GEOLOGICAL, GEOCHEMICAL AND DIAMOND DRILLING REPORT

ON THE

RAINBOW GROUP, MIDWAY, B.C.

GREENWOOD MINING DIVISION

82E/2W

Latitude 49°02'N, Longitude 118°40'W

Owned by: Dentonia Resources Ltd., Kettle River Resources Ltd. and D. Moore

Operated by: BP Resources Canada Limited

BPVR 87-13

R.H. Wong
S.J. Hoffman

February, 1988

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1. SUMMARY

The RAINBOW claim group, owned by Dentonia Resources Ltd., Kettle River Resources Ltd. and prospector Dave Moore, is located 5 km northwest of Midway, B.C., and covers a portion of the western edge of the Tertiary Toroda Graben. Several chalcedonic, epithermal, silica veins with anomalous values in gold, silver, arsenic and antimony occur within the claims and are hosted in steeply-dipping, north-northeast-trending and shallowly, northeast to east-dipping structures within rocks of Jurassic to Eocene age. The occurrence of epithermal silicification in an area of structural intersection suggests the potential for both bulk-tonnage and lode-type precious metal mineralization to occur.

Preliminary fieldwork completed by BP Resources Canada Limited from June 20 to November 13, 1987 consisted of geological examination and rock chip sampling, an orientation soil geochemical survey, and 159.4 m of diamond drilling in two drill holes. Geological investigations confirmed and expanded the zone of gold-silver-bearing veins which had been delineated by Kerr-Addison Mines Limited in 1984. The soil survey indicated that the BM horizon represents the optimal sample medium and is overlain by a thick (40 cm) AH horizon. Consistent sampling of the BM horizon at 25 m intervals is

considered to be an appropriate exploration procedure on the property. Diamond drilling tested a shallowly dipping zone of silicification known locally as the Picture Rock Quarry and a vertical vein located 300 m to the south. Although neither drill hole returned economic grades of mineralization, in both holes anomalous levels of gold, silver and arsenic occur in silicified zones within broader structurally-controlled envelopes of alteration.

Results of the programme indicate that the claim area has considerable potential to contain bonanza-type or possible bulk-tonnage precious metal mineralization. A systematic programme of geologic mapping, geochemical sampling, and geophysical surveying (IP/VLF) is warranted on the property in order to delineate the best targets for further drill testing.

A total of $25,000 has been applied as assessment on the RAINBOW Group and upon acceptance will maintain claims to their due dates until at least 1990.

