





ASSESSMENT REPORT  
**SHOOTAMOOK CREEK PROPERTY**  
Watson Lake Mining Division  
N.T.S. 105-B-14

By  
MARK FEKETE (March 1988)

092125

ASSESSMENT REPORT

for  
work performed on the  
**MATHEW** and **MATT** Mineral Claims  
Shootamook Creek Property  
Wolf Lake Area  
Watson Lake Mining District  
Claim Sheet 105-B-14  
60°47'N - 131°03'W

for  
TOTAL ERICKSON RESOURCES LTD.  
December 1987 to February 1988

by  
MARK FEKETE, GEOLOGIST  
March 10, 1988

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## 1. INTRODUCTION

In January 1988, Total Erickson Resources Ltd. completed a six-hole, 788.5 m diamond drilling program on the Shootamook Creek property in southeastern Yukon. Total Erickson holds an option on the property.

This report is based mainly on geological and geochemical data obtained from the diamond drill core but also draws from a variety of previous property evaluations and government publications.

## 2. SUMMARY AND CONCLUSIONS

2.1 In January 1988, a six hole diamond drilling program of 788.5 m (2587 feet) was completed on the Shootamook property in the Wolf Lake map area of southeastern Yukon.

2.2 The main objective of the drilling program was to test the "Winnie" structure down dip and along strike. The Winnie structure, interpreted as an altered brecciated epithermal "fault" system, proved to be discontinuous down dip and along strike. It is assumed that faults truncate the structure in both directions.

2.3 The main rock units encountered during drilling are as follows (classifications modified after Roddick, Poole and Green, 1960):

<u>Age</u>	<u>Rock Unit</u>	<u>Description</u>
Jurassic and/or Cretaceous	15	Granodiorite
Lower Cambrian	3	Metasediments
	3 <sub>x1</sub>	Sandy grey quartzite
	3 <sub>x2</sub>	Muddy black quartzite
	3 <sub>x3</sub>	Matrix supported siliceous conglomerate
	3 <sub>x4</sub>	Limestone
	3 <sub>y</sub>	Quartz-sericite schist
	3 <sub>x</sub>	Limey banded phyllite

2.4 Pyrite as fine to coarse disseminations or massive bands is the only significant mineralization. It appears to favour the sandy quartzite (3<sub>x1</sub>).

2.5 Geochemical and assay results are generally poor with one weak silver anomaly ranging from 3.5 to 11.0 ppm over 2.1 meters and occasional, scattered spot anomalies of gold, antimony and arsenic.

- 2.6 Based on mineral textures, spatial relationships of the rock types, structural features and comparison to deposit types known to occur in the region, three deposit types are suggested to perhaps occur on the Shootamook property:
- (a) Stratiform massive sulfide type (syngenetic/early diagenetic or epigenetic hydrothermal?)
  - (b) Epithermal type
  - (c) Skarn type.
- 2.7 No further subsurface work is recommended until detailed mapping, soil sampling and geophysical surveys are completed.
- 2.8 A program for surface work is recommended for the 1988 field season, which includes geological mapping, soil sampling and MAG and VLF-EM geophysics.
- 2.9 If results of the 1988 program favour further diamond drilling, it should be noted that NQ diameter rods and drilling mud be used to improve core recovery.

3. PROPERTY LOCATION, ACCESS AND STATUS

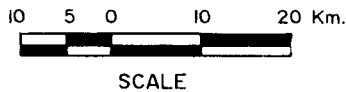
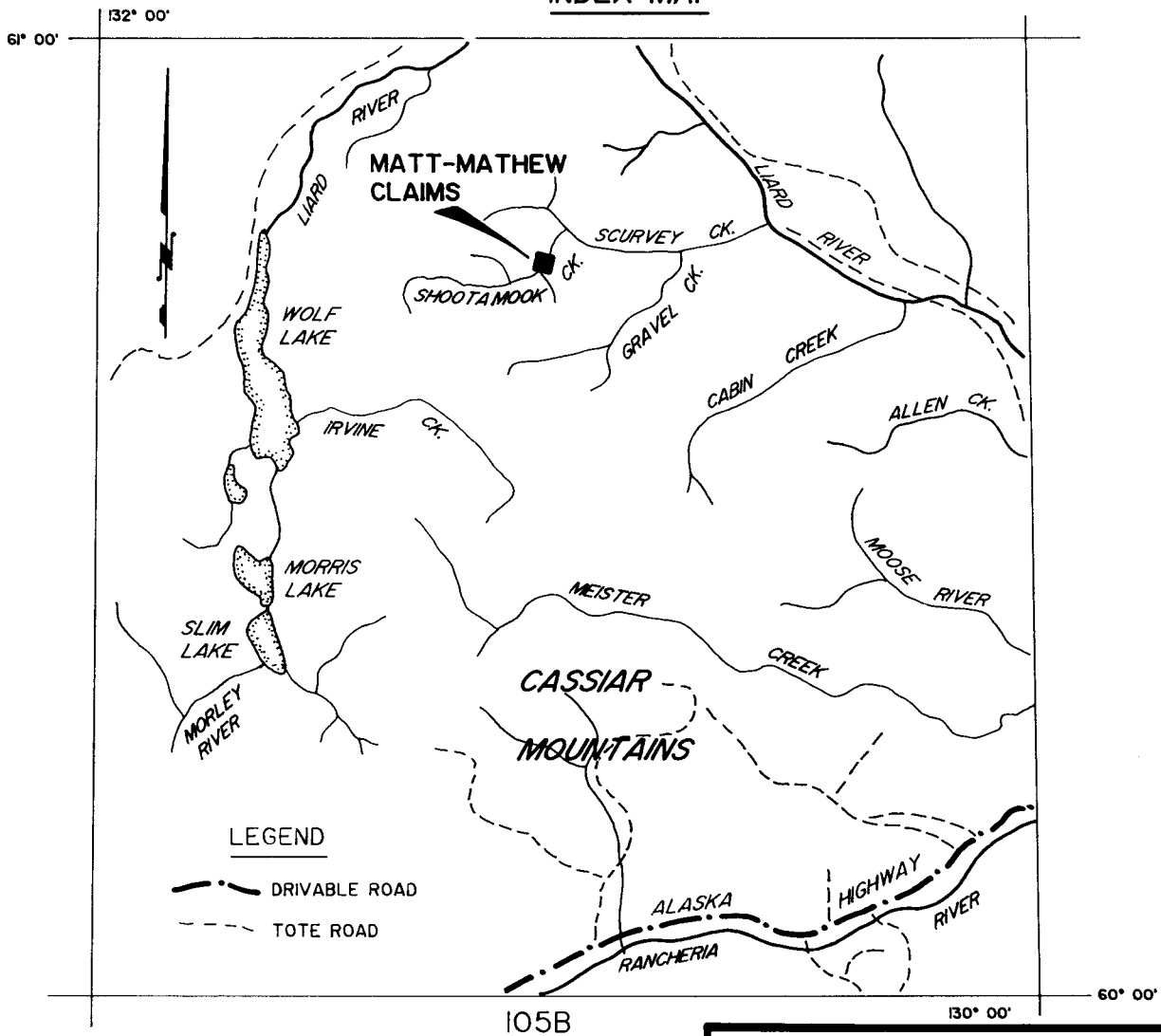
The Shootamook property is located at approximate latitude 60°47' North and longitude 131°33' West and appears on Claim Sheet 105-B-14 in the Watson Lake Mining District of Yukon. It consists of 48 contiguous, unsurveyed mineral claims located and recorded under the Yukon Quartz Mining Act. The claims are held by Total Erickson Resources Ltd. subject to the terms and conditions of an option agreement with prospector Mel Holloway. The particulars of the claims are outlined as follows (expiry dates listed are pending acceptance of 1988 work):

<u>Claim Name</u>	<u>Record Number</u>	<u>Expiry Date</u>
MATHEW 1-3	YA 71354 - YA 71356	January 20, 1997
MATHEW 4-6	YA 71357 - YA 71359	January 20, 1998
MATT 7-8	YA 73626 - YA 73627	January 20, 1995
MATT 9-48	YA 73721 - YA 73760	January 20, 1995

Access to the property is by helicopter, available for charter in Watson Lake, 150 km to the southwest, on a year-round basis. Silver Hart Mines has constructed a road from the Alaska Highway to its CMC property which ends at a point some 50 km south of the Shootamook property. Shakwak Exploration has indicated that they may extend the Silver Hart Road to access their Gravel Creek property, 15 km from Shootamook.



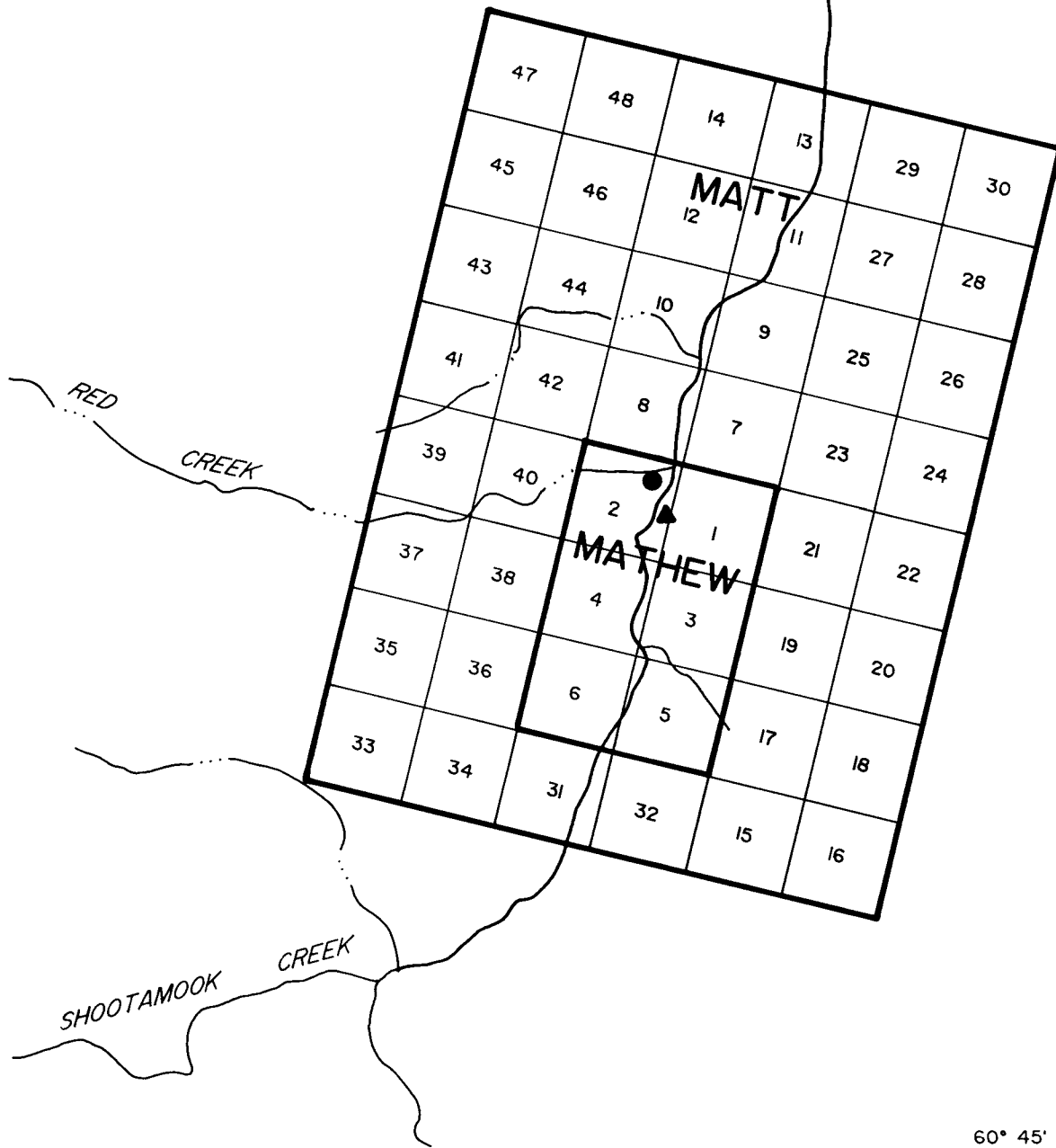
**INDEX MAP**



TOTAL ERICKSON RESOURCES LTD.		
PROPERTY LOCATION WOLF LAKE AREA		
SHOOTAMOOK PROPERTY		
DATE : FEB. 1988	TECH: M. FEKETE	FIGURE :
SCALE : 1 : 700,000	DRWN: <i>INTERPHYSICS LTD.</i>	1

LEGEND

- DRILL PAD LOCATION
- ▲ CAMP LOCATION



TOTAL ERICKSON RESOURCES LTD.

**CLAIM LOCATION PLAN**

SHOOTAMOOK PROPERTY

DATE: FEB., 1988

TECH: M. FEKETE

FIGURE :

SCALE : 1 : 50,000

DRWN: *W/EGRAPHICS LTD.*

2

#### 4. TOPOGRAPHY, VEGETATION AND CLIMATE

The topography of the property is moderate with elevations between 1025 and 1250 m for only 225 m of relief. However, numerous steep cliffs have developed in creek valleys due to erosion. Shootamook Creek and its several tributaries drain the property.

Rock exposures are scarce on the property due to a pervasive covering of black spruce, pine, willow and aspen with undergrowths of dwarf birch, labrador tea, fireweed, low bush cranberry and a variety of other shrubs, bushes, mosses and lichens.

The climate is typical of northern continental regions, with long, often severe winters and short but pleasant summers. Winter temperatures average  $-20^{\circ}$  to  $-10^{\circ}\text{C}$  but "snaps" of  $-40^{\circ}\text{C}$  or colder are common. Summer days show average daily temperatures between  $10^{\circ}$  and  $20^{\circ}\text{C}$  and are improved by long hours of daylight.

Precipitation in the area is moderate and generally falls in short-lived blizzards or storms.

#### 5. HISTORY AND PREVIOUS WORK

Prospectors first entered the Liard River Basin in the 1870's looking for placer gold on the Liard and its tributaries. After this initial push into the Wolf Lake area, activity declined until after World War II and the construction of the Alaska Highway. In the following decades, prospecting and geochemical surveys led to the discovery of numerous deposits hosting a variety of commodities.

Placer gold was apparently found on Shootamook Creek in 1936. Several old cabins, a few shallow pits and a scattering of decrepit tools remain as evidence of this discovery. In 1984, Mel Holloway staked mineral claims MATHEW 1-6 after prospecting over the CBC placer lease which he had located earlier over the area of the initial reported placer find. In 1985, a 30.15 m area was stripped to an average depth of 0.76 m. One selected chip sample taken from the narrow northwest trending "Winnie" structure returned 1200 ppb Au and 9.7 ppm Ag. The MATT 7-48 claims were tied onto the initial block in 1985. Between 1985 and 1987, several geologists from various mining companies and the G.S.C. visited the property and sampled the Winnie structure.

Total Erickson Resources Ltd. visited the property in July 1987 and subsequently entered into an option agreement with Holloway. Construction of a four-season camp began in late December. A three week diamond drilling program was completed in January 1988. This report is based upon the results of that drilling program.

## 6. REGIONAL GEOLOGY

The Wolf Lake area was mapped on a regional scale by W. H. Poole, 1951-1955 and J. A. Roddick and L. H. Green, 1959. No memoir was published but the results of their mapping are summarized on Map 10-1960 published by the G.S.C.

The northernmost tip of the Cassiar Mountains covers the bottom two-thirds of the map area. To the north and west, the Cassiars are bounded by the Nisutlin Plateau and to the east by Liard Plain and Dease Plateau. The Shootamook property is on the far northern margin of the Cassiar Mountains in the top third of the map area, which Poole, Roddick and Green indicate to be underlain by the following units:

<u>Age</u>	<u>Map Unit</u>	<u>Characteristics</u>
Quaternary	18	Unconsolidated glacial, fluvial and lacustrine deposits
Jurassic-Cretaceous	15d	Biotite quartz monzonite
	15c	Granodiorite
Upper Devonian- Lower Mississippian	7a	Greenstone, chlorite schist
	7b	Argillite, slate, phyllite and quartzite
Middle Cambrian- Middle Silurian	4c	Hornfels, limestone, skarn
Lower Cambrian	3b	Unfossiliferous limestone, minor dolomite, slate and phyllite
Lower Cambrian/ Pre-Cambrian(?)		Marble and skarn

The Cassiar Mountains roughly correspond to an anticlinal area underlain by the Cassiar Batholith. Two major synclines and two major fault systems, all trending northwest, dominate the map area. The major faults are called the Tintina and the Kuchika. These overlap one another in the Liard-Twin Lakes valley.

