CONFIDENTIAL

672531

VAULT PROJECT (Au)

BRITISH COLUMBIA

NTS 82E5E

Inco Exploration and Technical Services Inc.
February 1991

INTRODUCTION

Previous exploration at the Vault property had indicated the presence of epithermal gold mineralization in Tertiary volcanic flows and epiclastic sediments located near the eastern, faulted margin of a Tertiary outlier. It was considered that higher grade mineralization could be found along or near structures related to the faulted, eastern margin of the inlier. The property was optioned in 1986 and subsequent diamond drilling found higher gold values in the downfaulted extension of the initial discovery zone. The joint venture was formed on February 1, 1988.

PROPERTY

Location and Access

The property is located in the Osoyoos Mining Division. The centre of the claim block is 2.5 km NW of Okanagan Falls (NTS sheet 82E-5E, Latitude 49022'N, Longitude 119037'W). The claims are crossed by paved highways, and power and water are available on the property.

Status

The property consists of eighteen mineral claims totalling 1700 ha. in 79 units (Figure 1). Canadian Nickel Company Limited owns 60% and Seven Mile High Resources Inc. owns 40%. Murray Morrison has a 4.8% NPI in the property up to a maximum of $250,000.

HISTORY

1982: The Vault 1 claim was staked by M. Morrison to cover an area of gossanous silicified breccias that carried anomalous values in gold and silver. Riocanex Inc. optioned the claim, staked the Vault 2-5 claims and carried out a small program of geological mapping and soil geochemistry around the discovery outcrop. Four percussion holes for 295 m and 4 diamond drill holes for 632 m were drilled. Low gold and silver values were encountered.

1983: Dome Exploration (Canada) Limited optioned the claims in late 1983 and carried out a small program of induced polarization geophysics, a magnetometer survey and diamond drilling in the same area (7 holes for 558 m). Again, low values in gold and silver were encountered.

1985: Seven Mile High Resources optioned the property and carried out geological mapping, soil geochemistry, magnetometer and VLF-EM surveys over an area of 4 sq. km. Eight shallow percussion holes for 491 m were drilled in two areas, but the target depth was not reached.

1986: Inco Gold (Canico) optioned the property and remapped the existing SMHR grid, relogged the existing core and after a reinterpretation of the geology, drilled two widely spaced, vertical, diamond boreholes. One of these intersected 9.9 g/t Au over 1.05 m from 373.10 m to 374.15 m.

1987: The Vault 6 and 7 claims were staked. Sixteen diamond drill holes for 4,664 m were drilled. Several highly encouraging intersections were obtained from this drilling including 7.9 g/t Au over 12.9 m in BH 72408.

1988: An additional 49 holes for 18,307 m were drilled. As a result of this work, a large auriferous epithermal system was defined over an area of 1,000 m east-west by 500 m north-south. Within this, a central zone with a strike length of 600 m contains potentially economic gold mineralization.

1989: During this year, 75 holes were drilled for a total of 13,229 m. Most drilling was concentrated on the North Vein. The vein was partially drilled off and a mineral resource was calculated.

1990: Twelve holes were drilled for a total of 2,636 m in the West Zone and the North Vein and two trenches were dug along the strike length of the North Vein. At the east end of the West Zone, drilling discovered a significant mineralized zone within 120 m of surface that gave a best intersection of 5.1 g/t Au over 7.90 m. By the end of the year, all boreholes had been re-logged and standardized and all sections updated and readied for presentation to parties interested in acquiring an interest in the Vault property.

REGIONAL GEOLOGY

The Vault property is located in the northeastern part of the Penticton Tertiary Outlier (Figure 1). B.N. Church (see BCDMPR Bulletin 61) described a sequence of Eocene volcanics and sediments up to 4,000 m thick. The Outlier is bounded to the east by the major Okanagan Valley normal fault which dips about 30° to the west. The Eocene sequence has been preserved, possibly as a half graben, by down faulting along this structure. The sequence is cut by many northerly-trending step faults and by several westerly-trending radial faults. The beds generally dip easterly.

PROPERTY GEOLOGY AND MINERALIZATION

Three Eocene Formations were mapped on the property. From old to young these are: Marron, Marama and White Lake (Figures 1 and 2). The Marron Formation is made up of flows of porphyritic trachyte. The Marama Formation is divided into 2 parts: the lower part consists of epiclastic sediments, an olivine trachyte and a felsite unit; the upper part is a thick, very fine grained, dacitic flow. The White Lake Formation is made up of epiclastic sediments interlayered with mafic flows. The Formations are cut by a major north-east trending fault with the down throw on the east side. Drilling results suggest several east-west trending and possibly several northeast trending faults complicating the picture.

Epithermal gold mineralization is present in many narrow east-west trending veins over an area of 1,000 m east-west by 500 m north-south. No major feeder(s) has been found yet. In the down-dropped block, east of the major northeast-striking fault (the Central Zone), ore grade values occur where quartz veins intersect silicified Lower Marama Formation and particularly in a zone between two marker horizons. Marker No. 1 is at the bottom of the Formation and consists of an olivine trachyte flow. Marker No. 2 is a felsite unit and occurs about 30 m above the top of Marker No. 1. The zone has been traced by drilling over a strike length of 600 m and a down-dip extension of 100 m. The picture is complicated by minor faulting and possibly by slumping features. A vertical metal zoning is present as follows (from top to bottom): As-Sb, As(-Mo), Au-Ag(-Mo-Ba).

The North Vein consists of a narrow, discrete, steeply south dipping, quartz-calcite adularia vein cutting Marron Formation trachytes. It is located 350 m N of the Central Zone.

The Western extension of the Central Zone (West Zone or Original Discovery Zone) contains higher grade zones similar to those indicated in the Central Zone but at depths less than 100 m. Drilling in 1990 confirmed this potential.

RESERVES

Not enough pierce points are available to calculate a meaningful reserve in the Central Zone. By interpreting the geology and assay data on cross sections, a resource potential can be estimated. Along a strike length of 267.50 m, from 537+50E to 805E, this potential is 1,342,000 tonnes grading 2 g/t Au. Within this resource, high grade zones occur, but with the lack of sufficient pierce points continuity cannot be substantiated. If continuous, these zones could contain up to 135,000 tonnes grading 7 g/t Au per zone or structure. From 805E to 1100E, drilling is sparse but it appears that gold mineralization becomes more erratic towards the east. The better intersections in this zone are:

Borehole	Section	Width(m)	g/t Au
72436	825E	3.15	1.47
38898	865E	27.55	1.20
	including	1.7	7.37
72441	865E	6.06	2.96
	including	1.57	6.79
		4.28	2.58
	including	0.90	5.48
72414	900E	12.20	1.44
	including	2.40	3.04
72443	920E	7.46	2.66
	including	1.41	5.71
		8.87	2.49
	including	1.07	6.11
72471	1090E	2.93	7.12

The mineralized zone rakes towards the east. The top of the mineralized zone is 170 m below surface at 550E and is 500 m below surface at 1100E.

