AR 94-031

CAP D'OR

PROJECT

Rec'd May 30/94

GRANT NO. 5042

Submitted by;

Douglas Boddy
Lower Five Islands,
Cumberland County,
Nova Scotia.
BOK-1NO

Date; November 25, 1993

TABLE OF CONTENTS

MBC

LOCATION AND ACCESS:

Road access through this property is gravelled to the light house as well as one other easterly trending road from the top of the mountain out to Cape Spencer although it is not in the best of shape at this time. This road passes both the Hanways and Palisades deposits. The gravel road to Cap D'Or starts in East Advocate and is 45 kilometres west of the town of Parrsboro, Cumberland County, Nova Scotia on highway 209.

The licence 00389 encompasses a set of claims which trend east - west south of the village of Advocate and is located on the map (Figure 1) on the north end of the Bay of Fundy.

The map shoeing all roads and trails through this property is shown on map (Figure 2).

PHYSIOGRAPHY

The topography of this property consists of very high cliffs rising straight up from the Bay of Fundy to a vertical height of 350 feet from the shoreline. Refer to Photographs. The relief of the area is controlled by the bedrock with very little overburden in evidence. The overburden does no exceed 15 feet in any known areas of the property other than at the sand pit above Horseshoe Cove.

There are only a few localized springs that result in forming small brooks on the entire property making the property quite dry in most areas.

The trees on this land are mainly a mix of hard and soft woods comprised of tall spruce in the old stands and rough field spruce in the cutovers from the days of the mining. Maple and birch make up the balance of the market grade timber with considerable areas of alders where the old concentrator, main lodge, barns and fields were round Horseshoe Cove from the time of the mine.

LAND OWNERSHIP

Douglas Boddy owns the mineral rights to 16 mineral claims covering 258.4 hectares or 640 acres (Figure 3) and held under licence 00389.

Surface rights are held by private landowner(s).

SYNOPSIS OF PREVIOUS WORK

The history of this deposit goes back over 1000 years as the Native tribes of the area made use of the native copper for impliments, weapons and artifacts.

In June of the year 1604 Samuel DeChamplain and Sieur DeMonts surveyed the Bay of Fundy for the French and located the area of this deposit. Thinking they had found gold and from the colour of the rocks around it they called the place Cap D'Or (Cape of Gold). The name stayed even though the metal they found turned out to be copper.

The French did make some use of the copper they had found here as they used it to make coins here.

Over the years different parties looked over this ground but no great amount of work was carried out till about 1886 when some serious investigations began. Prior to that time only the local residents made any use of the native copper to make all manner of usable things from boat nails boot toes.

Over the next ten years up to 1896 when it was drawn to the attention of a Mr. H.J. Hanway who in 1899 on January 19 th incorporated under the laws of West Viginia formed the Colonial Copper Company of New York, U.S.A.

Work commenced on the Advocate property with the building of a concentrator, shafts, ramps, saw mills (2), bunk houses, miners houses, railway (narrow Guage), and a wharf. Many of the houses are still in existance to-day.

Refer to the 1902 comany report for photos and more complete details.

At that time the mine employed up to 125 men on the site and concentrates were shipped from Horseshoe Cove to Philadelphia for final smelting.

Complete production records and other data which would have been usefull as well as all the company files were destroyed in a fire many years ago when the caretakers place burned. Mr. Eli James of Advocate had been with the mine since its inception and looked after it long after it ceased.

Since the mine ceased operations in 1907 the houses were barged away from Horseshoe Cove to localities round the Bay of Fundy. The narrow guage train was sold to the Newfoundland Railway and the other buildings torn down for their fine timber and bricks which were made in a pit just two miles from the mine in East Advocate.

The equipment in the mill and other facilities was sold for scrap and the Hanway Lodge at Horseshoe Cove was burned by vandals.

There have been several companies and individuals look at the property since the closure of the Colonial Copper Mine.

In 1952 Dr. Bancroft of Acadia University with Quebec Metalurgical did some work and found that there was some good gold values in the assays and did some drilling of short holes but no follow up was ever done.

Mariner Mines and Kopan Developments did some minor drilling and soil sampling. The soil samples were interesting in that all yielded copper values and additional work was recomended but Kopan did not have the money and again the land fell silent.

It seems that over the years that many things have been recomended to be done by small operators to this ground but none have followed through to prove up the mineral potential.

GEOLOGY

The area of the claims located at Cap D'Or is made up of basalt of the North Mountain formation with amygdaloidal and massive columnar basalt flows which are evident from the photographs for both the south and west sides of this area. This area lies north of the Minas Geofracture System and immediately to the north of the North Mountain Formation is an area of sediments made up of sandstone and sandstone like conglomerate of the Blomidon and the Wolfville Formation. It is said that at a depth of 800 feet at Hanways the mine ran into this sandstone which was green with copper oxides and small amounts of native copper in it. I have located one piece of this material on the property which shows these round nodules.

Each nodule in the sandstone is made up of a piece of native copper in the centre surrounded by progressive areas of cuprite, azurite and finally malachite.

The uniqueness of the entire formation on both sides of the property which as Dr. Bancroft described as vertical basalt with flat flows of copper bearing basalt cutting across them. There are up to six of these flows ranging from 15 to 45 feet thick. The top of the Spencer Flow shows up quite clearly on the southern exposure.

MINERALS LOCATED ON THIS PROPERTY

Native copper

Native copper with some silver and/or gold

Malachite

Azurite

Cuprite

Covelite

Stilbite (Zeolite Group)

Naturalite

Mesolite

Thompsonite

Chabazite

Analcime

Apophylllite

Heulandite

Gmelanite

Phillipsite

Calcite

Chlorite

Amethyst

Quartz

Agate

Jasper

Hematite

Magnetite

LIST OF PERSONNEL

Douglas Boddy, Lower Five Islands, Cumb. Co. N.S.

Heather J. McMillen, Lower Five Islands, Cumb. Co. N.S.

Ken Adams, N.S. Geological Museum, Parrsboro, Cumb. Co. N.S.

Alister Peach, 3D Geoconsultants Ltd.

Sandy Sears, 3D Geoconsultants Ltd.

DAILY LOG OF ACTIVITIES ON THE PROJECT

DATE 1993	PERSONNEL	WORK CARRIED OUT
Oct 18	D. Boddy H. McMillen	Moved trailer to camp site in Advocate and set up.
Oct. 19	D. Boddy H. McMillen	Collected samples (D) and (E) from Hanways and Bennett Brook east.
Oct. 20	D. Boddy H. McMillen	Collecting float samples from area of below Hanways (D) 15 pounds. for assay. For description of material refer to notes on samples taken.
Oct 21	D. Boddy H. McMillen	Prospecting area from Bennett Brook west to Horseshoe Cove along the shore.
Oct. 22	D. Boddy H. McMillen	Examining area below new rockfall at Palisades and prospect on beyond to the Goose Tongue. Then on to Cape Spencer.
Oct. 23	D. Boddy H. McMillen	Add to sample (E) Bennett Brook and examine outcrops below No. 1 Shaft portal.
Oct. 24	D. Boddy H. McMillen	Sample west side below lighthouse. Sample (A) Large sample jackhammered from Spencer flow area for assay. For desc. refer to notes on samples. Float sample west side (B)
Oct. 25	D. Boddy H. McMillen	Sample by jackhammer of malachite and native copper from vein at Indian Cove. Sample (C) Refer to sample notes.
Oct. 26	D. Boddy H. McMillen	Locate mill concentrator and flag for cut survey line 2 metres wide. 500 feet.
Oct. 27	D. Boddy H. McMillen	Take samples to TUNS and do research at library at N.S. Dept of Natural Resources.
Oct. 28	D. Boddy H. McMillen	Samples from concentrator for panning out to determine weighted volume of concentrates. Panning out revealed that there was approx. 10% copper in the concentrator boxes at time of shutdown. Sample panned from 4 boxes(refer to photo for box) 42 pounds.
Oct. 29	D. Boddy H. McMillen	Photographed the east side from Horseshoe Cove to the Goose Tongue.
Nov. 1	D, Boddy	To N.S.N.R. Stellerton to see Paul McCulloch
Nov. 2	D. Boddy H. McMillen	Examine new large rockfall on west side just north of Hollisters Gulch noting considerable native copper but rocks still falling.
Nov. 3	D. Boddy H. McMillen P. McCulloch	Paul McCulloch of N.S.N.R. site visit. took to No 1 shaft, concentrator, west side, and reviewed samples and activities.
Nov. 4	D. Boddy H.McMillen	Surveyed and ribboned of from base at mill site 00 to number 1 shaft. 1850 feet
Nov. 5	D. Boddy H. McMillen	Surveyed off lines and flag from beyond Palisades to Hanways 4000 feet.

Date 1993	Personnel	Work carried out
Nov. 6	D. Boddy H. McMillen	Surveyed off lines on West side and flagged and measured.
Nov. 7	D. Boddy H. McMillen	Sampled new rockfall on the west side and noted large amounts of native copper. refer to sample notes.
Nov. 8	D. Boddy H. McMillen	Working on maps and reports due to weather.
Nov. 9	D. Boddy H. McMillen	Photograph and sample by jackhammer on the west side at sample site (A) and another new major rockfall.
Nov. 10	D. Boddy H.McMillen	To Stellerton to N.S.N.R. to pick up EM 16 unit and do research at N.S.N.R. and see Paul McCulloch re; EM 16.
Nov. 11	D. Boddy H. Mc Millen	Met with Ken Adams NS Museum re geological information on Cap D'Or from photos on south side and view samples we'd taken.
Nov. 12	D. Boddy H. McMillen	Alister Peach of 3D Geophysical with us to Palisades when we started our EM 16 run.
Nov. 13	D. Boddy H. McMillen	Run survey line from Nol shaft to Hanways Measured and flagged 6000 feet.
Nov. 15	D. Boddy H. McMillen	Run EM 16 survey on the west side on cliff top Run EM 16 survey on the west side at the base of the cliff and sample new rock fall past Hollisters Gulch Sample (F) Refer to sample notes.
Nov. 16	D. Boddy H. McMillen	work on reports and maps due to severe weather.
Nov. 17	D. Boddy H. McMillen	Run EM 16 with Sandy SearS of 3 D Geophysical
Nov. 18	D. Boddy H. McMillen	Run EM 16 survey from No 1 shaft to Hanways.
Nov. 19	D. Boddy H. McMillen	Run EM 16 filling in grids from No 1 and Calca Brook back to the Mill.
Nov. 20	D. Boddy H. McMillen	Cut out alders from the mill concentrator and photograph mill concentrator boxes.
Nov. 21	D. Boddy H. McMillen	Run EM 16 survey after surveying and flagging across Horseshoe Cove and back covering old drill hole no. 1 (1906) and up brook to drill hole 2.
Nov. 22	D. Boddy H. McMillen	Pack up all equipment and move the trailer back home. Work on maps graphs and report.
Nov. 23	D. Boddy H. McMillen	Work on maps, graphs and report
Nov. 24	D. Boddy H. McMillen	Work on maps, graphs and report.
Nov. 25	D. Boddy H. McMillen	Work on maps and typing report.
Nov. 26	D. Boddy H. McMillen	Work on report and EM 16 graphs.
Nov. 27	D. Boddy	To Stellerton to return EM 16 unit.

SAMPLELIST WITH GRAPHIC DESCRIPTION OF MATERIAL

Sample	Element	Description
A	Native Copper	This sample of native copper was removed from the Spencer Flow basalt which is a medium grained reddish coloured basalt with small sheets and blebs of native copper some of which displays silvery textures which tend to oxidize simillar to native silver as well as some have a goldish hue to them and do not display tarnishing even after washing in nitric acid.
B	Native Copper	This sample was of native copper of float removed from cracks and crevises on the west side north of area A but from the same basic structure except from the cliffs above the flat flow. This copper has only a small amount of fine grained dark basalt attached to some of them and display some to a lot of malachite staining on them.
C	Native Copper	This sample was located with a lot of Quartz attached with malachite and azurite with it The quartz was of a milky white fractured type .
D	Native Copper	This sample from Hanways area is from a zone that is just east of the mine and is most prolific as will be noted by the samples displayed at the show and given to the department with this report for their own use or collection.
E	Native Copper	This is from a new location just east of Bennett Brook and was removed from the east end of what is the Spencer flow and is found to be in fairly good sized blebs in a course grained reddish orange basalt with some malachite wherever there is any quartz or zeolites attached to the copper.
F	Native Copper	This was a new rockfall and when found there was considerable native copper so it was sampled. The host rock was very dark course grained almost like a conglomerate of a greenish black basalt.

LIST OF EXPENSES

Fundy Tides Campground	125.00
Mineral Engineering Centre TUNS	40.00
Davis Ultramar (Fuel)	308.00
Canadian Tire (Survey Ribbon)	7.10
J. Blair Ent.(Rental Jackhammer, transit	300.00
Japan Camera Centre(Film develop)	53.57
Youlds Ltd. (Copies & covers)	13.68
Wrights Pharmacy (Photocopies)	11.87
Sobeys (Food)	37.96
I.G.A. (Food)	58.44
Co-op (Food)	44.40
3 D Geophysical	600.00

echnical University
of Nova Scotia

MINERALS ENGINEERING CENTRE

P.O. Box 1000
Halifax, Nova Scotia
B3J 2X4

Tel: (902) 420-7675
Fax: (902) 425-1037

8 November, 1993

Gold'n Crystal Minerals
Lower Five Islands
Nova Scotia
B0M 1N0

Attention: Douglas Boddy

Re: Results of analyses on submitted samples.