Glaciation in an easterly direction is thought to have occurred during the Pleistocene age.

Exploration in the Wolf Lake map area has revealed a variety of mineralization types including vein and replacement breccias, skarns, porphyries and stratabound deposits. Silver, lead and zinc are the commodities of primary interest, but tin, tungsten, molybdenum, copper, fluorite, barite, gold and antimony are also present. Exploration has been mainly adjacent to the Alaska Highway which provides easy access. Several prospects in the vicinity of Shootamook Creek have seen work recently. The following is a summary of some nearby properties.

<u>Property</u>	<u>Company</u>	<u>Description and Recent Work</u>
TEAM	S.E.R.E.M.	Zn, W skarn; mapping and prospecting, geochem. and geophysical surveys.
IRVINE/SOURCE	Shakwak	Ag, Pb, Zn vein and W skarn; mapping and prospecting, trenching (blast and backhoe), percussion drilling, chip and grab sampling.
BINGY	Tally-Ho	Ag, Pb, Zn vein; geochem., blast trenching, chip and grab sampling.
LOGAN	Fairfield	Zn, Ag, Sn, Lu vein/stockwork; mapping and prospecting, geochem. and geophysics surveys, diamond drilling, chip-grab-core sampling.

## 7. 1988 DRILL PROGRAM

### 7.1 Introduction

Drilling commenced on the Shootamook property in mid-January 1988. The primary drill target was the "Winnie" structure which constitutes the main showing on the property. A drill pattern was designed to test the structure along strike and down dip. The following section of this report includes a summary of the drilling, a description of the geology encountered, an outline of geochemical and assay results, and a discussion of the results.

### 7.2 Drilling

D. J. Drilling of Surrey, B.C. was contracted to complete diamond drilling on the property. A B.B.S. #1 type drill was used to drill six holes with BQ diameter rods. All holes were drilled from the same pad. Figure 3 provides a drill hole location plan. The particulars of each hole are summarized as follows.

<u>DDH #</u>	<u>Azimuth (degrees)</u>	<u>Inclination (degrees)</u>	<u>Casing (feet)</u>	<u>Core (feet)</u>	<u>Total (feet)</u>
88-1	140°	-50°	62'	386'	448'
88-2	140°	-71°	40'	432'	472'
88-3	198°	-52°	60'	351'	411'
88-4	175°	-50°	62'	292'	354'
88-5	085°	-50°	40'	384'	424'
88-6	110°	-60°	30'	448'	478'
				TOTAL	<u>2587'/788.5 m</u>

Recovery was generally good but some runs were lost completely or showed <25% recovery. Unfortunately, recovery was especially poor near contacts. Water under considerable pressure was encountered in several holes. In DDH 88-2 and 88-6, this water caused enough caving, sanding and washing to force early abandonment of the holes.

It should be noted that NQ diameter core be used for any future drilling to improve recovery and allow for core size reduction.

### 7.3 Geology

The drill core was logged during the period of the drilling program. Drill footages were converted to metric prior to logging. Appendix I contains all drill logs and includes the appropriate tag numbers for all sampled intervals. The core is stored in log cribs on the property.

The main drill target was the "Winnie" structure which has been described in several evaluations as a one to three meter wide silicified "fault" breccia-alteration zone adjacent to a narrow felsic dyke. Fault gouge within the zone has assayed up to 2-3 gm/tonne consistently. At surface, this structure has an orientation of 050/70°NW but it was not encountered in any of the drill holes.

Four basic rock types were intersected during drilling: granodiorite, pelitic quartzite, quartz-sericite schist and limey banded phyllite. Each rock type is described below:

(1) GRANODIORITE - This unit was encountered in DDH 88-3 and 88-4. In hand specimen, it is generally fine grained, equigranular and a speckled green colour when fresh. Altered intervals are generally soft, intensely sericitized/carbonitized and a pale green to grey colour. Thin section 88-4 indicates that plagioclase and hornblende are the major minerals in the fresh rock but chlorite, K-feldspar, quartz and epidote are also present. Thin section 88-3 indicates that, in altered intervals, plagioclase has altered almost completely to sericite-carbonate and hornblende has altered to chlorite-sericite. Refer to Appendix III for complete petrographic analyses of thin sections.

(2) CLASTIC QUARTZITES - This unit shows considerable variation in respect of grain size and degree of alteration and deformation. Basically, it represents a siliceous clastic sediment that has been metamorphosed to a quartzite. Thin section 88-1 (see Appendix III) shows that quartz accounts for 80% of this rock unit with sericite and/or muscovite, kaolinite, pyrite and hematite. This unit can be divided into three basic sub-units based on grain size. The most common sub-unit is a fine grained mudstone. Typically, it is a very black colour, shows weak to moderate graphitic alteration, is well foliated and very fissile along schistosity planes. This muddy sub-unit grades into a sandy sub-unit which is grey, shows many open spaces, is non fissile and has poorly developed foliation. Narrow lenses of matrix supported conglomerate with flattened carbonate fragments in a siliceous matrix make up the third sub-unit. Limestone in thin lenses is also included in the group. Parts of this unit were encountered in all drill holes.

(3) QUARTZ SERICITE SCHIST - In hand specimen, this rock is pale green to grey and very fine grained. It shows intense deformation as tight isoclinal minor-drag folds. The rock is very competent and not very fissile along schistosity planes. Thin section 88-2 (Appendix III) indicates that quartz, sericite and siderite(?) are the dominant minerals, with lesser amounts of kaolinite, ankerite and pyrite.

(4) LIMEY BANDED PHYLLITE - This unit consists of alternating layers of black to grey graphitic material and light grey to white carbonate. Layers may be very narrow (<1 mm) or quite wide (0.5 m). The rock is very fissile and parts easily along well-developed schistosity planes. Narrow intervals of intense polyphase deformation are marked by tight, sometimes isoclinal drag folds. Graphitic alteration increases with the degree of deformation. This is the most common unit observed in the drill core. It outcrops on surface and hosts the Winnie structure.

Sulfide mineralization occurs as fine to coarse disseminations or as massive bands or lenses. Disseminated mineralization may be minor and discontinuous or pervasive and up to 10% of the total rock volume over intervals up to 2 m wide. Zones of massive mineralization are typically 5 - 10 cm wide. Pyrite is the only recognizable sulfide present. Some of the pyrite may be yellowish, like chalcopyrite, or silvery like arsenopyrite, but low geochemical values for copper and arsenic indicate that chalcopyrite and arsenopyrite do not occur in the core.

The sandy pelitic quartzite is the major host to pyrite mineralization. Mineralized zones of the sandy quartzite usually show many open spaces partially or completely filled with pyrite. Pyrite also occurs as fine to coarse disseminations in the remaining rock units. Sections of altered granodiorite show very thin (<1 mm) veinlets of pyrite with wide irregular selvages of chlorite(?)

Other types of mineralization include carbonate and/or kaolinite in thin, irregular, often anastomosing veinlets. Coarse purple coloured fluorite was observed in DDH 88-5.

Figures 4 a, b and c (in back flaps) provide cross-sections of the drill holes, showing lithology, mineralized sections and foliation orientations.

#### 7.4 Sampling and Geochemistry

Particular sections of the diamond drill core were chosen for sampling after the core was examined and logged. Sampled intervals were split in half with a mechanical hammer splitter. Half of each sample was returned to its proper core box; the other half was placed into a labelled plastic bag, after the sample's width, brief description and tag number were recorded in the drill logs. A total of 97 samples were collected and sent to Min-Em Laboratories in North Vancouver, B.C. for analysis. The samples were ground to -150 mesh. Gold values in g/tonne and oz/ton or ppb units were determined by fire or wet A.A. assay technique. Geochemical values in ppm units were determined for 31 elements by multi-element ICP technique. Appendix II contains all assay certificates and ICP reports.

Assays and geochemical results did not show any significant anomalies. Gold assays were all below 0.010 oz/ton. A small silver anomaly, ranging from 3.5 to 11.0 ppm over 2.1 m, was detected at the bottom of DDH #2. Gold, arsenic and antimony showed occasional spot anomalies which do not appear related to any particular rock type or mineralization. Copper, zinc and lead showed low background values and nothing above background. Geochemical results for the remaining elements are generally inconclusive and of little value.

## 7.5 Discussion

The rocks encountered in the drillholes fall under two basic categories, which are probably equivalent to two units described by Roddick, Poole and Green. The following table provides a summary of the various rocks intersected in the drill holes and a classification scheme modified after Roddick, Poole and Green, 1960.

<u>Age</u>	<u>Map Unit</u>	<u>Classification</u>
Jurassic and/or Cretaceous	15	Granodiorite
Lower Cambrian	3	Meta sediments
	3 <sub>x1</sub>	- sandy grey quartzite
	3 <sub>x2</sub>	- muddy black quartzite
	3 <sub>x3</sub>	- matrix supported siliceous conglomerate
	3 <sub>x4</sub>	- limestone
	3 <sub>y</sub>	Quartz sericite schist
	3 <sub>z</sub>	Limey banded phyllite

Geochemical and assay results from drill core samples do not indicate any economic mineralization. However, the style of mineralization and spatial relationship of the various rock units indicate that there is potential for economic mineralization in the area.

Pyrite mineralization in fine to coarse disseminations and massive bands occurs in a porous sandy quartzite derived from pelitic sediments. Stratabound sulphide deposits often display zoning of metal sulphides (Jowett, Rydzewski and Jowett, 1987). Poor drilling conditions prevented a complete intersection of the pyritized zone, so perhaps zones of more valuable sulphides (galena, sphalerite, arsenopyrite) exist at depth. With this type of model, arguments for metal concentration by syngenetic/early diagenetic or epigenetic hydrothermal processes may be pursued.

The "Winnie" structure which outcrops on surface as a 1 - 3 meter wide silicified "fault" breccia-alteration zone adjacent to a felsic dyke suggests potential for epithermal type mineralization. However, drilling proved this structure to be discontinuous and localized to the area of surface outcrop. Also, the proximity of the structure to the granodiorite body suggests that the two are closely related.

Felsic intrusives in contact with calcareous sediments provide the basic geological setting for the development of skarn type deposits (Eckstrand [ed.], 1984). Drilling shows that this geological setting exists and there is a potential for skarns to occur on the Shootamook property.

Examples of all three deposit types suggested above are reported to exist in the Wolf Lake map area. Evaluations of the property by numerous government and company geologists prior to drilling indicate that the epithermal model is the most obvious and popular interpretation.

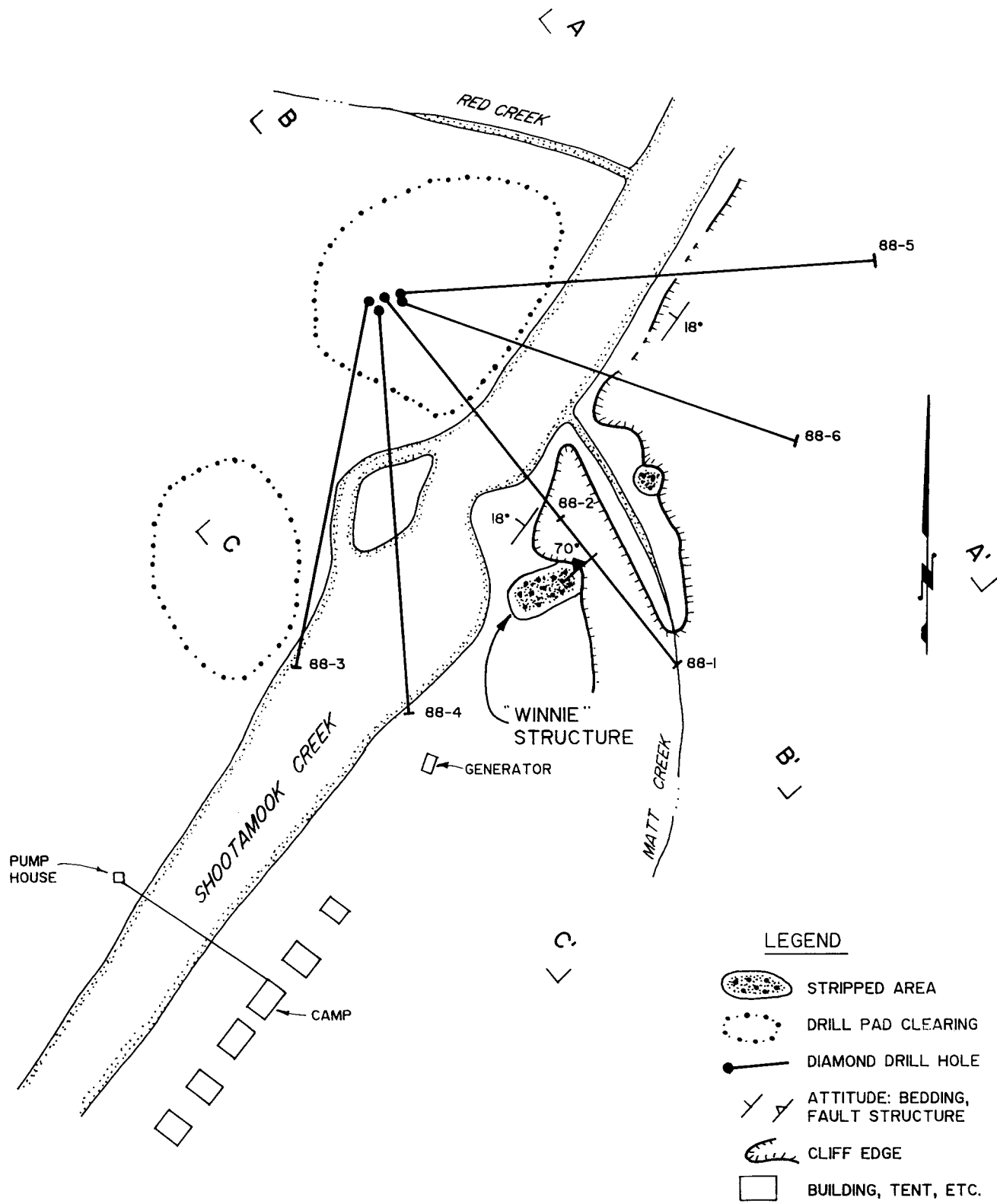
## 8. RECOMMENDATIONS

No further subsurface work should be planned until a program of mapping, soil sampling and geophysics is completed. Early in the field season - mid-May or early June - would be the best time for such a program.







A base map at a scale of 1:5000 with a 20 m contour interval is required for regional mapping over the property. A small grid is required for control on soil sampling and geophysical surveys. Soil samples should be analyzed for Ag, As, Cu, Hg, Pb, Sb, Sn, W and Zn by ICP (induced coupled plasma) spectrophotometry and for Au by wet A.A. (atomic absorption). Initial geophysical survey should be restricted to relatively simple and inexpensive magnetometer and VLF-EM methods.

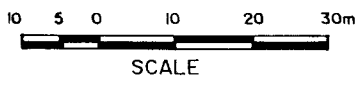
The following is an itemized cost estimate for the program outlined above.

a)	LINECUTTING (16 km with one 2 km baseline, two 2 km tie lines and five 2 km crosslines spaced 500 m apart): 25 man-days @ \$250/man-day	\$ 6,250
b)	GEOCHEMICAL SURVEY:	
	- Sample collection - 36 man days @ \$100/man day	3,600
	- Analysis - 1000 samples @ \$10/sample	10,000
c)	GEOLOGICAL MAPPING (1:5000 scale):	
	- Geologist - 18 days @ \$200/day	3,600
	- Orthophoto map preparation	5,500
d)	GEOPHYSICS (magnetometer and VLF-EM)	3,000
e)	TRANSPORTATION (helicopter and 4x4)	10,000
f)	FOOD	5,000
	TOTAL	<u>\$46,950</u>
	20% contingency	9,390
	<b>FINAL TOTAL</b>	<b><u><u>\$56,340</u></u></b>



**LEGEND**

-  STRIPPED AREA
-  DRILL PAD CLEARING
-  DIAMOND DRILL HOLE
-  ATTITUDE: BEDDING, FAULT STRUCTURE
-  CLIFF EDGE
-  BUILDING, TENT, ETC.

