit	0.018 oz Au/ton
Heino-Money deposit	0.025 oz Au/ton

**Cut-Off Grade**

In the process of blocking-out the reserves on sections and plans, comparatively low cut-off grades were used in order to obtain a better understanding of the configuration and continuity of mineralized sections within the skarn zones. This low grade material is shown as open blocks on the longitudinal sections accompanying this report (Figures 9, 10, 11, 13). Although these blocks are not included in the reserves, they could contain some mineable grade material considering the erratic nature of the mineralization (gold, skarn) and the difficulty of obtaining representative samples by diamond drilling. Along with other factors, they could indicate areas for further exploration.

The cut-off grade used, in ounces of gold per ton over minimum mining widths, are:

	<u>Blocking- Out</u>	<u>Calculating</u>
East Ridge	0.05	0.20
Heino-Money	0.20	0.40

## RESERVE CLASSIFICATIONS

The major classifications used for the Tillicum deposits are 'Geological Reserves' (East Ridge) and 'Mining Reserves' (Heino-Money).

### Geological Reserves

Two categories are used for the East Ridge deposit.

**Indicated Reserves** Reserve blocks containing a drill core intercept. Maximum projection of 15 metres along strike and dip from the intercept.

**Inferred Reserves** Reserve blocks beyond Indicated Reserve blocks; maximum projection of 50 metres along strike and dip from an intercept (35 metres beyond an Indicated block).

### Mining Reserves

Three reserve categories are used for the Heino-Money deposit.

**Proven Reserves** Ore blocks for which one side is exposed by underground workings; grade based on muck samples; maximum projection of 5 metres along the rake of the zones.

**Probable Reserves**

- (a) Projections to a maximum of 5 metres (along the rake) beyond proven ore; preference given to muck grades but with some qualification by drill core assays where available.
- (b) Ore in a zone defined by three or more drill holes with maximum spacings of 5 metres (with local exceptions).

- (c) Blocks of lower confidence which otherwise could be classified as proven ore.

**Possible Reserves**

- (a) Projections to a maximum of 10 metres beyond probable ore; grade based on an acceptable combination of mucks and drill core assays.
- (b) Ore in isolated drill core intersections.
- (c) Blocks of lower confidence which otherwise could be classified as proven or probable ore.

EAST RIDGE RESERVESBase Case Reserves

Parameters:	Cut-off Grade	0.200 oz Au/ton
	Dilution Grade	0.018 oz Au/ton
	Minimum Width	5.0 feet
	Specific Gravity	2.7

<u>INDICATED</u>			<u>INFERRED</u>		<u>TOTALS</u>		
<u>Zone</u>	<u>Tons</u>	<u>Grade (oz/t)</u>	<u>Tons</u>	<u>Grade (oz/t)</u>	<u>Tons</u>	<u>Grade (oz/t)</u>	<u>Ounces</u>
A	94,500	0.371	45,900	0.340	140,300	0.361	50,665
B	34,500	0.420	30,400	0.272	64,900	0.351	22,755
C	16,500	0.965	15,100	0.367	31,600	0.680	21,486
P	<u>16,400</u>	<u>0.406</u>	<u>9,500</u>	<u>0.205</u>	<u>25,900</u>	<u>0.333</u>	<u>8,614</u>
<b>TOTAL</b>	<b><u>161,900</u></b>	<b><u>0.446</u></b>	<b><u>100,900</u></b>	<b><u>0.311</u></b>	<b><u>262,700</u></b>	<b><u>0.394</u></b>	<b><u>103,520</u></b>

(Minor discrepancies due to round-off)

Sensitivities

The effects on total East Ridge reserves of changes to cut-off grade, minimum mining width and specific gravity are shown in the following tables.

Sensitivity - Cut-off Grade

<u>Cut-off (oz/t)</u>	<u>Tons</u>	<u>Grade</u>	<u>Ounces</u>
0.05	1,306,000	0.17	222,019
0.10	891,800	0.21	190,825
0.15	484,800	0.29	141,811
0.20*	262,700	0.39	103,521
0.25	157,300	0.51	80,847
0.30	118,600	0.59	70,546
0.35	93,100	0.67	62,002
0.40	68,200	0.78	52,813
0.45	58,300	0.83	48,539
0.50	49,000	0.90	44,123



## Sensitivity - Minimum Mining Width

<u>Width (ft.)</u>	<u>Tons</u>	<u>Grade</u>	
4.0	254,600	0.41	103,434
4.5	257,900	0.40	103,493
5.0*	262,700	0.39	103,520
5.5	260,000	0.39	101,750
6.0	247,400	0.39	97,432
6.5	239,500	0.39	93,525
7.0	243,000	0.38	91,887

## Sensitivity - Specific Gravity

<u>S.G.</u>	<u>Tons</u>	<u>Grade</u>	<u>Ounces</u>
2.65	257,800	0.39	101,620
2.70*	262,700	0.39	103,520
2.75	267,800	0.39	105,524
2.80	272,600	0.39	107,425
2.85	277,300	0.39	109,289
2.90	282,100	0.39	111,156

\*Base case results

HEINO-MONEY RESERVES

Base Case Reserves

Parameters:            Cut-off Grade            0.400 oz Au/ton  
                          Dilution Grade            0.025 oz Au/ton  
                          Minimum Width            5.0 feet  
                          Mining Dilution           1.5 feet  
                          Specific Gravity            2.7

Ore Reserves by Zones

	ZONE A		ZONE B		ZONE C		ZONE D		STOCKPILE		TOTALS	
	TONS	GRADE (oz/t)	TONS	GRADE (oz/t)	TONS	GRADE (oz/t)	TONS	GRADE (oz/t)	TONS	GRADE (oz/t)	TONS	GRADE (oz/t) OUNCES
PROVEN	0	0.000	2,796	1.018	2,233	1.081	1,710	0.948	917	1.045	7,656	1.024 7,841
PROBABLE	0	0.000	3,751	1.313	1,079	0.636	1,675	0.693	0	0.000	6,505	1.041 6,773
PROV + PROB	0	0.000	6,547	1.187	3,313	0.936	3,385	0.822	917	1.045	14,162	1.032 14,613
POSSIBLE	0	0.000	2,115	0.813	0	0.000	550	1.580	0	0.000	2,665	0.972 2,589
<b>TOTAL</b>	<b>0</b>	<b>0.000</b>	<b>8,662</b>	<b>1.096</b>	<b>3,313</b>	<b>0.936</b>	<b>3,935</b>	<b>0.928</b>	<b>917</b>	<b>1.045</b>	<b>16,827</b>	<b>1.022 17,203</b>

Ore Reserves by levels

	-2160 LEVEL-		-2150 LEVEL-		-2112 LEVEL-		-2050 LEVEL-		STOCKPILE		TOTALS	
	TONS	GRADE (oz/t)	TONS	GRADE (oz/t)	TONS	GRADE (oz/t)	TONS	GRADE (oz/t)	TONS	GRADE (oz/t)	TONS	GRADE (oz/t) OUNCES
PROVEN	2,069	0.993	2,463	1.001	1,691	0.977	517	1.374	917	1.045	7,656	1.024 7,841
PROBABLE	1,361	0.786	3,191	1.375	899	0.562	1,055	0.770	0	0.000	6,505	1.041 6,773
PROV + PROB	3,430	0.911	5,654	1.212	2,590	0.833	1,571	0.969	917	1.045	14,162	1.032 14,613
POSSIBLE	1,549	0.694	566	1.139	0	0.000	550	1.580	0	0.000	2,665	0.972 2,589
<b>TOTAL</b>	<b>4,978</b>	<b>0.843</b>	<b>6,220</b>	<b>1.205</b>	<b>2,590</b>	<b>0.833</b>	<b>2,121</b>	<b>1.127</b>	<b>917</b>	<b>1.045</b>	<b>16,827</b>	<b>1.022 17,203</b>

Minor discrepancies due to round-off

Sensitivities

## Sensitivity - Cut-off Grade

<u>Cut-off</u>	<u>Tons</u>	<u>Grade</u>	<u>Ounces</u>
0.20	21,834	0.86	18,703
0.25	21,139	0.88	18,548
0.30	19,171	0.94	18,026
0.35	17,474	1.00	17,455
0.40*	16,827	1.02	17,203
0.45	16,419	1.04	17,033
0.50	14,840	1.10	16,297
0.55	12,973	1.18	15,330
0.60	11,116	1.28	14,264

## Sensitivity - Specific Gravity

<u>S.G.</u>	<u>Tons</u>	<u>Grade</u>	<u>Ounces</u>
2.65	16,532	1.02	16,902
2.70*	16,827	1.02	17,203
2.75	17,121	1.02	17,503
2.80	17,416	1.02	17,804
2.85	17,711	1.02	18,105
2.90	18,005	1.02	18,406

\*Base case results

CONCLUSIONS

The East Ridge and Heino-Money deposits, although of similar geological character, are significantly different in potential grade and tonnage. The East Ridge is more extensive but lower grade, whereas the Heino-Money is quite small but high grade. In addition, the dip of the East Ridge zone is lower (30°-60°) than the Heino-Money (60°-90°). This shallower dip may require a somewhat larger minimum thickness than has been used in the present geological reserve calculations (eg., for a mining reserve, a variable thickness of five to seven feet, related to dip, may have to be considered).