Sample	Au ppm	Au oz/t
West Side Area (A)	0.090	0.0026
Float Cu West Side (B)	0.468	0.0136
Float Cu Indian Cove(C)	0.032	0.0009
Float Cu Hanways (D)	0.018	0.0005
Vein Cu Bennett Brook East(E)	0.029	0.0008
HGR-6		
TFZ-7		

Cyril Cole

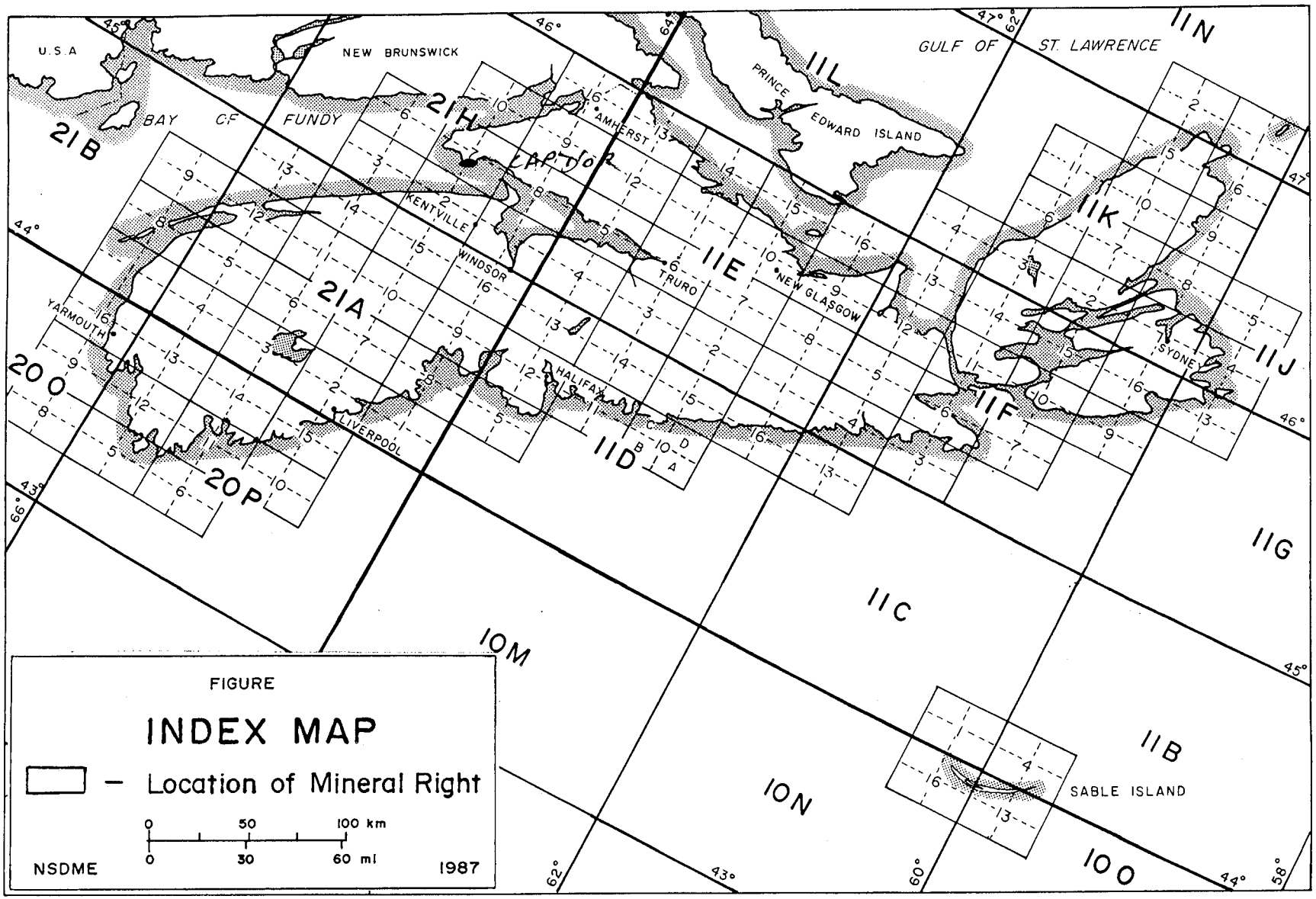
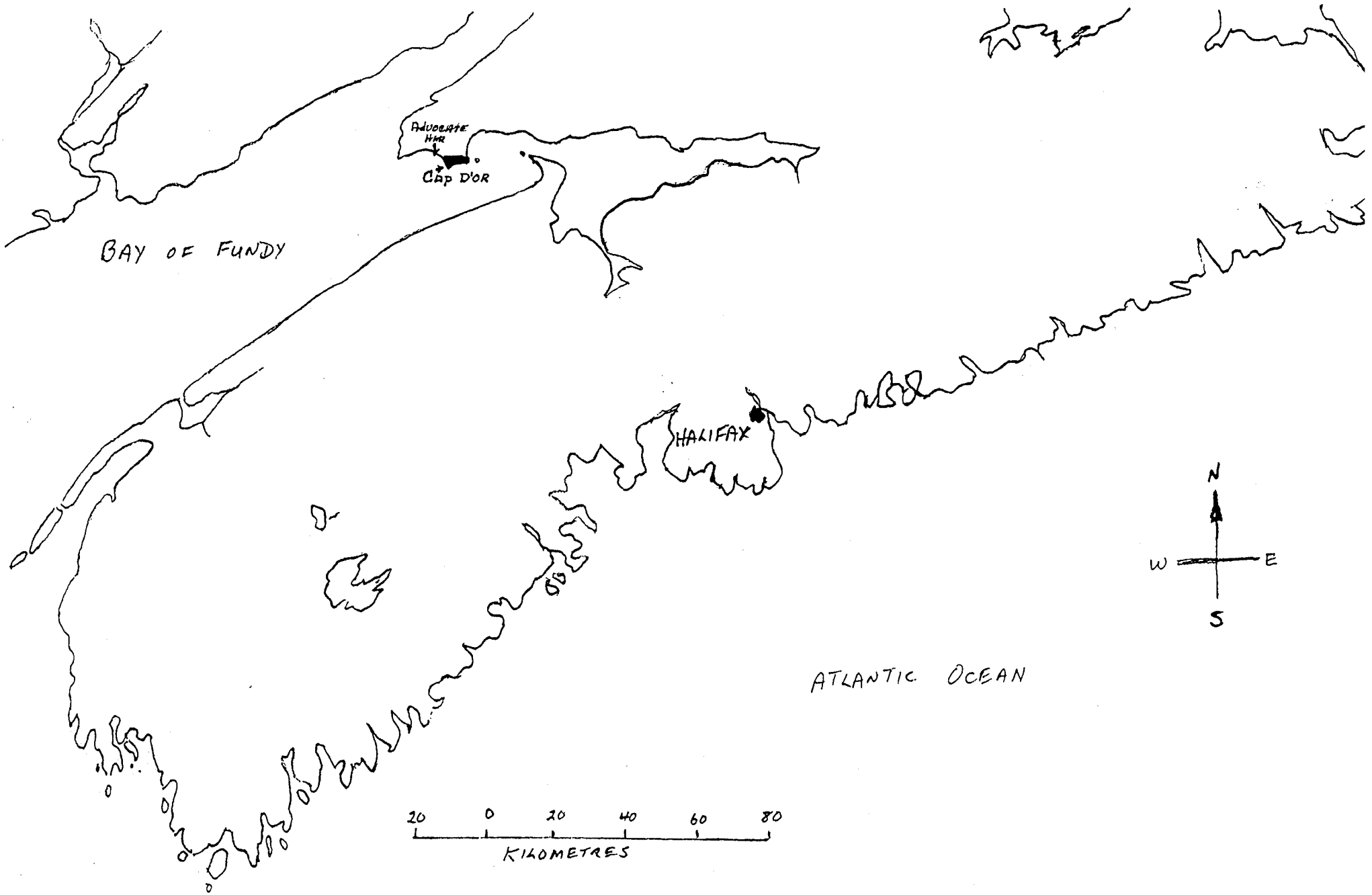

U.S.A
NEW BRUNSWICK
BAY OF FUNDY
GULF OF ST. LAWRENCE
PRINCE EDWARD ISLAND
AMHERST
KENTVILLE
WINDSOR
TRURO
NEW GLASGOW
STELLARTON
SYDNEY
YARMOUTH
LIVERPOOL
HALIFAX
SABLE ISLAND
21B
21H
21A
20O
20P
11L
11N
11E
11K
11J
11F
11D
11G
11C
10M
10N
11B
10O
FIGURE
INDEX MAP
— Location of Mineral Right
0 50 100 km
0 30 60 mi
NSDME
1987

FIG 1



LOCATION MAP. FIG 2

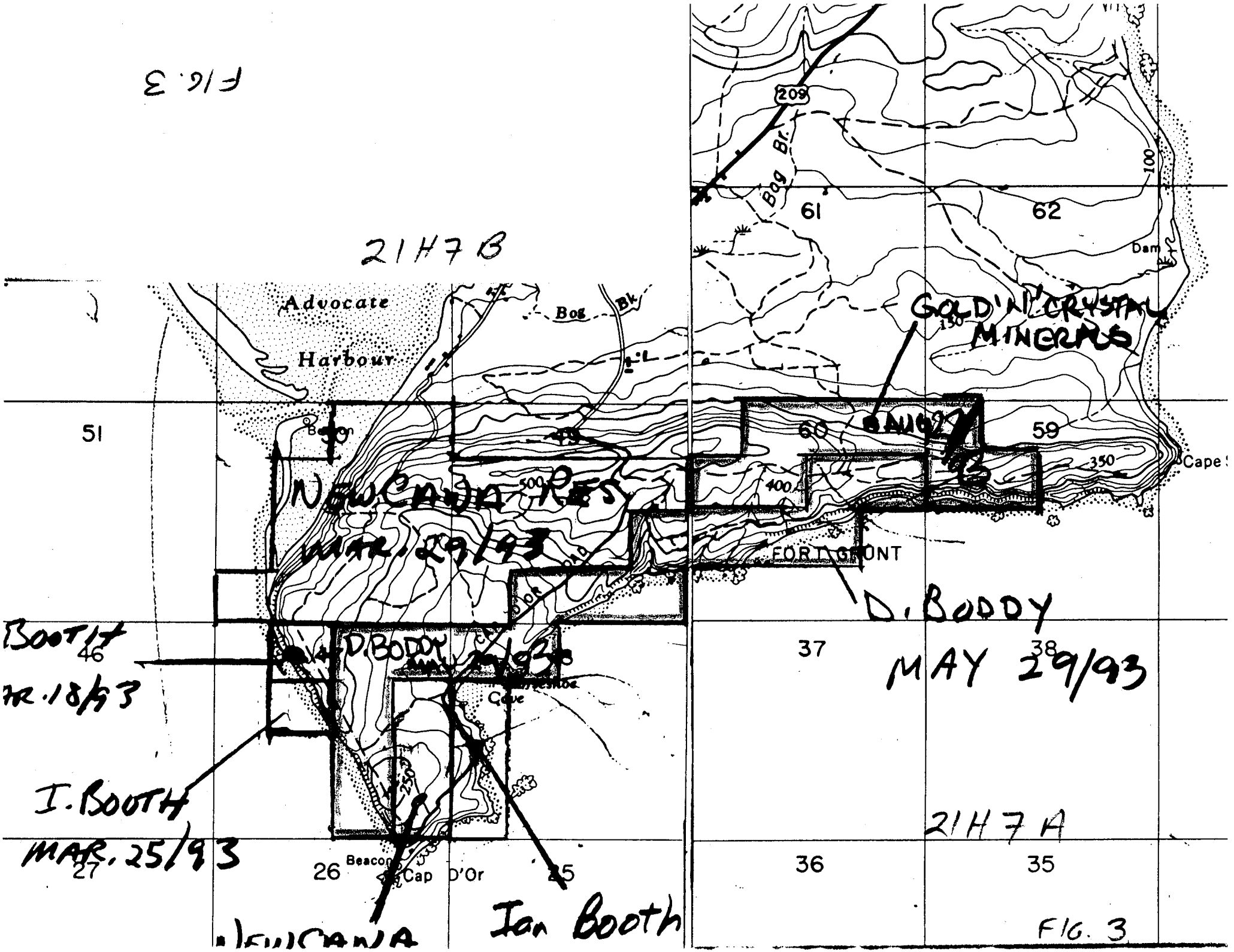


FIG. 3
21H7B
Advocate
Harbour
Bog
Bk
209
Bog Br.
61
62
100
Dam
GOLD'N' CRYSTAL
MINERALS
130
51
60
59
350
400
500
NEWCANA RES
MAR. 29/93
FORT GRANT
D. BODDY
MAY 29/93
BOOTH
MR. 18/93
D. BODDY
MAR. 18/93
37
38
Cove
I. BOOTH
MAR. 25/93
21H7A
27
26
Beacon
Cap D'Or
25
36
35
NEWCANA
Ian Booth
FIG. 3

EXTRACT FROM THE COPPER JOURNAL

COLDWATER COPPER MINING CO. COLORADO.