In 1989, the North Vein was tested over a strike length of 1050 m and a vertical depth varying from 100 to 200 m. Diamond drilling indicated a mineral resource of 150,000 tonnes grading 14 g/t Au using a cut-off grade of 3 g/t Au. The average true width for the intersections included in the tonnage calculation is 0.57 m. Drilling in 1990 tested the east and west ends of the North vein at depths of 400 m and 320 m respectively, but results were not encouraging and are not included in the tonnage calculation. In the trenching program on the North vein, the West Trench averaged 7.2 g/t Au, 50.0 g/t Ag along a strike length of 158 m and average width of 0.38 m and the East Trench averaged 3.4 g/t Au, 22.0 g/t Ag along 256 m with an average width of 0.58 m.

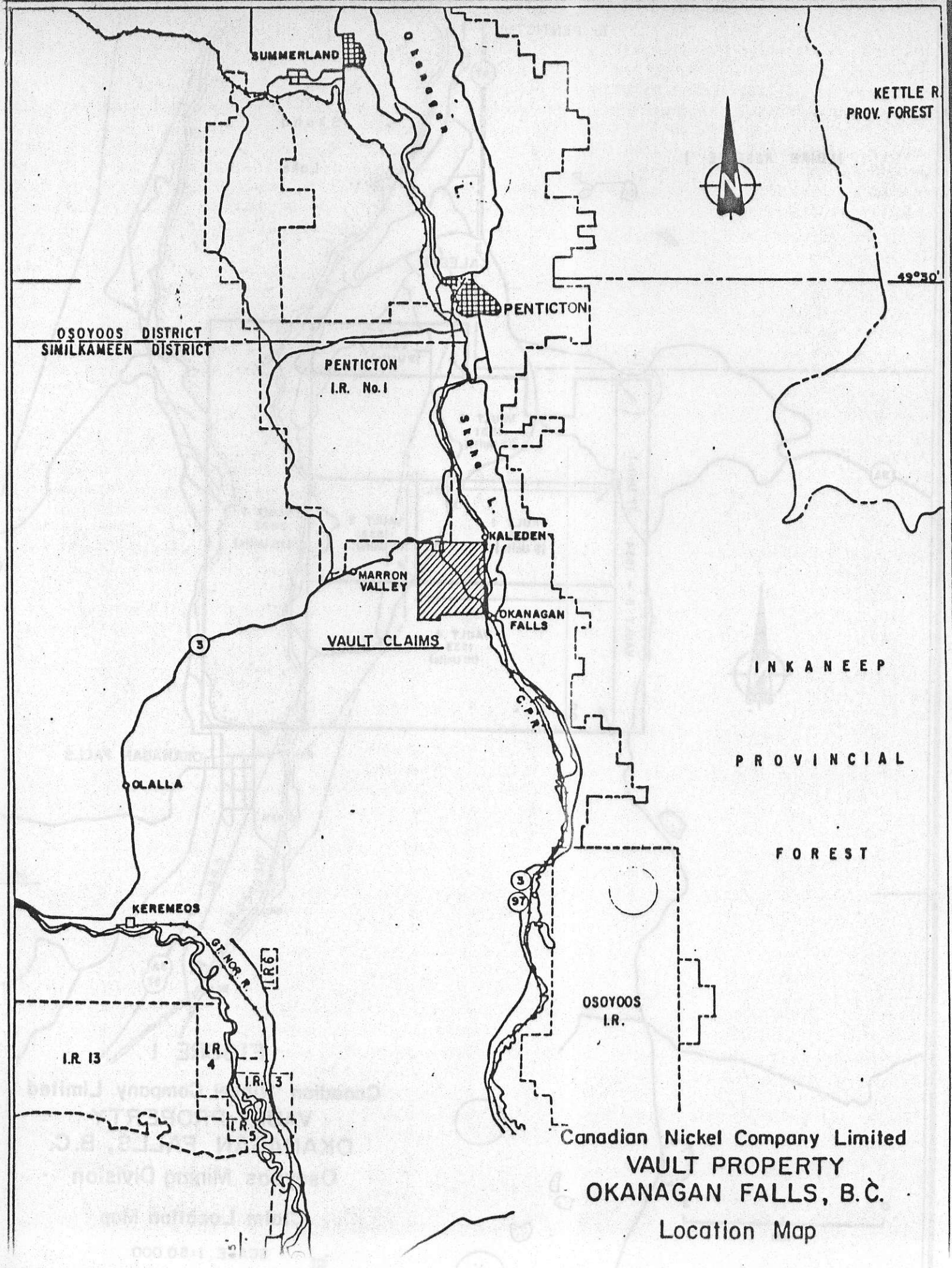
EXPENDITURE SUMMARY (US $)

Year	Inco Gold	SMHR	Total
1986	71,383	-	71,383
1987	335,353	-	335,353
1988	1,008,087	593,860	1,601,947
1989	625,000	416,000	1,041,000
1990	152,560	112,541	265,101
	2,193,265	1,123,656	3,316,921

PROPOSED 1991 PROGRAM AND BUDGET (Cdn $)

Program

No program or budget are proposed for 1991 and the property is up for sale.



Canadian Nickel Company Limited

VAULT PROPERTY
OKANAGAN FALLS, B.C.

