

Paul Wilton - Nelson

002613

Tolson

82F/7E

THIS PROSPECTUS CONSTITUTES A PUBLIC OFFERING OF THESE SECURITIES ONLY IN THOSE JURISDICTIONS WHERE THEY MAY BE LAWFULLY OFFERED FOR SALE AND THEREIN ONLY BY PERSONS PERMITTED TO SELL SUCH SECURITIES. NO SECURITIES COMMISSION OR SIMILAR AUTHORITY IN CANADA HAS IN ANY WAY PASSED UPON THE MERITS OF THE SECURITIES OFFERED HEREUNDER AND ANY REPRESENTATION TO THE CONTRARY IS AN OFFENCE.

082FSE039

PROSPECTUS

Hope of Discovery Prop.

New?  
NEW ISSUE

DATED: November 10, 1993

EFFECTIVE: November 16, 1993

**DOBRANA RESOURCES LTD.**

(the "Issuer")

Suite 304 - 700 West Pender Street  
Vancouver, B.C., V6C 1G8

MINISTRY OF ENERGY, MINES & PETROLEUM RESOURCES.

REC'D FEB 17 1994

NELSON, B.C.

OFFERING: 1,200,000 COMMON SHARES

\* The Offering may be increased by up to 15% (or 150,000 shares) to meet oversubscriptions. See "Plan of Distribution" herein for further particulars.

Shares	Price to Public (1)	Commission (3)	Net Proceeds to the Issuer (2)
Per Share	\$0.35	\$0.05	\$0.30
TOTAL	\$420,000.00	\$60,000.00	\$360,000.00

- (1) The price to the public was established pursuant to negotiations between the Issuer and the Agent.
- (2) Before deduction of the balance of costs of the Prospectus estimated to be \$35,000.00.
- (3) Agent's warrants for the purchase of an additional 300,000 shares of the Issuer have been granted to the Agent for guaranteeing the offering (Refer to the heading "Plan of distribution" herein).

**THERE IS NO MARKET THROUGH WHICH THESE SECURITIES MAY BE SOLD. THE ISSUE PRICE TO THE PUBLIC PER COMMON SHARE EXCEEDS THE NET BOOK VALUE PER COMMON SHARE FOLLOWING COMPLETION OF THIS OFFERING BY \$0.2152 REPRESENTING A PRO FORMA DILUTION OF 61.49% AFTER GIVING EFFECT TO THIS OFFERING.**

A PURCHASE OF THE SECURITIES OFFERED HEREUNDER MUST BE CONSIDERED AS SPECULATION. THE ISSUER'S PROPERTY IS IN THE EXPLORATION AND DEVELOPMENT STAGE ONLY AND IS WITHOUT A KNOWN BODY OF COMMERCIAL ORE. REFER TO THE HEADING "RISK FACTORS" HEREIN. ONE OR MORE OF THE DIRECTORS HAS AN INTEREST IN OTHER NATURAL RESOURCE COMPANIES. REFER TO THE SUB-HEADING "CONFLICT OF INTEREST" UNDER THE HEADING "DIRECTORS AND OFFICERS" FOR A COMMENT AS TO THE RESOLUTION OF POSSIBLE CONFLICTS OF INTEREST.

THE VANCOUVER STOCK EXCHANGE HAS CONDITIONALLY LISTED THE SECURITIES BEING OFFERED PURSUANT TO THIS PROSPECTUS. LISTING IS SUBJECT TO THE COMPANY FULFILING ALL THE LISTING REQUIREMENTS OF THE VANCOUVER STOCK EXCHANGE ON OR BEFORE MARCH 31, 1994, INCLUDING PRESCRIBED DISTRIBUTION AND FINANCIAL REQUIREMENTS.

NO PERSON IS AUTHORIZED BY THE ISSUER TO PROVIDE ANY INFORMATION OR TO MAKE ANY REPRESENTATION OTHER THAN THOSE CONTAINED IN THIS PROSPECTUS IN CONNECTION WITH THE ISSUE AND SALE OF THE SECURITIES OFFERED BY THE ISSUER.

UPON COMPLETION OF THIS OFFERING, THIS ISSUE WILL REPRESENT 38.63% OF THE COMMON SHARES THEN OUTSTANDING AS COMPARED TO 30.75% WHICH WILL BE OWNED BY DIRECTORS AND SENIOR OFFICERS AND SUBSTANTIAL SECURITY HOLDERS OF THE ISSUER. SEE ALSO "PRINCIPAL HOLDERS OF SECURITIES" HEREIN FOR DETAILS OF SHARES HELD BY DIRECTORS, SENIOR OFFICERS AND CONTROLLING PERSONS.

**IGNA**

engineering & consulting ltd.

082FSE039

R E P O R T   O N   T H E   M I N E R A L  
E X P L O R A T I O N  
O F  
T H E   T O T E M   G O L D   P R O P E R T Y

Lat. 49 25'N; Long. 116 43'W

N.T.S. 82 F/7E

NELSON M. D.

British Columbia

1987-1993

SUMMARY AND EVALUATION

For

DOBRANA RESOURCES Ltd

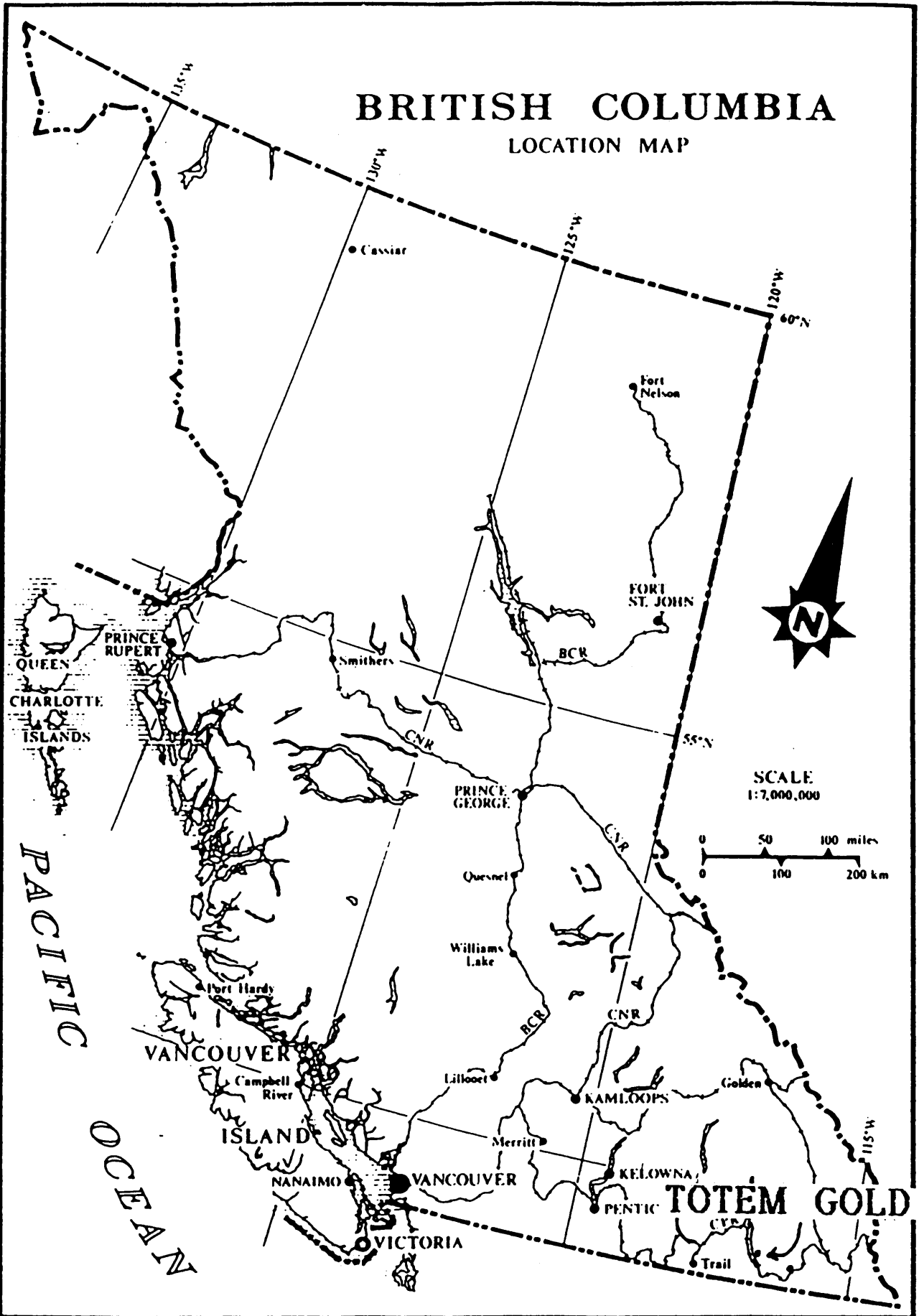
by

I. BOROVIĆ, P. Eng.  
geologist

VANCOUVER, B. C.  
March 18 1988.  
Updated: March 23, 1993.

# BRITISH COLUMBIA

## LOCATION MAP



**IGNA**  
engineering &  
consulting ltd.

**DOBRANA RESOURCES Ltd**  
**TOTEM GOLD PROPERTY**

DATE: MARCH 93

FIG. No. 1

TABLE OF CONTENTS

	page
SUMMARY	
EXPLORATION PLAN AND ESTIMATED BUDGET 1990.....	1
INTRODUCTION.....	2
PROPERTY.....	2
G E O L O G Y.....	4
STRUCTURE.....	5
MINERALIZATION.....	6
HISTORY OF EXPLORATION AND MINING.....	8
WORK DONE 1987.....	10
GEOLOGICAL MAPPING AND PROSPECTING.....	10
GEOPHYSICAL SURVEY 1987.....	13
Ground Magnetic Survey( Total Field).....	13
Ground ULF Survey.....	14
GEOCHEMICAL SURVEY 1987.....	15
WORK DONE 1989.....	16
CONCLUSIONS AND RECOMMENDATION.....	17
BIBLIOGRAPHY.....	18
CERTIFICATE.....	19
List of illustrations	following page
Location map(Fig.1).....	Front
Claim Map (Fig. 2).....	2
Geology Map(Fig. 3).....	4
Location of Workings(Fig. 4).....	7
Compilation Map and Location of Workings(Fig. 5).....	10
Ground Magnetic Survey (Fig. 6) Total Field.....	13
ULF Survey (Seattle) Profiles (Fig. 7).....	14
ULF Survey (Annapolis) Profiles (Fig. 8).....	14
Soil Geochemistry, Silver (Fig. 9). ....	15
Soil Geochemistry, Lead (Fig. 10).....	15
Soil Geochemistry, Zinc (Fig. 11).....	15
Soil Geochemistry, Gold (Fig. 12).....	15
Soil Geochemistry, Copper (Fig. 13).....	15
Geology and Loc. OF Workings 1989 (Fig. 14).....	16
ULF Survey (Seattle)89 Profiles(Fig. 15).....	16
ULF Survey (Cutler)89 Profiles(Fig. 16).....	16

## SUMMARY

A combined geological, geophysical and geochemical exploration work of the TOTEM GOLD property held by DOBRANA RESOURCES Ltd. was conducted by Igna Engineering and Consulting Ltd. from November throughout December 1987. Additional geological and geophysical work was done in 1989 and results are included within this Report. No exploration work was done since 1989.

The claims are situated in the Nelson Mining Division, in the southern Kootenay Lake area, 40 km north of Creston, B. C.

The geology of the property area is characterized by Proterozoic sediments of Purcell and Windermere Supergroup intruded by Cretaceous granitic rocks of the Bayonne Batholith. In many areas limestones and other sediments have undergone contact metamorphism and metasomatism resulting from the granitic intrusion. The vast area of the property itself is underlain by hydrothermally altered granitic rocks of the Bayonne Batholith.

Vein and skarn type mineralizations occur in the area.

Numerous old workings such as German (Gold) Basin, Hope of Discovery, Copper Canyon, Imperial and Valporaiso/Government, date back to the turn of the century.

The area has been explored for high grade silver, lead, zinc, gold, tungsten and copper. The old records show shipments of ore from Imperial and Valporaiso/Government mines containing 3.45 oz/t silver and 0.356 oz/t gold (O'Grady, 1933).

Sampling of the German Basin (Totem Gold Property) by Green in 1981, shows range of gold mineralization values from 0.001 oz/t to 0.098 oz/t; silver assays from 0.04 to 10.68 oz/t and lead from 0.1 to 39.7%.

Geophysical studies have revealed the presence of northerly trending electromagnetic conductors attributable to silver, lead, zinc, gold and copper mineralization. Magnetic survey suggests areas of alteration and possible presence of anomalous concentrations of minerals within shear zones parallel and coincidental with the German Basin contact and the shear zone.

Soil geochemistry results show an area anomalous in silver, lead, zinc, copper and gold in the vicinity of the north trending magnetic anomaly and electromagnetic conductor in the area of the TOTEM GOLD workings.

It is evident that vein types of base and precious metals mineralization might exist on the property.

A program of work is recommended using backhoe trenching, opening of old workings, geological mapping and sampling and diamond drilling.

## EXPLORATION PLAN AND ESTIMATED BUDGET 1992.

Exploration work should start by opening and enlarging the surface exposures coincidental with the ULF, soil and magnetic anomalies and also by opening, examining and sampling the old workings. Geological detail mapping and sampling of the trenches, and geological structural studies should continue.

In order to test extension of mineralized structures, trenching of significant anomalies which are showing the greatest mineral potential should be done.

To test the extent of the mineralization at depth a diamond drilling should follow in Phase 2.

The cost of the proposed exploration program is estimated at \$ 75 900.00. Additional work (Phase 2) would be dependent on favorable results of Phase 1.

## PHASE 1

Geological - structural - mineral studies.....\$	15 000.00
Engineering, supervision, evaluation.....\$	8 000.00
Room & Board.....\$	5 000.00
Trenching.....\$	15 000.00
Assaying.....\$	6 000.00
Transportation.....\$	5 000.00
Underground cleaning, sampling.....\$	15 000.00

Total	\$ 69 000.00
-------	--------------

Contingencies (10% of total).....\$	6 900.00
-------------------------------------	----------

Total Phase 1.....\$	75 900.00
----------------------	-----------

## PHASE 2

Geology, engineering, supervision.....\$	28 000.00
Room and board.....\$	8 000.00
Diamond drilling (5000 ft. @ \$ 80.00/foot)....\$	400 000.00
Assaying.....\$	12 000.00
Transportation.....\$	5 000.00

Total	\$ 453 000.00
-------	---------------

Contingencies (10% of total).....\$	45 300.00
-------------------------------------	-----------

Total Phase 2.....\$	498 300.00
----------------------	------------

## INTRODUCTION

DOBRANA RESOURCES LTD., a Vancouver, B.C. based mineral exploration company, intends to continue the exploration of the silver, lead, zinc, gold and copper bearing mineral property known in the past as GERMAN (GOLD) BASIN, located on the southwest slopes of Mount Sherman, north of Sanca Creek about 4 km east of Sanca on Kootenay Lake.

The following report is a summary of information obtained from the various published and private reports, which are listed in the Bibliography on page 18; from the writer's personal knowledge and experience gained through research and exploration work in the Kootenay Lake area in the past; from the results of the 1987 geological, geophysical and geochemical survey; and from recent investigations in September 1989.

The writer supervised the basic exploration work, comprised of geological mapping, geochemical soil survey, geophysical ULF-EM and ground magnetic surveys, done during November and December of 1987 and in September 1989.