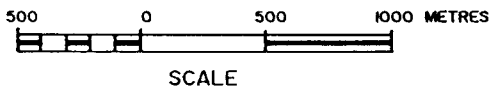
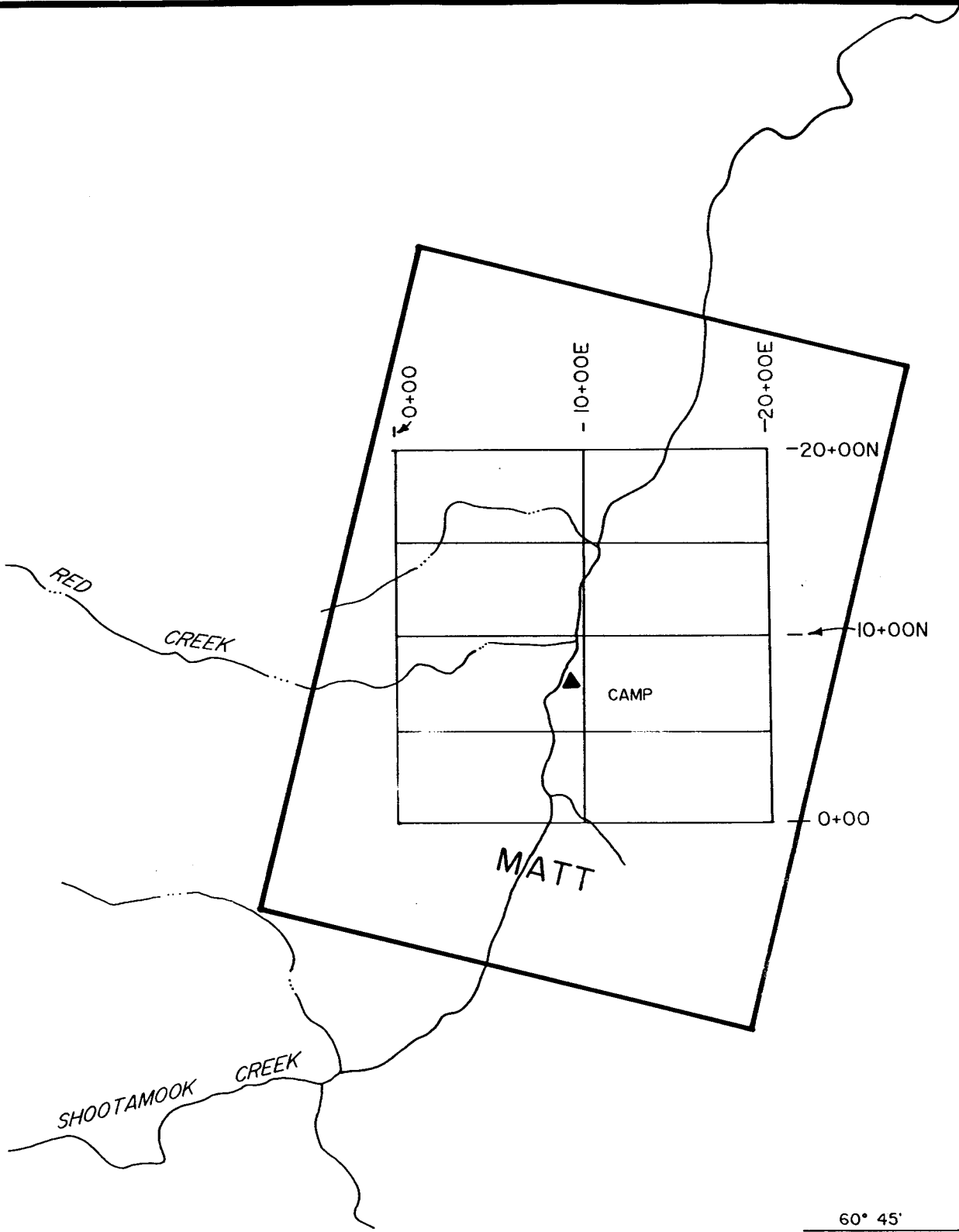


TOTAL ERICKSON RESOURCES LTD.

**D.D.H. LOCATION PLAN**

SHOOTAMOOK PROPERTY

DATE : FEB, 1988	TECH: M. FEKETE	FIGURE :
SCALE : 1 : 1000	DRWN: <i>INTEGRAPICS LTD.</i>	3



TOTAL ERICKSON RESOURCES LTD.

**GRID PROPOSAL**

SHOOTAMOOK PROPERTY

DATE: FEB, 1988

TECH: M. FEKETE

FIGURE :

SCALE: 1 : 50,000

DRWN: INTEGRAPHICS LTD.

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9.     REFERENCES

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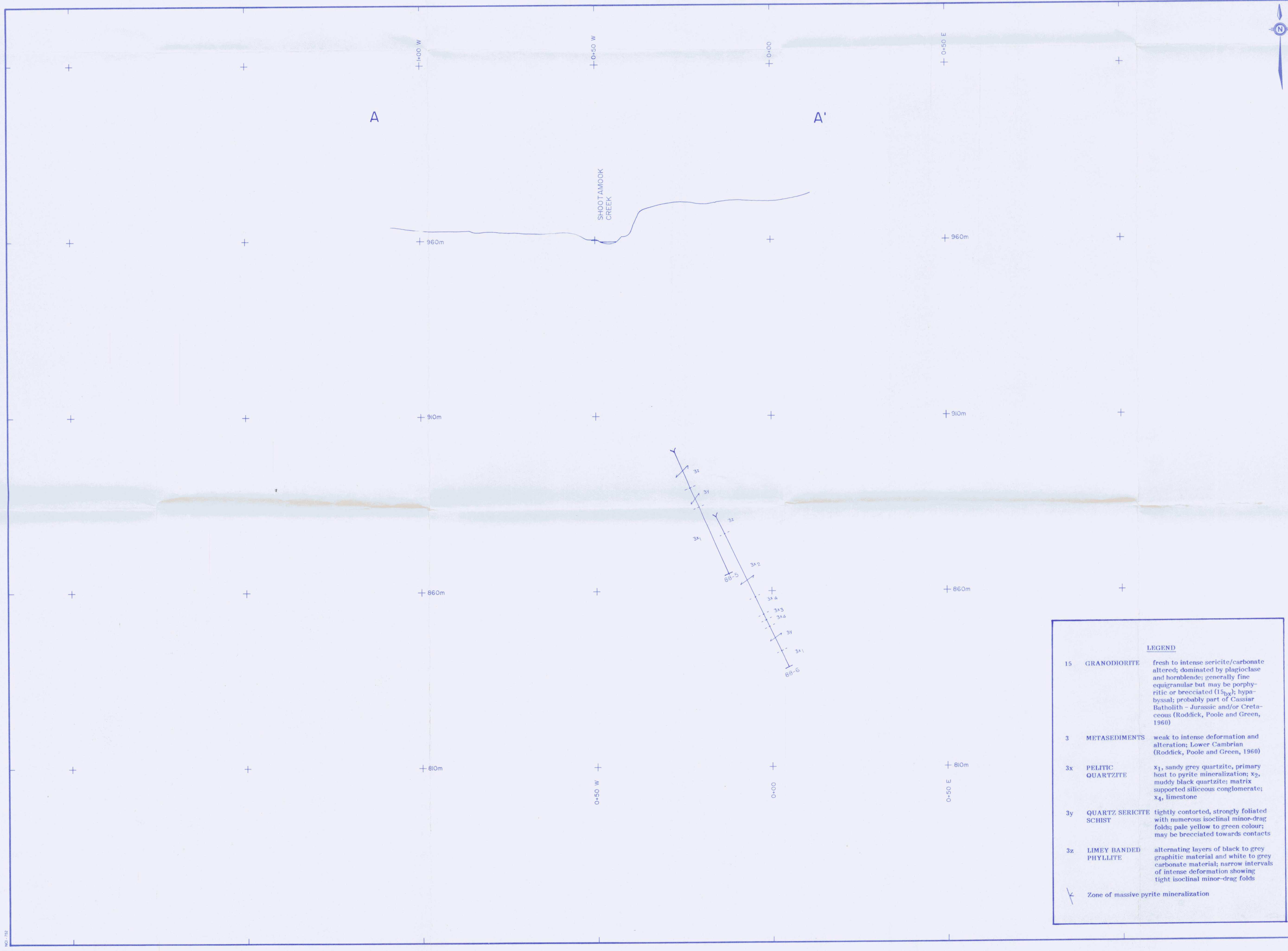
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Also - brief property evaluations:

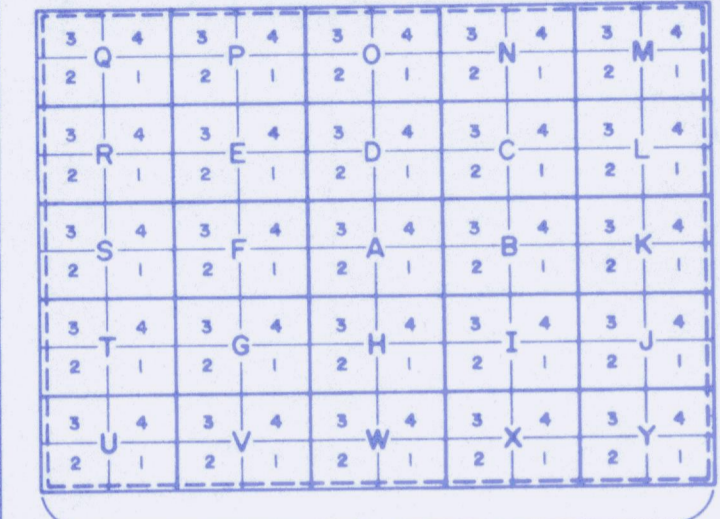
- 1987     R. Basnett - Total Erickson Resources Ltd.  
          J. Morin - Geol. Surv., Canada.  
1986     K. Dawson - Geol. Surv., Canada.  
          P. McGuigan - Esso Minerals Canada.  
          W. Reid - Noranda Exploration Co. Ltd.  
1983     J. Rowe - Cordilleran Engineering.



AREA INDEX

19	18	17	6,681,200 N
6	5	4	6,678,700 N
7	0	3	6,676,200 N
8	1	2	6,673,700 N
			6,671,200 N

468,700 E 472,000 E 475,300 E 478,600 E



ENLARGEMENT OF AREA \_\_\_\_\_

**SYMBOLS**

Rock outcrop, area of outcrop, float

Geological boundary (defined, inferred)

Bedding (horizontal, inclined, vertical, overturned, dip unknown)

Schistosity, gneissosity, cleavage, foliation (horizontal, inclined, vertical, dip unknown)

Lincation, axis of minor folds (horizontal, inclined, vertical)

Drag-fold (arrow indicates plunge)

Fault (defined, interpreted)

Fault (inclined, vertical, relative movement)

Surface joint (horiz, inclined, vert, dip unknown)

U/G joint (horiz, inclined, vert, dip unknown)

Syncline (defined, approximate)

Anticline (defined, approximate)

Anticline and syncline (overturned)

Intensity (weak, moderate, strong)

Vein (inclined, vertical, dip unknown)

Zone of alteration

Rock sample, X 0.324, 0.15  
Assay: Au, Ag ounce/ton

Trench

Adit or tunnel

Rock dump or tailings

Shaft, raise, winze

Diamond drill hole (entering section, leaving section) (on section / plan)

Contours 2500

Stream or creek (perennial, intermittent)

Marsh

Lake

Road

SCALE: 1:500

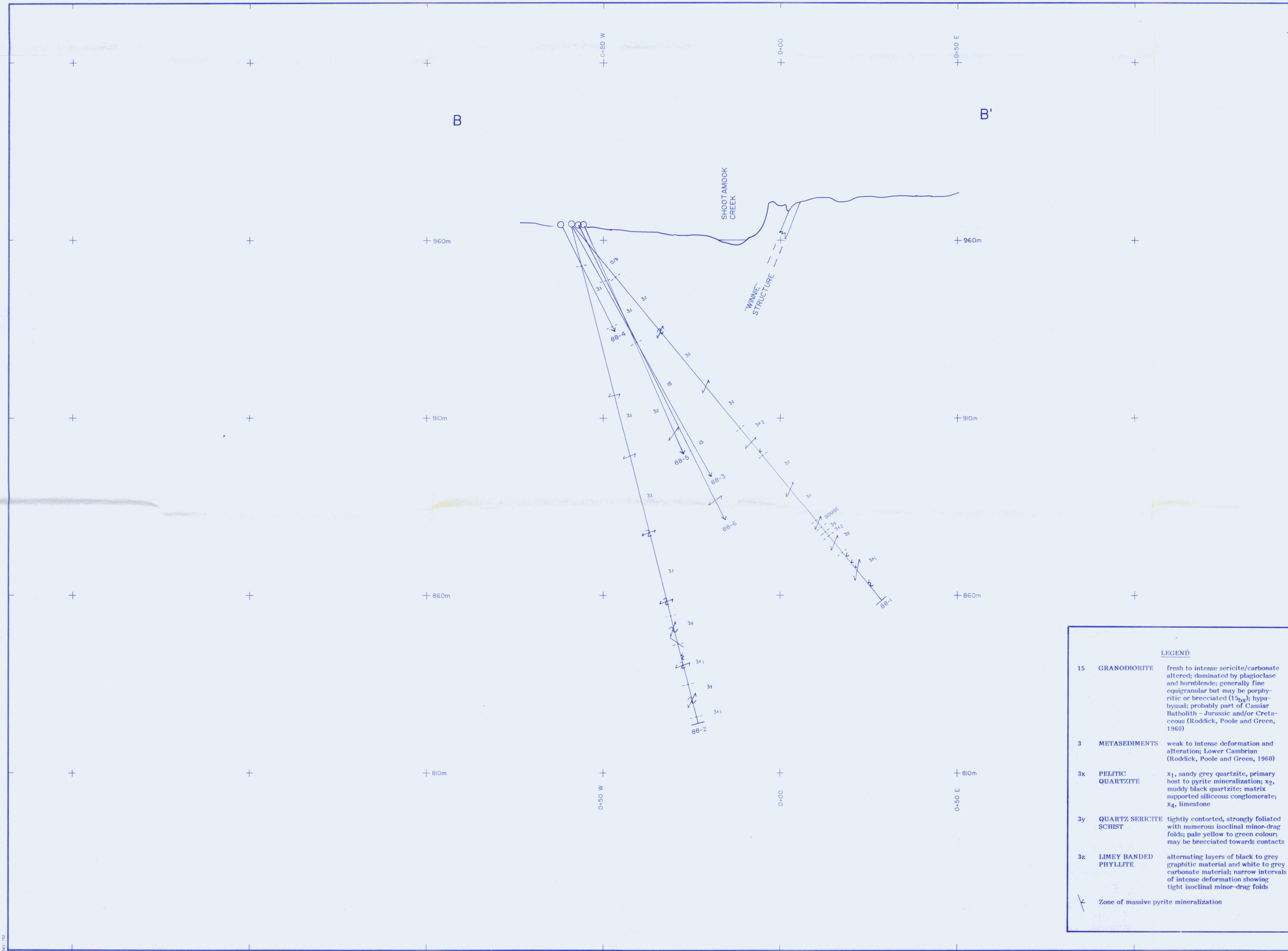
**LEGEND**

15	GRANODIORITE	fresh to intense sericite/carbonate altered; dominated by plagioclase and hornblende; generally fine equigranular but may be porphyritic or brecciated (15 <sub>px</sub> ); hypabyssal; probably part of Cassiar Batholith - Jurassic and/or Cretaceous (Roddick, Poole and Green, 1960)
3	METASEDIMENTS	weak to intense deformation and alteration; Lower Cambrian (Roddick, Poole and Green, 1960)
3x	PELTIC QUARTZITE	x <sub>1</sub> , sandy grey quartzite, primary host to pyrite mineralization; x <sub>2</sub> , muddy black quartzite; matrix supported siliceous conglomerate; x <sub>4</sub> , limestone
3y	QUARTZ SERICITE SCHIST	tightly contorted, strongly foliated with numerous isoclinal minor-drag folds; pale yellow to green colour; may be brecciated towards contacts
3z	LIMEY BANDED PHYLLITE	alternating layers of black to grey graphitic material and white to grey carbonate material; narrow intervals of intense deformation showing tight isoclinal minor-drag folds
		Zone of massive pyrite mineralization

TOTAL ERICKSON RESOURCES LTD.

