

CORPORATION FALCONBRIDGE COPPER

MEMORANDUM

DATE: August 21, 1985
À TO: D. H. Watkins
COPIES À TO: M. J. Knuckey, H. L. Gibson
DE FROM: A. J. Davidson
SUJET SUBJECT: Maggie Mines Ltd. Indian River Property - Acquisition Proposal

826210
926/10

Target: Volcanogenic massive sulphide - gold deposit similar to
Britannia.

Location: The Maggie Mines Indian River property is located
approximately 8km SE of Squamish, B. C. at the
headwaters of the Indian River. It is 12km east of
Britannia and adjoins our Indian River property on the
northwest (Fig. 1).

Claims: The property consists of 11 contiguous claims totalling 84
units (Fig. 2).

<u>Claim Name</u>	<u>Record No.</u>	<u>Units</u>	<u>Expiry Date</u>
War Eagle	116(10)	9	Sept. 20, 1991
Clarke	126(11)	8	Nov. 11, 1991
Janette	201(8)	20	Aug. 25, 1991
Santanna	204(9)	15	Aug. 27, 1991
Falcon	130(11)	6	Oct. 20, 1991
Jody	138(12)	2	Dec. 13, 1991
Celeste	136(12)	7	Dec. 12, 1991
Bob	186(7)	9	July 22, 1991
MAR	127(11)	6	Nov. 14, 1991
Harold Fr.	333(11)	1	Oct. 25, 1991
Jarmila Fr.	334(11)	1	Nov. 2, 1991

Ownership: All claims are 100% owned by International Maggie Mines
Ltd.; P. O. Box 132, Brackendale, B. C. Mr. Harold
Hopkins is president of the company and George
Archibald (Nuinsco) is a director.

History:

- 1969 - 1970 - property staked by Maggie Mines
- 1977 - short (77m) adit, crosscut and raise driven on WAR EAGLE claim
- 1978 - 1980
 - optioned by Placer Development
 - mapped WAR EAGLE - MAR area, 1:-5000
 - soil geochem
 - magnetometer survey
 - drilled 11 holes (1722) on WAR EAGLE zone
- 1980 - Maggie drills 4 holes (400m) on WAR EAGLE
- 1981 - 1982 - Maggie drills 37 holes (4473m) mostly on WAR EAGLE claim testing mineralized surface showings
- 1983 - MAR zone discovered, Maggie drilled 15 holes (484m) and drove 58m adit and 28m of crosscuts and raises to explore the MAR zone.
- 1984 - no significant work

total drilling 8005 m
no. of holes 78
average depth 102.6 m

General Geology:

The property occurs in Gambier volcanics of the Britannia pendant. The main thrust of past exploration has been in the WAR EAGLE - MAR area (Fig. 2,3). The geology of this area appears to be highlighted by the presence of two rhyolite units (tuffs, chert and flows) (domes?) separated by a dacitic volcaniclastic unit made up of tuffs and breccias. The upper rhyolite unit (URU) appears to be overlain by an andesitic unit while the lower rhyolite unit (LRU) is underlain by a dacitic ash tuff (Fig. 4). My initial impressions are that we may be dealing with a very similar situation to that at Roy and that the lower rhyolite at Maggie may even correlate with the Roy rhyolite. This definitely appears to be a proximal volcanic environment.

Mineralization

WAR EAGLE - Most of the mineralization found thus far in the WAR EAGLE zone occurs near the top of the Lower Rhyolite unit (LRU). This zone extends for

approximately 400m. (NE-SW) and the mineralization appears to be disseminated in chert and vein-like. Some stringer type veining is also mentioned. The mineralization is mainly sphalerite with minor chalcopyrite. Assays range up to 4% Zn/0.6m. Chlorite alteration associated with the sulphides appears to increase to the southwest. Some stringer type Cu mineralization has also been intersected in a Dacite tuff/breccia unit underlying the LRU (Fig. 5, 6).

MAR Zone - The MAR zone is located 1km SE of the WAR EAGLE. The mineralization at MAR is supposed to be hosted by both the dacite volcanoclastic that overlies the LRU and the Upper Rhyolite Unit itself (URU). Mineralization here consists of two veins, Main and East both of which contain significant Cu, Zn, Ag and Au values. Both veins consist of a 1-2m wide quartz flooded, brecciated shear within which occurs a 5-30cm wide zone of quartz containing 5-15% sulphides. Sulphides consist of disseminated chalcopyrite, pyrite, sphalerite and galena. Gold values are erratic but spectacular. Assays for drill holes and the subdrift along the vein are in Figures 8 and 9. Asarco Exploration did a detailed examination of the vein in July 1984 and their mapping and sampling confirms the results (Fig. 10).

AJD and HLG collected 9 grab samples from both underground and surface exposure of the veins. These results are in Table 1.

The Main vein outcrops on surface approximately 55m. updip (80°) from the subdrift and again about 70m. and 150m. along strike to the northeast. Assays are as in Table 1. Excellent anthophyllite-pseudo dalmatianite is seen associated with the vein both on surface and underground.

Potential:

MAR Immediate potential exists for significantly increasing the reserves at the MAR zone. Presently defined dimensions are (55 dip X 150 strike X 0.5m wide). No drilling has been done down dip of the adit level or either to the southwest or to the northeast along strike. The possibility also remains that these veins do represent remobilized mineralization from a massive sulphide deposit lower in the stratigraphy i.e. at the LRU - Dacite tuff contact or over at the URU - Dacite tuff contact.

WAR EAGLE The mineralization at WAR EAGLE is poorly understood but does appear to be both veinlike and disseminated. As such it may be related to a VMS at the LRU upper contact or through remobilization. Only detail mapping and lithogeochemistry will be able to resolve the WAR EAGLE zone and reveal the potential for a VMS.