For the Heino-Money deposit, the effect of a few tons of very high grade ore (real, or apparent from an assay) can result in a large change in the grade of an individual reserve block. An example is shown in Appendix I. However, the amount of grade data, and the extensive use of muck grades for reserve calculations, should have produced a reasonably confident total average grade for the deposit.


The reserves for the Tillicum property are estimated to be:

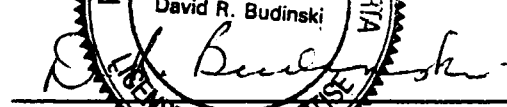
East Ridge - Geological Reserves (0.20 oz Au/ton cut-off)  
262,700 tons @ 0.394 oz Au/ton (103,520 oz gold)

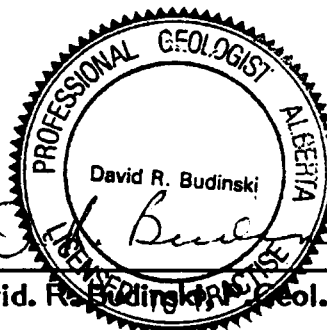
Heino-Money - Mining Reserves (0.40 oz Au/ton cut-off)  
16,830 tons @ 1.022 oz Au/ton (17,200 oz gold)

Respectfully submitted,  
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CERTIFICATE

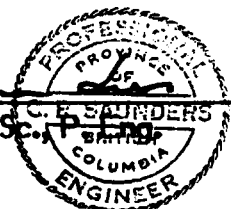
I, **C. Raymond Saunders** of 666 St. Ives Crescent, North Vancouver, Canada, do hereby certify that:

1. I am a graduate of the University of British Columbia, (B.A.Sc. in Geological Engineering, 1956).
2. I am a registered Professional Engineer of the Province of British Columbia (registration number 6498).
3. From 1956 until 1967, I was engaged in mining and mining exploration in Canada for a number of companies; positions included mine geologist, mine engineer and chief geologist for underground and open pit operations. Since 1967 I have been practicing as a consulting geological engineer in minerals exploration, property development and deposit evaluation in Canada and other countries.
4. I have examined the Tillicum property.
5. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the properties or securities of Esperanza Explorations Ltd., or any associate or affiliate of Esperanza Explorations Ltd.
6. I do not have a direct or indirect interest in, nor do I beneficially own, directly or indirectly, any securities of Esperanza Explorations Ltd. or any associate or affiliate of Esperanza Explorations Ltd.

Respectfully submitted,

Vancouver, Canada

  
C. Raymond Saunders, B.A.Sc., P. Eng.



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TELEPHONE (604) 662-3722  
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CERTIFICATE

I, **David R. Budinski** of 219 Sandringham Crescent, North Vancouver, Canada, do hereby certify that:

1. I am a graduate of the University of Alberta (B.Sc. in Geology, 1955).
2. I am a registered Professional Geologist of the Province of Alberta (registration number 6221).
3. From 1955 until 1989, I was engaged in mining and mineral exploration in Canada for a number of companies; positions included mine geologist, chief geologist and exploration manager for underground and open pit operations. Since 1989 I have been practicing as a consulting geologist in minerals exploration, property development and deposit evaluation in Canada and other countries.
4. I have not examined any of the properties reported upon herein.
5. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the properties or securities of Esperanza Explorations Ltd., or any associate or affiliate of Esperanza Explorations Ltd.
6. I do not have a direct or indirect interest in, nor do I beneficially own, directly or indirectly, any securities of Esperanza Explorations Ltd. or any associate or affiliate of Esperanza Explorations Ltd.

Vancouver, Canada

Respectfully submitted,

  
David R. Budinski, B.Sc., P.Geol.

APPENDIXHEINO-MONEY DEPOSIT  
EFFECT OF VERY HIGH GRADE OREExample I:

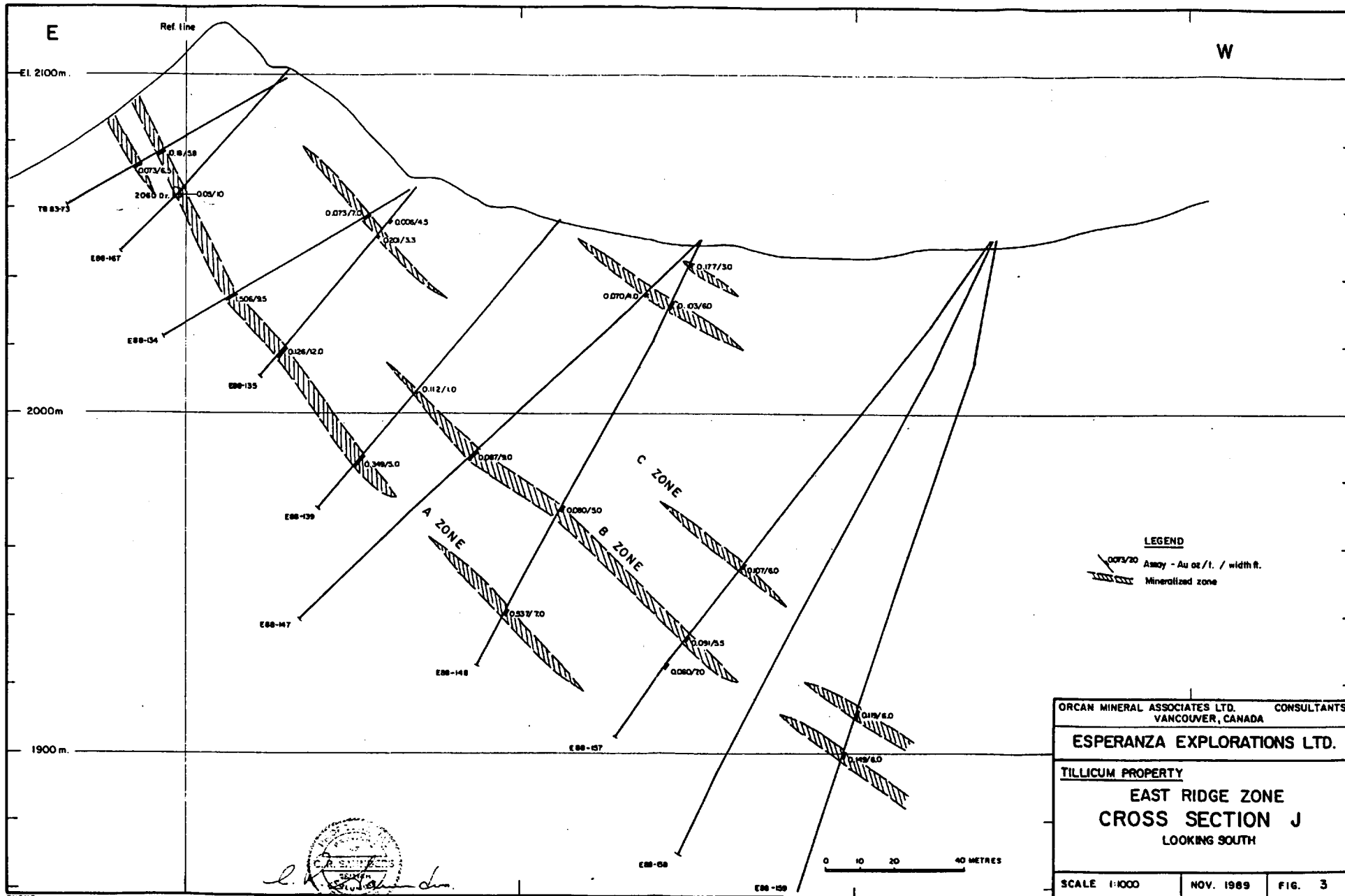
Reserve Block of 250 tons

- (1) 225 tons @ 0.50 oz Au/ton  
25 tons @ 0.00 oz Au/ton  
250 tons @ 0.45 oz Au/ton average
- (2) 225 tons @ 0.50 oz Au/ton  
25 tons @ 5.00 oz Au/ton  
250 tons @ 0.95 oz Au/ton average