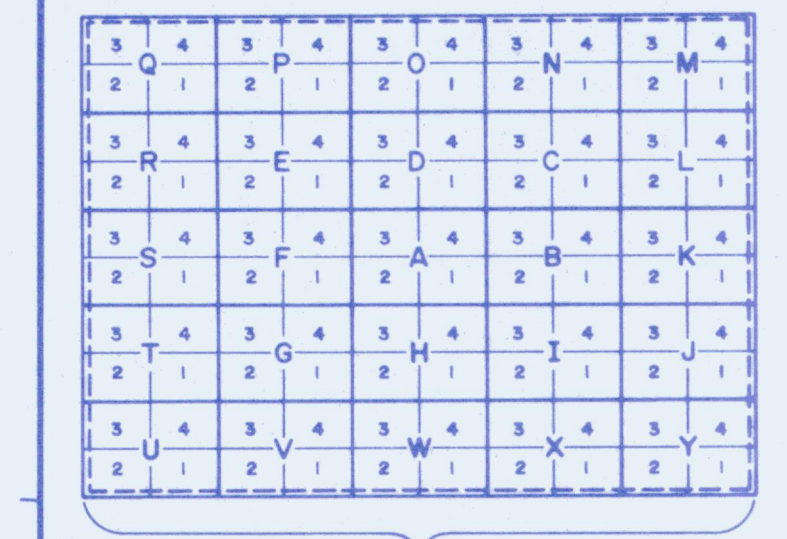
092125  
X-SECTION A (0+50N)

Project Name: SHOOTAMOOK Project No.: \_\_\_\_\_  
 Latitude: 60° 47' N Longitude: 131° 03' W  
 Mining Division: WATSON N.T.S.: 105 B/4  
 To accompany a report by: M. FEKETE  
 Alpha No.: \_\_\_\_\_ Drawing No.: 4a  
 Date: FEBRUARY 1988 Map No.: \_\_\_\_\_



**AREA INDEX**

19	18	17	6,681,200 N
6	5	4	6,678,700 N
7	0	3	6,676,200 N
8	1	2	6,673,700 N
468,700 E	472,200 E	475,700 E	479,200 E



**SYMBOLS**

- Rock outcrop, area of outcrop, float
- Geological boundary (defined, inferred)
- Bedding (horizontal, inclined, vertical, overturned, dip unknown)
- Schistosity, gneissosity, cleavage, foliation (horizontal, inclined, vertical, dip unknown)
- Lineation, axis of minor folds (horizontal, inclined, vertical)
- Drag-fold (arrow indicates plunge)
- Fault (defined, interpreted)
- Fault (inclined, vertical, relative movement)
- Surface joint (horiz, inclined, vert, dip unknown)
- U/G joint (horiz, inclined, vert, dip unknown)
- Syncline (defined, approximate)
- Anticline (defined, approximate)
- Anticline and syncline (overturned)
- Intensity (weak, moderate, strong)
- Vein (inclined, vertical, dip unknown)
- Zone of alteration
- Rock sample, X 0.324, 0.15 Assay: Au, Ag ounce/ton
- Trench
- Adit or tunnel
- Rock dump or tailings
- Shaft, raise, winze
- Diamond drill hole (entering section, leaving section) (on section / plan)
- Contours 2500
- Stream or creek (perennial, intermittent)
- Marsh
- Lake
- Road

**092125**  
SCALE: 1:500

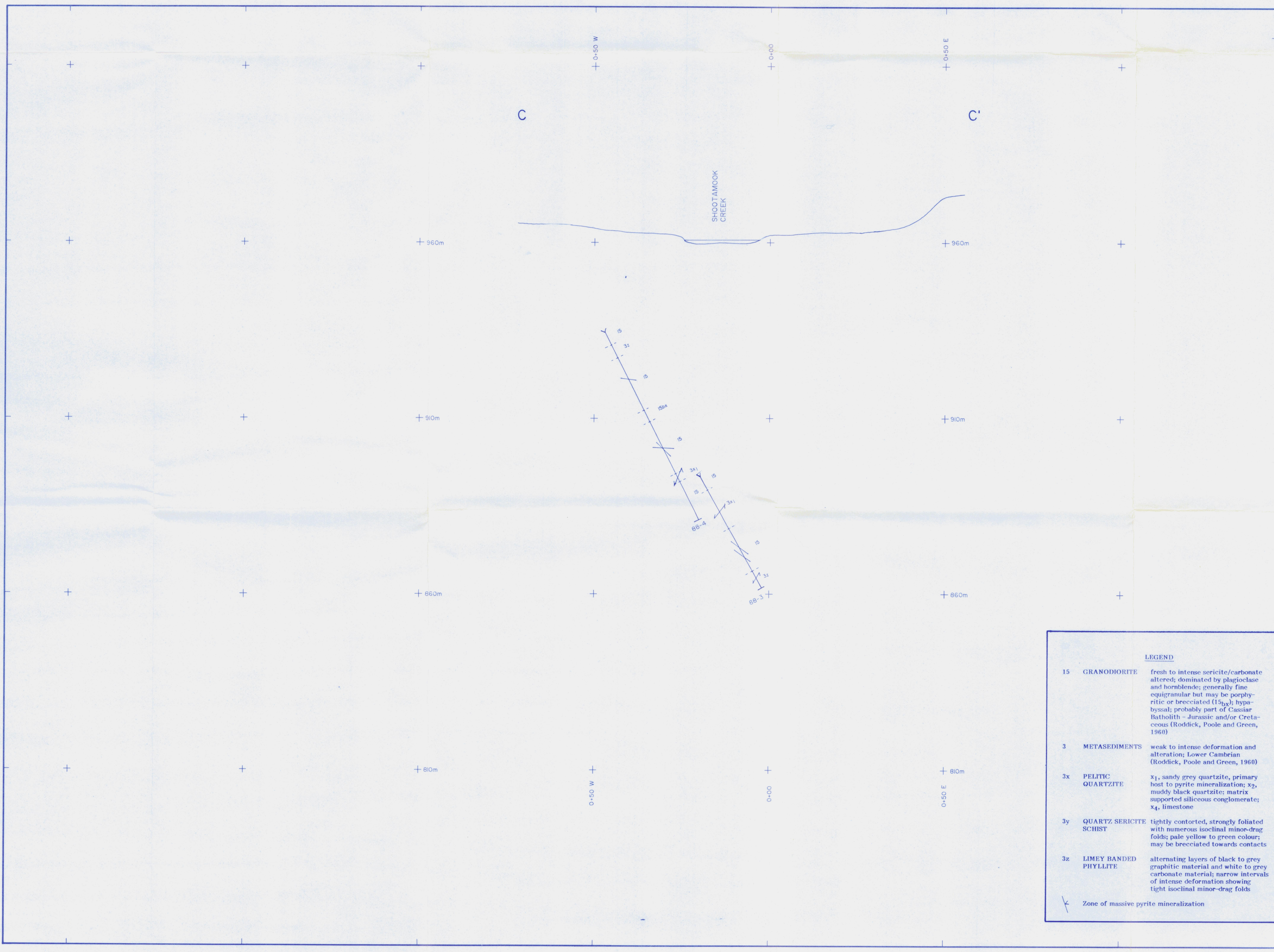
**LEGEND**

15	GRANODIORITE	fresh to intense sericite/carbonate altered; dominated by plagioclase and hornblende; generally fine equigranular but may be porphyritic or brecciated (15 <sub>bx</sub> ); hypabyssal; probably part of Cassiar Batholith - Jurassic and/or Cretaceous (Roddick, Poole and Green, 1960)
3	METASEDIMENTS	weak to intense deformation and alteration; Lower Cambrian (Roddick, Poole and Green, 1960)
3x	PELTIC QUARTZITE	x <sub>1</sub> , sandy grey quartzite, primary host to pyrite mineralization; x <sub>2</sub> , muddy black quartzite; matrix supported siliceous conglomerate; x <sub>4</sub> , limestone
3y	QUARTZ SERICITE SCHIST	tightly contorted, strongly foliated with numerous isoclinal minor-drag folds; pale yellow to green colour; may be brecciated towards contacts
3z	LIMEY BANDED PHYLLITE	alternating layers of black to grey graphitic material and white to grey carbonate material; narrow intervals of intense deformation showing tight isoclinal minor-drag folds
	Zone of massive pyrite mineralization	

**TOTAL ERICKSON RESOURCES LTD.**

**X-SECTION B (0+00)**

Project Name: SHOOTAMOOK Project No.: \_\_\_\_\_  
 Latitude: 60° 47' N Longitude: 131° 03' W  
 Mining Division: WATSON N.T.S.: 105 B/4  
 To accompany a report by: M. FEKETE  
 Alpha No.: \_\_\_\_\_ Drawing No.: 4b  
 Date: FEBRUARY 1988 Map No.: \_\_\_\_\_



**AREA INDEX**

19	18	17	6,681,200 N
6	5	4	6,678,700 N
7	0	3	6,676,200 N
8	1	2	6,673,700 N
			6,671,200 N

468,700 E    472,200 E    475,700 E    479,200 E

**ENLARGEMENT OF AREA**

**SYMBOLS**

- Rock outcrop, area of outcrop, float:
- Geological boundary (defined, inferred):
- Bedding (horizontal, inclined, vertical, overturned, dip unknown):
- Schistosity, gneissosity, cleavage, foliation (horizontal, inclined, vertical, dip unknown):
- Lination, axis of minor folds (horizontal, inclined, vertical):
- Drag-fold (arrow indicates plunge):
- Fault (defined, interpreted):
- Fault (inclined, vertical, relative movement):
- Surface joint (horiz, inclined, vert, dip unknown):
- U/G joint (horiz, inclined, vert, dip unknown):
- Syncline (defined, approximate):
- Anticline (defined, approximate):
- Anticline and syncline (overturned):
- Intensity (weak, moderate, strong):
- Vein (inclined, vertical, dip unknown):
- Zone of alteration:
- Rock sample, X 0.324, 0.15 Assay: Au, Ag ounce/ton:
- Trench:
- Adit or tunnel:
- Rock dump or tailings:
- Shaft, raise, winze:
- Diamond drill hole (entering section, leaving section) (on section / plan):
- Contours:
- Stream or creek (perennial, intermittent):
- Marsh:
- Lake:
- Road:

092125

SCALE: 1:500

**LEGEND**

15	GRANODIORITE	fresh to intense sericite/carbonate altered; dominated by plagioclase and hornblende; generally fine equigranular but may be porphyritic or brecciated (15 <sub>px</sub> ); hypabyssal; probably part of Cassiar Batholith - Jurassic and/or Cretaceous (Roddick, Poole and Green, 1960)
3	METASEDIMENTS	weak to intense deformation and alteration; Lower Cambrian (Roddick, Poole and Green, 1960)
3x	PELTIC QUARTZITE	x <sub>1</sub> , sandy grey quartzite, primary host to pyrite mineralization; x <sub>2</sub> , muddy black quartzite; matrix supported siliceous conglomerate; x <sub>4</sub> , limestone
3y	QUARTZ SERICITE SCHIST	tightly contorted, strongly foliated with numerous isoclinal minor-drag folds; pale yellow to green colour; may be brecciated towards contacts
3z	LIMEY BANDED PHYLLITE	alternating layers of black to grey graphitic material and white to grey carbonate material; narrow intervals of intense deformation showing tight isoclinal minor-drag folds
	Zone of massive pyrite mineralization	

**TOTAL ERICKSON RESOURCES LTD.**

**X-SECTION C (0+50 S)**

Project Name: SHOOTAMOOK    Project No.:

Latitude: 60° 47' N    Longitude: 131° 03' W

Mining Division: WATSON    N.T.S.: 105 B/14

To accompany a report by: M. FEKETE

Alpha No.    Drawing No.: 4c

Date: FEBRUARY 1988    Map No.:


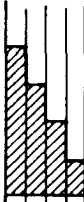
APPENDIX I

DRILL LOGS

# TOTAL ERICKSON RESOURCES LTD.

## MINERALS SECTION

### DRILL LOG

PROJECT SHOOTAMOOK OPTION	GROUND ELEV.
HOLE No. 88-1	BEARING 140°
LOCATION	DIP -50°
	TOTAL LENGTH 136.6 m (448')
LOGGED BY MARK FEKETE <i>Mark Fekete</i>	HORIZONTAL PROJECT 87.8 m
DATE JANUARY 15-17 1988	VERTICAL PROJECT 104.6 m
CONTRACTOR DJ DRILLING	<b>ALTERATION SCALE</b>  <ul style="list-style-type: none"> <li>absent</li> <li>slight</li> <li>moderate</li> <li>intense</li> </ul>
CORE SIZE BQ	
DATE STARTED JANUARY 14	<b>TOTAL SULPHIDE SCALE</b>  <ul style="list-style-type: none"> <li>traces only</li> <li>&lt; 1%</li> <li>1% - 3%</li> <li>3% - 10%</li> <li>&gt; 10%</li> </ul>
DATE COMPLETED JANUARY 16	
DIP TESTS NONE	
COMMENTS	LEGEND





DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
50	100									
55	60		▷▷	54.1-55.1 wide band of white calcareous material; v. broken w/ only 50% recovery; narrow zone of grey gouge on FW						
60	100									
65	100			Note: 65 m projected intersection of Winnie structure from surface; nothing encountered						
70	100									
75	0		▷▷▷	74.7-84.7 BLACK CLASTIC PHYLLITE v. black; intense graphitic alteration; well developed foliation @ 80° to c/a weakly fissile - does not part easily along cleavage planes; carbonate occurs as random, irregular shaped fragments; very soft & gouged towards top & FW contacts - note poor recovery towards these contacts; pyrite dissem. throughout but sometimes occurs in massive bands						
80	95									
85	50		▷▷▷							
90	90		▷▷▷	84.7-88.3 LIMEY BANDED PHYLLITE 84.7-88.0 very broken with poor recovery; rounded pieces of white (carb.) & black (graphitic) mat'l.						
95										
98										



DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
80				84.7-108.3 LIMY BANDED PHYLLITE [continued] 86.0-100.5 intense deformation showing minor folds; banded light grey to white with dark grey to black ~1% pyrite as occasional finely crystalline masses up to 1cm wide; moderate to strongly fissile - long foliation @ ~70° to C/A.						
90				100.5-101.9 wide band of white carbonate (calcite ~80%) with pieces of bands of graphitic mat'l enclosed						
85				101.9-108.3 as in 86.0-100.5						
100				108.3-110.5 CLAUDE v. black, soft, graphitic; derived from black clastic phyllite; no dissemination						
100				110.5-112.2 SERICITE PHYLLITE pale grey to almost white; soft weakly fissile along foliation @ ~60° to C/A						
85				112.2-113.7 BLACK CLASTIC PHYLLITE dark grey; graphitic; good foliation @ 160° to C/A; weakly fissile.						
100				113.7-119.2 SERICITE PHYLLITE pale grey to almost white; moderately fissile along good foliation @ ~60° to C/A; 2% dissemin. ex. (pyrite).						
110				119.2-136.6 SANDY PHYLLITE (QUARZITE) 119.2-127.1 sandy mat'l which shows graphitic (argillitic?) thin bands of massive ex. min. in a brecciation; substantial water return and strong sulfur gas smell						
95				127.1-127.7 very dark showing only small graphitic thin; foliation @ 50° to C/A; fine crystalline ex. in thin streaks // to foliation.						
75										
80										
85										
100										

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%	COMPOSITE ASSAYS
100.5 - 101.5 lens of massive white calcite j minor sx			1.0	57333				
101.5 - 101.7 same as above but w/ bands of massive py (30%)			0.4	57334				
108.3 - 110.5 graphitic gouge w/ minor dissem py (1%)			2.2	57335				
110.5 - 112.2 phyllite w/ clay alt'n			1.7	57336				
112.2 - 113.7 phyllite, graphitic			1.5	57337				
113.7 - 115.1 phyllite, argillic			1.4	57338				
115.1 - 116.0 phyllite, argillic w/ minor dissem py (1%)			0.9	57339				
116.0 - 117.0 as above			1.0	57340				
117.0 - 118.0 as above			1.0	57341				
118.0 - 119.2 as above (poor recovery)			1.2	57342				
119.2 - 120.4 sandy qtzite w/ fn. dissem. py (2%)			1.2	57343				
120.4 - 121.2 as above w/ blebs of py (5%) up to 1cm wide			0.8	57344				
121.2 - 122.1 as above w/ bands of massive fn crystalline py (40%) + fn dissem py (10%)			0.9	57345				
122.1 - 122.7 fn dissem py (10%)			0.6	57346				
122.7 - 123.0 brecciated w/ numerous open spaces + masses of py (5%) up to 1cm wide.			0.3	57347				
123.0 - 123.4 brecciated + open spaces + bands of massive py (25%) up to 10cm			0.4	57348				
123.4 - 124.4 argillic alt'n w/ dissem py (5%) as blebs and cubes			1.0	57349				
124.4 - 125.4 as above w/ int. arg. alt'n			1.0	57350				
125.4 - 126.75 brecciated narrow bands massive py (10%)			1.15	57351				