Location Map

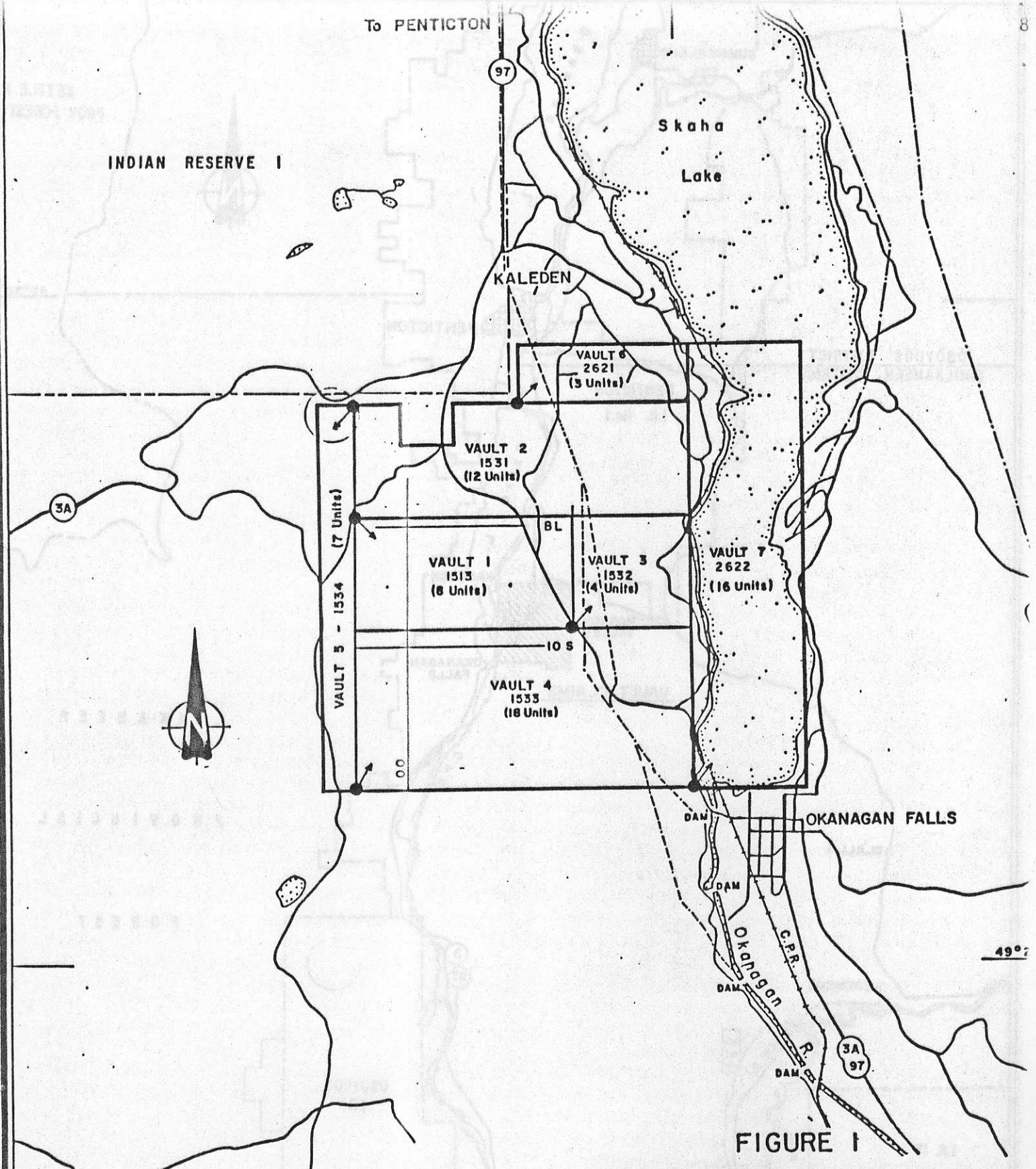


FIGURE 1

Canadian Nickel Company Limited

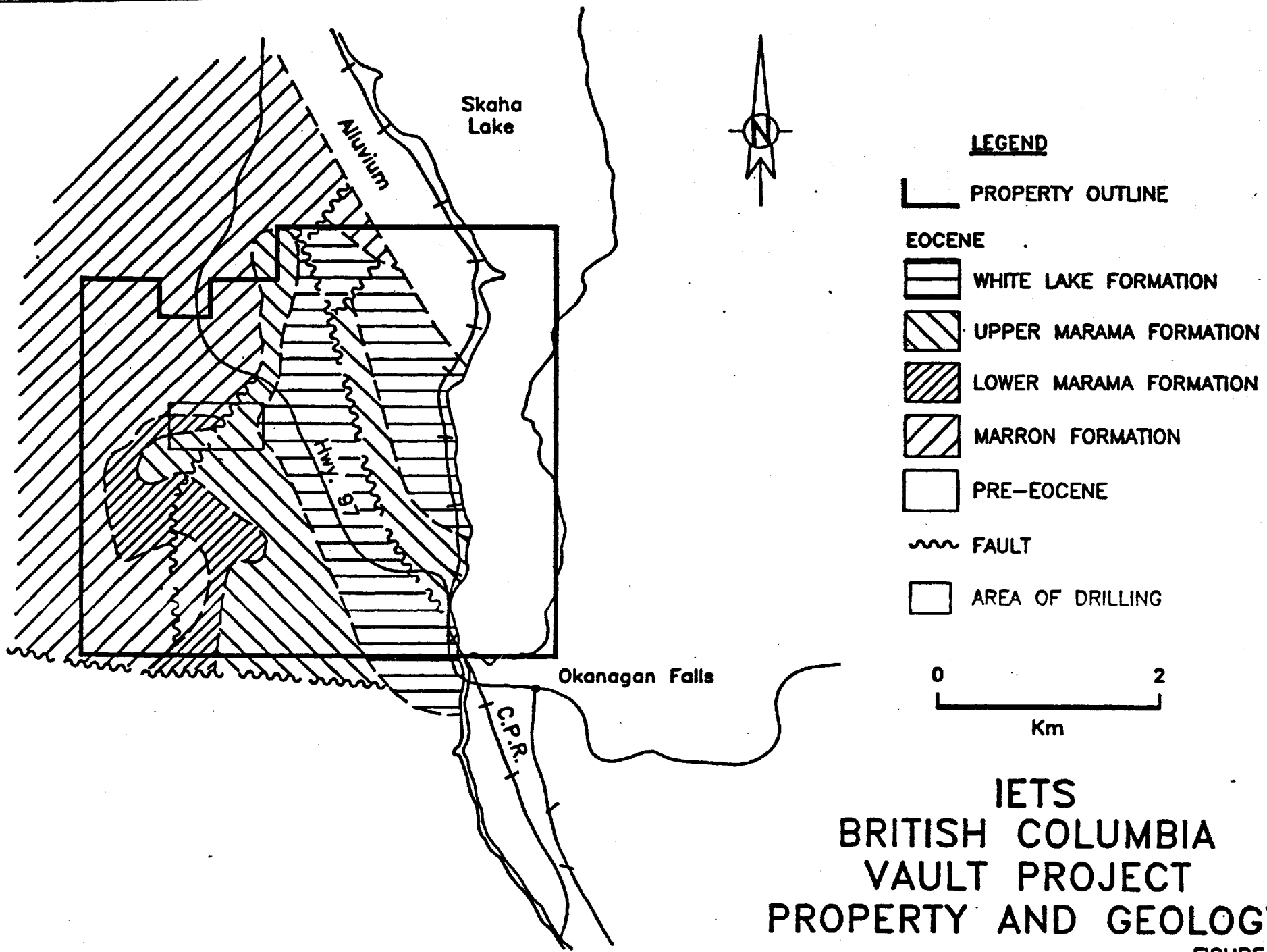
VAULT PROPERTY

OKANAGAN FALLS, B.C.