Example II:

Reserve Block of 50 tons

- (1) 30 tons @ 0.50 oz Au/ton  
20 tons @ 0.00 oz Au/ton  
50 tons @ 0.30 oz Au/ton average
- (2) 30 tons @ 0.50 oz Au/ton  
20 tons @ 5.00 oz Au/ton  
50 tons @ 2.30 oz Au/ton average

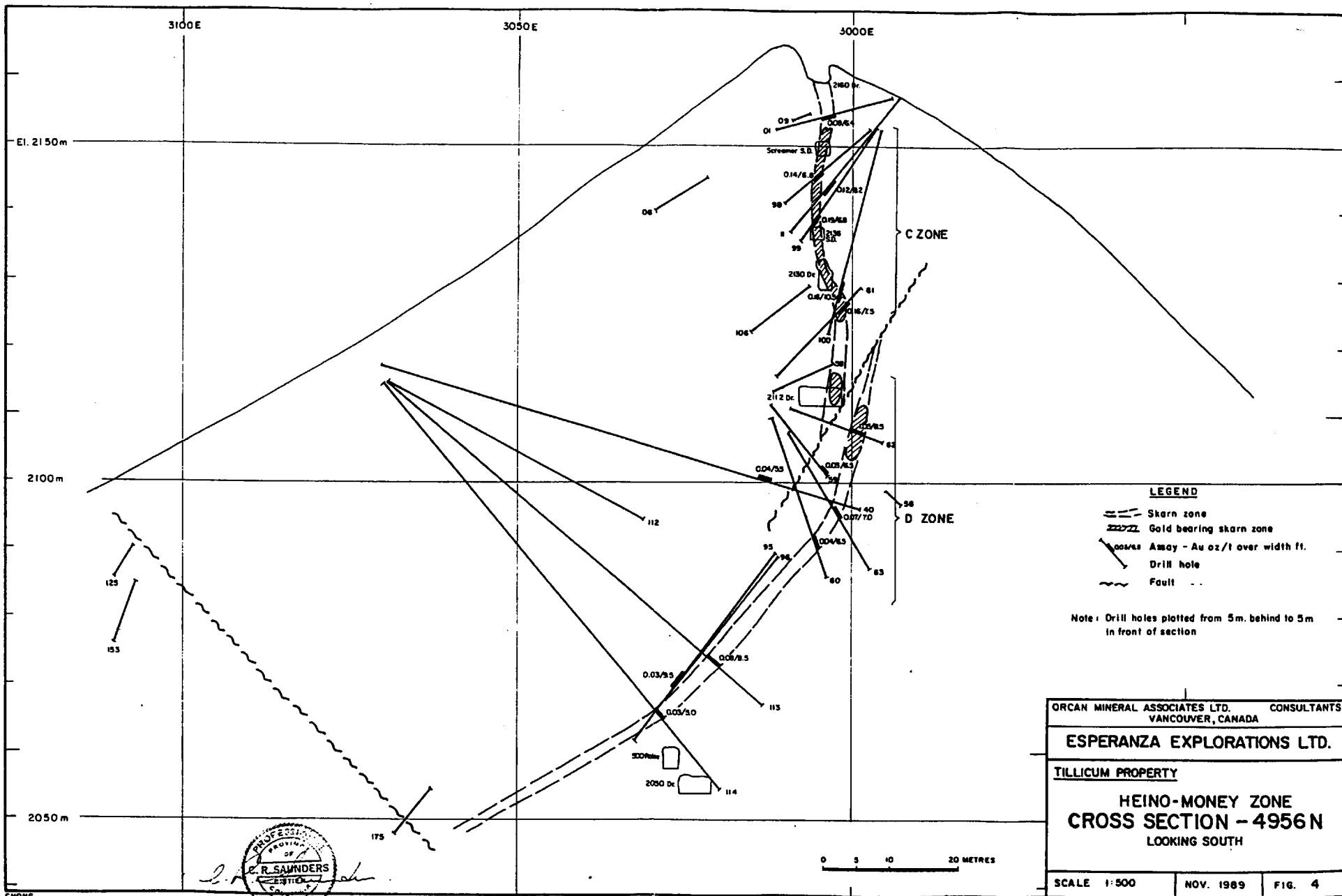


*l. [Signature]*

**C.P. ENGINEERS**

5500  
ST. JAMES ST.  
VANCOUVER, B.C.



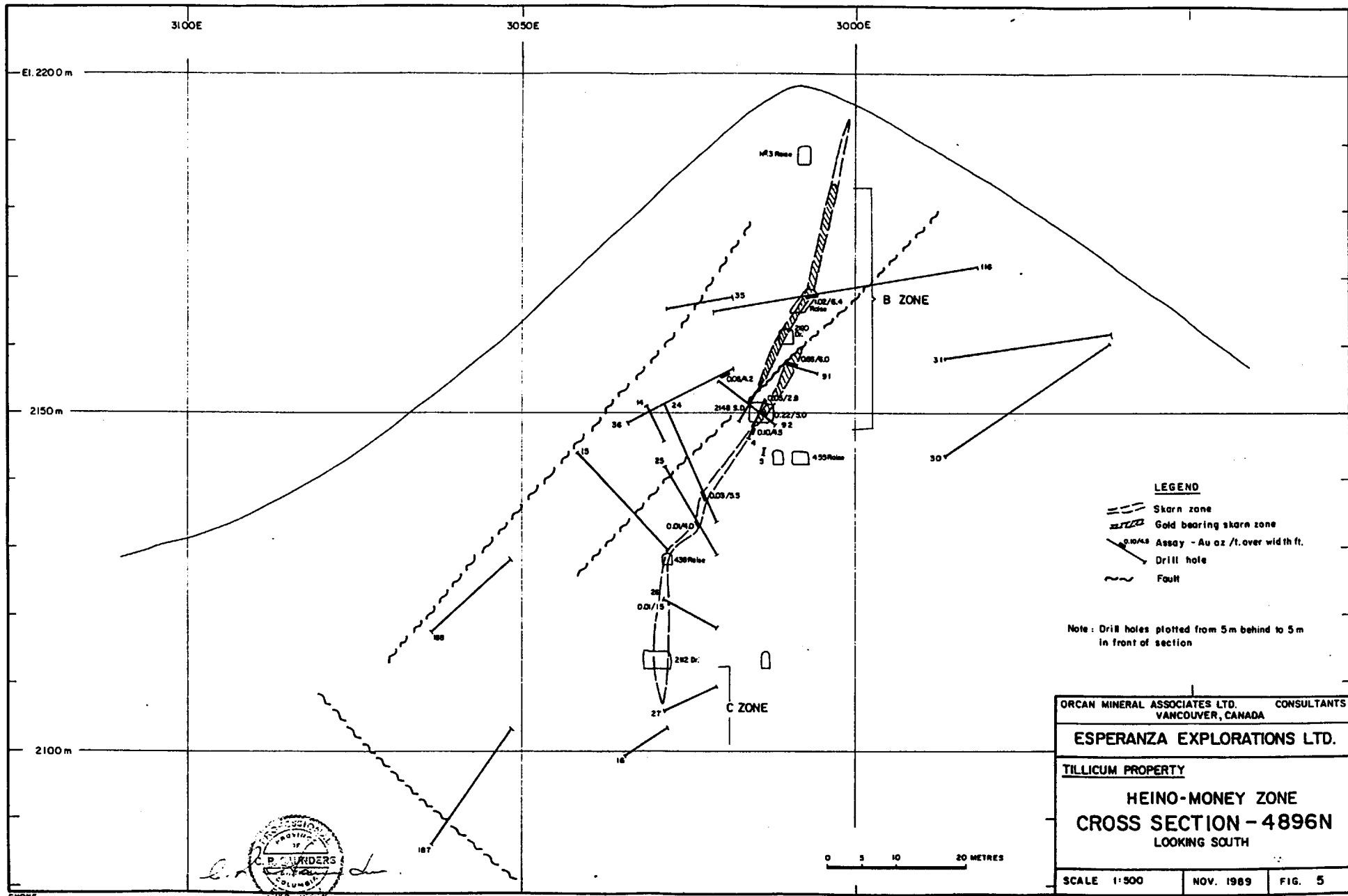


- LEGEND**
- Skarn zone
  - Gold bearing skarn zone
  - Assay - Au oz/1 over width ft.
  - Drill hole
  - Fault