2. INTRODUCTION

A) Location and Access

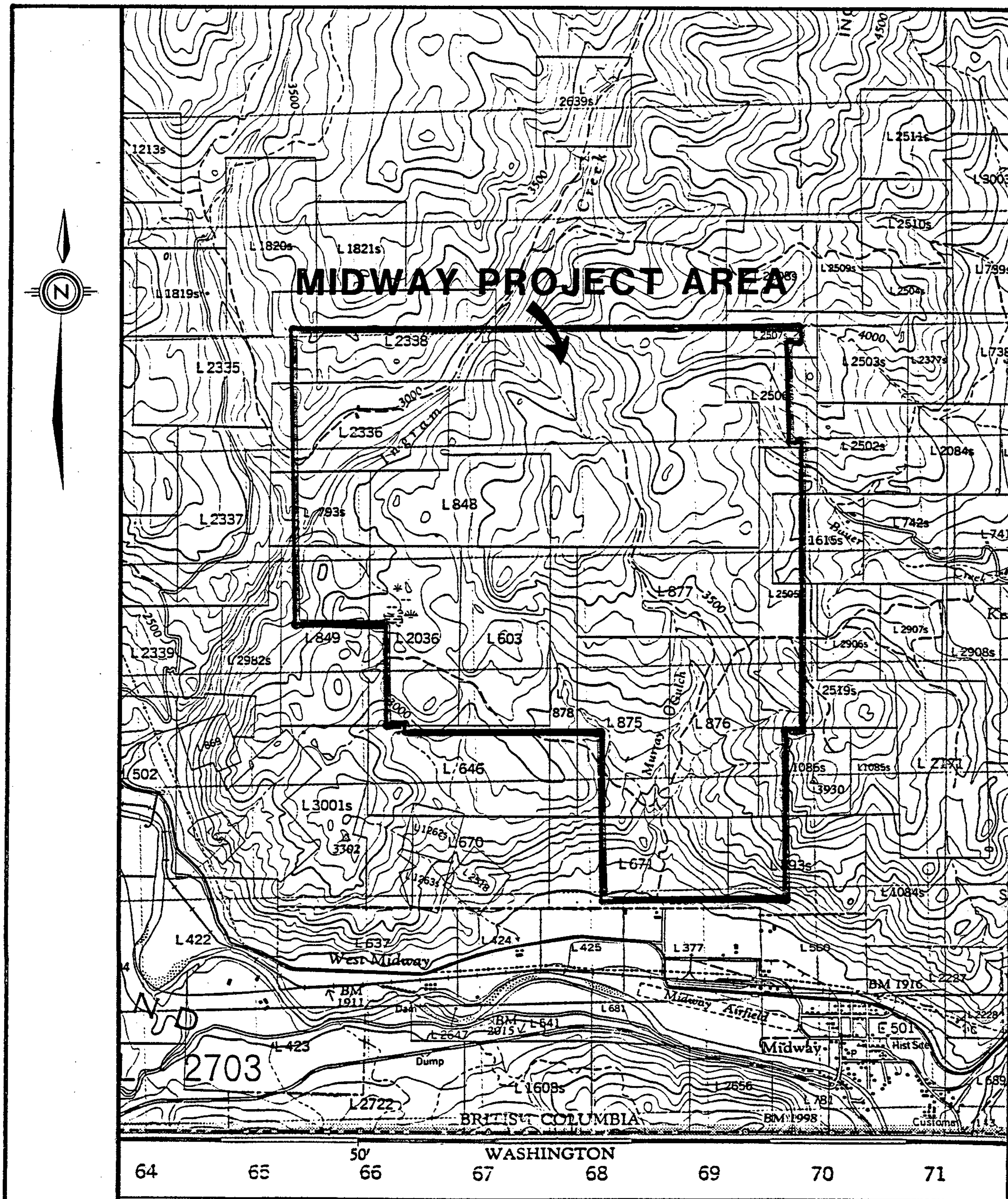
The property is centred at 49°02' North Latitude and 118°40' West Longitude on the south-facing slope of the Kettle River valley. The town of Midway is 5 km to the southeast (Figure 1).

Access is via a network of two and four-wheel drive ranch roads which lead northerly from Highway 3 up Murray Gulch.

B) Land Status

The RAINBOW claim group, comprising six mineral claims and one fractional claim totalling 80 units, is held as follows:

CLAIM NAME	UNITS	RECORD NO.	RECORDING DATE	OWNER
ANNEX	20	3402	Jan 14	Dentonia 50%/Kettle River 50%
GRAHAM CAMP	18	3403	"	" / "
RAINBOW	20	3404	"	" / "
DOWNHILL	8	3405	"	" / "
MIDWAY	9	472	Aug 10	D. Moore
M.F.	4	769	"	"
MIDWAY FR.	1	3401	Jan 14	"



INSET MAP of B.C.

PROJECT AREA

BP RESOURCES CANADA LIMITED MINING DIVISION			
MIDWAY PROJECT			
LOCATION MAP SOUTHCENTRAL B.C.			
SCALE 1:50 000	DRAWN BY: R.W.		FIG. 1
DATE March 1988	DRAFTED BY: H.R.Z.		
N.T.S. 82E/2W	PROJ. 10136	BPVR 87-13	

Within the MIDWAY claim, a three acre area covering what is locally known as the Picture Rock Quarry, is held under lease from D. Moore by J. Carlton. The quarried rock is utilized for lapidary purposes.