Office: 232 West Cedar St., Kalamazoo, Mich. Mine office: Encampment, Wyo. Employs 25 men. Z. L. Baldwin, president; E. S. Drury, vice-president; Edwin Gillis, secretary and treasurer; G. T. Keene, general manager; Joseph Montague, superintendent. Organized Dec. 11, 1899, under laws of Wyoming, with capitalization $1,000,000, shares $1 par. Lands, 5 claims, area about 50 acres, also 20 acres miscellaneous lands, in the Pearl district of Larimer county, Colorado. Country rocks are granite and diorite, with 3 fissure veins, of which one of 20′ estimated width shows oxide and carbonate ores, and native copper, with sulphides at a little depth, estimated to carry an average of 10% copper and 8 oz. silver per ton, opened by shafts of 130′ and 134′ and a 275′ crosscut. Property is known as the Wolverine mine, bottom of principal shaft showing massive chalcocite and a little disseminated chalcopyrite of high average grade. Has steam power. Developments are regarded as promising. Property has been leased for a 3 to 5 year term to the Wolverine Leasing & Mining Co., composed of Coldwater shareholders.

SOCIEDAD COLECTIVA. CHILE.

Supposed to operate the Tiltil mine, department of Santiago, Chile.

COLOMBIA GOLD & COPPER CO. COLOMBIA.

Thos. S. Moffat, president and Pooh-Bah. Capitalization, $125,000, shares $10 par. Lands, sundry undeveloped government concessions in the Republic of Colombia.

MINAS COLON, RECOMPENSA y OTRAS. MEXICO.

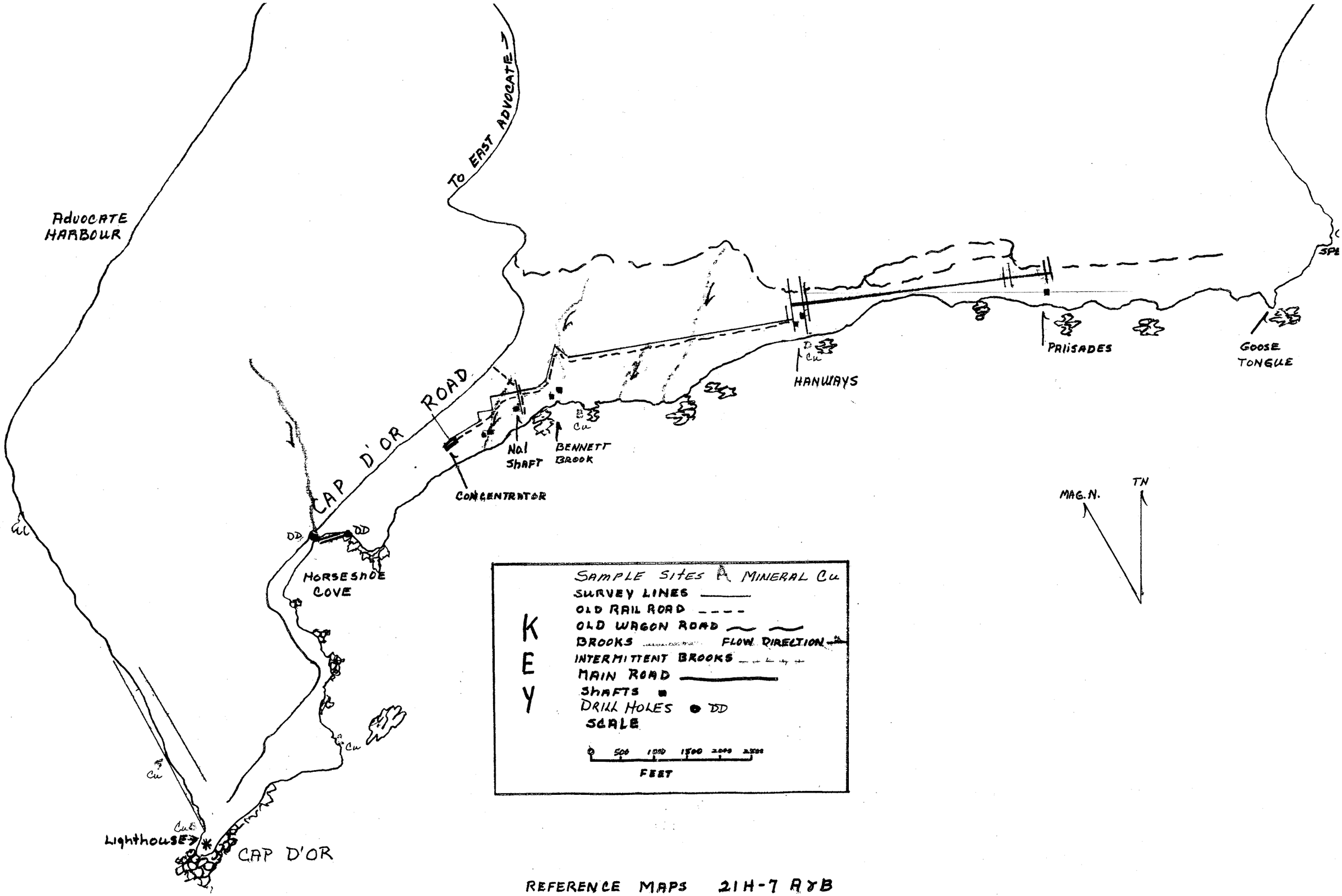
Operated by Choix Consolidated Mining Co., Ltd.

COLONIAL COPPER CO. NOVA SCOTIA & ONTARIO.

Office: 32 Broadway, New York. Mine office: Advocate, Cumberland Co., N. S. Employs about 125 men. Organized January 19, 1899, under laws of West Virginia, with capitalization $5,000,000, shares $1 par. Has authorized a $300,000 bond issue to raise working capital. J. A. Hanway, president and general manager; H. D. Hanway, secretary; A. Munger, treasurer; S. M. Archibald, superintendent. Lands, about 2,000 acres, showing 6 contact veins, of which 3 are developed, these having an average width of 25′ and carrying about 2.5% copper. Has 2 vertical and one incline shaft, latter 500′ in depth. Machinery outfit includes 3 Rand air compressors, 3 large and 6 small hoists, drills, etc. Has a 400-ton concentrating mill, with Blake crushers, rolls, jigs, tables, screens, etc., connected with mine, 1½ miles distant, by a 36″ gauge railroad. Nearest railway is 30 miles distant, but property is located on the shore of the Bay of Fundy and receives all machinery and supplies by water. Company also owns the New Annan mine, carrying sulphide ore in lenses, and the Chandos mine in Peterboro county, Ontario, latter showing a 4′ vein assaying 8% copper, but now idle. Begun building a 200-ton concentrator September, 1902. Company seems honestly managed, but is suffering from lack of needed funds, the development and equipment of a mine upon a large scale having proved much more costly than was anticipated when work was begun.

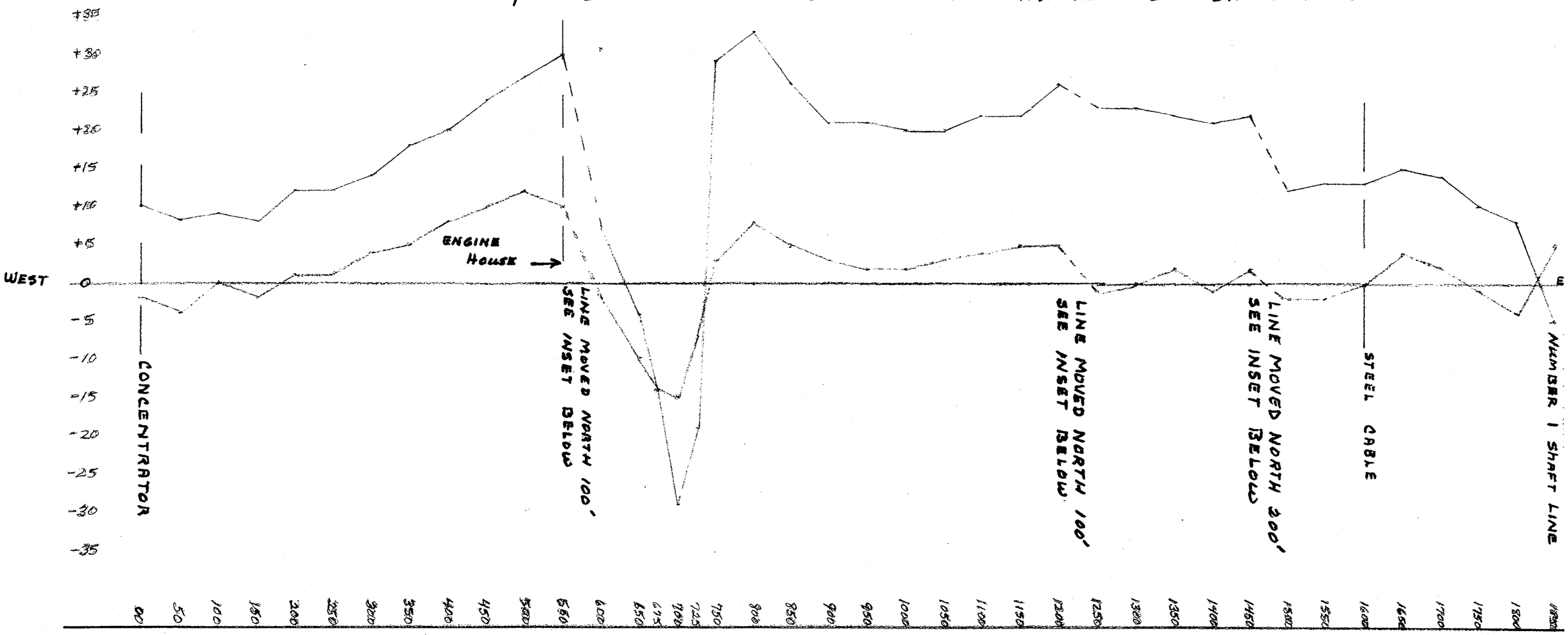
COLONIAL COPPER CORPORATION, LTD. AUSTRALIA.

Offices: Salisbury House, London, E. C., Eng. Works office: Lithgow,

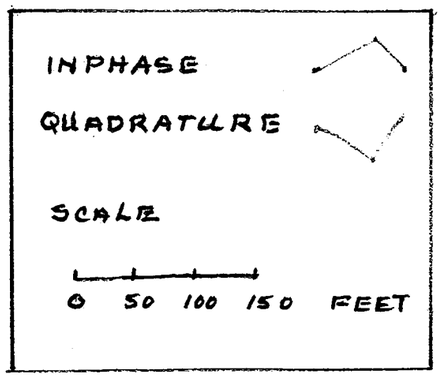


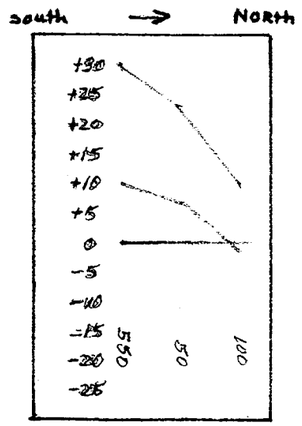
REFERENCE MAPS 21H-7 A & B

EM 16 Survey Line Between Concentrator and Number One Shaft Line

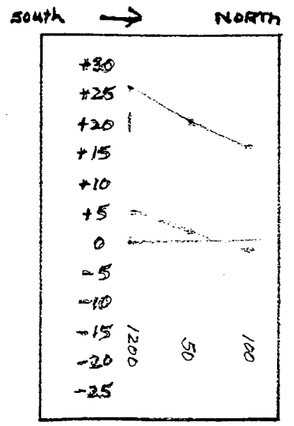


KEY:

