



41110SE0023 W9370.00103 STREET

010

**REPORT ON STRIPPING, BULK SAMPLING
AND DIAMOND DRILLING**

STREET TOWNSHIP PROPERTY

Sudbury Mining Division, Ontario

for

**Emerald Isle Resources Inc. &
Stralak Resources Inc.
Joint Venture**

by

Frank H. Toews, B.Sc., F.G.A.C.

November 30, 1993



010C

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Figure 3 - Plan of location of bulk sampling, stripping & access - drill roads, Claim 1043375

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Diamond drill logs & sections for DDH ST 93-01 to -16 incl.

**REPORT ON STRIPPING, BULK SAMPLING AND DIAMOND DRILLING -
EMERALD ISLE RESOURCES INC. / SIRALAK RESOURCES INC. STREET
TOWNSHIP PROPERTY, ONTARIO (SUDBURY MINING DIVISION)**

LOCATION & ACCESS

The property is located in east-central Street Township, approximately 20 air-miles (32 km) from the city of Sudbury (Figure 1). Access is via Highway 17 East for a distance of 27 km to the all-weather, Kukagami Lake Road which heads north from the highway. At about 6 km north, a newly constructed road, suitable for heavy trucks, trends northeasterly for a distance of over 2 km to a point near the east boundary of claim 1043375, where a drill access road continues parallel to the main Baseline of the grid. (Also see figures 2 & 3.)

PROPERTY & OWNERSHIP

The property is being explored for industrial minerals, specifically garnets, suitable for use with water jet cutting and other abrasive purposes for which markets exist.

The property pertaining to this report consists of 11 adjoining claims numbered 1043372 to 1043382 inclusive (figure 2), jointly held by Emerald Isle Resources Inc. and Siralak Resources Inc.

Mechanical stripping and outcrop washing, and bulk sampling was carried out on claim 1043375. Diamond drilling covered parts of claims 1043375 and 1043376.

PREVIOUS WORK

Street Township was mapped as part of a regional geological survey by the Ontario Division of Mines (see Preliminary Map P.844, River Valley Area, scale 1 in. = 1 mile, by S.B. Lumoers, 1973). The township is diagonally crossed by the northeasterly trending Grenville Front Tectonic Zone (figure 1) which here separates Proterozoic-age rocks of the Southern Province lying to the northwest, from highly metamorphosed lithologies of the Grenville Structural Province to the southeast. The claim group lies to the east of the Grenville Front which locally trends in a more northerly direction.

Subsequent prospecting by Mr. Ab Jerome led him to the discovery of muscovite-rich outcrops, and a garnetiferous horizon(s) which is the focus of this report. The muscovite-rich outcrops, which occur to the north of the garnetiferous horizon, were tested with 3 diamond drill holes in 1991 by Jarvis Resources Limited.

RECENT WORK

In early June, 1993, base and grid lines were cut, chained and picketed with picks at 25-metre intervals. This was followed by detailed geological mapping at a scale of 1 : 250 (separate report) which outlined a siliceous to micaeous garnetiferous zone (main garnet unit) up to 20 m wide, with a length of over 350 m, striking east-northeast, more or less parallel to the base line (Azimuth 060 degrees). The main garnet unit dips steeply to the southeast for the most part. Thinner, parallel bands, similar to this main garnet unit, are found in the footwall to the main unit, interbanded with mafic to felsic gneisses and schists. The hanging wall rocks appear to be mainly mafic gneisses which are locally garnetiferous. Granitic pegmatite to pegmatitic veining can be observed in all lithologies. The main garnet unit is medium to coarse grained, siliceous (quartz-feldspar-rich) to mica-rich (biotitic to muscovitic) with a variable, red to purplish almandine garnet content (< 5 to 50%, estimated average of 25% +/- by volume). The garnets range in size from 0.1-3 cm averaging < 1 cm. Diamond drilling confirmed the presence of the main garnet unit at depth.

Over 2 km of access road construction by Erana Mines Ltd., the contractor, began in September, 1993.

RECENT WORK, ctd.

Stripping

Mechanical stripping of vegetation and overburden, and washing of outcrops (south of the baseline, centered on Line 0+00) was carried out in order to better expose the main garnet unit and reveal possible additional units to the south. Stripping revealed bedrock hummocks of mafic gneiss to the south with overburden depths of 1 to over 2 m in sandu boulder clay. An area of approximately 35 m by 100 m was cleared and/or stripped, and outcrop exposures were washed down. (See figure 3 for location.)

Dates: October 27 - 29 & November 4 -5/93

Contractor : Erana Mines Limited
106 Fielding Road
Livello, Ontario P0M 2E0

Labour : R. Gervais & R. Poulin

Equipment : - JD 650 C Excavator (Operator-R.Gervais)
- 850 JD Bulldozer (" " -R.Poulin)
- Float (" " -R.Gervais)
- Truck

Bulk Sampling & Industrial Mineral Testing

A 10-ton bulk sample was obtained from the main garnet unit, near Line 0+00 / 0+25m S. (See figure 3.) The sample was hauled by float to Erana Mines Ltd. where the sample was crushed, screened and bagged. A preliminary test using a Gemini Table and a small sample resulted in a garnet concentrate of about 62 wt. % (dry). On November 24/93, a 1-ton sample was shipped to each of Lakefield Research, Lakefield, Ontario and Allis-Chalmers, Belleville, Ontario for industrial minerals testing. Results of the testing are not yet available. In addition drill core from the recent exploration program is being split, crushed and concentrated using the Gemini Table to obtain more precise estimates of the garnet content of the main garnet unit.

Dates : November 7 - 20 /93

Contractor : Erana Mines Ltd.

Supervision - H.J. Blanchard

Labour : R. Poulin, R.Gervais, A.Jerome, F.Gervais

Equipment : - JD 650 Excavator (Operator-R.Gervais)
- JD 850 Bulldozer (" " -R.Poulin)
- JD 450 (" " -R.Poulin)
- Crusher (" " - various)
- Compressor (" " - various)
- Float (" " -R.Gervais)
- 2 Trucks

RECENT WORK. ctd.

Diamond Drilling

An exploration diamond drilling program was initiated by E. Blanchard and supervised by the author. A total of 2071 feet (636.4 m) of BQ drilling was completed in 16 holes during October and November, 1993. The holes were drilled on 25 m centres between Line 0+50m W and 3+25m E using the grid for control. (See figures 4 & 5.) All holes were oriented at -45 deg. / Azimuth 330 deg. and varied in length from 100 to 160 feet (30.48 to 48.78 m). The holes were drilled with a shallow open pit mining method envisaged.

The main garnet unit was intersected in all drill holes with core lengths of about 6 to 14 m, except for the hole on section 3+25m E where the unit is interpreted to have split into narrow, more weakly garnetiferous sections. The main garnet unit is open to the west of section 0+50m W and at depth (since it was intersected at depths of between 5 and 20 m below surface). Similar, narrow garnetiferous units occur in the footwall to the main unit in the drill holes, as well as in outcrop exposures.

Dates : October 4 to November 24 /93

Contractor : Erana Mines Ltd.

Labour : O. Richer (driller), R. Fluery (helper),
R. Gervais (Float)

Equipment : - Drill - JKS Boyles 300
- JD 850 Bulldozer
- Float
- Truck

Respectfully submitted,

Frank H. Toews
Frank H. Toews, B.Sc., F.G.A.C.
Geologist

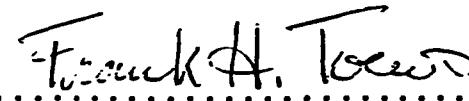
November 30, 1993

STATEMENT OF QUALIFICATIONS

I, Frank H. Toews, B.Sc. of Highway 537, R.R. #3, Sudbury, Ontario, certify as follows, concerning my report entitled "Report on Strippling, Bulk Sampling and Diamond Drilling, Street Township Property, Sudbury Mining Division, Ontario", for the Emerald Isle Resources Inc. & Stralak Resources Inc. Joint Venture, dated November 30, 1993.

- a) That I am a graduate of the University of Waterloo, Waterloo, Ontario, with a B.Sc. in Earth Science (1971).
- b) That I am a member (Fellow), in good standing, of the Geological Association of Canada.
- c) That I have been employed as a geologist in the mining and exploration industry in various parts of Canada for over 22 years.
- d) That I was present on the property and was involved in the geological aspects of the program and in the report preparation.
- e) That I have no direct or indirect interest in the properties or securities of either Emerald Isle Resources Inc. or Stralak Resources Inc.

Sudbury, Ontario
November 30, 1993


.....
Frank H. Toews, B.Sc., F.G.A.C.
Geologist

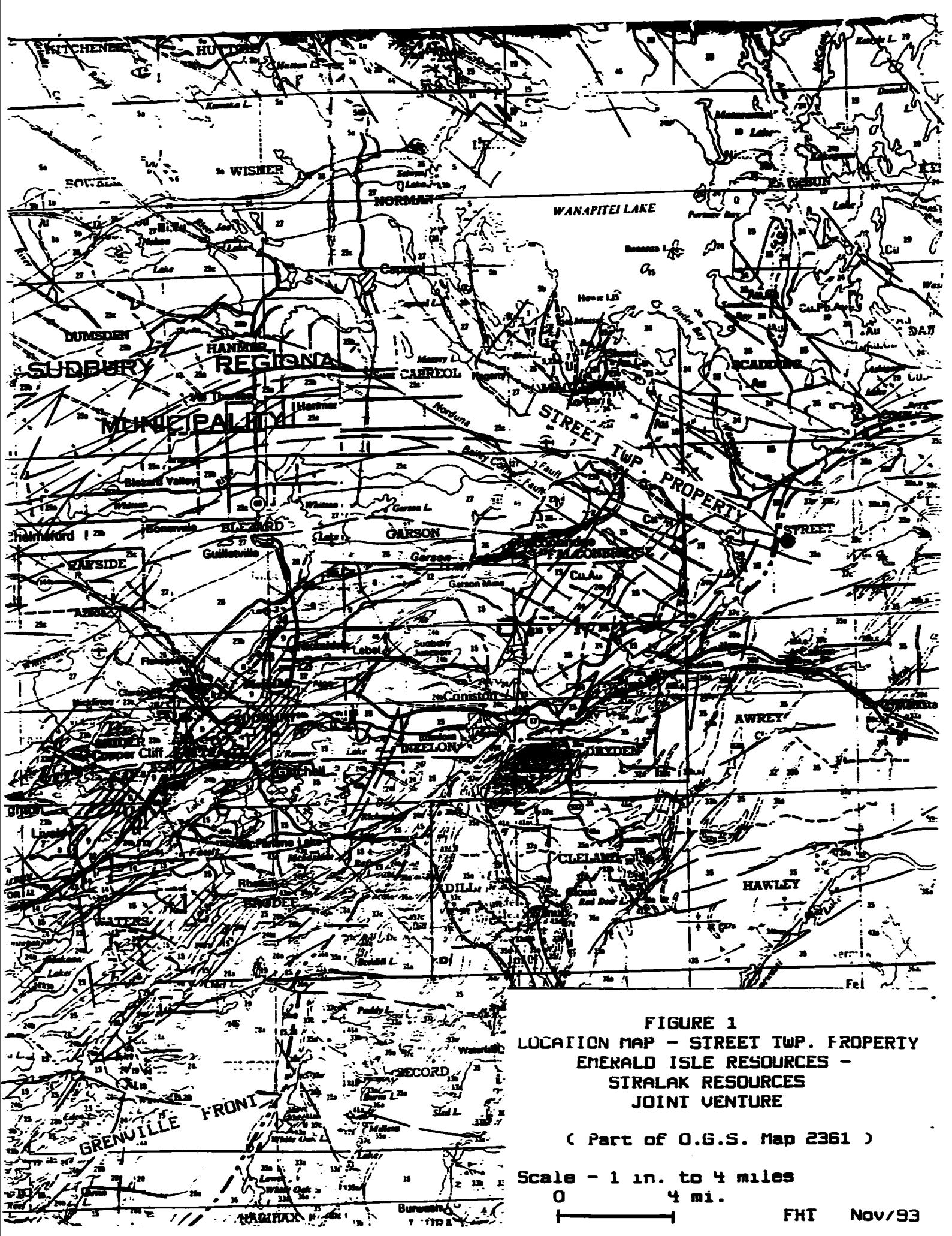


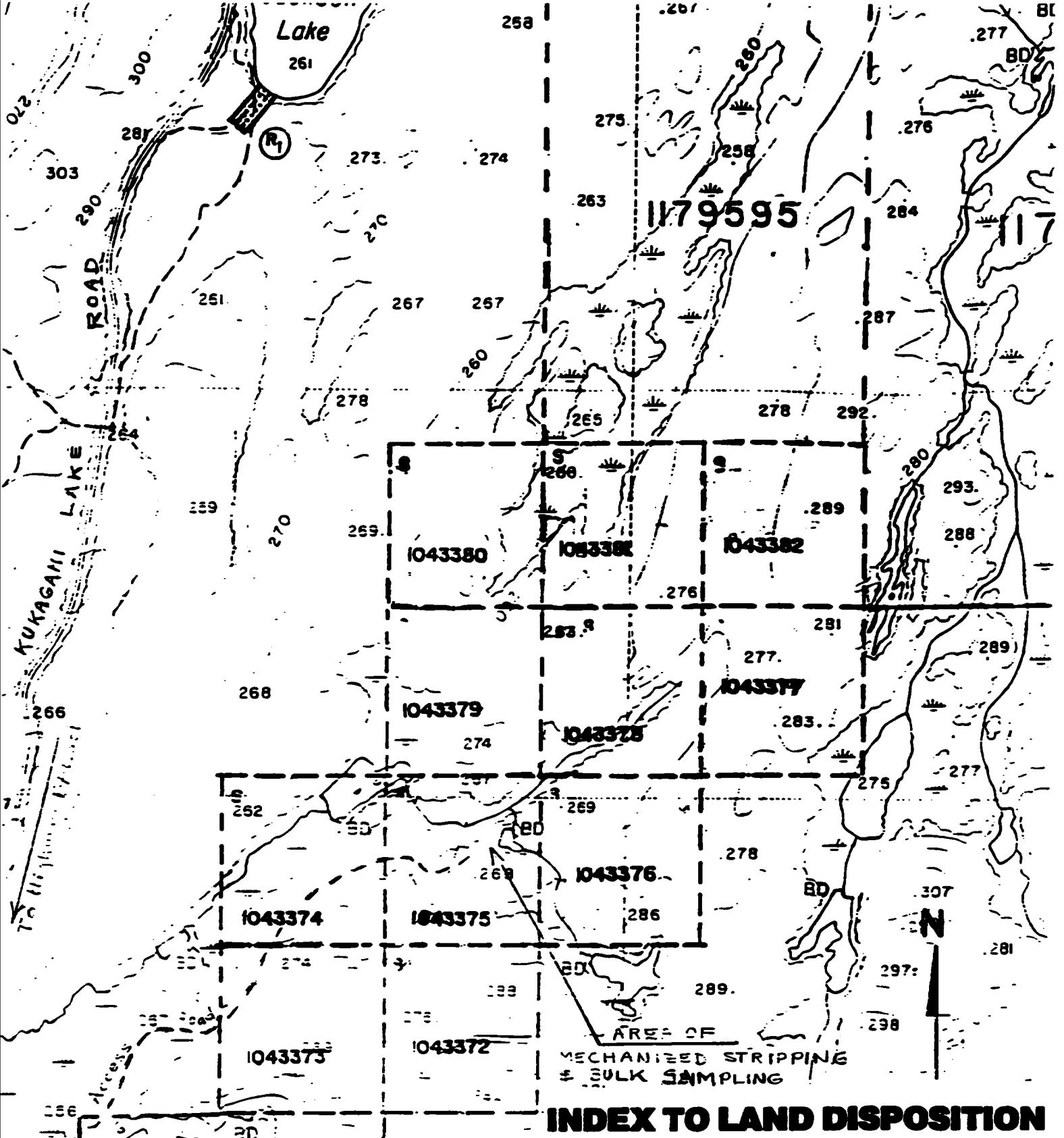
FIGURE 1
LOCATION MAP - STREET TWP. PROPERTY
EMERALD ISLE RESOURCES -
SIRALAK RESOURCES
JOINT VENTURE

(Part of O.G.S. Map 2361)

Scale - 1 in. to 4 miles

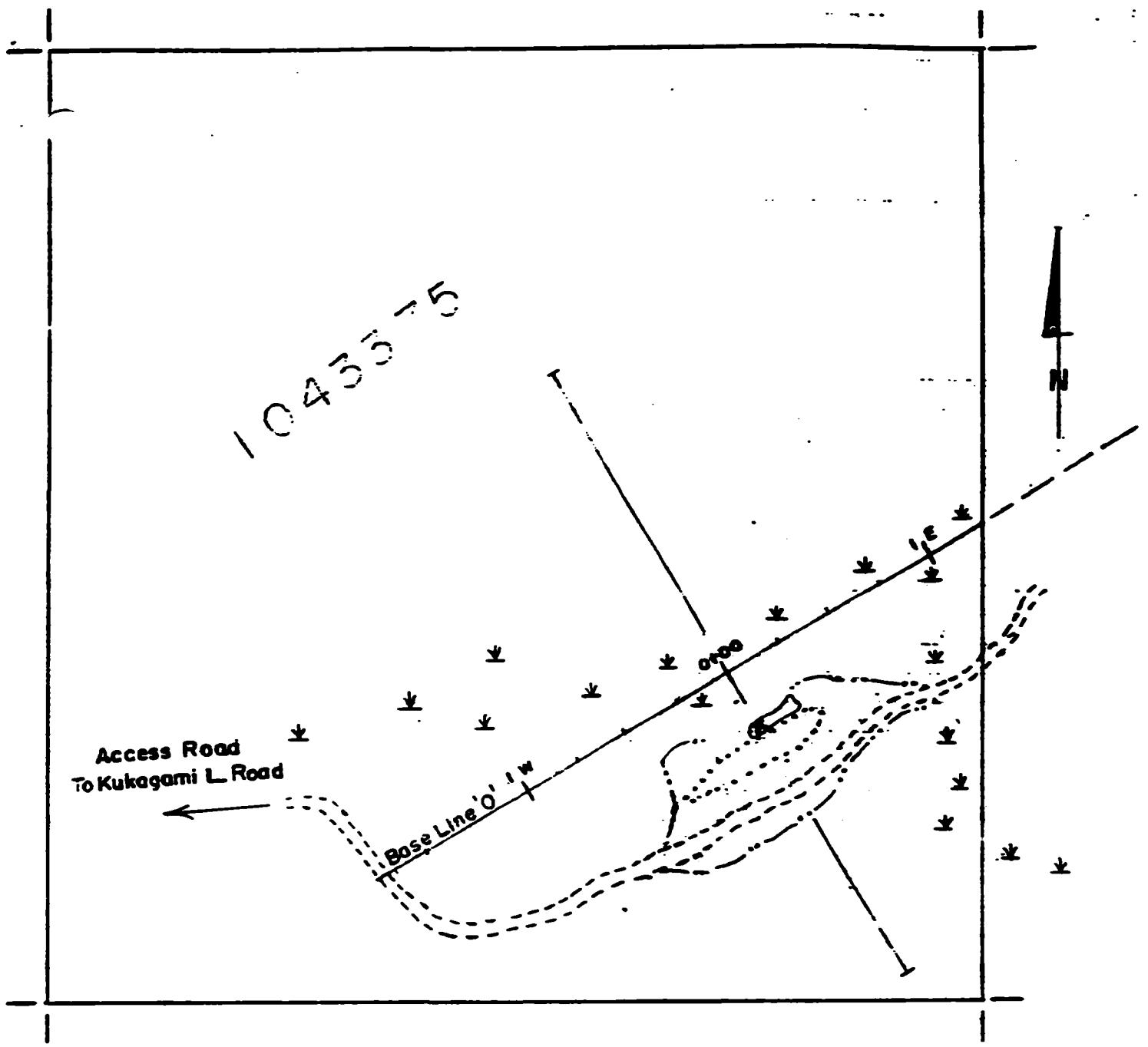
0 4 mi.

FHT Nov/93

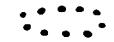


SCALE ~ 1:12,500





Area of stripping



Area of mafic gneiss exposures



Site of bulk sample in garnet unit



Open, swampy parts

EMERALD ISLE RESOURCES INC. STREET TWP. PROPERTY

**Plan of Location of Bulk Sampling,
Stripping & Access-Drill Roads
Claim No. 1043375**

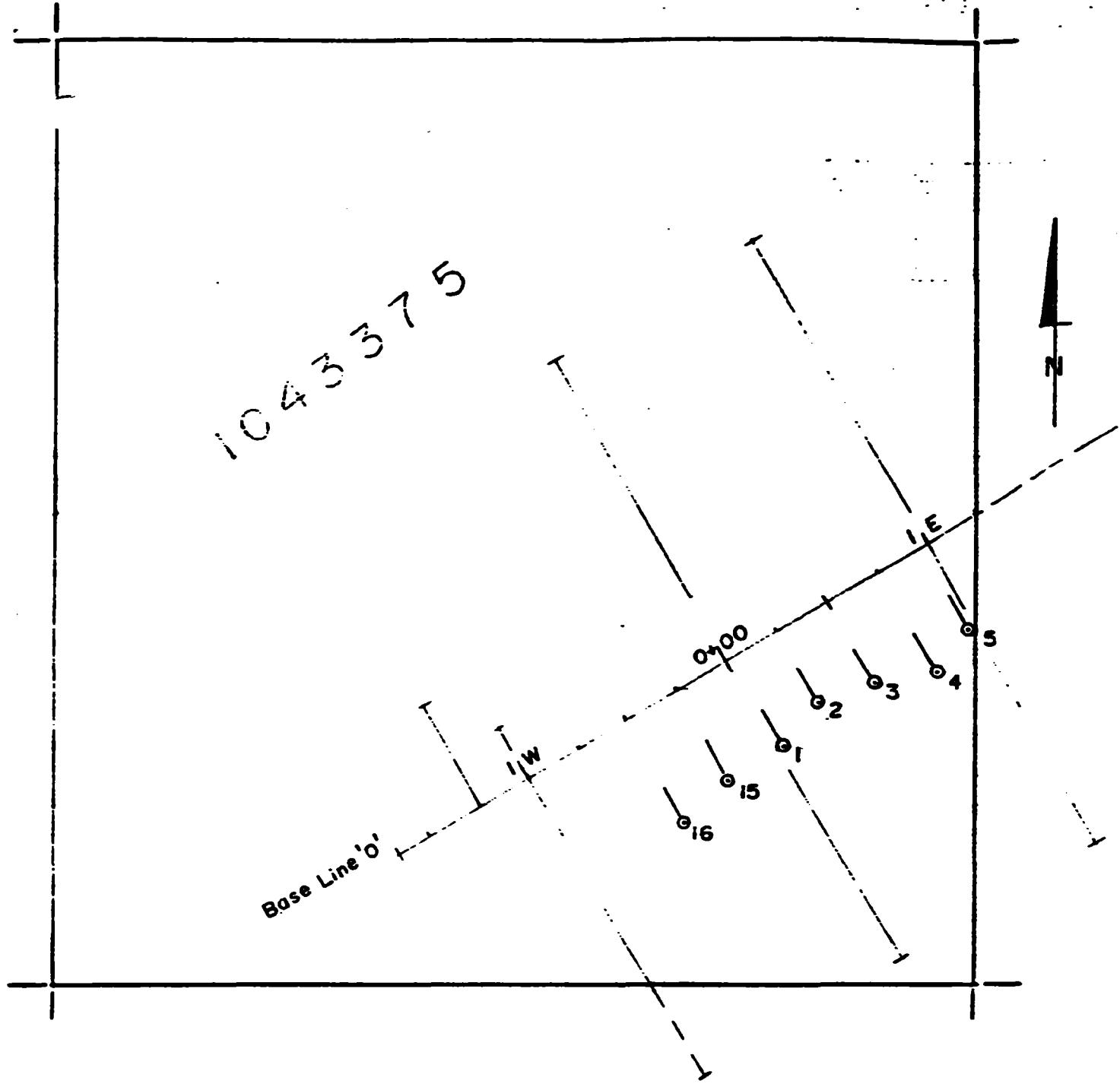
Drawn by:
F. H. Toews B.Sc.

Date: Nov. / 93

Scale - 1:2990

0 50 100m

FIG. 3



NOTE - All holes dip -45° / Azi 330°
numbered ST93-01 to -05 , -15, -16

**EMERALD ISLE RESOURCES INC.
STREET TWP. PROPERTY**

Diamond Drill Hole Location Plan

Claim No. 1043375

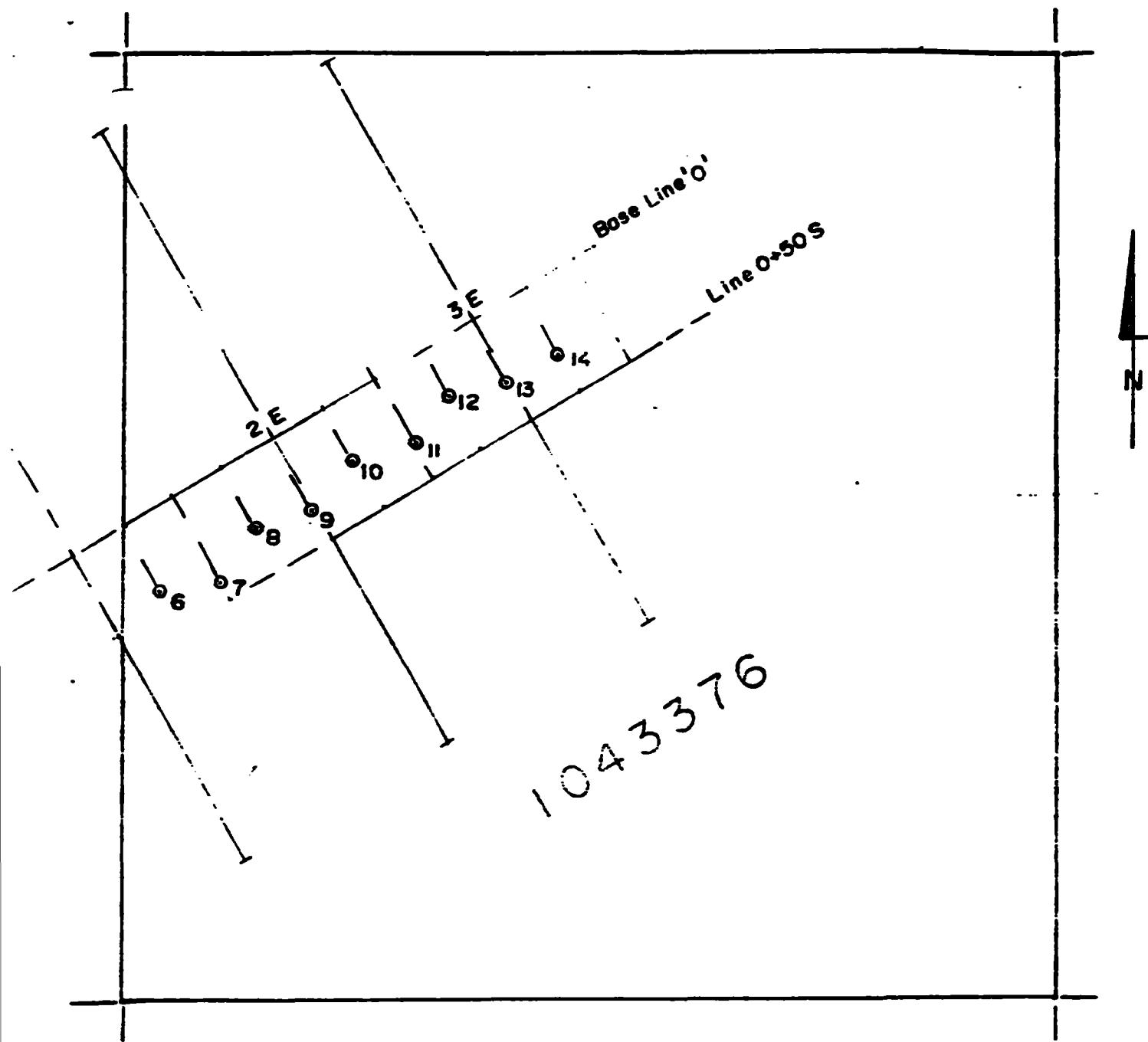
Drawn by:
F.H. Toews B.Sc.