Note: Drill holes plotted from 5m. behind to 5m. in front of section

ORCAN MINERAL ASSOCIATES LTD. CONSULTANTS	
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ESPERANZA EXPLORATIONS LTD.	
TILLICUM PROPERTY	
HEINO-MONEY ZONE	
CROSS SECTION - 4956 N	
LOOKING SOUTH	
SCALE 1:500	NOV. 1989
FIG. 4	

PROFESSIONAL  
ENGINEER  
OF  
C. R. SAUNDERS  
REGISTERED  
ENGINEER

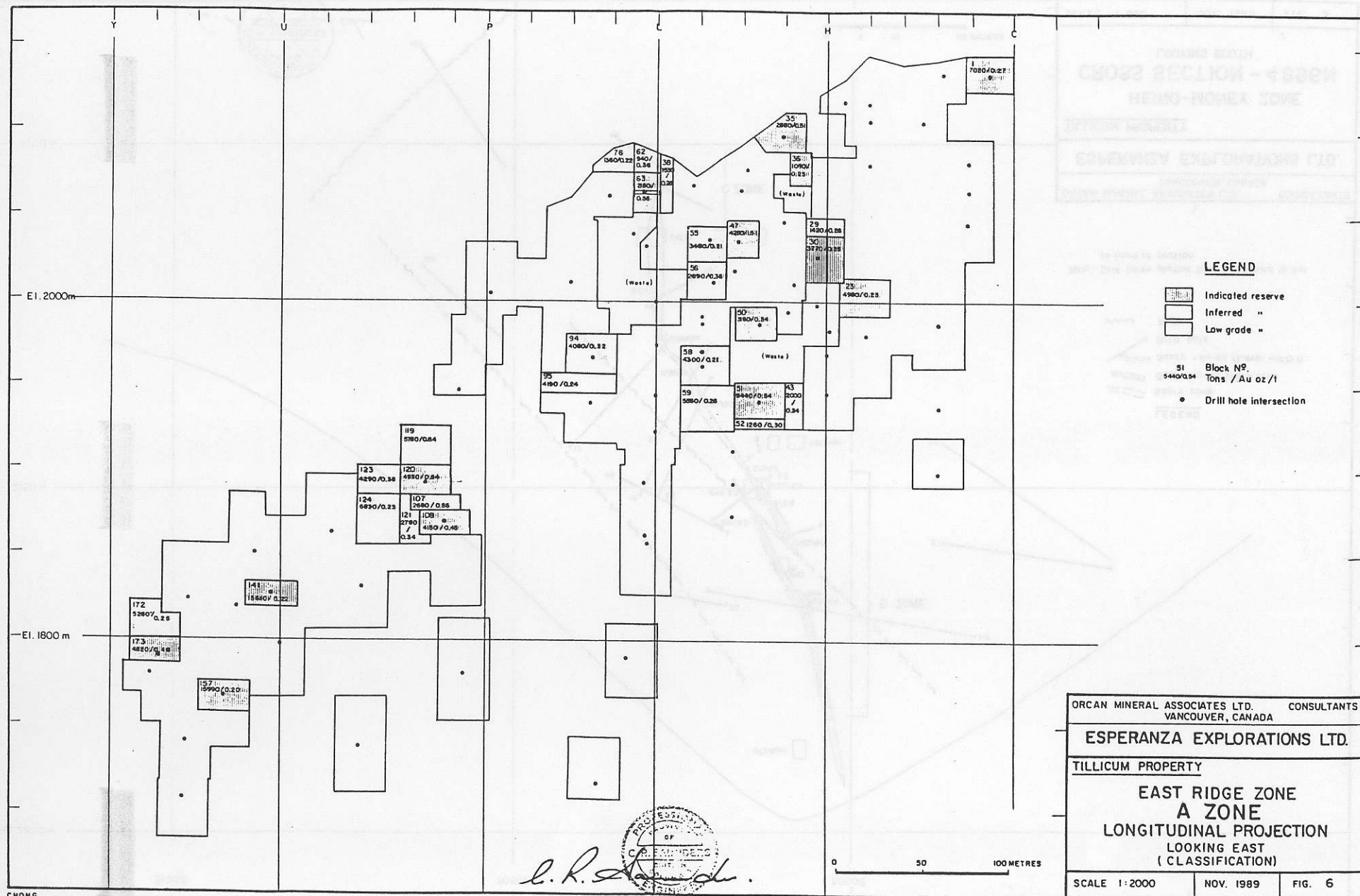


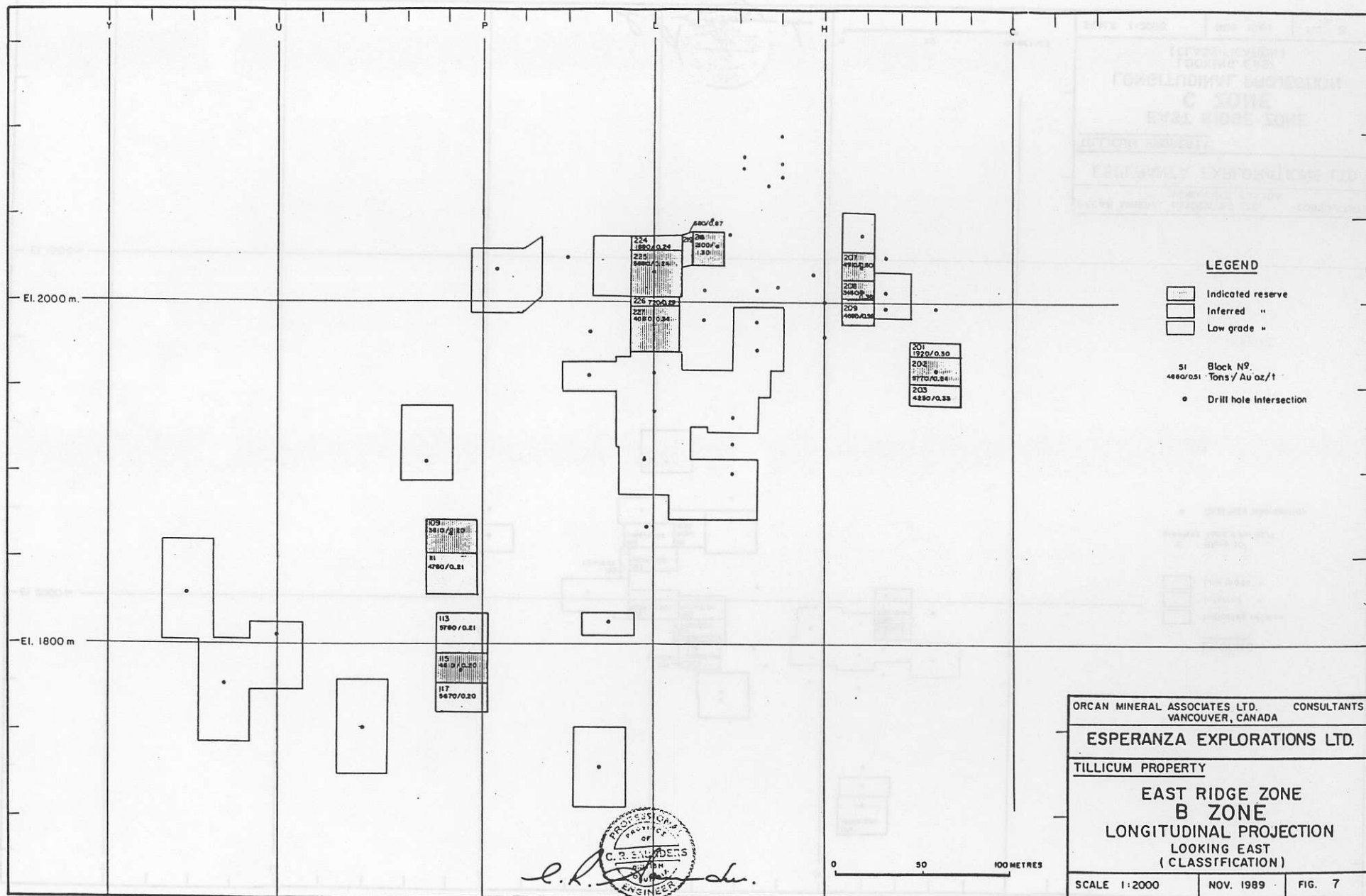
- LEGEND**
- Skarn zone
  - Gold bearing skarn zone
  - Assay - Au oz /ft. over width ft.
  - Drill hole
  - Fault