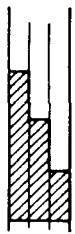
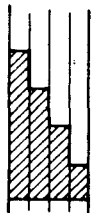




# TOTAL ERICKSON RESOURCES LTD.

MINERALS SECTION

## DRILL LOG

PROJECT SHOOTAMOOK OPTION	GROUND ELEV.
HOLE No. 88-2	BEARING 140°
LOCATION	DIP -71°
	TOTAL LENGTH 143.9 m (472')
LOGGED BY MARK FEKETE <i>Mark Fekete</i>	HORIZONTAL PROJECT 46.9 m
DATE JANUARY 18-19, 1988	VERTICAL PROJECT 136.0 m
CONTRACTOR D.J. DRILLING	<b>ALTERATION SCALE</b>  <ul style="list-style-type: none"> <li>absent</li> <li>slight</li> <li>moderate</li> <li>intense</li> </ul>
CORE SIZE BQ	
DATE STARTED JAN. 16	<b>TOTAL SULPHIDE SCALE</b>  <ul style="list-style-type: none"> <li>traces only</li> <li>&lt; 1%</li> <li>1% - 3%</li> <li>3% - 10%</li> <li>&gt; 10%</li> </ul>
DATE COMPLETED JAN. 18	
DIP TESTS NONE	
COMMENTS SANDED IN WHEN CHANGING BIT	LEGEND

DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
0				0-12.2 CASING						
5										
10				12.2-73.7 LIMY BANDED PHYLLITE						
15	95			varies from pale to dark gy; foliation @ a 90° to L/A; moderate to intense graphitic alteration making rock very fissile; numerous white to light gy calcareous bands; py(10%) dissems. blebs and cubes up to 1cm wide; some qtz veining and other feature noted below.						
25	95									
30										
35	95									
40				39.1-39.3 quartz lens; no visible ss but minor calcite(5%) as fine blade interstitial to qtz						



DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
40				12.2-73.7 LIMY Banded PHYLLITE [continued]						
45	95			46-52 - narrow bands of limey green to brown, vitreous, hard mineral; seems assoc. w/ calcareous bands possible garnet or enstatite						
50										
55	75	▷▷▷		55.05-55.2 lens of white massive qtz w/ thin stringers of slightly orange calcite (10%) and dissem. py (2%) cubes						
60		▷▷▷		55.7-56.6 v. broken gouge; poor recovery 59.7-61.4 "						
65	75	▷▷		64.4-64.7 qtz lens; massive milky qtz no visible sx 65.9-67.2 v. broken and gouged						
70		▷▷▷								
75	95			73.7-79.2 LIMY Banded PHYLLITE + INT QTZ VN. series of veins and lenses X cutting phyllite giving interval brecciated look quartz lenses/veins 25% of rock; minor py (1%) and calcite (5%)						
80				79.2-86.0 [see page 5 for description]						

MINERALIZATION DESCRIPTION	TOTAL	SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%		COMPOSITE ASSAYS
55.05 - 55.2 massive qtz lens w/ 10% calcite in thin stringers; py (2%) dissem as blebs and cubes				0.15	57362					
64.4 - 64.7 massive qtz lens; no ss				0.3	57363					
73.7 - 74.7 limy banded phyllite - slightly sandy w/ qtz (20%) stringers				1.0	57364					
74.7 - 75.5 as above w/ less qtz and fn dissem py (20%)				0.8	57365					
75.5 - 76.3 as above; qtz (10%), py (2%)				0.8	57366					
76.3 - 77.1 as above but crumbled and brecciated				0.8	57367					
77.1 - 77.6 qtz (50%) in graphitic phyllite; minor py (2%) in qtz				0.5	57368					
77.6 - 78.6 as above				1.0	57369					
78.6 - 79.6 as above				1.0	57370					





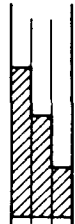
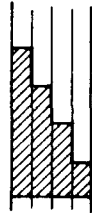
DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
120.2 - 132.6	15			SANDY PHYLLITE (QUARTZITE) Sandy pelitic matl which often shows weak to moderate schistosity very poor recovery (26% over 11.2m); dissem. ox concentrating into masses up to 10cm						
132.6 - 135	40									
135 - 130	30									
130 - 135	35									
132.6 - 141.7	20			SERICITE / QTZ PHYLLITE pallow green to yellow; soft often greasy; well developed foliation @ ~40° to C/A; very fissile // to foliation; tight isoclinal drag folds; dissem py (2%)						
135 - 140	90									
140 - 145	40		▷▷	141.7 - 143.3 SANDY PHYLLITE (QUARTZITE) dark sandy material with coarse foliation; slightly fissile; numerous narrow qtz veinlets; v. broken up poor recovery						
145 - 150										

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%		COMPOSITE ASSAYS
125.3 - 127.7 massive py (40%) in bands up to 10 cm wide + dissem. py (10%) in sandy quartzite phyllite			2.4	57375					
134.0 - 134.4 sericite / qtz phyllite w/ qtz/calcite bands			0.4	57376					
141.8 - 141.9 massive white qtz lens w/ numerous open spaces part or completely filled with py (10%) green chalky mineral (not malachite)			0.1	57377					
141.9 - 142.9 sandy quartzite phyllite dissem py			1.0	57378					
142.9 - 143.9 as above			1.0	57379					

# TOTAL ERICKSON RESOURCES LTD.

## MINERALS SECTION

### DRILL LOG

PROJECT SHOOTA MOKK OPTION	GROUND ELEV.
HOLE No. 88-3	BEARING 198°
LOCATION	DIP -52°
	TOTAL LENGTH 125.3 m (411')
LOGGED BY MARK FEKETE	HORIZONTAL PROJECT 77.1 m
DATE 21 JANUARY, 1988	VERTICAL PROJECT 98.7 m
CONTRACTOR DJ DRILLING	<b>ALTERATION SCALE</b>  <ul style="list-style-type: none"> <li>absent</li> <li>slight</li> <li>moderate</li> <li>intense</li> </ul>
CORE SIZE BQ	
DATE STARTED 19 JAN.	<b>TOTAL SULPHIDE SCALE</b>  <ul style="list-style-type: none"> <li>traces only</li> <li>&lt; 1%</li> <li>1% - 3%</li> <li>3% - 10%</li> <li>&gt; 10%</li> </ul>
DATE COMPLETED 21 JAN.	
DIP TESTS NONE	
COMMENTS	LEGEND

DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
0-21.0				CASING						
21.0-40.3				LIMEY BANDED PHYLLITE banded light & dark layers; good foliation @ ~50° to CIA; weakly to moderately fissile // to foliation; py (2%) dissem fn or as blobs and cubes or as thin stringers // to foliation; minor drag folds						
40.3-41.6				INTRUSIVE DYKE-SILL-IRREGULAR? pale gy to gr; weak to moderate carbonate alteration (HCL fizz) very thin pyrite veinlets w/ irregular dark green selvage (chlorite?) @ 35° to CIA fine grained texture partially obscured by alteration						
41.6-44.8				INTRUSIVE PORPH TEXTURE tight array of white argillic/carb. altered phenocrysts in pale green groundmass.						
44.8-58.0				INTRUSIVE as in 40.3-41.6						
58.0-60.9				INTRUSIVE very soft and plastic almost like plastocene; intense clay and carbonate alt'n.						



DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
60			▷▷▷▷	60.9-66.4 INTRUSIVE: weak to mod argillic alt'n; bands of massive py up to 5cm wide w/ v. sharp, distinct margins; very broken with poor recovery						
65	30		▷▷▷▷	66.4-67.8 INTRUSIVE intense argillic / carb alt'n v. soft like plasticene						
			▷▷▷▷	67.8-69.2 INTRUSIVE same as 60.9-66.4 interval; grades to limy banded phyllite; FW contact arbitrarily picked.						
70				69.2-73.3 LIMY BANDED PHYLLITE gy to bk; good foliation @ ~80° to C/A						
				72.9-73.3 qtz lens; milky white, massive w/ blebs of py						
75	95			73.3-78.3 INTRUSIVE light gy to gn; wk argillic alt'n						
				78.3-85.1 LIMY BANDED PHYLLITE grey calcareous layers alternating w/ black graphitic layers; good foliation @ ~60° to C/A; weak to intensely fissile; some sections of thin or non-existent calcite veinlets & cutting foliation; last meter shows bands of massive py and is darker colour, less banded						
80				85.1-91.1 SANDY PHYLLITE (QUARTZITE) BKFED very dark colour with numerous subrounded to subangular fragments giving brecciated look (conglomerate?) hard (silicification?) ; open spaces and fine dissem. to massive banded py						
85	95			91.1-114.9 INTRUSIVE varies from pale yellow to green/gy (alt'd) to speckle/dark green (fresh) alteration varies from weak to intense argillic w/ minor carb. and narrow silicified zones; xcut by thin anastomosing calcite veinlets; thin py (2%) veinlets with wide, irregular, dark schages						
90										
95	95									
100										

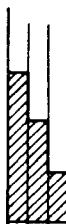
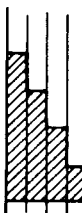
MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%		COMPOSITE ASSAYS
60.8-61.3 intrusive w/ bands of massive py (5%)			0.5	57389					
64.9-65.4 as above			0.5	57390					
67.1-67.8 intrusive w/ arg/carb alteration			0.7	57391					
72.9-73.3 qtz w/ blebs of py (5%)			0.4	57392					
84.1-85.1 fine dissem + massive bands py				57393					
85.1-86.1 dissem blebs and stringers of py (2%) in silicified/brecciated matrix				57394					
86.1-87.1 fine dissem py (2%)				57395					
87.1-88.1 same as above				57396					
88.1-89.1 dissem py (3%) as coarse blebs and open space fills				57397					
89.1-90.1 py 5% in fine dissem, part or full open space fillings and massive bands up to 5cm wide				57398					
90.1-91.1 fine dissem py + open space fillings				57399					
91.1-92.1 " "				57400					

DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
100				91.1 - 114.9 INTRUSIVE [see pag 3 for description]						
105	95									
110										
115	95			114.9 - 119.3 INTRUSIVE INTERLAYERED w/ LIMY BANDED PHYLLITE pyrite occurs as massive blebs up to 5 cm across						
120	95			119.3 - 125.3 LIMY BANDED PHYLLITE alternating light and dark layers w/ well developed foliation @ 60° to CIA ; some minor drag folds in tight isoclinal patterns ; narrow calcite veinlets in erratic anastomosing arrays generally // to CIA pyrite occurs as occasional irregular blebs up to 1cm wide						

# TOTAL ERICKSON RESOURCES LTD.

MINERALS SECTION

## DRILL LOG

PROJECT SHOOT & LOOK OPTION	GROUND ELEV.
HOLE No. 88-4	BEARING 175°
LOCATION	DIP -50°
	TOTAL LENGTH 107.9 m (354')
LOGGED BY MARK FEKETE <i>Mark Fekete</i>	HORIZONTAL PROJECT 69.4 m
DATE JANUARY 23	VERTICAL PROJECT 82.7 m
CONTRACTOR DS DRILLING	<p>ALTERATION SCALE</p>  <p>absent slight moderate intense</p>
CORE SIZE OR	
DATE STARTED JANUARY 21, 1988	
DATE COMPLETED JANUARY 22, 1988	
DIP TESTS NONE	<p>TOTAL SULPHIDE SCALE</p>  <p>traces only &lt; 1% 1% - 3% 3% - 10% &gt; 10%</p>
COMMENTS	LEGEND

DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY	
					A	B	C	D	E		
0		Casing		0-18.9 CASING							
5											
10											
15											
20											
25	100				18.9-38.2 LIMY BANDED PHYLLITE light grey w/ dark grey bands; weak to mod. spherulitic alb. ; well developed foliation // banding @ a low to high angle occurs in cubes & glass nodules dissects throughout interval						
30											
35	100										
40					38.2-44.7 INTENSIVE [see page 4 for description]						





MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%			COMPOSITE ASSAYS
71.2-72.2 - rhyolite with minor argillite and siliceous; possible fault zone; py+cp (2%) as irregular bands up to 1cm wide			1.0	14201						


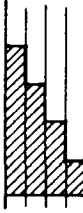
DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
80										
85	75			87.8-91.1 INTRUSIVE shows bands of massive sx						
90				90.2-90.4 band of massive cpy + py xcuts rhy. @ 30° to C/A						
95	75			91.1-95.7 SANDY PHYLLITE (QUARTZITE) dark to pale grey; well developed foliation but with poor fissility @ 45° to c/a; cpy + py occur very concentrated blebs giving almost massive appearance						
100				95.7-103.3 INTRUSIVE - pale white to green; fine grained & aphanitic; xcut by numerous bands of massive sx up to 10 cm wide; total sx approx 15%; gradational into underlying unit.						
105	75			103.3-105.8 INTRUSIVE - dark speckled green & orange; porphyritic texture orange mineral ~40% is probably orthoclase; py dissem throughout in small blebs (<1%); grades into unit underlying.						
				105.8-107.9 INTRUSIVE pale grey; quite hard, relatively unaltered; thin discontinuous py veins (<1%)						

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%		COMPOSITE ASSAYS
83.6-83.9 massive py in dark irregular mass w/in rhy; py (50%)			0.3	14202					
90.2-90.4 massive cpy+py (90%)			0.2	14203					
97.5-97.8 intense concentration of cpy+py blebs (50%)			0.3	14204					
102.5-103.0 rhy with large irregular bodies of massive sx. finely crystalline consisting of cpy rpy & maybe cspy; total = ~ 15-20%			0.5	14205					
104.2-104.7 - vitreous w/ 40% orange vitreous mineral (orthoclase)			0.5	14206					

# TOTAL ERICKSON RESOURCES LTD.

MINERALS SECTION

## DRILL LOG

PROJECT SHOOTAHOOK OPTION	GROUND ELEV.
HOLE No. 88-5	BEARING 085°
LOCATION	DIP -50°
	TOTAL LENGTH 128.9 (422')
LOGGED BY MARK FEKETE	HORIZONTAL PROJECT 82.9 m
DATE JANUARY 24, 1988	VERTICAL PROJECT 98.7 m
CONTRACTOR DS DRILLING	<p style="text-align: center;"><b>ALTERATION SCALE</b></p>  <ul style="list-style-type: none"> <li>absent</li> <li>slight</li> <li>moderate</li> <li>intense</li> </ul>
CORE SIZE BQ	
DATE STARTED JANUARY 23, 1988	
DATE COMPLETED JANUARY 25, 1988	<p style="text-align: center;"><b>TOTAL SULPHIDE SCALE</b></p>  <ul style="list-style-type: none"> <li>traces only</li> <li>&lt; 1%</li> <li>1% - 3%</li> <li>3% - 10%</li> <li>&gt; 10%</li> </ul>
DIP TESTS NONE	
COMMENTS	LEGEND

DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
0				0-12.1 CASING						
5										
10				12.1-95.4 LIMY BANDED PHYLLITE						
15				white to light grey to black ; well developed foliation @ ~ 40 to 80° ; narrow intervals show intense deformation w/ tight isoclinal "S" & "Z" folds ; pyrite (1%) dissem in blebs & cubes up to 1cm across ; graphite with veins from weak to very intense making rock very friable & easily cleaved.						
20				note qtz/carb veins @ 16.5-16.7						
25										
30										
35										
40										
45										
50										
55										
60										
65										
70										
75										
80										



DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
0										
85										
90										
95	95	ΔΔΔΔ		95.4-97.7 LIMY BANNED PHYLLITE v. broken & spalled as it approaches contact w/ underlying rock unit, possible fault contact.						
100	35			97.7-104.7 SERICITE PHYLLITE pale white to yellow green colour; soft & greasy feel; foliation very subtle @ ~60° to L/H; very broken & spalled towards contacts.						
105	75			104.7-108.9 SILTY TO SANDY PHYLLITE - alternating layers of silty and sandy phyllite. silty mat'l is generally light grey & may show weak foliation; sandy mat'l tends to be darker, shows numerous open spaces & contains dissemin. which may concentrate into occasional massive bands up to 10 cm across. note poor recovery.						
110	95									
115	50	ΔΔΔ								
120										