Date: Nov./93

Scale - 1: 2500



FIG. 4



NOTE - All holes dip - 45° / Azimuth 53°
numbered ST 93-06 10 - 14

**EMERALD ISLE RESOURCES INC.
STREET TWP. PROPERTY**

Diamond Drill Hole Location Plan

Claim No. 1043376

Drawn by:
F.H. Toews B.Sc.

Date: Nov./93

0 50 100m

FIG. 5

Emerald Isle Resources / Striatik Resources Joint Venture

B.O.M. LEGEND

GRENVILLE STRUCTURAL PROVINCE

STREET TOWNSHIP
(Claims 1043375 & 1043376)

Topography & elevations are approximate

1 a - Granitic pegmatite dyke
b - Pegmatitic veins &/or lenses
c - Quartz veins &/or lenses

2 a - garnet-plagioclase-quartz gneiss
b - garnet-biotite-plagioclase-quartz gneiss
c - garnet-muscovite-plagioclase-quartz gneiss] GARNET UNIT
d - Muscovite-plagioclase-quartz gneiss/schist] FELSIC
e - Biotite-plagioclase-quartz gneiss/schist] GNEISS

3 - Quartz-plagioclase-hornblende+/-biotite+/-garnet gneiss -MFIC GNEISS

—?— Main Garnet Unit Contact
(relative to core axis, core
foliations &/or surface mapping)

—?— Other contacts
(relative to core axis)

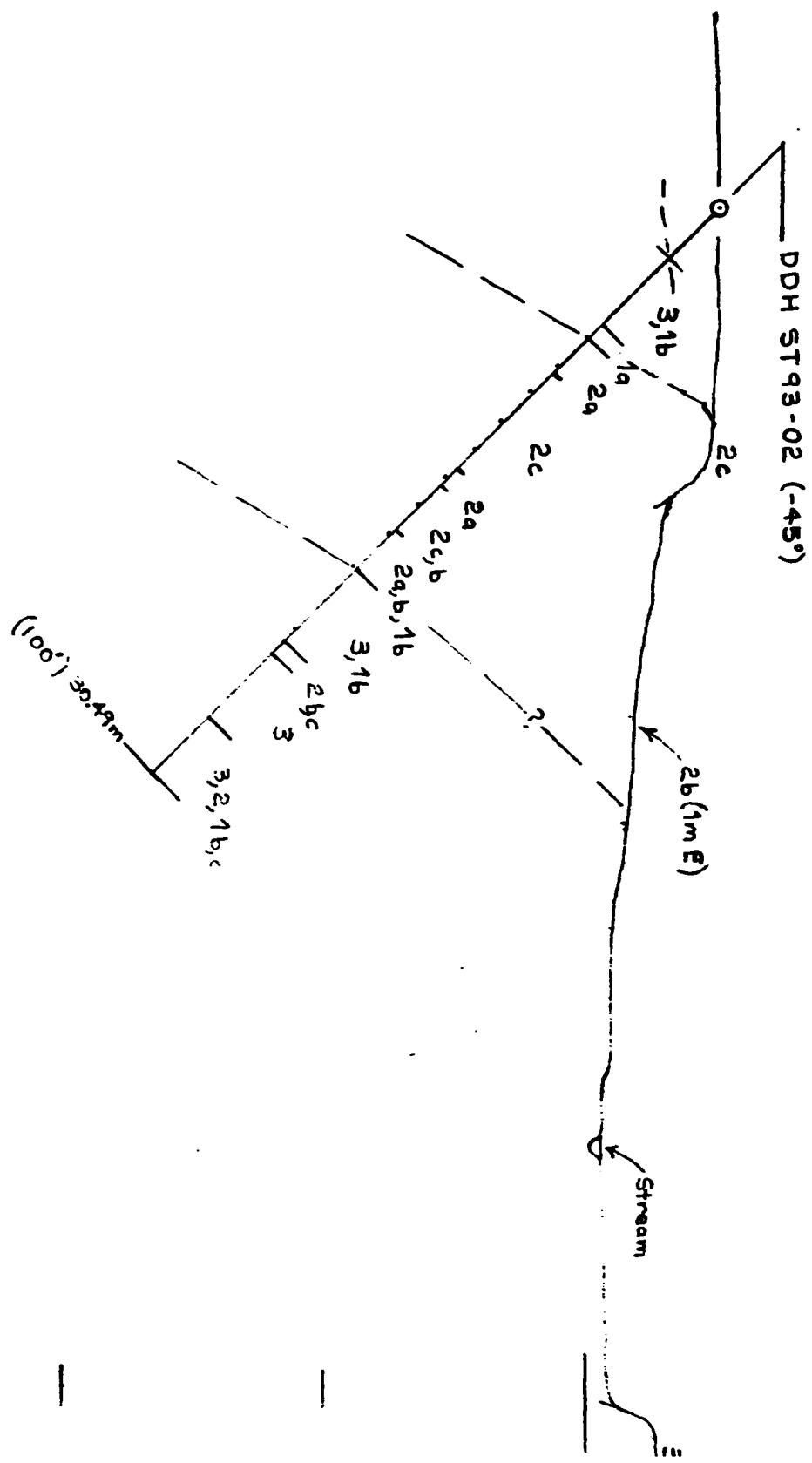
~ ~ ~ Fault
(relative to C.A.)



EMERALD ISLE RESOURCES-
 SIRALAK RESOURCES
 STREET TOWNSHIP PROPERTY

Section 0 + 03m E

Scale - 1 : 250
 0 5m
 FHT Nov/93

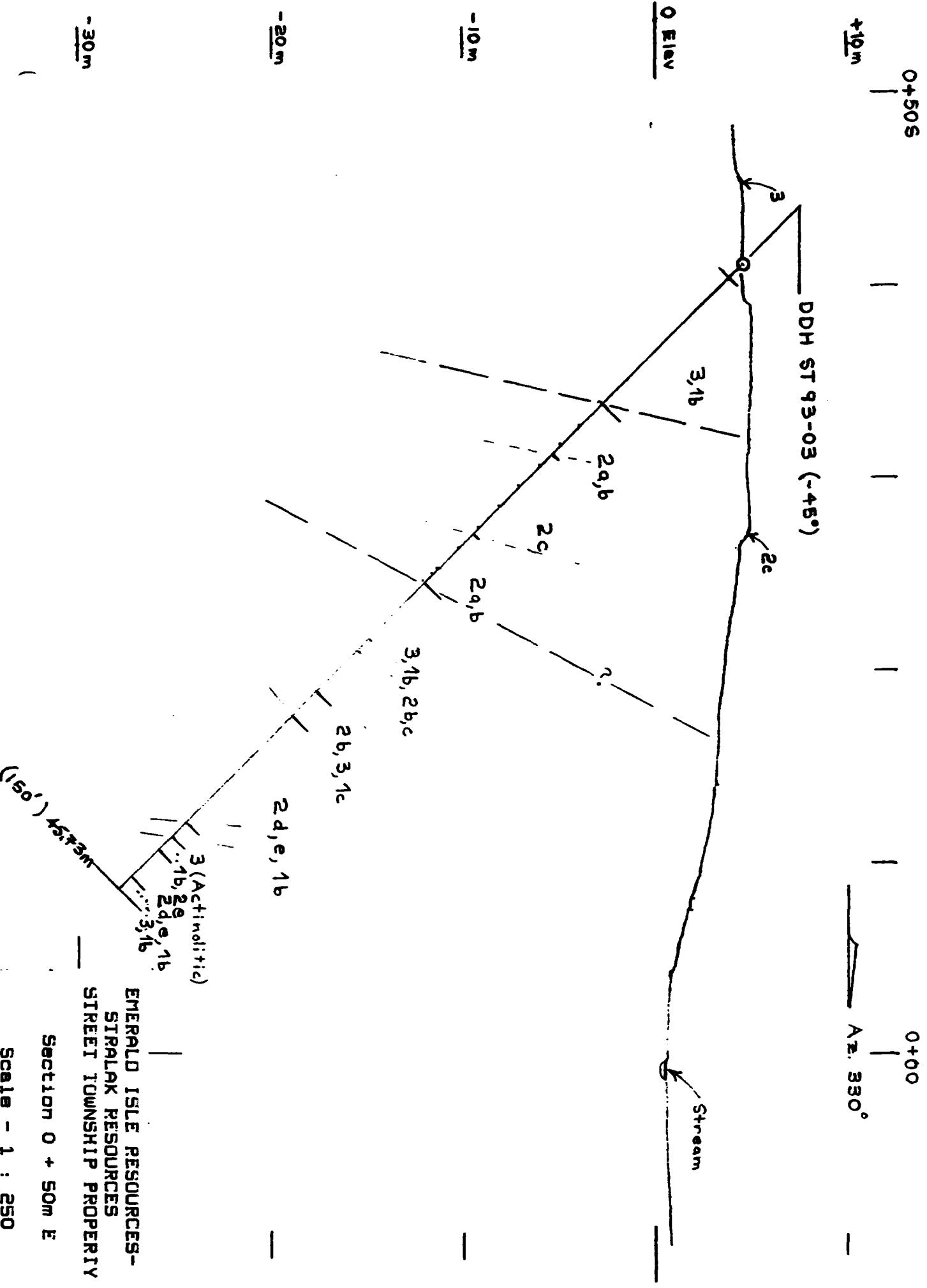


EMERALD ISLE RESOURCES-
 STRALAK RESOURCES
 STREET TOWNSHIP PROPERTY

Section 0 + 25m E

Scale - 1 : 250

0 5m FHT Nov/93



0+50S
+10m

Az. 330°

0+00

DDH ST 93-04 (-45°)