Note: Drill holes plotted from 5m behind to 5m in front of section

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TILLICUM PROPERTY	
HEINO-MONEY ZONE	
CROSS SECTION - 4896N	
LOOKING SOUTH	
SCALE 1:500	NOV. 1989
FIG. 5	

CNOR6





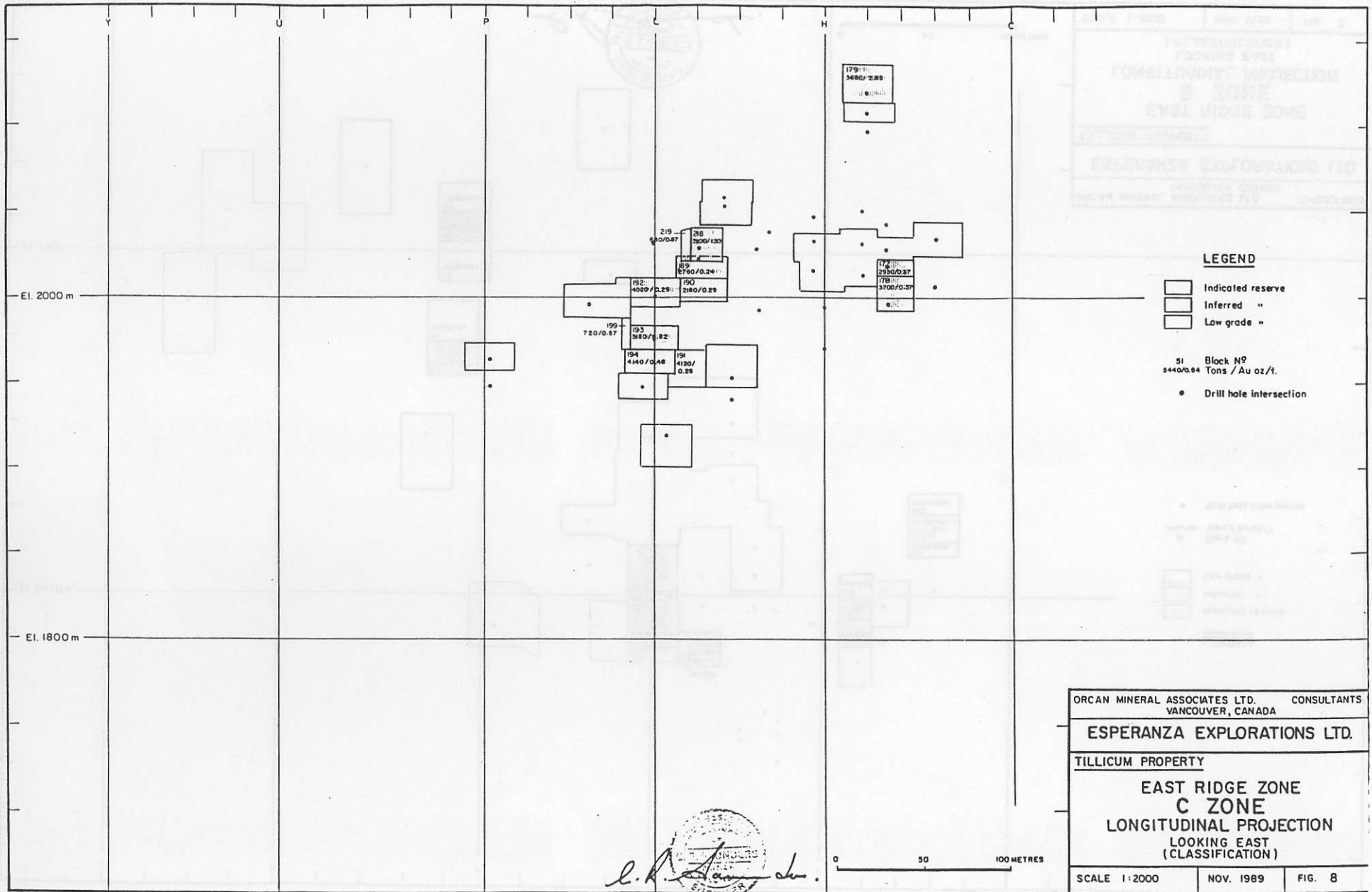
**LEGEND**

- Indicated reserve
- Inferred "
- Low grade "
- 51 Block No.  
4800/0.21 Tons/Au oz/t
- Drill hole intersection

ORCAN MINERAL ASSOCIATES LTD. CONSULTANTS VANCOUVER, CANADA	
ESPERANZA EXPLORATIONS LTD.	
TILlicum PROPERTY	
EAST RIDGE ZONE B ZONE LONGITUDINAL PROJECTION LOOKING EAST (CLASSIFICATION)	
SCALE 1:2000	NOV. 1989 FIG. 7

C. R. SAUNDERS
   
 PROFESSIONAL ENGINEER

0 50 100 METRES



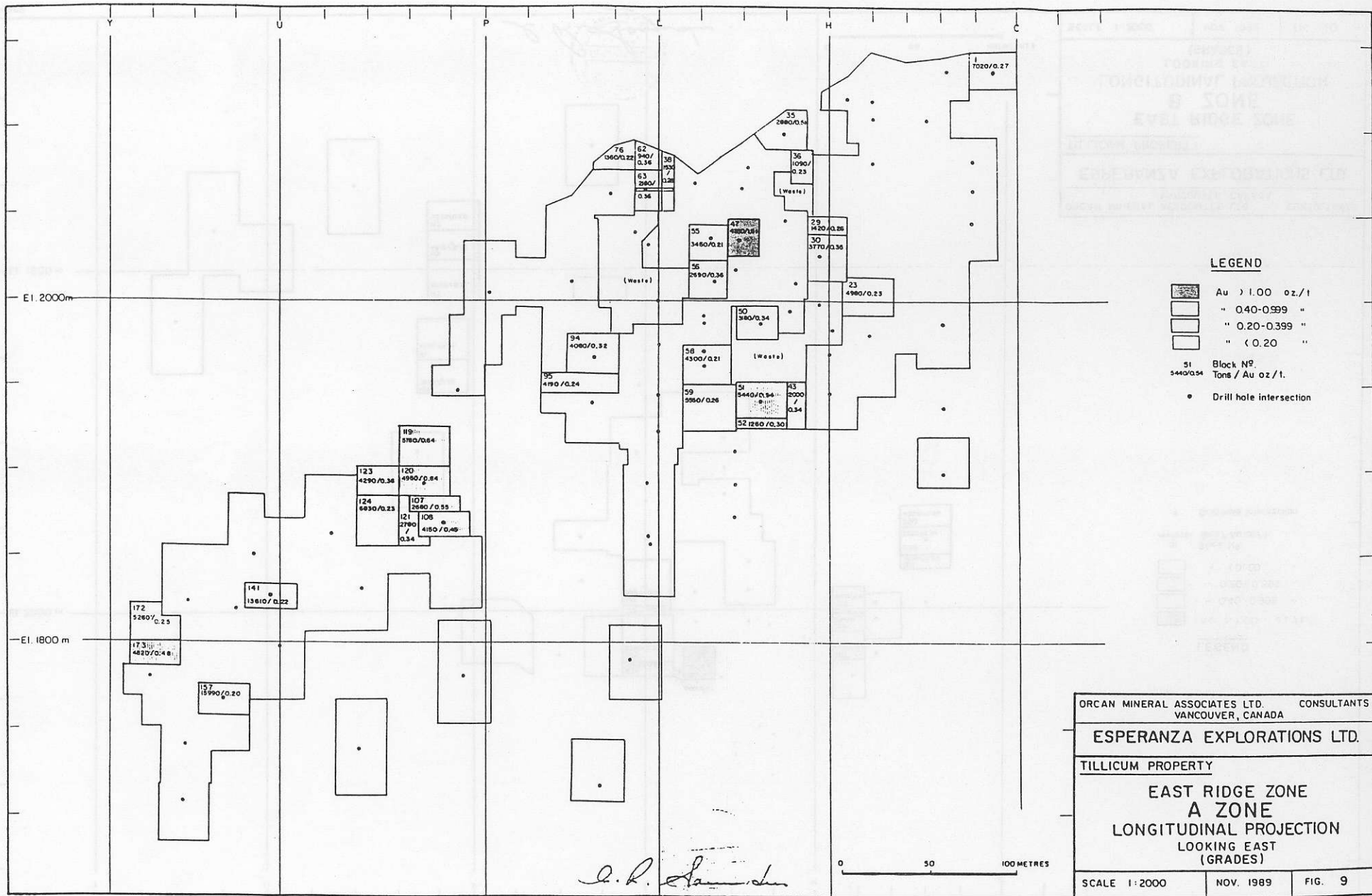
TITILLICUM PROPERTY  
 LOOKING EAST  
 LONGITUDINAL PROJECTION  
 C ZONE  
 EAST RIDGE ZONE  
 ESPERANZA EXPLORATIONS LTD.