C) Topography, Climate and Vegetation

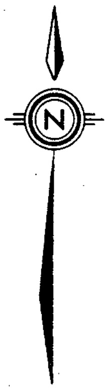
The claim area lies on the gently-rolling to moderately steep south-facing slope of the Kettle River valley at elevations between 600-1200 m a.s.l. The southwesterly and south-flowing drainages of Ingram Creek and Murray Gulch traverse the western and eastern portions of the property, respectively.

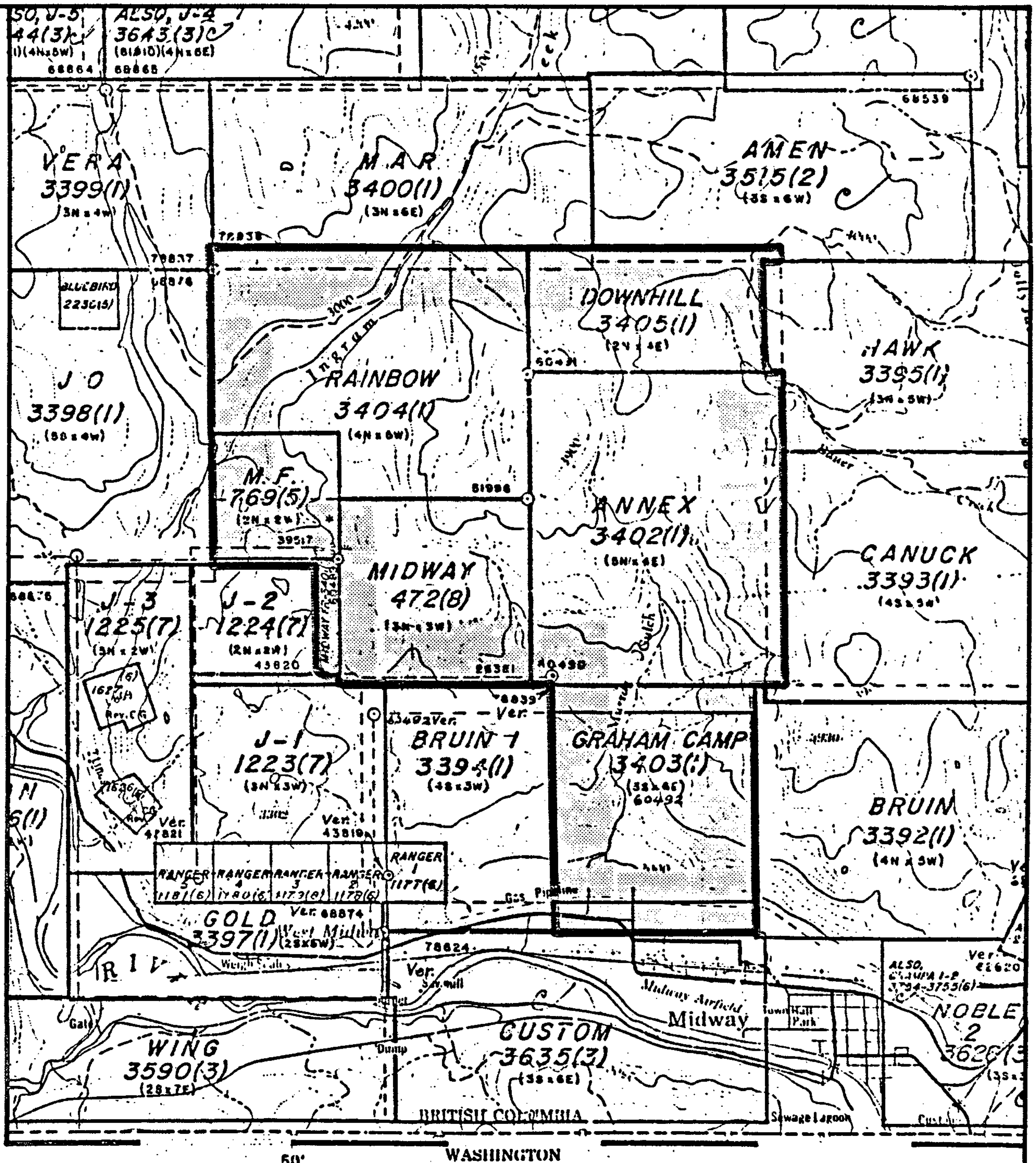
The Midway-Greenwood area is characterized by dry, hot summers and dry, cold winters. Precipitation generally averages 40-50 cm annually.