O Elev

Stream

Stream

2c, 1c, 2c, 3, 1b, 2a, b, 1, 3

-10m

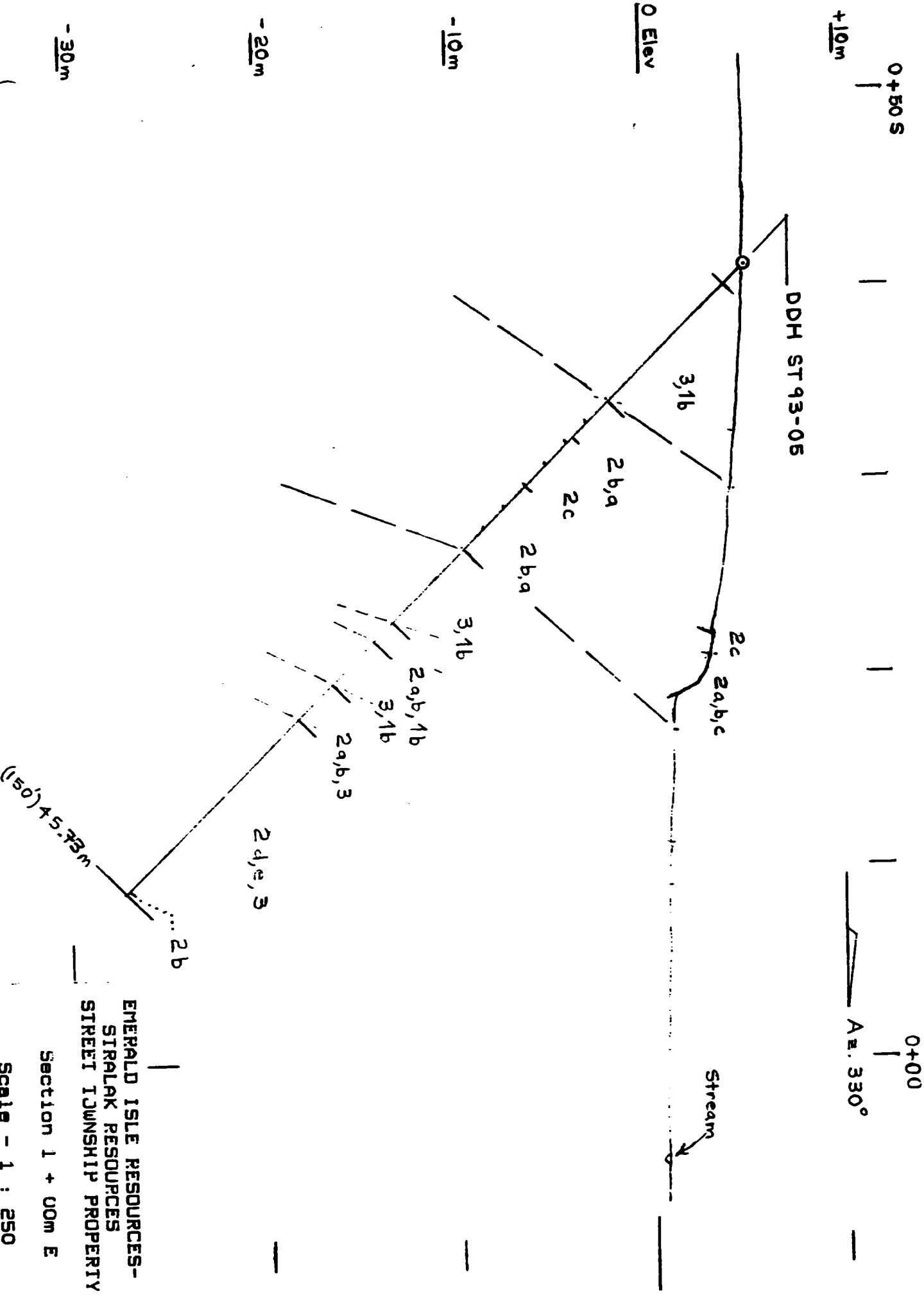
-20m

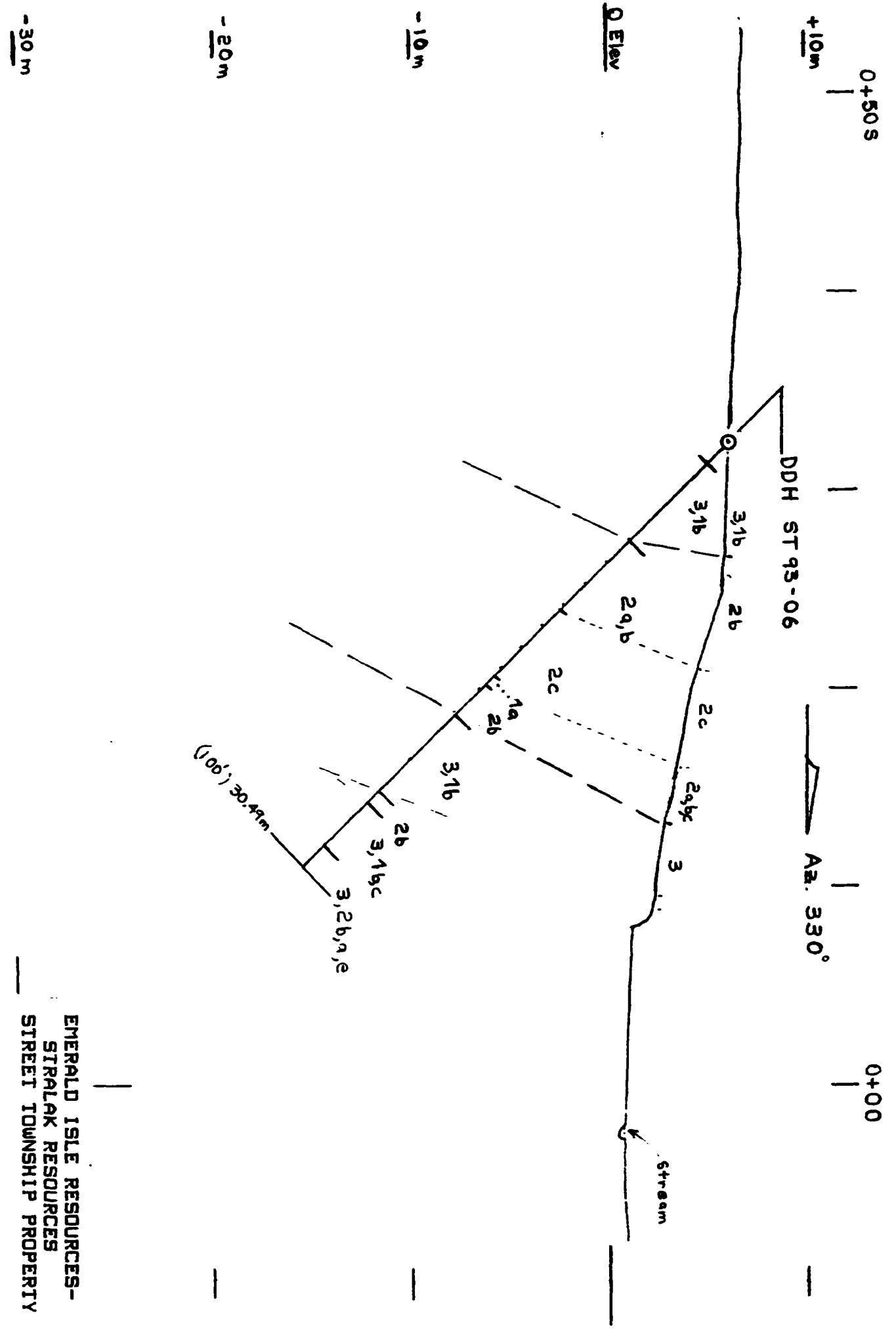
-30m

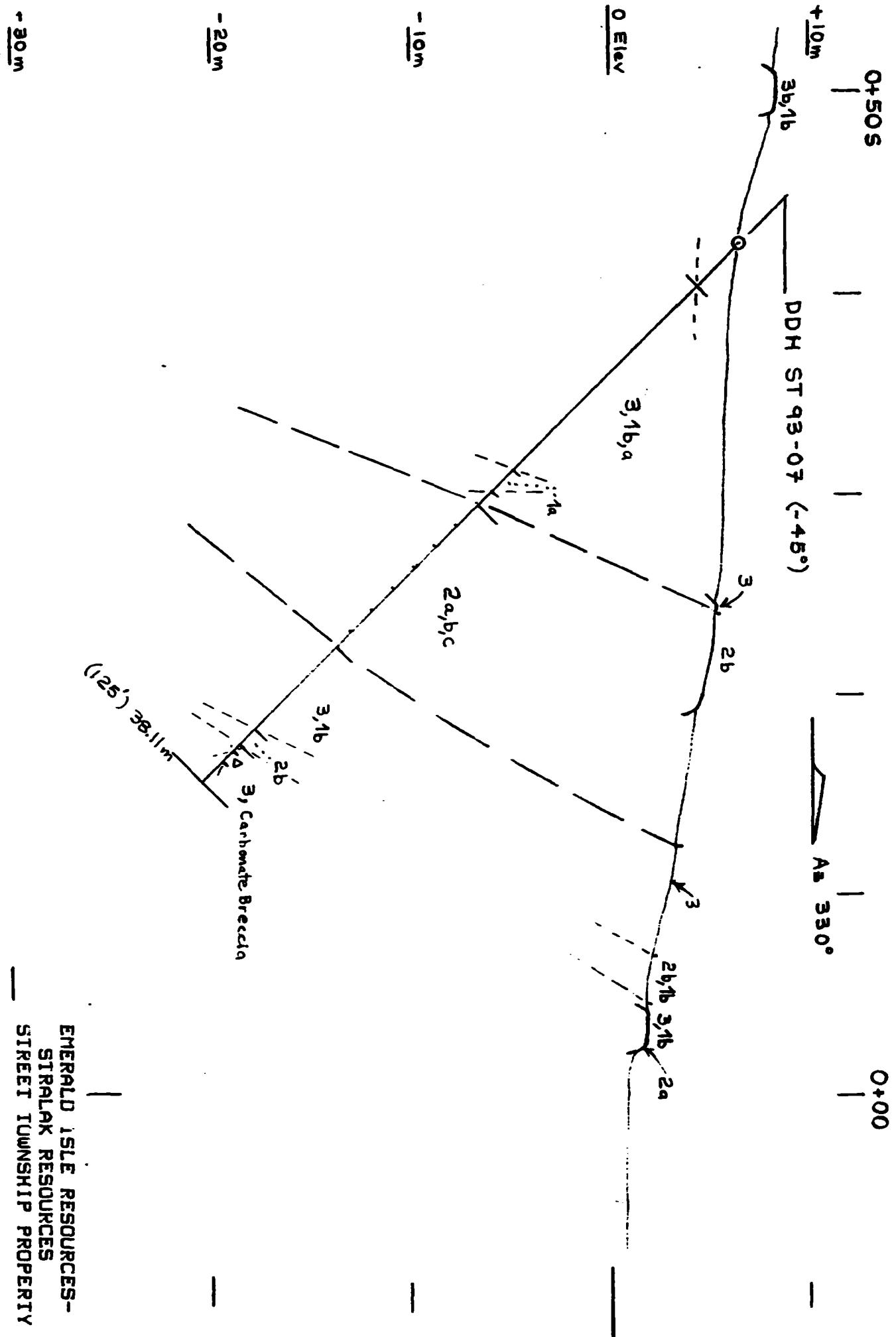
EMERALD ISLE RESOURCES-
STRALAK RESOURCES
STREET TOWNSHIP PROPERTY

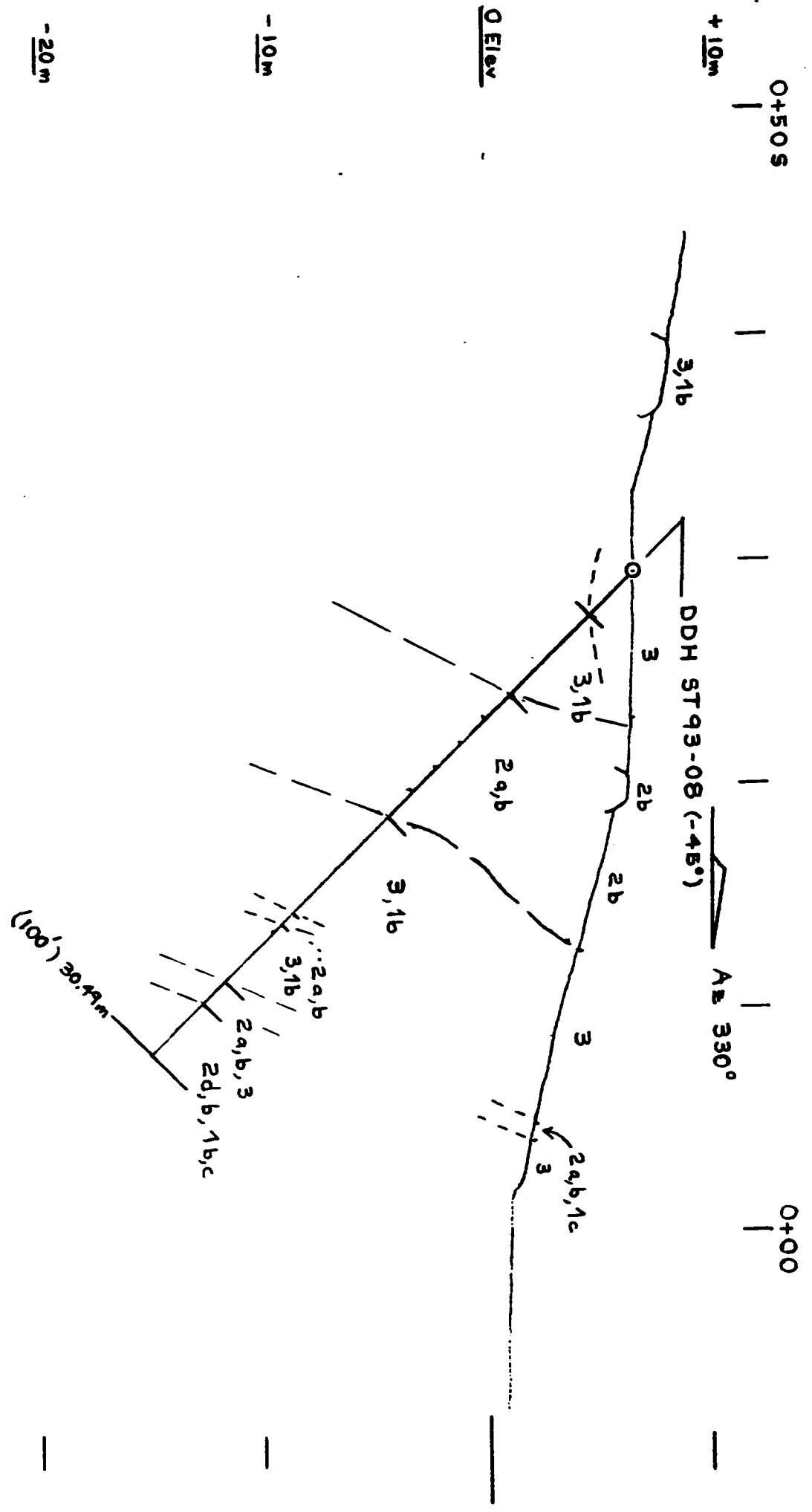
Section 0 + 75m E

Scale - 1 : 250
0 5m FHT Nov/93





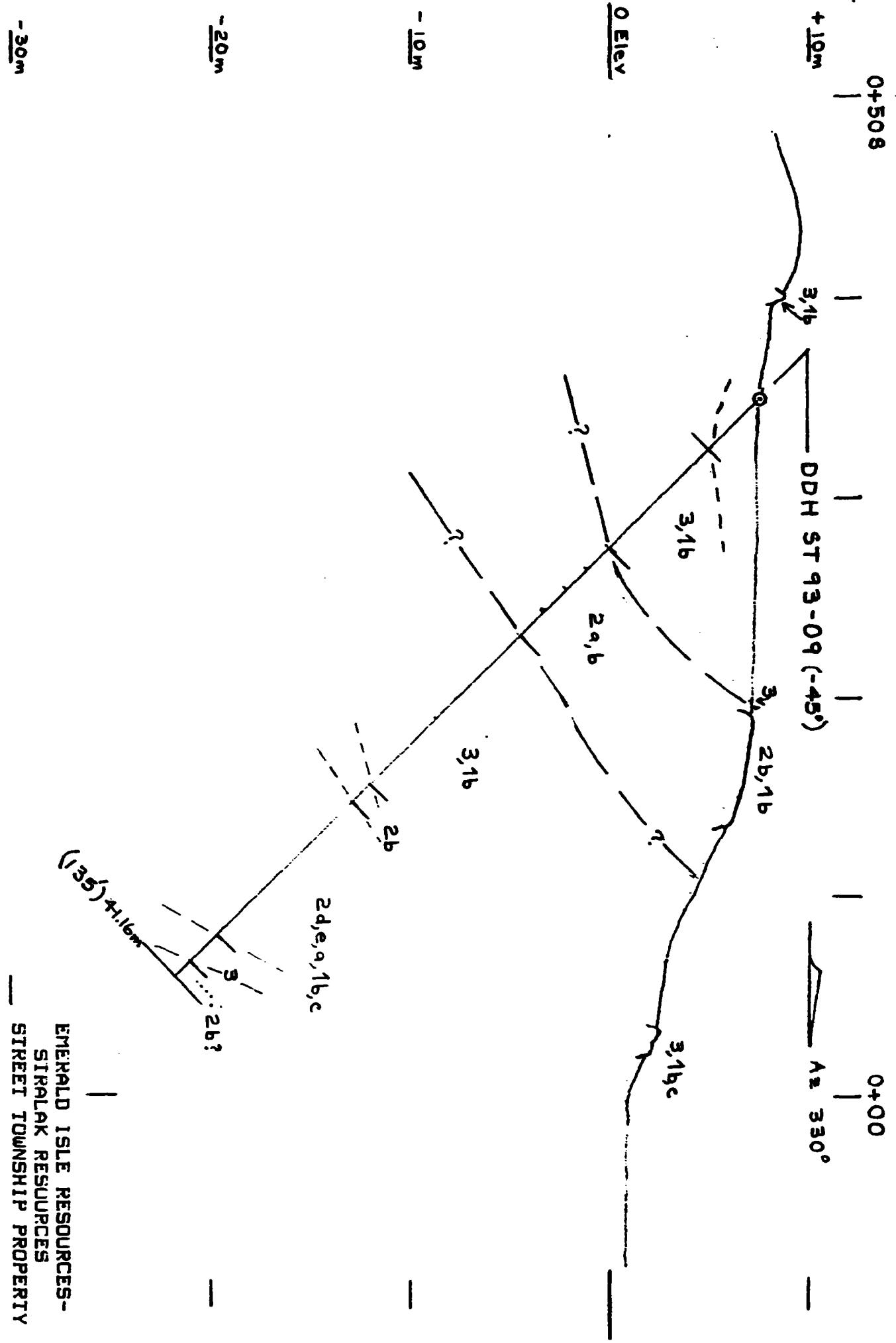




EMERALD ISLE RESOURCES-
 STRALAK RESOURCES
 STREET TOWNSHIP PROPERTY

Section 1 + 75m E

Scale - 1 : 250
 FHT Nov/93



EMERALD ISLE RESOURCES-
STRALAK RESOURCES
STREET TOWNSHIP PROPERTY

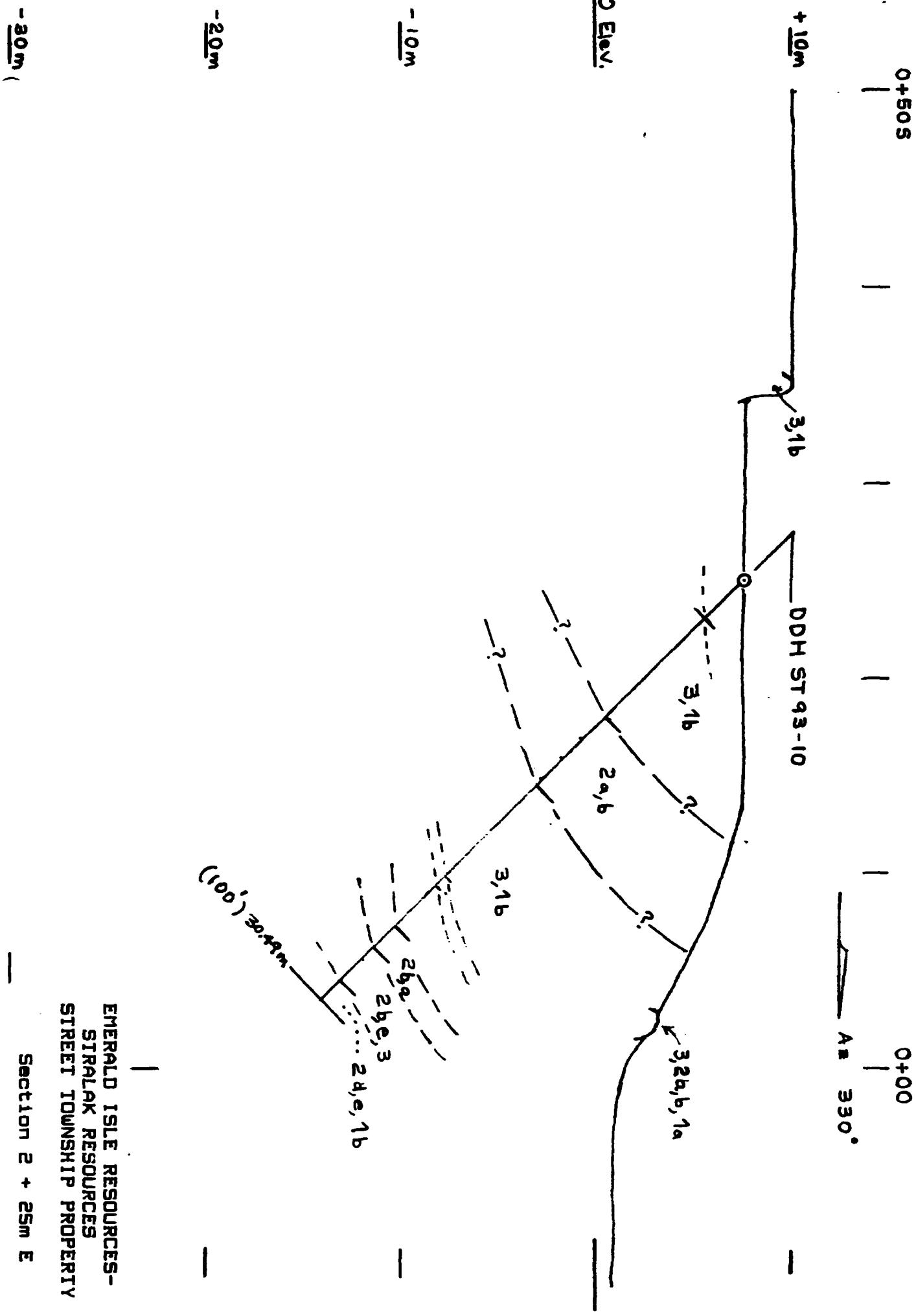
Section 1 + 99m E

Scale - 1 : 250
0 5m FHT Nov/93

-30m

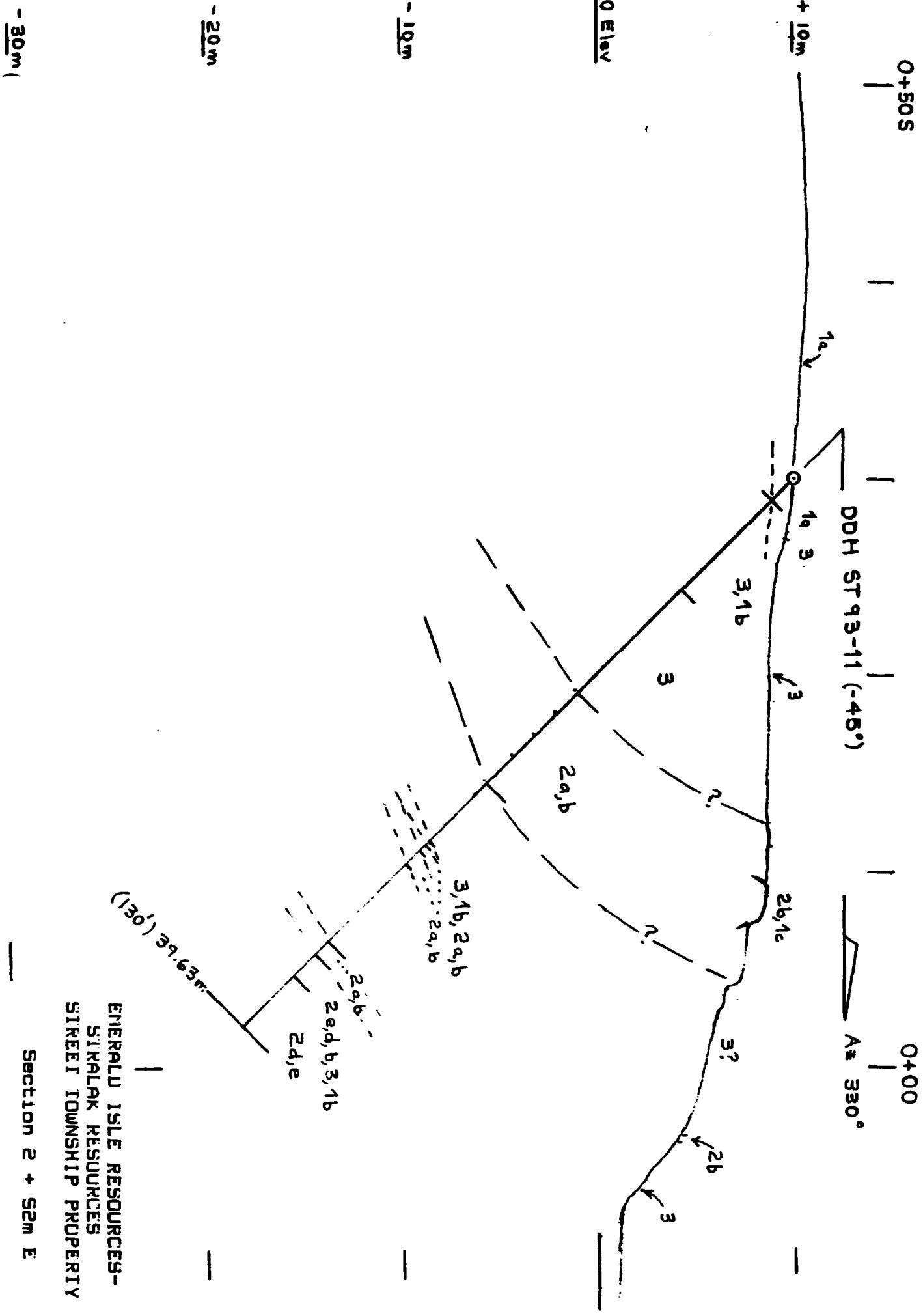
-20m

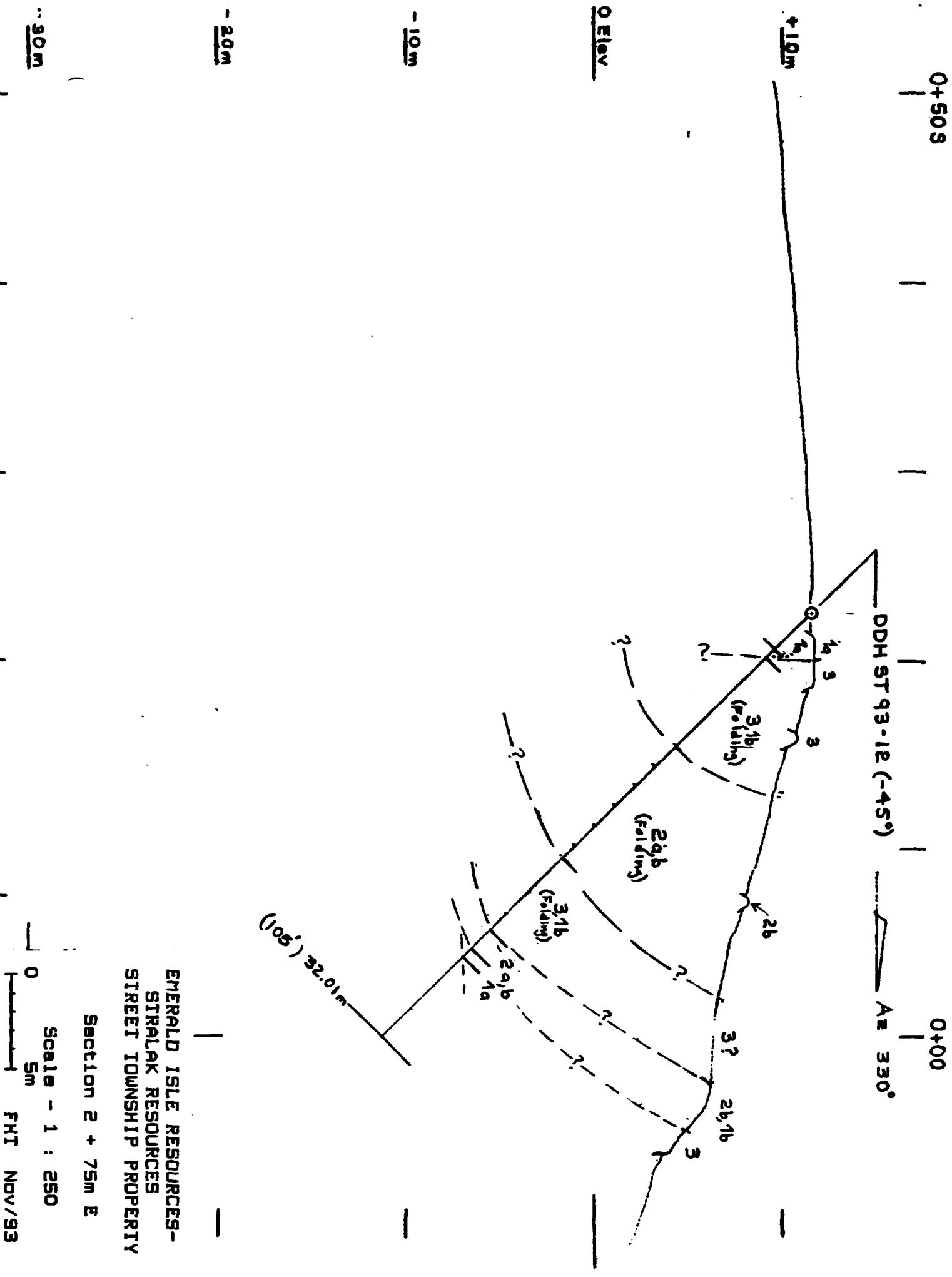
-10m



EMERALD ISLE RESOURCES-
 STRALAK RESOURCES
 STREET TOWNSHIP PROPERTY

Scale - 1 : 250





0+50S

0+00

Az 830°

DDH ST 93-13 (-45°)

+10m

-10m

-20m

O/Elev

(1/2') 38.48 ft
EMERALD ISLE RESOURCES-
STRALAK RESOURCES
STREET TOWNSHIP PROPERTY

Section 3 + 00m E

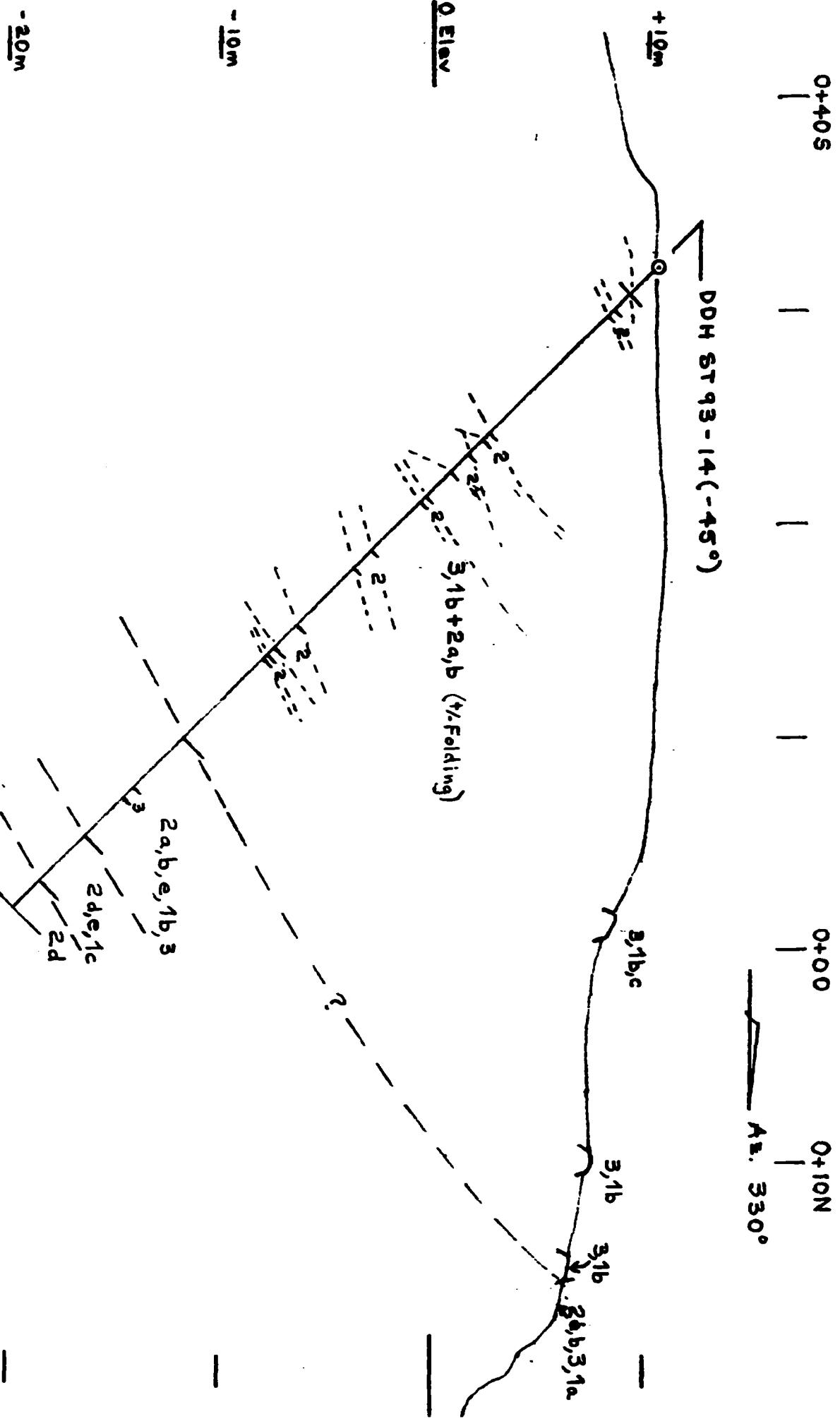
Scale - 1 : 250
0 5m FHT Nov/93

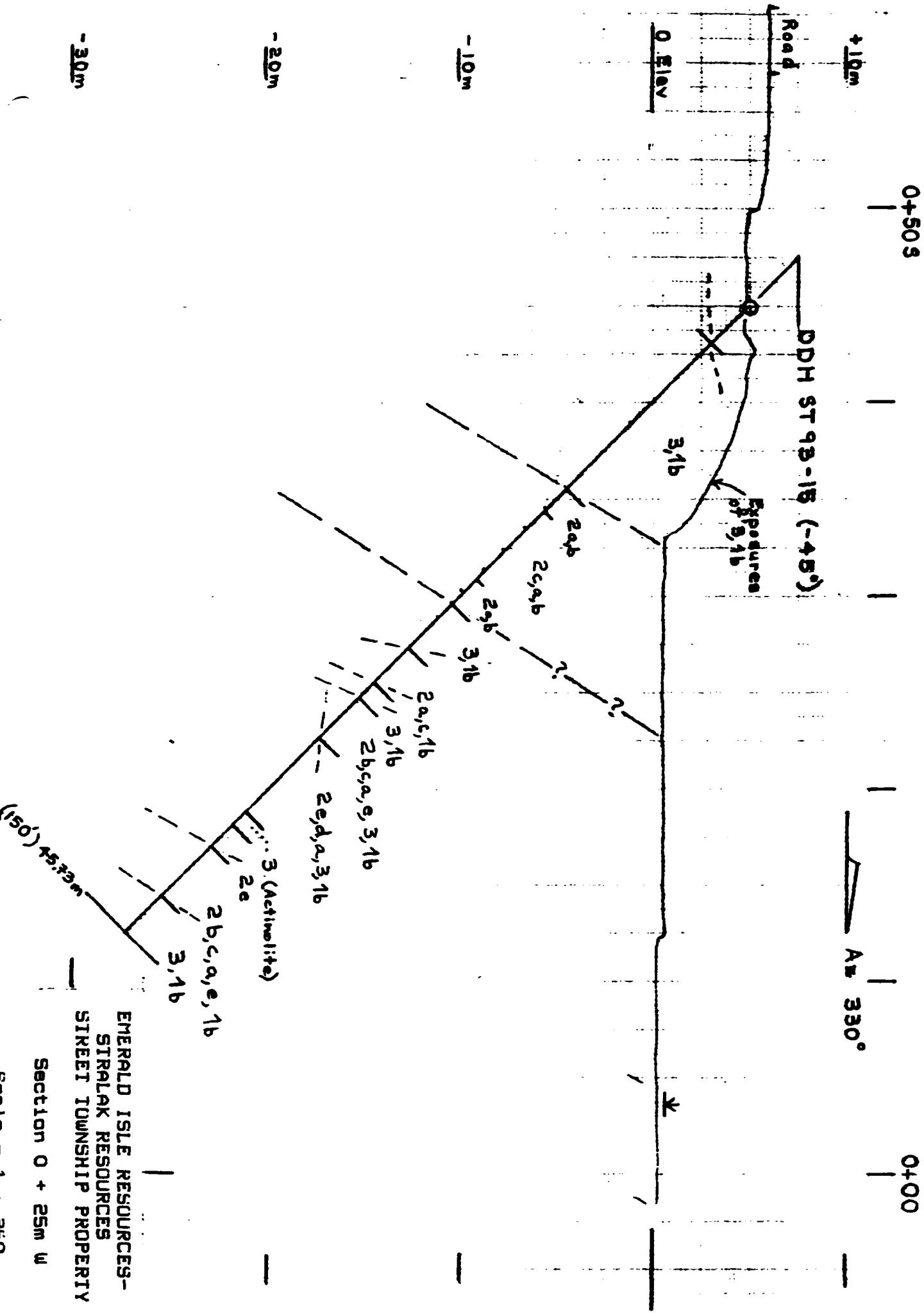
EMERALD ISLE RESOURCES-
STRALAK RESOURCES
STREET TOWNSHIP PROPERTY

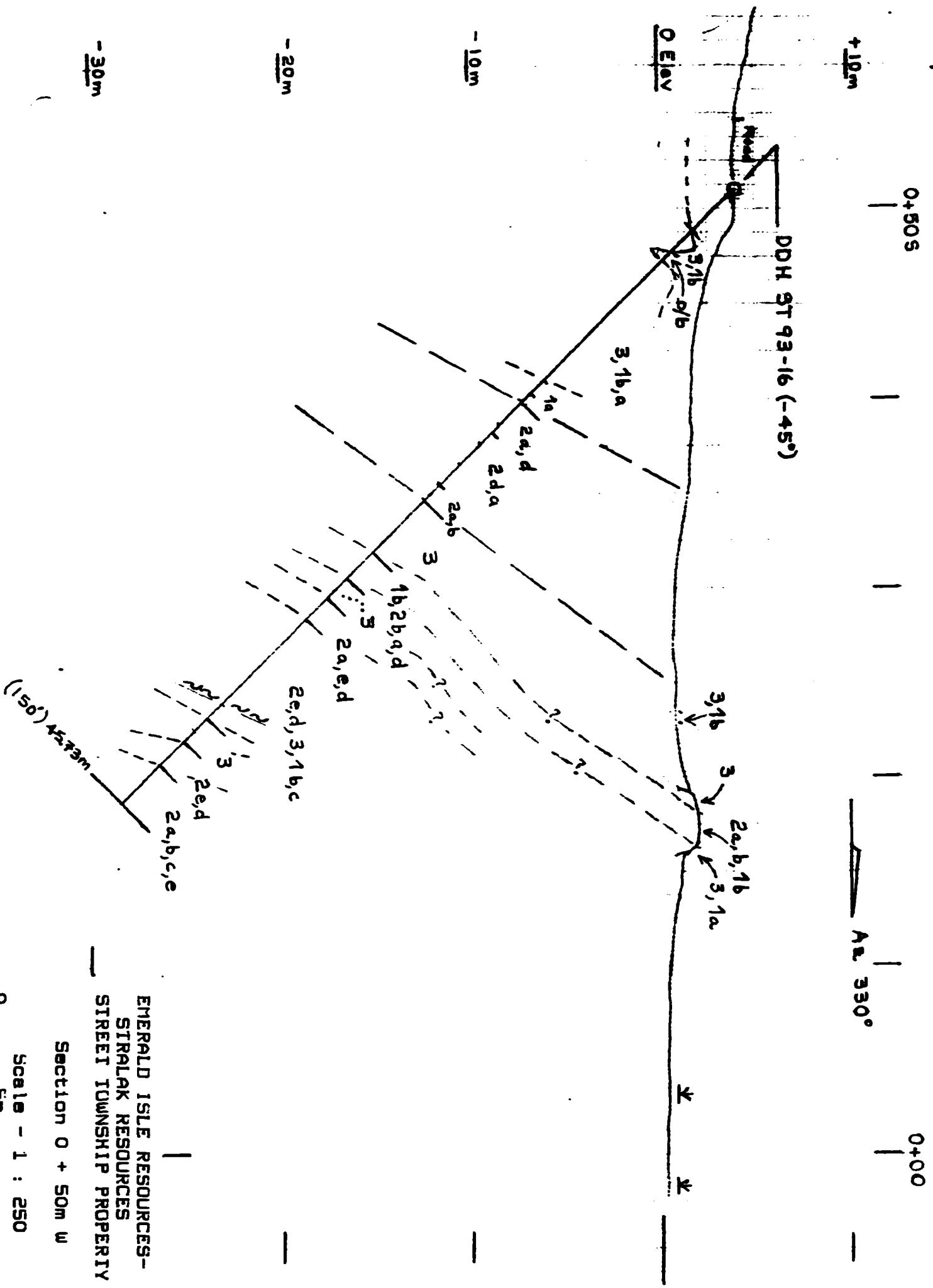
Section 3 + 25m E

Scale - 1 : 250
0 5m FHT Nov/93

(140') 42.68m







DDH.: ST 93-01

DIP: -45°

SIZE: B.Q.

AZIMUTH: 330°

ELEVATION: +5 m

COORDINATES: Line 9+03 m E / 0+44 m S

LOCATION: Claim 1043375, Street Twp., Ontario

COMPANY: Emerald Isle Resources Inc./ Stralak Resources Inc. Joint Venture

DRILLED BY: Erana Mines Ltd., Lively, Ontario

DATE STARTED: Oct. 4/93

DATE FINISHED: Oct. 5/93

FINAL DEPTH: 160' (48.78 m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: -Drilling beneath old pit

-Casing pulled

0 - 13'
(0 - 3.96m)

CASING

13 - 44.3'
(4.57 - 13.51m)

MAFIC GNEISS + PEGMATITE VEINING +/- GARNET

Dark grey to greenish grey to black; medium grained; soft; 50-80% \pm hornblende \pm biotite \pm chlorite, 20-50% felsic minerals, light gray-white feldspar + quartz as veins parallel to foliation; Trace to locally 10% (average 2%) red garnet in association with some biotite; rocks generally foliated at 70-80° to C.M.; 10% \pm white to grey-white medium to very coarse grained pegmatite veining (+-parallel to or 10°-20° from to foliation); pegmatitic material is composed of feldspar + quartz \pm biotite \pm chlorite \pm garnet and sometimes red to grey alteration; Veining varies from < 1 cm. to 0.2 m as and contacts generally S.E. to C.M. IRREGULAR

Garnet found in 13' - 1 cm. in size

13 - 15' Boulders - pieces of metagabbro and some metasediment present

23-24.5' 5-10% garnet

38-40.4' 50% garnet + Garnet

44.3' Contact surface to C.M.

44.3 - 92.4' 50-100% GRANULIFEROUS UNIT (+ MUSCOVITE-RICH PARTS)
(13.51 - 25.12m)

Dark grey to black; granular, very (muscovitic); medium to coarse grained; most massive to foliated at 20-80° to C.M.; felsic minerals to common; rich in central portions of 30-50% muscovite + 5-10% feldspar; 5-15% biotite + muscovite + 10-40% red to grey-green garnet (average 25% \pm 5.1 - 1 cm. rounded irregular blocks). Muscovite-rich areas consist of up to 70% muscovite, some quartz-feldspar contact \pm 0.5-1 cm. and 5-25% (average 20%) rounded to subangular, 0.1-2 cm. red garnet; contacts fractious

-Rhythmite - - - - - 25% \pm

44.3 - 51.5'	Siliceous, massive to foliated +/- biotite 46.3 - 46.7' - pegmatite vein, gradational contacts
51.5 - 73.5' (15.70 - 22.26m)	Muscovite-rich, schist/gneiss; +/- biotite; gradational contacts; several short siliceous sections included in zone
73 - 82.4'	Siliceous, biotitic 73.7 - 74.7' lacy, pegmatitic (?) veining
82.4'	Contact \approx 75-80° to CA.