**LEGEND**

- Indicated reserve
- Inferred "
- Low grade "
  
- 51 Block N<sup>o</sup>  
5440/0.64
- Drill hole intersection

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<b>ESPERANZA EXPLORATIONS LTD.</b>		
TILLICUM PROPERTY		
<b>EAST RIDGE ZONE          C ZONE          LONGITUDINAL PROJECTION          LOOKING EAST          (CLASSIFICATION)</b>		
SCALE 1:2000	NOV. 1989	FIG. 8

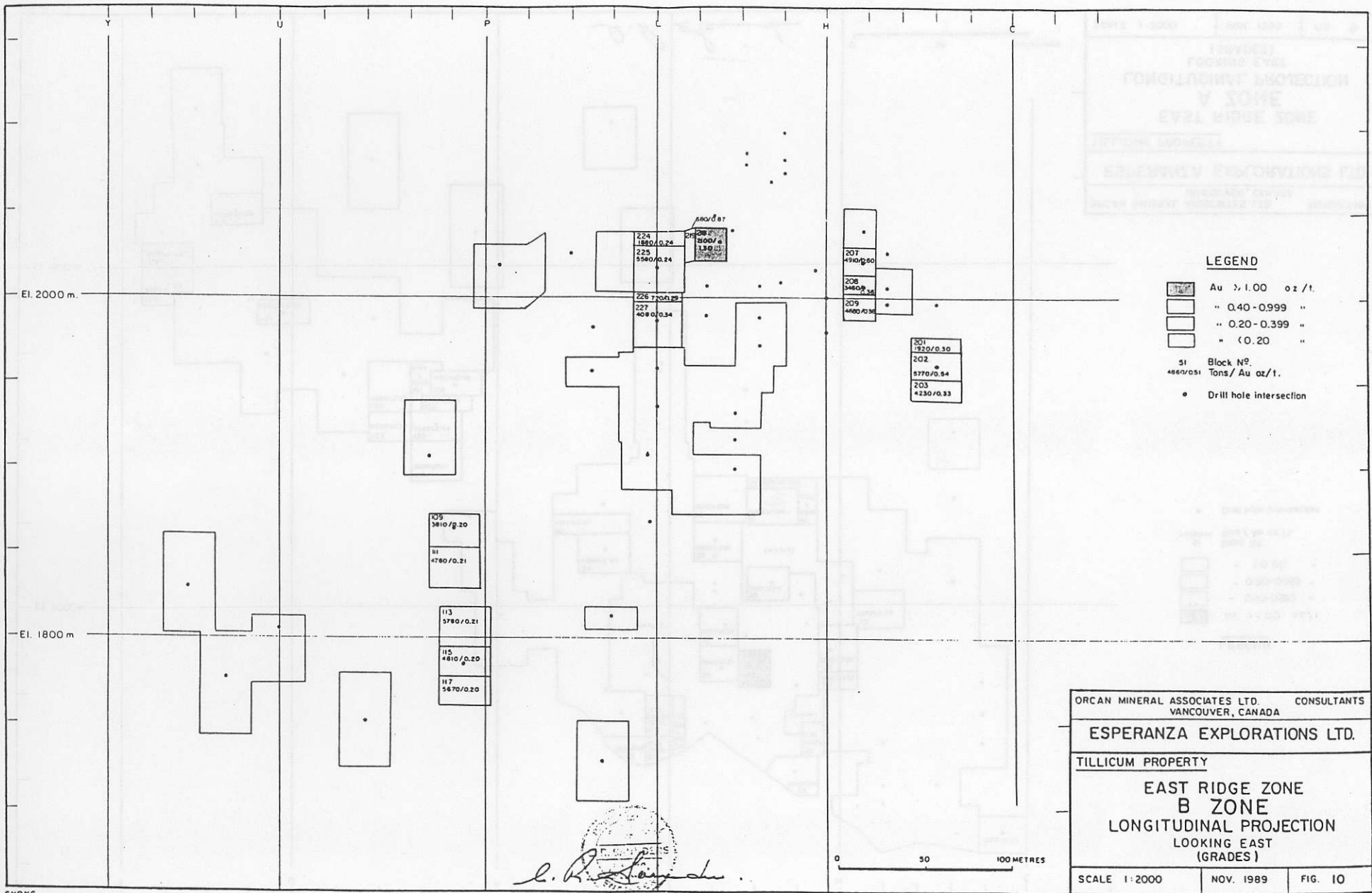
CHONG



CHONG

*E. P. Anderson*





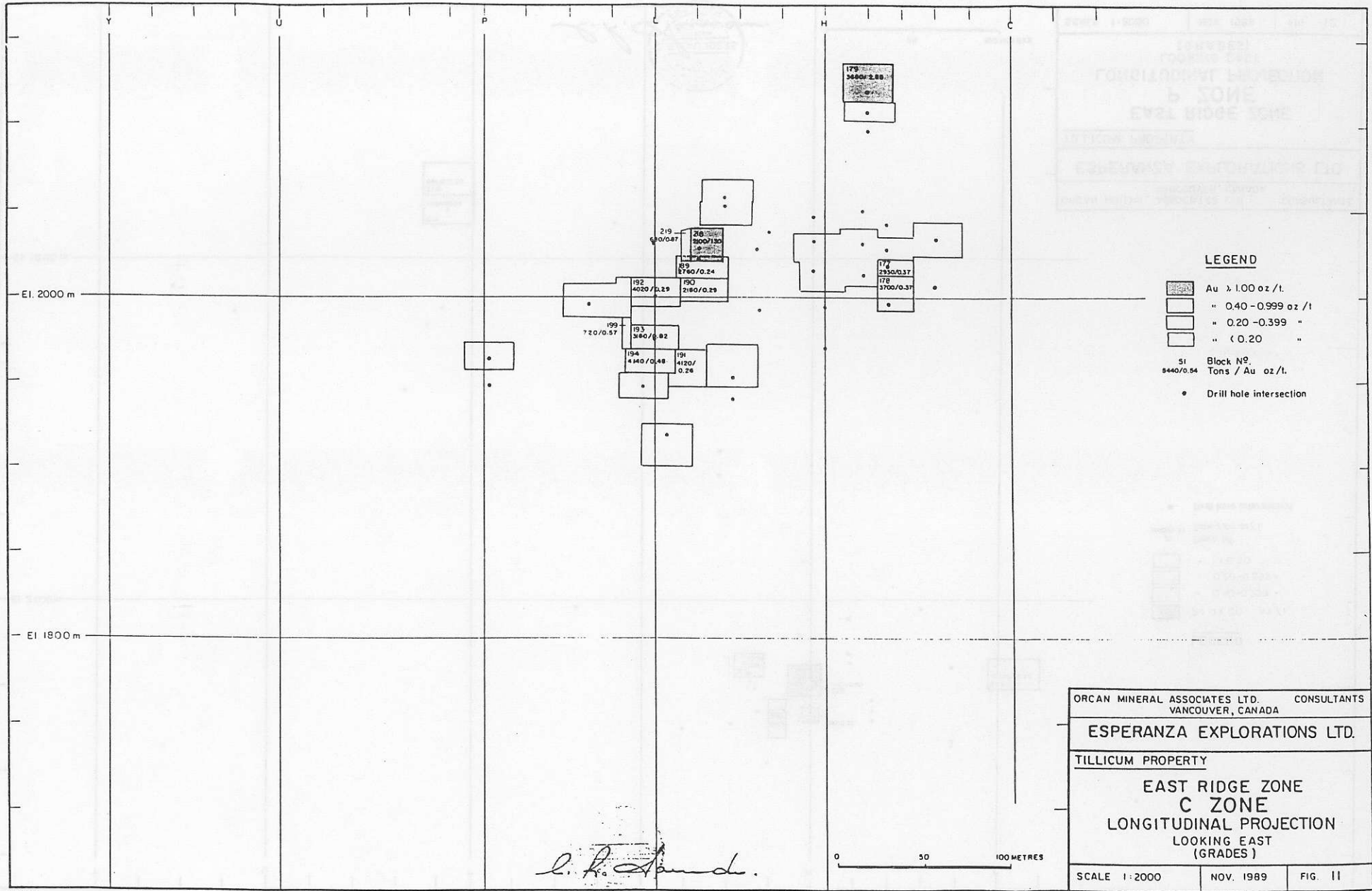
(REVISED)  
 FORMING PART OF  