Conclusions and Recommendations

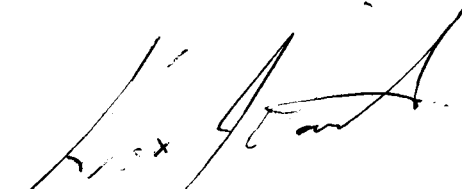
- 1) The Maggie Mines property is located on Indian River immediately north of our Anaconda - Indian River property.
- 2) The property contains two mineralized zones located at different stratigraphic levels.
- 3) The WAR EAGLE zone is associated with a lower rhyolite unit, is dominantly disseminated and veinlike Zn-Cu mineralization and may be remobilized from or otherwise related to a VMS.
- 4) The MAR zone is a quartz vein containing Zn-Cu-Ag-Au mineralization. This zone has assayed up to 7 oz/ton Au. It is open both down dip and along strike and may also be related to a VMS.
- 5) Acquisition of the property is strongly recommended.

Proposed 1986 Program

- 1) Relog WAR EAGLE and MAR Zone core.
- 2) Linecutting and limited geophysics to tie together the WAR EAGLE and MAR Zones.
- 3) Mapping and lithochemistry on WAR EAGLE - MAR zone.
- 4) Diamond drilling (900m) to explore the downdip and strike potential of the MAR Zone.