Osoyoos Mining Division

Claim Location Map

SCALE 1:50 000



IETS
BRITISH COLUMBIA
VAULT PROJECT
PROPERTY AND GEOLOGY

FIGURE 1

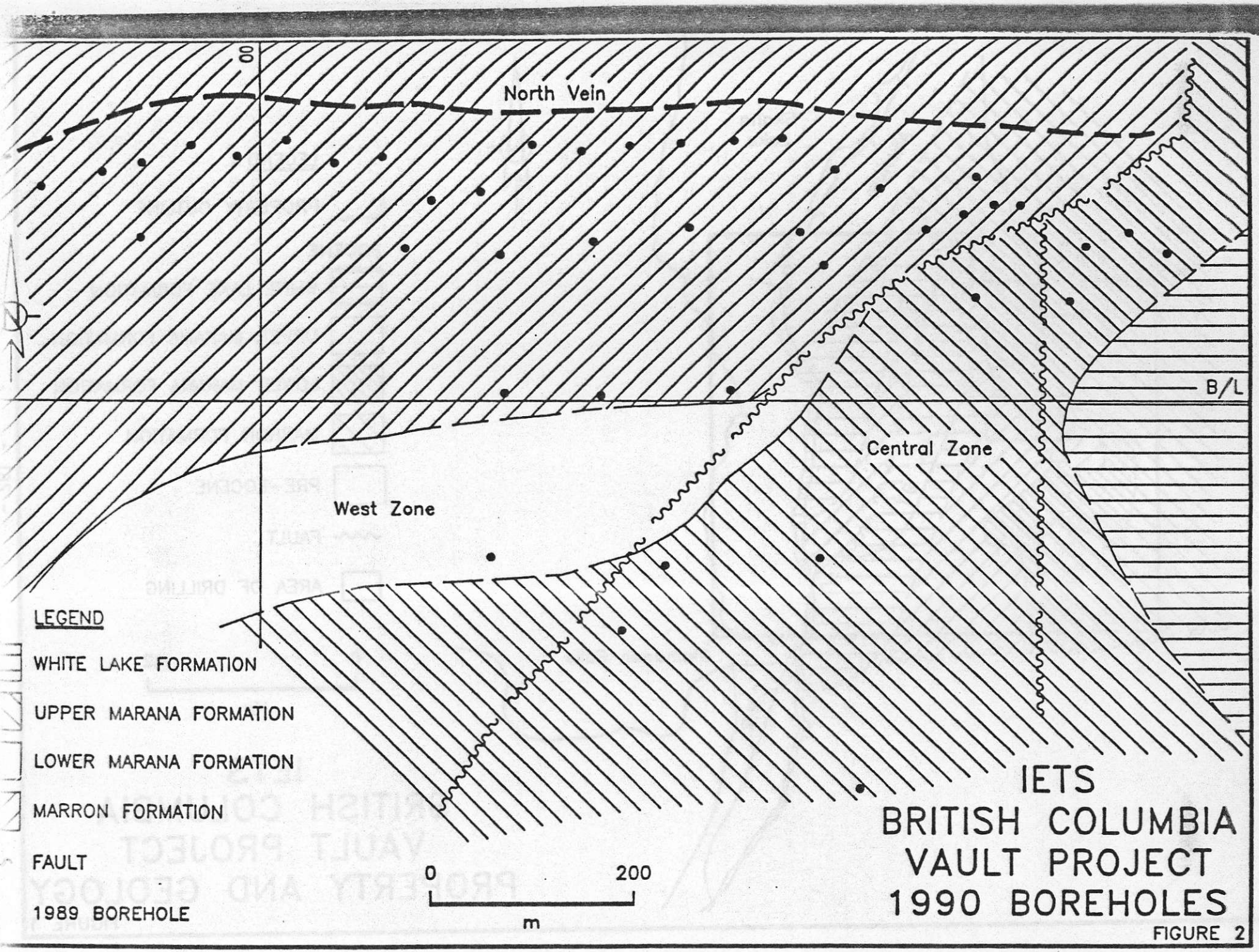
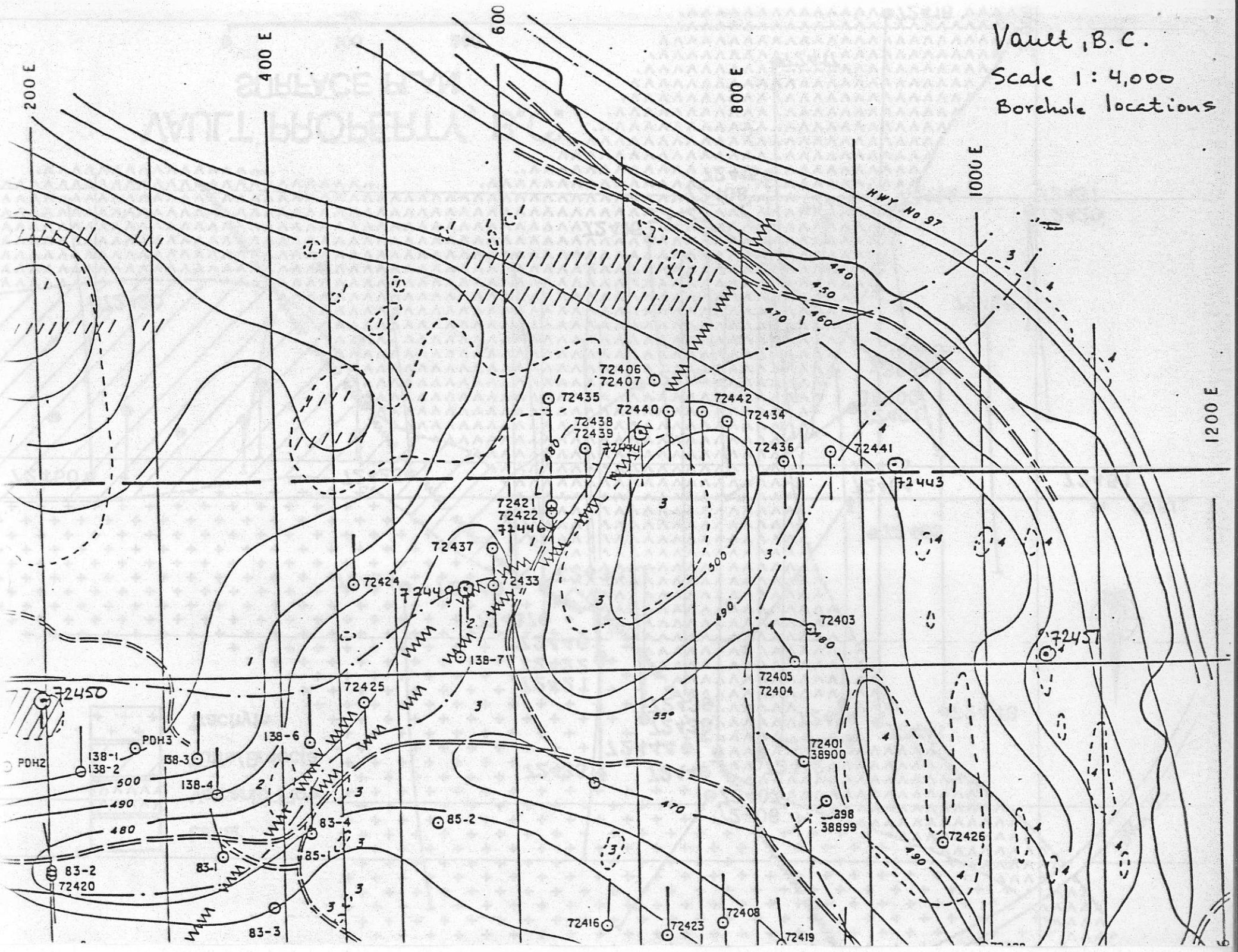
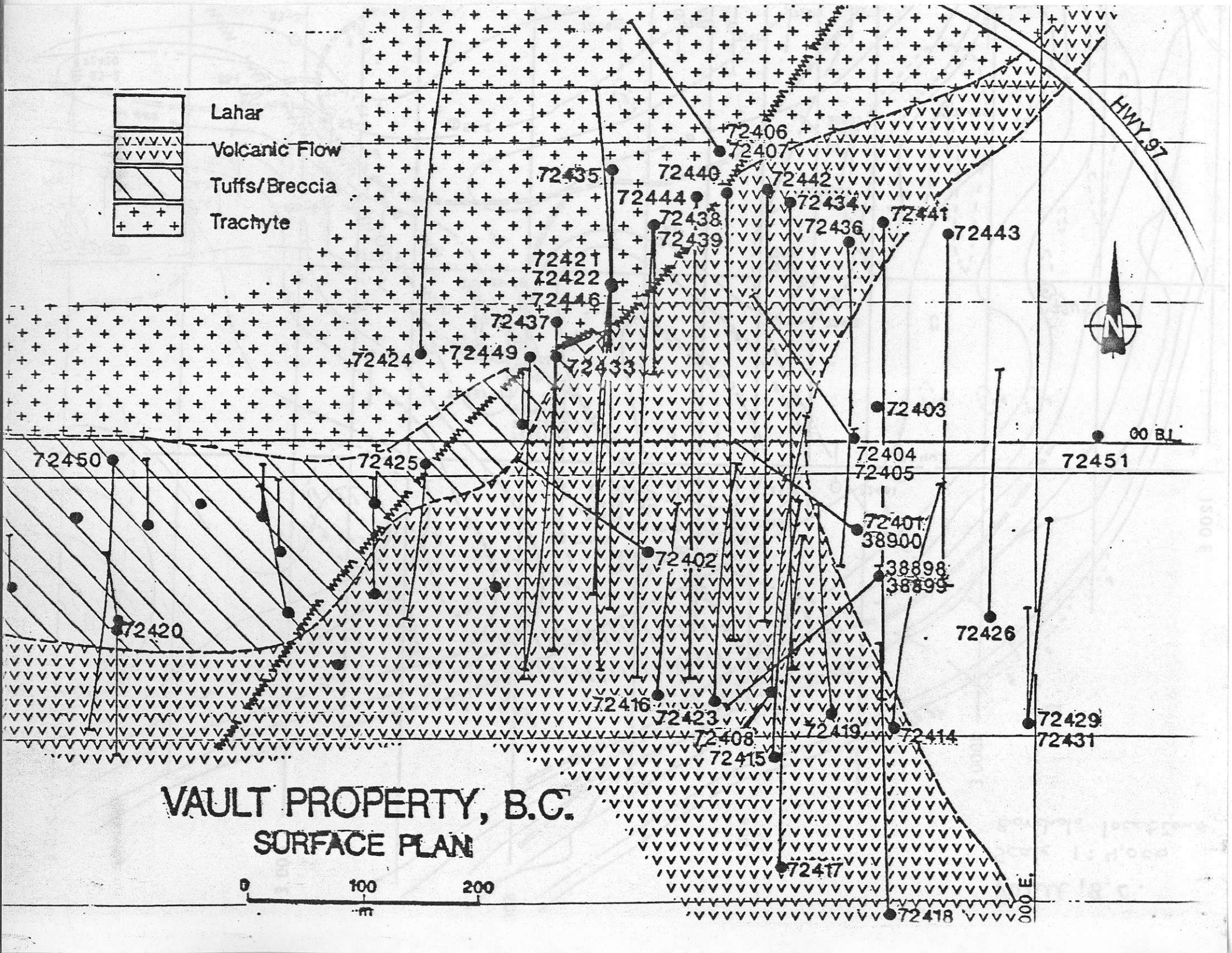