The most recent work is continuation of the 1987 exploration efforts.

The conclusions expressed in this report are based upon the results of the geological, geochemical and geophysical work done on and around the Totem Gold property in 1987 and in 1989 and in the past.

## PROPERTY

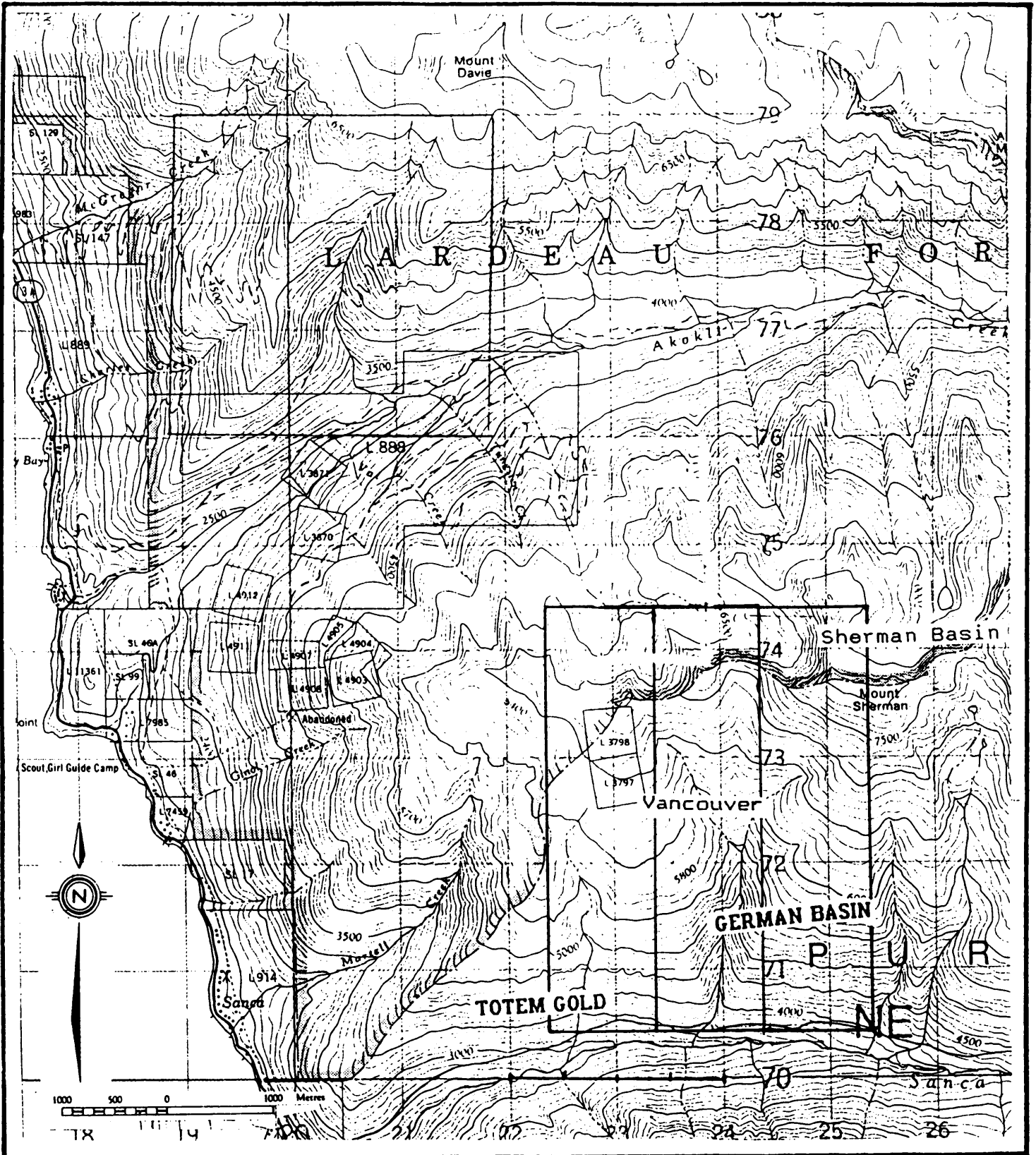
Claims:  
(Fig. 2)

The property is composed of two located mineral claims with a total of 49 units as follows:

Claim(# of units)	Title. No.	Rec. Date
Totem Gold(16)	316180	Feb. 17 1994.
German Basin(16)	316179	Feb. 17 1994.
Vancouver (1)	313573	Oct. 1 1993.
Sherman Basin(16)	312692	Aug. 27 1993.

Owner: DOBRANA RESOURCES LTD.  
304-700 W, Pender St.  
Vancouver, B. C. V6C 1G8

Location:  
(Fig. 1 and 2)  
(Lat. 49 25'N; Long. 116 43'W); NTS 82 F/7E; Nelson, M.D. B.C.



**IGNA**

engineering &  
consulting ltd

**DOBRANA RESOURCES Ltd**  
**TOTEM GOLD PROPERTY**

**Claim Map**

NTS 82F/7E

DATE

MARCH, 93  
FIG. 2



The property is approximately 40 km north-northwest of Creston, B.C., about 4.5 km east of Sanca on Kootenay Lake and north of Sanca Creek.

#### Access:

A forestry access road leaving highway 3A at Sanca rises to approximately 1200 m elevation in the easterly direction. It follows Sanca Creek for 6.5 km where it joins an old mine and series of new logging roads leading northerly into the property. The nearest rail point is at Sirdar, 36 km distance south of the old mine site. The smelter at Trail is approximately 150 km distance by road.

#### Climate

In the property area, climate is temperate. Summers are moderately dry and warm. Snowfall accumulation varies widely from winter to winter but is rarely greater than one meter. Annual precipitation is light to moderate.

#### Physiography

THE TOTEM GOLD PROPERTY is located on the western flanks of the Purcell Mountains. The Purcell Mountains lie east of the Selkirk Mountains and are separated from them by the long through valley occupied by Beaver River, Duncan River, Duncan Lake, and Kootenay Lake.

Along the east side of Kootenay Lake the tributary creeks, flowing in narrow deep valleys, have carved out a series of narrow ridges running east and west, ranging in elevation from 7,000 feet (2100m) on the ends overlooking the lake to 8,000 feet (2400m) and higher on the eastern ends.

The Purcell Mountains are underlain by sedimentary and metamorphic rocks, largely of Proterozoic age but extending upward into the Lower Palaeozoic, which are intruded by batholiths of granitic rocks. The sedimentary and metamorphic rocks comprise thick quartzite, argillaceous quartzite, argillite, and limestone members.

The rocks are involved in overturned and frequently complex folds about axes which regionally have an accurate plan, being northeasterly in the south, northerly in the central ranges, and northwesterly in the north. The trends of individual ranges are controlled by this fundamental bedrock structure.

In the southern Purcell Mountains south of Mount Findlay and Skookumchuck Creek "the mountains up to 7,000 feet are rounded and well wooded to the summit, higher ones are commonly extremely rugged, and those carved out of granite or massive quartzites are climbed only with extreme difficulty."

#### Water

Intermittent streams from which quantities of water can be obtained for exploration drilling occur in the vicinity of the property.

## Power

A power line (rated 2200 volts) extends from the transmission line on Highway 3A to the old mine site at Valporaiso-Government workings (about 3.5 km from the Hope of Discovery property) and appears to be in good condition. To become operational, the terminus needs only to be refitted with transformers and the power line right-of-way re-slashed. The power line is owned and maintained by West Kootenay Power Ltd. from whom power can be contracted.

## Crew accommodation

During the summer months room and board for the exploration crew is found in the motel at the Destiny Bay on Kootenay Lake only 13 km from the property.

In late fall and winter months the nearest room and board facilities are located in the town of Creston some 40 km to the south of the property.

## G E O L O G Y

### REGIONAL GEOLOGY

(Fig. 3)

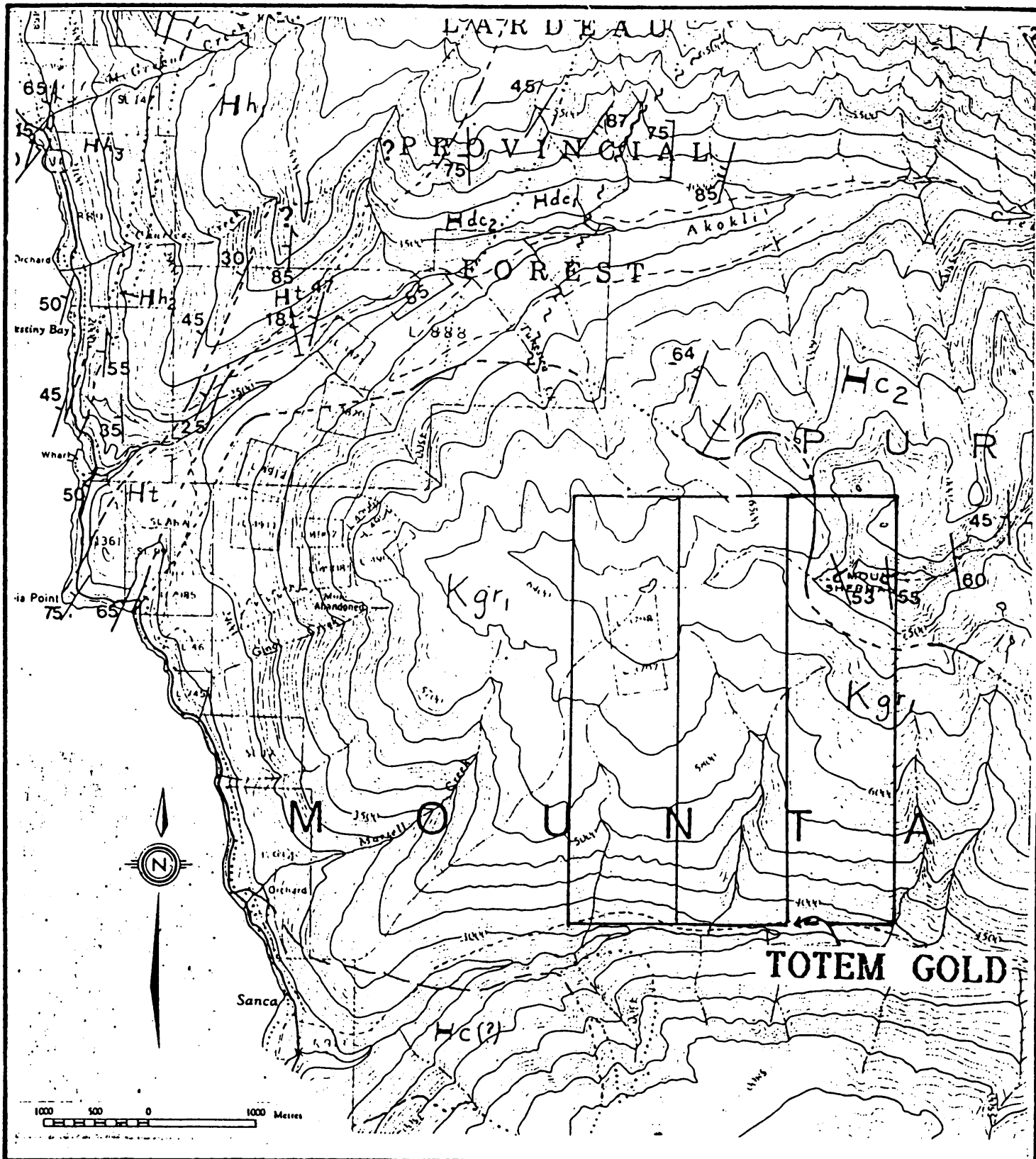
(Rice 1938, 1941; Green 1981; Reesor 1983)

The northeastern area of the Property is underlain by late Precambrian (Proterozoic) sediments of Madrynian and Helikian age. Sediments have been divided into two systems or supergroups: the Purcell and the Windermere (Rice 1938, 1941). Proterozoic sediments have been intruded by Cretaceous granitic rocks of the Bayonne Batholith which occupy the rest of the property.

### The Purcell Supergroup

The Purcell Supergroup consists of a conformable succession of formations which in the area of interest is represented by Creston (Hc) and the Dutch Creek Formations (Hdc).

The Creston Formation (Hc) is composed of varicolored argillaceous quartzite, laminated argillite, bands of chlorite schist. Narrow beds and lenses of calcareous rocks occur in the upper part of the formation, and are transitional to the Kitchener-Siyeh Formation (Rice 1941). The Kitchener-Siyeh consists mainly of impure dolomitic limestone, argillite and calcareous quartzite. Limestone and calcareous rocks compose the bulk of the formation. The Kitchener Formation is not subdivided on map Fig 4 & 5. The Dutch Creek Formation (Hdc) overlies the Kitchener and is represented by slaty argillite with fine, regular lamination. Some of the argillite is calcareous, grading to impure, dolomitic limestone or sandy, grading to argillaceous quartzite.