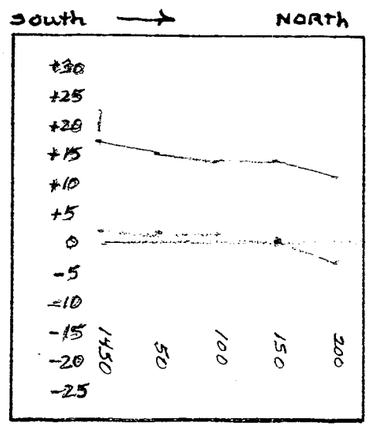




NORTH AT 550' INSET

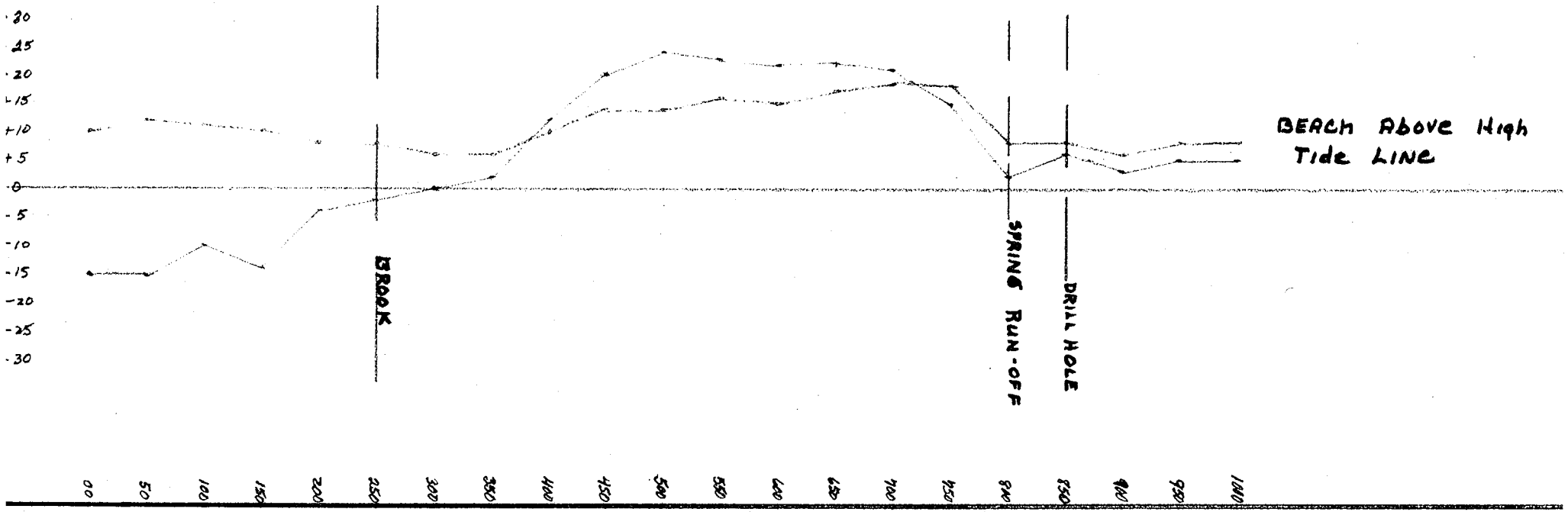


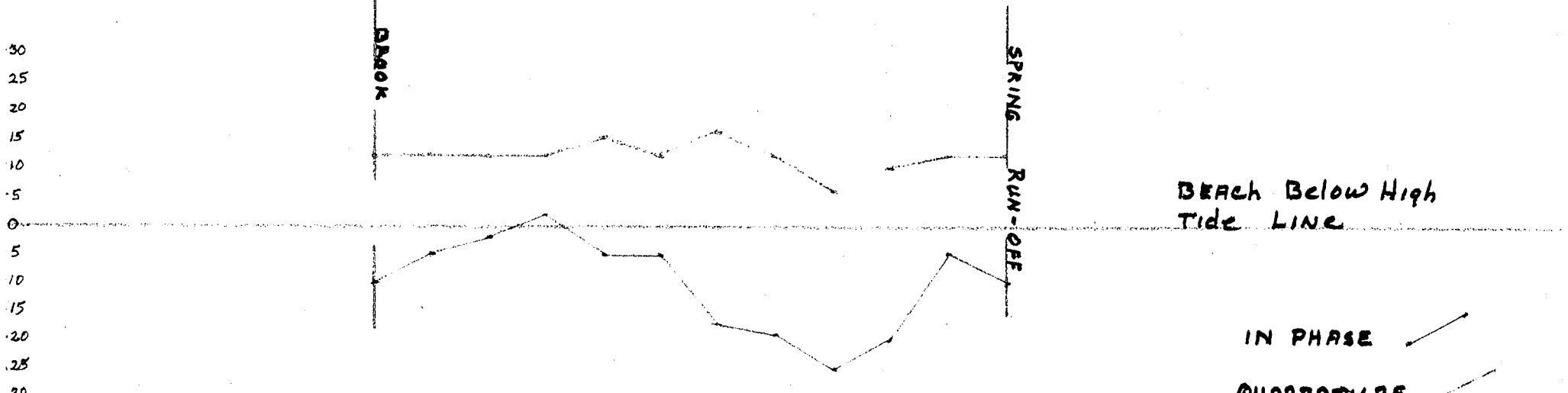
NORTH AT 1200' INSET



NORTH AT 1450' INSET

HORSESHOE COVE





READINGS TAKEN AT LOW TIDE FROM SOUTH-WEST TO NORTH-EAST

1/13

DIRECTION OF READINGS SOUTH TO NORTH

EM 16 - CUTLER, MAINE (CRYSTAL)

READINGS ON WEST SIDE BEACH

CAMP AT LIGHTHOUSE

GILBERT LIGHTHOUSE RD

LARGE ROCK FALL

VEIN

APPRX LENGTH OF GULLY

READINGS ON WEST SIDE CLIFF

WATER POND ALIGN

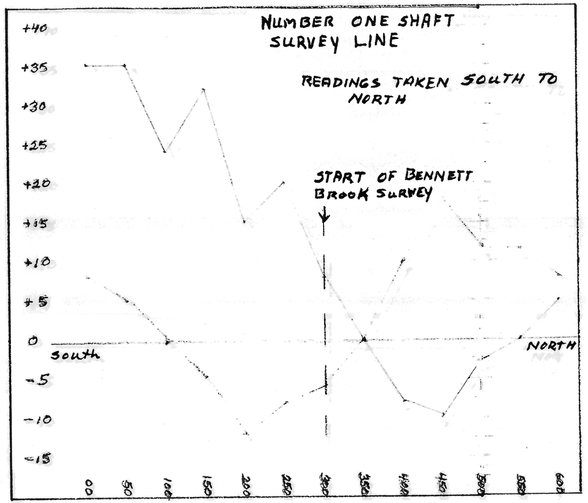
READINGS

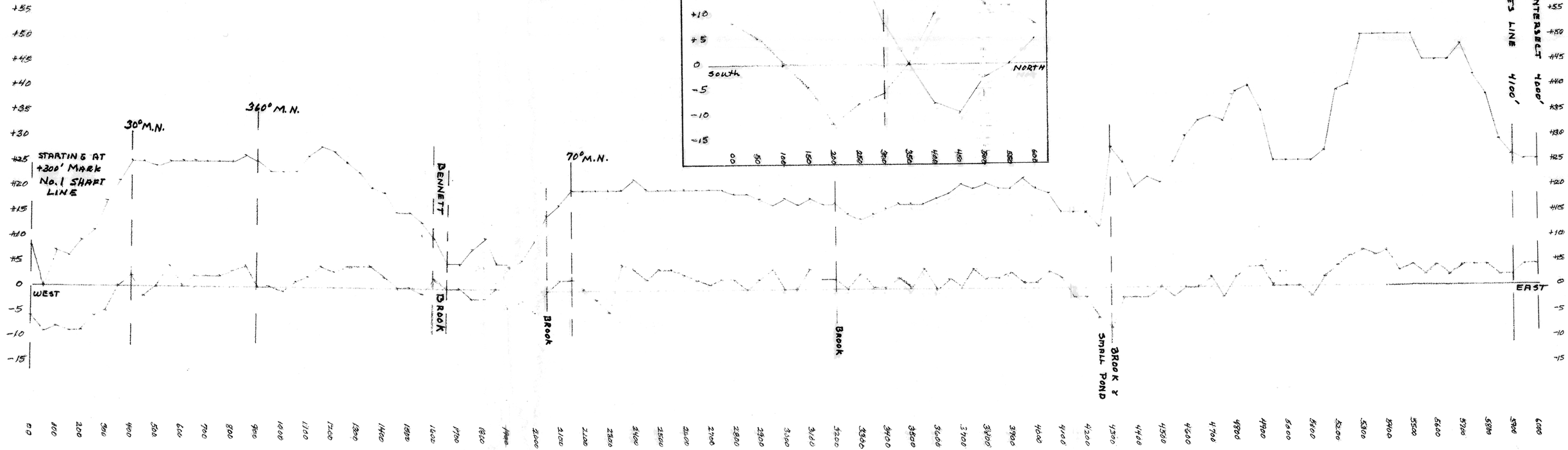
IN PHASE

QUADRATURE

BENNETT BROOK SURVEY LINE

BETWEEN NUMBER ONE SHAFT LINE AND HANWAYS





READINGS TAKEN WITH EM 16 WEST TO EAST

AR 94-031

CAP D'OR VLF SURVEY REPORT

Prepared for: Mr. Doug Boddy
Lower Five Islands, NS

Prepared by: Three-D GeoConsultants Limited
Truro, NS

November 22, 1993

THREE - D
GEOCONSULTANTS
LIMITED

PO Box 715, Truro, NS B2N 5E5
789 Prince Street, 2nd Floor
Tel: (902) 895 - 8555 Fax: (902) 895 - 8533

Offices in: Fredericton NB, Truro NS, Calgary AB

November 22, 1993

Mr. Doug Boddy
Lower Five Islands, NS
B0M 1N0

File #: 9419

Dear Sir

Re: *CAP D'OR VLF SURVEY*

Enclosed is the final report submitted in completion of the Cap d'Or VLF Survey. It includes the results of the field work, an interpretation of the data and conclusions and recommendations for potential future project work.

If there are any questions or comments, please contact me at the Truro office at 1-800-561-8655 or (902) 895-8555.

Yours truly
THREE-D GEOCONSULTANTS LIMITED

Allister Peach

Allister R. Peach, P.Geol.
Senior Geologist

TABLE OF CONTENTS

LIST OF MAPS

LIST OF FIGURES

1.0 INTRODUCTION

Three-D GeoConsultants Limited was contracted by Mr. Doug Boddy to perform a one day VLF-EM 16 survey over a selected area of a claim group in the Cap d'Or area of Nova Scotia. The purpose of the survey was to delineate the possible extension of the previously mined Hanways and Palisades ore zones as well as test a potentially ore bearing fault zone north of Cap d'Or.

The Cap d'Or area is underlain by the North Mountain Basalt, a Triassic - Jurassic sequence of dark red-brown to black, massive and amygdaloidal basalt flows and associated sills and dykes with local agglomerates. The flows in the area dip gently to the south and are offset by northeast and northwest trending faults.

The Hanways and Palisades ore zones were mined for native copper which is known to occur in amygdules and as nuggets and sheets along joints and fractures in the basalt. Gem quality minerals such as zeolites are also present in open spaces within the flows.

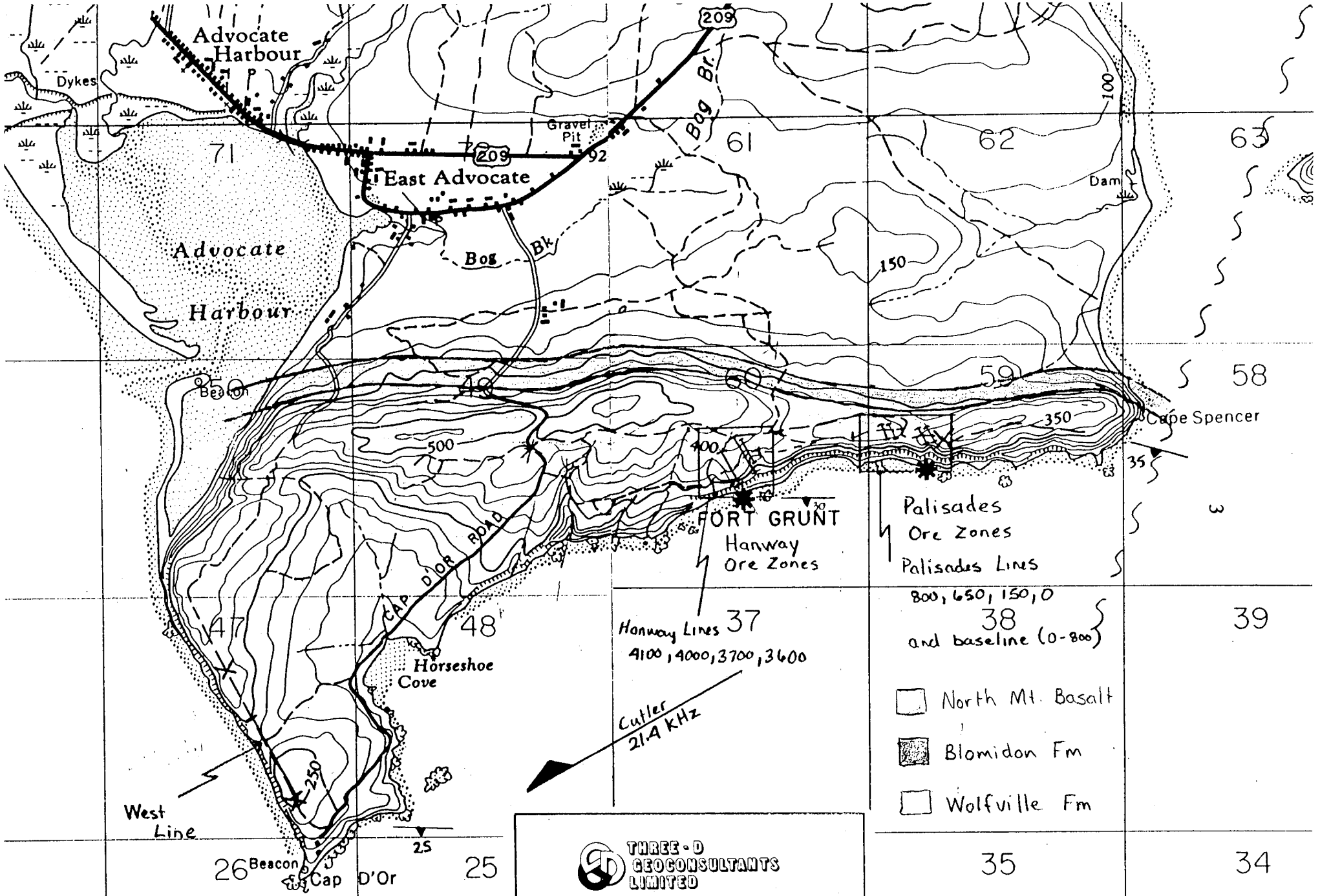
2.0 VLF SURVEY RESULTS

A total 8,300 line feet (2 530 metres) were surveyed in the Cap d'Or area along northwest - southeast oriented lines, originating from an east - west baseline (Map No. 1). Sixty-five hundred (6,500) feet were covered with readings taken every 50 feet (with local infilling) and 1,800 feet were surveyed with readings every 100 feet. The signal readings from Cutler, Maine was used (Station NAA, 24.0 kHz) and all readings were taken facing toward the northwest. The following is a summary of the results.