82.4' - 95.5' MAFIC GNEISS

(25.12 - 29.12m)

Similar to section from 15-44.3'
Foliation \approx 70-80° to CA.
<5% pegmatitic veins, 0.5-3 cm wide, parallel to foliation
Trace to 5% red garnet. average \sim 2%

82.4 - 84.5'	5-2% Garnet
86.8	0.2' wide siliceous garnet band with 60% garnet and 5% pyrope-chalcopyrite rags and veinlets; band \approx 75° to CA.
94.5 - 95.5'	2-10% Garnet; contact somewhat gradational

96.5 - 98.5 "SILICEOUS" GARNETIFEROUS UNIT
(29.12 - 30.12m)

Variable: biotitic -> muscovitic

95.5 - 96.3'	Siliceous, biotitic +/- muscovite; 35-40% garnet
96.3 - 98.5'	Muscovitic +/- biotite; 5% garnet (1-5mm), more biotite & 25% garnet near contact with pegmatite \approx 20-25° to CA.

15.8 - 100.7 PEGMATITE

(30.12 - 30.70m)

White to light green; very coarse grained; 5% biotite-chlorite

100.7' Contact \approx \sim 55-60° to CA.100.7 - 107.4 MAFIC GNEISS - GARNETIFEROUS SECTION
(30.70 - 32.74m)Similar to section from 15-44.3' in general; 5-10%
pegmatitic veins parallel to foliation @ 50-70° to CA.
1-5% red garnets107.3' 5-10% garnets in biotitic mafic gneiss
with foliations @ 60° to CA.

107.4-114' Biotitic + Muscovitic, Garnetiferous Units (+- Siliceous Sections)
(32.74-43.90m)

Medium to light to silvery grey; medium to coarse grained; moderately hard to soft; gneissic to schistose with foliations @ 60-80° to C.A.; <1-5% to locally 20-25%. (average $\leq 5\%$) red garnets 0.2-1 cm in size; Some pegmatitic veining parallel to foliations

107.4-110.8' Biotitic, siliceous, garnetiferous; 5-25% garnet (0.2 to 1-2 cm grains and clots; average 15%) foliation @ 60-70° to C.A.
110.8' 0.1' grey pegmatitic vein @ 60-70° to C.A.

110.8-129.7' Muscovite-rich (+- biotite) schist / gneiss, foliations @ 70-80° to C.A.; few siliceous sections; few pegmatitic veinlets parallel to foliation (some with reddish feldspars); rare to local 2% garnets

122.2' - ≤ 1 cm wide zone of pinkish quartz-carbonate veinlets; brecciate host rocks
126.5-128.8' - 5% garnet in biotitic zone, possible Kyanite present

127.5-129.7' - possible pale bluish grey Kyanite slates present in biotitic-muscovitic section with minor garnet: 1-2% Kyanite

129.7-131.5' 10% red to grey pegmatitic veins
131.5-132.5' Biotitic-muscovite gneiss parallel to foliation @ 70-80° to C.A.

131.5-134.4' Biotitic, siliceous, garnetiferous sections, foliations @ 70-80° to C.A., minor Kyanite

131.7-132.8' - 2-3% garnets (≤ 1 cm)

132.3-134.4' - 15% garnets (0.2-1 cm)

134.4-137.5' Muscovite-biotite schist with siliceous veins; foliations @ 70-80° to C.A.; minor 1-2% garnets (0.2-1 cm in size)

135.7-137.6' 5-10% garnets, locally faceted to 3 cm in size

142.8-143.6' Biotitic-siliceous section with about 15% garnets (0.2-1 cm size); foliation @ 75-80° to C.A.

143.6-144' Biotitic, grey pegmatitic vein +/- biotite (chlorite + garnet veins); over contact

144.2-145' Chlorite + pyrite on an irregular fracture @ 30-45° to C.A.

144-160
(43.0 - 48.78m)

MAFIC GNEISS +/ GARNET

Similar to 15-44.3'; Foliation @ 75-80° to C.A.
minor pegmatitic veining parallel to foliation (mainly);
locally garnetiferous

144-145' 2% garnets (red)

145-145.5' 10% garnets and felsic lenses; garnets ≤ 1cm size

150.6-151.7' ≤ 5% garnets (≤ 0.5 cm)

160' (48.78m)

END

Frank H. Toews, B.Sc

Frank H. Toews

Geologist

D.D.H.: ST 93-02

DIP: -45°

ZF: BQ

COORDINATES: Line 0+25mE / 0+35mS

LOCATION: Claim 1043375, Street Twp., Ontario

p. Lof 3

AZIMUTH: 330°

ELEVATION: +5m

COMPANY: Emerald Isle Resources Inc./Stratek Resources Inc. Joint Venture

DRILLED BY: Eraua Mines Ltd., Lively, Ontario

DATE STARTED: Oct. 6/93

DATE FINISHED: Oct. 6/93

FINAL DEPTH: 100' (30.49m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: - Casing pulled

0 - 9'
(0 - 2.74m)

CASING

9 - 20.6'
(2.74 - 6.28m)

MAFIC GNEISS +/- PEGMATITE

Dark grey to greenish grey-black; soft to moderately soft; 50-70% hornblende (+- K-feldspar + biotite), 20-50% felsic minerals (plagioclase, quartz); trace to locally 2-5% red garnets (<1cm) to lithic fragments; $\pm 0-30^\circ$ to C.A.; 10% grey-white pegmatite veining, <1 cm - 0.3' wide parallel to foliation and some with reddish feldspar alteration, a few with red garnet; a few - rare - ripples $\pm 10-25^\circ$ to CA.

? - 9.5' : Pieces of couloirs

9.8 - 18.5' : Some scattered foliations and grey quartz lenses;

5% red, rounded garnets 0.2-2 cm in size

18.5 - 18.8' : Pegmatite veins +/- biotite +/- garnet, @ about 60° to C.A.

18.8 - 20.6' : 3% lithic, 5% pegmatite patches and veining;

10% garnet

20.6' : Irregular, +/- 1m, garnetiferous contact with pegmatite \pm about 20° to C.A.

20.6 - 23.1'
(6.28 - 7.04m)

PEGMATITE

Grey-green, coarse grained - very coarse grained, quartz-feldspar +/- plagioclase

21.4 - 23.1' : Numerous patches of biotite-garnet veins;

5% garnet

23.1' : Granular contact

23.1 - 64'
(7.04 - 19.51m)

"SILICEOUS" GARNET-FELDSPAR UNIT (+ MUSCOVITE-RICH PART)

Light to medium grey to reddish grey to silvery grey (muscovite); medium to coarse grained; very hard to soft (mica-rich) in central areas of unit; massive to foliated; Siliceous sections contain 50-70% felsic minerals (quartz-feldspar) <1-2% biotite (muscovite) \rightarrow c. 1 mm thick

ctd.

garnets (0.2-2 cm in size), rounded to subhedral
 Muscovite-rich areas contain up to 90% muscovite and
 quartz-feldspar, some biotite and 5-25% garnets;
 Average garnet content ~ 20-25%
 Foliations @ 60-80° to C.A.

23.1 - 29.4' Siliceous, but more biotitic to muscovitic in
 lower parts; minor Pyrite visible
 25-35% rounded grains and patches of garnet
 (locally 2-5%).

29.4 - 46' Muscovite-rich (+/- biotite) schist / gneiss
 (8.96 - 14.02m) with 5-30% garnet (average ~ 15-20%)
 38.1' - locally, bright green mica

46-49' Siliceous, 2-3% muscovite, 2-3% garnet
 (0.2-0.5 cm); contacts @ ~ 60° to C.A.;
 minor Pyrite visible

49-57' Muscovite-rich (+/- biotite) schist / gneiss;
 (14.94 - 17.38m) 15% garnet on average. (0.2-1 cm)

57-64' Biotitic, more siliceous, ~ 20% garnet (0.2-1.5cm)
 59.6 - 59.9' - a reddish to grey pegmatite
 vein @ 50-60° to C.A.,
 64' - Pegmatitic veinlets @ 75% in contact area

64 - 76.5' MAFIC GNEISS
 (19.51 - 23.32m)

Similar to 9-20.6' section; foliation @ 75-80° to C.A.
 locally biotitic; 5% reddish to grey pegmatite-pegmatitic
 veining (0.5cm-0.3'), more or less parallel to foliation;
 Trace to 5% red garnets

72 - 72.3' Pegmatite vein

72.3 - 72.8' 15% garnet

74.6 - 76.5' Average 5% garnet; few grey pegmatitic
 patches; some biotite present

76.5 - 79' "SILICEOUS" GARNETIFEROUS UNIT
 (23.32 - 24.09m)

76.5 - 78.5' 35% red garnet; biotitic to muscovitic
 from 77.5 to 79'

79 - 90.2' MAFIC GNEISS
 (24.09 - 27.50m)

Similar to 9-20.6' section; Trace to locally 5%
 garnet; foliations @ 60-80° to C.A.; < 10% pegmatite
 veining, some with red feldspar, some with garnets

90.2-100' (27. 30.49m)	MAFIC GNEISS (BIOTITIC TO MUSCOVITIC) - PARTLY GARNETIFEROUS Dark to medium grey, more massive to foliated @ 70-80° to C.A.; moderately hard to moderately soft; ~5% grey quartz and pegmatitic veining or lenses
90.2-93.5'	Biotitic; 5-20% garnet (red) 0.1-1cm size; average 10-15% garnet
93.5-98.8'	Muscovitic, minor Pyrite
98.8-100.0	Biotitic-muscovitic; ~15% garnet

100'
(30.49m)

END

Frank H. Toews, B.Sc.

Frank H. Toews

Geologist

DRH.: ST.93-03

p.1 of 4

DIP: -45°

AZIMUTH: 330°

SIZE: BQ

ELEVATION: ~ +4.5m

COORDINATES: Line 0+50mE / 0+41mS

LOCATION: Claim 1043375, Street Twp., Ontario

COMPANY: Emerald Isle Resources Inc. / Stratek Resources Inc. Joint Venture

DRILLED BY: Erana Mines Ltd, Lively, Ontario

DATE STARTED: October 7/93

DATE FINISHED: October 7/93

FINAL DEPTH: 150' (45.73m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: - Casing pulled

- Collected West of swampy area

0-3'
(0-0.91m)

CASING

3-33.4'
(0.91-10.18m)

MAFIC GNEISS +/- PEGMATITE +/- GARNET

Dark grey to greenish grey; moderately hard to soft;
 50-80% mafic minerals (hornblende + biotite), 20-50%
 felsic minerals (plagioclase-quartz); Trace to 5% red garnets
 (0.2-3 cm size); foliation @ 65-75° to C.A. mainly;
 5% grey-white pegmatite-pegmatitic veining (+-red feldspar
 alteration +/- biotite +/- garnet) more or less parallel to foliation
 and <1 cm to 3.8' wide

7.6-10'

50% pegmatite veining

11.6-12.8'

75% siliceous bands, 0.2-0.4' wide, parallel
to foliation @ 65-75° to C.A., with about 10-15%
red garnet

18.7-29.5'

2-15% (average <5%) rounded to irregular
red garnet blobs and patches <1-3 cm in size
some associated with more felsic patches, lenses
+/- biotite

29.5-32'

Soft, chlorite-c? massive to schistose, +/- biotite
foliation @ 75 to 55-60° to C.A.

32'

0.2' grey-white quartz vein with contacts @ 30°
and 55° to C.A. parallel to foliation

32.7-33.4'

Some garniferous, siliceous bands @ 55 to 45°
to C.A.; 2-3% garnet

33.4'

Contact @ ~45° to C.A.

33.4-76.4' "SILICEOUS" GARNETIFEROUS UNIT (BIOTITIC TO MUSCOVITIC)
(10.18-23.29m)

Medium grey to reddish grey to silvery grey (muscovitic),
 to intercalated locally more massive with foliation @ 60-80°
 to C.A.; moderately hard to soft (mica-rich);
 average ~20% garnets, 0.2-2 cm in size

33.4 - 46'	More siliceous, biotitic to increasingly muscovitic; foliation @ 50-60° to weakly foliated; 10-50% red garnets (0.2-2 cm, average 0.7 cm size) averaging about 25%.
46 - 65'	Muscovite-rich (+ biotite), schistose to more massive, foliation @ 55-65° to C.A. 5-20% red garnets (0.2-1 cm); average 0.5 cm size, averaging ~ 10-15% garnet
65 - 76.4'	Biotitic (+ muscovite), more siliceous, foliation @ 65-80° to C.A.; 10-25% red garnet (0.2-1 cm, average 0.5 cm size) averaging ~ 15-20% garnet
76.4'	Contact @ about 70-75° to C.A.

76.4-102.8' MAFIC GNEISS + "SILICEOUS" GARNETIFEROUS ZONE (23.29 - 31.34 m)

Similar to section from 3-33.4', < 1-5% red garnets Foliation @ 80-65° to C.A. (mainly 75-80°) < 5% pegmatitic veining & lenses 1cm-0.1' wide, parallel to foliations Epidote veinlet < 1 cm wide @ 40° to C.A. with Pyrite blebs in & nearby	
76.4-77.9' 5-10% garnets	
80-80.5' 5% garnets	
89.5-90' 5% garnets	
90 - 93' (27.44-28.35 m)	Siliceous, garnetiferous unit; biotitic to muscovitic; (very siliceous, light grey between joints? 1.6-2.4"); 2-20% garnet (average 5-10%)
93-93.4'	Pegmatitic vein, 50% red feldspars; curved, biotitic, cleared contact @ ~ 15-10° and 20° to C.A. broken core
96-102'	Red altered feldspars in gneiss and pegmatitic veinlets

102.8-108.9' BIOTITIC GARNETIFEROUS ZONE (#MAFIC GNEISS) (31.34 - 33.20 m)

Dark grey; moderately hard to softer; 10-50% mafic minerals; 5-20% red garnets, 0.2-1 cm in size (average 10%+ garnets); parts more siliceous; foliated to massive with foliations @ about 80° to C.A.; minor pegmatite veinlets
Contacts @ 75-80° to C.A.

108.5-108.9' Milky quartz vein with some biotite shreds, contacts @ 75° and 85° to C.A.

ST 93-03

108.2 - 134.6'	MUSCOVITIC, FELSIC GNEISS / SCHIST (\pm GARNET). (33.2 - 41.0m)
	Variable; dark to light greys, fine to medium grained; very hard to soft; siliceous sections; some biotitic parts; local blades of Kyanite in places; occasional quartz; some pegmatite veins parallel to foliations & banding which vary from $65-85^\circ$ to C.A. (mainly $70-80^\circ$); schistose parts are mica-rich; generally only minor red garnets present locally.
112 - 115.7'	Dark grey, muscovitic to biotitic; 1 to 10% (locally) garnet; some kyanite
113.7'	0.1' milky quartz vein @ $85-90^\circ$ to C.A.
115.7 - 117.2'	25% pegmatite veins with reddish feldspar alteration; veins $\leq 0.2'$ wide @ $65-80^\circ$ to 45° to C.A. parallel to foliations in muscovite-rich schist
120.8 - 131.6'	Mainly very hard, light greys, siliceous, banded to foliated, muscovitic (\pm biotite \pm chlorite) gneissic to schistose; foliations $55-80^\circ$ (mainly $70-80^\circ$ to C.A.)
128 - 130'	Some patchy to spotted, red feldspar alteration in siliceous zone
133.8 - 134.6'	Partly biotitic, 1-2% red garnet; minor Kyanite, biotite schist bands near contact @ 50° to C.A.
134.6 - 137.8'	ACTINOLITIC ZONE (ULTRAMAFIC? DYKE / SILL)
(41.04 - 42.01m)	Dark to medium green, medium grained, very soft, schistosel to more massive with foliations mainly parallel to sub-parallel contacts @ $50-60^\circ$ to C.A.; 10-15% brown biotite; (similar to ST 93-15, 121.4 - 124.1')
137.8 - 141'	PEGMATITIC-SILICIFIED, GNESSIC ZONE
(42.01 - 42.99m)	(42.01 - 42.99m)
	Light grey with 20% (+) biotitic patches, bands and slivers; some pink feldspar alteration; foliations @ $35-60^\circ$ to C.A.
137.8 - 138.1'	Biotitic schist, some Kyanite; foliation @ 55° to 35° to C.A.
141'	Gradational contact; foliations @ $\sim 60^\circ$ to C.A.
141 - 147.6'	MUSCOVITIC-BIOTITIC GNEISS (\pm SILICIFICATION)
(42.99 - 45.0m)	Light to medium to dark greys; moderately hard to hard; foliations @ $50-80^\circ$ to C.A. (mainly); few pegmatitic veins
147.6'	Vague contact

147.6-150' MAFIC GNEISS ('GARNETIFEROUS')
(45.0 - 45.73m)

Medium to dark greenish grey 40-60% mafic minerals
(hornblende & biotite); 1-15% red garnets 0.2-2cm
in size; white pegmatitic veinlets and lenses parallel to
foliation @ 70-80° to C.A.; occasionally with red
feldspars

147.8-1485' ~15% garnets

150'
(45.73m)

END

Frank H. Toews, B.Sc.

Frank H. Toews

Geologist

D.D.H.: ST 93-04

DIP: -45°

SIZE: BQ

COORDINATES: Line 0+75mE / 0+425mS

LOCATION: Claim 1043375, Street Twp., Ontario

AZIMUTH: 330°

ELEVATION: ~ +2 m

COMPANY: Emerald Isle Resources Inc./Stralak Resources Inc. Joint Venture

DRILLED BY: Erana Mines Ltd., Lively, Ontario

DATE STARTED: Nov. 1/93

FINAL DEPTH: 150' (45.73 m)

LOGGED BY: Frank H. Poews, B.Sc.

REMARKS: - Casing pulled

- Collared on east side of swampy area (new road crosses over)

0-10'
(0-3.05m)

CASING

10-54.4'
(3.05-16.59m)

MAFIC GNEISS + PEGMATITE +/- GARNET

Dark grey to greenish grey, medium to coarse grained; hard to soft. 40-60% mafic minerals (Hornblende +/- Biotite), 40-60% felsic minerals (feldspar-quartz). Trace to 10% red garnet (0.1-2 cm size); foliation @ 60-80° to C.A.; Traces Pyrite; 15% (+) grey-white (+-reddish) pegmatite veining > 1 cm - 2' wide, more or less parallel to foliations; some red feldspar interc. spots, patches, veinlets.

11-14' | 25% pegmatite-pegmatitic veining @ 60-75° to C.A.
Pegmatite dyke @ 60-65° to C.A.

16.6-18.6' | Some folding below pegmatite vein

24.3' | Dull red hematitic, pitted fractures @ ~50° to fl.

27.8' | Cross-cut foliation @ ~65-70° to C.R.

28-47' | 2% garnets (< 1 cm size); more biotitic

47-54.4' | < 5% to locally 10% garnets 0.3-3 cm in size; rocks more biotitic; scattered pegmatite veins ≤ 0.2' wide @ 60-80°

52.7' - 0.6' pegmatite @ 60° to C.A.

54.4' | Contact @ 60-65° to C.A.

54.4-79.5' "SILICEOUS" GARNET-FEUDITE UNIT
(16.59-30.34m)

Medium to light grey to silvery grey (more muscovitic); medium to coarse grained; gneissic to more massive to schistose with to talcitic @ 60-70° to C.A.; more muscovite schist. Garnet to talcitic @ 60-70° to C.A.; more muscovite schist. Centres: garnets; 5-50% red to purplish garnets (average 0.2-2 cm in size, 20-30 mm apart), elongate to more patches; garnet-rich parts with up to 25-30% dark to pale muscovite-rich portions with up to 90% muscovite felsics (quartz-talc-spar); locally Kyanite visible present; rocks very hard to soft (mica-rich).

54.4 - 655'	Biotitic becoming muscovitic; siliceous parts; 5-35% garnets (average 15-25%).
65.5 - 865' (19.97-26.37m)	Mainly muscovitic; 5-35% garnet (average 15-20%). 73-74" - siliceous, biotitic; 1-2% bluish grey Kyanite 74-86.5' - muscovite-rich, schistose. (Occasional bright green mica in section.)
86.5 - 88.7' (26.37-27.04m)	Very siliceous; weakly gneissic; 40% (?) garnet
88.7 - 99.5'	Biotitic (+ muscovite); siliceous; 15-25% garnets; occasional Kyanite; foliations mainly 70-80° to C.A. 90.5-91.8' two chlorite and carbonate fractures @ 10-15° to C.A. 98.7' - Chlorite slip @ 35° to C.A. cross-cuts foliation 99.5' - Contact @ ~70° to C.A.

99.5-113.5' MAFIC GNEISS
(30.34 - 34.60m)

Similar to Section from 10 - 54.4'; 5% pegmatite-pegmatitic veins parallel to foliations @ 65-75° to C.A.; reddish feldspar alteration in gneiss and in pegmatite; veining < 1cm to 0.3' wide; Trace-3% red garnets 0.1-1cm in size (locally 5%)
108.8
Two dia. red leucitic fractures + carbonate @ 50° & 35° to C.A.
113.5'
Contact @ about 75-80° to C.A.

113.5-119.8' "SILICEOUS" GARNETIFEROUS UNIT
(34.60 - 36.52m)

Biotitic (+ muscovite); foliated to more massive @ 65-75° to C.A.; 5-60% red garnets, grains to rounded patches 0.1-2cm in size (average 0.5cm); average 20-25% garnet; 5% garnet near up-hole contact
119.8'
Contact @ 35° to C.A.

119.8-127.3' MAFIC GNEISS
(36.52 - 38.81m)

Similar to section from 10.5-113.5'; foliation @ 65-75° to C.A.; Trace to none; 10% red garnets (some in pegmatite veins) 0.1-0.7cm in size; average 2% garnets
120.6'
0.5' pegmatite vein (+ biotite + garnet)
121.3'
Chlorite-carbonate fracture @ 15° to C.A.
126.7-127.3'
5-10% garnets
127.3'
Contact @ about 70° (?) to C.A.

12' - 134.6' "SILICEOUS" GARNETIFEROUS UNIT
(38.81 - 41.04m)

Biotitic; foliated to more siliceous and massive, with foliations @ 65-75° to C.A.; section of garnetiferous Mafic gneiss; 5-30% red garnets 0.1-1.5 cm. in size (average 15-20% garnets, 0.5 cm. size)

137.9 - 133' Mafic gneiss, 5% garnet

134.6 - 148.4' MUSCOVITIC, FELSIC GNEISS / SCHIST
(41.04 - 45.24m)

Light to medium to silvery grey; parts siliceous; medium to coarser grained; locally biotitic; parts garnetiferous; often muscovite-rich (up to 90%) but parts biotitic; locally Pyrite swarms in foliation planes; foliations @ 55-80° to C.A. but mainly 70-80° to C.A.; rocks moderately soft to moderately hard, locally very hard.; occasional pegmatite and quartz vein parallel to foliations.

134.6 - 136' Biotitic; minor garnet

136.6 - 137' 50% milky quartz veins @ 75-80°, parallel to foliation

138.8' 0.1' pegmatite vein with red alteration in feldspar

139.3 - 139.7' Siliceous, pinkish alteration veinlets @ 5-10° to C.A.

141.4' Quartz vein - 1-2 cm wide @ 75-80° to C.A.

142 - 148.3' 1-5% red garnets (average <2%) in muscovite-rich schist; foliations 60-65° mainly
148-148.3' - 1-5% Kyanite; partly biotitic
148.3' - Contact @ ~ 65° to C.A.

148.3 - 150' "SILICEOUS" GARNETIFEROUS UNIT
(45.24 - 45.73m)

Biotitic; ≤ 20% red garnets, 0.2-1 cm in size
foliation weak @ ~ 70° to C.A.

150'
(45.73m)

END

Frank H. Toews, B.Sc.
Frank H. Toews
Geologist

DDH: ST 93-05

DIP: -45°

SI E: BQ

COORDINATES: Line 1+00 E / 0+41 m S

LOCATION: Claim 104 3375, Street Twp., Ontario

P. 1 of 4

AZIMUTH: 330°

ELEVATION: ~ + 5.25m

COMPANY: Emerald Isle Resources Inc./Stratok Resources Inc. Joint Venture

DRILLED BY: Erana Mines Ltd., Lively, Ontario

DATE STARTED: Nov. 2/93 DATE FINISHED: Nov. 4/93

FINAL DEPTH: 150' (45.73m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS:- Casing pulled

0-5' | CASING
(0-1.52m)

5-32.9' MAFIC GNEISS + PEGMATITE
(1.52-10.03m)

Core from 6.7'

Dark grey to greenish grey; moderately hard to soft; medium to coarse grained; 40-70% mafic minerals (hornblende & biotite) 20-50% felsic minerals (feldspar-quartz) as grains, rags, lenses; Trace to locally 10° (average 2%) red garnets and patchy garnets (some in pegmatite); 20-25% grey-white pegmatite=pegmatitic veining 2 cm to 1.3' wide, more or less parallel to foliation which vary @ 35-75° to CA. (mainly 60-65° to CA.); some biotite in pegmatites

8.5-9.8' Pegmatite, 10% biotite rags & patches, 2% red garnet (occasionally with Pyrite)

8.5' - contact @ ~35° to CA parallel to foliation

9.8' - contact @ ~75° to CA, parallel to foliation

10.8-11' Pegmatite, 15% biotite rags, bands, 2% garnet

mainly near margins (biotite-rich)

10.8' - contact @ 65° to CA,

11' - contact @ 75° to CA,

11.7-12.2' Pegmatite, contacts @ 40° and 65-70° to CA.

12.4-21.9' Pegmatite, contacts @ 60-65° to CA., some red glassy alteration

26-26.6' Pegmatite, contacts @ 70-75° to CA.

28-31' + low temp. soft (chloritic & biotitic) very mafic foliations @ 65-70° to CA. (some last core near 3 o'clock); some pegmatitic veining & lenses

Contact @ 60° parallel to foliation

32.2-67.8'
(10.0. 20.67m)

"SILICEOUS" GARNETIFEROUS UNIT

Medium to light grey - reddish grey to silvery grey (muscovite-rich, medium to coarse grained; gneissic to more massive to Schistose with foliations @ 60-75° to C.A.; more muscovite schist in central parts & biotitic in marginal parts; 15-35% red to purplish garnets (average 20-25%). 0.2-2cm in size (average ~0.5cm) as rounded grains, and patches; biotitic parts with up to 15% dark brown biotite; muscovite-rich sections with up to 90% muscovite, 10-50% felsics (quartz-feldspars); local pyrite in foliation is sometimes seen

32.9-41.5' Biotitic (+ muscovite); hard to moderately hard. Siliceous; 20-25% garnet; foliations @ 65-70° to C.A.
40.5-41.5' - muscovitic parts

41.5-52.9'
(12.65-16.13m) Muscovite-rich; Schistose to gneissic; soft. Foliations @ 45-65° to C.A.; 10-30% garnet (average ~20% garnet)

52.9-67.8' Biotitic (+ muscovite); similar to 32.9-41.5' foliations @ 60-75° to C.A.; 15-35% garnet (average ~ 25%).

67.8' Contact @ ~65° to C.A.

67.8-85.5'
(20.67- 26.07m) MAFIC GNEISS +/- PEGMATITE

Dark grey to greenish grey; similar to section from 5-32.9'. 5% pegmatitic veining; some red feldspar alteration in gneiss and pegmatite; Trace to locally 5% red garnets; foliations @ 60-75° to C.A.

78.6-79' Several <1-2mm wide, epidote shear @ 15-20° to C.A.; cross-cut foliation @ 65-70° to C.A.
Intersection line, s², set

80.6-81' Several <1-5mm wide, partly folded, partly anastomosing epidote shear @ 10-25° to S.I.A., cross-cuts foliations trend @ ~70° to C.A. in vicinity
Fracture @ 5-10° to C.A. intersects 0-15° fracture below 85'

85.5' Contact @ ~60-65° to C.A.