IGNA

engineering &  
consulting ltd

DOBRANA RESOURCES Ltd  
TOTEM GOLD PROPERTY

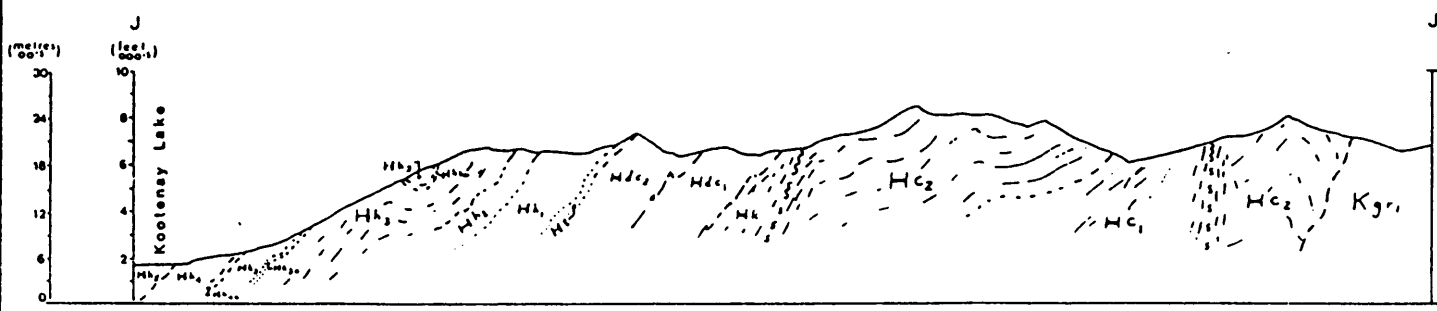
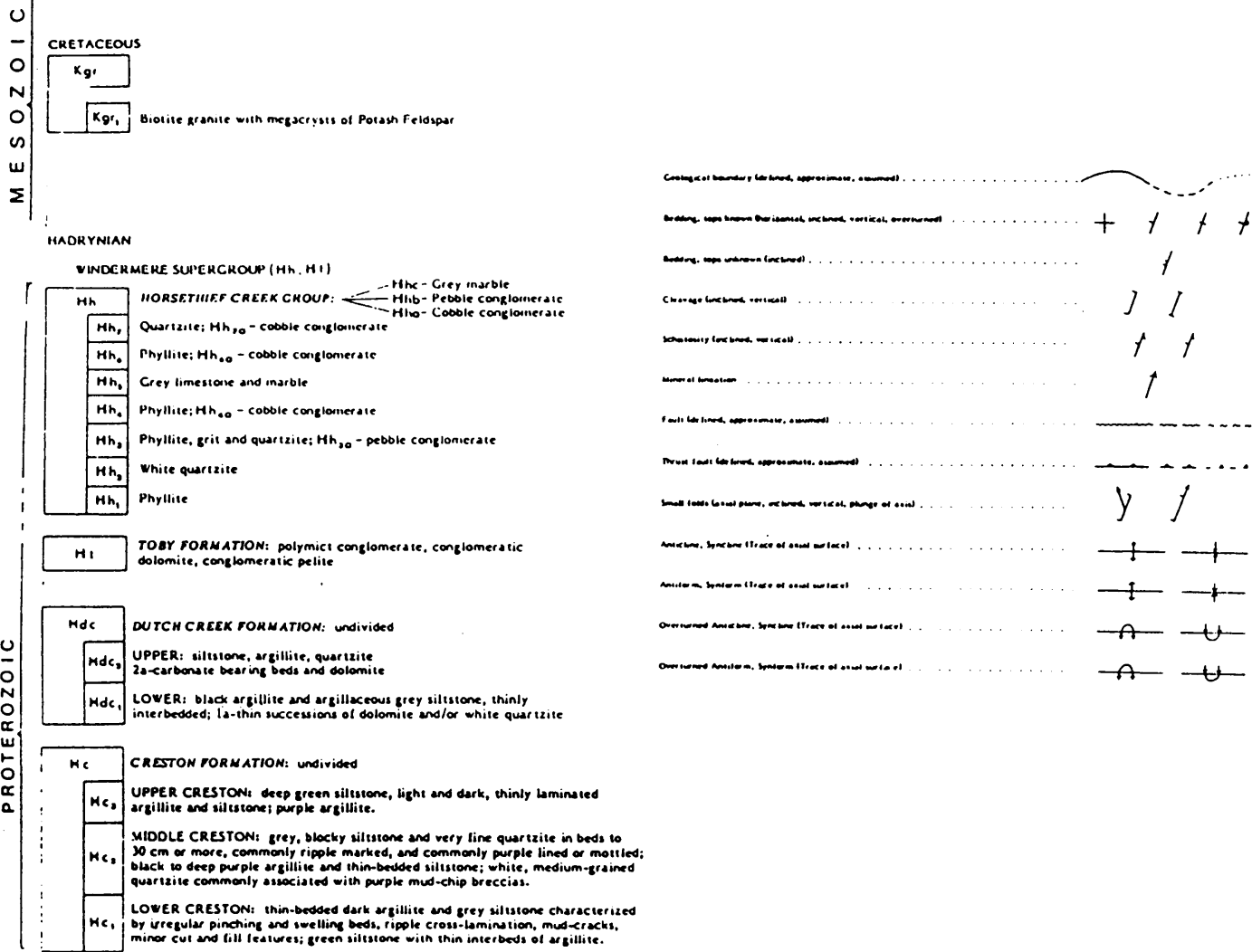
Geology

NTS 82F7E

DATE

MARCH 93  
FIG. 3

# LEGEND



J. E. REESOR JAN 1983

<p><b>IGNA</b> engineering &amp; consulting ltd</p>	<p><b>DOBRANA RESOURCES Ltd</b> <b>TOTEM GOLD PROPERTY</b></p>	<p>NTS 82F/7E</p> <p>DATE</p> <p>FIG. 3A</p>
---	--	--

## The Windermere Supergroup

The Toby Formation (Ht) is the basal member of the Windermere series (Rice, 1941) and mainly consists of a greenish grey conglomerate. The clasts are mostly quartz set in a siliceous cement. Conglomerate is interbedded with greenish foliated argillite.

The Horsethief Creek Group (Hh) overlies the Toby Formation and is represented in large part by slaty argillite, laminated, finely-grained or sandy with beds and lenses of crystalline limestone, arkose and pebble conglomerate.

## Granitic Intrusives:

### Bayonne Batholith (Kgr)

The major part of the Totem Gold property area is underlain by the granitic intrusive rocks of the Bayonne Batholith. The intrusive is typically white to light grey, medium to coarse grained biotite granite.

It is composed of approximately equal amounts of quartz, potash feldspar and plagioclase. Megacrysts of potash feldspar from 2 to 3 cm long occur in the rock. Locally the intrusive rock may be weathered and friable with feldspar altered to kaolin. Fine grained pink to grey aplite dykes transect the granitic rock frequently.

The contact to the metasediments (northern part of the property) is irregular, with numerous apophysis and relicts of country rock. The metasediments observed near the contacts have been silicified and bleached in narrow aureoles.

## STRUCTURE:

Foliation measurements north and west of the intrusive rocks showed steep eastward dips on planes striking 10 - 20 NE (Green, 1981). This suggests an eastward dipping fold axial plane consistent with other areas adjoining the Kootenay Arc the major structure of the region.

A major fault structure or sheeted zone, conforming closely to the fabric of the schistose metasediments in the Akokli Creek Valley, traces southward into the intrusive rocks without apparent attenuation or refraction. This north-south trending shear zone, subparallel to the major structure of the area, the Val Fault (Green op. cit.), is the locus for mineralization in the Totem Gold and German (Gold) Basin area.

## MINERALIZATION

The results of a study of geology and related mineralizing events at the Valporaiso/Government workings and results of our investigations on the Totem Gold show remarkable structural and mineralogical similarities in the two properties. The reason for this is location of mineralization in the shear zone within the intrusive.

## Description of Workings

(Fig. 4)

## Valporaiso/Government workings

(Fig. 4)

At the Valporaiso/Government Workings mineral and quartz vein deposition is controlled by parallel fractures within a major sheared zone striking northward and dipping 35- 50 to the east, and a minor zone of parallel fractures striking northeastward and dipping 50 to 80 to the east. The major fracture zone (the Val Fault) persists along the strike to the northern margin of the intrusive and extends into the metasediments. The host rock is a biotite granodiorite - chloritic and sericitic within and in the vicinity of mineralization, adjacent to quartz veins and locally adjacent to some concordant fractures. The mineral assemblages indicate both low to moderate and high temperature hydrothermal activity. Alteration of feldspar to muscovite (greisenization) occurs over narrow widths in the host rock near quartz veins in some localities. In general, alteration in the host rock near quartz veins or shears is chloritic, sericitic and kaolinitic, gradually decreasing outward, away from the shear.

Vein quartz, pyrite, arsenopyrite, wolframite, galena, sphalerite, chalcopyrite, silver and gold are the primary vein materials in order of abundance.

Pyrite, arsenopyrite and wolframite occur together and probably were precipitated in close synchronicity. Although wolframite with arsenopyrite occurs in sheared and altered wall rock, often in ribbon structures, it was also observed with pyrite along fracture shears in quartz veins. Small amounts of chalcopyrite with pyrite and galena occur in vein quartz, but generally these minerals are scarce. Gold values fluctuate in direct proportion to silver values and were likely deposited in the same stages.

## Hope of Discovery Workings (FORBES RESOURCES LTD)

(Fig. 4) Located to the north across Akokli Creek.

The main occurrence consists of a galena-bearing quartz vein within thinly folded, bedded, white limestone of the Dutch Creek Formation. The vein strikes N 12 W and dips 77 E. Galena occurs in bands and pockets within the quartz and in minor concentrations along the bedding planes of the foot wall and hanging wall limestones. The vein varies from 2.5 to 70 cm in width and has been exposed over a strike distance of 60 m. An open cut and a 25 m long adit have been driven along the vein.

Three samples taken from the open cut averaged: Silver 7.7 oz/t; Lead 13.4%; Zinc 14.6% over 0.5 m width over a strike distance of 20 m.

#### Copper Canyon Workings

Fig. 4 (within Hope of Discovery property)

Located on the west facing slope of Mr. Davie between McGregor and Charles Creeks.

A quartz vein 0.7 to 1.2 m in width containing disseminations and stripes of pyrite, chalcopryrite, and secondary copper carbonates occurs within quartzites and quartzose schists. Two tunnels, separated by 12 to 15 m vertically, have been driven along the vein. The lower tunnel is 43 m long and the upper tunnel is 11 m long. Grab samples from the stockpile of the mouth of each tunnel assayed: Gold tr to 0.02 oz/t; Silver 0.6 to 1.0 oz/t; Copper 0.91 to 4.21%.

#### TOTEM GOLD PROPERTY

##### Gold (German) Basin Group

(Fig. 4)

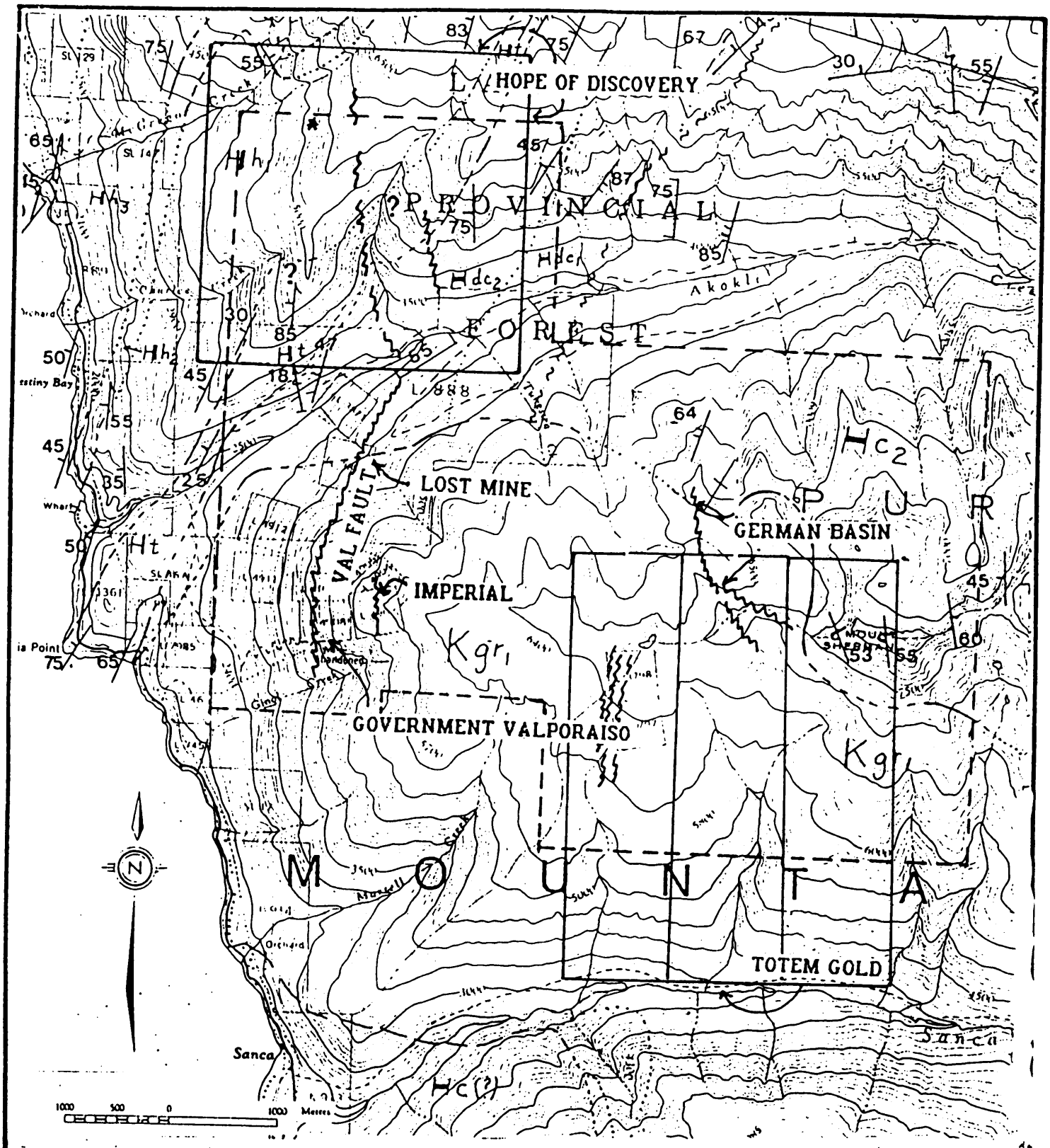
This is an old property restaked in 1906 by J. W. Mulholland of Sanca Creek, B. C.

It lies in German Basin on the south side of Akokli Creek at an elevation of 7,000 feet. A trail about 5 miles long connects it with the main highway up the east side of Kootenay Lake at Columbia Point.

The workings are caved in and following description is a summary of description by A. S. Greene, P. Geol. 1981.:

The deposit is a quartz vein in the same granitic body as the Valporaiso, and the vein outcrops along its east wall not far below the crest of the ridge. It strikes roughly north and, near the surface, dips about 30 degrees west. The workings consist of a long adit driven from a point just above the floor of the basin, and a shorter adit higher up the vein. Several raises have been driven from these adits through to the surface. In addition to the underground workings, a line of open-cuts expose the vein on the surface for about 300 feet. All the underground workings were in poor condition at the time of the writer's visit and the examination was largely confined to the surface. The vein in the open-cuts occupies a strong fracture in the granite and is from 3 to 8 feet wide. It apparently dies out where the fracture passes from the granite to the sediments. The quartz is milky white and contains scattered galena, pyrite, and chalcopryrite. Some orange-yellow scheelite (calcium tungstate) was seen. Gold is reported associated with the sulphides.

On the ridge above the workings several open-cuts have been excavated, in most of which large quartz veins are exposed. The relation between these and the main vein is not known.



**IGNA**  
 engineering &  
 consulting ltd

**DOBRANA RESOURCES Ltd**  
**TOTEM GOLD PROPERTY**  
**Location of Workings**

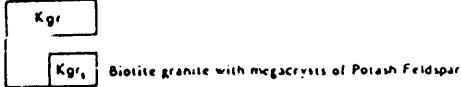
NTS 82F7E  
 DATE  
 MARCH, 93  
 FIG. 4



# LEGEND

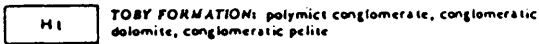
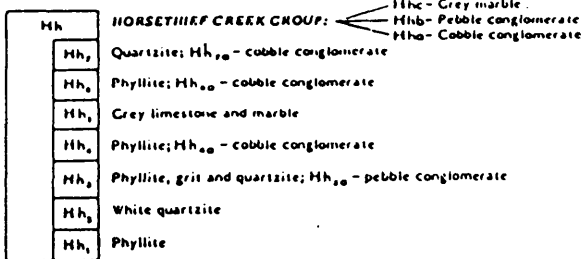
MESOSOIC

CRETACEOUS

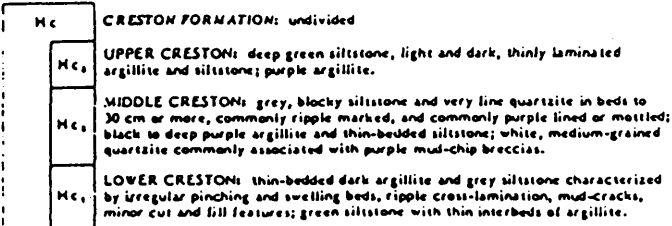
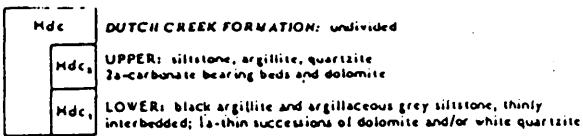


IIADRYNIAN

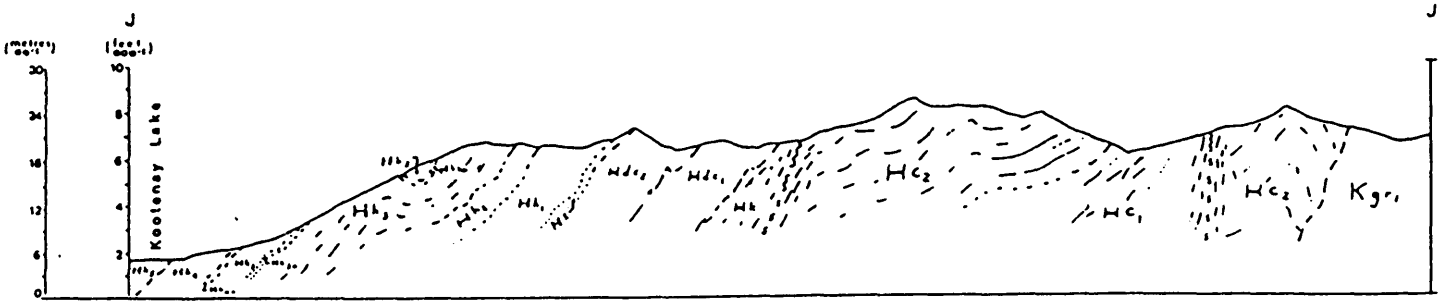
WINDERMERE SUPERGROUP (Hh, H1)



PURCELL SUPERGROUP (Mdc, Hc)



PROTEROZOIC



J. E. REESOR JAN. 1983

IGNA  
engineering &  
consulting ltd

DOBRANA RESOURCES Ltd  
TOTEM GOLD PROPERTY

NTS 82F/7E  
DATE  
MARCH, 93  
FIG. 4A

HISTORY OF EXPLORATION AND MINING  
( Fig. 4 )

Exploration history of the Totem Gold property is related to the exploration history of the numerous properties in the area such as Government-Valporaiso, Imperial, Lost Mine, German (Gold) Basin and Hope of Discovery.