Vegetation on the property is largely grassland, consisting mainly of ponderosa pine, bitter brush, bunchgrass and sagebrush. Apart from intermittent small-scale mining, the land is used mainly for grazing.

D) Previous Work

Tertiary grabens extending northward from Washington State into the Midway-Grand Forks area of B.C. include the Toroda





BP RESOURCES CANADA LIMITED
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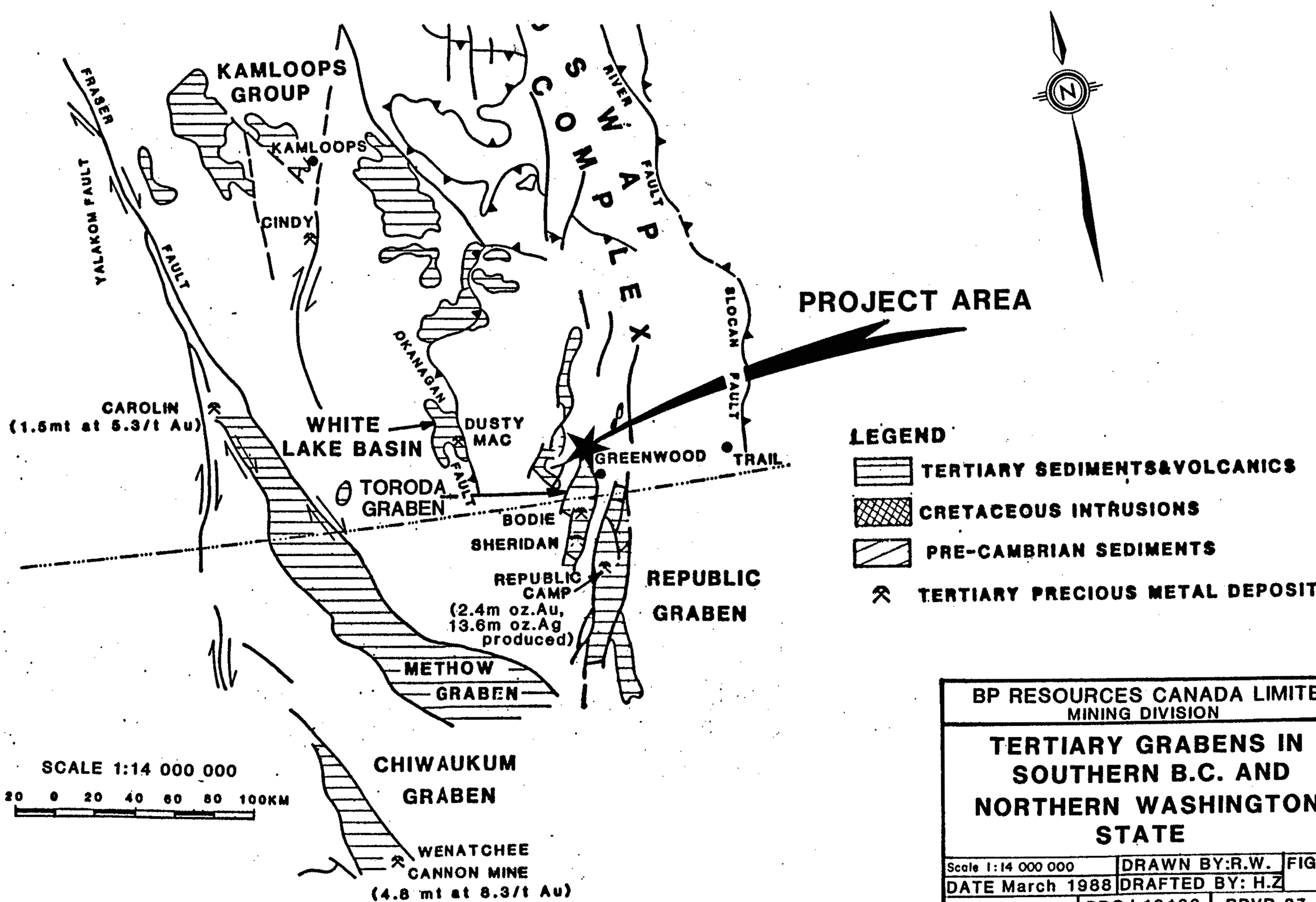
RAINBOW GROUP