2.1 WEST LINE

The West Line (Figure 1) originates approximately 1,500 feet north of the lighthouse at Cap d'Or and extends 2,000 feet northwest along an old road which parallels the coast. Readings were taken at stations spaced at every 50 foot intervals.

A graph of the survey results displays a varied profile for both the in-phase and quadrature responses. The initial large negative in-phase response is due to the presence of a large roll of copper wire buried in the vicinity. The remaining profiles both display an overall U-shape with local high and low spikes . The U-shape mimics the local topography, but is offset approximately 200 feet to the southeast. The local spikes may represent changes in overburden thickness. At the 850 foot station there is a change from positive in-phase to negative in-phase and the in-phase profile cuts the quadrature profile. A weak, shallow conductor may give this type of profile.



THREE-D GEOCONSULTANTS LIMITED

Map No. 1

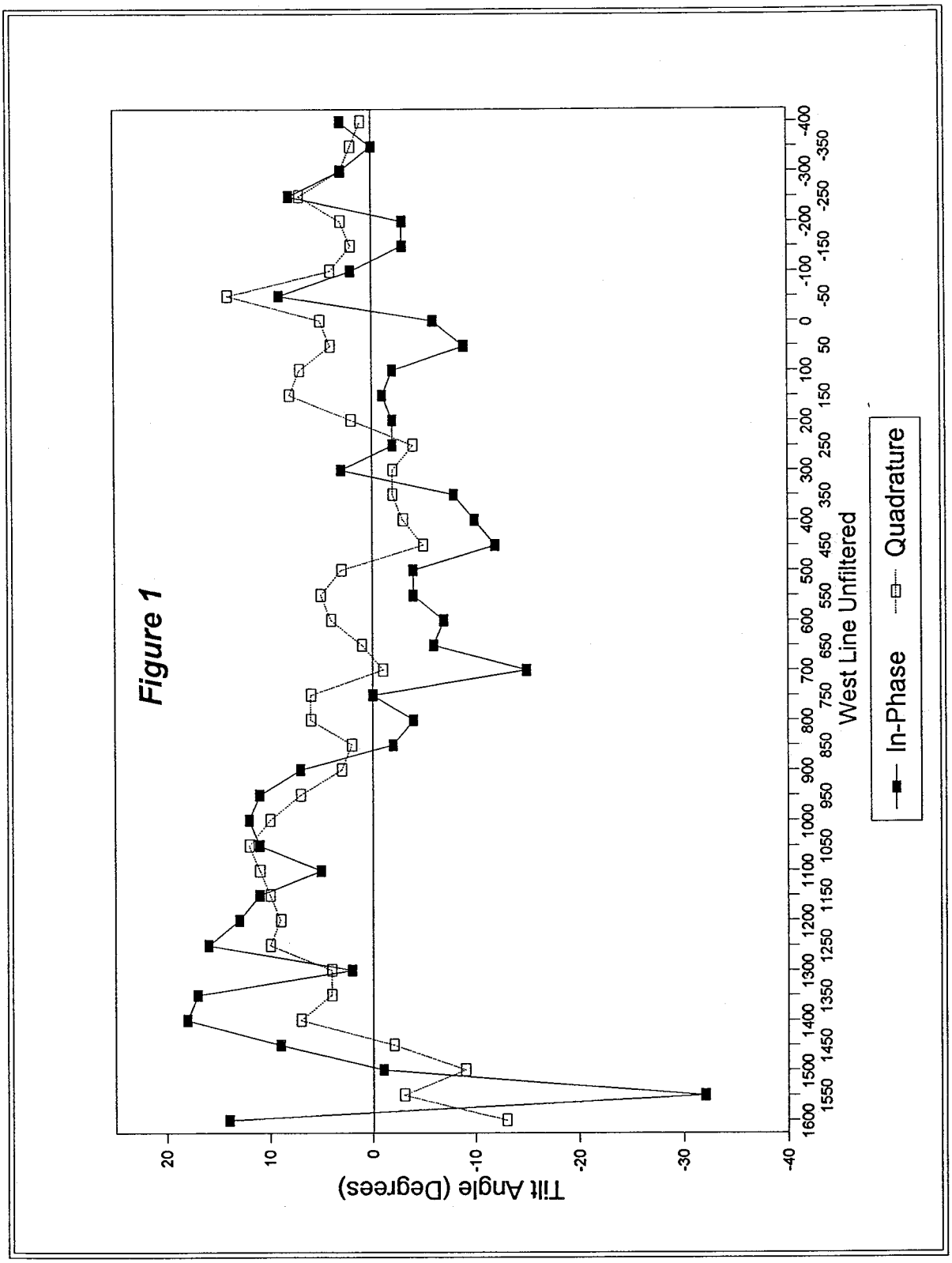


Figure 1
Tilt Angle (Degrees)
20
10
0
-10
-20
-30
-40
1600 1550 1500 1450 1400 1350 1300 1250 1200 1150 1100 1050 1000 950 900 850 800 750 700 650 600 550 500 450 400 350 300 250 200 150 100 50 0 -50 -100 -150 -200 -250 -300 -350 -400
West Line Unfiltered
In-Phase
Quadrature

2.2 HANWAYS LINE 4100

This line (Figure 2) covered 300 feet and is in the area of the strike extension of the Hanways ore zones. Quadrature response is flat, whereas in-phase values increase toward the southeast. The southeast end of the line is bounded by a steep cliff which is probably responsible for the increasing in-phase values.

2.3 HANWAYS LINE 4000

This line (Figure 3) is 800 feet in length and is in the area of the strike extensions of the Hanways ore zones. This line is similar to Line 4100 in that it has a flat quadrature profile and the in-phase is affected by the topography (cliff) to the south. A small positive in-phase spike at 300 feet may be due to a very thin overburden cover.

2.4 HANWAYS LINE 3700

Line 3700 (Figure 4) is 850 feet in length and was designed to cross the strike extension of the Hanways ore zones. The quadrature profile is relatively flat except for a small increase to positive quadrature values at station 125. This is also the location where the in-phase changes its angle from high positive values to large negative values. This type of profile is characteristic of a shallow, thin conductor. The remainder of the in-phase profile is flat except for the topography influenced portion at the southeast end of the survey line.

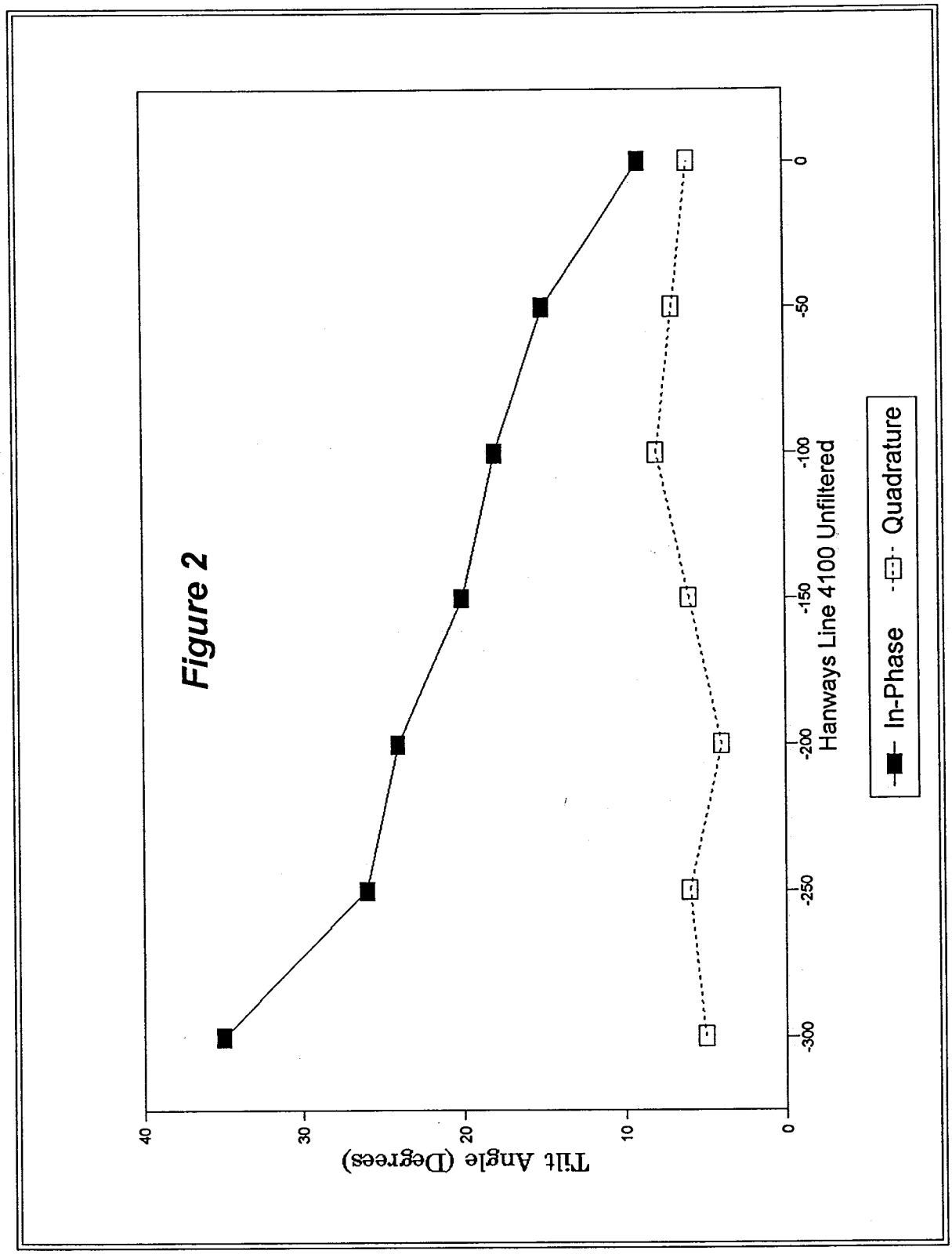


Figure 2
Tilt Angle (Degrees)
40
30
20
10
0
0
-50
-100
-150
-200
-250
-300
Hanways Line 4100 Unfiltered
In-Phase
Quadrature

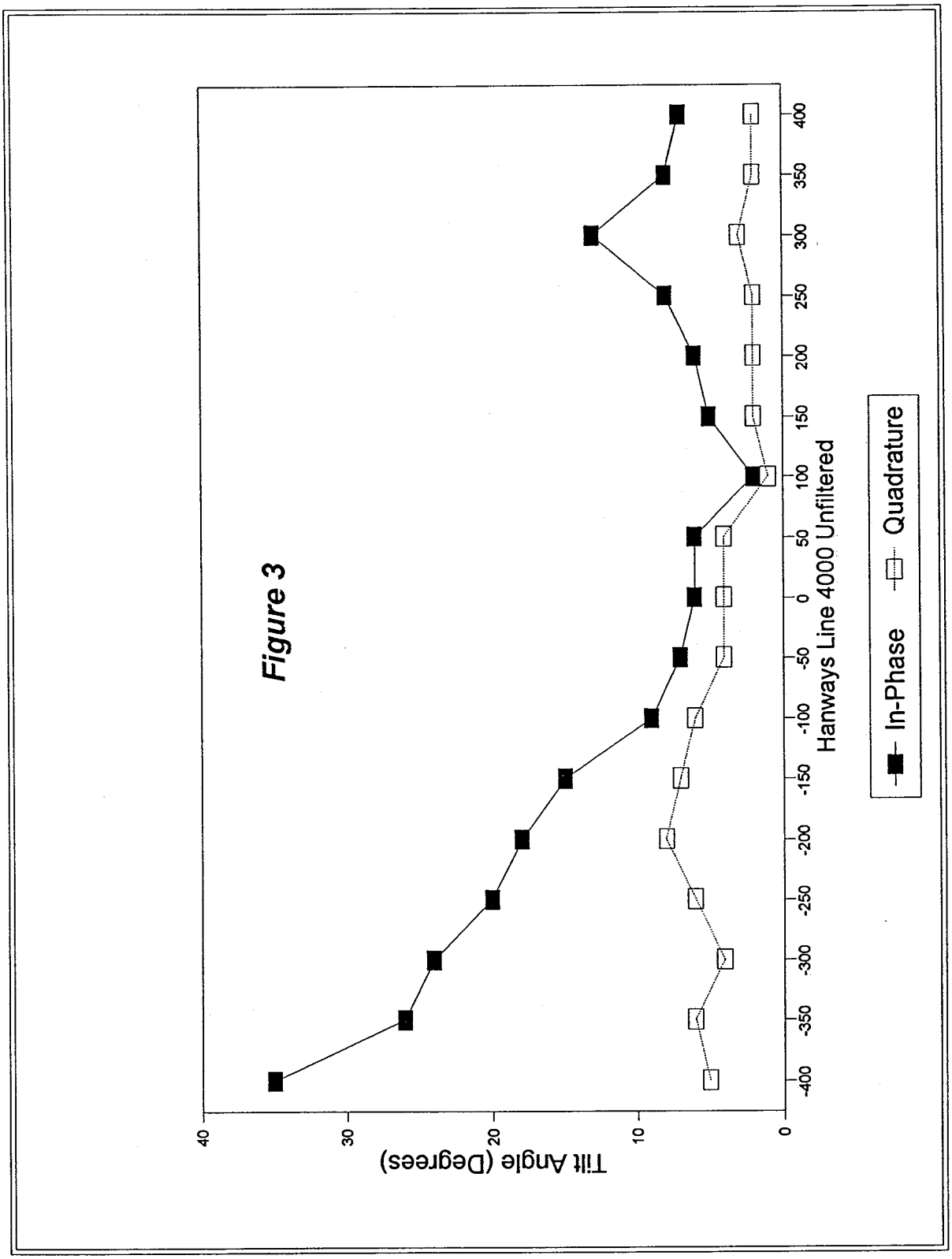


Figure 3
Tilt Angle (Degrees)
40
30
20
10
0
-400
-350
-300
-250
-200
-150
-100
-50
0
50
100
150
200
250
300
350
400
Hanways Line 4000 Unfiltered
In-Phase
Quadrature