The above properties are located within similar geological structures and appear to have similar mineral paragenesis.

- 1898 - A claim was staked on the Imperial Vein.
- 1900 - The Valporaiso Gold Mining Company acquired 7 claims in the vicinity of the present workings and drove the Valporaiso crosscut adit 60 m east of the vein.
- 1901 - The Imperial and Valporaiso were closed.
- 1919 - Imperial Mines Ltd. drove a 39 m crosscut to the Imperial vein.
- 1926 - Associated Mining and Milling Co. Ltd. acquired the claims of the Valporaiso Gold Mining Co. and Imperial Mines Ltd. and staked 20 additional claims.
- 1927 - The holdings of Associated Mining and Milling Co. Ltd. were increased to 60 claims.
- 1928 - Sanca Mines Ltd. acquired the property of Associated Mining and Milling Co. Ltd. Some assessment work was done.
- 1930 - Sanca Mines Ltd. performed assessment work.
- 1932 - Canada Smelters Ltd., an associate of Sanca Mines Ltd., built a pole track tramway from the Valporaiso portal to a storage bin 900 m downslope.
- 1933 - Canada Smelters Ltd. shipped 324 tons of gold-silver ore to the Trail smelter. "Unsorted mine run ore" assayed 0.356 oz/t gold and 3.455 oz/t silver. The Government shaft was sunk to a depth of 82.5 m and about 190 m of lateral work was done in the Government/Valporaiso workings.
- 1953 - Mr. Wilson of Boswell leased the Valporaiso and Government claims and staked 15 more for the purpose of investigating the area for tungsten occurrences.

- 1954 - Akokli Tungsten Mines Ltd., associated with Palouse Co. Ltd. of Moscow, Idaho, performed underground lateral development, 450 m of long hole percussion drilling and some surface trenching on the Valporaiso/Government zone.
- 1955 - Akokli Tungsten Mines Ltd. improved the Government shaft, did some drifting and drove a raise to the surface. The pilot mill was completed. The mill treated 533 tons of tungsten material, and produced 11.200 lbs of tungsten-pyrite concentrate.
- 1956 - E. Houghland did sampling and geological work on behalf of Palouse Co. Ltd.
- 1964 - Present holdings were acquired by M. J. Pritchard on behalf of Northern Pacific Mines Ltd.
- 1981 - A. S. Greene examined the Valporaiso/Government Workings (August - October) at the request of J. D. Mawhinney of Custom Mining Inc. He did geological evaluation and examination of the property and located drill sites.

#### Hope of Discovery Workings

A very good but overgrown road leads 3.5 km from a forestry access road on the north side of Akokli Creek, approximately 2 km east of Highway 3A to the workings site at the 5500 foot elevation. The workings, approximately on strike and 4 km north of the Valporaiso/Government Workings, consist of a 24 m adit with a 3 m raise to surface, following a quartz lead and 30 m of surface trenching above the adit. Construction includes two ore bins and a waste chute in fair condition (approximately 4 tons of mineralized rock remain in the bins).

W O R K   D O N E   1987  
(Fig. 5)

Geological, geophysical and geochemical surveys were done on the part of the Totem Gold property during November and throughout December of 1987.

#### GEOLOGICAL MAPPING AND PROSPECTING

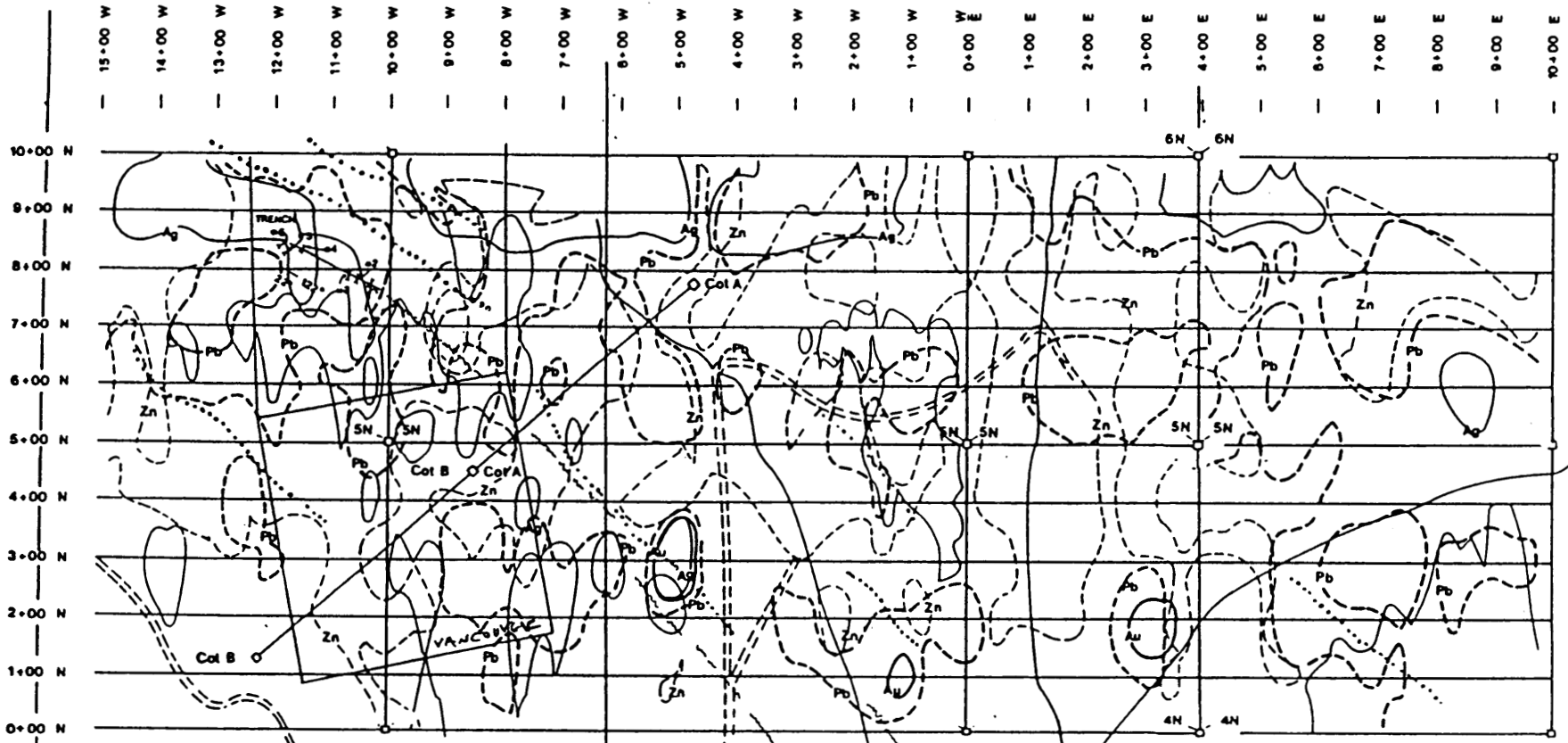
##### German (Gold) Basin

(Fig. 4, 5, 14) (after, Green, A. S. 1981. and expl.1987&89)

The German Basin Workings, originally developed in the later 1800's, lie on the south side of Akokli Creek, 3.6 km east of the Valparaiso/Government Workings at an elevation of about 7000 feet. The underground workings consist of a long adit (portal caved), a 35 m adit driven in on a quartz vein 20 m higher, and a water filled shaft (depth unknown) 65 m southwest of the lower adit. The higher adit and the shaft were examined and sampled. Several raises to surface and stopes have been driven from the adits. The raises however, are also caved. A series of open cuts, following the same quartz vein and fault structure for about 100 m on a north ridge of the basin, were also sampled and examined.

5 m inside the portal of the upper adit, 100m southeast of the lower adit, a 2 m thick milky quartz vein oriented N 5 W35/ W was stoped updip for about 4 m. A major fault structure, N 45 W/90, intersects the controlling shear at this location. The vein consists of coarsely crystalline, vuggy quartz mineralized with galena and pyrite in irregular bands, patches, and clustered in vuggy quartz. Thin, dark to rusty, weathered sulphide bands were observed underground along the margins of the quartz vein footwall. There is slight chloritization, seritization and pyritization of the granodiorite host rock on the footwall. Examination of the vein underground shows the vein pinching and swelling at intervals over the 35 m exposed distance, varying in thickness from a maximum of 2m at the portal, to a minimum of 0.15 m, 15m, and 35m, south of the portal. The vein ranges in orientation from N 5 W/35 W to N 10 W/45 W. The vein has obviously intruded a pre-existing shear zone of closely spaced fractures, axis evident in some places by the occurrence of parallel wallrock remnants within the quartz vein. Fractures within the quartz parallel the shear and were probably developed after cooling.

A quartz vein is exposed in a downdip shaft 65 m southwest of the lower adit and approximately 5 m below. The narrow 0.1 m vein occupies a shear oriented W/65 S and shows visible spotty galena mineralization.



1.00  
2.00

Totem Opid. Claim

German Basin Claim

Sherman Basin

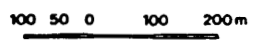
To Highway

		Soil anomalies			
		Au	Ag	Pb	Zn
3701 TRENCH	1	0.004	0.03	0.38	0.37
3702	1	0.006	0.30	0.04	0.04
3703	1	0.012	0.04	0.06	0.03
3704 TRENCH	2	0.004	0.20	0.07	0.03
3705	2	0.006	0.20	0.04	0.02
3706 TRENCH	4	0.002	0.35	0.10	0.10
3707	4	0.002	0.05	0.00	0.01
3708 TRENCH	8	0.018	3.07	0.33	0.02
3709	8	0.002	4.05	0.04	0.01

**LEGEND**

- ..... VLF conductor (Seattle)
- VLF conductor (Annapolis)
- Magnetic anomaly

- Au
- Ag
- Pb
- Zn



IGNA  
engineering &  
consulting ltd

**DOBRAWA RESOURCES Ltd**  
**TOTEM GOLD**  
**COMPILATION MAP**  
**Location of workings**

NITS B2.F7.E  
DATE  
MARCH/93  
FIG 5

The open cuts on the north ridge, 500 to 600 m north of the underground workings, expose an irregular quartz vein up to 1 m thick. The northernmost trench exposes a 0.6 m galena mineralized quartz vein N 40 W/55 W, truncated or faulted off by an N 10 E/40 E oriented fault. Approximately 70 m south of this exposure is a 1 m thick, unmineralized, vuggy quartz vein oriented W/35 S.

SAMPLING BY GREEN 1981.: ( GR=grab; CH=chanell )

Assay Reference No.	Field Reference No.	Elements Tested	Location; Width or Interval; Remarks
5566	GR 10-21-1	Ag, Au, Pb	German Basin, open cut on north ridge; quartz with galena.
5567	CH 10-21-1	Au, Ag, Pb	German Basin, upper adit, adjacent to portal; 0-2.0 m quartz vein, vuggy NS W/35 W.
5568	CH 10-21-2	Au, Ag, Pb	as above, 35 m south of porta; 0-0.3 m; rusty sheared quartz, galena, N40 W/40 W.
5569	CH 10-21-3	Au, Ag, Pb	as above, 25 m south of portal; 0-6 m (top down); quartz in hanging wall, dark oxides NS W/35 W.
5570	CH 10-21-4	Au, Ag, Pb	as above; 0.6 - 1 m; black oxide over rusty sheared quartz (0.15m) altered grandiorite (0.25 m).
5571	CH 10-21-5	Au, Ag, Pb	as above; 20 m south of portal; 1 - 0.2 m; quartz vein.
5572	CH 10-21-6	Au, Ag, Pb	as above; 15 m south of portal; 0 - 0.5 m; quartz vein.
5573	CH 10-21-7	Au, Ag, Pb	as above; 8 m south of portal on north wall of raise; 0 - 1.2 m; quartz vein, galena, wallrock clasts.
5574	CH 10-21-8	Au, Ag, Pb	German Basin, shaft 65 m southwest of lower adit; 0 - 1 m; quartz vein near top of shaft N90 W/65 S.

5575	CH 10-21-9	Au, Ag, Pb	German Basin, northern open cut on north ridge; 0-0.6 m quartz vein with galena N40 W/55 W.
5576	CH 10-21-10	Au, Ag, Pb	as above; southern open cut on north ridge; 0-1 m; quartz vein, vuggy N90 W/35 S
5577	CH 10-22-1	Au, Ag, Pb	North Akokli workings 2.5 km north of Valporaiso workings, adit, 10 m north of portal on face; 0-0.5 m; shear and quartz vein N15 W/80 E.

Description	oz/t Au	oz/t Ag	% Pb
5566	0.052	10.68	39.7
5568	0.012	0.62	0.3
5569	0.002	0.10	0.1
5570	0.008	0.29	0.3
5571	0.004	0.26	0.2
5572	0.004	0.23	0.3
5573	0.098	8.22	1.8
5574	0.006	0.37	0.4
5575	0.001	0.04	0.1
5576	0.001	0.04	< 0.1

Samples are taken from German (Gold) Basin workings. Exact location is not available.

#### Northern Crown Grant and Vancouver Crown Grant (1987 exploration)

Geological investigations were centered around the Northern Crown Grant area. The snow conditions were better and outcrops easier to locate.

On the Northern Crown Grant a series of trenches were located and sampled. These trenches, after some excavations, were found to contain massive--vuggy + or - Fe Quartz veins and Fe--Granite with tree quartz stringers. In trench #5 (see map, Fig. 5) one sample contains a 1.0-1.5 cm band of brecciated vein with pyrite. The vein trends 122o and dips 22 south.