85.5-87.5'
(26.07- 27.38m) "SILICEOUS" GARNETIFEROUS UNIT

Light to darker grey - reddish grey; medium to coarse grained; biotitic (+-muscovite); massive to gneissic @ 65-70° to C.A. Trace to 45% garnets (average 20%) 0.2-2cm size (average 0.5-1

85.6-86.4' Coarse grained, grey-white pegmatite, patchy to vein-like
89.8' Contact @ 70-75° to C.A.

89.8 - 100.1'
(27.38 - 30.52m) MAFIC GNEISS

Similar to section from 5-32.9'; 2% pegmatitic veinlets parallel to foliation @ 65-70° to C.A.; some parts more massive and very mafic; Trace to locally 10% red garnets (average 2%)

100.1' Contact @ about 70-75° to C.A.

100.1 - 108.2'
(30.52 - 32.99m) "SILICEOUS" GARNETIFEROUS UNIT + BIOTITIC, GARNETIFEROUS MAFIC GNEISS

Light to dark grey to reddish grey; medium to coarse grained; biotitic; 5-30% red garnet (average 15-20%); 0.2-2cm size grains and patches (average 0.5 cm²); rocks massive to foliated @ 60-70° to C.A.; less than 10% grey-white pegmatitic veins 1 cm to 0.4' wide, parallel to foliation; 20% +/- mafic gneiss

100.1 - 101.4' Very siliceous (silica flooding), 25-35% garnet

108.2' Contact @ 70° to C.A.

108.2 - 150'
(32.99 - 45.73m) MUSCOVITIC TO BIOTITIC FELSIC-INTERMEDIATE GNEISS/ SCHIST +/- GARNET

Light to medium grey; medium to coarse grained; often muscovitic soft to hard; foliations @ 50-70° to C.A. (mainly 60-65°); <1 to 3% garnets locally; occasional pegmatite vein 1 cm - 0.2' wide parallel to foliation; some pyrite films in foliation planes

108.2 - 111' Biotitic to muscovitic

111 - 112.3' Mafic gneiss band; horblende-rich; foliation 70° c.

112.3 - 139.5' Muscovitic, +/- garnet (Trace to locally 2%)
120 - 123' - Intermediate-mafic gneiss; biotite-rich 2% red garnets; 2-3% light grey Kyanite; foliation @ 60-65° to C.A.

139.5 - 143' Scattered Kyanite present down-hole
Biotite-rich, intermediate gneiss/ schist;
2% garnet, 5% Kyanite

143 - 149' Biotitic to muscovitic intermediate gneiss;
locally with Kyanite; locally with garnets
(Trace to 2%)

ST 93-05

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149-150' Garnet unit
20% biotite; 20-25% red garnets 0.1-1cm. in size;
foliation @ $65-75^{\circ}$ to C.A.

150'
(45.73m) END

Frank H. Toews, B.Sc.

Frank H. Toews

Geologist

D.D.H.: ST 93-06

D: -45°

SIZE: BQ

COORDINATES: Line 1+25mE / 0+32.5mS

LOCATION: Claim 1043376, Street Twp., Ontario

AZIMUTH: 330°

ELEVATION: ~ +6m

COMPANY: Emerald Isle Resources Inc./ Stralak Resources Inc. Joint Venture

DRILLED BY: Eriana Mines Ltd., Lively, Ont.

DATE STARTED: Nov. 4/93

DATE FINISHED: Nov. 5/93

FINAL DEPTH: 100' (30.49 m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: - Casing pulled

0 - 5'
(0 - 1.52m)5 - 23.5'
(1.52 - 7.16m)

CASING |

MAFIC GNEISS +/- PEGMATITE

Core from about 7'

Medium to dark grey to greenish grey; medium to coarser grained; moderately soft to soft; 40-60% (f) mafic minerals (hornblende +/- biotite), < 40-60% felsic minerals (feldspars - quartz as grains, rags & narrow lenses and bands; Trace to locally 10% rounded, red garnets (some associated with pegmatitic veining, 0.2-2 cm size grains and patches which can be irregular in outline); foliations mainly @ 65-70° to C.A.; ≤ 70% grey-white pegmatitic veining (< 0.2 wide) to 14.9' lower portion of zone is mafic, schistose, soft, dark green with about 3% lost core (Ground Core?) from about 15.4' to 20' and 1' from 20' to 23.5'

12.7 - 14.9': < 5% garnet

14.9' - contact with very mafic unit @ ~65° to C.A. parallel to foliation

14.9 - 23.5': Dark green, very soft, schistose, biotitic-chloritic very fine-grained with foliations @ 65-70° to about 23' (also occasional pegmatitic veinlets) where foliations change to lower angles @ 50 to 35° to C.A.; some broken or crushed core; SHEAR? ZONE 15.4' - crushed core (lost core here?)

23.5' - contact curves @ 35-70° to C.A. parallel to 50° - parallel to foliation in schist @ ~35° to C.A.

23.5 - 64' "SILICEOUS" GARNET-FERROUS ZONE +/- PEGMATITE
(7.16 - 19.51m)

Medium to light grey to reddish grey to silvery grey (muscovite rich); medium to coarse grained; gneissic to more massive to schistose with foliations @ 60-70° to 50° to C.A.; more muscovitic in central parts and biotitic on margins; < 10-35% red to purplish garnets (average ~ 25%), 0.2-1 cm in size, average 0.5 cm to rounded to sub-rounded grains & pinkish,

ctd.

biotitic parts with up to 15-20% brown biotite; muscovite-rich parts with up to 70% muscovite 10-50% felsics (quartz-feldspar); local Pyrite +/ or chalcopyrite is sometimes visible; Garnets are greenish, chloritized near zone margins; rocks very hard to soft in mica-rich part

23.5-39.5'

Biotitic (+ muscovite); 15-35% garnets (average ~25%) foliations 60-70° to C.A. (occasionally 45-50°)
23.5-25' - garnets are mainly greenish and chloritized

32'-33.2' red feldspar alteration

39.5-55'
(12.04-16.77m)

Muscovitic to muscovite rich, schistose to more massive; 5-35% garnets (average ~20-25%)
39.5-44' foliations decrease from about 70-75° to about 50° to C.A.

44-55' - more massive to weakly foliated parts;
(~15-20° near 48', ~50-60° near 51.5-53')

55' - contact with pegmatite @ ~45° to C.A.)

Pegmatite +/- Garnet +/- Muscovite; grey-white with pinkish-reddish feldspar alteration

56.2-56.8' patchy area with muscovite +/- biotite and 25% +/- garnet patches, locally containing disseminated pyrite

57.1' - Contact @ about 65° to C.A.
(sub-parallel to contact at 55')

Biotitic (+ muscovite); 15-35% garnet (average ~25%); foliations increase from about 50° to 80° down-hole

62-64' - garnets greenish, chloritized;
also 5% red feldspar alteration in pegmatitic veining

64' - contact @ ~75° to C.A.

64-82.2' MAFIC GNEISS +/- PEGMATITE +/- GARNET (19.51-25.06m)

Dark greenish grey to green; medium to coarser grained; 50-80% mafic minerals (hornblende +/- biotite +/- chlorite); Some red feldspar alteration in gneiss (+/- in pegmatite); Trace to 10% red garnet (average 2% +/-); foliated to massive @ 60-80° to C.A.; 5% pegmatite veining ≤ 0.3' wide parallel to foliations

67.5-68.4'

Biotitic; intermediate gneiss +/- red feldspar alteration foliation 70-80° to C.A., 2% garnet

69.5'

1 cm ± zone of pink carbonate + quartz veinlets @ 50° to C.A.

73-73.8'

Biotitic, intermediate gneiss; 2% garnet

79.6-82.2'

5-10% garnets, and two epidotized, garnetiferous veins @ 70-80° to C.A.

82.2' contact @ 65-80° to C.A.

82.2-84.5' "SILICEOUS" GARNETIFEROUS UNIT
(25.0 - 25.76m)

Dark to light grey-reddish grey; medium to coarse grained; biotitic; massive to foliated @ $70-80^\circ$ to C.A.; 15-35% red garnets (average 25%+), partly chloritized and greenish below 84'

83.8-84.5' Red alteration in some feldspars
84.5' Contact with quartz vein @ $85-90^\circ$ to C.A.
chlorite + dull red hematite on slip contact

84.5-94.9' MAFIC GNEISS + PEGMATITE + LAMPROPHYRE DYKE

(25.76 - 28.93m)

Similar to section 64-82.2'; Trace to 5% red garnet; foliations @ $65-80^\circ$ to C.A.

84.5-85.2' Garnetiferous mafic gneiss with three quartz and pegmatite veins $\leq 0.1'$ @ $70-80^\circ$ to C.A.
5-10% garnet

85.2-85.8' Altered, garnetiferous zone; Epidotized patch-vein with upper contact irregular at sub-parallel to core axis and lower contact @ 75° to C.A.; garnet patches and trains in, and marginal to, epidote alteration; 0.2' patch of red hematite with 20% pyrite blebs, in epidote; 85.7'-rags of chalcopyrite (5%) in epidote alteration; 15% red garnet in section

85.8-87.7' 2-3% red garnet; several slips +/- hematite +/- carbonate @ $< 10-15^\circ$ to C.A.; foliation $75-80^\circ$ to C.A.

87.7-88.2' Hematitic, chloritic, LAMPROPHYRE DYKE @ $\sim 30^\circ$ to C.A.; small ($\leq 5\text{ mm}$) clasts (felsic and mafic); dull red; fracture on contacts; hematitic mud on one internal fracture parallel to contacts

90' Cave from 87.7' (probable source of pieces)

90-90.2' Epidotized band with contacts @ 60° and 80° to C.A. parallel to foliations; red altered feldspar 1-2% Pyrite and Chalcopyrite disseminations and small splashes

94.9' Contact @ 85° to C.A.

94.9-100' MIXED "SILICEOUS" GARNETIFEROUS UNIT + MAFIC + FELSIC GNEISS
(28.93 - 30.49m)

Banded and foliated $\pm 65-80^\circ$ to C.A., Trace to 15% red garnets (average 5-10%).

94.9-96.0 Siliceous, biotitic, garniferous unit,
15-20% garnets 0.2-1cm size
96-98.4 Variable; 5-10% garnets overall
99.4-100 Felsic, biotitic gneiss

100'
(30.49m)

END

Frank H. Toews, B.Sc.

Frank H. Toews
Geologist

D.D.H.: ST 93-07

DIP: -45°

SIZE: BQ

AZIMUTH: 330°

ELEVATION: ~ +6.5M

CC DIMENTES: Line 1+50mE / 0+42.5mS

LOCATION: Claim 1043376, Street Twp., Ontario

p. 1 of 3

COMPANY: Emerald Isle Resources Inc. / Stralak Resources Inc. Joint Venture

DRILLED BY: Erana Mines Ltd., Lively, Ontario

DATE STARTED: Nov. 5/93

DATE FINISHED: Nov. 8/93

FINAL DEPTH: 125' (38.11 m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: - Casing pulled
- Water lost at 120'C- 10'
(0 - 3.05m)

CASING

10 - 60.7'
(3.05 - 18.51m)

MAFIC GNEISS + PEGMATITE +/- GARNET

Dark grey to greenish grey; medium to coarser grained; moderately hard to moderately soft; 40-70% mafic minerals (hornblende +/- biotite), 25-50% felsic minerals (feldspar-quartz). Trace to locally 10% red garnets (average 1-2%), 0.2-2cm in size; related to locally massive. @ 55-70° to CA. 5-10% grey-white pegmatite veining 1 cm to 0.8' wide, mainly parallel to schist-parallel to foliations plus a 5' dyke at 52.6'; occasionally red feldspar alteration is present and often biotite occurs in pegmatite.

51.6 - 52.6'

Fracture \approx 0-5° to C.R. cross-cut foliation @ 60-65° to C.P.; some broken core52.6 - 57.4'
(16.04 - 17.5m)Biotitic, pegmatite dyke
57.4' - Contact parallel to local foliation @ 45-45° to C.R.

57.4 - 60.7'

Mafic gneiss +/- garnet; foliation @ 65-70° mainly; minor pegmatitic veining

60.7 - 60.7' - 5-10% garnet

60.7' - Contact hazy @ ~65° to C.R.

60.7 - 93.7'
(18.51 - 28.57m)

"SILICEOUS GARNETIFEROUS UNIT"

Easier to light grey to reddish grey; biotitic (+ muscovite) very hard to moderately hard; massive to foliated @ 70-80° to CA; medium to coarse grained; occasional pegmatitic vein 0.1-0.4' wide; some red feldspar alteration; up to 25% brown biotite; < 10% muscovite in central parts; occasional small Kgranite; 5 to 40% red to pinkish garnets (average 20%), 0.2-2cm in size (average 0.5cm +/-) as rounded grains and small patches; 40-60% felsics (quartz-feldspar)

92.9 - 93.7' Garnets. Greenish. Chloritized
93.7' Contact \approx 65° to C.R.

9' - 112.7' MAFIC GNEISS + PEGMATITE + GARNET
(28.57-34.36m)

Similar to section from 10 - 60.7'; some red feldspar alteration in gneiss (& in pegmatite veining); foliations @ 65-75° to C.A. majority; 5% grey-white pegmatite veining (+ red feldspar alteration) more or less parallel to foliations, some with ragged contacts; 1-2% red garnets

98' Epidotized veinlet, 2-3 mm wide, @ ~15° to CA

102' 2-5 mm wide carbonate breccia veinlets @ 35-45° to C.A.; hematitic alteration

107.4-108.2' Epidotized alteration band with 10% garnet; contacts ~ 60° to CA.

111-111.7' Fracture @ ~10° to C.A., broken core

111.7' Brecciation along pegmatitic veinlet @ ~60-65° to CA.; shear zone (<5mm wide)

112.3-112.7' Epidotized band; 10% garnet; upper contact @ 60° along pegmatitic veinlet; lower contact @ ~70° to CA.

112.7-116.2' "SILICEOUS" GARNETIFEROUS UNIT
(34.36-35.43m)

Silicic, 15-25% garnet (chloritized garnets near upper contact); 116.2' contact @ ~30° to CA.

116.2-125' MAFIC GNEISS + CARBONATE BRECCIA ZONE
(35.43-38.11m)

Gneiss similar to section 93.7-112.7'; 2% segregative silicic, parallel to foliations which are @ 65-75° to C.A.

116.2-117.3' Red feldspar alteration, ~10% garnets

117.3-120' Carbonate breccia zone; breccia veinlets 35.43-36.53m. Increase in size; 20% white carbonate matrix with angular to sub-rounded, altered wall-rock fragments up to several cm. in size. General attitude in main brecciation @ ~20-30° to C.A. Some veins would cross-cut each other.

ST 93-07

120'

Drillers report lost water at 120';
(?) Fracture @~70° (?) to C.A. parallel to foliation

125'
(38.11m)

END

Frank H. Toews, B.Sc.

Frank H. Toews

Geologist

RD.H.: ST 93-08

DIP: -45°

SIZE: BQ

AZIMUTH: 330°

ELEVATION: ~ +6.5m

COORDINATES: Line 1+75mE / 0+29.5mS

LOCATION: Claim 1043376, Street Twp., Ontario

COMPANY: Emerald Isle Resources Inc. / Stralak Resources Inc. Joint Venture

DRILLED BY: Erana Mines Ltd., Lively, Ontario

DATE STARTED: Nov. 8/93

DATE FINISHED: Nov. 8/93

FINAL DEPTH: 100' (30.49m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: - Casing pulled

0 - 9'	CASING
(0 - 2.77m)	
9 - 25.5'	MAFIC GNEISS +/- PEGMATITE +/- GARNET
(2.77 - 7.77m)	Dark grey to greenish grey; medium to coarser grained; moderately hard to soft; 50-80% mafic minerals (hornblende + biotite), 20-50% felsics (feldspar-quartz). Trace to locally 20% red garnets 0.2-3cm in size; more massive to foliated @ 50-80° to CA. (variable, some foliations wrap around garnet patches, but foliations often 65-75° to CA.); 5-10% pegmatite-pegmatitic veining and patches, often with ragged margins, but more or less parallel to foliations and <1cm to 0.4' wide, with pink to red feldspar alteration, from about 10-18' and generally grey-white below 18; pegmatite sometimes garnetiferous
12.4 - 13'	20% garnet patches up to 3cm in size
13.7 - 21.5'	Dark green; soft; sections with rounded patches of garnet ≤ 3cm in size, one with pyrite blebs and radiating elongate blebs of pyrite locally ≤ 5% garnet
22 - 25.5'	5-10% garnets as grains and patches 0.2-1cm in size; often rounded; foliations 65-80° to CA.
24.5 - 25.5'	- 10% garnet
25.5'	Contact @ 65-70° to CA. parallel to foliations

25.5 - 51' "SILICEOUS" GARNETIFEROUS UNIT
(7.77 - 15.55m)

Medium to light grey to reddish grey; biotitic; medium to coarse grained; more massive to foliated @ 20-80° to CA. (mainly 60-80°); 10-35% red to purplish garnet (average 20° 0.1-1cm in size (average 0.5cm+) rounded to sub-hedral. 10-25% brown biotite; 40-70% felsics (quartz-feldspar); occasional grey white pegmatitic vein ≤ 0.1' wide per. to foliations

28.7 - 30.5 Folding; foliations variable from ~60° to SW to about 60° ± CA.

-	36 - 37'	Folding(?), foliations @ ~65-70° to 15-20° to ~60° to C.A.; 45.2' - local Kyauite Contact @ ~65° to C.A., parallel to foliation
	51'	
51-84.9' (15.55-25.88m)	MAFIC GNEISS +/- PEGMATITE + LOCAL "SILICEOUS" GARNETIFEROUS UNIT	
		Dark grey to greenish grey; medium to coarser grained; more massive to foliated @ 60-75° to C.A.; 50-75% mafic minerals (hornblende, biotite), <20-50% grey felsics (feldspar-quartz), Trace to locally 10% (average <2%) red garnets 0.1-0.5 cm in size; <5% grey-white pegmatite - pegmatitic & quartz veining (+/- patches) ≤ 1 cm to 0.2' wide, parallel to foliations mainly
	65-66'	3 chloritic fractures (parallel) @ 10-15° to C.A. cut foliation @ 70-75° to C.A.
	66.2-70.7'	2-10% garnets, average ~5%. 70.7' - contact @ ~60-75° to C.A.
	70.7-72.9' (21.55-22.23m)	"Siliceous" garnetiferous Unit (?), very siliceous to more mafic (~30% biotite) & <10-20% red to purplish garnets (average 15% +/-) 0.1-0.2 cm in size
	70.7-71.4'	very siliceous, some banding (includes garnets) @ 75-80° to C.A.; ≤ 10% garnets ≤ 0.3 cm in size
	72.9'	locally gradational contact @ 60-65° to C.A.
	72.9-74'	5-10% garnets 1 cm - 0.2 cm in mafic gneiss
	84.9'	Contact parallel to foliation @ ~70° to C.A.
84.9-89.3' (25.88-27.23m)	"SILICEOUS" GARNETIFEROUS UNIT	
		Medium to darker grey to reddish grey; biotitic; medium grained to coarser grained; foliated to more massive @ 65-75° to C.A.; several dark green-grey mafic gneiss bands 0.2' and 0.6' wide (garnetiferous); <10-20% garnets (average 10-15%) 0.1-2 cm in size (average 0.3-0.5 cm), up to 40% biotite; few pegmatitic veins @ 65-75° to C.A. ≤ 0.2' wide and a pegmatitic vein occurs on down-hole contact.

'89 - 100' MUSCOVITIC FELSIC GNEISS/SCHIST +/- GARNET
(27.23-30.49m)

?Lost core ~ 1.2' from 90-100' markers

Light greys to silvery grey; hard to moderately soft;
foliations mainly 70-80° to C.A.; medium to coarser
grained; up to 25% muscovite, some biotite, Trace
to 2% garnets (red), 75% +/- felsics (quartz-feldspar)
occasional parallel to cross-cutting pegmatitic / quartz
veining

98.2-100' 6" of garnetiferous unit, biotitic to
muscovitic & 0.1' pegmatitic vein, ≤ 10% garnet

100' BND
(30.49m)

Frank H. Toews, B.Sc.

Frank H. Toews
Geologist

EDH.: ST 93-09

DIP: -45°

- ZE: BQ

COORDINATES: Line 1 + 99mE / CT 35mS

LOCATION: Claim 104 3376, Street Twp., Ontario

AZIMUTH: 330°

ELEVATION: + 7.5m

COMPANY: Emerald Isle Resources Inc./Stralak Resources Inc. Joint Venture

DRILLED BY: Erana Mines Ltd., Lively, Ont.

DATE STARTED: Nov. 9, '93

DATE FINISHED: Nov. 10/93

FINAL DEPTH: 135' (41.16m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: - Casing pulled

0 - 12'	CASING
(0 - 3.66m)	
12 - 34.7'	MAFIC GNEISS + PEGMATITE +/- GARNET
(3.66 - 10.58m)	Core from 13.4'
	Dark grey to greenish grey; medium to coarser grained; moderately hard to soft; foliated @ 60-80° to CA. with some sections Variable and contorted @ 25-60° to CA.; 50-80% mafic minerals (hornblende +/- biotite) < 20-50% felsics (grey feldspar-quartz). Trace to locally 10% red garnets (average 2% +/-) 0.1 - 3 cm in size. 5% (+) grey-white, pegmatite - pegmatitic veining, rags and patches ≤ 1 cm - 5.8 wide (@ +/- biotite +/- garnet +/- pyrite) more or less parallel to foliations
19.2'	Pegmatite veinlet ≤ 2 mm wide @ ~80° to CA. parallel to foliation
19.2 - 21.6'	5-10% garnets 0.5 - 3 cm grains to patches, 5-10% rags and veinlets of pegmatitic material present; foliations partly contorted
23 - 29'	Sections with pegmatite / pegmatitic veins, rags and patchy irregular veins along with variable foliations @ 35-70° to CA., some garnets and patchy garnet also present
23 - 23.7'	Pegmatite + biotite +/- garnet, contacts @ 60 and 30° to CA.
29 - 34.4'	Foliations more regular @ 70° to 60° to 80° to CA. < 5% pegmatitic veining; Trace to 5% garnets
34.4 - 34.7	Pegmatite vein; up-hole contact ragged @ 60-70°, down-hole contact more uniform @ 60° to CA.

3' 7 - 65.3' "SILICEOUS" GARNETIFEROUS UNIT
 (10.58 - 16.86m)

Medium to light to darker grey to reddish grey; biotitic; very hard to moderately hard; more massive to foliated @ $70-80^\circ$ mainly (locally $20-40^\circ$); medium to coarse grained 10-35% red to purplish garnets (average 20-25%) 0.1-1cm (occasional patches to 3cm) averaging 0.5 cm +/-; 5-25% brown biotite; 40-60% felsics (quartz-feldspar); occasional pegmatitic vein $\leq 0.1'$ wide

39.4-40.5' Foliations change from about 80° to 25° to 65° to CA.
 41.4-44' Several chloritic fractures @ $15-25^\circ$ to CA.
 55.3' Contact @ about 80° +/- to CA.

55.3 - 90' MAFFIC GNEISS + PEGMATITE "- GARNET
 (16.86 - 27.44m)

Dark grey to greenish grey; moderately hard to moderately soft; foliated @ $65-80^\circ$ to CA. mainly; 70-85% mafic minerals (hornblende +/- biotite), 10-30% felsics (feldspar-quartz). Trace to 5% red garnets (average <1-2%); parts have red feldspar <10% pegmatite-pegmatitic veining, rags and patchy vein material (+/- red altered feldspars +/- garnet) ≤ 1 cm to 0.4' wide, more or less parallel to foliation

55.3-58.7' 5-10% garnets, 0.1 - 0.5 cm in size

66 - 82' Variable red feldspar alteration in pegmatitic material and in some of gneissic host rocks

69.8-71.2' Pegmatite vein; contacts @ $\sim 40^\circ$ to CA. mafic inclusion, and epidote "band" @ $\sim 20^\circ$ to CA. in central part

72.5-72.8' Epidote vein 0.5-2cm wide @ $0-15^\circ$ to CA. (cuts some pegmatite) tangent to ^{bands} hematite + carbonate veinlet, 1 cm wide @ 45° to CA. (sheared?) Contact @ 60° to CA. parallel to foliation

70 - 93.8'
 (27.44 - 28.6m)

"SILICEOUS" GARNETIFEROUS UNIT

Darker greys to reddish grey; biotitic; moderately hard; foliated @ $60 \rightarrow 80^\circ$ to CA.; 10-50% red garnet (average 10-15%) 0.1-1cm in size (average, c. 3cm +/-) up to 50% diotite two mafic gneiss bands 0.5' and 0.2' wide (with garnet) unit locally very siliceous

93.8' Contact @ 80° to CA.

93.8-125.5 MUSCOVITIC TO BIOTITIC FELSIC GNEISS / SCHIST ($\frac{1}{4}$ -GARNET)
 (28.6 38.26m) WITH SHORT SECTION OF "SILICEOUS" GARNETIFEROUS UNIT

Light to medium grays; variable; hard to soft; fine to
 medium to coarser grained; foliations @ $60-80^\circ$ to CA.;
 Trace to locally 5% red garnets (average $< 1\%$ garnet);
 Few quartz and pegmatitic veins $< 1\text{cm}$ to 0.4' wide
 parallel to foliations; local Kyanite near 120.8'
 < 5 to locally $\approx 30\%$ micaceous minerals,

100.5-102.8 "Siliceous" garnetiferous unit, biotitic; moderately
 hard; $\leq 15\%$ red garnets 0.1-1cm in size (0.5cm
 average); local Kyanite;
 Contacts @ 80° to CA. parallel to foliations
 Contact @ 75° to CA.

125.5-(31.7) GARNETIFEROUS MAFIC GNEISS
 (38.26 - 40.15m)

Dark grey - greenish gray; moderately hard to soft;
 foliations @ $70-80^\circ$ to CA.; 5-10% red garnets 0.2-1cm
 in size (average 0.3cm)

131.7' Contact @ 70° to CA.

131.7-135' GARNETIFEROUS BIOTITIC GNEISS (GARNET UNIT?)
 (40.15- 41.16m)

Dark grey to reddish grey; medium grained; biotite-rich
 15-20% red garnets 0.1-0.3cm in size; moderately hard;
 foliation @ $70-75^\circ$ to CA. (weak); up to 30% biotite

131.9-132.1 Pegmatite vein @ $\sim 45^\circ$ to CA.

135' (41.16m) END.

Frank H. Toews, B.Sc.

Frank H. Toews

Geologist

D.D.H.: ST 93-10

p. 1 of 3

DIP: -45°

AZIMUTH: 330°

SIZE: BQ

ELEVATION: ~ +7.5m

ORDINATES: Line 2+25m E / 0+25m S

LOCATION: Claim 1043376, Street Twp., Ontario

COMPANY: Emerald Isle Resources Inc. / Stralak Resources Inc. Joint Venture

DRILLED BY: Erana Mines Ltd., Lively, Ontario

DATE STARTED: Nov. 10/93

DATE FINISHED: Nov. 11/93

FINAL DEPTH: 100' (30.49m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: - Casing pulled

(0-0-9') CASING
(0-2.74m)

8.9-32.6' MAFIC GNEISS +/- PEGMATITE +/- GARNET
(2.71-9.94m)

Dark grey; medium to coarser grained; foliated to more massive @ 60-80° to C.A.; biotitic sections; 50-80% mafic minerals (hornblende +/- biotite); 20-50% felsics (feldspars-quartz). Trace to locally 15%; \pm garnets (average <5%). 0.1-2cm in size; 5-10% grey-white pegmatite-pegmatitic veins rags and patches, <5mm to 0.6m, ^{mainly} more or less parallel to foliations; Some pegmatite contains biotite and/or garnet as well; few chloritic fractures @ 15-30° to C.A.