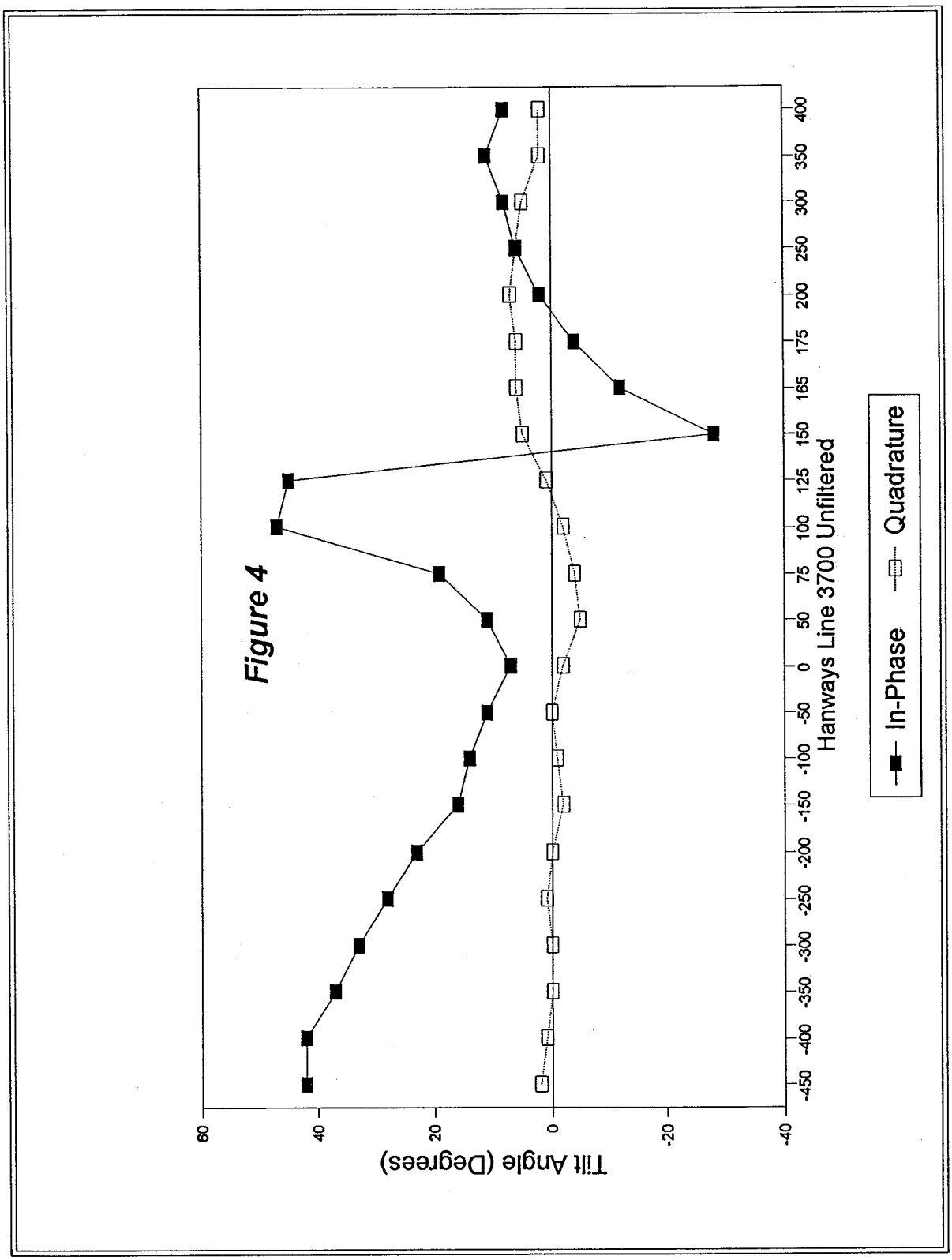


Figure 4
Tilt Angle (Degrees)
60
40
20
0
-20
-40
-450 -400 -350 -300 -250 -200 -150 -100 -50 0 50 75 100 125 150 165 175 200 250 300 350 400
Hanways Line 3700 Unfiltered
In-Phase
Quadrature

2.5 HANWAYS LINE 3600

This line (Figure 5) covers 500 feet and is the last survey line within the area of the Hanways ore zones. The profiles are similar to the previous three Hanways survey lines, however, there is an interesting crossover at approximately Station 100. At this point, the in-phase changes from positive to negative values and it also intersects the quadrature profile. This type of profile is characteristic of a thin shallow conductor; similar to Hanways Line 3700.

2.6 PALISADES LINE 0 AND 150

Both of these lines (Figures 6 and 7) are 350 feet in length and are in the area immediately north of the Palisades ore zones. They both display relatively flat quadrature profiles and their in-phase values increase to the south due to a steep uphill slope to the south along the length of the survey lines.

2.7 PALISADES LINES 650 AND 800

Line 650 (Figure 8) is 350 feet and Line 800 (Figure 9) is 300 feet in length. Both survey lines have very shallow U-shaped quadrature and in-phase profiles. These profiles reflect the slight changes in topography which slopes slightly downhill to the north and then flattens out.

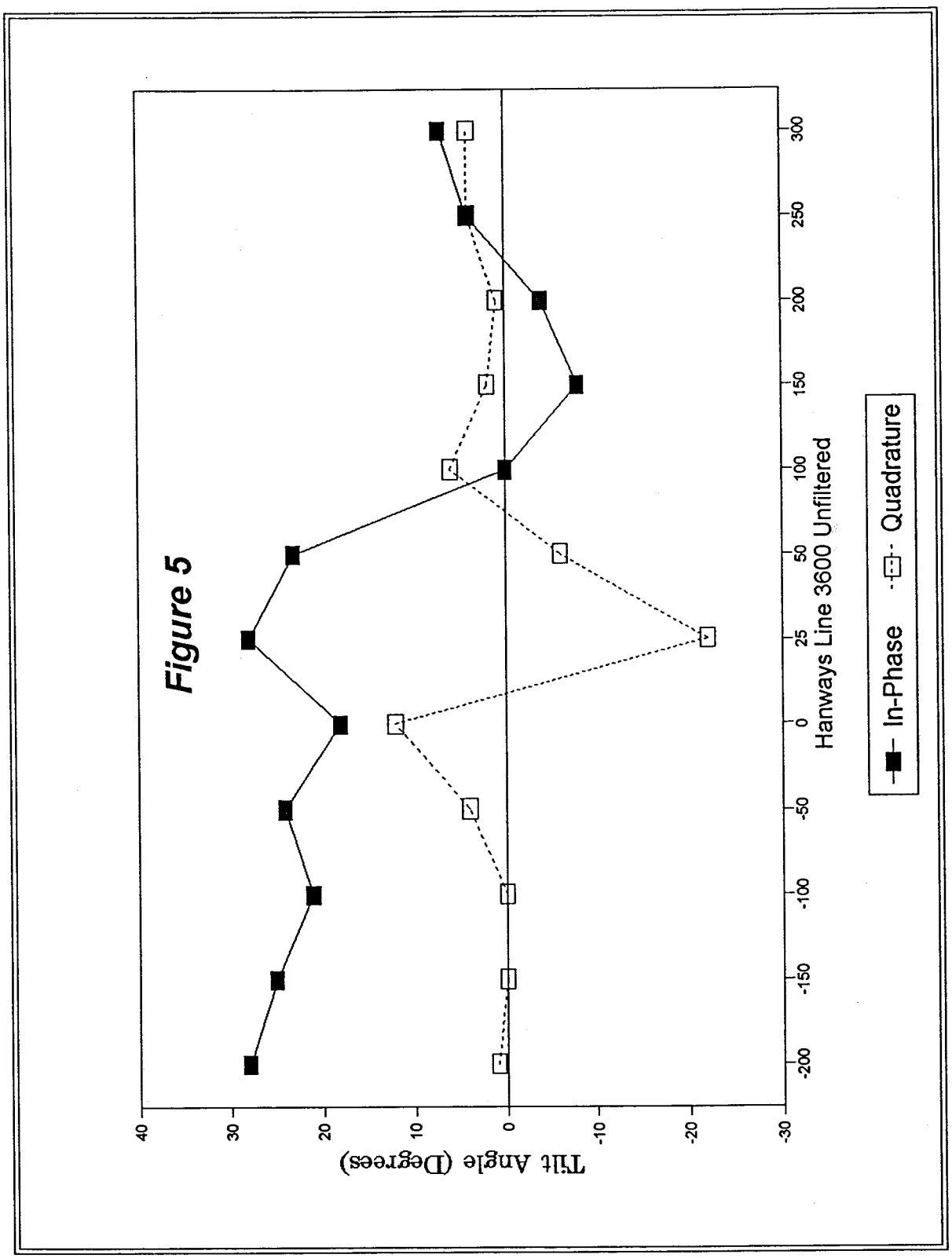


Figure 5
Tilt Angle (Degrees)
40
30
20
10
0
-10
-20
-30
-200
-150
-100
-50
0
25
50
100
150
200
250
300
Hanways Line 3600 Unfiltered
In-Phase
Quadrature

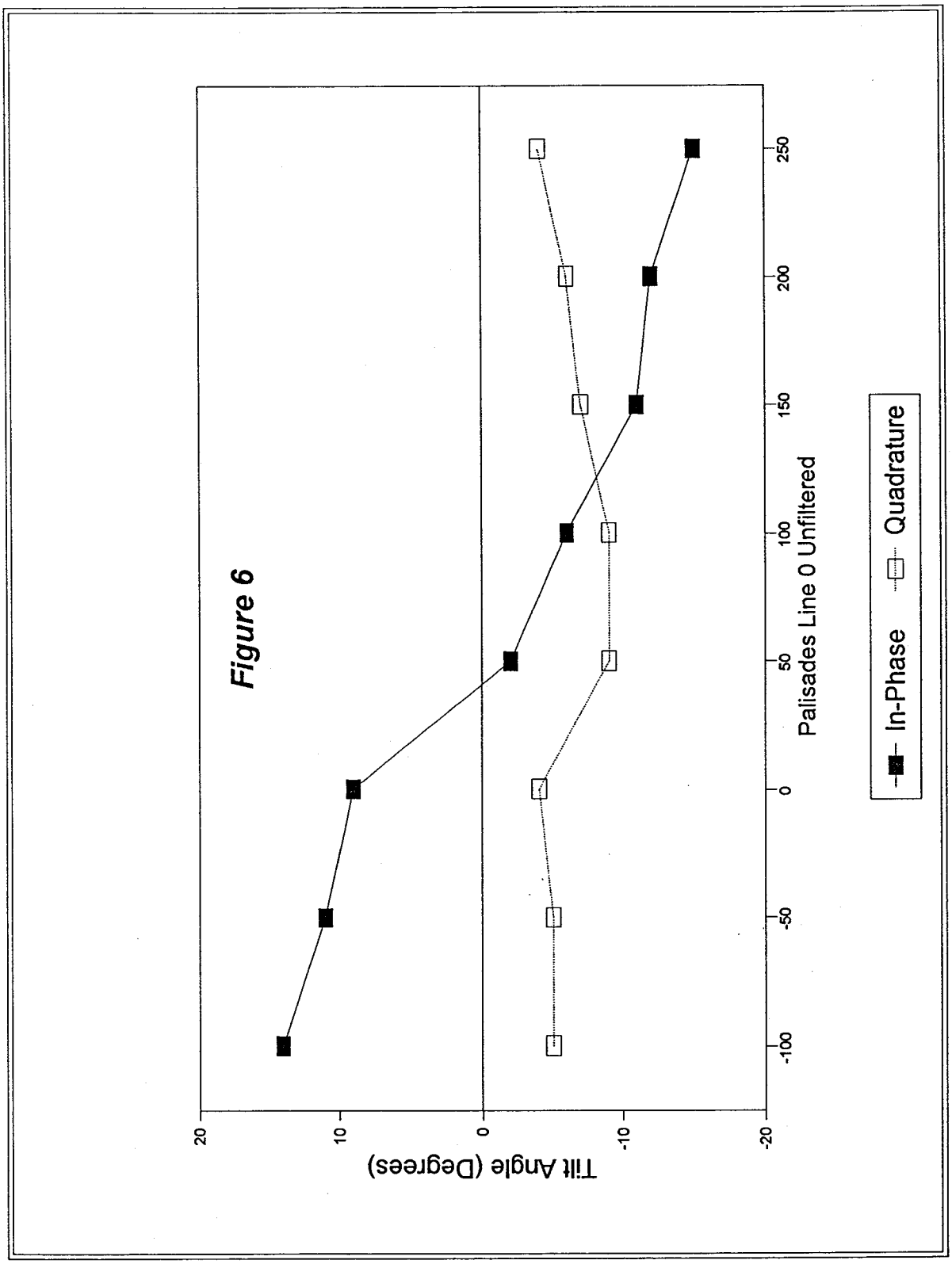


Figure 6
Tilt Angle (Degrees)
20
10
0
-10
-20
-100
-50
0
50
100
150
200
250
Palisades Line 0 Unfiltered
In-Phase
Quadrature