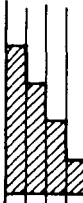
MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%		COMPOSITE ASSAYS
96.7-97.7 v. broken & crushed rock forming contact between limer bedded phyllite & light sericitic phyllite			1.0	14207					
97.7-98.7 pale sericitic phyllite			1.0	14208					
103.7-104.7 "				14209					
104.7-105.8 Sandy phyllite w/ open spaces & dissem sx (2%)			0.8	14210					
105.8-106.0 silty phyllite with py dissem in blebs (5%)			0.5	14211					
111.9-112.9 sandy to silty phyllite w/ dissem sx (2%)			1.0	14212					
116.6-116.95 sandy phyllite w/ large masses (10%) of sx (5%)			0.35	14213					
120.3-120.8 sandy phyllite w/ numerous open spaces & fine dissem sx (3%)			0.5	14214					
120.8-121.3 sandy phyllite w/ numerous open spaces & big blebs of sx (10%)			0.5	14215					
124.5-125.0 silty phyllite w/ band of massive sx (20%)			0.5	14216					



# TOTAL ERICKSON RESOURCES LTD.

MINERALS SECTION

## DRILL LOG

PROJECT JHoota Mook Option	GROUND ELEV.
HOLE No. DDH 88-6	BEARING 110°
LOCATION	DIP -60°
	TOTAL LENGTH 145.7 (478')
LOGGED BY MARK FEKETE <i>Mark Fekete</i>	HORIZONTAL PROJECT 72.85 m
DATE JANUARY 27, 1988	VERTICAL PROJECT 126.20 m
CONTRACTOR D.J. DRILLING	<p style="text-align: center;"><b>ALTERATION SCALE</b></p>  <ul style="list-style-type: none"> <li>absent</li> <li>slight</li> <li>moderate</li> <li>intense</li> </ul>
CORE SIZE BQ	
DATE STARTED 25 JANUARY, 1988	
DATE COMPLETED 27 JANUARY, 1988	
DIP TESTS NONE.	<p style="text-align: center;"><b>TOTAL SULPHIDE SCALE</b></p>  <ul style="list-style-type: none"> <li>traces only</li> <li>&lt; 1%</li> <li>1% - 3%</li> <li>3% - 10%</li> <li>&gt; 10%</li> </ul>
COMMENTS	
LEGEND	

DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
0				0-9.1 CASING						
5										
10				9.1-102.4 LIMEY BANDED PHYLLITE						
15	95			generally light to dark gray with numerous light bands; well developed foliation (ca 30-90° to L/A); graphitic alteration varies from weak to intense & is related directly to schistosity & fissility; pyrite occurs in occasional dissem. blebs up to 1cm wide; narrow zones showing minor folds in tight isoclinal configuration (19.2-19.5 is a v. good example); many narrow intervals of v. intense graphitic alteration resulting in soft gouge;						
20				23.6-24.0 soft, black graphitic gouge						
25	95			28.2-28.5 soft, black graphitic gouge.						
30										
35	95									
40										

MINERALIZATION  
DESCRIPTION

TOTAL  
SULPHIDE

INTERVAL

WIDTH

ASSAY  
NUMBER

%

%

%

COMPOSITE  
ASSAYS

28.2-28.5 soft black graphitic  
gouge w/ minor (<1%) dissem.  
SX.

0.3 14217

DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
40				9.1-102.4 LIMY Banded PHYLLITE [continued]						
45				43.15-43.9 soft black graphitic gouge note poor recovery						
				46.8-47.2 soft black graphitic gouge						
50										
55				54.9-55.5 soft grey graphitic gouge						
60				60.1-60.4 calcite lens or vein; white w/ numerous black graphitic frags. (wall rock)						
65										
70										
75										
80										

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%			COMPOSITE ASSAYS
60.1-60.4			0.3	14218						
white calcite w/ small fragments & streaks of graphitic host rock										

DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
80				9.1 - 102.7 LIMY BANDED PHYLLITES [continued]						
85										
90										
95										
100				102.4 - 103.9 LOST RUN minor sand & rock chips						
105				103.9 - 123.4 CLASTIC PHYLLITE varies from black & white colour seems to be associated to moderate sericitic/weak argillic alteration; dark layers very hard & cherty and may show flattened angular clasts; very porous showing many open spaces which may contain cubic pyrite crystals; non-calcareous.						
110				106.9 - 107.3 cherty matrix supported cgl.						
				109.7 - 110.7 " "						
				112.6 - 112.8 " "						
115										
120										

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%			COMPOSITE ASSAYS

112.6 - 112.8 conglomerate w/ dissem. pyrite (2%)

0.2 14219

112.8 - 113.8 white elastic mat'l w/ dissem sx (5%)

1.0 14220

DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACT INTENSITY
					A	B	C	D	E	
123.4-128.9		LIMESTONE		grey, calcareous, fine grained; shows some narrow zones of weak to moderate graphitic alteration and banding; possible km-metm version of banded. limy phyllite.						
128.9-131.0		CONGLOMERATE OR BRECCIA Dyke		mottled pale white to green; angular poorly sorted clasts; texture obscured somewhat by argillic/sericitic alt'n						
131.0-133.0		LIMESTONE		as in 123.4-128.9						
133.0-141.0		SERICITE PHYLLITE		pale green colour; foliation varies from poor to excellent and is @ 80° to CA & cut by occasional erratic calcite veinlets (< 1mm wide)						
141-146.7		SERICITE PHYLLITE		as above but very hard => possibly silicified; 10% dissem pyrite in narrow bands roughly // to foliation; note creamy blue clay mineral.						
		END OF HOLE								

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%			COMPOSITE ASSAYS
128.9-129.9 Conglomerate with minor disseminated py			1.0	14221						
141.1-143.9 very hard silicified phyllite w/ ~10% disseminated py as blebs			2.8	14222						

APPENDIX II

CERTIFICATE OF ANALYSIS

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524

TELEX: VIA USA 7601067 UC

Certificate of ASSAY

Company: TOTAL ERICKSON RESOURCES  
Project: SHOOTAMOOK - P.O. 10610  
Attention: R. BASNETT

File: 8-43/P1  
Date: JAN 20/88  
Type: ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AU G/TONNE	AU OZ/TON
57326	.01	0.001
57327	.03	0.001
7328	.01	0.001
7329	.07	0.002
57330	.04	0.001
7331	.07	0.002
57332	.31	0.009
7333	.05	0.001
7334	.03	0.001
57335	.06	0.002
7336	.15	0.004
7337	.02	0.001
57338	.02	0.001
7339	.05	0.001
7340	.05	0.001
7341	.05	0.001
7342	.06	0.002
57343	.04	0.001

Certified by



MIN-EN LABORATORIES LTD.

(VALUES IN PPM)	AG	AL	AS	B	BA	BE	BI	CA	CD	CO	CU	FE	K
57 326	2.7	1640	24	17	21	.8	1	39760	.6	7	12	21490	590
57 327	4.7	2480	95	13	28	1.0	1	2620	1.2	4	22	32460	1070
57 328	2.6	2500	53	14	29	1.0	1	2990	.3	4	15	35660	1190
57 329	3.0	2570	101	16	34	2.3	1	3110	1.3	1	10	80040	1100
57 330	1.9	2300	121	11	26	1.2	1	2320	1.1	3	10	41120	1070
57 331	4.3	2460	134	25	42	4.3	1	3490	2.2	1	12	160680	720
57 332	2.3	1900	317	15	23	1.7	1	26820	6.2	5	20	57280	700
57 333	3.0	8460	22	14	19	.9	1	102160	.4	5	2	27820	600
57 334	1.9	10920	44	20	24	1.4	1	63970	.5	10	2	40410	770
57 335	1.2	2900	23	9	25	.7	1	14060	.5	12	72	22950	1170
57 336	.7	3440	28	14	27	1.8	1	3230	.9	14	40	63180	780
57 337	1.1	2210	10	10	27	1.4	1	16740	.5	9	22	47170	1160
57 338	.8	3360	18	11	28	1.0	1	8920	.6	13	15	34950	1420
57 339	1.0	2230	13	8	23	.6	1	1060	.4	8	27	17670	1270
57 340	.6	2270	12	8	21	.8	1	1410	.4	9	18	24410	840
57 341	1.7	2320	12	7	20	.7	1	1660	.3	9	27	20550	910
57 342	.6	2950	18	9	27	.8	2	1930	.4	9	13	23720	1420
57 343	1.4	960	23	5	13	.5	3	920	.3	7	12	16610	590

PROJECT NO: SHOOTAMDOK P.O. 10610 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 8-043/P1

ATTENTION: R.BASNETT

(604)980-5814 OR (604)988-4524

\* TYPE ROCK GEOCHEM \*

DATE: JAN 20, 1988

(VALUES IN PPM )	LI	MG	MN	MO	NA	NI	P	PB	SB	SR	TH	U	V
57 326	10	13010	653	2	70	15	630	32	3	334	1	1	10.1
57 327	8	1000	14	1	70	11	1400	410	64	27	1	1	4.2
57 328	6	680	1	1	60	10	3010	45	65	29	1	1	5.3
57 329	6	890	1	1	50	11	3480	21	123	15	1	1	5.5
57 330	5	560	1	1	40	13	2780	14	78	20	1	1	6.1
57 331	4	1270	1	1	40	11	4320	12	334	13	1	1	4.9
57 332	8	6440	171	1	50	20	1090	11	69	94	1	1	9.4
57 333	23	13070	504	1	70	20	1070	13	4	561	1	1	12.4
57 334	31	14950	388	1	60	51	1450	14	15	320	1	1	25.4
57 335	12	2320	104	1	70	24	2160	19	19	60	1	1	6.9
57 336	23	1220	7	1	40	36	1450	10	69	12	1	1	8.3
57 337	9	3690	118	1	50	21	1120	15	64	55	1	1	6.2
57 338	9	5730	293	1	50	35	1200	11	10	21	1	1	10.8
57 339	9	480	12	1	50	18	1000	9	26	6	1	1	5.1
57 340	15	430	5	1	40	22	1510	9	62	12	1	1	5.8
57 341	16	460	7	1	40	18	1740	12	45	14	1	1	6.0
57 342	21	680	16	1	50	26	1630	8	67	13	1	1	6.7
57 343	4	340	16	1	30	16	880	17	31	4	1	1	6.1

COMPANY: TOTAL ERICKSON RESOURCES

MIN-EN LABS ICP REPORT

(ACT:F31) PAGE 3 OF 3

PROJECT NO: SHOOTAMDOK P.O. 10610 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 8-043/P1

ATTENTION: R.BASNETT

(604)980-5814 OR (604)988-4524

\* TYPE ROCK GEOCHEM \*

DATE: JAN 20, 1988

(VALUES IN PPM )	ZN	GA	SN	W	CR
57 326	47	1	1	1	225
57 327	62	1	1	1	72
57 328	37	1	1	1	104
57 329	27	1	1	2	120
57 330	31	1	1	1	157
57 331	33	1	1	4	69
57 332	53	1	1	2	235
57 333	47	1	1	2	158
57 334	70	1	1	3	156
57 335	55	1	1	1	98
57 336	77	1	1	2	117
57 337	39	1	1	1	99
57 338	38	1	1	2	127
57 339	29	1	1	1	137
57 340	57	1	1	1	173
57 341	36	1	1	1	163
57 342	34	1	1	1	172
57 343	16	1	1	1	244

(VALUES IN PPM )	AG	AL	AS	B	BA	BE	BI	CA	CD	CO	CU	FE
57 344	2.4	3370	33	5	35	1.0	1	2230	.6	5	12	34490
57 345	2.7	2490	28	6	46	3.0	2	1150	1.2	4	17	110690
57 346	1.6	3770	11	1	35	.6	1	920	1.2	6	10	16070
57 347	1.8	4530	18	3	38	.4	1	1100	.8	7	14	11890
57 348	3.1	2780	35	5	40	2.2	3	1020	.6	4	11	80390
57 349	.7	3270	9	1	30	.5	1	980	.5	5	10	14110
57 350	.4	3850	6	2	43	1.0	1	570	.4	6	13	34490
57 351	.6	3400	7	1	27	.7	2	740	.4	4	6	20140
57 352	.2	5360	7	1	39	.3	2	1460	.4	8	15	6390
57 353	.9	3800	11	2	28	.6	2	7600	.9	6	9	17820
57 354	.9	5330	10	4	24	.9	2	6100	.9	9	12	31410
57 355	1.1	3480	10	2	32	.6	1	700	.8	6	16	17860
57 356	.9	3940	10	3	44	.6	1	960	.4	8	19	17910
57 357	.9	2750	12	1	32	.4	1	12410	1.2	5	9	11700
57 358	.9	2430	9	1	34	.4	1	11230	1.4	7	5	11140
57 359	3.2	2660	47	28	75	5.7	1	2180	.8	1	12	228900
57 360	.8	5260	13	7	70	.7	1	12400	.6	10	20	21540
57 361	1.2	2570	62	3	34	.9	1	40520	2.3	3	7	26180
57 362	.7	1530	10	1	12	.5	1	21990	1.3	1	4	12010
57 363	1.1	6990	10	8	32	1.1	1	23440	1.5	5	13	36150
57 364	2.6	1410	5	1	14	.3	1	218780	.4	2	4	8160
57 365	2.7	1430	2	1	15	.3	1	229850	.4	2	4	7140
57 366	2.8	1670	1	1	19	.4	1	216250	.6	3	5	9470
57 367	2.6	2540	5	1	26	.6	1	189750	.4	3	10	15270
57 368	2.7	1630	3	1	18	.3	1	212150	.5	1	4	7980
57 369	2.8	2060	3	1	23	.4	1	199830	.5	2	7	10370
57 370	2.8	1310	1	1	19	.4	1	221820	.4	2	5	8150
57 371	2.4	1760	5	1	22	.8	1	114090	.4	20	23	23400
57 372	1.1	4570	3	4	48	1.2	1	28280	.8	2	3	36800
57 373	.9	4250	9	4	45	1.2	1	15180	1.4	6	1	37690
57 374	1.5	1470	12	6	20	.4	1	7820	1.0	1	4	9030
57 375	2.5	4510	32	7	43	1.7	2	2290	.5	17	18	57500
57 376	1.3	12830	2	13	71	1.6	2	52100	1.0	10	20	49600
57 377	11.0	2800	156	2	27	1.2	2	1700	3.7	5	7	40630
57 378	8.7	2090	61	1	58	1.1	2	1660	1.3	3	8	38190
57 379	3.5	2910	55	1	67	.6	3	840	2.1	5	8	17860
57 380	1.0	3690	28	5	54	1.1	1	1800	.7	4	12	35910
57 381	.9	6390	5	8	39	.4	2	12560	.4	1	1	6760
57 382	.9	8680	12	11	62	.6	4	9790	1.2	5	21	12600
57 383	.7	13600	17	22	74	.7	4	5830	.4	12	16	20180
57 384	1.6	9160	25	18	76	1.1	1	11040	1.3	8	7	32030
57 385	1.2	14190	6	21	74	1.2	5	23290	.7	9	1	35710
57 386	1.0	12250	5	14	36	1.3	4	6170	.7	10	3	38840
57 387	1.6	15680	4	14	35	1.0	5	34690	.7	11	18	28170
57 388	.7	32770	7	35	55	1.0	8	13470	1.0	17	6	19610
57 389	1.8	13140	16	23	29	.9	3	6820	.5	12	30	25510
57 390	1.4	16880	9	17	22	.5	5	9660	.5	15	24	10320
57 391	1.2	23210	4	26	44	1.2	6	22090	.9	14	18	28610
57 392	1.2	7950	37	14	79	1.1	4	20080	.5	7	22	30370
57 393	1.9	6170	62	7	59	.9	2	1780	1.7	6	19	25730
57 394	2.0	5650	202	5	51	1.0	1	1580	5.2	3	14	30760
57 395	1.5	5960	80	9	49	.5	3	2090	3.2	3	10	13730
57 396	1.8	4960	55	4	40	.6	1	2110	1.5	3	10	14610
57 397	3.9	2310	45	1	24	.9	1	2530	1.6	3	30	27650
57 398	5.7	1670	99	1	21	1.2	2	830	2.7	2	10	38450
57 399	7.5	2400	128	2	28	1.0	1	850	3.1	2	11	31710
57 400	2.1	9540	17	10	29	.9	1	7400	.4	11	11	26660