 TONGCHANGWANG PROPERTY  
 B ZONE  
 EAST RIDGE ZONE  
 TILICUM PROPERTY  
 LONGITUDINAL PROJECTION  
 LOOKING EAST  
 (GRADES)

**LEGEND**

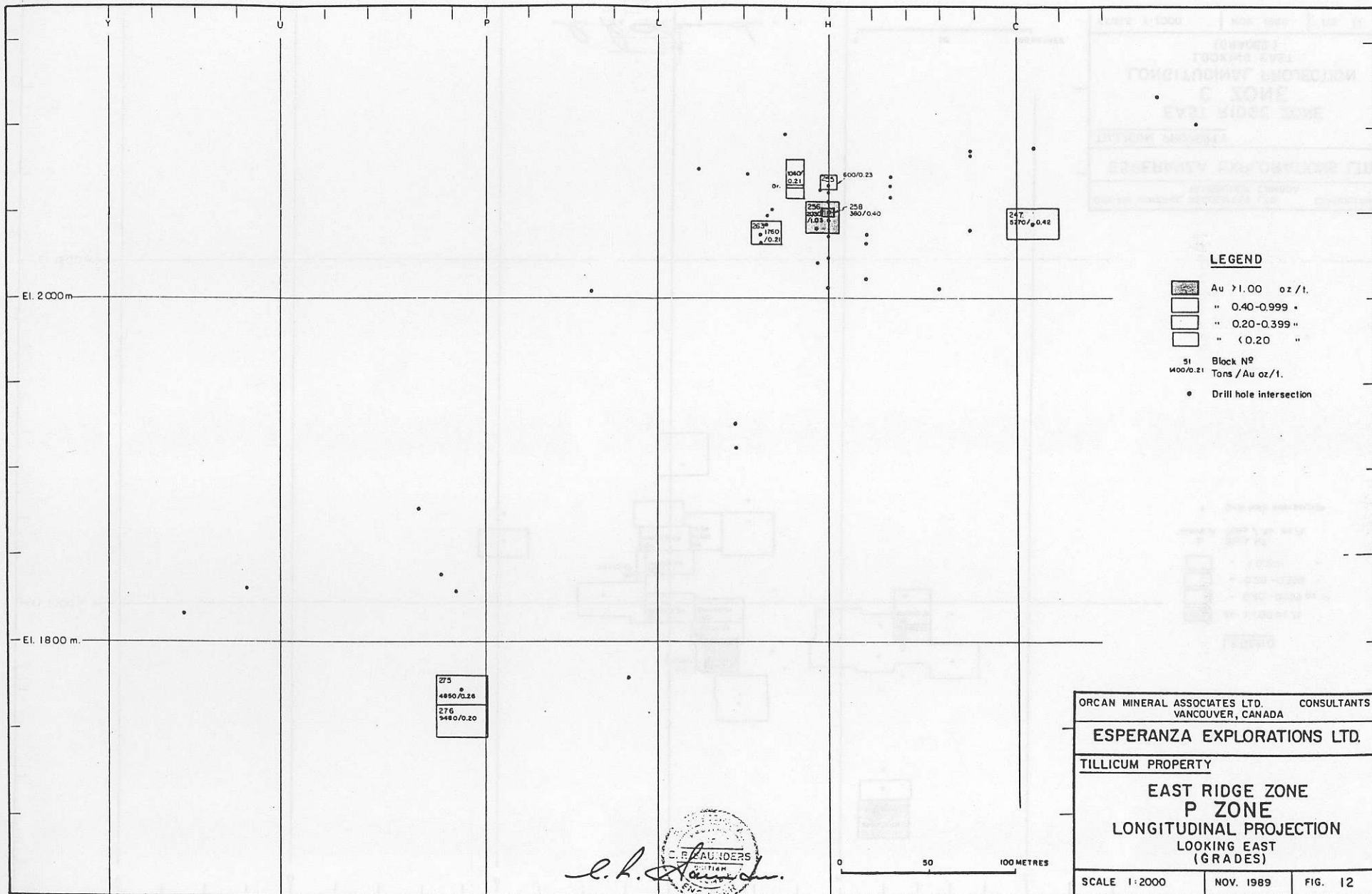
- Au > 1.00 oz/t.
- " 0.40 - 0.999 "
- " 0.20 - 0.399 "
- " < 0.20 "
- SI Block N<sup>o</sup>.
- 4662/051 Tons/ Au oz/t.
- Drill hole intersection

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<b>ESPERANZA EXPLORATIONS LTD.</b>
TILICUM PROPERTY
EAST RIDGE ZONE B ZONE LONGITUDINAL PROJECTION LOOKING EAST (GRADES)
SCALE 1:2000      NOV. 1989      FIG. 10