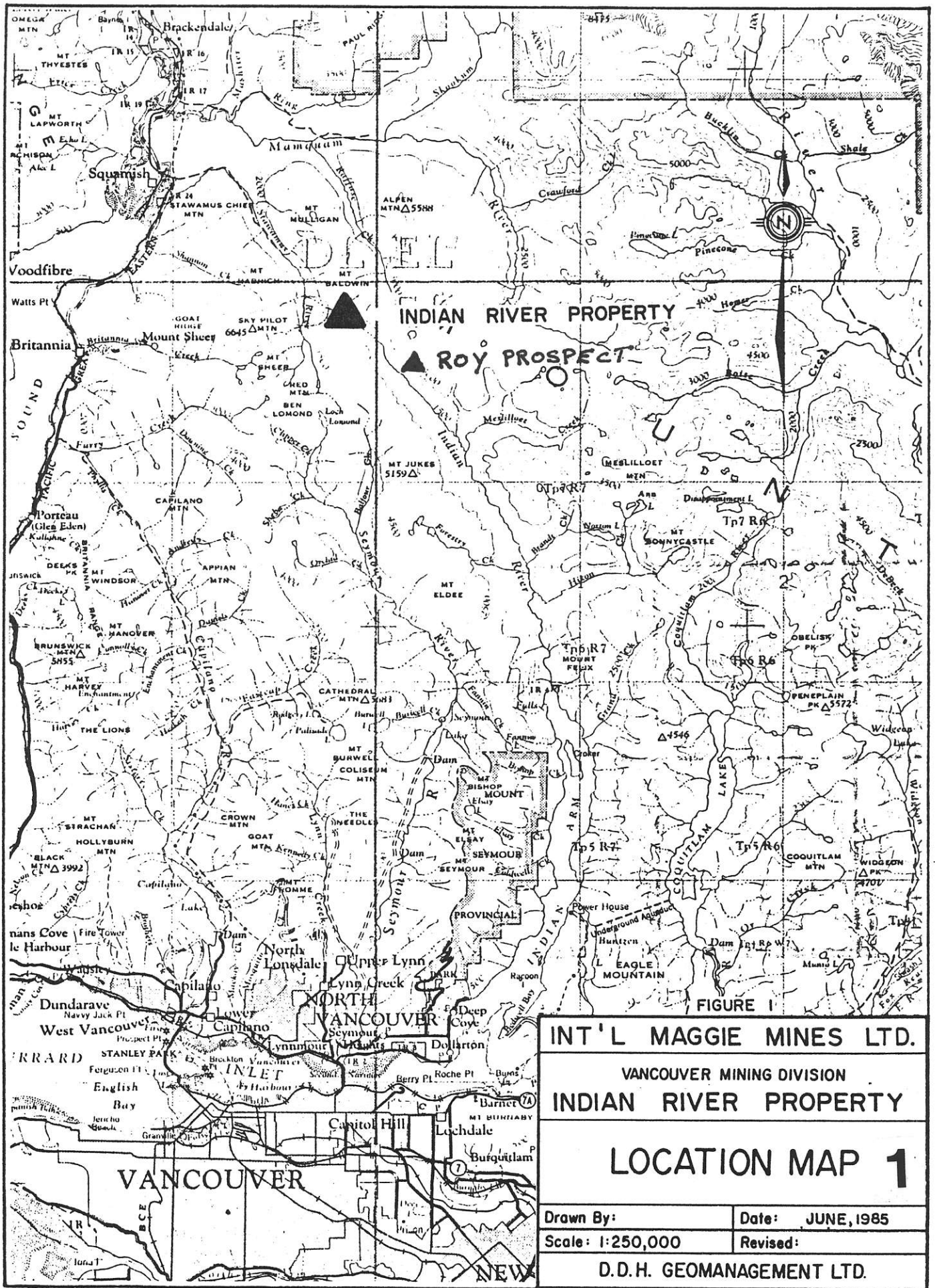
Proposed 1986 Budget

\$150,000



A. J. Davidson

AJD/ik



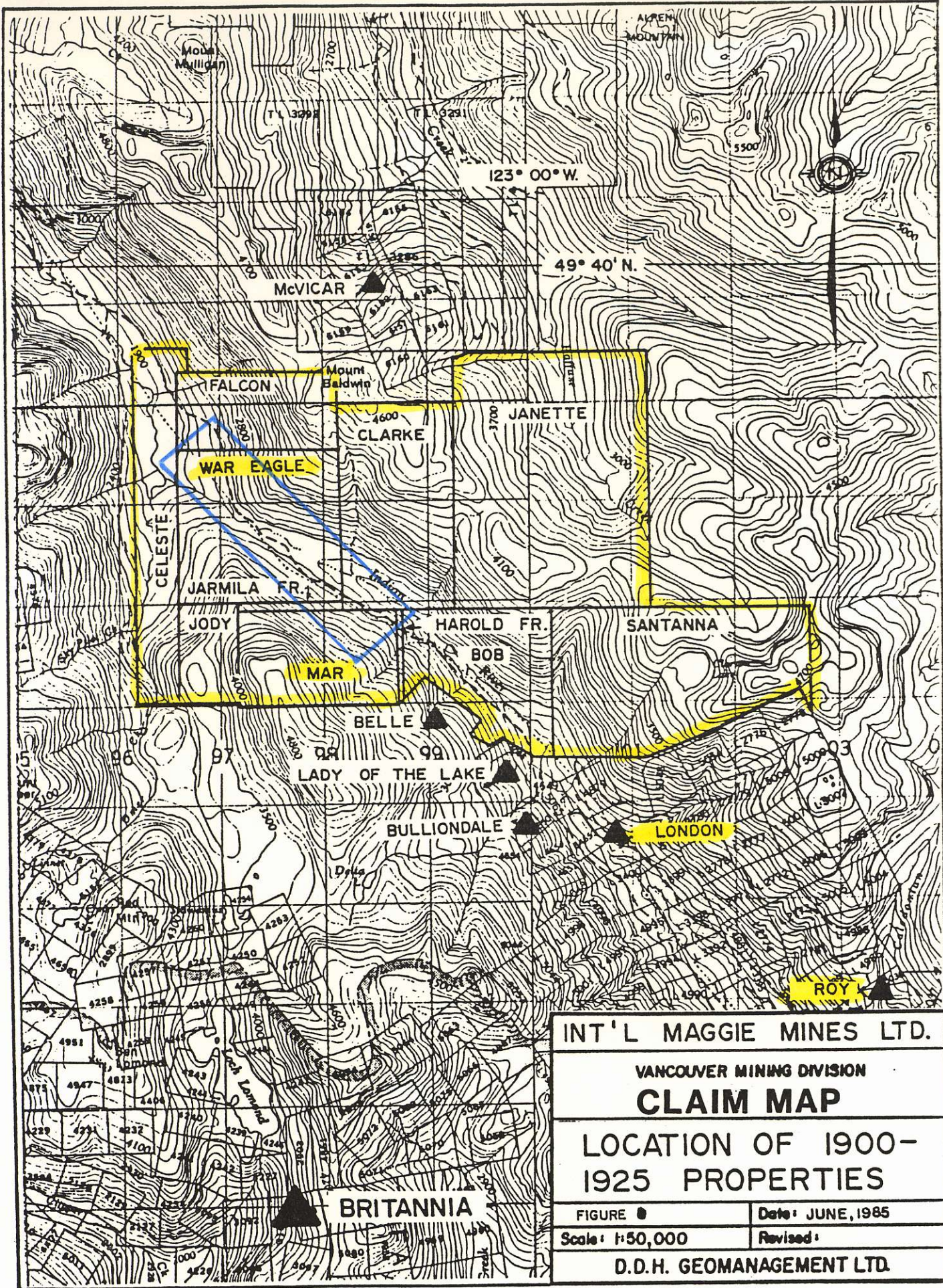
INT'L MAGGIE MINES LTD.

**VANCOUVER MINING DIVISION
INDIAN RIVER PROPERTY**

LOCATION MAP 1

Drawn By:	Date: JUNE, 1985