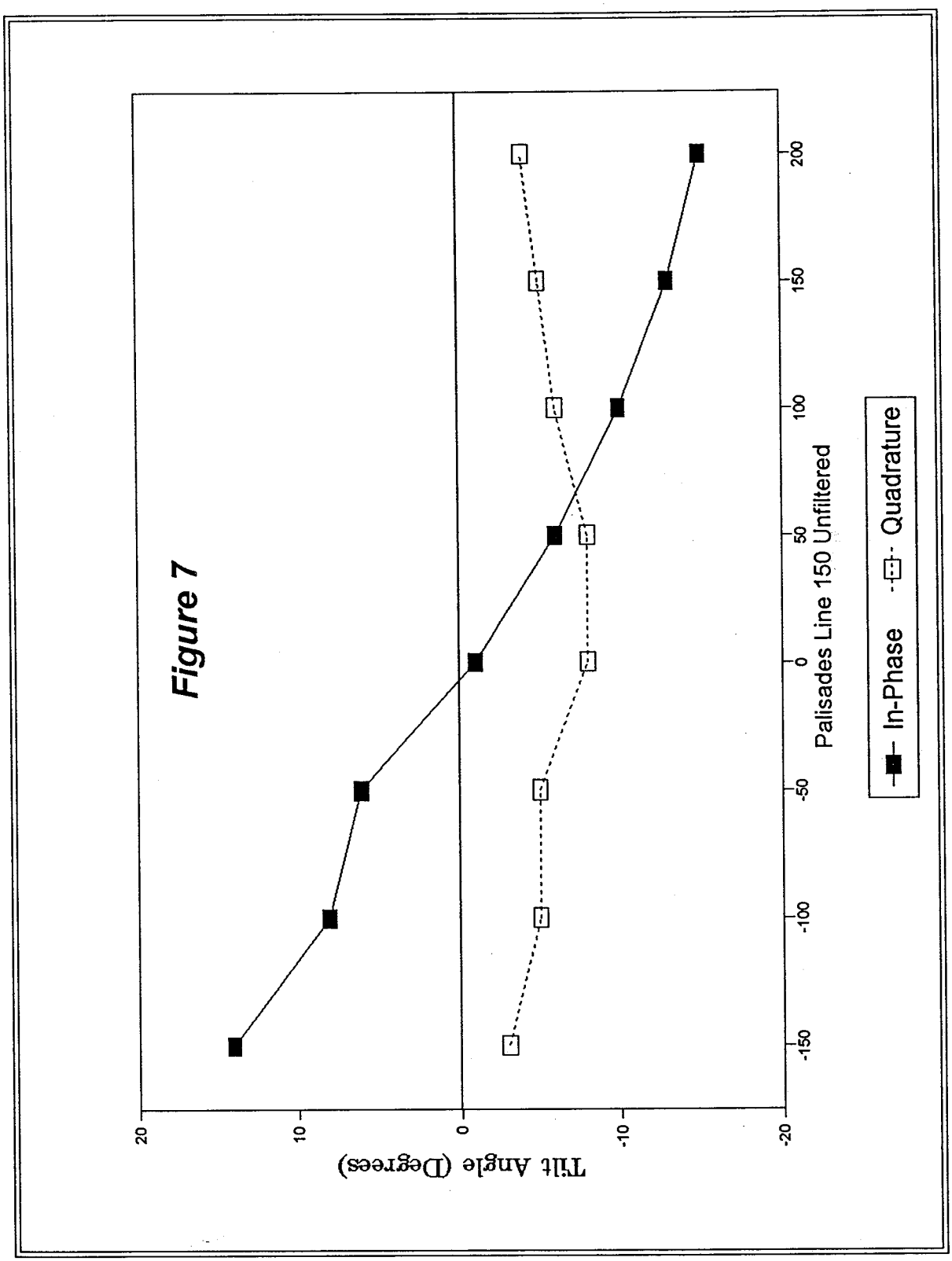


Figure 7
Tilt Angle (Degrees)
20
10
0
-10
-20
-150
-100
-50
0
50
100
150
200
Palisades Line 150 Unfiltered
In-Phase
Quadrature

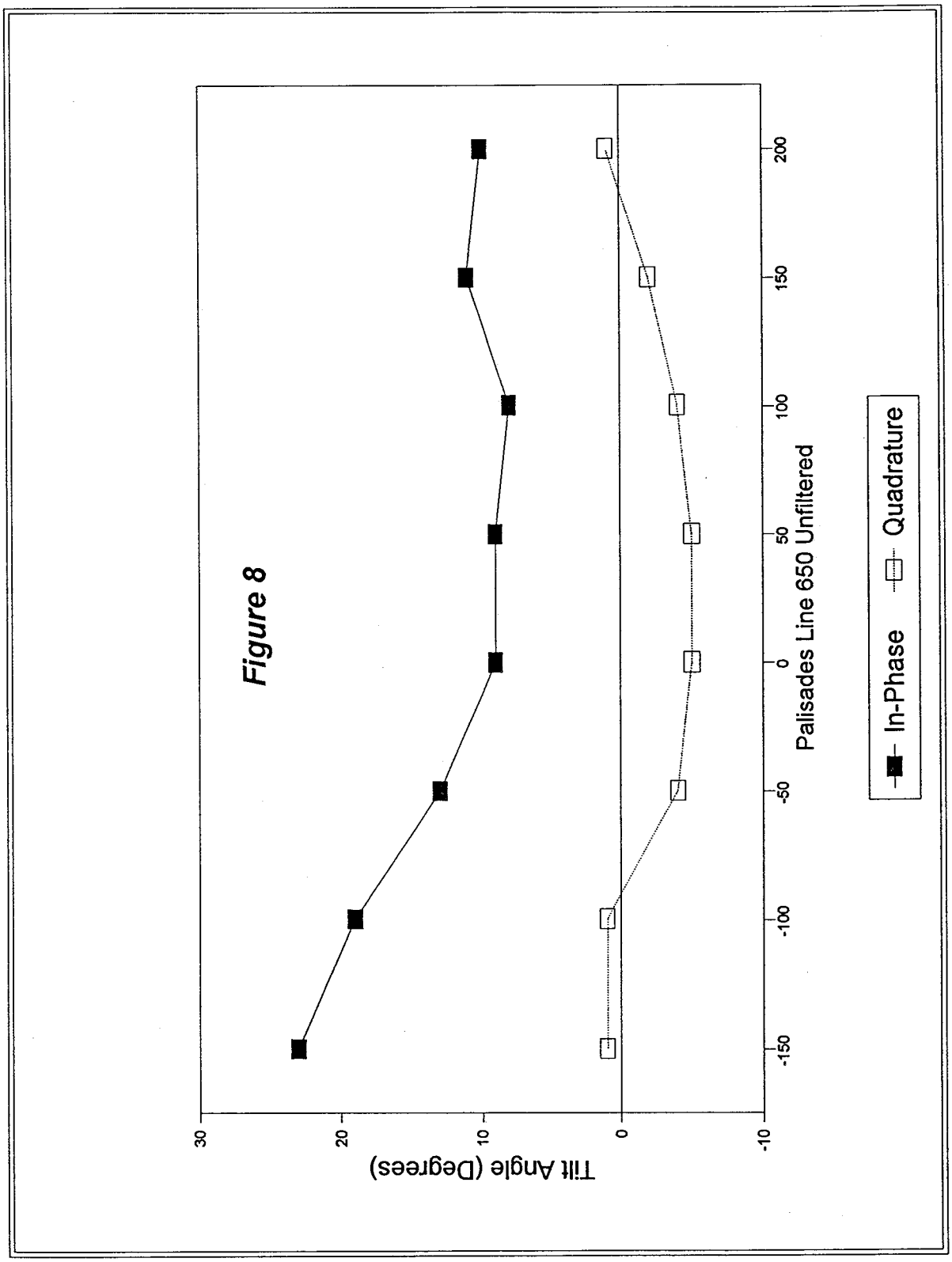


Figure 8
Tilt Angle (Degrees)
30
20
10
0
-10
-150
-100
-50
0
50
100
150
200
Palisades Line 650 Unfiltered
In-Phase
Quadrature

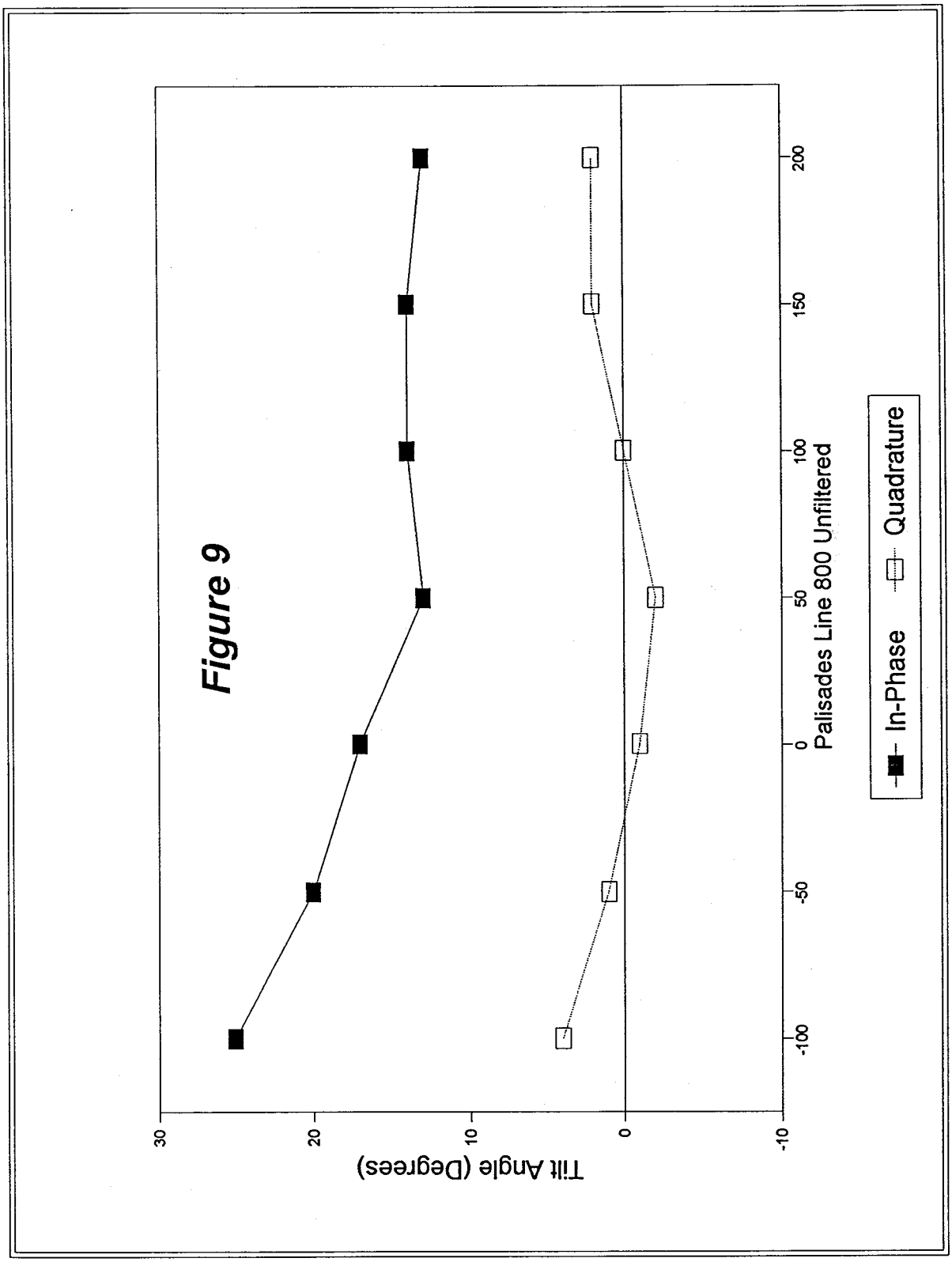


Figure 9
Tilt Angle (Degrees)
30
20
10
0
-10
-100
-50
0
50
100
150
200
Palisades Line 800 Unfiltered
In-Phase
Quadrature

2.8 PALISADES BASELINE

Two sections of the Palisades baseline were surveyed, one in the vicinity of the Palisades ore zones (Figure 10) and one to the west of the Hanways ore zones (Figure 11).