8.9-9.5' Biotitic, <5% garnet; foliation @ ~70° to C.A.
9.5-10.1' Pegmatite vein parallel to foliation; 2% garnet

10.1-12.2' 5% garnets \leq 2cm size; some pegmatite

12.2-14' Biotitic; foliated @ 75-80° to C.A.; 15% garnets \leq 2cm in size; some contorted foliations

14-14.4' Pegmatite, Biotitic, foliated @ ~55° to C.A., contacts @ 75° and 65° to C.A.

18.5-20.5' 15-20% pegmatite-pegmatitic veining @ 65-55° to C.A.; \pm few garnets to 2cm size

20.5-20.5' - loca chalcocite veins, rags +/- pyrite

20.5-30' 1-5% garnets

30-32.6' 5-10% garnets, increasing towards contact; foliations @ 75° to C.A.

32.6' Contact \approx ~80° to C.A.

32.6-49.1' "SILICEOUS" GARNETIFEROUS UNIT
(9.94-14.97m)

Light to medium greys to reddish grey; medium to coarse grained; foliated to more massive @ 50-80° to C.A. (mainly 70-75°); biotitic; 15-50% rounded to sub-hedral reddish to purplish garnets (average 25%+), 0.1-1cm in size (average 0.5cm+); Trace to 25% biotite; 25-60%

ctd.

felsic minerals (quartz - feldspar); rocks very hard to moderately hard; a few fractures @ $20-40^\circ$ to CA; occasional pegmatitic vein

32.6 - 33.9' Siliceous; 20-50% garnet

37 - 40.3' Foliations @ 60° to 50° to 65° to CA. (Folding?)

49.1' Nebulous contact

**49.1 - 82.7' MAFIC GNEISS + PEGMATITE + GARNET
(14.97 - 25.21m)**

Similar to 8.9-32.6' but more mafic; parts biotitic; mainly 2-3% pegmatitic veining $\leq 0.2'$ wide, more or less parallel to foliations @ $55-80^\circ$ to CA; rocks moderately hard to softer. Trace to locally 10% red garnets (average 2-3%) 0.1-1cm in size;

49.1 - 50.5' 5-10% garnet; lower portion schistose, biotitic coarse grained; foliation $\sim 65^\circ$ to CA

70 - 70.2' Biotitic, 15% garnet; foliation @ $\sim 55^\circ$ to CA.

* 70.2 - 72.5' Pegmatite, and ^{some} siliceous garniferous unit (?). Grey-white pegmatite; garniferous; biotitic; Foliations parallel to sub-parallel to contacts which @ $\sim 55^\circ$ to CA; < 5 to 25% red garnets (average < 10%) 0.1-0.5cm in size; possibly siliceous garniferous unit in lower part of section.

77.3 - 78.9' Epidotized, garniferous band; $\leq 15\%$ red garnet 0.2-1cm size;

77.3' - contact @ $40-45^\circ$ to CA, with quartz vein $< 0.1'$ wide which is parallel to 50° CA foliations above vein

78.9' - contact @ $40-45^\circ$ to CA,

Schistose, Biotitic, coarse grained; foliation @ $60-70^\circ$ to CA, some garnets

* 81.7 - 82.7' Grey-white pegmatite; biotitic; garnets ($\leq 3\text{cm}$) near down-hole contact; 20% biotite rags and bands

81.7' - veinlets of pegmatite at contact @ 80° to CA.

82.7' - irregular contact @ $\sim 45-50^\circ$ to CA.

82.7-87.5' "SILICEOUS" GARNETIFEROUS UNIT
(25.21 - 6.68m)

Medium to light greys to reddish grey; medium to coarse grained; biotitic; massive to foliated @ $70-80^\circ$ to C.A.; $<10-25\%$ red to purplish garnets (average 15%); 0.1-1cm in size (average 0.3 cm +); up to 30% brown biotite; 40-60% felsic minerals (quartz-feldspar); two fractures @ $30-35^\circ$ to C.A. rocks very hard to hard;

87.5-90.5' BIOTITIC INTERMEDIATE-FELSIC GNEISS + GARNET
(26.68 - 27.59m)

Medium to darker grey; medium grained; $\leq 40\%$ biotite, $\leq 5\%$ red garnet, 50-60% felsics (quartz-feldspar); foliation @ $65-75^\circ$ to C.A.; grey to pink felsic silification veining near 88° ; rocks are hard

90.5-95.4' "SILICEOUS" GARNETIFEROUS UNIT + BIOTITIC INTERMEDIATE GNEISS + PEGMATITE
(27.59 - 29.08m)

90.5-92.3' Medium greys; medium grained; "Siliceous" garnetiferous unit; biotitic; foliated @ $80-80^\circ$ to C.A.; $\sim 15\%$ red garnets 0.1-0.3 cm in size; two pegmatitic veins $\leq 0.1'$ wide @ $60-45^\circ$ more or less parallel to foliation

92.3-93.9' Mafic-intermediate gneiss; dark grey, biotitic 2% garnets; foliations $60-80^\circ$ to C.A.

93-93.4' - Biotitic (+garnet) bands in pegmatite @ $75-80^\circ$ to C.A., parallel to foliation

93.9-95.1' "Siliceous" garnetiferous unit; medium grained; medium-dark grey; biotitic; foliated @ $70-80^\circ$ to C.A.; $\leq 15\%$ red garnets 0.1-1cm in size
- More mafic, softer from 95.1'
- 95.4' contact with pegmatite vein @ 75° to C.A.

95.4-100' BIOTITIC + MOSCOVITIC FELSIC GNEISS / SCHIST + GARNETS
(29.08 - 30.49m) + PEGMATITE

Light to medium greys; fine to medium grained; foliation $60-70^\circ$ to C.A. mainly; up to 60% micaceous minerals; locally 2-3% red garnets

95.4-95.8' Pegmatite vein(s)

98.3-99' Pegmatite; some muscovite and red feldspars

100' (30.49m) END

Frank H. Toews, B.Sc.
Frank H. Toews
Geologist

D.D.H.: ST 93-11

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DIP: -45°

AZIMUTH: 330°

SIZE: BQ

ELEVATION: +10 m

COORDINATES: Line 2+52 mE / 0+30mS

LOCATION: Claim 1043376, Street Twp., Ontario

COMPANY: Emerald Isle Resources Inc./Strelak Resources Inc. Joint Venture

DRILLED BY: Erana Mines Ltd., Lively, Ontario

DATE STARTED: Nov. 11/93

DATE FINISHED: Nov. 15/93

FINAL DEPTH: 130' (39.63m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: - Casing pulled

0-5'
(0-1.52m)

CASING

5-50.9'
(1.52-15.52m)

MAFIC GNEISS +/- PEGMATITE +/- GARNET

Core from 7' (2.13m)

Dark grey to greenish grey; medium to coarse grained; parts garniferous and biotitic; foliated to more massive @ 65-80° mainly; 40-75% mafic minerals (hornblende & biotite) Trace to more locally 20% red garnets (average 5%) 0.1-5cm in size as rounded grains and patches; 10-40% felsics (feldspar & quartz); 5% grey-white ^{biotitic} pegmatite - pegmatitic veins, rags and patches, more or less parallel to foliations and <1cm to 0.8' wide a few fractures @ 20-25° to C.A.; rocks hard to soft

7-26.3'
(2.13-8.02m)

Often biotite-rich, more pegmatitic material and garnets up to 5cm in size in parts; local disseminated pyrite & chalcopyrite; possible local garnet in 7.6-9.3' - 5-10% garnets 0.2-1cm in size 9.3-12.7' - 10-20% garnets 1-3cm in size, variable foliations, some @ 65° to C.A. 12.7-18.5' - 2-3% garnets; foliations @ 70-80° to C.A.

18.5-26.3' - 10-20% garnets ≤ 0.5-5cm in size, very biotite-rich parts with contorted foliations; biotite-rich pegmatite vein with contacts @ about 40-50° and 60° to C.A. from ~19.3-20.3' with some red feldspar alteration.

26.3-50.8' Mainly hornblende-rich (+- biotite); Trace to 5% (average) garnets 0.2-1cm in size; occasional pegmatitic veining; foliations 60-80° to C.A.

37-39' Biotite-rich; 5-10% garnets, foliations @ 60° to C.A.

39-50.8' - mainly <1-2" garnets; foliations 70-80° to C.A. 50.9' - contact @ 75-80° to C.A.

50.9-72.1' "SILICEOUS" GARNETIFEROUS UNIT +/- PEGMATITES

Medium to lighter greys to reddish grey; biotitic; very hard to hard; foliated @ $70-80^\circ$ (locally 60°) to C.A.; 10-50% (locally) rounded to sub-hedral, red to purplish garnets (average 25%) 0.1-1 cm in size (average 0.5 cm⁺); 10-25% brown biotite, 40-60% felsic minerals (quartz-feldspar.); rocks are medium to coarse grained; a few fractures @ $15-25^\circ$ to C.A. are present;

51.1-51.3' Mafic gneiss band @ $\sim 75-80^\circ$ to C.A.68.7' 0.5' Pegmatite vein +/- biotite, with contacts @ 80° and 60° to C.A.72.1' Contact @ 65° to C.A. parallel to foliations72.1 - 109.7' MAFIC GNEISS +/- PEGMATITE +/- "SILICEOUS" GARNETIFEROUS UNIT(?) BANDS
(21.98 - 33.45m)

Mafic Gneiss is dark to medium grey to greenish grey, moderately hard to moderately soft; medium to coarser grained; foliated to more massive @ $\sim 60-75^\circ$ to C.A.; 50-80% mafic minerals (hornblende +/- biotite); Trace to 5% red garnets, 0.1-0.5 cm mainly; 15-40% felsic minerals (feldspar-quartz); $\leq 5\%$ grey-white pegmatite veining (+/- biotite +/- garnet) $< 1 \text{ cm}$ to 0.7 wide, often parallel to foliations (some cut foliations)

Several garnetiferous, biotitic, foliated, more siliceous bands 0.2-3' wide, parallel to foliations @ $60-65^\circ$ to C.A.

72.1 - 72.7' Biotite-rich; foliated; 5-10% garnets 0.2-1.5 cm in size with pegmatitic veining below 72.7'

85.8-86.5' (26.16-26.37m) Siliceous, garnetiferous unit band with 15% (+) garnets 0.2-0.5 cm in size; rocks biotitic and foliated parallel to contacts @ 65° and 75° to C.A.87.9 - 91' (26.80 - 27.74m) Siliceous, garnetiferous unit band with 15-25% garnets, 0.2-0.5 cm in size (mainly); rocks biotitic (+ up to 30%) foliated to more massive @ $60-65^\circ$ to C.A.; 0.1' quartz vein on down-hole contact @ about $60-65^\circ$ to C.A.94.4-97.5' Several calcitic fractures @ $0-5^\circ$ to C.A. and one @ 30° to C.A., cut foliations @ $65-70^\circ$ to C.A.102.7-103.4' Pegmatite +/- biotite-chlorite to garnet; contacts opposed @ $60-70^\circ$ and $15-20^\circ$ to C.A., sub-parallel to and cross-cutting foliations, respectively

108 - 108.6' Pegmatite with ragged fragments of wall rocks; contacts irregular to ragged @ $50-60^\circ$ to CA. more or less parallel to foliations of host rocks @ $65-70^\circ$ to CA.; fracture @ 35° to CA. +/- pyrite

109.7' Irregular pegmatitic veinlet 1 cm (?) wide on contact @ about $75-80^\circ$ to CA.

109.7-112.8' "SILICEOUS" GARNETIFEROUS UNIT (?)
(33.45-34.39m)

Medium to darker greys to reddish grey; foliated to more massive @ $75-80^\circ$ to CA.; moderately hard to moderately soft; biotitic; medium to coarse grained; 15-20% red to purplish garnets 0.2-1 cm in size (average 0.5 cm); 20-40% biotite; 40-50% felsic minerals (quartz-feldspar); Several pegmatitic veins <0.1' wide @ $70-80^\circ$ to CA.; Several fractures +/- chlorite @ $25-35^\circ$, 10° to CA.

112.8-118' VARIABLE, FELSIC TO MAFIC GNEISS +/- GARNET +/- PEGMATITE
(34.39-35.98m)

112.8-114.2' Moscovitic to biotitic felsic gneiss; medium grained; medium to light greys; hard to very hard, $\leq 20\%$ micaeous minerals; siliceous contact area
114.2-115' Pegmatite, biotitic +/- garnet grains contacts @ $65-75^\circ$

115-118' Biotitic, partly garnetiferous, mafic gneiss; dark grey to greenish grey, locally lighter and siliceous; 115-117.1' - reddish garnetiferous bands @ 80° to sub-parallel to CA. (folding); bands with trace to 20% red garnets ≤ 0.2 cm in size (average 10% garnets)

117.1'-117.7' Felsic, biotitic gneiss @ 45° to 80° to CA.; $\leq 5\%$ garnet
117.7-118' - mafic, massive, biotitic 2% garnet near contact with pegmatitic vein @ $60-70^\circ$

118-130' MUSCOVITIC TO BIOTITIC FELSIC GNEISS/SCHIST +/- GARNET
(35.98-39.63m)

Medium to light greys; medium grained; foliations @ $70-80^\circ$ to CA.; 20-50% muscovite-biotite; trace to 5% red garnets 0.2-0.5 cm in size; occasional pegmatitic vein, $\leq 0.2'$ wide; occasional red feldspar alteration; occasional pyrite smear in foliation planes; occasional carbonate fracture filling @ 20° to CA.
118-118.3' Folded pegmatite vein

END

^{Peg}
130' (39.63m)

Frank H. Toews, B.Sc.
Frank H. Toews
Geologist

D.D.H.: ST 93-12

DIP: -45°

ZEE: 3Q

AZIMUTH: 330°

ELEVATION: +11.5m

COORDINATES: Line 2+75m E / 0+225m S

LOCATION: Claim 1043376, Street Twp., Ontario

COMPANY: Emerald Isle Resources Inc./Stratak Resources Inc. joint venture

DRILLED BY: Erana Mines Ltd., Lively, Ontario

DATE STARTED: Nov. 16/93

DATE FINISHED: Nov. 16/93

FINAL DEPTH: 105' (32.01m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: -Casing pulled

0-9'
(0-2.74m)

CASING

8-11.2'
(2.44-3.41m)

PEGMATITE +/- MAFIC GNEISS

Grey-white, very coarse grained, feldspar-quartz (+ biotite)-pegmatite with two incursions of garnetiferous, biotitic-hornblende-feldspar mafic gneiss, schist

8-10': Broken core; contains 0.3' inclusion of mafic gneiss with 5% red garnets \leq 1cm size
10-10.6': Mafic gneiss schist inclusion, \leq 10% red garnets; foliations @ 80-60° to C.A.

10.6': ragged contact @ \sim 60° to C.A.

10.6-11.2': Pegmatite +/- biotite rags +/- garnet

11.2': ragged contact @ \sim 60-30°, sub-parallel to foliation

11.2-33.3' MAFIC TO INTERMEDIATE GNEISS +/- GARNET +/- PEGMATITE
(3.41-10.15m)

Dark grey to greenish grey, to medium-light greys; variolite; 30-80% mafic minerals (hornblende & biotite), 20-60% felsic minerals (feldspar-quartz); < 1 to 20% red garnets (average \leq 10% to \sim 27'); parts are biotite-rich and schistose; foliations variable @ $<$ 20-70° to C.A. (often 60-70°, 5-10% green white pegmatite-pegmatitic material as veins, ragged veins, lenses, patches & rags, some with garnets, often with biotite).

Possibly, some siliceous garnetiferous unit present.

Garnets vary in size from 0.2-4cm in size (average 1cm+) and are rounded to ragged in outline

16.6-17.6': Silicate-rich, scintillose @ 70-35° to C.A.

17.6-19.4': More felsic, siliceous, local actinolite; parts may be siliceous garnetiferous unit (biotitic) with $<$ 5% garnet; foliations 50-75° to C.A.

19.4-20': Garnetiferous biotitic schist

ST 93-12

23 - 23.2'	Biotitic pegmatite vein with red feldspar alteration; contacts @ ~65° and 80° to CA.
23.2 - 24.1'	Garnetiferous, biotite-rich schist; foliations @ ~80° to 45-50° to CA.
24.1 - 32.4'	Mafic gneiss + pegmatitic veins and veinlets; 2-5% garnet; foliations @ 70° to CA. becoming ~60° down-hole near 32.4' Foliations @ ~45° to 0° to 45° to CA. (folding) 5-10% garnets in mafic gneiss
32.4 - 33.4'	Contact @ 45° to CA parallel to foliation
33.3'	

33.3-60.7' ± "SILICEDUS" GARNETIFEROUS UNIT + MAFIC GNEISS
(10.15 - 18.51m)

Medium to light green to reddish grey; medium to coarse grained; biotitic; foliated to more massive @ 5-80° to CA. (variable due to folding); 15-35% red to purplish rounded to sub-hexagonal garnets (average ~25%) 0.2-3cm in size (average 0.5cm+); 10-30% biotite, 25-50% felsic minerals; zircon + cassiterite; occasional pegmatite vein. A few fractures @ 25-35° to C.A.; minor disseminated pyrrhotite &/or chalcopyrite in garnets in places

33.9 - 34.4' Garnetiferous mafic gneiss band @ 70-80° to CA

34.7 - 49.5' Folding; foliations @ 75° to 45° to 15-10° to CA; with wrinkles in foliations from about 39.3-40.5

49.5 - 45' Foliations @ 70-75° locally 60° to CA.

45 - 46.4' Fold nose with foliations opposed @ 35-40° to CA.

46.4 - 47.3' Foliations @ 45° to 60° to CA

49.2 - 54' Foliations @ 70° ± to CA,

54 - 60.7' More mafic biotitic mafic gneiss? in part); often larger garnets, up to 2cm in size, are more impure (biotite, + Pyrite); 10-20% red to purplish garnets; some foliations @ 70-75° to C.A.

- Locally, small blebs of magnetic Pyrrhotite & some Chalcopyrite in garnets near 59.8'
Contact @ 60° to C.A. parallel to foliations

59.7'

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60.7-78.5' MAFIC TO INTERMEDIATE GNEISS + PEGMATITE & GARNET
(18.51-23.93m)

Dark to medium greenish grey; medium to coarse grained; biotite-rich parts; variably foliated @ $\sim 30-65^\circ$ to C.A. (some folding present in zone); 25-85% mafic minerals (hornblende +/- biotite with some biotite-rich sections), $\leq 10\%$ to 50% felsic minerals (feldspar-quartz), Trace to locally 10% red garnets (average 1-2% garnet) 0.1-1 cm in size. 15% grey-white pegmatite - pegmatitic veining (+/- garnet +/- biotite as veins, rags and ragged veinlets, more or less parallel to foliations; rocks very soft to moderately soft; pegmatite is very hard

60.7-66' More typical mafic gneiss; foliations @ $60-75^\circ$ to C.A. mainly, Trace to 5% garnets

64.6-65.1' - pegmatite vein; ragged contacts @ $60-70^\circ$ and $20-35^\circ$ to C.A., parallel to foliations patches of wall rock present

66-66.8' Foliations change from about 60° through 30° to irregular sub-parallel to C.A. & become impregnated by pegmatitic material more or less parallel to low angle foliations

66.8-68.5' Pegmatite with patchy coarse grained host rock and Nil to locally 10% red garnets 0.2-1cm in size; some folding up-fold

68.5' - contact @ $35-45^\circ$ to C.A. parallel to foliation

68.5-78.5' Mainly coarse to very coarse grained mafic to intermediate gneiss / schist often biotite-rich (after hornblende which is chloritic, soft), with patches and rags of felsic material and some pegmatitic material; Trace to locally 10% garnets 0.2-1cm in size; foliations vary @ 40 to 75° to C.A.

69-70.3' - Biotite-rich schist

70.3-71.2' - Pegmatitic; biotitic

74.3-75.1' - Folding; foliations @ $45^\circ \pm 0^\circ$ to reversed @ $15-70^\circ$ to C.A.

75.6-76.1' - Biotite-rich schist with foliation @ 75° to 50° to C.A.

71.2-75.1' - Biotite-rich schist / gneiss, coarse grained +/- pegmatitic material; foliations often @ $60-75^\circ$ but variable

76.1-78.5' - medium to coarser grained mafic gneiss; $< 1-2\%$ garnets; foliations @ $45^\circ-50^\circ$ to 15° to opposed @ $55-60^\circ$ near 78.5'

78.5' - contact @ $\sim 55-60^\circ$ to C.A.

78.5-83.1' "SILICEOUS" GARNETIFEROUS UNIT + MAFIC GNEISS BAND
(23.93 - 31m)

Light to medium greys to reddish grey; medium to coarse grained; foliated @ 65-75° to C.A.; Biotitic; 10-35% red to purplish rounded to sub-hedral garnets (average 15-20%) 0.1-0.5 cm in size; 20-30% biotite; 50-60% felsics (quartz-feldspar) siliceous near pegmatite in unit below; Few fractures with chlorite +/- carbonate @ 15°, 30° to C.A. (opposed)
80.3-81.3 Mafic gneiss band parallel to foliations; biotitic parts; 1-2% garnet

83.1' +/- Contact gradational

83.1-84.9' PEGMATITE

(25.34-25.88m)

Grey-white, with some red feldspar alteration; minor garnet; biotite flakes & patches; several chloritic fractures +/- carbonate @ 35° and 5° to C.A.

84.9' Contact @ 40-45° to C.A. parallel to foliation in mafic gneiss

84.9-105' MAFIC GNEISS +/- PEGMATITE

(25.88-32.01m)

Dark greys to greenish-grey; medium to coarser grained; foliated @ 75-85° to C.A. mainly; 50-80% mafic minerals (hornblende +/- biotite), 20-50% felsics (feldspars-quartz) trace to locally 5% red garnets 0.1-1 cm in size; <3% Pegmatitic veining & rags & patches mainly parallel to foliations
84.9-89.7' Foliation changes from 45-50° to 25° to 65-70° to C.A.

105' END

Frank H. Toews

Frank H. Toews

Geologist

DTH: ST93-13

L.P.: -45°

SIZE: 32

AZIMUTH: 330°

ELEVATION: +10.5m

COORDINATES: Line 3+00m E / 0+30m S

LOCATION: Claim 1043376, Street Twp., Ontario

COMPANY: Emerald Isle Resources Inc. / Stralak Resources Inc. Joint Venture

DRILLED BY: Erana Mines Ltd., Lively, Ontario

DATE STARTED: Nov. 17/93 DATE FINISHED: Nov. 17/93

FINAL DEPTH: 126' (38.48m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: - Casing pulled

0-5'
(0-1.52m) CASING5-30.2'
(1.52-9.21m) MAFIC TO INTERMEDIATE GNEISS (+ GARNET) + "SILICEOUS"
GARNETIFEROUS UNIT +/- PEGMATITE.

Core from about 5.2'

Rocks variable; often biotitic; variable foliation; possibly somewhat brecciated in part; gradational to more distinct contacts; Traces to 25% garnets (average $\leq 10\%$) 0.2- to 3cm in size; garnets rounded to sub-rounded, red to purplish.; rocks hard to soft

5.2-6.4' Mafic to intermediate gneiss with felsic pegmatitic veining from 5.9'

5.2-5.5' - Dark greenish-grey, hornblende-rich (+- biotite); contact in ground core ends

5.5'-5.9' - Intermediate gneiss; medium-dark grey; biotitic but some hornblende remnants; 50% +/- felsics; $\leq 5\%$ garnets; down-hole contact irregular @ 75° +/- to C.A.5.9-6.4' - Felsic, pegmatitic, medium to coarse grained; 5-10% biotite and biotitic garnetiferous bands < 1.5 cm wide @ $65-75^\circ$ to C.A.; 5-10% red garnets 0.2-0.5 cm in size6.4' - contact @ $80-85^\circ$ to CA6.4'-9.7'
(1.95-2.96m) "Siliceous" garnetiferous unit; biotitic, more massive to tonalitic @ $70-80^\circ$ to CA; 10-25% red to purplish garnets (average 15-20%) 0.1-0.5 cm in size, rounded to sub-hedral; 25% +/- biotite; 50-60% felsic minerals (quartz - feldspar); rocks medium to coarse grained.

ST 93-13

9.7 - 11.5'	Mafic gneiss; dark grey to greenish grey; medium to coarser grained; 75-80% hornblende (+ biotite); 5-10% red garnets, 0.2-1 cm in size; 10-20% felsics (feldspar-quartz); foliations @ 70-80° to C.A.
11.5 - 25.7'	Mixed intermediate to mafic gneiss; medium to dark greys to greenish greys; medium to coarse grained; locally appears somewhat brecciated; 15-50% felsics (feldspar-quartz) and pegmatitic material sometimes patchy to ragged veins; 50-80% mafic minerals (hornblende +/- biotite with biotite-rich schistose parts); Trace to locally 40% red garnets (average 10% +/-) 0.2-3 cm in size (average 1 cm +/-), some with quartz, biotite, pyrit. Foliations variable @ 35° to 70° to C.A. Possibly parts are locally siliceous garnetiferous unit? 15.3-16.2' - 5-10% blue-grey, bladed Kyanite up to 2 cm long, often oriented @ 50-75° to C.A.
18-22, 2'	10-40% garnets, average 15%
25.7 - 30.2'	Mainly dark grey to greenish grey mafic gneiss; medium to coarse grained; 70-85% mafic minerals (hornblende +/- biotite); <1 to 20% red garnets (average < 10%); more massive to foliated @ 75-85° to C.A.
25.7-28.5' +	- actinolitic, soft; some biotite; mainly 2-3% garnets
28.7-30.2'	- 10-20% garnets; more garnet and biotite towards down-hole contact
30.2'	- contact @ ~ 50-60° to C.A.

30.2-57.5' "SILICEOUS" GARNETIFEROUS UNIT + MAFIC GNEISS BAND

(3.21 - 17.53m)

Medium to lighter greys to reddish grey, locally dark grey; medium to coarse grained; foliated to more massive @ 20-70° to C.A.; biotitic; <3% pegmatitic veins 0.1-0.5' wide parallel to foliation, more or less; 10-30% red to purplish garnets (average ~20%), 0.1-1 cm in size (average 0.5cm), rounded to sub-hearai; 10-25% brown biotite; 50-65% felsic minerals (quartz-feldspar); several fractures @ 15-25° to C.A.; rocks very hard to moderately hard. Mafic gneiss band from ~36.8-39.6' (gradational, biotite-rich contacts)

30.2-32.5' Weakly foliated ± ~60° to 70° to C.A. to massive
32.5-34.6' Foliations change from ~20-25° to 45° to C.A. down-hole

34.6 - 36.8'	Foliations @ ~50° increasing to ~60-65° and then more massive, biotite-rich and garnetiferous down-hole towards mafic gneiss band below
36.8 - 39.6' (11.22 - 12.07m)	Dark greenish grey; medium to coarser grained; generally foliated @ 70-80° to C.A. with parallel grey felsic veinlets and lenses (2-3%); 2-10% red garnets 0.2-1.5 cm in size (average < 5% garnet); 60-85% hornblende +/- biotite, with remainder being felsics; minor chalcopyrite, pyrite; (Contacts gradational, biotite and garnet rich)
39.6 - 40.3'	Biotite-rich, 40% garnet, local Pyrite disseminations near 40.1'
40.3 - 57.5	Foliations @ 65-80° to C.A.
50.2 - 50.7'	Pegmatite vein; biotitic; some garnet; up-hole contact @ 20-40° to C.A., down-hole contact @ 75° to C.A., both irregular, sub-parallel to foliations
57.5'	Contact with ^{0.21} pegmatite vein @ 45-60°, sub-parallel to foliation @ 65° to C.A. in garnet unit

57.5-125.2' MAFIC GNEISS +/- PEGMATITE +/- GARNET + LOCAL "SILICEOUS" GARNETIFEROUS UNIT BANDS
(17.53 - 38.17m)

Mafic (locally intermediate) gneiss is dark grey to greenish grey; foliated to more massive @ mainly 60-75° to C.A. (locally 15-45° to C.A.); 50-75% mafic minerals (hornblende +/- biotite), Trace to locally 5-10% red garnets (average < 2%); 15-50% felsic minerals (feldspar-quartz); rocks are moderately hard to soft, medium to coarse grained; occasional red feldspar alteration 5-10% grey-white pegmatite-pegmatitic veining, rags, patches often parallel to sub-parallel to foliations but also cross-cutting some pegmatite with red feldspar alteration; contacts ~~are~~ ragged and veins are < 1 cm to 0.4' wide

78 - 80.7' Siliceous garnetiferous unit; medium to light grey (23.78-24.6m) to reddish grey; medium to coarser grained; biotitic; 5-20% red garnets (average 15%), 0.1-1 cm in size (average 0.2-0.3 cm); 20-30% brown biotite; 60-80% felsic minerals (quartz-feldspar). Foliations @ 65-75° to C.A. parallel to mafic gneiss; rocks hard to moderately hard.
78'- contact is partly pegmatitic @ 55-70° to C.A.
80.7'- contact is siliceous; irregular @ 50-70° to C.A. in part with 2.5cm garnet patch
83 - 86.3' 25% pegmatite veining, often ragged margins @ 20-70° to C.A. and variable foliations in mafic gneiss @ 20-65° to C.A.