There seems to be an extensive 'shear zone' on the Southern Crown Grant located approximately 75-150 m east of the 115 + 00W tie line from Lines 2+50 - 4+50 North.

The entire area covered by the two Crown Grants seems to be completely underlain by granodiorite-granite. A noticeable amount of aplitic float is located around L 2 + 00N 115 + 00W and on the Southern Crown Grant.

Samples taken from the trenches were assayed and results are shown on Fig. 5.

## GEOPHYSICAL SURVEY 1987

## Ground Magnetic Survey (Total Field)

(Fig. 6)

## Field Method and Instrumentation

The ground magnetic survey on the Totem Gold property was performed simultaneously with the VLF survey. The Scintrex IGS unit with magnetometer and VLF was used for both surveys. The grid used is described in the GROUND VLF SURVEY. Magnetic readings were taken in conjunction with the VLF readings.

For the survey a portable unit and a base station, fitted with similar proton precision sensors, were used. The base station was programmed to sample the magnetic field every two seconds. The portable unit records the magnetic data, time and station coordinates; corrections are made automatically at the end of the days survey by connecting the portable and base stations to each other.

## Data Presentation

(Fig. 6)

Corrected values were plotted on 1:5000 scale plan and contoured. Contour intervals are 100 and 500 gammas.

## Discussion of Results

(Fig. 6)

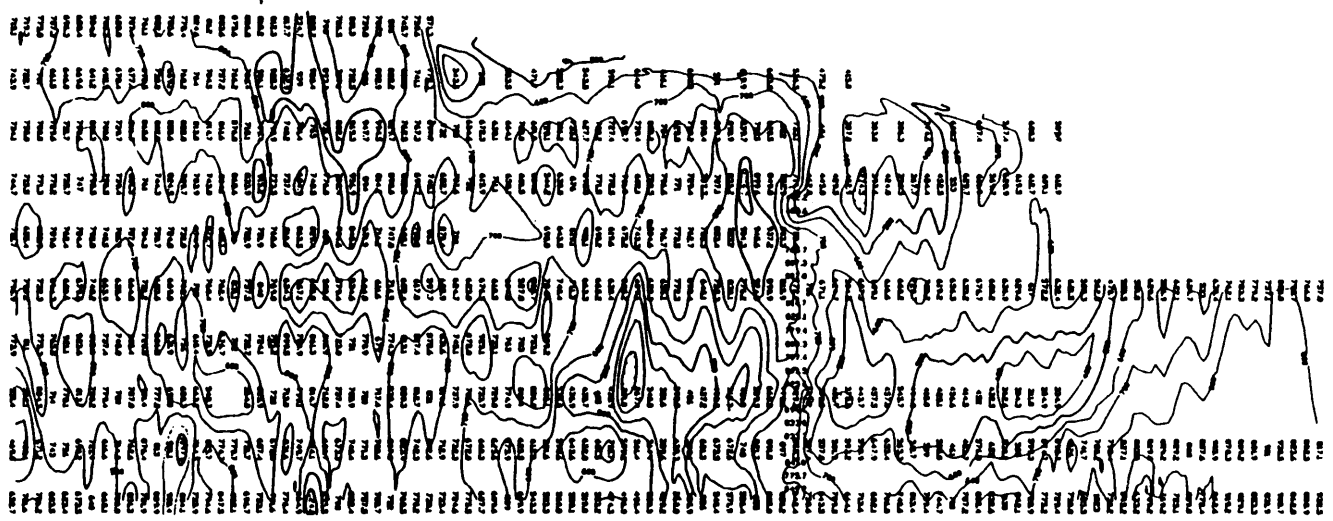
Magnetic anomalies within surveyed part of the property show northerly trend with relief of about 800 to 1000 gammas. This kind of magnetic relief is characteristic for the terrain underlain by granitic intrusive rocks and trend shows possible development of fractures, faults and related shear zones. Gold and silver bearing granitic rocks of the Idaho Batholith give very similar magnetic susceptibility response even over the wide silicified shears with considerable gold, silver and sulfide mineralization. One of the best examples are gold and silver mines located on the large mineralized shear zones near Atlanta in south central Idaho.

In the north western part of the grid the magnetic high is mapped in an area with significant silver lead and zinc anomalies. (see Compilation Map Fig. 5) In the general area two VLF conductors were mapped striking northwest-southeast.



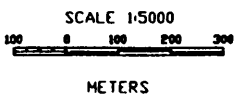


Station 100E ---  
Station 950E ---  
Station 900E ---  
Station 850E ---  
Station 800E ---  
Station 750E ---  
Station 700E ---  
Station 650E ---  
Station 600E ---  
Station 550E ---  
Station 500E ---  
Station 450E ---  
Station 400E ---  
Station 350E ---  
Station 300E ---  
Station 250E ---  
Station 200E ---  
Station 150E ---  
Station 100E ---  
Station 50E ---  
BASELINE ---  
Station 50V ---  
Station 100V ---  
Station 150V ---  
Station 200V ---  
Station 250V ---  
Station 300V ---  
Station 350V ---  
Station 400V ---  
Station 450V ---  
Station 500V ---  
Station 550V ---  
Station 600V ---  
Station 650V ---  
Station 700V ---  
Station 750V ---  
Station 800V ---  
Station 850V ---  
Station 900V ---  
Station 950V ---  
Station 1000V ---  
Station 1050V ---  
Station 1100V ---  
Station 1150V ---  
Station 1200V ---  
Station 1250V ---  
Station 1300V ---  
Station 1350V ---  
Station 1400V ---  
Station 1450V ---  
Station 1500V ---



--- Line 900N  
--- Line 800N  
--- Line 700N  
--- Line 600N  
--- Line 500N  
--- Line 400N  
--- Line 300N  
--- Line 200N  
--- Line 100N  
--- Line 0N

BASE MAG VALUE: 57,000 GAMMAS  
CONTOUR INTERVAL: 100 GAMMAS



TO ACCOMPANY REPORT BY: I. BOROVIĆ, P.ENG.	
TOTEM GOLD PROJECT	
FOR: DOBRANA RESOURCES LTD.	
BY: IGMA ENGINEERING AND CONSULTING LTD. PLOTTED BY: RPH MAPPING AND COMPUTER SERVICES LTD.	
TOTAL MAGNETIC FIELD STRENGTH	
NELSON M.D. B.C.	
DATE: FEBRUARY 1986	FIGURE NO. 6
PLOTTED BY: RPH	

## Ground VLF-EM Survey

### Field Method and Instrumentation

A Scintrex IGS VLF-magnetometer instrument was utilized.

A flagged grid, 28.5 km lines in total, was used for the survey, the lines being spaced at 50 and 100 meter intervals and the stations every 50 meters. Readings were taken at 25 meter intervals.

The Scintrex IGS-2 unit was set up to receive two stations, NKL Seattle, Washington, 24.8 kHz and NSS Annapolis, Maryland 21.4 kHz, measuring the horizontal field strength and the in-phase and out-of phase or quadrature components of the vertical field. The instrument was a three coil system, one horizontal coil and two vertical coils all at 90 angles to each other. The horizontal coil is used to scale the in-phase and quadrature readings, to correct for changes in the strength of the VLF signal at different points on the property. The frequency reference needed to obtain quadrature readings is accomplished by using the magnetic field's frequency.

### Data Presentation

The in phase and quadrature components of the electromagnetic field are shown as total field values in profiles superimposed on 1:5000 scale maps, one for Seattle and one for Annapolis.

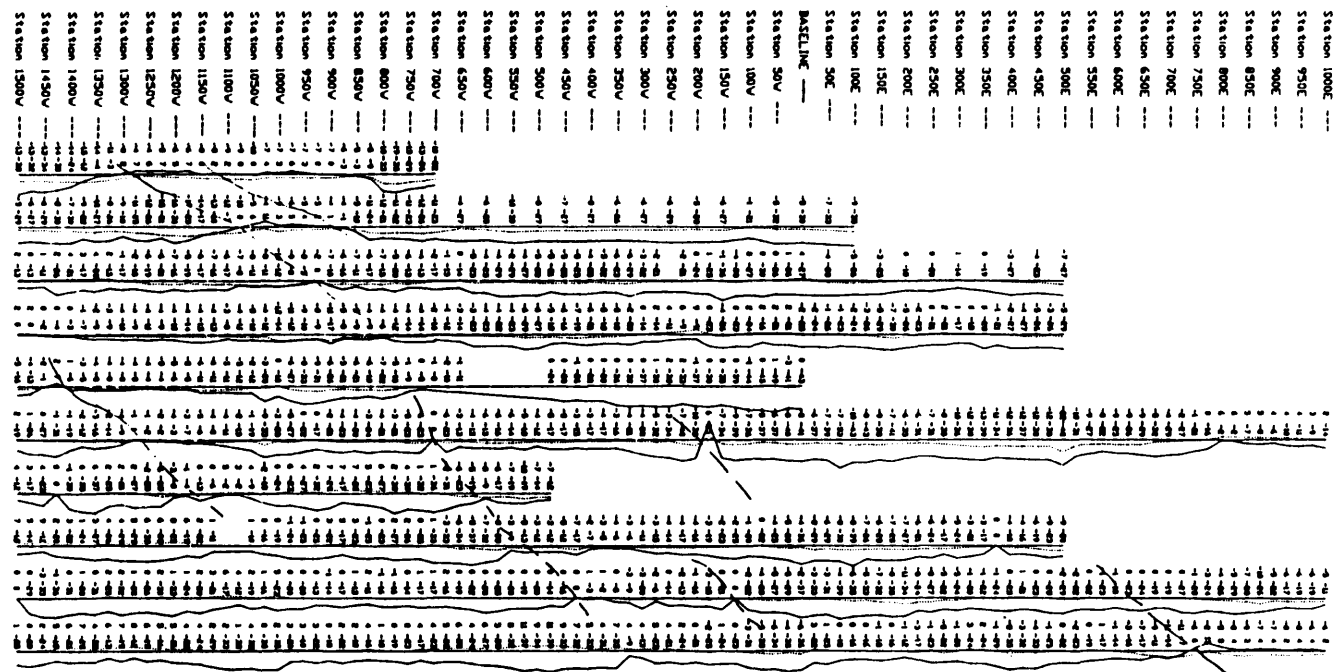
### Discussion of Results

(Seattle and Annapolis stations)  
(Fig. 7, 8)

Two moderate strength conductors were mapped in the western part of the surveyed area and both correspond to the magnetic high and mineralized structures. The conductors strike southeast and may indicate mineralization localized within shears similar to mineralization occurring on the Valporaiso/Government property.

The conductors extend from Lines 9+00 N and 10+00 N, Station 12+00 W, to about Line 0+00 N, Station 4+00 W.

This conductors may indicate a mineralized zone. It coincides with a trenched shear near the northwest end and also with moderately significant silver, lead and zinc anomalies in the soils.



- Line 900N
- Line 800N
- Line 700N
- Line 600N
- Line 500N
- Line 400N
- Line 300N
- Line 200N
- Line 100N
- Line 0N

SCALE 1:5000  
 100 0 100 200 300

METERS

PROFILE LEGEND

INPHASE: ———

QUADRATURE: - - - - -

PROFILE SCALE  
 (VALUES IN PERCENT)

100  
 50  
 0  
 -50  
 -100

FOR EACH POSITION  
 LOWER NUMBER ON PAGE IS INPHASE  
 UPPER NUMBER ON PAGE IS QUADRATURE

TO ACCOMPANY REPORT BY: I. BROVIC, P. ENG.	
TOTEM GOLD PROJECT	
FOR DOBRANA RESOURCES LTD.	
BY: IGMA ENGINEERING AND CONSULTING LTD. PLOTTED BY: RPM MAPPING AND COMPUTER SERVICES LTD.	
VLF - EM (SEATTLE) PROFILES OF VERTICAL INPHASE AND QUADRATURE NELSON M.D., B.C.	
MTS: 807 - 7E	DATE: FEBRUARY 1988
PLOTTED BY: RPA	FIGURE NO. 7



PROFILE LEGEND

INPHASE: ———  
 QUADRATURE: - - - -

PROFILE SCALE  
 (VALUES IN PERCENT)

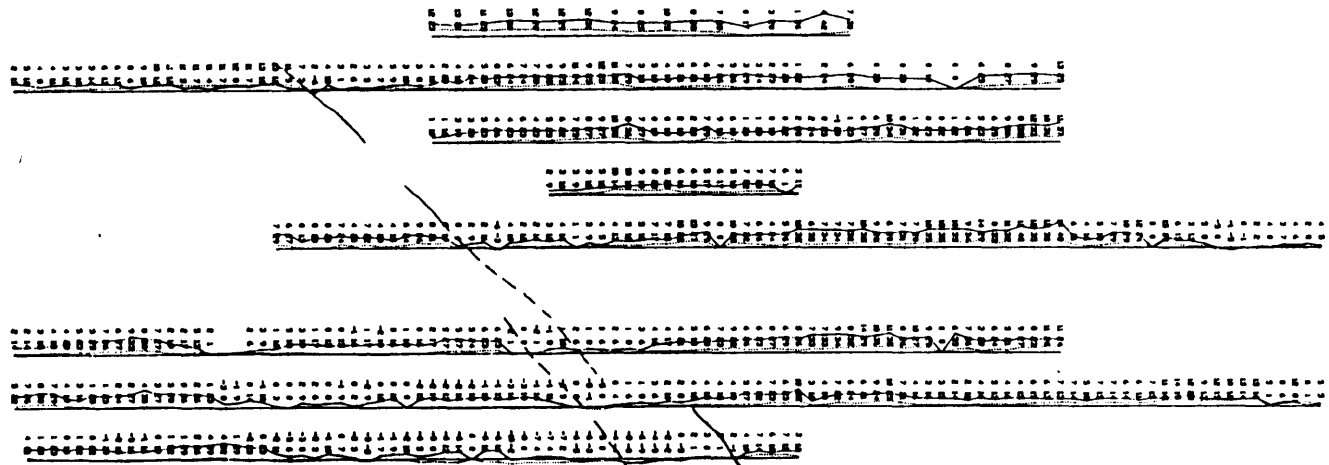
100  
 50  
 0  
 50  
 100

--- Line 800M  
 --- Line 700M  
 --- Line 600M  
 --- Line 500M  
 --- Line 400M  
 --- Line 300M  
 --- Line 200M  
 --- Line 100M  
 --- Line 0M

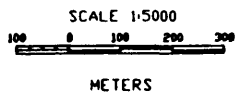
TO ACCOMPANY REPORT BY:  
 I. RUDOVIC P.L.N.C.