The survey line in the Palisades ore zones area covered 850 feet and trends approximately east-west, parallel to the coastline. The quadrature and in-phase profiles are flat to Station 500 where they begin to increase toward the west. This is coincident with the survey line which nears and subparallels the steep coastline and therefore the increasing in-phase values are probably topography related.

The survey line to the west of the Hanways ore zones exhibits a flat quadrature response up until Station 3000, then the quadrature value increases steadily to the west. Initially, the in-phase values are negative and increase to the west crossing the quadrature profile between Stations 1900 and 2000. Again, the profiles are probably in response to the changing topography as the coast line is approached toward the west.

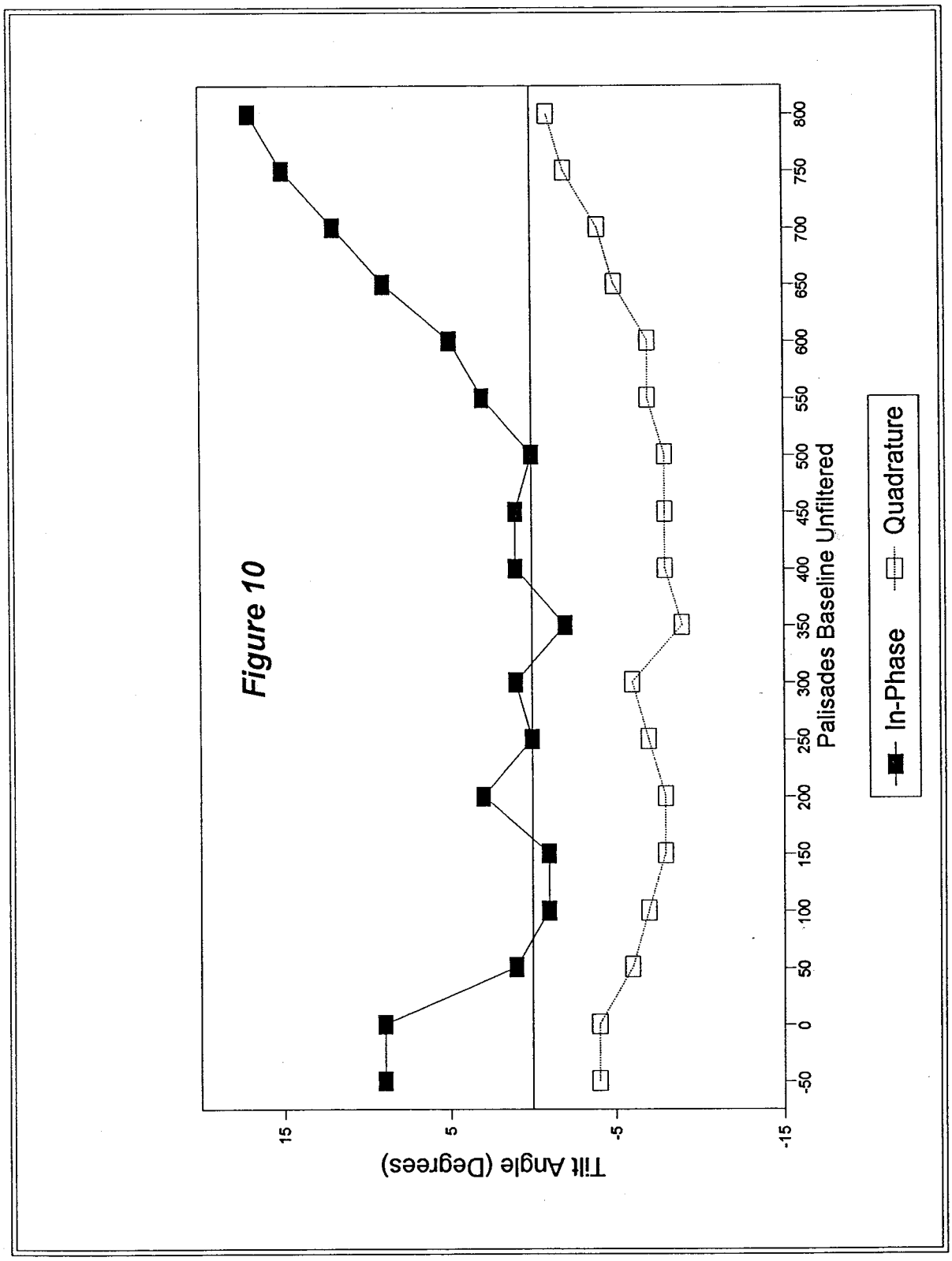


Figure 10
Tilt Angle (Degrees)
15
5
-5
-15
-50
0
50
100
150
200
250
300
350
400
450
500
550
600
650
700
750
800
Palisades Baseline Unfiltered
In-Phase
Quadrature

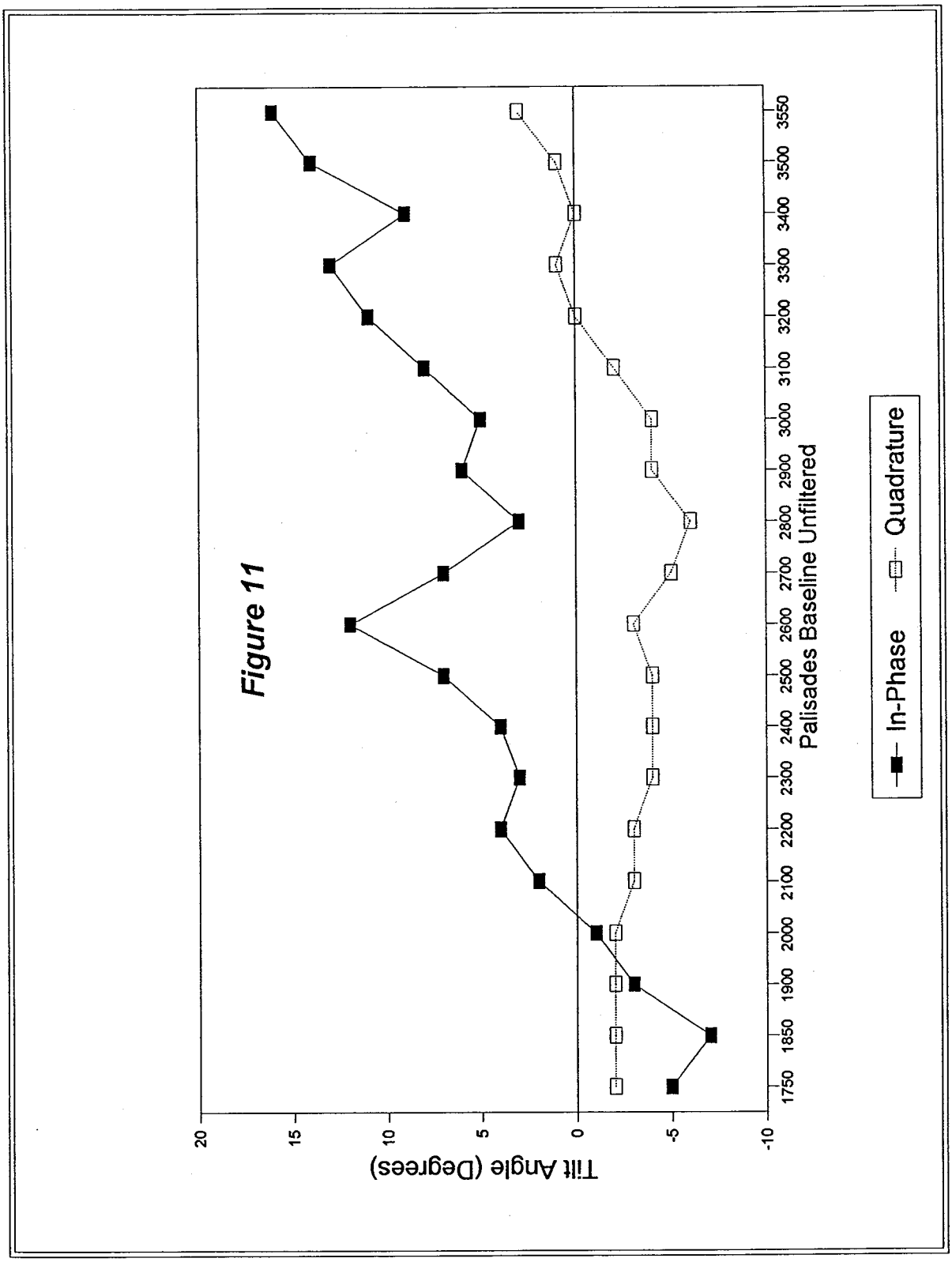


Figure 11
Tilt Angle (Degrees)
20
15
10
5
0
-5
-10
1750
1850
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3550
Palisades Baseline Unfiltered
In-Phase
Quadrature

3.0 CONCLUSIONS & RECOMMENDATIONS

The VLF Survey shows that over the surveyed lines the quadrature profiles are relatively flat whereas the in-phase profiles are affected by changes in topography at the coastline (ie. in-phase values increase in proximity to the cliffs).

Exceptions to this trend occur in the area north of the Hanways ore zones and on the West Line. Thin conductors were located on Hanways Line 3700 at Station 125 and Hanways Line 3600 at Station 100. These conductors may represent strike extensions of the Hanways ore zones. On the West Line, a thin conductor is located near Station 850.

It is recommended that:

1. A more detailed electromagnetic survey be completed over the conductors located north of the Hanways ore zones and on the West Line. This program would consist of either a more closely spaced VLF-EM16 survey with 25 foot station spacing or a ground conductivity survey, EM31 or EM34, on a 25 foot station interval on 50 foot or less line spacing.

2. Upon resolution of the conductors, a series of trenches be dug across the conductors where there is an easy access and thin overburden. These trenches would be geologically mapped and mineral samples collected for analyses.

Department of Natural Resources

MAP REFS. 21H7A+B

Recd Aug 10/94

STATEMENT OF ASSESSMENT WORK EXPENDITURES

(N.B. Complete as necessary to substantiate the total claimed)

RE: EXPLORATION LICENCE NO. 00389 DATE OF ISSUE _____ 19__

TYPE OF WORK			AMOUNT SPENT
1. Prospecting	22.	days	1100.00
2. Geological mapping	4	days	200.00
3. Trenching/Stripping/Refilling		m³	
4. Assaying & whole rock analysis	5	#	40.00
5. Other laboratory		#	
6. Grid: a) Linecutting	8.5	km	800.00
b) Picket setting		km	
c) Flagging	12	km	600.00
7. Geophysical Surveys:			
Airborne: a) EM CONTRACT	2.5'3	km	600.00
b) Mag or Grad		km	
c) Radiometric		km	
d) Combination		km	
e) Other EM16	6.2	km	800.00
8. Geophysical Surveys:			
Ground: a) EM		km	
b) Seismic Soundings		#	
c) Magnetic/telluric		km	
d) IP/Resistivity		km	
e) Gravity		km	
f) Other		km	
9. Geochemical Surveys:			
a) Lake, stream, spring (seds/water)		samples	
b) Rock/core/chips	55	samples	~~300.00~~
c) Soil/Overburden		samples	
d) Gas Method		samples	
e) Biogeochemistry		samples	
f) Sample Collection	8	days	400.00
g) Other			
10. Drilling:			
a) Diamond (#holes/m)	/_____	m	
b) Percussion (#hole/m)	/_____	m	
c) Rotary (#hole/m)	/_____	m	
d) Auger (#holes/m)	/_____	m	
e) Reverse circulation (#holes/m)	/_____	m	
f) Logging, supervision etc.	/_____	days	
g) Sealing (# holes)			
11. Other: (describe) EQUIPMENT RENTALS			300.00
		SUBTOTAL	

RECEIVED AUG 8 1994 GEOSCIENCE RESOURCES

OVERHEAD COSTS

12. Secretarial Services 2. DAYS TYPING REPORT		100.00
13. Drafting Services 3. DAYS		150.00
14. Office Expenses (rent, heat, light etc.)		125.00
15. Field Supplies FUEL, RIBBON, ETC.		315.10
16. Compensation Paid to Landowners		
17. Legal Fees		
18. Other (describe) FOOD + FILM DEV'T PHOTO COPY SERV. ETC.		413.07
SUBTOTAL		
TOTAL		5948.17

I hereby certify that the above information is true and correct and that it has not before been submitted for assessment work credit.

As PRESIDENT I am duly authorized to make this certification.

(Position in Company or Licensee)

DATED AT Lower Five Islands in the Province of Nova Scotia.

this 1 ST day of August 19 94.

Name and Address of Licensee: Douglas Boddy, Lower Five Islands Cumb. Co. N.S. B0M-1N0

Signature Douglas Boddy