Scale: 1:250,000	Revised:

D.D.H. GEOMANAGEMENT LTD.



INT'L MAGGIE MINES LTD.

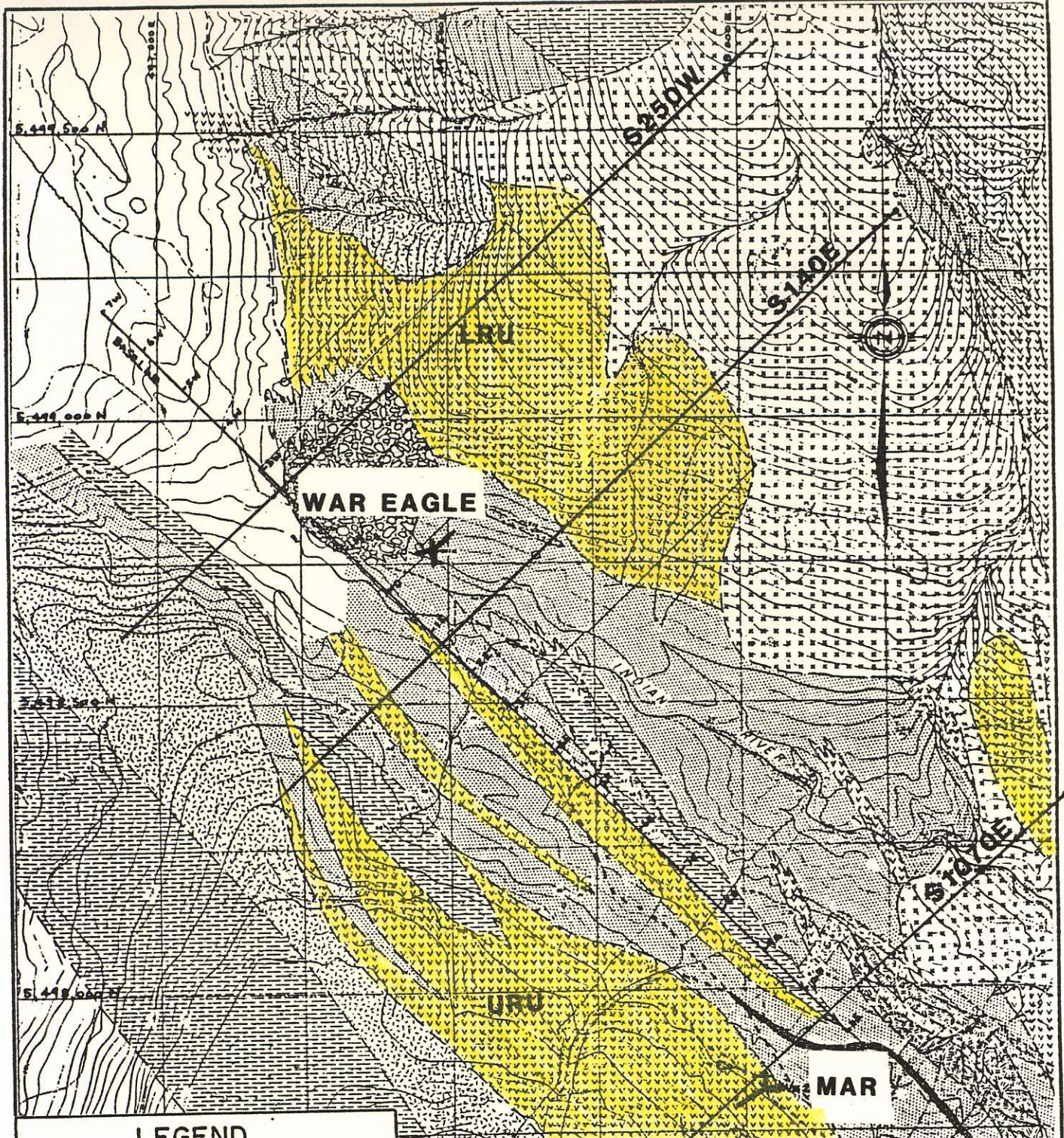
VANCOUVER MINING DIVISION

CLAIM MAP

LOCATION OF 1900-1925 PROPERTIES

FIGURE 0	Date: JUNE, 1985
Scale: 1:50,000	Revised:

D.D.H. GEOMANAGEMENT LTD.