00
North Vein
B/L
Central Zone
West Zone
LEGEND
WHITE LAKE FORMATION
UPPER MARANA FORMATION
LOWER MARANA FORMATION
MARRON FORMATION
FAULT
1989 BOREHOLE
0
200
m
IETS
BRITISH COLUMBIA
VAULT PROJECT
1990 BOREHOLES

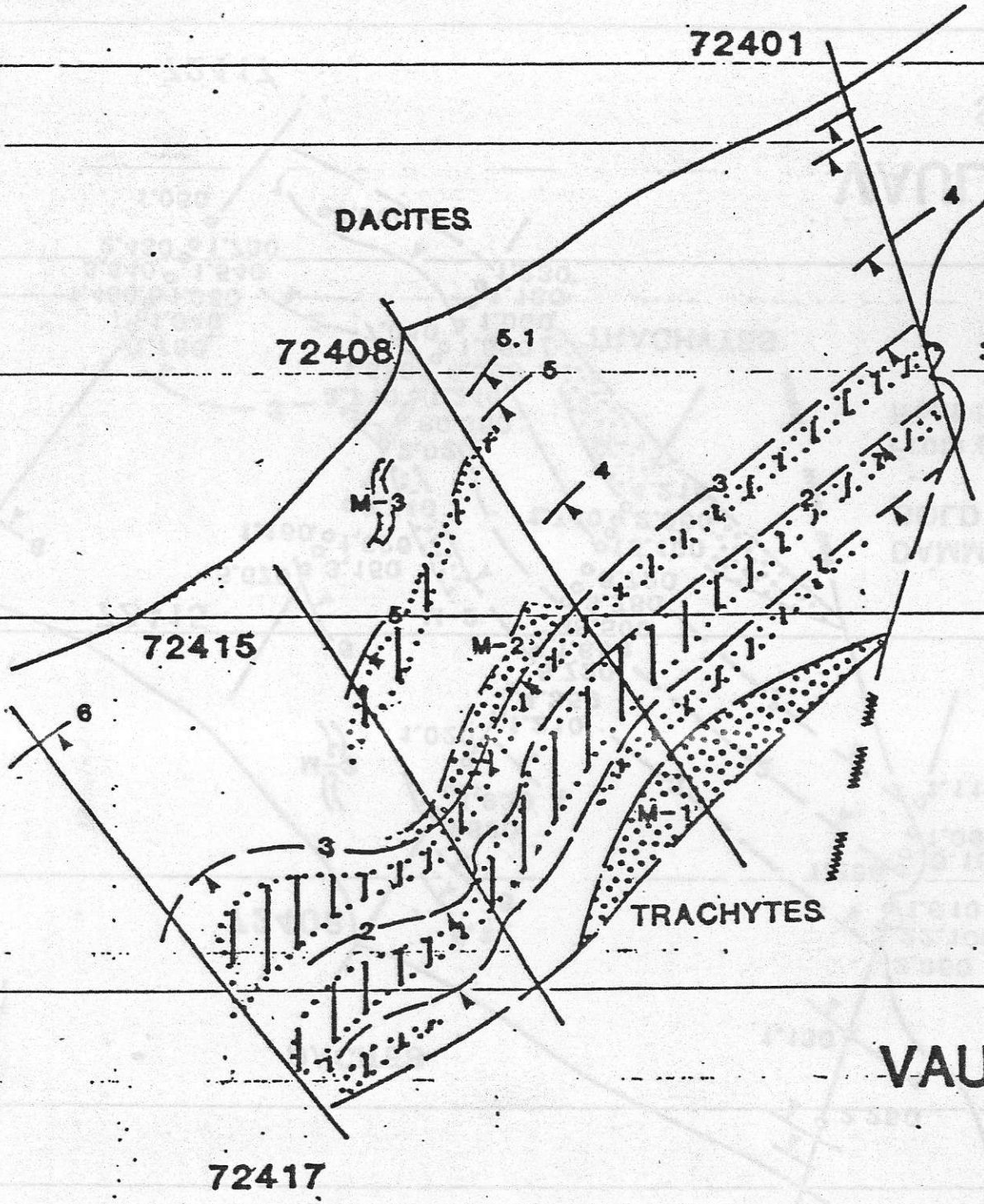
FIGURE 2


Vault, B.C.
Scale 1:4,000
Borehole locations
200 E
400 E
600
800 E
1000 E
1200 E
HWY NO 97
72406
72407
72435
72440
72442
72434
72438
72439
72436
72441
72443
72421
72422
72446
72437
72424
72449
72433
72403
72457
138-7
72405
72404
72450
72425
138-6
PDH3
PDH2
138-1
138-2
138-3
138-4
72401
38900
398
38899
72426
83-4
85-2
85-1
83-1
83-2
72420
83-3
72416
72423
72408
72419
440
450
470
460
480
500
490
550



VAULT PROPERTY, B.C.