<b>TOTEM GOLD PROJECT</b>	
FOR: DOBRANA RESOURCES LTD	
BY: IGMA ENGINEERING AND CONSULTING LTD	
PLOTTED BY: RPM MAPPING AND COMPUTER SERVICES LTD	
<b>VLF - EM (ANNAPOLIS)          PROFILES OF VERTICAL          INPHASE AND QUADRATURE</b>	
MELSON M.D., B.C.	
DATE: FEB - 78	DATE: FEBRUARY 1980
PLOTTED BY: RPM	FRAME NO: 8

Station 100E ---  
 Station 790E ---  
 Station 900E ---  
 Station 890E ---  
 Station 800E ---  
 Station 790E ---  
 Station 650E ---  
 Station 600E ---  
 Station 590E ---  
 Station 500E ---  
 Station 490E ---  
 Station 400E ---  
 Station 390E ---  
 Station 300E ---  
 Station 290E ---  
 Station 200E ---  
 Station 190E ---  
 Station 100E ---  
 Station 90E ---  
 BASELINE ---  
 Station 90V ---  
 Station 100V ---  
 Station 150V ---  
 Station 200V ---  
 Station 290V ---  
 Station 300V ---  
 Station 390V ---  
 Station 400V ---  
 Station 490V ---  
 Station 500V ---  
 Station 590V ---  
 Station 600V ---  
 Station 650V ---  
 Station 700V ---  
 Station 790V ---  
 Station 800V ---  
 Station 890V ---  
 Station 900V ---  
 Station 990V ---  
 Station 1000V ---  
 Station 1050V ---  
 Station 1100V ---  
 Station 1150V ---  
 Station 1200V ---  
 Station 1250V ---  
 Station 1300V ---  
 Station 1400V ---  
 Station 1500V ---  
 Station 1600V ---



FOR EACH POSITION  
 LOWER NUMBER ON PAGE IS INPHASE  
 UPPER NUMBER ON PAGE IS QUADRATURE



## GEOCHEMICAL SURVEY 1987

Summary of Results and Correlation with Geophysical, Magnetometer and ULF Surveys.

A geochemical soil survey was done over the central part of the property on a 28.5 km/line grid covering three mineral claims: the German Basin, Totem Gold, Gold Dust claims and also the Vancouver Reverted Crown Granted claim.

## Sampling method:

Samples were taken from the poorly developed reddish brown "B" horizon which is about 15 cm below the surface. In most cases a layer of humus is only 2 to 4 cm thick and an underlying leached layer("A") is from 4 to 10 cm thick. The soil material was collected with a spoon; cleaned of larger size particles and put in the standard soil sample envelope which was marked with a coordinate location. Samples were collected at regular 50 m intervals along the lines on snow covered ground.

## Analytical methods:

Soil samples were dried, pulverized, screened to -80 mesh, and the subsequent AA analyses were done by General Testing Laboratories of Vancouver, B.C. Samples were assayed for silver, lead, zinc, gold and copper.

## Summary of Results

## Silver(Fig. 9)

Anomalous values begin at 0.04 ppm to 0.08 ppm. Values above 1.0 ppm are significantly anomalous.

## Lead (Fig. 10):

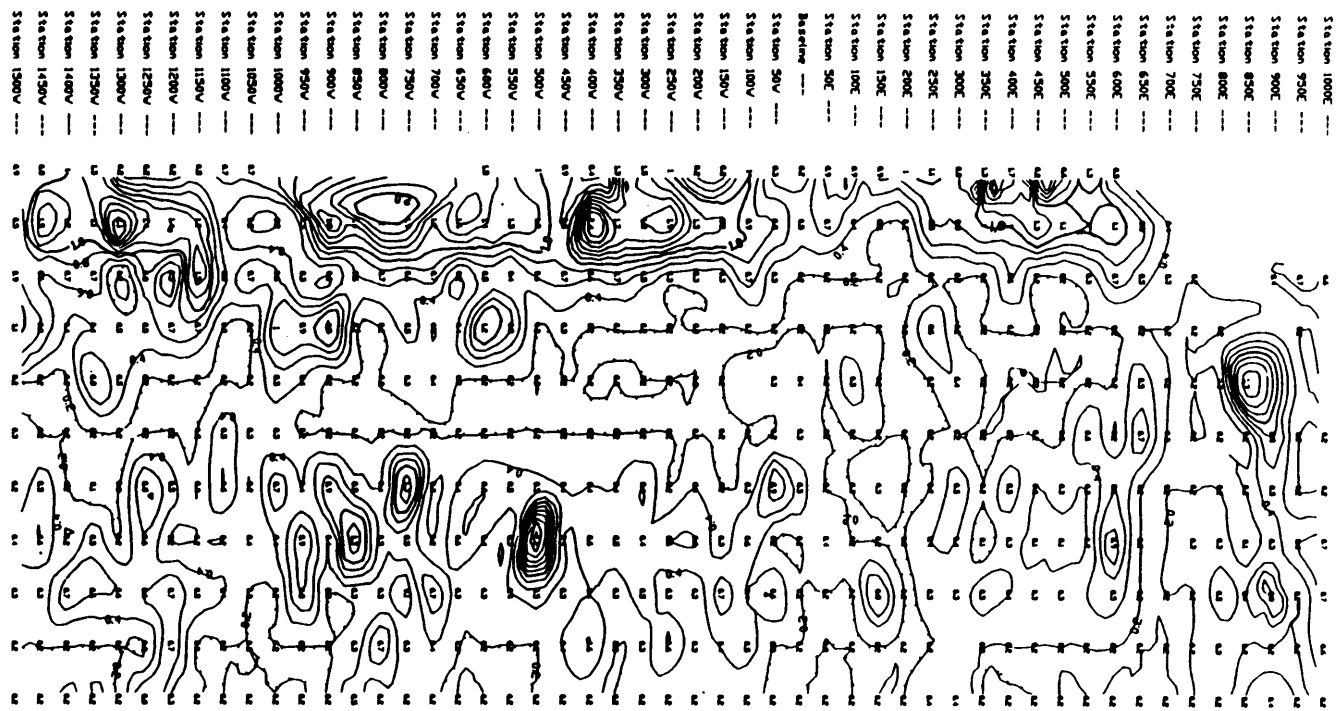
Lead being a less mobile element than zinc shows anomalies beginning at 40 ppm and significant anomalous values beginning at 100 ppm.

## Zinc (Fig. 11):

Dispersion of zinc throughout the soils shows that zinc occurs in the same area with lead and silver. Anomalous values begin at 100 ppm and highly anomalous values are 200 ppm and higher.

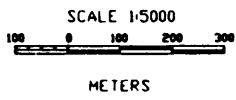
## Gold (Fig. 12)

Gold dispersion is fairly uniform except for a few anomalous peaks. Background values of 0.02 ppm (20 ppb) gold is high for the area. Anomalous values start at 0.025 ppm (25 ppb) and significant anomalies begin at 0.035 ppm (35 ppb).

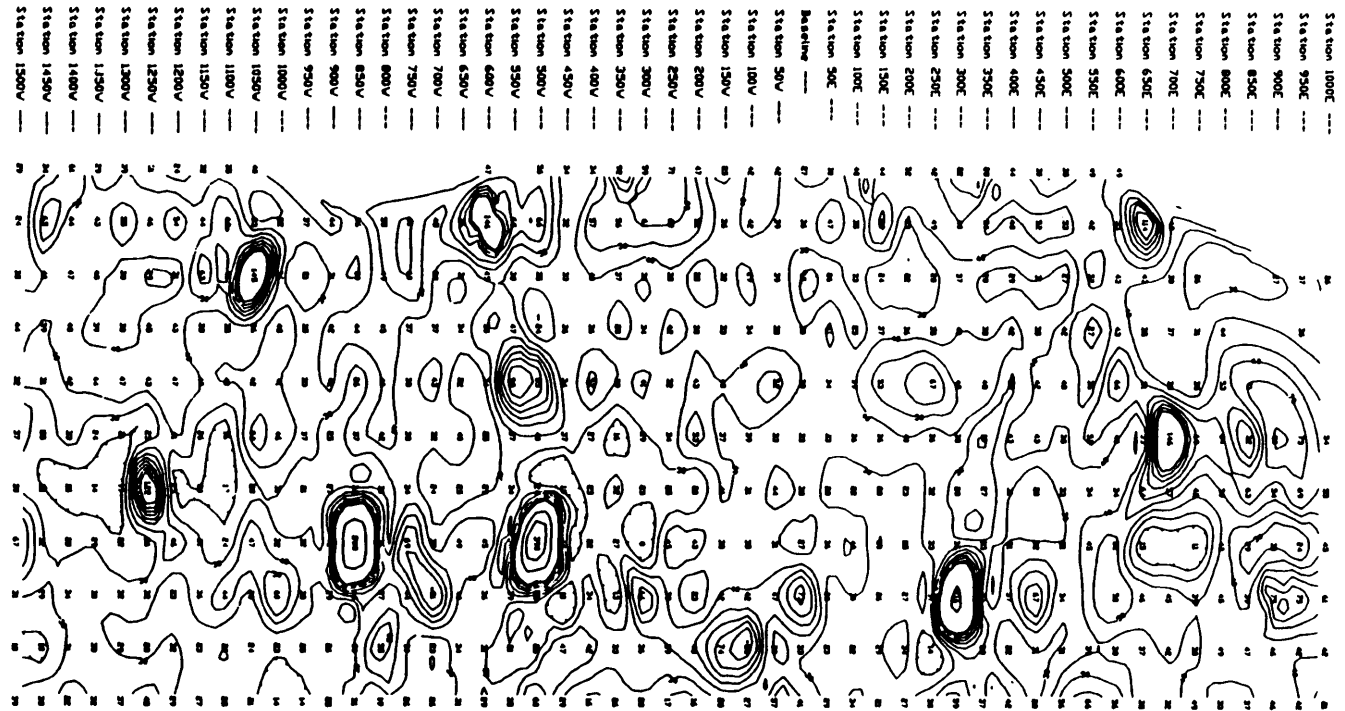


- Line 1000N
- Line 900N
- Line 800N
- Line 700N
- Line 600N
- Line 500N
- Line 400N
- Line 300N
- Line 200N
- Line 100N
- Line 0N

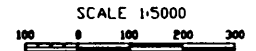
CONTOUR INTERVAL  
0.2 PPM AG  
(TICKS SIGNIFY AREAS BELOW 0.2 PPM)



TO ACCOMPANY REPORT BY: I. BOROVIC, P. ENG.	
TOTEM GOLD PROJECT	
FOR: DOBRANA RESOURCES LTD.	
BY: IGMA ENGINEERING AND CONSULTING LTD. PLOTTED BY: RPM MAPPING and COMPUTER SERVICES LTD.	
SOIL GEOCHEMISTRY SILVER	
NELSON M.D., B.C.	
RTS: 09 - 22	DATE: FEBRUARY 1988
PLOTTED BY: RPA	FIGURE NO: 0



- Line 1000
- Line 900
- Line 800
- Line 700
- Line 600
- Line 500
- Line 400
- Line 300
- Line 200
- Line 100
- Line 0N



METERS

TO ACCOMPANY REPORT BY:  
J. BOROVIĆ P. ENG.

**TOTEM GOLD PROJECT**

FOR: DOBRANA RESOURCES LTD

BY: IGMA ENGINEERING AND CONSULTING LTD

PLOTTED BY: RPM MAPPING  
AND COMPUTER SERVICES LTD

**SOIL GEOCHEMISTRY  
LEAD**

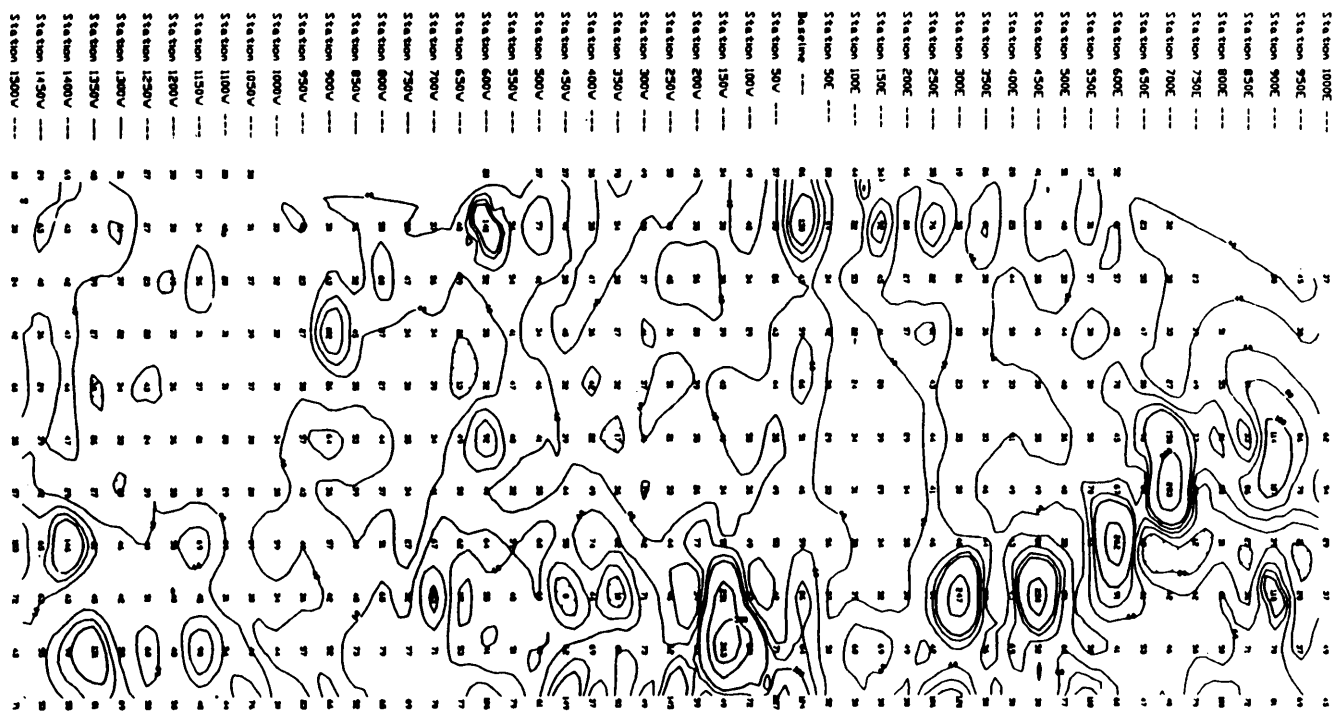
NELSON M.D., B.C.

NTS: 80% - 75  
PLOTTER: BY RPM

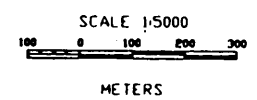
DATE: FEBRUARY 1990  
FIGURE NO. 10

CONTOUR INTERVAL  
BELOW 100 PPM: 10 PPM PB  
ABOVE 100 PPM: 100 PPM PB

(TICKS SIGNIFY AREAS BELOW 20 PPM)  
(LOWEST CONTOUR SHOWN: 20 PPM)



- Line 1000N
- Line 900N
- Line 800N
- Line 700N
- Line 600N
- Line 500N
- Line 400N
- Line 300N
- Line 200N
- Line 100N
- Line 0N



● CONTOUR INTERVAL  
BELOW 100 PPM: 20 PPM ZN  
ABOVE 100 PPM: 100 PPM  
(TICKS SIGNIFY AREAS BELOW 20 PPM)

TO ACCOMPANY REPORT BY:  
I. BOROVIC, P. ENG.

TOTEM GOLD PROJECT

FOR DOBRANA RESOURCES LTD.