LEGEND

	ANDESITE
	GRANITIC INTRUSIVES
	RHYOLITE TUFFS-FLOWS
	TUFFS, TUFFACEOUS SEDIMENTS
	SEDIMENTS (CHERT, ARGILLITE, SILTSTONE, SANDSTONE)
	PORPHYRITIC ANDESITIC FLOWS
	LAPILLI LAM TUFF
	AGGLOMERATE
	VENT

INT'L MAGGIE MINES LTD
INDIAN RIVER PROPERTY
GEOLOGY MAP OF THE
WAREAGLE - MAR ZONE
 Modified from Placer Development 1978-79

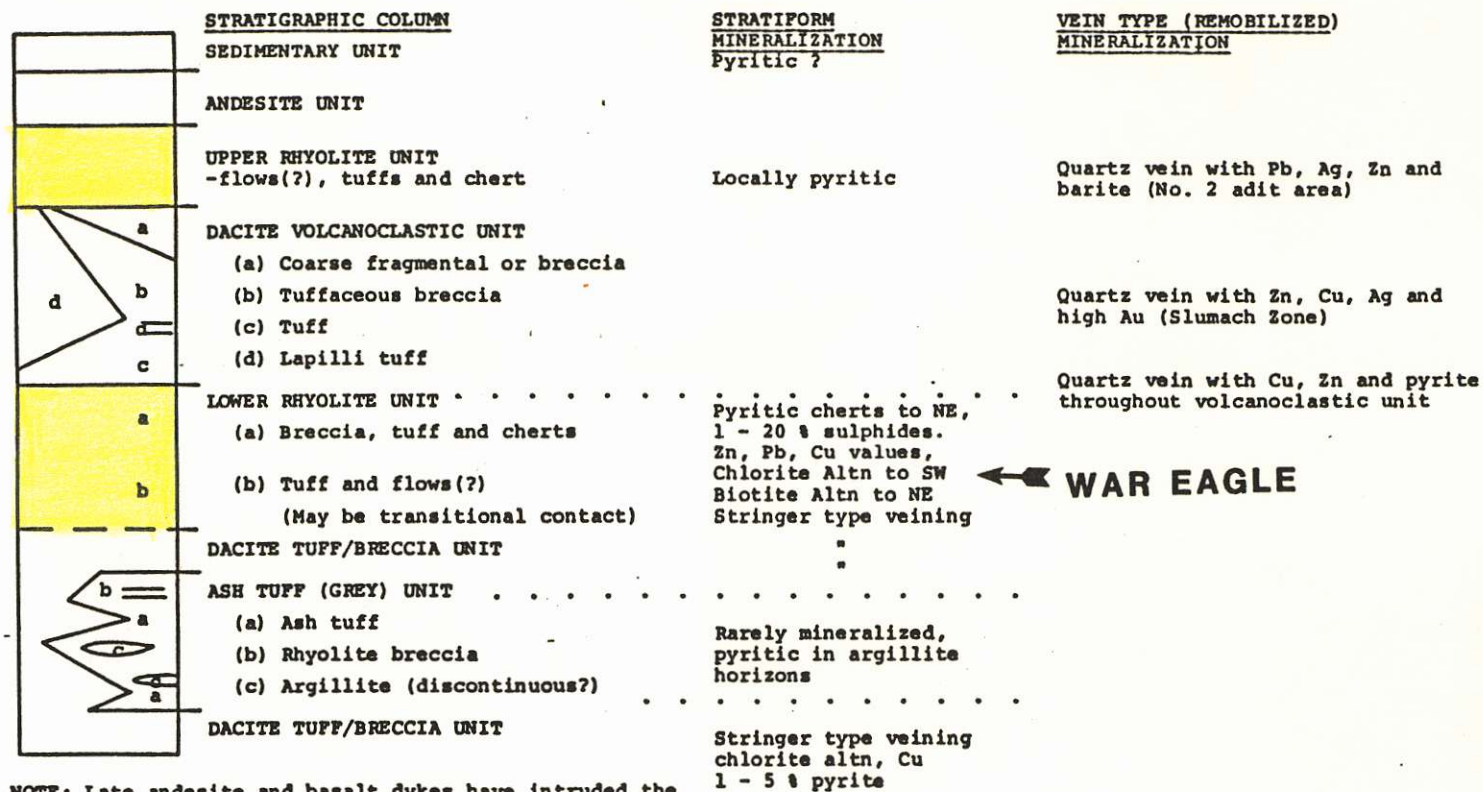
FIGURE 5	DATE JUNE, 1985
SCALE 1:10,000	REVISED

D.D.H. GEOMANAGEMENT LTD.

INTERNATIONAL MAGGIE MINES LTD.