SURFACE PLAN



Potential Au-Ag ore outline

M-1 Marker horizon number 1

3 Damming front number 3 trend of line corresponds to bedding trend

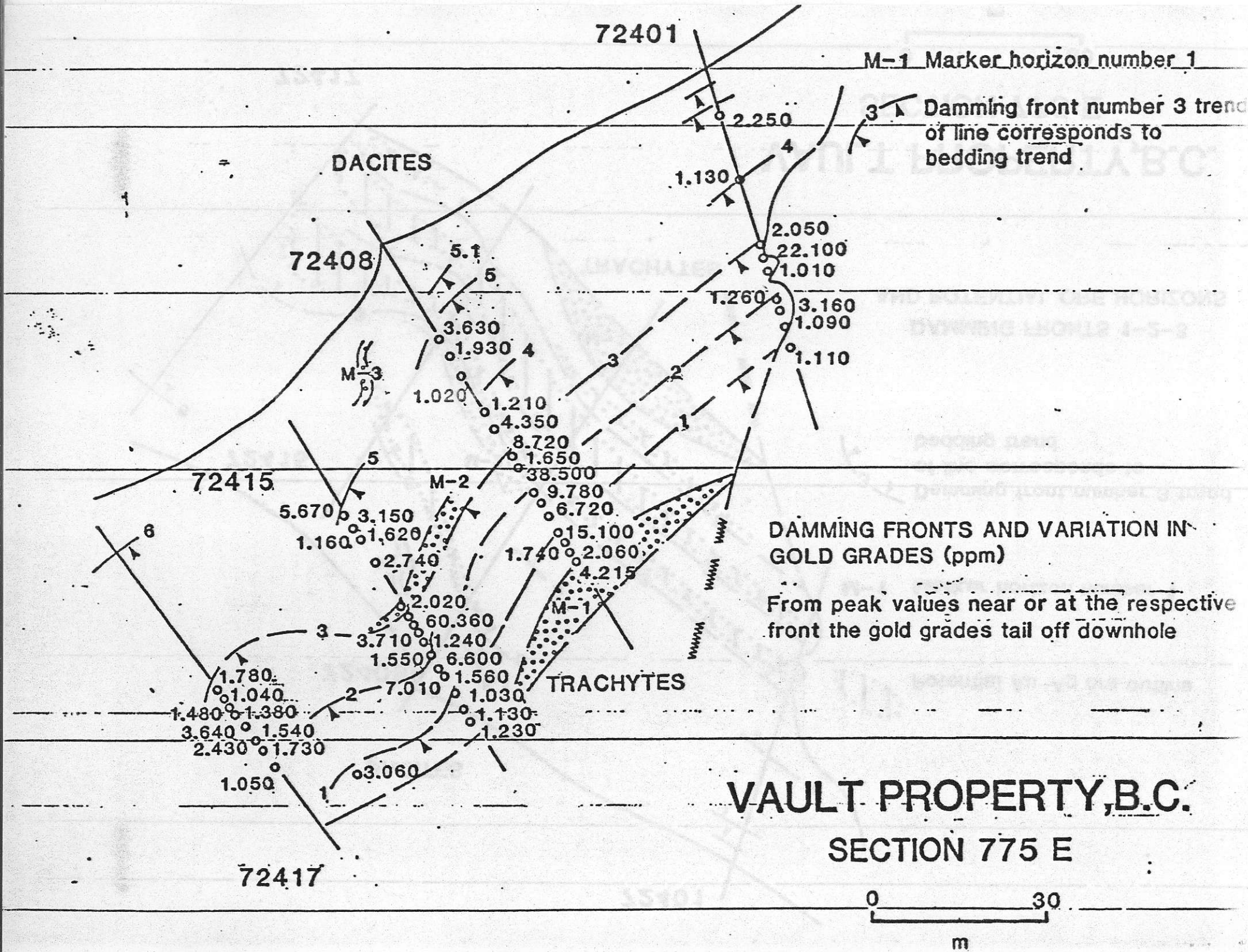
DAMMING FRONTS 1-2-3
AND POTENTIAL ORE HORIZONS

VAULT PROPERTY, B.C.

SECTION 775 E

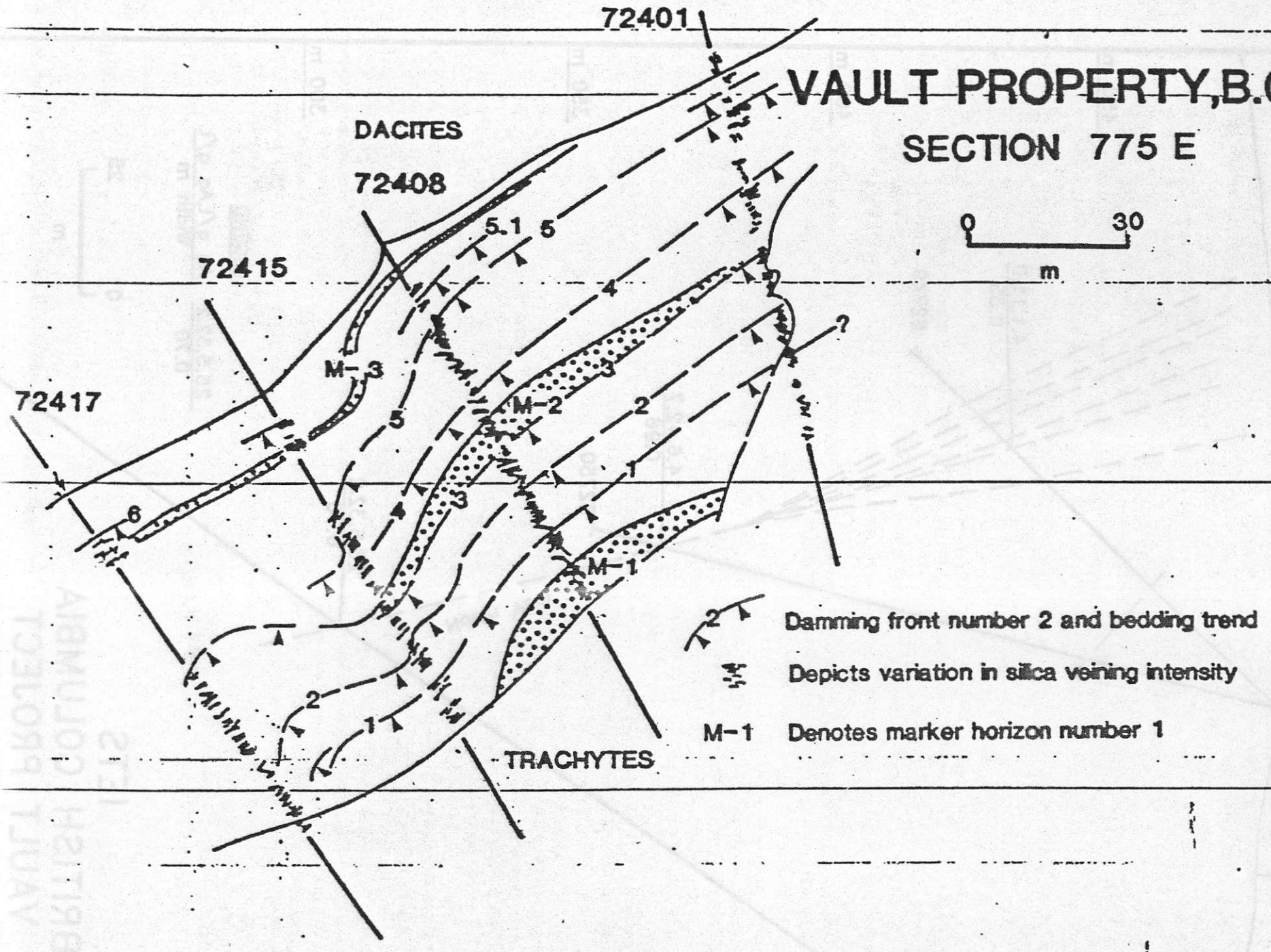
0 30

m



VAULT PROPERTY, B.C.