-	83.2-88.3'	Siliceous, hard, epidotized, brecciated(?) vein with variable garnet content (<2% to 15% near margins of vein); minor Chalcopyrite rags and magnetic disseminated pyrrhotite near down-hole contact; Contacts are opposed @ 15-20° (upper) and 30-40° (lower) to CA, but parallel to local foliations in mafic gneiss
	109.5' +	local fold in foliation @ 60° to sub-parallel to CA.
	111-113'	30-35% pegmatitic veining, patches, partly brecciates mafic gneiss host; pegmatitic veining has ragged, irregular contacts, sub-parallel to cross-cutting foliations @ 70° to 20° to CA.
	120.5'	Fold nose with limbs parallel to opposing, foliations @ 60° and 40-50° to CA, two pegmatite veins ≤ 0.1' wide cut foliations outside of fold zone between 120' @ 120.8'
	125.2'	Contact parallel to foliation @ 75-80° to CA.

"SILICEOUS" GARNETIFEROUS UNIT

Medium greys; biotitic; locally siliceous and very hard near contact; 10-20% red garnets (average <15%) 0.2-1 cm in size; up to 50% biotite; foliation @ 75-80° to CA.

~126.2'
(38.48m)

END

Frank H. Toews, B.Sc.

Frank H. Toews

Geologist

DD.H.: ST 93-14

DIP: -45°

E-ZE: BQ

AZIMUTH: 330°

ELEVATION: +10.5 m

COORDINATES: Line 3+25 m.E / 0+32 m.S

LOCATION: Claim 104 3376, Street Twp., Ontario

COMPANY: Emerald Isle Resources Inc./Stratok Resources Inc. Joint Venture

DRILLED BY: Erana Mines Ltd., Lively, Ontario

DATE STARTED: Nov. 18/93

DATE FINISHED: Nov. 18/93

FINAL DEPTH: 140' (42.68m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: - Casing pulled

- Main garnet unit appears to finger out

0 - 6' (0 - 1.83m)	CASING
6 - 103.1' (1.83 - 31.43m)	MAFIC GNEISS +/- PEGMATITE +/- "SILICEOUS" WEAKLY GARNETIFEROUS UNIT BANDS Mafic (locally intermediate) gneiss is dark grey to greenish grey, medium to coarser grained; foliated to more massive @ 50-75° to C.A.; 50-80% mafic minerals (hornblende + biotite); Trace to 5% red garnets (average < 2%), 0.1 - 1.5 cm in size; 20-50% felsic minerals (feldspar - quartz); hard to soft <5-10% grey-white pegmatite - pegmatitic veining, rags, patchy areas, often more or less parallel to foliation, and < 1 cm to 0.5 wide; some show visible folding - Siliceous, weakly garnetiferous unit bands are biotitic, foliated @ 60-75° to C.A., more or less parallel to mafic gneiss foliations but may be folded in places, and are < 2' to 5' wide; Trace to 10% (4%) garnets present; rocks light-medium grey, hard to soft.
Core from ~7.6'	
7.6 - 9.5'	Mafic gneiss plus some pegmatite veining; 8.4 - 8.8' - biotitic, siliceous garnet unit, minor red garnet; foliation @ 70-75° to C.A.
9.5 - 10.6' (2.9 - 3.23m)	Biotitic siliceous garnet unit; Trace to 1% garnets; Foliation @ 65-75° to C.A.
11.3 - 11.55'	Folded ≤ 1cm wide pegmatitic veinlet in mafic gneiss; down-hole limb @ 60° parallel to foliation
25. - 25.8'	Biotite-rich mafic schist/gneiss; foliation @ 65-70° to C.A.
32 - 35'	Mainly biotite-rich mafic schist/gneiss; foliation @ 70-75° to C.A.; 0.5' of hornblende-rich mafic gneiss
36.2 - 37.9' (11.04 - 11.55m)	Biotitic, siliceous garnetiferous unit; folded with patches of biotitic, garnetiferous mafic gneiss; Trace to 10% garnets up-hole contact @ ~75° to C.A., down-hole contact opposite @ 60° to C.A. with sinuous weak foliations between

37.9 - 40.6' (11.55 - 12.38m)	Folded, partly biotitic, garnetiferous mafic gneiss; foliations vary from 60° to 60° opposed decreasing to about 20° near 40', then increasing to about 65° to C.A.; 5% garnets
40.6 - 44.7' (12.38 - 13.63m)	Biotitic, siliceous garnetiferous unit; Trace to locally 5% red garnet; unit is folded - 40.6 - 42.5' - foliations @ $60-65^{\circ}$ to C.A. 42.5 - 42.7' - nose area 42.7 - 44.7' - foliations more less opposite to section between 40.6 - 42.5, @ $50-65^{\circ}$ to C.A. 44.7' - contact with mafic gneiss @ $65-70^{\circ}$ to C.A.
46.2 - 49'	30% +/- pegmatite-pegmatitic veinings, ^{rags,} ^{fractures} flooding of mafic gneiss; rocks foliated to more massive; local 3 cm garnet patches near 47.6'
50.2 - 51.5' (15.3 - 15.70m)	Biotitic, "siliceous" garnetiferous unit; 1-2% garnets ≤ 0.5 cm size; foliations @ $70-80^{\circ}$ parallel to contacts with mafic gneiss
51.5 - 61.7'	Mafic gneiss +/- biotitic parts, minor pegmatitic veinings < 1% to 10% red garnets (average 5% +/-) 0.1 - 1.5 cm in size (average 0.2 - 0.5 cm); foliations mainly $60-65^{\circ}$ to C.A. 61 - 61.5' - epidotized, siliceous, garnetiferous vein(?) at nose of fold; contacts are opposed @ $50-55^{\circ}$ to C.A. Sub-parallel to foliations in mafic gneiss host rocks; 5% garnet in and near vein. 61.7' - contact @ 60° to C.A.
61.7 - 65.9' (18.81 - 20.09m)	Partly siliceous and biotitic garnetiferous unit; medium to light greys; medium to coarse grained, moderately soft to hard; ~5% pegmatitic veinings mainly below 64'; 61.7 - 64.4' - darker, biotite rich, 5-20% red garnets (average 10%), 0.1 - 1 cm in size; foliations @ 60° decreasing to ~ 40° to C.A. 64.4 - 65.9' - light to medium greys, biotitic, Trace to 5% garnets (average $\leq 2\%$) 0.1 - 0.5 cm in size; foliations @ 70° (+/-) to C.A. 65.9' - contact @ ~ 60° with mafic gneiss
65.9 - 78'	Mafic gneiss with several bands (25%) of biotitic, light to medium greys, siliceous, weakly garnetiferous unit, 0.3 - 2' wide @ $60-75^{\circ}$ to C.A. between 69.5' and 77.1'; foliations similar to contacts; Trace to locally 5% red garnets throughout section (average $< 2\%$)

ST 93-14

78 - 83.2' (23.78 - 25.37m)	Medium to lighter grey to reddish grey, medium to coarse grained, biotitic, moderately soft to hard, "siliceous" garnetiferous unit; parts biotite-rich; 10-20% red garnets (average 10-15%), 0.1-2 cm in size (mainly 0.1-0.3 cm.); rocks massive to foliated @ 65-75° to C.A.; several pegmatitic veins ≤ 0.1' wide.
83.2 - 84.5'	Mafic gneiss < 1-2% garnet contacts @ 75-80° to C.A.
84.5 - 85.5' (25.76 - 26.07m)	Similar to 78-83.2', ≤ 15% garnet, 0.1-1 cm in size
85.5 - 103.1' 103.1'	Mafic gneiss + pegmatite-pegmatitic veining; parts biotitic; Trace to 2% garnet; medium to coarse grained; foliated @ 60-80° to C.A. mainly; Coarse grained amphibolite sections from 96.9 to 102'. 88-92' = 20% pegmatite-pegmatitic veining rags and patchy flooding; some brecciation Contact @ ~75° to C.A. parallel to foliation

103.1-124.4' "SILICEOUS" GARNETIFEROUS UNIT +/- FELSIC GNEISS +/- MAFIC GNEISS BANDS +/- GARNET (Probably represent Footwall Units, 31.43 - 37.93m)

Garnetiferous unit is medium to lighter grey to reddish grey; very hard to moderately hard; more massive to foliated @ 60-75° to C.A.; medium to coarse grained; biotitic; 5-20% red garnets (average ~10%), 0.1-1 cm in size (average 0.5 cm rounded to sub-rounded in shape); 15-30% brown biotite; 50-70% felsic minerals (quartz-feldspar).

Several light-medium grey, fine to medium grained, biotitic siliceous, felsic gneiss bands +/- garnets interbedded with garnet units, with foliations mainly parallel to contacts (one band shows folding); up to 15% biotite, Trace to 10% garnets; bands 0.6-3' wide, more massive to foliated

One mafic gneiss band +/- garnet

Few pegmatite veins up to 0.1' wide

103.1 - 109.6'	Garnet unit; ~15% garnets 0.1-1 cm in size
109.6 - 110'	Pegmatite vein + biotite; contacts @ 75 and 170° to C.A.
110 - 110.6'	Felsic gneiss + pegmatitic veinlet; foliation @ 55-60° to C.A.
110.6 - 111.6'	down-hole contact semi-gradiational; 1% garnet, 0.1-0.3 cm
111.6 - 113'	Garnet unit; <5-10% garnets 0.1-0.7 cm in size; folia @ 55-60° to C.A.; contacts semi-gradiational
111.6 - 113' +	Felsic gneiss; < 1-10% garnets (average 2-3%) 0.1-0.3 cm

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ctd.	Foliation @ 60° C.A. to ~ $112.5'$, then opposed @ $70-75^{\circ}$ C.A. from $112.8'$ Garnet unit; 5% garnet; 0.1-0.7 cm; foliation $75-80^{\circ}$ to C.A.; up-hole contact gradational
113 - 113.8'	$113.8'$ - contact with mafic gneiss @ $80-85^{\circ}$ to C.A.
113.8 - 116.3'	Mafic gneiss, dark to medium greenish grey, massive to foliated @ $80-85^{\circ}$ to C.A.; parts biotitic; 2-5% garnets $15.3'$ patchy quartz; nose of fold?
116.3 - 119.7'	$116.3'$ semi-gradiational contact; foliation @ ~ 70° to C.A. Garnet unit; darker to medium greys; biotitic; 5-10% garnet, 0.1-0.7 cm in size; foliations @ $72-75^{\circ}$ to C.A., locally 60° near $119.7'$ $119.7'$ contact @ 60° to C.A.
119.7 - 122.8'	Felsic gneiss; biotitic; massive to foliated; 10% coarser grained biotitic bands $\leq 0.1'$ wide @ $70-80^{\circ}$ and more tightly to openly folded between $121.5'$ and $122.5'$; some garnets in biotitic bands; < 1% overall
122.8 - 124.4'	$122.8'$ - contact @ $70-75^{\circ}$ parallel to foliations Garnet unit; darker to lighter greys; foliated @ $75-80^{\circ}$ to C.A.; 5-15% garnets (average 10%) 2.1-1 cm in size; 1 cm thick quartz veinlet parallel to foliation $124.4'$ - contact with $2.2'$ biotitic quartz vein @ ~ 75° to

BIOTITIC TO MUSCOVITIC FELSIC GNEISS / SCHIST

(37.93 - 41.04m)

124.4 - 134.6'	Light grey to medium-light ^{similar} greys; medium grained; foliated @ mainly $70-80^{\circ}$ to C.A.; moderately hard to soft; up to 80% micaceous minerals, minor red garnets; Pyrite fillets in foliation
124.4 - 124.6	Biotitic quartz vein
124.6 - 128'	More feldspar-quartz rich; light grey; several garnetiferous dark grey, biotite-rich bands $\leq 0.3'$ wide with up to 5% garnet
128' - 130.8'	Locally foliations @ 55° to C.A.
130.8 - 132'	Milky quartz vein + muscovite @ $70-80^{\circ}$ to C.A. parallel to foliations
134.4 - 34.5	Milky quartz vein 2 $70-80^{\circ}$ to C.A. parallel to foliations in schist

MUSCOVITE \pm BIOTITE SCHIST \pm GARNET

(41.04 - 42.68m)

Medium-light oliveish-grey; medium to coarse grained; foliated @ $70-80^{\circ}$ to C.A.; parts crenulated; up to 90% micaceous minerals, 2-3% red garnets, rounded to lensoid, 0.1-0.3 cm in size

END

FRANK H. TOEWS, B.Sc.

Frank H. Toews
Geologist

D.D.H.: ST 93-15

>: -45°

SIZE: BQ

AZIMUTH: 330°

ELEVATION: +5m

COORDINATES: Line 0+25m W / 0+45m S

LOCATION: Claim 1043375, Street Twp., Ontario

COMPANY: Emerald Isle Resources Inc./Stratak Resources Inc. Joint Venture

DRILLED BY: Erana Mines Ltd., Lively, Ontario

DATE STARTED: Nov. 19 /93 DATE FINISHED: Nov. 23 /93

FINAL DEPTH: 150' (45.73m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: - Casing pulled

- Cold weather caused water line problems on Nov. 22

0- 9'

(0 - 2.74m)

CASING

9.2-10.6' Boulder of Nipissing Gabbro in core

10.6'-43.9'

MAFIC GNEISS +/- PEGMATITE +/- GARNET

(3.23 - 13.38m)

Dark grey to greenish grey; moderately hard to soft; foliated @ 60-80° to C.A.; medium to coarser grained; 50-80% mafic minerals (hornblende & biotite), trace to locally 10% red garnets (average < 2% 0.2-2 cm in size, rounded to irregular patches, <20-50% felsic minerals (feldspar-quartz); locally some red altered feldspars in gneiss and pegmatite; ~10% pegmatite-pegmatitic veining (+biotite +/- garnet +/- red feldspars), mainly parallel to sub-parallel to foliations in gneiss and often with irregular to ragged margins; veining mainly ≤ 1cm to 0.2' wide, A few chloritic fractures @ 510-35° to C.N.

25-30' Pegmatitic veining often with red feldspar alteration

31.7' Some caved, reduced pebbles from top of hole

31.8-32' Biotitic, schistose @ 55-60° to C.A.

32.3-32.5' Broken, crushed core;uggy pegmatitic veinlet @ 32.5°

33-37.4' 3-10% garnet in gneiss and in some pegmatite veins (average < 5%; garnet); foliations @ 60° to 70° to C.A.

37.4-38.3' Pegmatitic vein, <10% biotite veinlets (?), irregular; some chloritized garnets?

...to 38.3m 38.3' Contact irregular @ ~30-60° to C.A. parallel to foliation

38.3-43.9' Dark to medium green to greenish grey; soft biotitic, actinolitic, mafic schist with patches of quartz and one pegmatite veinlet; foliations @ 55-75°

43.9' - Dioritic, chloritic contact @ ~75° to C.A. more or less parallel to foliation in schist; possible kinking present

43.2-71.4'
(13.3 - 21.7m)

"SILICEOUS" (BIOTITIC TO MUSCOVITIC) GARNETIFEROUS UNIT

Light greys to reddish to silvery grey (muscovitic); more massive to foliated @ 35-80° to C.A.; very hard to soft (mica-rich); ≤ 1% to 40% (locally) red to purplish garnets (average ~20%+), 0.1-2 cm in size (average 0.5 cm), rounded to sub-hedral in shape; rocks weakly to moderately biotitic on margins (<1% to 25%) and muscovitic + biotite to muscovite-rich in central portions (10%-80% mica); 10-60% felsic minerals (quartz-feldspar); occasional fracture @ 35° and 60° to C.A.
Minor pegmatite

43.9-44.7'
44.7-49.1'
(13.63-14.97m)

Very siliceous, 10% garnet (patchy)
Siliceous, weakly biotitic becoming muscovitic; more massive becoming foliated @ about 70-80° to C.A.; 20-40% garnet (average ~25-30%), 0.3-2 cm & and patchy

49.1-52.5'

Muscovitic; schistose; foliation @ 65-70° to C.A.
hard to moderately soft., some bright green micas
49.1-50.9' - 10-35% garnets (average 20%+), 0.3-1c in size

50.9-52.5' - 1-5% garnet

52.5-53.5'

More siliceous, muscovitic to biotitic, medium grained
Trace to 40% pinkish garnets (average 20%), 0.1-0.5 cm in size
weakly foliated; possibly minor Kyanite near 53.4'
Muscovite-rich (+ biotite); schistose; ≤ 5% garnets
(some leusoid) 0.2-1 cm in size; foliation @ ~70-75° to C.A.

56.9-57.8'

More siliceous, muscovitic, weakly to moderately
schistose with foliations @ 70-65° to C.A. (+ Pyrite)

5% garnets 0.1-0.3 cm in size mainly

59.8-61.8'

Muscovite-rich schist, foliations @ 75-80°

to C.A.; 10% garnets 0.3-0.7 cm in size

61.8'-65.5'

More siliceous; muscovitic; siliceous patches;

weakly foliated @ 20° to 60° to C.A.;

20-25% garnets 0.5-2 cm in size; some

sillite present

65.5'-71.4'

Biotitic (10-25%); siliceous; foliations @ 45° to 60°
to C.m.; 15-35% garnets (average ~20%), 0.1-1c in size (average 0.3-0.5 cm)

65.5-67.5° foliations change from about 65° to 45° to
down to a 0.3° pegmatitic zone.

67.5-71.4° foliations @ 65° to 80° to C.m.

downward

71.2 contact @ ~80° to C.A.

ST 93-15

71.4-82'
(21.77-25.0m)

MAFIC GNEISS +/- GARNET +/- PEGMATITE

Similar to 10.6-37.4' section; hard to moderately soft; foliated @ $70-80^\circ$ to C.A. mainly; some pegmatite-pegmatitic veining and patches < 1 cm to 0.4' wide parallel to sub-parallel to foliations (mainly); Trace to locally 5% garnet, 0.1-0.7 cm in size;

71.5-71.9" Pegmatite (+/- biotite +/- garnet +/- red feldspar alteration). Contacts @ $\sim 75^\circ$ +/- and 45° (slip) to C.A.

74.3-74.6' Pegmatite; nebulous contacts @ $70-80^\circ$ to C.A.

80.8-80.9' Small shears (epidote?) @ $75-80^\circ$ to C.A. parallel to foliation

81.2'-81.4' Slip @ $80-85^\circ$ and small shear downhole @ 45° C.A., minor folding between them; slip and shear parallel foliations above and below zone

81.4-82' Foliations @ 45° to 55° to C.A. sub parallel to pegmatite vein contact at 82'

82-90.2'
(25.0-27.50m)"SILICEOUS" (MUSCOVITIC) GARNETIFEROUS UNIT + PEGMATITE
(Pegmatite veins border garnet unit.)

Light grey to silvery grey to reddish grey; medium to coarse grained; parts biotitic; very hard to moderately soft; more massive to schistose with foliations @ 50° to 70° to C.A. (more or less parallel to upper pegmatite vein) 5-25% garnets, 0.1-1 cm in size (average $\leq 15\%$, 0.5 cm smaller in more siliceous zones).

82-83.2' Pegmatite with some red feldspar alteration, 5-10% biotite rags, canas (+/- garnet) mainly @ $45-55^\circ$ parallel to contacts.

83.2-89.2' Contact gneissic & biotite-rich @ 55° to C.A. Garnet zone, 25% very siliceous sections $\leq 0.5'$ wide; rocks mainly muscovitic and schistose
89.8-90.2' Siliceous, biotitic, garnetiferous, weak foliation @ 55° to C.A.

89.2' contact with pegmatite @ $55-60^\circ$ to C.A. opposed to foliation above

89.2-90.2' Pegmatite with 2% garnet and 10% biotite rags and bands

90.2' contact with mafic gneiss @ $55-60^\circ$ to C.A. opposed to contact at 89.2' parallel to sub-parallel to mafic gneiss below

96' - 93.8' MAFIC GNEISS + PEGMATITE
(27.50 - 28.60m)

Similar to 71.4 - 82' section; 2-5% garnets, 0.2-0.5 cm in size; rocks moderately soft to soft; foliations @ 60-70° to C.A.; 15-20% pegmatite-pegmatitic (+ biotite). Veining < 1cm to 0.4' wide parallel to foliations rocks with horiz/laude + biotite

91.9 - 92.3' Biotite-rich pegmatite; 40-50% biotite; contacts biotite schist @ ~65° and ~60° to C.A. parallel to foliations in gneiss.

93.8' Contact @ 70° parallel to foliation in gneiss

93.8 - 103.5' "SILICEOUS" GARNETIFEROUS UNIT + FELSIC GNEISS AND
(28.60 - 31.55m) MAFIC GNEISS BANDS

Garnet unit is medium-light grey to silvery grey (muscovitic) to reddish grey; very hard to soft (mica-rich); foliated to massive (with folding evident in core in places) @ 70° to 55° to C.A. mainly; Trace to 25% red to purplish garnets 0.1-1cm in size (average 15-20% garnets in garnet sections, 0.3 cm in size) 10-50% biotite; 40-60% felsic minerals (quartz-feldspar); rocks locally muscovite-rich schist; occasional pegmatite-pegmatitic vein or patch < 0.1' wide

Felsic gneiss bands are light grey, fine to medium grained. siliceous + biotite

One mafic gneiss band!

93.8 - 95.4' Garnet unit; biotitic (20-30%); 15%+ garnets; foliation @ 70-75° to C.A.
95.4' - Contact with pegmatite vein @ ~70° to C.A. Biotitic felsic gneiss, muscovite-biotite schist with several garnet veins and patches; minor garnet; foliation @ 60-70° to C.A.
96.1 - 96.5' Mafic gneiss band enclosed by a siliceous band and pegmatite vein; contacts @ 75-80° to C.A.

97.6 - 100.8' Garnet unit; many biotitic (locally muscovitic schist), felsic to schistose; foliated @ 60-75° to C.A.; possible foliation of light grey siliceous bands (2-5-6' thick) between 98 - 99.3' (one shows @ 70° to foliation); 10-20% garnets 0.2-1cm in size; 100.8' - 101.6' @ 75° to C.A. with grey siliceous band below

100.8 - 101.6' Even siliceous band with vague foliation upper part, and 0.2' quartz + vein with muscovite contacts @ 35° and 55° at 101'

101.2 - 101.6' - Schistose schist (and lower pegmatitic vein ~1.5') @ 50-75° to C.A.

- 101.6-103.5' Fold zone - in garnet unit and siliceous bands (+- biotite +/- muscovite)
 101.6-102' - garnet unit with pegmatitic patch and pegmatitic veinlets on contacts @ 45° and $60-65^\circ$ to CA.; foliations change down-hole from 45° to 65° to CA.; $\leq 10\%$ garnet
 102-102.2(+)' grey, folded, biotitic, siliceous band with lower contact @ 40° to CA.; fold limbs parallel contacts
 (31.16-31.4m) 102.2-103.2' Garnet unit, folded with foliation @ 40° to $15-20^\circ$ to 0° at nose, to an opposed foliation of 60° to CA. at down-hole contact; biotitic; 15% garnets 0.2-0.7 cm in size
 103.2-103.3' muscovitic (+- biotite) schist band with foliation and contacts @ 60° to 50° to CA.
 103.3-103.5' - grey siliceous band (+- biotite + muscovite) with foliation @ 35° to CA. parallel to down-hole contact

123.5-124' BIOTITIC TO MUSCOVITIC FELSIC GNEISS / SCHIST + MINOR GARNETIFEROUS UNIT AND MAFIC GNEISS BAND
 (31.55-37.0m)

Severally, light greys; moderately hard to moderately soft; biotitic to muscovitic with 10-30% micaceous minerals (locally mica-rich), 50-90% felsic minerals (quartz-feldsp.) foliations $\approx 60-75^\circ$ to CA., parts crenulated; trace to locally 2% garnets; occasional pegmatitic vein and lenses

106.1-106.7' Biotitic, garnetiferous unit @ 75° to CA. parallel to foliations; 10% garnets ≤ 0.5 cm in size

111.2-111.7' Biotitic, massive mafic gneiss band, pegmatite @ contacts @ 75° and 65° to CA.

113.8-114.3' Folded ?? pegmatite vein; outer contacts @ $\sim 35^\circ$ to CA. partly to sub-parallel local enclosing foliations; some with pyrite near contacts

118.4-120.7' Soft; biotite-muscovite-rich schist with 1-2% garnet, 0.2-0.3 cm in size, foliations change from $\sim 50^\circ$ to 45° to CA.; some kyanite(?) near 120.6'

121.4-124.1' MAFIC GNEISS, SCHIST
 (37.01 - 37.84m)

Soft, dark to medium green to greenish grey; medium to coarse grained; actinolitic, biotitic; more massive to foliated parallel to contacts @ $75-80^\circ$ to CA.

124.5-128.4' BIOTITIC (+ MUSCOVITIC) FELSIC GNEISS / SCHIST
(37.84 - 39.45m)

Similar to 103.5-121.4' section; foliated to more massive @ $70-80^\circ$ to CA.; minor garnets; few pegmatitic veinslets $\leq 0.1'$ wide (+ red feldspar alteration).

125.1-125.6' Biotite-rich; soft; possible Kyanite present; minor garnets
129.4' Locally garniferous adjacent to contact with pegmatite veining with irregular contact @ $\sim 75^\circ$.

129.4-141.7' "SILICEOUS" GARNETIFEROUS UNIT +/- PEGMATITE +/- KYANITE
(39.45 - 43.17m)

Light to medium greys to silvery grey (muscovitic); hard to soft; more massive to foliated, gneissic to schistose; biotitic to muscovitic; Trace to locally 30% red garnets 0.1-1.5cm in size (average 10%+ garnets, 0.3cm in size); rocks variable, locally very siliceous; <10-60% micas; 10-70% felsics; foliations @ $70-80^\circ$ to CH, mainly, parts crenulated. Few pegmatite-pegmatitic veins.

130-130.5' Some Kyanite (light bluish-grey)

135.2-136.2' Some Kyanite

138.2-139.6' Chlorite-carbonate fractures @ 5° to CA.

140.6-141.7' Trace garnet; foliations @ $60-80^\circ$ to CA., several pegmatitic veins

141.6' Contact with garniferous mafic gneiss @ $\sim 80^\circ$ to CA.

141.6-150' MAFIC GNEISS + PEGMATITE +/- GARNET
(43.17 - 45.73m)

Similar to 71.4-82' section; dark grey to greenish grey, moderately hard to soft; +/- biotite; Trace to locally 15% garnets (average 3%, 0.2-1cm+ in size); rocks more massive to foliated @ $75-80^\circ$ to CH, with some pegmatitic veins parallel.