INTERPRETED STRATIGRAPHIC SECTION
WITHIN LOWER CRETACEOUS GAMBIER GP. ROCKS
DIAGRAMMATIC (NOT TO SCALE)

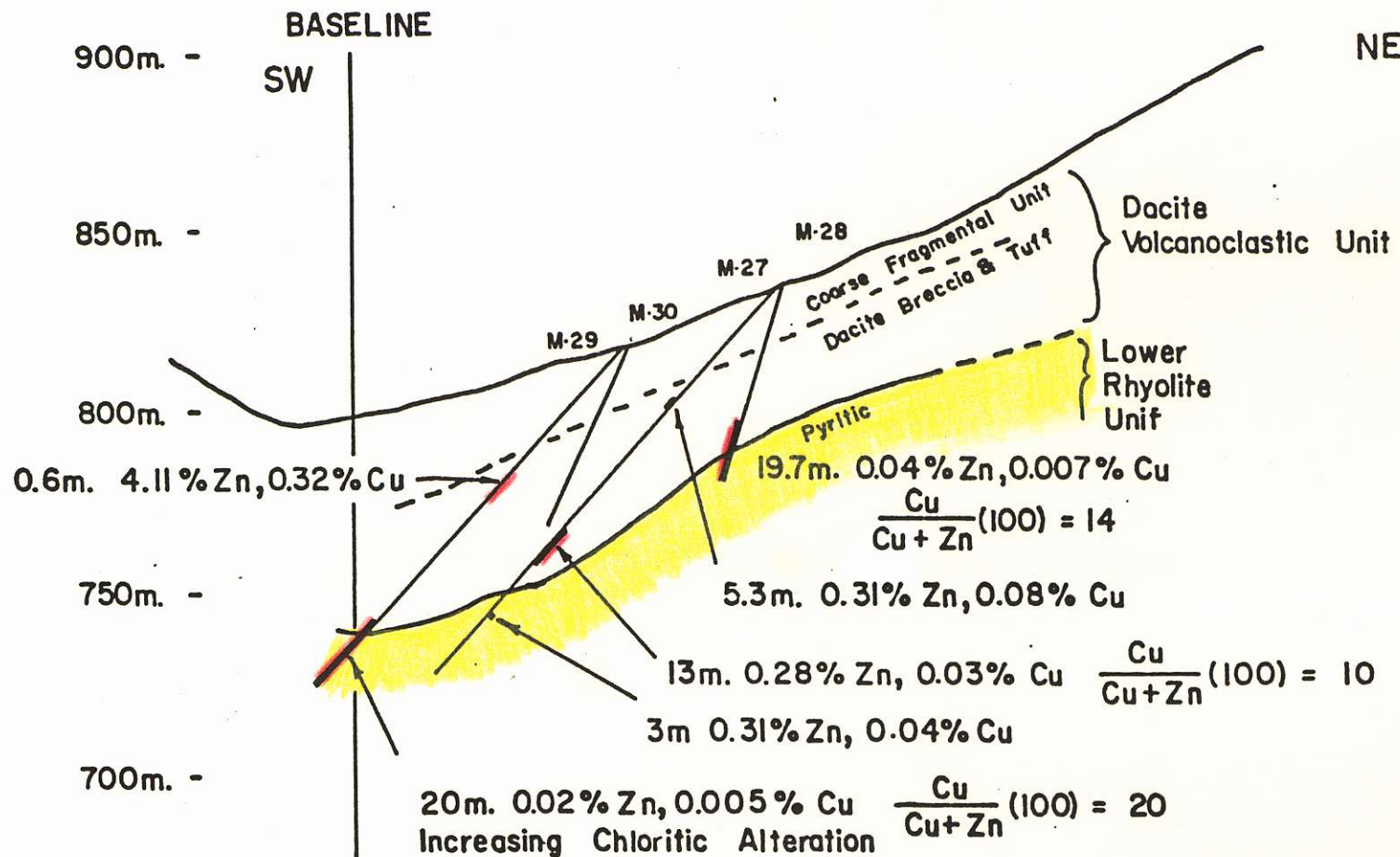
STRATIGRAPHIC TOP



← MAR

← WAR EAGLE

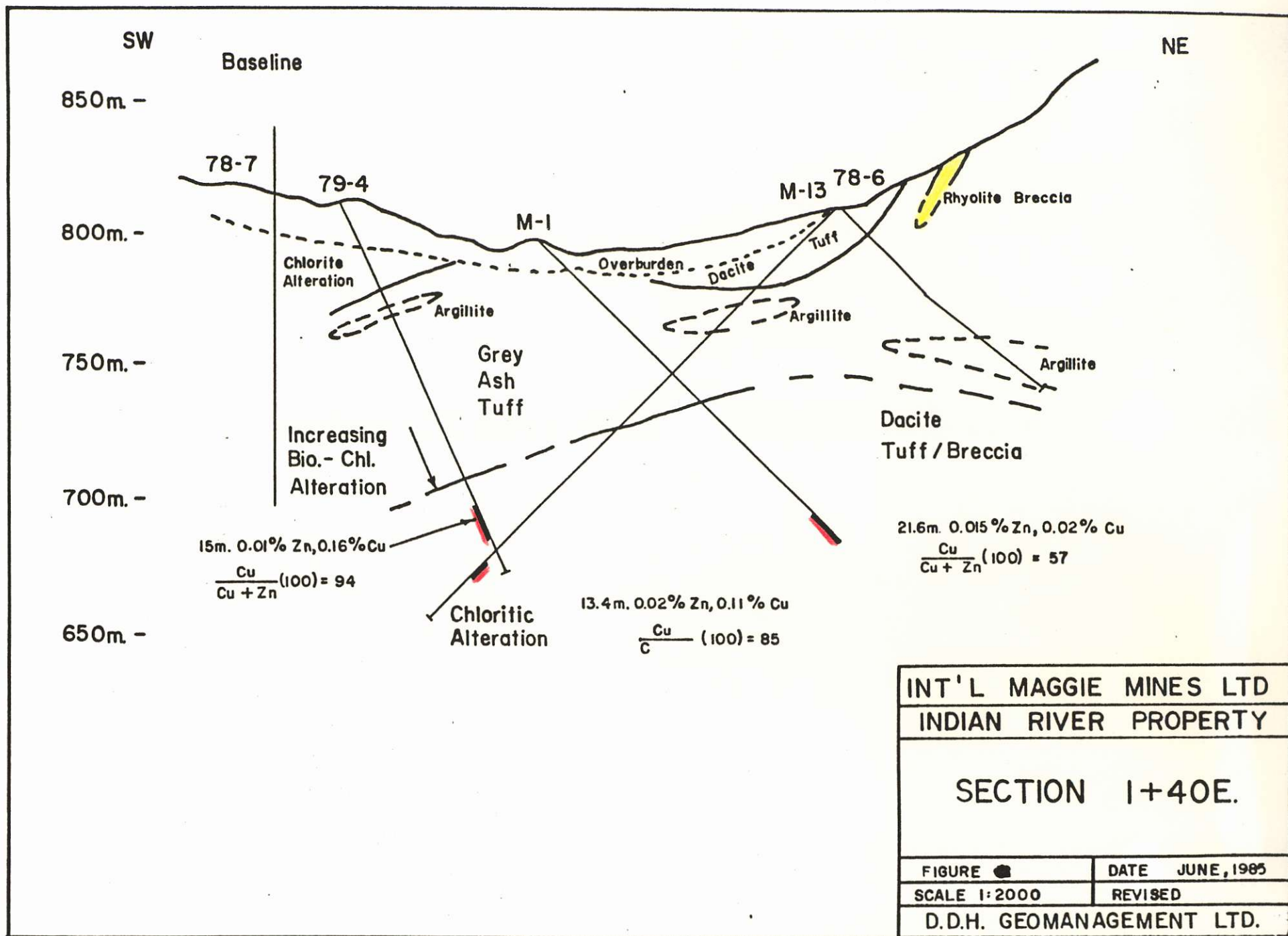
NOTE: Late andesite and basalt dykes have intruded the above sequence.