(VALUES IN PPM)	K	LI	MG	MN	MO	NA	NI	P	PR	SR	SR	TH
57 344	1510	4	1220	11	1	60	10	660	25	46	10	1
57 345	1090	1	1180	1	1	40	5	810	31	84	3	1
57 346	1980	3	540	8	1	70	9	680	18	16	9	1
57 347	2290	1	630	14	1	70	13	890	21	16	10	1
57 348	1200	1	910	2	1	40	1	880	27	71	5	1
57 349	1560	5	430	5	1	60	8	760	23	18	11	1
57 350	1920	1	540	1	1	60	9	610	10	29	9	1
57 351	1200	7	410	2	1	50	8	520	17	15	11	1
57 352	2370	3	510	8	1	80	22	800	13	3	11	1
57 353	1900	1	3440	161	1	70	9	690	35	14	16	1
57 354	1010	30	2270	52	1	40	20	2160	17	38	32	1
57 355	1910	1	470	3	1	60	15	550	6	37	8	1
57 356	2690	1	560	12	1	90	17	760	16	38	9	1
57 357	1910	1	7180	112	1	80	12	530	16	23	19	1
57 358	1810	1	6190	112	1	70	12	680	29	6	17	1
57 359	1200	1	2560	1	2	50	7	860	26	93	7	1
57 360	2270	1	6140	168	1	90	40	990	25	18	20	1
57 361	1670	1	16020	305	1	120	4	390	23	4	271	1
57 362	290	1	8750	283	1	40	7	260	17	2	260	1
57 363	1270	9	10620	482	1	100	9	890	27	2	187	1
57 364	630	1	3770	192	1	60	3	1330	10	2	1256	1
57 365	740	1	3040	104	1	70	7	1280	8	1	1749	1
57 366	880	1	3660	120	1	90	5	1580	7	2	1432	1
57 367	1100	1	6210	224	1	120	10	1560	7	6	1066	1
57 368	780	1	4130	224	1	100	6	930	9	2	1454	1
57 369	870	1	4850	161	1	120	7	1190	8	5	1216	1
57 370	600	1	3080	157	1	80	4	850	6	4	1546	1
57 371	900	1	5580	936	1	70	8	730	14	7	270	1
57 372	2220	1	9050	406	1	170	24	1050	13	21	120	1
57 373	1930	1	11070	519	1	130	22	1260	19	5	50	1
57 374	840	1	2840	230	1	80	4	350	16	3	8	1
57 375	1980	1	1020	6	1	90	53	1080	4	76	11	1
57 376	1700	7	15840	761	1	80	15	2530	25	4	195	1
57 377	410	1	800	21	1	30	64	570	29	182	10	1
57 378	1110	1	1010	18	1	30	1	550	23	43	6	1
57 379	1770	1	530	21	1	50	8	490	14	35	6	1
57 380	2160	1	510	1	1	120	4	980	16	76	22	1
57 381	2210	1	5450	192	1	50	6	880	34	3	138	1
57 382	2460	11	3970	185	1	60	27	1940	48	17	117	1
57 383	2450	36	1000	32	1	80	52	4570	37	70	47	1
57 384	2700	11	4370	173	1	60	36	3280	23	74	136	1
57 385	2450	19	9380	466	1	60	56	5030	33	28	172	1
57 386	1110	23	930	25	1	60	61	4870	29	49	36	2
57 387	710	16	7150	428	1	90	53	4430	35	21	83	1
57 388	660	59	12400	258	1	140	166	6080	37	10	90	2
57 389	490	28	1160	29	1	60	54	5090	47	40	35	2
57 390	490	17	2130	122	1	70	63	5420	31	26	48	2
57 391	660	48	14020	332	1	120	99	5490	46	9	129	2
57 392	3670	3	10970	366	1	170	18	960	25	11	190	1
57 393	2580	8	1010	13	1	110	14	1060	15	43	31	1
57 394	2120	5	700	11	1	100	6	1260	27	50	31	1
57 395	2780	3	650	9	1	80	9	1990	18	27	35	1
57 396	2300	3	600	14	1	60	6	1940	18	42	31	1
57 397	1050	1	500	15	2	30	6	2280	26	62	27	1
57 398	830	1	490	17	1	20	1	810	17	89	9	1
57 399	1180	1	490	15	1	30	9	860	14	97	12	1
57 400	1000	40	2060	125	1	60	55	4760	25	56	42	2

(VALUES IN PPM)	U	V	ZN	GA	SN	W	CR	AU-PPB
57 344	1	4.5	28	1	1	1	112	35
57 345	1	4.4	29	1	1	3	102	40
57 346	1	4.2	18	1	1	1	95	15
57 347	1	5.0	21	1	1	1	161	10
57 348	1	4.8	23	1	1	1	121	140
57 349	1	3.6	13	1	1	1	87	5
57 350	1	3.8	24	1	1	1	81	20
57 351	1	3.1	19	1	1	1	85	15
57 352	1	6.3	25	1	1	1	91	10
57 353	1	5.6	15	1	1	1	113	10
57 354	1	9.2	59	1	1	1	53	5
57 355	1	3.3	22	1	1	1	73	25
57 356	1	4.1	16	1	1	1	88	20
57 357	1	4.5	12	1	1	1	78	5
57 358	1	4.6	6	1	1	1	76	5
57 359	1	6.0	41	1	2	3	51	325
57 360	1	10.8	25	1	1	1	96	55
57 361	1	6.1	25	1	1	2	133	35
57 362	1	4.4	27	1	1	1	169	20
57 363	1	9.0	66	1	1	2	124	25
57 364	2	6.3	20	1	1	1	28	15
57 365	2	5.9	11	1	1	1	23	5
57 366	2	6.2	15	1	1	1	23	20
57 367	2	7.7	19	1	1	1	29	10
57 368	2	6.3	11	1	1	1	44	5
57 369	2	6.3	14	1	1	1	25	5
57 370	2	5.8	9	1	1	1	20	10
57 371	1	6.4	12	1	1	1	103	20
57 372	1	10.0	33	1	1	2	45	15
57 373	1	10.6	39	1	1	2	62	25
57 374	1	3.9	19	1	1	1	241	20
57 375	1	7.5	51	1	1	1	92	45
57 376	1	16.4	39	1	1	2	57	5
57 377	1	4.2	32	1	1	1	216	40
57 378	1	3.2	11	1	1	1	162	10
57 379	1	3.5	12	1	1	1	157	5
57 380	1	3.4	29	1	1	2	105	25
57 381	1	3.5	10	1	1	1	69	5
57 382	1	7.6	39	1	1	1	75	5
57 383	1	19.8	62	1	1	2	72	5
57 384	1	16.6	46	1	1	1	81	5
57 385	1	27.9	67	1	1	2	81	5
57 386	1	21.4	59	1	2	2	96	5
57 387	1	38.4	64	1	1	3	128	5
57 388	1	57.2	54	1	2	5	174	10
57 389	1	21.7	76	1	2	2	99	20
57 390	1	31.9	67	1	2	2	97	15
57 391	1	48.5	57	1	2	4	132	5
57 392	1	13.4	64	1	1	1	113	10
57 393	1	7.2	44	1	1	1	96	5
57 394	1	6.5	42	1	1	1	148	80
57 395	1	6.1	24	1	1	1	165	10
57 396	1	5.3	21	1	1	1	163	5
57 397	1	5.4	21	1	1	1	202	15
57 398	1	3.5	14	1	1	1	182	25
57 399	1	4.1	19	1	1	1	192	45
57 400	1	19.3	56	1	1	1	67	5

PROJECT NO: SHOOTAMOOK P.O.10662

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 8-149/P1

ATTENTION: R.BASNETT

(604)980-5814 OR (604)988-4524

\* TYPE ROCK GEOCHEM \*

DATE:FEB 12, 1988

(VALUES IN PPM )	AG	AL	AS	B	BA	BE	BI	CA	CD	CO	CU	FE	K
14 201	2.0	6950	24	25	57	1.2	1	40120	1.9	8	14	37440	2330
14 202	1.6	8550	13	18	41	2.3	1	12240	1.2	9	13	77500	800
14 203	3.6	4910	23	21	44	4.3	4	2390	1.5	44	390	154960	1460
14 204	1.2	8810	2	23	68	2.4	1	1810	.4	7	148	79200	3350
14 205	1.3	8580	12	18	29	2.2	1	4490	.5	8	21	76020	230
14 206	1.5	17630	8	25	376	1.1	12	21070	.8	10	9	26980	870
14 207	1.5	3370	9	8	25	1.0	1	123490	1.6	7	4	27000	1060
14 208	.9	4000	6	11	33	1.2	2	31480	.8	9	1	35230	1890
14 209	1.1	3910	6	17	30	1.2	2	21000	.6	5	4	37310	1760
14 210	2.0	3300	19	11	45	1.2	1	1810	.3	7	47	40730	1710
14 211	1.5	2500	261	9	39	1.1	1	870	9.9	5	16	36730	1280
14 212	.5	3090	13	9	71	.4	1	1040	.3	9	15	9350	1910
14 213	1.0	2670	12	9	38	.5	2	13710	.9	9	21	16780	1710
14 214	.7	3990	10	11	48	.8	1	7590	.5	11	14	23050	1780
14 215	.6	3410	4	11	37	1.3	1	8900	.5	12	14	42190	1310
14 216	.9	2420	9	17	52	2.0	1	1390	.3	5	16	71260	1550
14 217	.9	5340	2	15	43	1.2	1	18230	.6	7	25	36790	1790
14 218	3.2	1010	2	3	12	.4	1	241710	.5	1	3	9080	340
14 219	1.1	2710	17	10	32	1.4	2	3220	.3	4	11	46680	1640
14 220	1.0	3460	6	9	28	1.1	1	2550	.3	8	30	34850	1490
14 221	1.4	760	8	7	17	1.2	4	145120	1.2	1	2	37920	490
14 222	3.0	2120	42	7	66	.7	1	2280	1.8	9	19	22510	1030

COMPANY: TOTAL ERICKSON

MIN-EN LABS ICP REPORT

(ACT:F31) PAGE 2 OF 3

PROJECT NO: SHOOTAMOOK P.O.10662

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 8-149/P1

ATTENTION: R.BASNETT

(604)980-5814 OR (604)988-4524

\* TYPE ROCK GEOCHEM \*

DATE:FEB 12, 1988

(VALUES IN PPM )	LI	MG	MN	MO	NA	NI	P	PB	SB	SR	TH	U	V
14 201	17	17710	628	1	60	35	3860	41	30	333	1	1	17.0
14 202	16	4740	311	1	40	62	4540	29	72	52	1	1	20.5
14 203	14	1610	1	1	60	1	2340	68	91	15	1	1	10.8
14 204	17	1230	1	1	60	4	1550	18	59	22	1	1	9.1
14 205	31	800	2	1	40	27	4760	33	86	29	1	1	12.5
14 206	48	20860	415	1	580	41	4260	31	3	214	2	1	48.2
14 207	7	30990	725	1	120	24	990	23	3	245	1	1	12.0
14 208	6	15370	764	1	140	30	1200	18	4	96	1	1	11.5
14 209	5	10560	569	1	120	15	1060	19	10	46	1	1	8.3
14 210	9	830	13	1	80	10	1080	28	30	14	1	1	3.4
14 211	3	580	1	1	70	7	610	19	47	9	1	1	2.3
14 212	5	390	10	1	90	18	870	27	15	10	1	1	3.5
14 213	2	7200	117	1	90	13	940	44	5	22	1	1	4.8
14 214	9	3130	87	1	80	20	1570	43	6	21	1	1	7.3
14 215	7	3600	80	1	70	26	2540	14	7	23	1	1	9.6
14 216	2	1100	1	1	70	1	600	19	72	7	1	1	2.5
14 217	8	8610	143	1	120	16	1380	22	5	104	1	1	7.6
14 218	1	5030	753	1	40	4	560	5	1	1689	1	2	6.1
14 219	1	780	5	1	60	2	620	33	19	25	1	1	3.1
14 220	1	550	2	1	60	19	870	15	21	22	1	1	4.6
14 221	1	59350	1392	2	120	4	510	21	1	81	1	1	9.9
14 222	8	970	19	1	40	49	710	48	103	17	1	1	3.2

(VALUES IN PPM)	ZN	GA	SN	W	CR	AU-PPB
14 201	56	1	1	1	43	5
14 202	71	1	1	2	47	10
14 203	49	1	3	2	51	30
14 204	49	1	1	2	38	10
14 205	52	1	1	2	44	5
14 206	43	1	1	2	87	5
14 207	26	1	1	1	35	10
14 208	38	1	1	1	42	5
14 209	36	1	1	1	50	10
14 210	24	1	1	1	81	20
14 211	17	1	1	1	78	30
14 212	14	1	1	1	83	10
14 213	18	1	1	1	120	5
14 214	23	1	1	1	116	5
14 215	41	1	1	1	62	10
14 216	24	1	1	1	77	60
14 217	68	1	1	1	41	5
14 218	11	1	1	1	22	5
14 219	16	1	1	1	101	10
14 220	35	1	1	1	78	10
14 221	15	1	1	1	10	5
14 222	36	1	1	1	93	5

APPENDIX III

PETROGRAPHIC REPORTS

88-1 122.3-122.4Brecciated Metamorphosed Siliceous Mudstone  
with patches of Pyrite and Hematite(?)

The rock is a moderately contorted and brecciated, and shows a variety of textures. It is dominated by extremely fine to very fine grained quartz, with much less sericite/muscovite and kaolinite, and with disseminated patches of opaque (probably pyrite and hematite). Textures suggest that the original rock was a siliceous mudstone.

quartz	80-82%
sericite/muscovite	5- 7
kaolinite	5- 7
pyrite	3- 4
hematite	1- 1½
Ti-oxide	minor
tourmaline	trace
zircon	trace

Patches in the rock consist of extremely fine grained aggregates of quartz with much less kaolinite and sericite, and with minor dusty Ti-oxide. These grade sharply into coarser grained patches dominated by quartz, quartz-sericite, or sericite/muscovite. Deformation textures are most prominent in mica-rich patches, where moderate to tight folding is suggested. Grain size of quartz ranges from 0.03-0.15 mm in the coarser grained patches. Sericite/muscovite forms disseminated flakes in these patches averaging 0.03-0.07 mm in length. In sericite/muscovite-rich patches, ragged clusters of flakes are up to 0.15 mm in grain length.

Kaolinite also occurs in interstitial patches and veinlike zones up to 0.4 mm in width. In these, it forms unoriented aggregates of equant flakes averaging 0.01-0.02 mm in size.

Pyrite forms disseminated, equant to irregular grains and aggregates, mainly less than 0.3 mm in size, with a few up to 3 mm across. The largest, subhedral grain contains abundant silicate inclusions.

Several clusters of elongate platy grains up to 1.5 mm in length may be of hematite. Some elongate grains may also be of pyrite.

Ti-oxide forms dusty disseminations in the finest grained rock and in sericite/muscovite-rich patches.

Tourmaline forms disseminated, equant grains averaging 0.01-0.05 mm in size. It is pleochroic from pale to light yellowish green.

Zircon forms a very few anhedral grains from 0.01-0.02 mm in size.

88-2 114.5-114.6m

## Tightly Contorted Quartz-Siderite-Sericite-(Kaolinite) Schist with Patches of Pyrite-Quartz-Ankerite-Kaolinite, and Veinlets of Kaolinite-Carbonate

The rock is a tightly contorted, strongly foliated schist, with compositional banding defined by strong variation in proportions of quartz, siderite, sericite, and minor kaolinite. Replacement patches are dominated by pyrite and quartz with much less ankerite and kaolinite. Veinlets are of kaolinite and carbonate.

quartz	65-70%
siderite	12-15
sericite	8-10
kaolinite	2- 3
ankerite	2- 3
pyrite	4- 5
veinlets	
kaolinite-carbonate	minor

Some layers are dominated by quartz grains averaging 0.05-0.1 mm in grain size. These contain ragged porphyroblasts of ankerite up to 0.5 mm in size. Other layers are dominated by quartz and siderite, with siderite concentrated in fine grained seams parallel to foliation, and quartz showing elongate grains parallel to foliation. These layers contain minor disseminated sericite.

A few layers up to 1.5 mm wide are dominated by siderite with much less kaolinite.

Quartz-siderite layers grade with increasing sericite content into quartz-siderite-sericite layers and further to sericite-(siderite-quartz) layers. Tight drag folds of the order of 0.3-0.5 mm in size are moderately abundant, and are particularly well developed in sericite-rich layers.

Siderite was tentatively identified because of its high relief and moderate alteration to limonite. It has much higher relief than the colorless mineral identified as ankerite elsewhere in the section.