141.6-143.5' Mafic gneiss with 5-15% garnets, enclosing 2 pegmatite vein @ $75-85^\circ$ to CA from 142.9-142.7'

150'
(45.73m)
END

Frank H. Taews

Frank H. Taews

Geologist

D.D.H.: ST 93-16

p.1 of 5

DIP: -45°

S.E.: BQ

AZIMUTH: 330°

ELEVATION: +4m

COORDINATES: Line 0+50 mW / 0+51 mS (on access road)
LOCATION: Claim 104 3375, Street Twp., Ontario

COMPANY: Emerald Isle Resources Inc. / StrataK Resources Inc. joint venture

DRILLED BY: Erana Mines Ltd., Lively, Ontario

DATE STARTED: Nov. 23 / 93 DATE FINISHED: Nov. 24 / 93

FINAL DEPTH: 150' (45.73m)

LOGGED BY: Frank H. Toews, B.Sc.

REMARKS: Casing pulled; collar on road

- Note: hole passed from bedrock through cobbles and 0.5' of sand between about 15' and 17.5' where bedrock was re-entered.

0- 10'
(0- 3.05m)

CASING

~10 - 52'
(3.05 - 15.85m)

MAFIC GNEISS +/- PEGMATITE +/- GARNET

Dark grey to greenish grey; moderately hard to soft; foliated @ 65-80° to CA. mainly (local kinks? or folds visible in places); medium to coarser grained; 50-75% mafic minerals (hornblende-biotite), 20-50% felsic minerals (feldspar-quartz). Trace to locally 10% red garnets, 0.2-1 cm +/- in size (average < 2% garnets); ~10% grey-white pegmatite-pegmatitic veining, rags and patches, often with irregular to ragged contacts more or less parallel to foliations, but some are folded locally or cut the foliations in the gneiss; veining is ≤ 1cm to < 1' wide, occasionally with red feldspar alteration; most veining ≤ 0.1' wide

10 - 15' +/- Mafic gneiss +/- pegmatite (bedrock)

15-17.5' Cobblest fine grained mafic gneiss, pink arkose, Nipissing Gabbro and pebbles of wackes

~17-17.5' - driller reported sand here

17.5 - 18.3' Bedrock begins again; pegmatite, biotitic bands and rags

18.3' - ragged contact with gneiss @ ~45° to CA. cross-cuts main foliation @ 75-80° which is locally folded and invaded by fingers of pegmatite material

26.9-27.3'
(3.20) Pegmatitic vein; ragged contacts; up-hole contact parallel to foliation @ ~65° to CA.

44.4 - 46.1' 10-15% impure, red garnets and patches 0.2-3cm ill size

44.6 - few apatite (?) shears @ ~80-90° to CA.

44.7 - 45' pinkish to white pegmatite vein with wall rock inclusions-rags; contacts ~85° & 70° to CA. ≥ 0.1' wide pinkish pegmatite @ 60-70° to CA.

46.1'

46.2-46.5'	Coarse grained; chloritic, biotitic, soft, breccia 46.5' - contact with pegmatite @ ~70° to CA.
46.5-50' (14.18-15.24m)	PEGMATITE VEIN - reddish alteration and grey-white to creamy feldspar + quartz; 10-25% coarse biotite + chloritized amphibole(?) as rags and irregular veinlets; Patches and irregular veins of pegmatite in partly brecciated mafic gneiss
50-50.9'	Brecciated(?) mafic gneiss, rags of grey siliceous material present; rocks biotitic; <10% red garnets 0.2-1cm in size
50.9-52' (15.52-15.85m)	62' - contact @ ~75° to CA.; gradational?
52-76' (15.85-23.17m)	"SILICEOUS" GARNETIFEROUS UNIT Light greys to medium greys to reddish-grey to silvery grey (muscovitic); massive to foliated @ ~70-80° to CA., partly schistose; very hard to moderately soft; Trace to 40% red to purplish garnets 0.2-2cm in size (average 20%, 0.5cm+ size); muscovitic and biotitic sections with up to 50% micas; 30-90% felsics(quartz- feldspar) some sections very siliceous
52-55' (15.85-16.77m)	Siliceous (+- muscovite-biotite); 30-40% garnets (often patchy) 0.2-1cm in size
55-59' (16.77-17.99m)	Muscovitic (+- biotite); less siliceous; 20-35% garnets, 0.2-2cm in size (average 25%+, <1cm in size); weak high angle foliations
59-62.9'	Muscovitic, less siliceous; 5-30% garnets 0.2-1cm in size (average 20%, <1cm size) weak to moderate foliations @ 70-85° to CA.
62.9-64.9'	75% grey siliceous bands (+- muscovite) @ 75-85° to CA. with muscovite-rich parts; 2% garnet;
64.9-67.9'	Muscovitic; foliated @ 75-85° to CA., some crenulations; 2-3% garnets ≤ 0.5cm in size
67.9-69.2'	Very siliceous, grey, +- muscovite; 1-2% garnet 0.3cm+ in size
69.2-71.5'	Muscovitic (+- biotite); foliated @ 75-85° 5-25% garnets 0.2-1cm in size (average 20% 0.5cm)
71.5-76' (21.80-23.17m)	Biotitic, medium greys; foliated @ 75-85° to CA.; 20% + biotite, ~20-25% garnets 0.2-1cm in size (average 0.5cm+)
76'	Contact parallel to foliation @ ~80° to CA.

76-88.8' MAFIC GNEISS +/- GARNET
(27.07-27.07m)

Dark grey to greenish-grey; moderately hard to moderately soft; foliated @ 45-80° to CA. (mainly 70-80°), 60-80% mafic minerals (hornblende-biotite), Trace to 15% garnets 0.1-0.5 cm in size (average 2%, 0.3 cm size). Occasional pegmatite vein

76-78.8' 3-5% garnets

78.8-80.0' Redrilled core; ground core ~0.4'

80.3' 0.1' pegmatite vein parallel to foliation @ 70-65° to CA. in gneiss

80.4-81.5' Foliation changes from 65° to 50° and then increases to ~80° below

83.3-83.5' Pegmatite @ ~80° parallel to foliation

87-87.4' Epidotized, siliceous, garnetiferous (<10%) band @ ~70° to CA. parallel to foliation

87.4-87.7' Garnetiferous, biotitic, siliceous, with 15% garnet; foliation @ ~75° to CA.

87.7-88' Pegmatite vein +/- biotite; contacts @ 65° parallel to foliation

88-88.8' Garnetiferous, biotitic mafic gneiss; ~15% garnet; foliation @ 70-75° to CA.

88.8-94.9' PEGMATITE + GARNETIFEROUS UNITS
(27.07-28.93m)

88.8-91.1' Pegmatite Vein; grey-white becomes more biotitic and garnetiferous below 89.7' with 0.1-0.2 remnant garnetiferous biotitic band @ 75-80° to CA. at 89.7', and biotite flakes and red garnets 0.5-2 cm in size from 90-90.9' (10-15% garnet)

88.8' - Contact @ 75-80° to CA.

90.9-91.1' 90.9' - nebulous contact in garnet-rich zone Biotite-rich; 25%+ garnets ≤ 0.5 cm in size

91.1'(+) 91.1'(+) - Contact @ 75-80° to CA

91.1-92' Light grey to reddish, medium grained, biotitic Siliceous garnet unit; some banding @ 75-80° to CA. Trace to 50% garnets 0.1-0.5 cm in size (average 30% garnet, some patchy); rocks muscovitic near contact at 92' @ 80° to CA.

92' 92' - grey, siliceous, biotitic-muscovitic pegmatite Vein @ ~80° to CA

92.3-94.1' Siliceous, muscovitic gneiss/schist; grey; foliated @ 75-80° to CA.; minor Garnets

94.1-94.3' Biotitic, 15% garnet

94.3-94.9' Grey-white pegmatite with biotite-garnet band!
and reg's @ $70-75^\circ$ to CA
94.9' - contact @ $\sim 70-75^\circ$ to C.A. with locally
garnetiferous mafic gneiss (biotitic)

94.9-99.7'
(28.93-30.40m)

MAFIC GNEISS +/- GARNET

Similar to 76-88.8' section; foliations @ $70-80^\circ$ to C.A.
mainly; minor pegmatitic veinlets; Trace to 15%
red garnets $\leq 0.5\text{cm}$ in size (average $\leq 5\%$ garnets)

99.7-105'
(30.40-32.01m)

"SILICEOUS GARNETIFEROUS UNIT + BIOTITIC TO MUSCOVITIC GNEISS BAND

Dark to medium grey garnetiferous unit, biotitic, siliceous,
medium grained; 15-20% garnets 0.2-1cm in size
with central, grey, biotitic to muscovitic gneiss band
from 101.5-103.9'; foliations @ $70-80^\circ$ to C.A.;
minor pegmatite

105-129.2'
(32.01-39.39m)

BIOTITIC TO MUSCOVITIC FELSIC GNEISS/SCHIST +/- MAFIC GNEISS(BIOTITE) BANDS +/- PEGMATITE + FAULT

Light to medium greys to dark grey (mafic), medium grained;
biotitic to muscovitic, parts siliceous; generally no
garnets present; foliations @ $60-75^\circ$ to CA (mainly) locally
@ 50° to CA; minor quartz and pegmatitic veinlets

123-125.2' Muscovite-biotite-rich schist, some crenulations;
1% (+/-) garnets; some Kyanite; foliations @ $70-$
 85° to CA.

125.3-125.6' Green, chloritized, schistose; foliation @ 70° CA
125.6-126' Chloritized, very soft schist, crushed core & mud -
FAULT

126-129.2' Biotitic gneiss foliated @ $\sim 75^\circ$ +/- to C.A.,
fractures/slips @ $15-25^\circ$ to CA., broken core

129.2-135'
(39.39-41.16m)

MAFIC GNEISS

(Similar? to unit from 121.4-124.1' in ST 93-15)

Dark green, medium to coarse grained; 60-80% mafics (partly biotitic
but mainly amphibole); locally foliated @ 60° to CA,
minor quartz veinlets and pegmatite

135' - contact @ 60° with pegmatite veinlet

135-140'
(41.16 - 42.84m)

BIOTITIC TO MUSCOVITIC FELSIC GNEISS / SCHIST

Medium greys; medium grained, foliated @ 60-70° to C.A.
< 2% pegmatitic veinlets; occasional garnet

136.3' Some kyanite in biotite-muscovite schist

136.4-137.6' Discing parallel to foliation in schist @ 60-70° to C.A.

140.5-150'
(42.84 - 45.73m)

"SILICEOUS" GARNETIFEROUS UNIT +/- FELSIC GNEISS

Medium greys; medium to coarse grained; hard to moderately soft; biotitic to muscovitic (variable), gneissic to schistose with foliations @ 65-70° to C.A.; Trace to 20% red garnet 3.1 - 1.5cm in size (average < 10% garnets 0.3cm +/- in size); 1-2% pegmatitic veinlets parallel to foliations; locally, some Kyanite in schistose rocks

140.5-144' ≤ 15% garnets

149-150' Felsic gneiss; light grey; hard; +/- biotite & garnet

150' (45.73m)

END

Frank H. Toews, B.Sc.

Frank H. Toews
Geologist

Report of Work Conducted
After Recording Claim

Mining Act

Assessment - Toronto

Transaction Number

W4310.00103

Personal information collected on this form is obtained under the authority
this collection should be directed to the Provincial Manager, Mining Lan
Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

- Instructions:**
- Please type or print and submit in duplicate
 - Refer to the Mining Act and Regulations 1. 41110SE0023 W6370.00103 STREET
 - A separate copy of this form must be completed for each Work Group.
 - Technical reports and maps must accompany this form in duplicate.
 - A sketch, showing the claims the work is assigned to, must accompany this form.

900

Recorded Holder(s)		Joint	Client No. EIR#129512 50%
EMERALD ISLE RESOURCES INC./STRALAK RESOURCES INC.Venture			STR#198246 50%
Address		Telephone No.	
106 Fielding Road, Lively, Ontario P0M 2E0		(705) 682-0649	
Mining Division	Township/Area	Miner's Plan No.	
Sudbury	Street Township	G-4109	
Date Work Performed	From: October 4th, 1993	To: November 24th, 1993	
Work Performed (Check One Work Group Only) <div style="text-align: center; margin-top: 10px;"> ONTARIO GEOLOGICAL SURVEY GIS - ASSESSMENT FILES Type RECEIVED RECORDED DEC - 2 1993 Receipt <i>J.A. Funk</i> </div>			
Work Group			
Geotechnical Survey	MAR 24 1994		
X Physical Work, Including Drilling	Exploratory Diamond Drilling		
Rehabilitation	RECEIVED		
Other Authorized Work	SECTION 18 ONLY		
Assays			
Assignment from Reserve			

Total Assessment Work Claimed on the Attached Statement of Costs \$ 37,671.

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
Erana Mines Limited	106 Fielding Road, Lively, Ontario P0M 2E0

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date	Recorded Holder or Agent (Signature)
	Dec. 3/93	<i>J.A. Funk</i>

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying

Joanne A. Funk, 106 Fielding Road, Lively, Ontario P0M 2E0

Telephone No.	Date	Certified By (Signature)
(705) 682-0649	December 3, 1993	<i>J.A. Funk</i>

For Office Use Only

Total Value Cr. Recorded <i>Applicable \$ 8,400.00 reserved: 429,271.50</i>	Date Recorded <i>Dec. 02/94</i>	Mining Recorder <i>[Signature]</i>	Received Stamp MING DIV. RECEIVED <i>DEC 3 1993</i>
Deemed Approval Date <i>Mar. 2/94</i>	Date Approved <i>Feb. 07/94</i>		
Date Notice for Amendments Sent		P.M. 7:00 6/10/11/24/12/31/5/6	

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim
-	S 1043372	1	-	400.
	1043373	1	-	-
	1043374	1	-	-
	1043375	1	18,372.	12,000.00
	1043376	1	19,299.	16,600.
	1043377	1	-	6,400.00
	1043378	1	-	-
	1043379	1	-	-
	1043380	1	-	-
	1043381	1	-	-
	1043382	1	-	-
	S 1179594	4	400.	12,499.
	1179595	6	1,600.	-
			2,400.	-
Total Number of Claims	13			

Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve
37,671.	8,400.	7600.00	29,271

Total Assigned From	Total Reserve

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

- Credits are to be cut back starting with the claim listed last, working backwards.
- Credits are to be cut back equally over all claims contained in this report of work.
- Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date
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Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des mines

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction

WJ9370.00103

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7284.

Les renseignements personnels contenus dans la présente forme sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7284.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaire	Labour 1-runner Main-d'œuvre 1-helper		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type		
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
	drill-JKS Boyles		
Total Direct Costs Total des coûts directs			

2. Indirect Costs/Coûts indirects

* * Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global	
Transportation Transport	Type			
Food and Lodging Nourriture et hébergement				
Mobilization and Demobilization Mobilisation et démobilisation				
Sub Total of Indirect Costs Total partiel des coûts indirects				
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)				
Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs)	Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)		37,671	

\$17./ft. is all-inclusive.
see attached invoices.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed $\times 0.50 =$
----------------------------------	---

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Evaluation totale demandée $\times 0.50 =$
--------------------------------------	---

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as agent
(Recorded Holder, Agent, Position In Company)

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature	<i>J. A. Fennell</i>	Date
		Dec. 3/93

Note : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.

Zina Mines Limited

106 Fielding Rd., R.R. #2
Lively, Ontario
P0M 2E0

(705) 682-0649
Telex 607-7361
FAX 682-2447

Emerald Isle Resources Inc. AND
Stralak Resources Inc.

106 Fielding Road
Lively, Ontario
P0M 2E0

INVOICE NO.: STR-317 F/T

DATE : Oct. 20/93

TERMS : Due upon receipt.

RE: Diamond Drilling (B.Q.) - "STREET TOWNSHIP"

Hole #93-01 - Oct. 4-5/93

Hole drilled complete to
160 ft. @ \$17./ft.

\$2720.00

Hole #93-02 - Oct. 6/93

Hole drilled complete to
100 ft. @ \$17./ft.

1700.00

Hole #93-03 - Oct. 7/93

Hole drilled complete to
150 ft. @ \$17./ft.

2550.00

\$6970.00

7% G.S.T. GST#R101671313

487.90

410 ft

\$7457.90

LESS: 50% due Emerald Isle Resource

-3728.95

\$3728.95

TRI PP Oct. 3-16/93
File "EIR STR 1"

ERANA MINES LIMITED
 106 Fielding Road
 Lively, Ontario
 P0M 2E0

TO: Emerald Isle Resources Inc. AND
Stralak Resources Inc.
 106 Fielding Road
 Lively, Ontario
 P0M 2E0

INVOICE NO.: STR-320
 DATE : Nov. 15/93
 TERMS : Due upon receipt.

RE: Diamond Drilling (B.Q.) - "Street Township"

Hole #93-04 - <u>Nov. 1-2/93</u>	Hole drilled complete to 150 ft. @ \$17./ft.	\$ 2,550.00
Hole #93-05 - <u>Nov. 3-4/93</u>	Hole drilled complete to 150 ft. @ \$17./ft.	2,550.00
Hole #93-06 - <u>Nov. 4/93</u>	Hole drilled complete to 100 ft. @ \$17./ft.	1,700.00
Hole #93-07 - <u>Nov. 5-8/93</u>	Hole Drilled complete to 125 ft. @ \$17./ft.	2,125.00
Hole #93-08 - <u>Nov. 8-9/93</u>	Hole drilled complete to 100 ft. @ \$17./ft.	1,700.00
Hole #93-09 - <u>Nov. 9-10/93</u>	Hole drilled complete to 135 ft. @ \$17./ft.	2,295.00
Hole #93-10 - <u>Nov. 11/93</u>	Hole drilled complete to 100 ft. @ \$17./ft.	1,700.00
<i>860 ft</i>		\$14,620.00
G.S.T. 7%		1,023.40
		<u>\$15,643.40</u>
LESS: 50% due to Emerald Isle Res.		<u>- 7,821.70</u>
		<u>\$ 7,821.70</u>

ERANA MINES LIMITED
 106 Fielding Road
 Lively, Ontario
 P0M 2E0

TO:	Emerald/Stralak Joint Venturers 106 Fielding Road Lively, Ontario P0M 2E0	INVOICE NO.:	E/S JV-004
		DATE	: NOV. 26/93
		TERMS	: Due upon receipt.

RE: Diamond Drilling (B.O.) - "Street Township"

Hole #93-11 -	<u>Nov. 11-15/93</u> Hole drilled complete to 130 ft. @ \$17./ft.	\$ 2,210.00
Hole #93-12 -	<u>Nov. 16/93</u> Hole drilled complete to 105 ft. @ \$17./ft.	1,785.00
Hole #93-13 -	<u>Nov. 17/93</u> Hole drilled complete to 126 ft. @ \$17./ft.	2,142.00
Hole #93-14 -	<u>Nov. 18/93</u> Hole drilled complete to 140 ft. @ \$17./ft.	2,380.00
Hole #93-15 -	<u>Nov. 19-23/93</u> Hole drilled complete to 150 ft. @ \$17./ft.	2,550.00
Hole #93-16 -	<u>Nov. 23-24/93</u> Hole drilled complete to 150 ft. @ \$17./ft.	<u>2,550.00</u>

3c1 ft

G.S.T. 7% GST #R00107131C

\$13,617.00

953.19

\$14,570.19

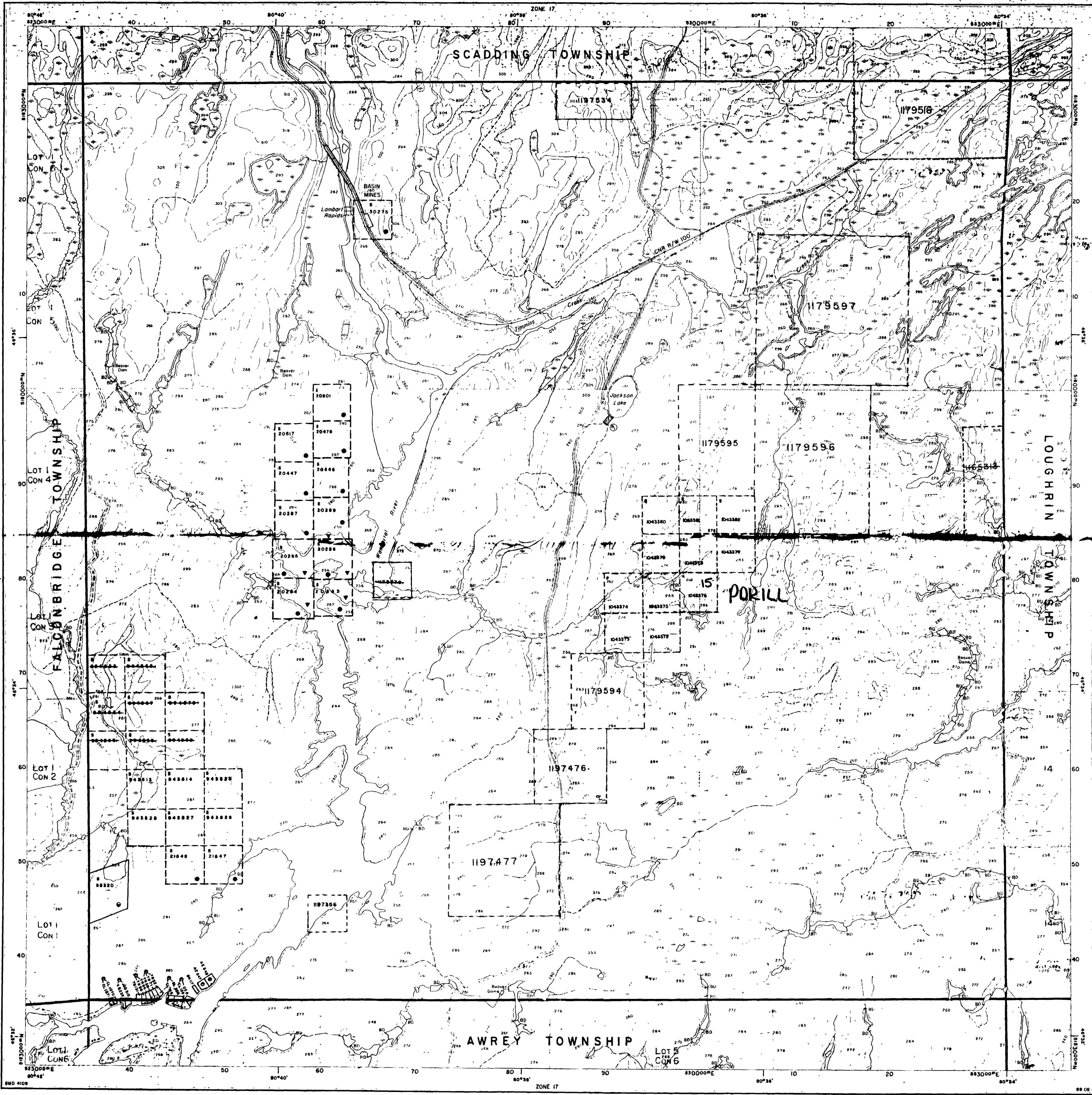
DIAMOND DRILLING

TWP/AREA Street twp REPORT NO. 15

WORK PERFORMED FOR: Emerald Isle Resources Inc./Stralak
 RECORDED HOLDER: SAME AS ABOVE () Resources Inc. Joint
 : OTHER () Venture

CLAIM NO.	HOLE NO.	FOOTAGE	DATE	NOTE
1043375	ST 93-01	160'	Oct/93	(1)
"	ST 93-02	100'	"	"
"	ST 93-03	150'	"	"
"	ST 93-04	150'	Nov/93	"
"	ST 93-05	150'	"	"
1043376	ST 93-06	100'	"	"
"	ST 93-07	125'	"	"
"	ST 93-08	100'	"	"
"	ST 93-09	135'	"	"
"	ST 93-10	100'	"	"
"	ST 93-11	130'	"	"
"	ST 93-12	105'	"	"
"	ST 93-13	126'	"	"
"	ST 93-14	140'	"	"
1043375	ST 93-15	150'	"	"
"	ST 93-16	150'	"	"

NOTES: (1) W9370.00103, filed June 1994.



Ministry of
Natural
Resources
Ontario
Ministry of
Northern Development
and Mines
IN SERVICE APRIL 27, 1980

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TOWNSHIP

STREET

M.N.R. ADMINISTRATIVE DISTRICT
SUDBURY
MINING DIVISION
SUDBURY
LAND TITLES/REGISTRY DIVISION
SUDBURY

Scale 1:20 000
Metres 1000 2000
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
Feet 3280 6560 9840
Contour Interval 10 Metres

AREAS WITHDRAWN FROM DISPOSITION

MRO - Mining Rights Only
SRO - Surface Rights Only
M+S - Mining and Surface Rights

Description	Order No.	Date	Disposition	File
(1) BEC-42/80	29/10/69	SRO		23022

SYMBOLS

Boundary	
Township, Meridian, Baseline	.....
Road allowance; surveyed	.....
shoreline	.....
Lot/Concession; surveyed	.....
unsurveyed	.....
Parcel; surveyed	.....
unsurveyed	.....
Right-of-way, road	.....
railway	.....
utility	.....
Reservation	.....
Clim., Pit, Pile	.....
Contour	.....
Interpolated	.....
Approximate	.....
Depression	.....
Control point (horizontal)	△
Flooded land	.....
Mine head frame	.....
Pipeline (above ground)	.....
Railway: single track	.....
double track	.....
abandoned	.....
Road, highway, county, township	.....
access	.....
trail, bush	.....
Shoreline (original)	.....
Transmission line	.....
Wooded area	.....

NOTES
THE SUBDIVISION OF THE TOWNSHIP OF STREET AB LAID OUT INTO LOTS AND CONCESSIONS WAS ANNULLED IN 1963.

DISPOSITION OF CROWN LANDS

Patent	
Surface & Mining Rights	.....
Surface Rights Only	.....
Mining Rights Only	.....
Lease	
Surface & Mining Rights	.....
Surface Rights Only	.....
Mining Rights Only	.....
Licence of Occupation	.....
Order-in-Council	.....
Cancelled	.....
Reservation	.....
Sand & Gravel	.....

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. FOR THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT. MINING INFORMATION ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON



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TOWNSHIP

STREET

M.N.R. ADMINISTRATIVE DISTRICT
SUDSBURY
MINING DIVISION
SUDSBURY
LAND TITLES/REGISTRY DIVISION
SUDSBURY

Scale 1:20 000
1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 Metres
1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 Feet

Contour Interval 10 Metres

AREAS WITHDRAWN FROM DISPOSITION

MRO - Mining Rights Only
SRO - Surface Rights Only
M+S - Mining and Surface Rights

Description	Order No.	Date	Disposition	File
SEC 42/80	29/10/89	SRO	23022	

SYMBOLS

Boundary	.....
Township, Median, Baseline	.....
Road allowance, surveyed	.....
shoreline	.....
Lot/Concession, surveyed	.....
unsurveyed	.....
Parcel; surveyed	.....
unsurveyed	.....
Right-of-way, road	.....
railway	.....
utility	.....
Reservation	.....
Cliff, Pt, Pde	.....
Contour	.....
Interpolated	.....
Approximate	.....
Depression	.....
Control point (horizontal)	△
Flooded land	.....
Mine head frame	.....
Pipeline (above ground)	.....
Railway: single track	.....
double track	.....
abandoned	.....
Road, highway, county, township	.....
access	.....
trail, bush	.....
Shoreline (original)	.....
Transmission line	.....
Wooded area	.....

NOTES
THE SUBDIVISION OF THE TOWNSHIP OF STREET AS LAYED OUT INTO LOTS
AND CONCESSIONS WAS ANNULLED IN 1985

DISPOSITION OF CROWN LANDS

Patent	Surface & Mining Rights	.....
	Surface Rights Only	.....
	Mining Rights Only	.....
Lease	Surface & Mining Rights	.....
	Surface Rights Only	.....
	Mining Rights Only	.....
Licence of Occupation	.....	OC
Order-in-Council	.....	OC
Cancelled	.....	.....
Rescission	.....	.....
Sand & Gravel	.....	.....

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NATURAL RESOURCES. FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