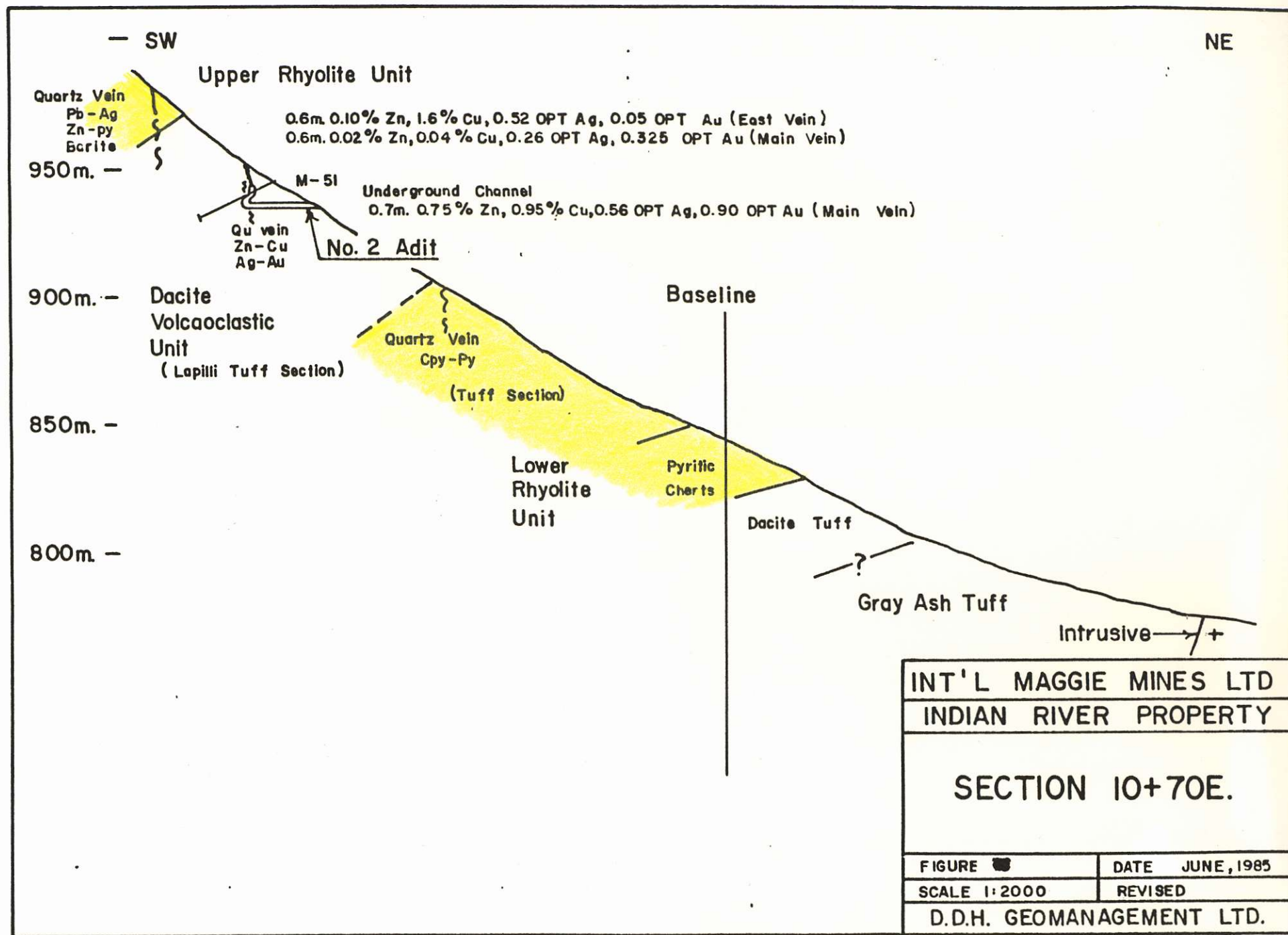


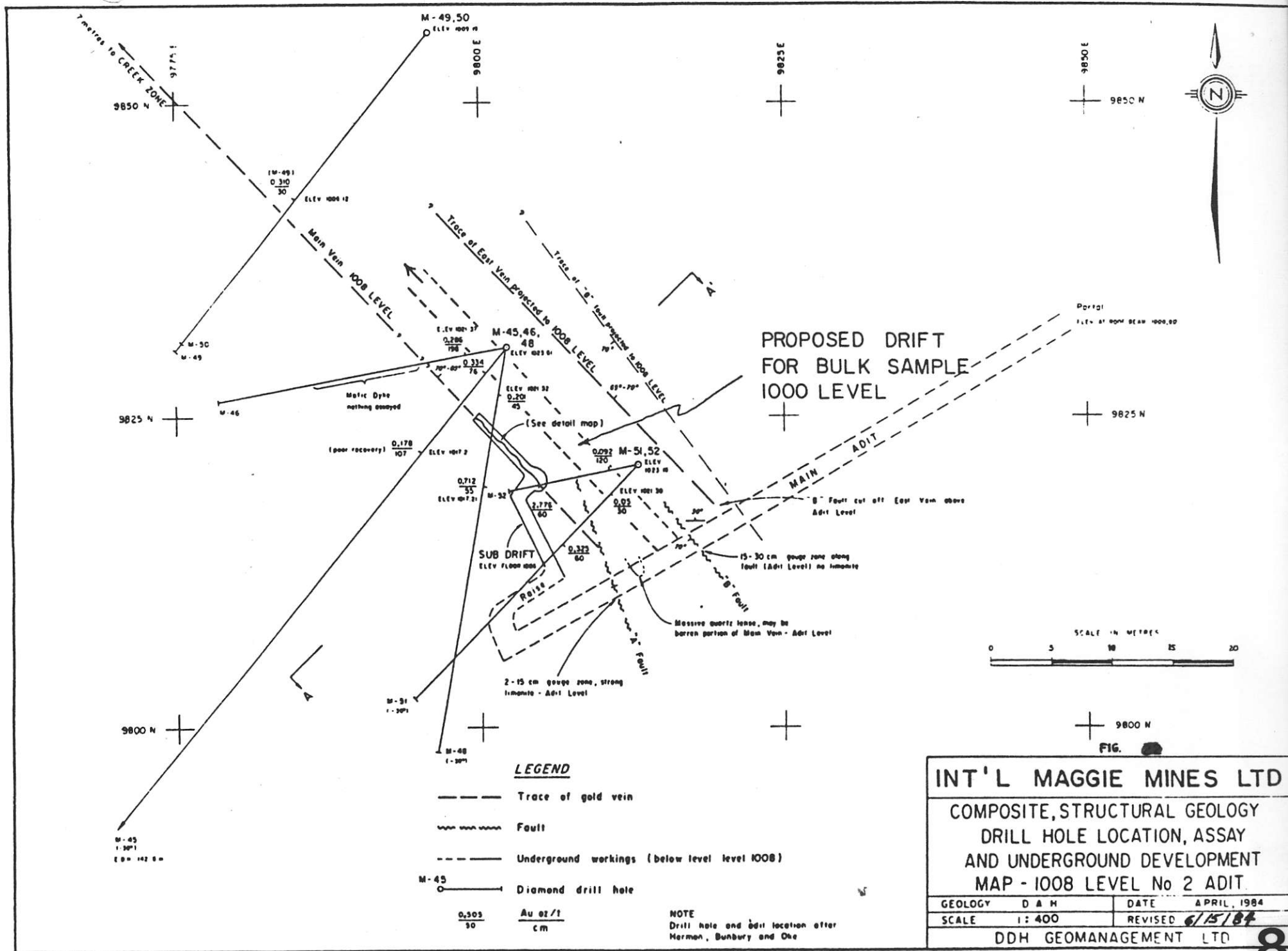
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INDIAN RIVER PROPERTY

SECTION 2+50W.

FIGURE 2	DATE JUNE, 1985
SCALE 1:2000	REVISED
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MAR CLAIM

DETAIL SAMPLE MAP
1008 SUBDRIFT

Drawn By:

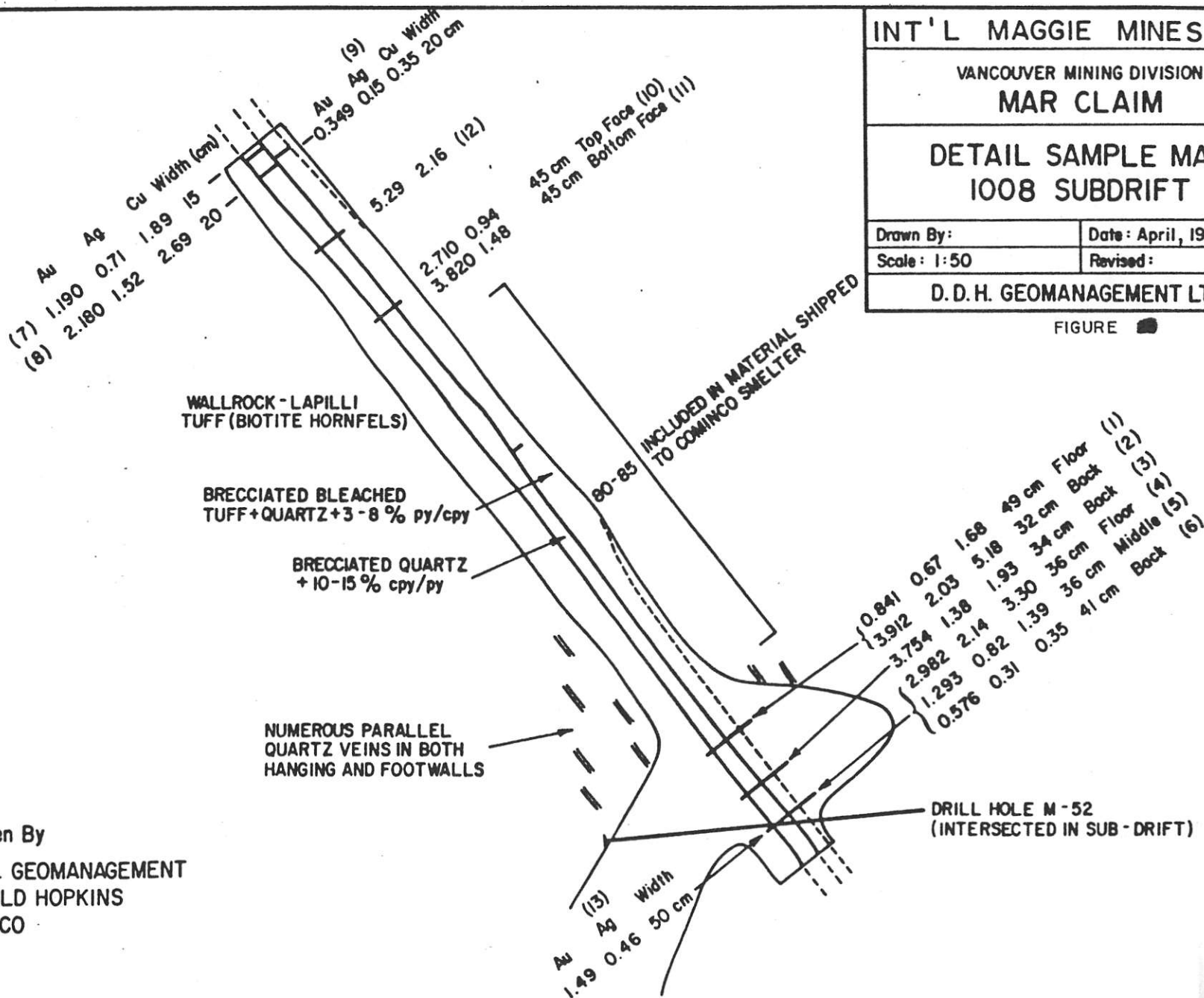
Date: April, 1984

Scale: 1:50

Revised:

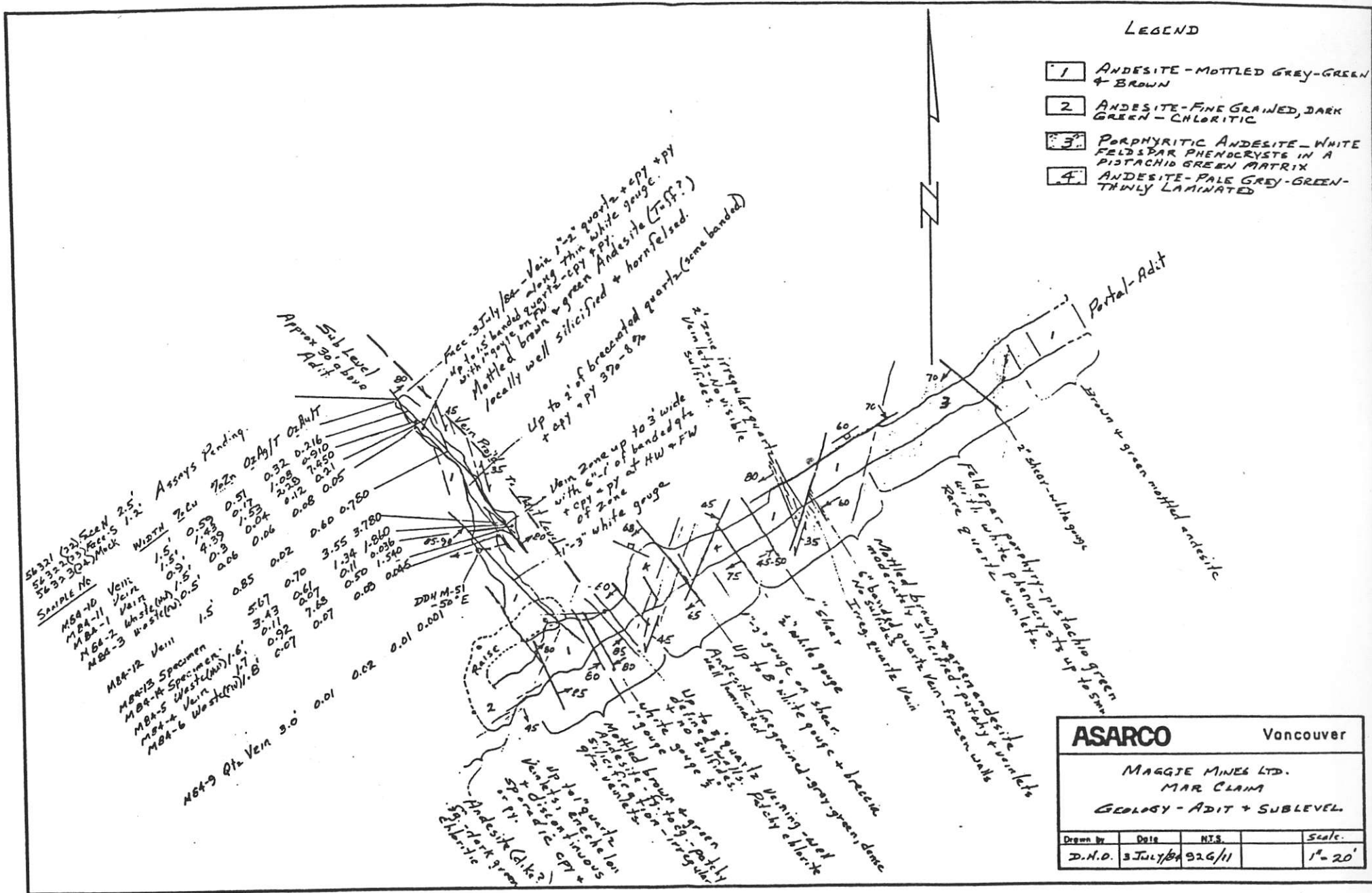
D. D. H. GEOMANAGEMENT LTD.

FIGURE ■



Samples Taken By

1-9 D.D.H. GEOMANAGEMENT
10+11 HAROLD HOPKINS
12+13 ASARCO



INTERNATIONAL MAGGIE MINES LTD.

Reduced scale 1" = 31'

ASARCO - GEOLOGY, ADIT AND SUBDRIFT : INDIAN RIVER PROPERTY

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FIGURE

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TABLE 1

MAGGIE MINE SAMPLES

		<u>AG</u> <u>oz/ton</u>	<u>AU</u> <u>oz/ton</u>	<u>CU</u> <u>%</u>	<u>ZN</u> <u>%</u>
M1	Upper trench - good sphalerite	0.39	0.293	0.904	0.42
M2	Upper trench - good sphalerite	0.16	0.233	0.086	23.10
M3	Main road showing	0.19	0.120	0.329	14.50
M4	End of road showing	0.53	0.015	1.150	7.40
M5	High grade vein in X-cut	2.97	5.819	4.610	1.12
M6	Walls of vein in X-cut	0.06	0.035	0.103	0.10
M7	Vein at end of X-cut	0.88	0.373	1.790	0.09
M8	Vein at top of raise	2.01	0.432	4.380	0.10
M10	Yard high grade	0.76	0.726	1.600	0.18
M11	Spotted alteration - andalosite	0.05	0.012	0.074	0.06

4 shipments to Trail

Total 43.42 tons

@ 1.155 oz/t Au, 2.93 oz/t Ag, 1.38% Cu, 5% Zn