CLAIM MAP

SCALE 1:50 000	DRAWN BY: R.W.	FIG. 2	
DATE March 1988	DRAFTED BY: H.R.Z.		
N.T.S. 82E/2W	PROJ. 10136	BPVR 87-13	

Graben and the Republic Graben (Figure 3). The Republic Graben which hosts the Republic mining camp (2.4 m oz Au/ 13.6 m oz Ag produced from epithermal bonanza deposits) and the recent Echo Bay discovery (3.2 m tonnes @ 4.3 g/t Au open-pittable plus .43 m tonnes @ 8.5 g/t Au underground) terminates near the 49th parallel. The Toroda Graben, which is a subparallel, en echelon structure extends as far north as the town of Greenwood.

Two occurrences of epithermal Tertiary silicification are known in the B.C. portion of the Toroda graben. They are the TAM O'SHANTER prospect near the northern margin of the graben, and the RAINBOW prospect near the western margin of the graben. The TAM O'SHANTER was drilled by Bulkley Silver in 1984 and examined by the writer in 1986. The RAINBOW area was the object of considerable early (pre 1950's) prospecting evidenced by numerous shallow pits and diggings. During the late 1960's and early 1970's, D. Moore of Greenwood conducted intermittent mining operations at the MIDWAY MINE, a gold, silver and base-metal mineralized shear on the MIDWAY claim. A total of 19 tonnes were shipped with recovered grades of 14 g/t Au, 1506 g/t Ag, 15% Pb and 16% Zn. In 1983, a joint venture between Dentonia Resources and Kettle River Resources completed a