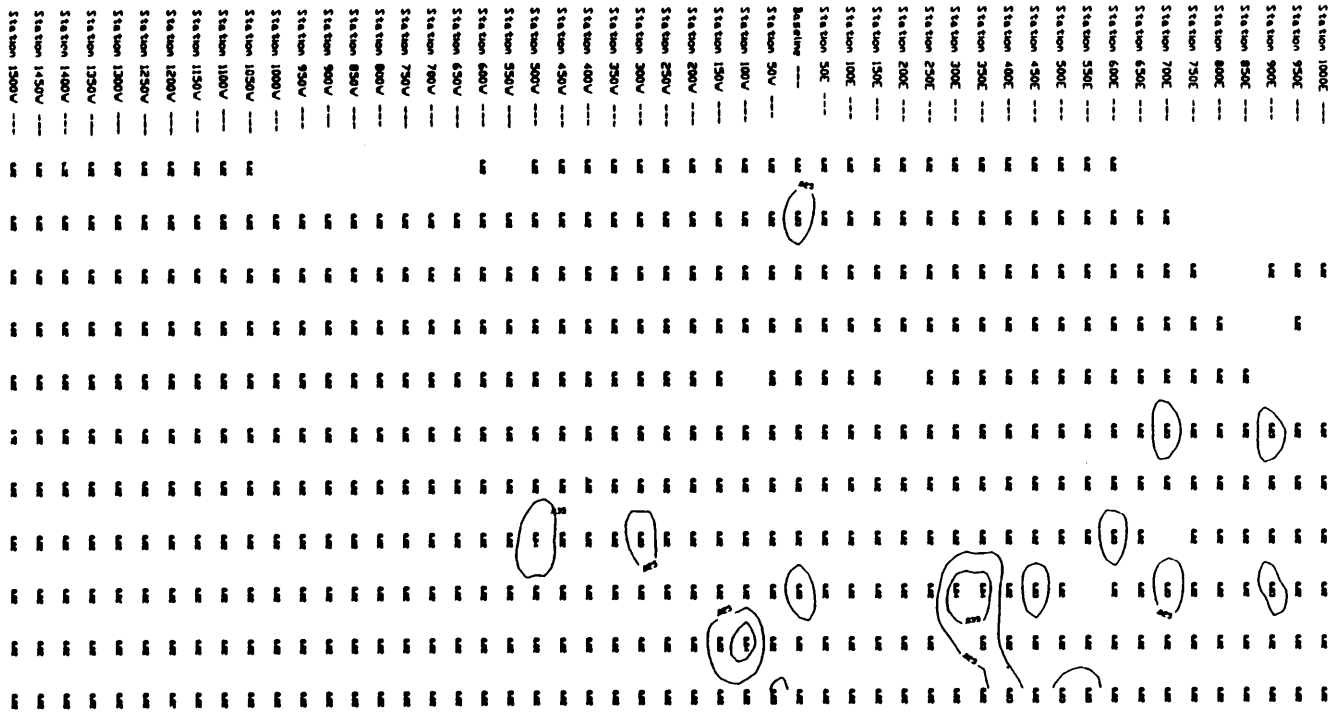
BY: IGMA ENGINEERING AND CONSULTING LTD.  
PLOTTED BY: RPM MAPPING  
AND COMPUTER SERVICES LTD.

SOIL GEOCHEMISTRY  
ZINC

NELSON M.D., B.C.

W.S. 02 - 11      DATE: FEBRUARY 1980  
PLOTTED BY: R.P.A.      FIGURE NO. 11



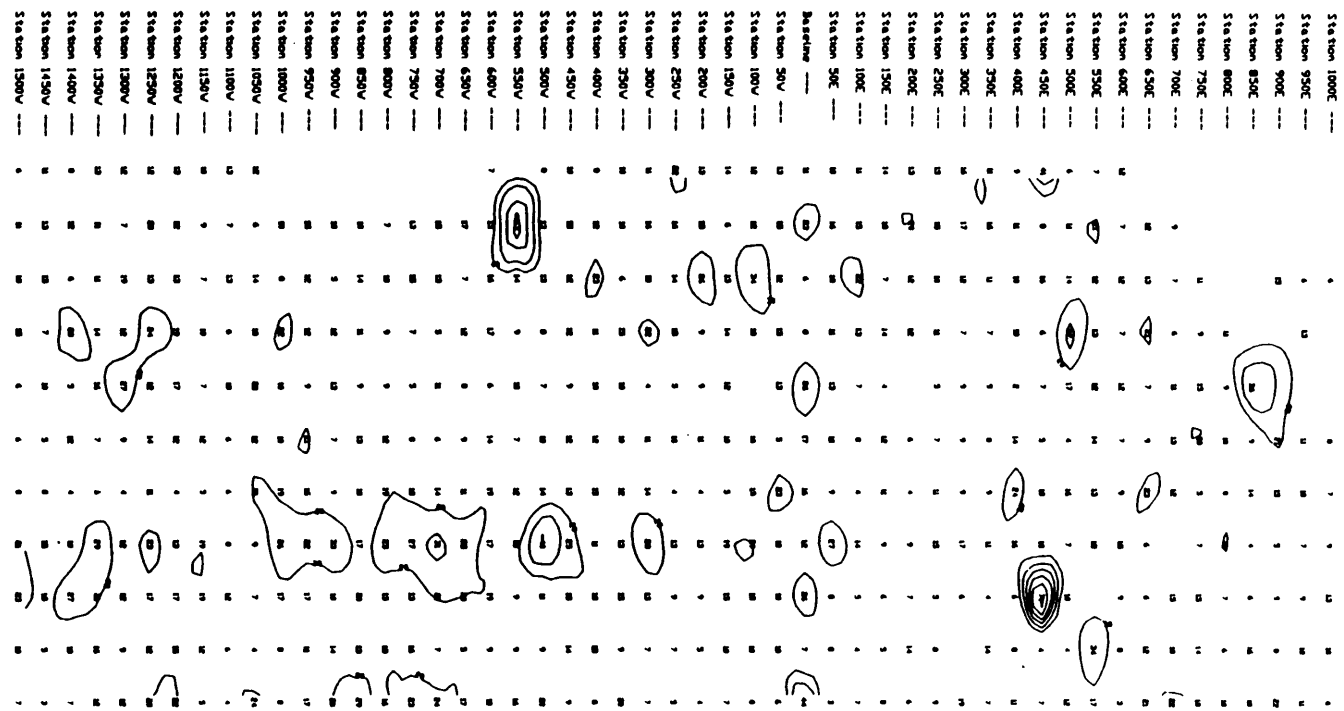


--- Line 100N  
 --- Line 900N  
 --- Line 800N  
 --- Line 700N  
 --- Line 600N  
 --- Line 500N  
 --- Line 400N  
 --- Line 300N  
 --- Line 200N  
 --- Line 100N  
 --- Line 0N

Station 100E ---  
 Station 950E ---  
 Station 900E ---  
 Station 850E ---  
 Station 800E ---  
 Station 750E ---  
 Station 700E ---  
 Station 650E ---  
 Station 600E ---  
 Station 550E ---  
 Station 500E ---  
 Station 450E ---  
 Station 400E ---  
 Station 350E ---  
 Station 300E ---  
 Station 250E ---  
 Station 200E ---  
 Station 150E ---  
 Station 100E ---  
 Station 50E ---  
 Baseline ---  
 Station 50V ---  
 Station 100V ---  
 Station 150V ---  
 Station 200V ---  
 Station 250V ---  
 Station 300V ---  
 Station 350V ---  
 Station 400V ---  
 Station 450V ---  
 Station 500V ---  
 Station 550V ---  
 Station 600V ---  
 Station 650V ---  
 Station 700V ---  
 Station 750V ---  
 Station 800V ---  
 Station 850V ---  
 Station 900V ---  
 Station 950V ---  
 Station 1000V ---  
 Station 1050V ---  
 Station 1100V ---  
 Station 1150V ---  
 Station 1200V ---  
 Station 1250V ---  
 Station 1300V ---  
 Station 1350V ---  
 Station 1400V ---  
 Station 1450V ---  
 Station 1500V ---

SCALE 1:5000  
 100 0 100 200 300  
 METERS  
 CONTOUR INTERVAL  
 0.01 PPM AU  
 (FROM A BASE OF 0.005 PPM)

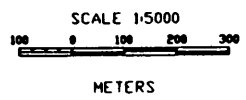
TO ACCOMPANY REPORT BY: I. JORDVIC P. ENG.	
TOTEM GOLD PROJECT	
FOR: DOBRAMA RESOURCES LTD.	
BY: IGMA ENGINEERING AND CONSULTING LTD. PLOTTED BY: RPH MAPPING AND COMPUTER SERVICES LTD.	
SOIL GEOCHEMISTRY GOLD	
NELSON M.D., B.C.	
M.F.S. 887 - 76	DATE: FEBRUARY 1990
PLOTTED BY: RPH	FIGURE NO. 12



--- Line 1000N  
 --- Line 900N  
 --- Line 800N  
 --- Line 700N  
 --- Line 600N  
 --- Line 500N  
 --- Line 400N  
 --- Line 300N  
 --- Line 200N  
 --- Line 100N  
 --- Line 0N

Station 1000E ---  
 Station 950E ---  
 Station 900E ---  
 Station 850E ---  
 Station 800E ---  
 Station 750E ---  
 Station 700E ---  
 Station 650E ---  
 Station 600E ---  
 Station 550E ---  
 Station 500E ---  
 Station 450E ---  
 Station 400E ---  
 Station 350E ---  
 Station 300E ---  
 Station 250E ---  
 Station 200E ---  
 Station 150E ---  
 Station 100E ---  
 Station 50E ---  
 Bareline ---  
 Station 50V ---  
 Station 100V ---  
 Station 150V ---  
 Station 200V ---  
 Station 250V ---  
 Station 300V ---  
 Station 350V ---  
 Station 400V ---  
 Station 450V ---  
 Station 500V ---  
 Station 550V ---  
 Station 600V ---  
 Station 650V ---  
 Station 700V ---  
 Station 750V ---  
 Station 800V ---  
 Station 850V ---  
 Station 900V ---  
 Station 950V ---  
 Station 1000V ---  
 Station 1050V ---  
 Station 1100V ---  
 Station 1150V ---  
 Station 1200V ---  
 Station 1250V ---  
 Station 1300V ---  
 Station 1400V ---  
 Station 1450V ---  
 Station 1500V ---

CONTOUR INTERVAL  
 10 PPM CU  
 (LOWEST CONTOUR INTERVAL SHOWN: 20 PPM)



TO ACCOMPANY REPORT BY: I. BOROVIĆ, P. ENG.	
TOTEM GOLD PROJECT	
FOR: DOBRANA RESOURCES LTD.	
BY: IGMA ENGINEERING AND CONSULTING LTD.	
PLOTTED BY: RPM MAPPING AND COMPUTER SERVICES LTD.	
SOIL GEOCHEMISTRY COPPER	
NELSON H.D., B.C.	
DATE: FEBRUARY 1990	FIGURE NO. 13
PLOTTED BY: RPA	

Copper (Fig 13):

Copper dispersion shows a background of 20 ppm and significant anomalies of up to 213 ppm.

#### Discussion of Results

Soil geochemistry has outlined several anomalous zones on the property. Coincidental silver, lead and silver, lead, and zinc anomalies occur in the north, northwestern and south central parts of the surveyed area.

#### WORK DONE 1989

Geological mapping and geophysical VLF-EM survey for assessment purposes were done in September of 1989.

From Borovic, 1989:

#### Geological Mapping (Fig. 14)

During 1989 mapping we were able to examine the shear zone toward south thanks to numerous new logging roads built on the property last year. Numerous dykes crisscross highly deformed cataclastic granitic rocks with strong clay alterations.

The shear striking in a northerly direction appears to be at least as much as one km wide and in the northern part where old workings are located it contains gold and silver mineralization.

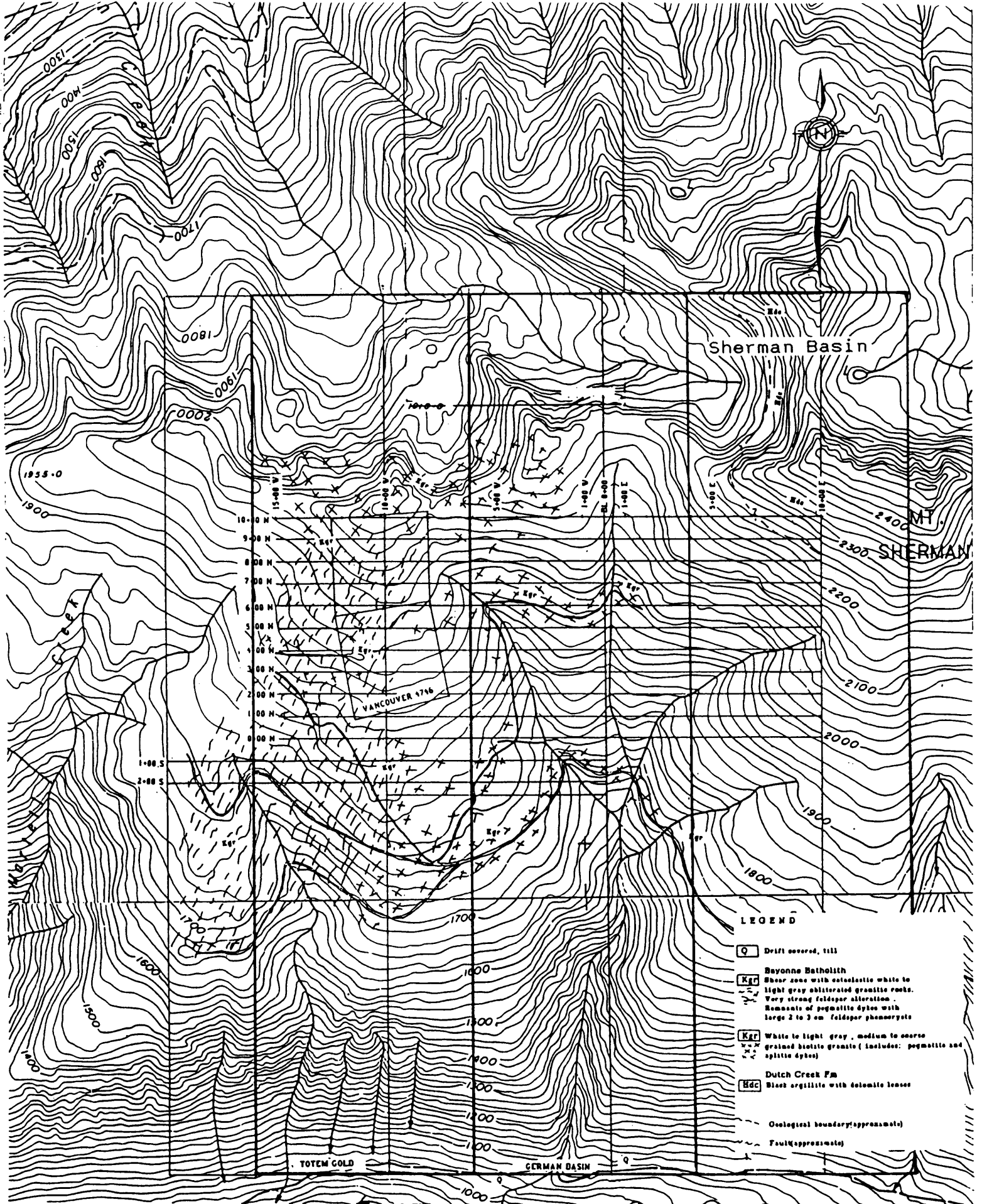
#### Geophysical VLF-EM survey (Fig. 15 & 16)

The geology of this area is very consistent, granitic rocks being predominant. Because of this, the EM readings were quite constant and showed little that would be considered anomalous, with only one exception. No crossovers were discovered, dip angles lying in the negative virtually throughout.

The area of interest lies at the west end of the survey area. Near this end of line 1+00 S, the dip angles are at their lowest and, on the Cutler frequency, actually hit zero at two stations.