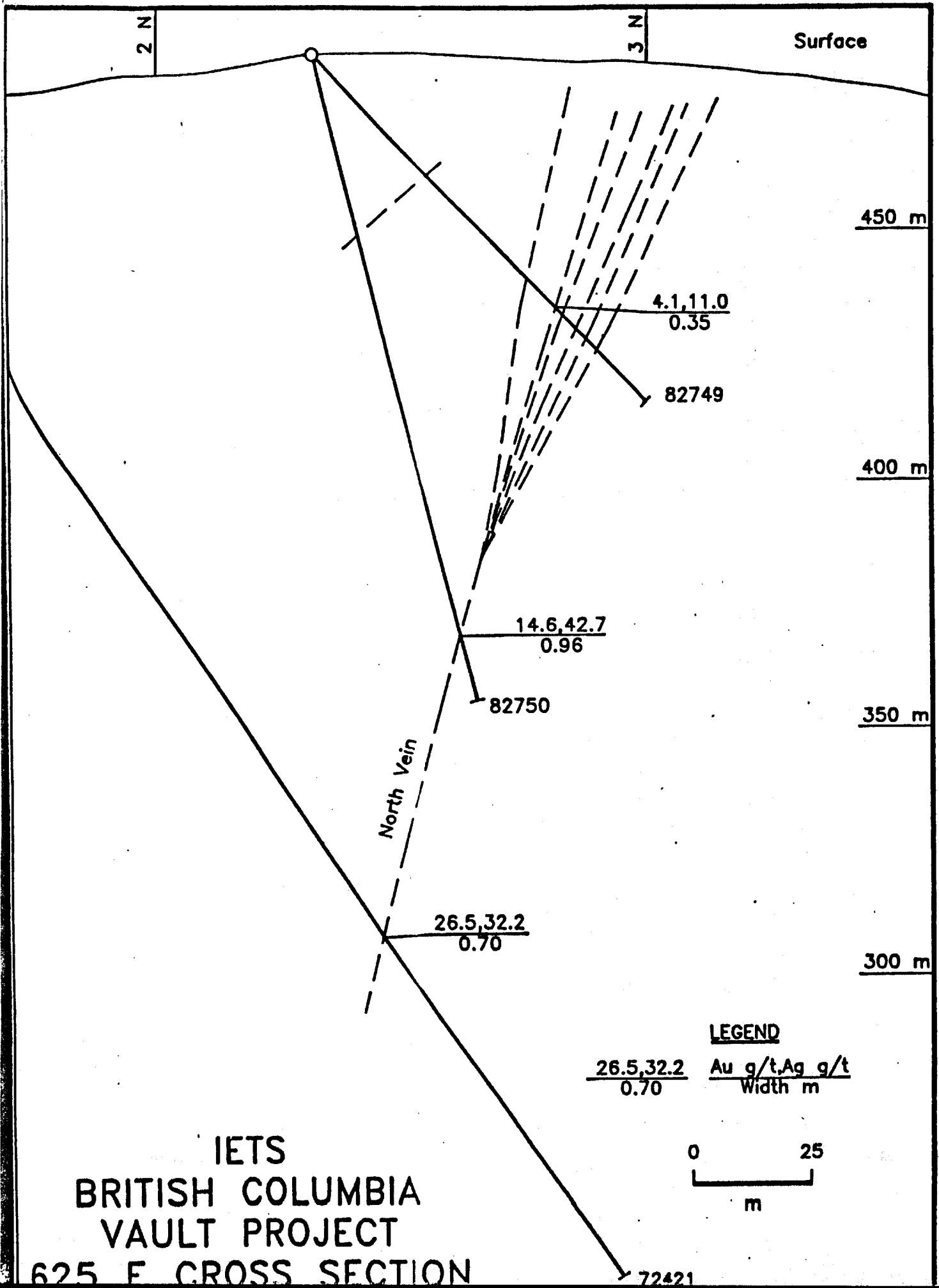
SECTION 775 E



VAULT PROPERTY, B.C.

SECTION 775 E

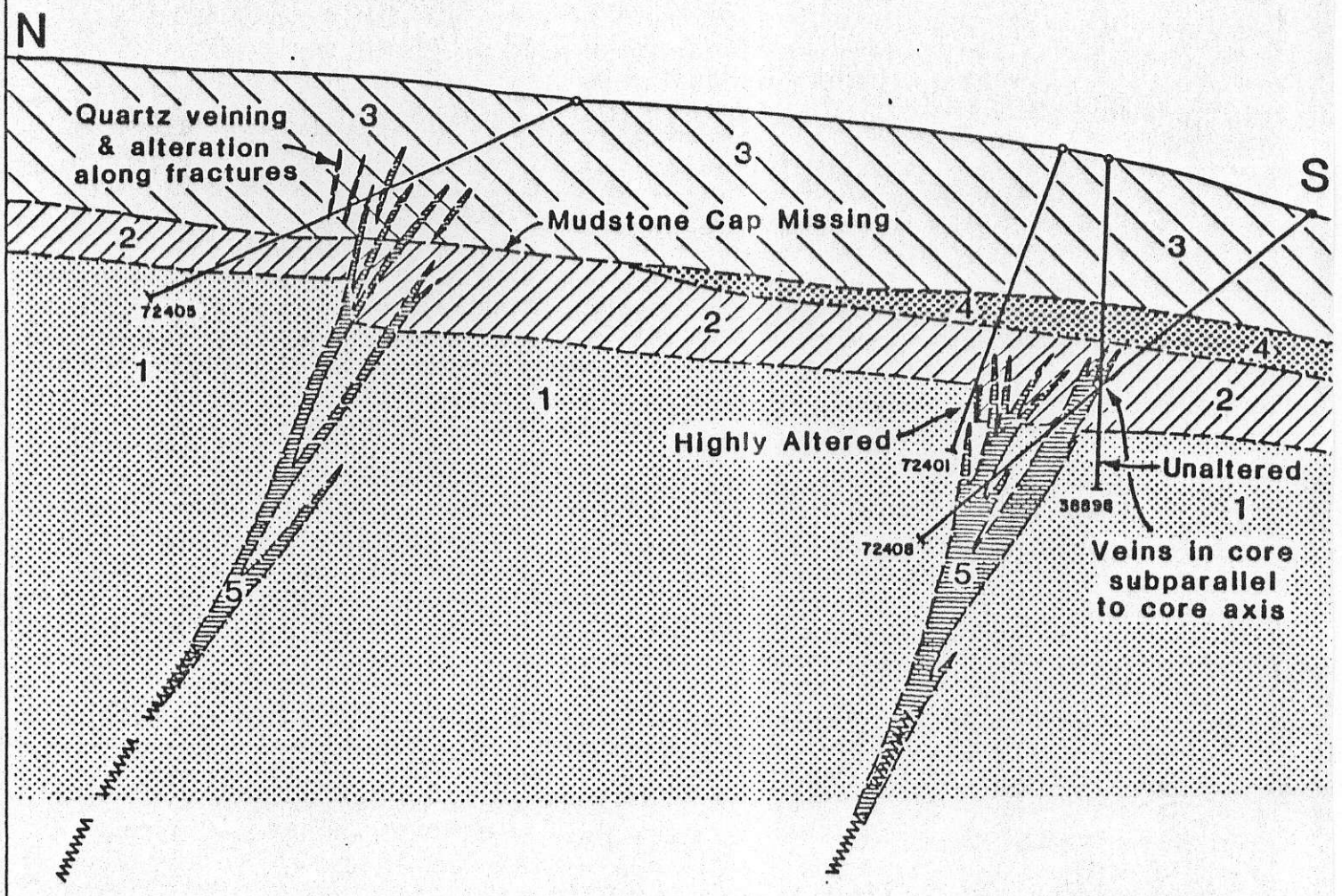
DAMMING FRONTS AND SILICA VEIN DISTRIBUTION



IETS
BRITISH COLUMBIA
VAULT PROJECT
625 E CROSS SECTION

VAULT PROPERTY, B.C.

SCHEMATIC CROSS-SECTION



1 Unit 1

2 Unit 2

3 Unit 3

4 Pyritic Mudstone

5 Veln Material

Fracture