CHONG





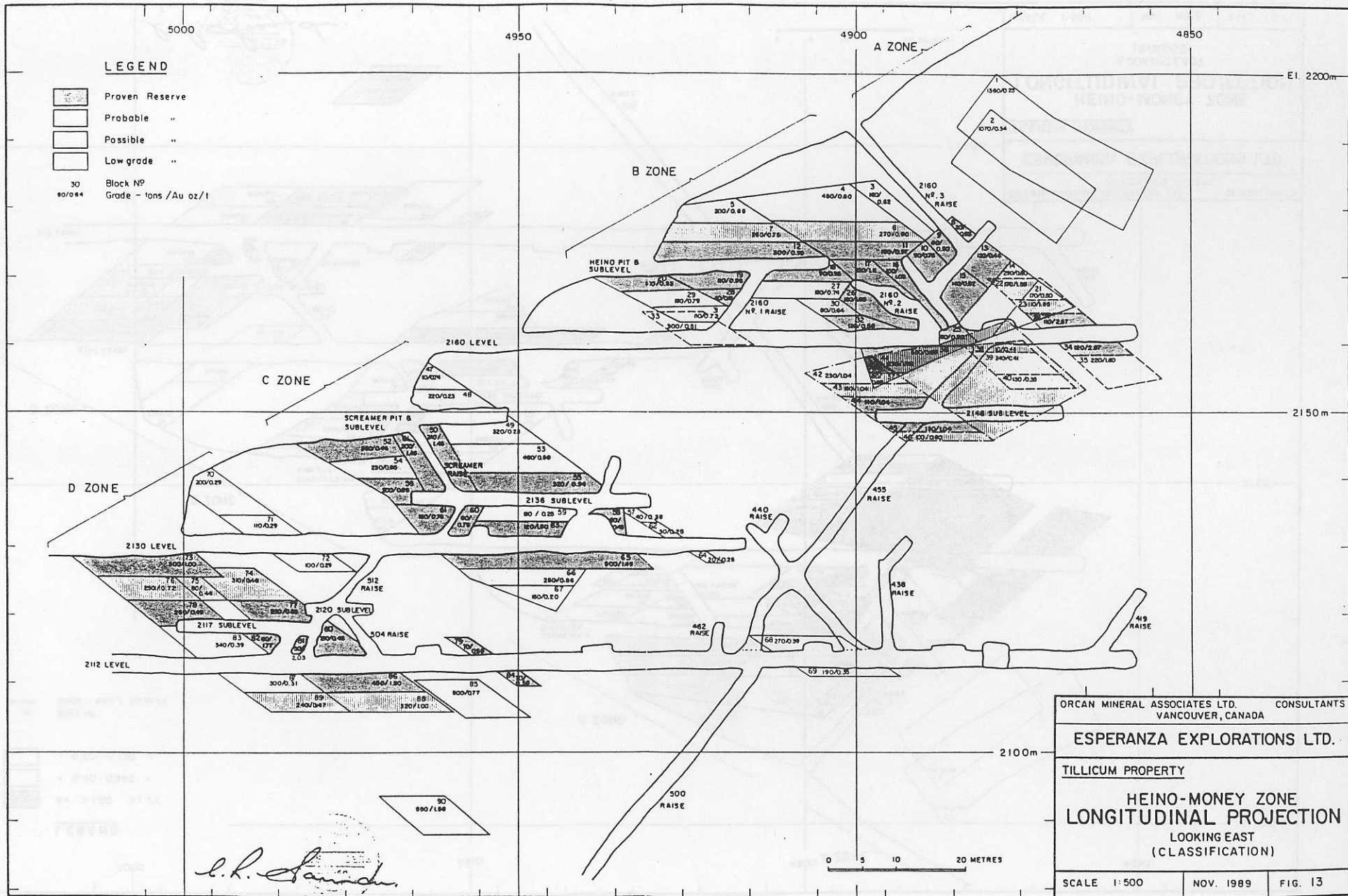


**LEGEND**

- Au >1.00 oz / t.
- " 0.40-0.999 "
- " 0.20-0.399 "
- " < 0.20 "
- 51 Block N<sup>o</sup>  
400/0.21
- Drill hole intersection

ORCAN MINERAL ASSOCIATES LTD. CONSULTANTS VANCOUVER, CANADA
<b>ESPERANZA EXPLORATIONS LTD.</b>
TILLICUM PROPERTY
<b>EAST RIDGE ZONE          P ZONE          LONGITUDINAL PROJECTION          LOOKING EAST          (GRADES)</b>
SCALE 1:2000      NOV. 1989      FIG. 12

CHONG



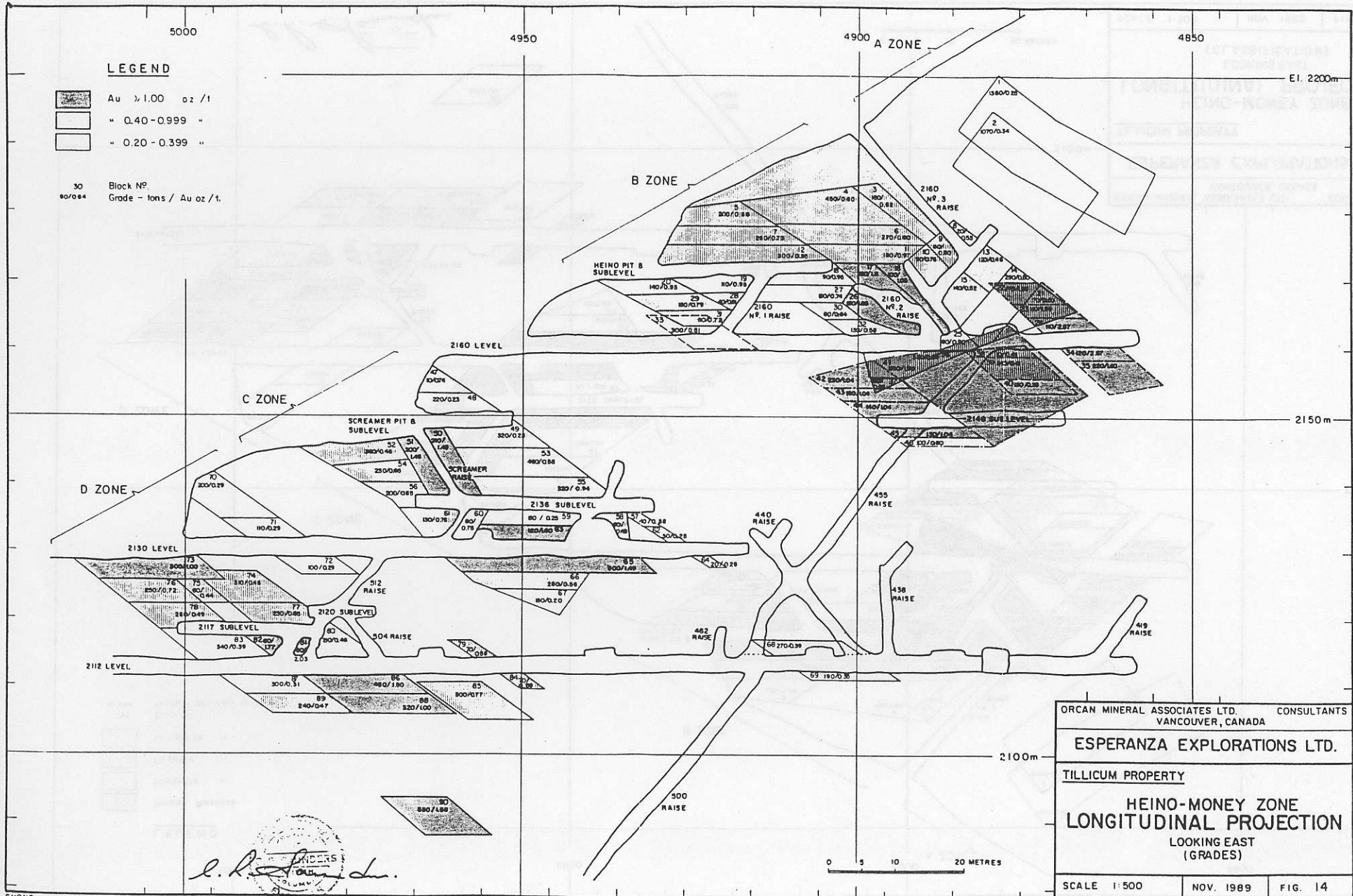
**LEGEND**

- Proven Reserve
  - Probable "
  - Possible "
  - Low grade "
- 30 Block N<sup>o</sup>  
80/084 Grade - tons / Au oz/t

ORCAN MINERAL ASSOCIATES LTD. CONSULTANTS VANCOUVER, CANADA	
<b>ESPERANZA EXPLORATIONS LTD.</b>	
TILLICUM PROPERTY	
<b>HEINO-MONEY ZONE LONGITUDINAL PROJECTION LOOKING EAST (CLASSIFICATION)</b>	
SCALE 1:500	NOV. 1989
FIG. 13	

*L.R. Sandhu*

0 5 10 20 METRES



**LEGEND**

- Au > 1.00 oz / t
- " 0.40 - 0.999 "
- " 0.20 - 0.399 "

30 Block Nº  
90/084 Grade - tons / Au oz / t.

ORCAN MINERAL ASSOCIATES LTD. CONSULTANTS  
VANCOUVER, CANADA

**ESPERANZA EXPLORATIONS LTD.**

TILlicum PROPERTY

**HEINO-MONEY ZONE  
LONGITUDINAL PROJECTION  
LOOKING EAST  
(GRADES)**

SCALE 1:500

NOV. 1989

FIG. 14