The rock contains patches up to several mm across dominated by pyrite grains up to 3 mm in size surrounded by patches of fine to locally medium grained quartz, with much less very fine to fine grained ankerite and extremely fine grained patches of kaolinite. Some quartz and minor ankerite/calcite and kaolinite form overgrowths of subparallel grains oriented perpendicular to pyrite crystal faces. Kaolinite forms patches along the border of the section; these are up to 0.3 mm across and consist of aggregates of equant grains 0.01-0.015 mm in size.

The rock is cut by a few veinlets up to 0.05 mm wide of extremely fine grained kaolinite with local patches of carbonate. Veinlets of carbonate occur in and near the pyrite-quartz-rich patches. Calcite also forms thin veinlets along borders of several pyrite grains.

Ankerite and calcite are distinguished on the basis of relief; however, some grains have intermediate relief, and it is uncertain as to which carbonate they represent.

88-3 58.55-58.65

## Altered Hypabyssal Quartz-bearing Diorite

The rock contains a few phenocrysts of plagioclase and of biotite, and more abundant ones of hornblende. These grade downwards in size to a fine grained groundmass dominated by plagioclase with lesser hornblende and much less biotite, quartz, and carbonate. A few late patches are of quartz-(calcite). Plagioclase is altered strongly to sericite, and hornblende is altered completely to chlorite-sericite-Ti-oxide. Biotite is altered completely to chlorite-(Ti-oxide).

plagioclase	50-55%
hornblende	25-30
biotite	5- 7
quartz	4- 5
carbonate	4- 5 (ankerite ± calcite)
apatite	0.3
Ti-oxide	0.3

Plagioclase forms a few equant phenocrysts averaging 0.7 mm in size. Groundmass plagioclase averages 0.1-0.25 mm in size. Phenocrysts are altered completely to sericite and groundmass is altered strongly to sericite, commonly with moderately abundant dusty opaque.

Hornblende forms subhedral prismatic grains from 0.2-1.5 mm in length. These are altered completely to extremely fine grained aggregates of chlorite-sericite, with abundant Ti-oxide; minerals are aligned along the c-axis of hornblende. A few grains also contain replacement patches of carbonate.

Biotite forms a few phenocrysts averaging 0.7 mm in length and more abundant grains averaging 0.2-0.4 mm long. These are altered completely to pseudomorphs of chlorite with minor patches of Ti-oxide.

Quartz forms anhedral, equant, interstitial grains averaging 0.03-0.07 mm in size.

Carbonate occurs mainly as disseminated patches averaging 0.05 mm in size of ankerite. A few coarser replacement patches are up to 0.7 mm in size. Some of these are ankerite and some are calcite. A few patches up to 1 mm across consist of carbonate with moderately to much less chlorite; they may be secondary after original hornblende phenocrysts.

Apatite forms euhedral to subhedral prismatic to acicular grains from 0.05-0.12 mm in length.

Ti-oxide forms patches up to 0.15 mm across of extremely fine grained aggregates.

The rock contains one large interstitial quartz grain 1.5 mm across; it is irregularly intergrown along its border with groundmass minerals. A few much smaller patches consist of intergrowths of fine to very fine grained calcite and quartz.

88-4 57.6-57.7

## Hypabyssal Granodiorite

The rock contains phenocrysts of hornblende grading down to a fine grained rock dominated by plagioclase and hornblende, with much less chlorite, K-feldspar, and quartz, minor epidote, and accessory apatite, allanite, opaque (Pyrite?), Ti-oxide, and sphene. It contains interstitial patches up to 1.7 mm in size of quartz-calcite-(epidote).

plagioclase	35-40%	interstitial patches	
hornblende	30-35	quartz	3- 4%
chlorite	7- 8	calcite	3- 4
K-feldspar	7- 8	K-feldspar	1- 2
quartz	4- 5	epidote	minor
epidote	1- 1½		
apatite	0.2		
allanite	minor		
Ti-oxide	trace		
opaque (pyrite?)	trace		
sphene	trace		

Hornblende forms elongate, subhedral to euhedral prismatic phenocrysts averaging 1.2-2 mm in length. It is altered slightly to extremely fine grained actinolite. Locally, actinolite forms an overgrowth on the end of a hornblende phenocryst. Phenocrysts grade downwards in size to groundmass hornblende averaging 0.2-0.3 mm in size.

Plagioclase forms anhedral to subhedral grains averaging 0.2-0.7 mm in size. Many are replaced along their borders by K-feldspar. Some myrmekitic intergrowths of extremely fine grained quartz in plagioclase form very fine grains along borders with K-feldspar grains. Plagioclase is altered slightly to patches of very fine grained epidote.

Chlorite forms irregular, interstitial patches of very fine grain size. Most are less than 0.3 mm across, but a few are up to 1.5 mm across. Some, especially larger ones, contain patches of epidote and/or calcite. Several patches of chlorite-epidote appear to be pseudomorphic after biotite flakes up to 0.7 mm in length.

K-feldspar forms interstitial grains averaging 0.05-0.15 mm in size.

Quartz forms interstitial grains averaging 0.05-0.1 mm in size.

Epidote forms patches up to 0.8 mm in size. A few patches of epidote are intergrown with allanite, with allanite commonly rimmed by epidote. Allanite is pleochroic from straw to light reddish brown; it forms anhedral grains and prismatic, subhedral grains, the latter up to 0.4 mm long.

Apatite forms euhedral to subhedral prismatic grains up to 0.3 mm in length.

Ti-oxide and opaque form anhedral patches from 0.1-0.2 mm in size. Sphene forms a few patches up to 0.1 mm across.

The rock contains interstitial patches up to 1.7 mm in size of fine to medium grained calcite and quartz. Quartz locally shows euhedral grain outlines against calcite. Epidote forms a few clusters of very fine grains intergrown with calcite. K-feldspar occurs in a few patches as anhedral, equant grains averaging 0.3-0.4 mm in size.

On a fracture surface in the hand sample is a vein of calcite.

APPENDIX IV

ITEMIZED STATEMENT OF COSTS

## STATEMENT OF COSTS

### a) Personnel

<b>Name</b>	<b>Position</b>	<b>Days</b>	<b>Description</b>	
M. Fekete	Geologist	26	Field	
		2	Travel	
		16	Office	
		44	Total @ \$200/day	\$ 8,800.00
R. Basnett	Geologist/ Supervisor	2	Field	
		2	Travel	
		4	Total @ \$250/day	1,000.00
M. Conchie	Cook	24	Field	
		4	Travel	
		28	Total @ \$200/day	5,600.00
M. Holloway	Mainten- ance	26	Field	
		2	Travel	
		28	Total @ \$200/day	5,600.00
				<b>\$21,000.00</b>

### b) Drilling

Casing 294' @ \$30/ft.	\$ 8,820.00
BQ casing 2293' @ \$25/ft.	57,325.00
Materials - 1 NW shoe	327.00
3 BW shoes	720.00
40' NW casing	652.00
60' BW casing	810.00
110 BQ boxes @ \$9/box	990.00
Labour: 668 man hours @ \$25/hr.	16,700.00
Mob/demob.	7,170.00
Air fares	1,420.00
	<b>\$94,934.00</b>

### c) Transportation and Communication

Helicopter charters	\$66,847.85
Truck rentals	1,858.69
Air fares	570.00
Expediting	675.00
Radios	590.00
	<b>\$70,541.54</b>

d)	<u>Camp Construction</u>	
	Equipment and supplies	\$41,728.20
	Labour	27,781.00
	Generator rental	1,100.00
	Explosives	1,843.85
		<u>\$72,453.05</u>
e)	<u>Food and Accommodation</u>	
	Hotel and restaurant	\$ 4,668.25
	Groceries	6,298.59
		<u>\$10,966.84</u>
f)	<u>Analyses</u>	
	Rock geochem., assay, prep.	\$ 1,623.00
	Petrographic studies	217.75
		<u>\$ 1,840.75</u>
g)	<u>Fuel</u>	
	Jet fuel	\$ 5,649.40
	Diesel	16,339.00
	Drums	12,740.00
	Less drum/fuel credit	[12,797.16]
	Freight	2,255.90
	Gas	660.25
	Propane	167.40
	Bottles	460.00
		<u>\$25,474.79</u>
h)	<u>Report Preparation</u>	
	Typing and photocopying	\$ 250.00
	Drafting and binding	500.00
	Office expenses	25.00
		<u>\$ 775.00</u>
i)	<u>Technical Supplies</u>	
	Sample bags	\$ 140.00
	Core splitter	744.50
	Maps	9.00
		<u>\$ 893.50</u>

TOTAL EXPENSES: \$298,879.47

APPENDIX V

STATEMENT OF QUALIFICATION

STATEMENT OF QUALIFICATIONS

I, **MARK FEKETE**, of the City of Whitehorse in the Yukon Territory, DO HEREBY STATE:

THAT I am a graduate of the University of British Columbia, having obtained a B.Sc. degree in Geology - May, 1986;

THAT I have been active in mineral exploration in various capacities on a full-time and part-time basis for ten years in the Yukon Territory, British Columbia and Australia;

THAT I participated in the work described in this report as an employee of Total Erickson Resources Ltd;

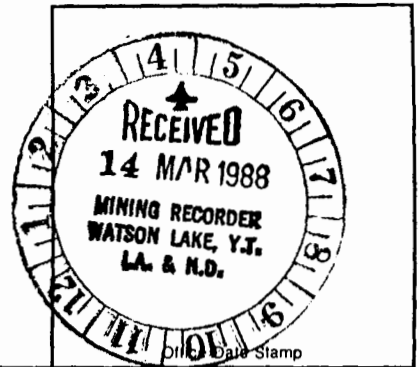
THAT I have no interest, directly or indirectly, in the Shootamook property, nor do I expect to receive any interest.

SIGNED at Whitehorse, Yukon, this 10<sup>th</sup> day of March, 1988.

A handwritten signature in cursive script, appearing to read 'Mark Fekete', written in black ink.

Mark Fekete, B.Sc.

APPLICATION FOR A CERTIFICATE OF WORK  
FORM 4 (SEC. 53)  
YUKON QUARTZ MINING ACT



This form required in duplicate with sketch showing location of work.

Name: Mark Fekete (agent: Total Erickson) Occupation: Geologist.  
Postal address: 500-171 W. Esplanade, North Vancouver, B.C.

I do hereby take oath and say that:

I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

I have done, or caused to be done, work on the following mineral claim(s):  
(Here list claims on which work was actually done by number and name)

MATHEW 2 YA 71355.

Work done at: Shoptarmook Creek Claim Sheet No. 105 B / 14

in the Mining District of Watson Lake to the value of at least 24934<sup>00</sup> dollars.

on the 10<sup>th</sup> day of January 19 88.

I represent the following mineral claims under the authority of Grouping Certificate No. 4505  
(List claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

<u>CARRANT No.</u>	<u>CLAIM NAME.</u>
<u>YA 71354 &amp;</u>	<u>MATHEW 1 to Jan. 20, 1993 renew to</u>
<u>YA 71356</u>	<u>MATHEW 3 Jan. 20, 1997 (4 yrs).</u>

The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

2587' (788.5 m) diamond drilling (BQ)

January 10 to January 27, 1988.

This form required in duplicate with sketch showing location of work.

Signature of Notary Public at Watson Lake

Date: 10<sup>th</sup> March, 19 88.

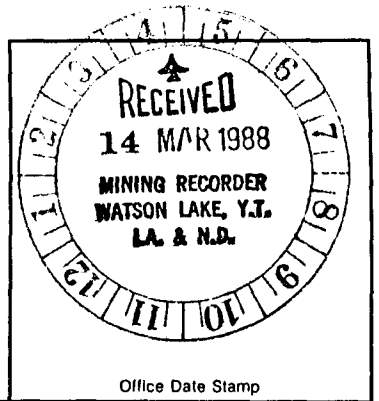
I am the owner, or agent, of the mineral claim(s) to which reference is made herein.

I have done, or caused to be done, work on the following mineral claim(s):  
(Here list claims on which work was actually done by number and name)

Mark Fekete  
Owner or Authorized Agent

092125

APPLICATION FOR A CERTIFICATE OF WORK  
FORM 4 (SEC. 53)  
YUKON QUARTZ MINING ACT



This form required in duplicate with sketch showing location of work.

name Mark Fekete (agent: Total Erickson) occupation Geologist.  
 (postal address) 500-171 W. Esplanade, North Vancouver, B.C.

I do hereby swear and say that:

I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

I have done, or caused to be done, work on the following mineral claim(s):  
 (Here list claims on which work was actually done by number and name)

MATHEW 2 YA 71355.

located at Shootamook Creek Claim Sheet No. 105 B / 14

in the Watson Lake Mining District, to the value of at least 24934<sup>00</sup> dollars.

effective the 10<sup>th</sup> day of January 19 88.

I hereby represent the following mineral claims under the authority of Grouping Certificate No. \_\_\_\_\_  
 (Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

GRANT No.	CLAIM NAME	RENEWAL PERIOD
YA 71357	mathew 4	Jan 20 1993 to Jan 20 1997 (4 yrs)
YA 71358 to	MATHEW 5 to 6	Jan. 20, 1994 renew to
YA 71359		Jun. 20, 1998 (4).
YA 73727 to	MATT 15 to 26	Jun. 20, 1991 renew to
YA 73738		Jun. 20, 1995 (4)

The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

2587' (788.5 m) diamond drilling (BQ)

January 10 to January 27, 1988.

092125

This form required in dup...

Signature before me at Watson Lake



APPLICATION FOR A CERTIFICATE OF WORK FORM 4 (SEC. 53) YUKON QUARTZ MINING ACT



This form required in duplicate with sketch showing location of work.

I, (name) Mark Fekete (agent Total Erickson), occupation Geologist of (postal address) 500-171 W. Esplanade, North Vancouver, B.C., make oath and say that:

- 1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein. 2. I have done, or caused to be done, work on the following mineral claim(s): (Here list claims on which work was actually done by number and name)

MATHEW 2 YA 713555 -

situated at Shootamock Creek Claim Sheet No. 105 B/14 in the Watson Lake Mining District, to the value of at least 94934.00 dollars, since the 10th day of January 1988.

to represent the following mineral claims under the authority of Grouping Certificate No. (Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

Table with 3 columns: CLAIM NO., CLAIM NAME, and Renewal Period. Includes entries for MATT 7 to 8, MATT 9 to 14, MATT 27 to 30, and MATT 46 to 48.

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

2587' (788.5 m) diamond drilling (BA) January 10 to January 27, 1988.



082120

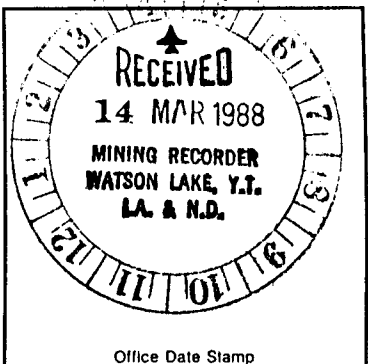
This form required.

Sworn before me at Watson Lake I, (name) Mark Fekete this 14th day of March, 1988.

Notary Public signature and name.

Owner or Authorized Agent signature and name.

APPLICATION FOR A CERTIFICATE OF WORK  
FORM 4 (SEC. 53)  
YUKON QUARTZ MINING ACT



This form required in duplicate with sketch showing location of work.

I, (name) Mark Fekete (agent: Total Erickson) Occupation Geologist.  
of (postal address) 500-171 W. Esplanade, North Vancouver, B.C.

make oath and say that:  
1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, work on the following mineral claim(s):  
(Here list claims on which work was actually done by number and name)

MATHEW 2 YA 71355.

situated at Shootamook Creek Claim Sheet No. 105 B / 14

in the Watson Lake Mining District, to the value of at least 94934<sup>00</sup> dollars,

since the 10<sup>th</sup> day of January 19 88.

to represent the following mineral claims under the authority of Grouping Certificate No. \_\_\_\_\_  
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

<u>GRANT No.</u>	<u>CLAIM NAME</u>	
<u>YA 73741 to</u>	<u>MATT 31 to 45</u>	<u>Jan. 20, 1991 renew</u>
<u>YA 73757</u>		<u>to Jan 20, 1995 (4yrs)</u>

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

2587' (788.5 m) diamond drilling (BQ)

January 10 to January 27, 1988.

092125

Sworn before me at Watson Lake

this (postal address) 14<sup>th</sup> day of March, 19 88.

make oath and say that:  
1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

*[Signature]*  
Notary Public

*[Signature]*  
Owner or Authorized Agent