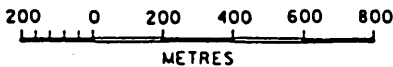
This area is possible extension of the Val fault and further investigation of the region around the west end of line 1+00 S is recommended. It is recommended that closer line spacing (50 m) be considered around 1+00 S and that additional lines be established north of the current lines. This will serve a number of purposes. If the zero readings are indicative of a noteworthy anomaly, a detailed look in the immediate vicinity should define it. Additional lines outside those already done could cover a fairly large area in a relatively short time and provide a more complete picture rather economically.

In order to evaluate the gold bearing shear, more detailed work, specially close spaced sampling and possibly IP survey is going to be necessary in the shear zone.



**LEGEND**

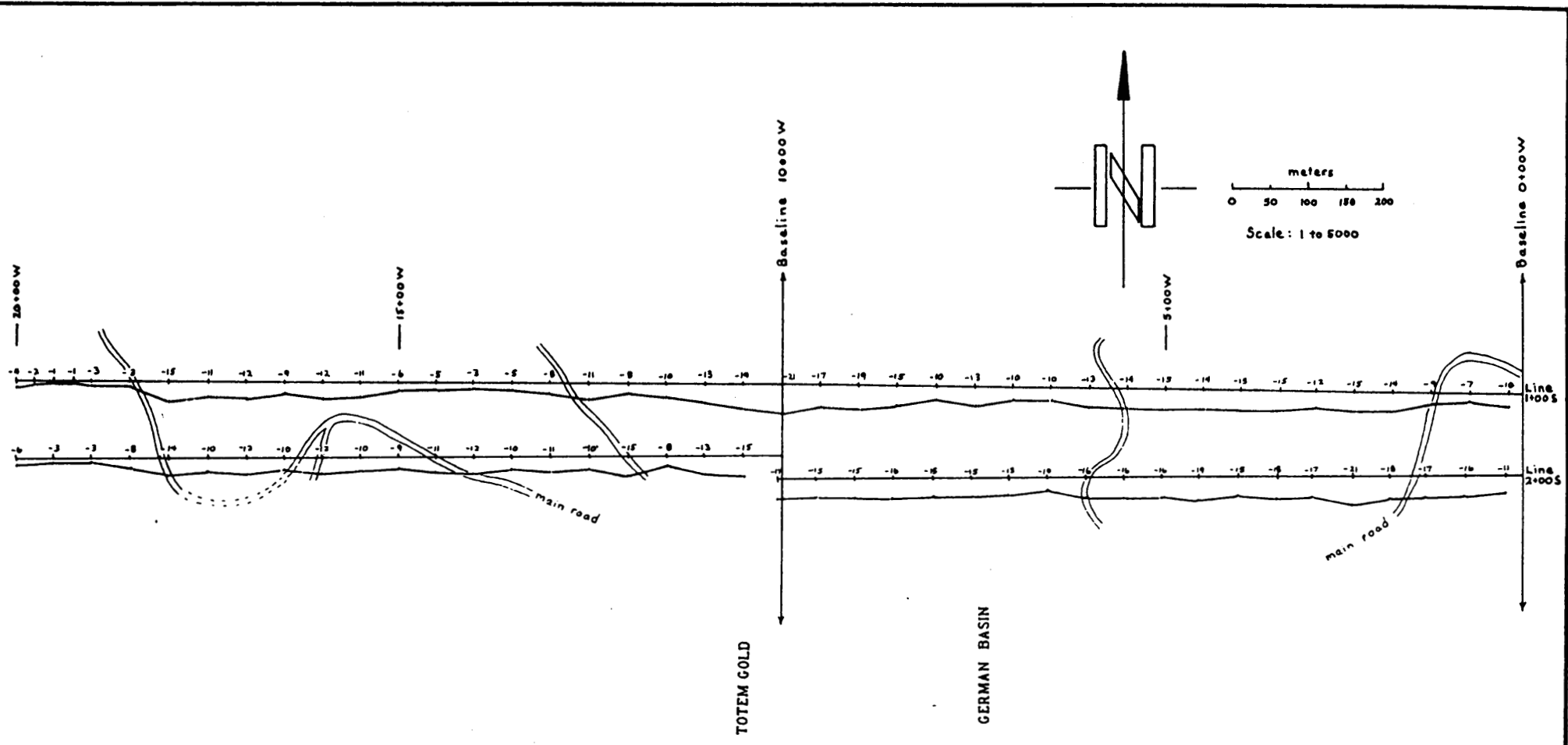
- Q** Drift covered, till
- Kgr** Bayonne Batholith  
Shear zone with catclastic white to light gray obliterated granitic rocks. Very strong feldspar alteration. Remnants of pegmatite dykes with large 2 to 3 cm feldspar phenocrysts
- Kgr** White to light gray, medium to coarse grained biotite granitic (includes: pegmatite and aplite dykes)
- Bdc** Dutch Creek Fm  
Black argillite with dolomite lenses
- Geological boundary (approximate)
- - - Fault (approximate)



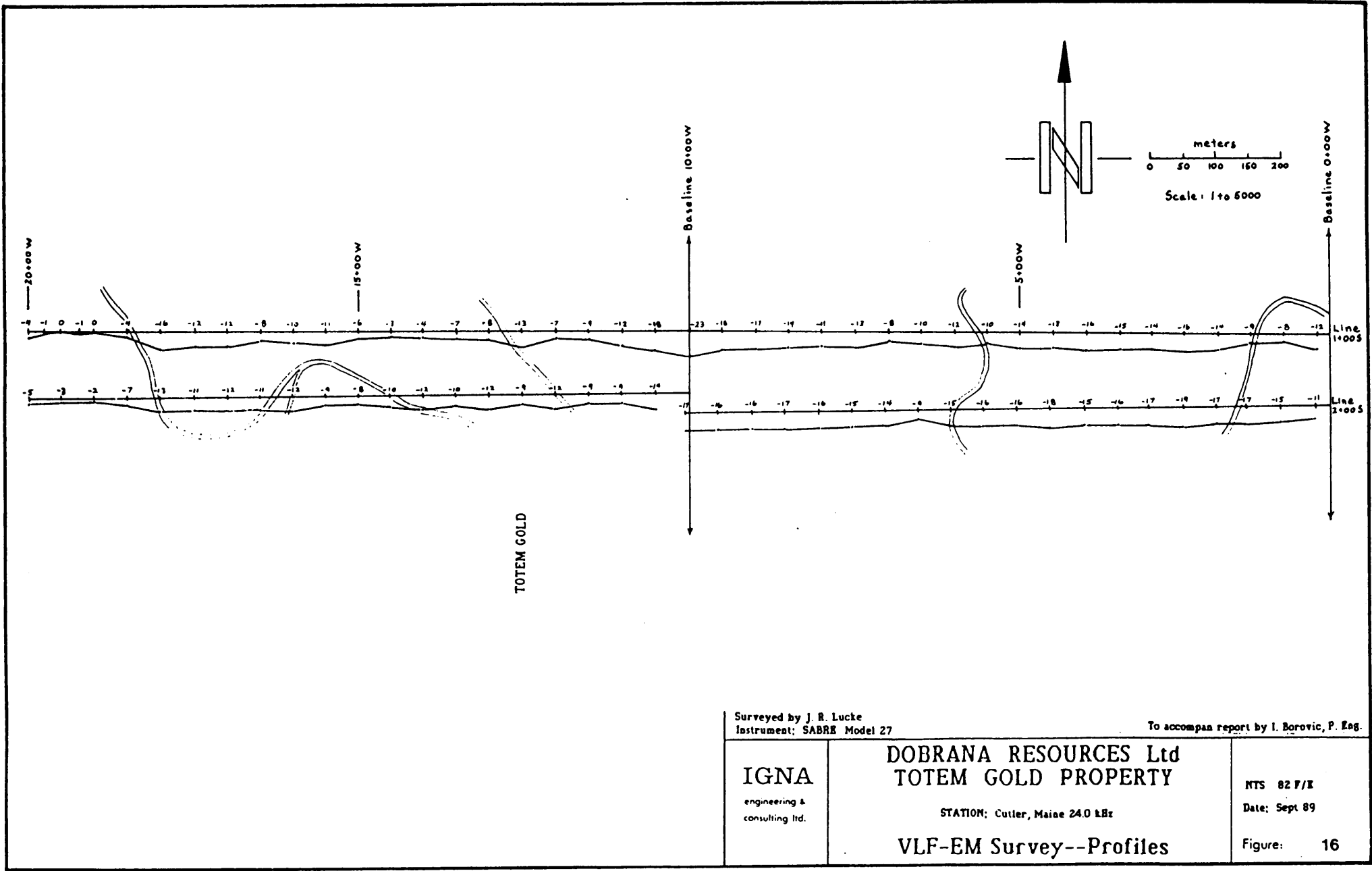
- BUILDING
- CONTOUR AND ELEVATION
- SPRING
- ROAD
- RAILROAD
- POWDER LINE
- FENCE
- FLUME
- DEPRESSION
- TREED SWAMP

CONTOUR INTERVAL 20 METRES

<b>IGNA</b> engineering & consulting inc.	<b>DOBRANA RESOURCES Ltd</b> <b>TOTEM GOLD PROPERTY</b>	MTS 02 777E Date: Apr 00 MARCH 93 Fig 14
	<b>Geology and Location of Workings</b>	
	To accompany report by I. Barovic, P. Eng.	



Surveyed by J. R. Lucke Instrument: SABRE Model 27		To accompany report by I. Borovic, P. Eng.
<b>IGNA</b> engineering & consulting ltd.	<b>DOBRANA RESOURCES Ltd</b> <b>TOTEM GOLD PROPERTY</b> STATION: Seattle, Washington 24.8 kHz <b>VLF-EM Survey--Profiles</b>	NTS 82 P/7E Date: Sept 89 Figure: 15



CONCLUSIONS AND RECOMMENDATIONS  
(Fig. 5)

Coincidental soil, VLF and magnetic total field anomalies in the northwest and south central part of the surveyed area are probably caused by underlying mineralized structures. These areas should be further explored using excavating methods and later drilled in order to examine the horizontal and vertical extent of the silver, lead, zinc and gold mineralization.

In addition to a follow up physical work, basic exploration work should be extended to the other parts of the Totem Gold Property, particularly in the area of the German (Gold) Basin old workings.

The Phase 1/87&89 of exploration on the Totem Gold project has indicated one large target worth investigating.

1. -area beginning at the northwestern end of the property where northwest-southeast trending moderately strong VLF anomaly is located. The anomalies are about 1000 m long.

Featuring:

- presence of strong silicification, brecciation, in the shear.
- sulfide mineralization associated with the shear zone.

Second possibility worth investigating is located in and around German (Gold) Basin area in the northern part of the Totem Gold Project.

## BIBLIOGRAPHY

- Borovic, I. (1988): Report on the Mineral Exploration of the Totem Gold Property. Summary and Evaluation for Dobrana Resources Ltd. (March 1988)
- (1989): Report on the Geological and Geophysical Exploration of the Totem Gold Property. Assessment Rpt. For Dobrana Resources Ltd.; Oct. 1989.
- Green, A. S. (1981): Property Evaluation Report, Destiny Bay Properties, Valporaiso/Government Workings, Hot Group of Claims. Prepared for Custom Mining Inc. Kamloops, B. C.
- Hoy, Trygve (1980): Geology of the Riondel Area, Central Kootenay Arc, Southeastern B. C.; B. C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 73.
- Reesor, J. E. (1973): Geology of Lardeau Map-Area, B. C. G. S. C., Memoir 369.
- Reesor, J. E. (1983): Nelson Map-Area East Half; G. S. C. Open File 929.
- Rice, H. M. A. (1938): East Half Nelson Map-Area British Columbia, Preliminary Report, Canada Department of Mines and Resources, Geological Survey, Ottawa 1938.
- Rice, H. M. A. (1941): Nelson Map-Area, East Half, British Columbia, Canada Department of Mines and Resources, Geological Survey, Memoir 228.



# IGNA

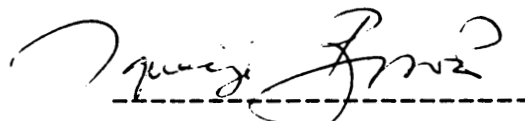
engineering & consulting ltd.

19

## C E R T I F I C A T E

I, Ignacije Borovic, of the city of Vancouver, B.C., do hereby certify that:

1. I am a member of the Association of Professional Engineers in the province of British Columbia.
2. I am employed by Igna Engineering and Consulting Ltd. with office at 4258 West 10 th Avenue, Vancouver, B. C.
3. I am a graduate of the University of Zagreb, and I have practiced continuously as a geologist and graduate geological engineer since 1962.
4. I do not have any direct or indirect interest in the properties or securities of DOBRANA RESOURCES Ltd., nor do I expect any.
5. This report is based on research, study, exploration and evaluation work performed by me and under my supervision in the area of the TOTEM GOLD property.
6. Permission is granted to DOBRANA RESOURCES Ltd. to use this report in a statement of Material Facts or Prospectus to be filed with Canadian Securities or Exchange Commissions, provided that no material will be extracted out of context or used for any other purpose.



-----  
I. Borovic, P. Eng.

Vancouver, B. C.  
March, 23 1993

# IGNA

engineering & consulting ltd.

## A D D E N D U M

A report dated March 23 1993, prepared by the writer for Dobrana Resources Ltd. describes the location and general geological setting of the Totem Gold property. It also gives summary of the exploration work performed in 1987 and 1989 respectively and evaluates the results. The property is located on the south slopes of Mt Sherman just north of Sanca Creek in the southern Kootenay Lake area in the Nelson Mining Division. The report also provides estimated costs for the recommended work programs of which the first phase totalled \$75 900.00. Since preparation of the report there have been significant developments in connection with the claims. The purpose of this Addendum is to update the aforementioned report as to the claim situation.

### ACQUISITION OF A NEW MINERAL CLAIM

The Company has on the writers recommendation acquired Sherman Basin mineral claim located on the eastern border of the Totem Gold Property. The claim is composed of 16 (2x8) units and is contiguous with the eastern border of the German Basin mineral claim. The Sherman Basin claim covers the easternmost part of the Totem Gold Property exploration area, effectively protecting areas of the Company's interest.

### RESTAKING OF THE PROPERTY

From 1989 to date

In order to protect the extensive exploration work performed on the claims in 1987 and in 1989 the Company has restaked the claims after the assessment credits have run out.

The Company has also allowed the old Gold Dust claim to lapse as the part of the claim where some of the earlier work was done was overstaked by the current Totem Gold claim thereby protecting and securing the area of interest.

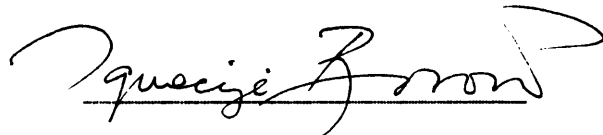
The old Hod claim was earlier assessed by the undersigned as having no relative merit and recommended to the Company to allow it to lapse.

The claim group comprising the Totem Gold property now consists of the following claims:

Restaked Totem Gold (316180), German Basin (316179), Vancouver (313573) and Sherman Basin (312692) acquired by an option agreement.

In support of all of the above, attached are a revised Claim Map dated March 23, 1993 and an old Claim Map dated September, 1989.

IGNA ENGINEERING AND CONSULTING Ltd.

A handwritten signature in cursive script, appearing to read "I. Borovic", written over a horizontal line.

I. Borovic, P. Eng.

At Vancouver, March 23, 1993.