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TERTIARY GRABENS IN SOUTHERN B.C. AND NORTHERN WASHINGTON STATE

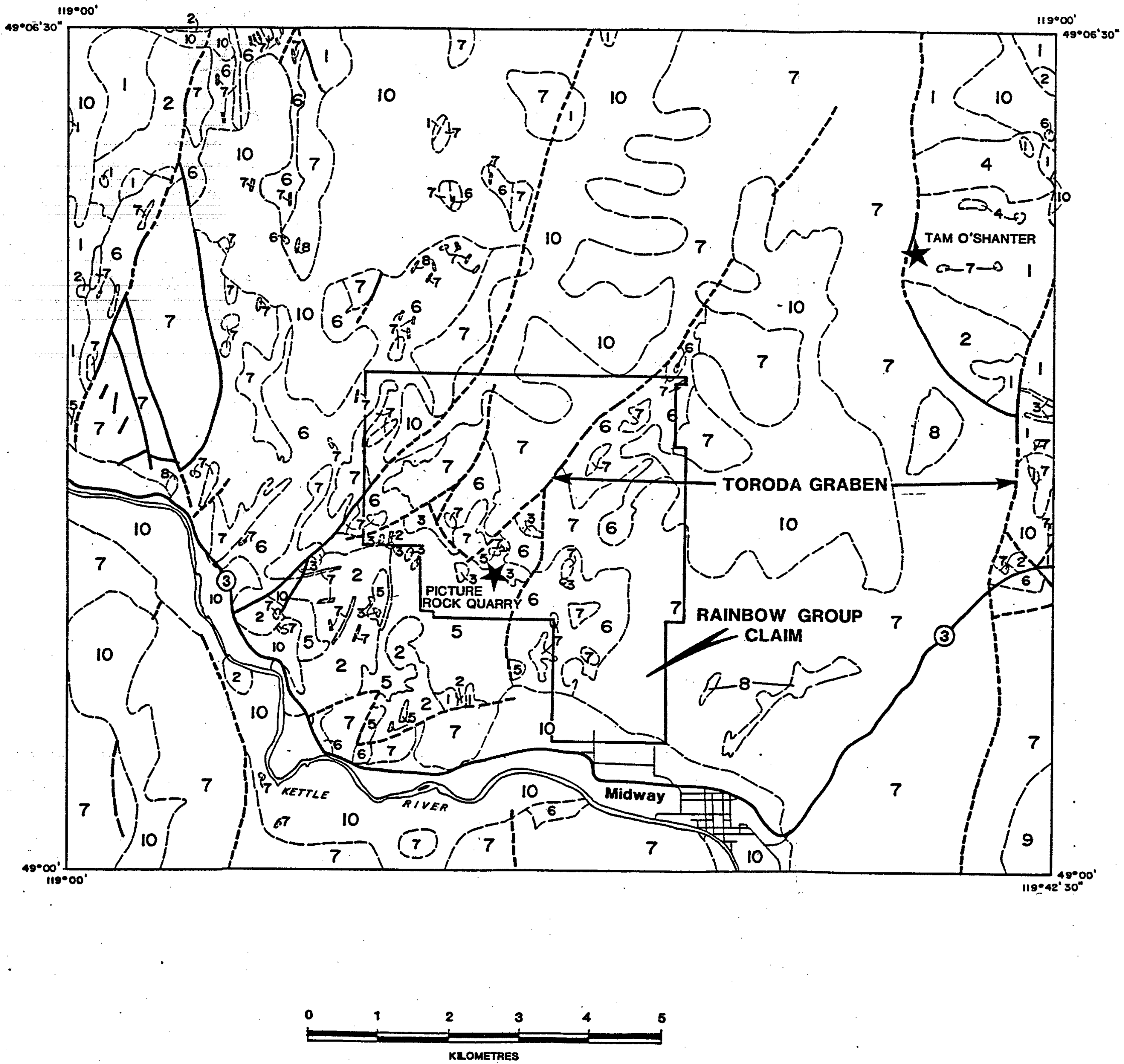
Scale 1:14 000 000	DRAWN BY:R.W.	FIG. 3
DATE March 1988	DRAFTED BY: H.Z	
NTS	PROJ.10136	BPVR 87-13

programme of geologic mapping, a limited ground magnetic survey, and minor rock geochemical sampling.

Kerr-Addison conducted the most recent exploration on the RAINBOW property in 1984. Their work included geologic mapping and rock geochemical sampling over an area 600 m x 1000 m. In addition, a programme of close-spaced soil sampling was conducted over an area 300 m x 200 m centred on the Picture Rock Quarry. Results of this work indicated at least two stages of chalcedonic silicification, with most of the veining localized at serpentinite contacts. As well, arsenic and antimony in soils were shown to be useful pathfinder elements for gold and silver mineralization. No driling was conducted by Kerr-Addison.

3. REGIONAL GEOLOGY

The southwestern portion of the Greenwood map-area, within which the RAINBOW property occurs, is underlain predominantly by Middle Eocene sedimentary and volcanic rocks which have been preserved in a series of small north-northeast trending grabens (Figure 4). Limestone, sharpstone conglomerate and minor chert, sandstone and argillite of the Middle Triassic Brooklyn Formation, and chert and greenstone of the Permian Knob Hill Group bound and locally occur within the grabens. Several small bodies of serpentinized ultramafic rock comprise a crude east-west-trending belt and are considered to be of Jurassic age. A number of high-level porphyritic diorite to quartz diorite intrusions, the largest of which lies partially within the RAINBOW claims, form a subparallel feature to the serpentinites and are of Late Cretaceous to Early Tertiary age. Feldspathic and lithic tuffaceous sandstone, and locally, shale and conglomerate of the Kettle River Formation comprise the basal member of the Eocene succession, while sodic trachyte, andesite, trachyandesite, minor phonolite and tuff of the Marron Formation constitute the volcanic to subvolcanic upper member. These units are intruded by plutonic rocks (Coryell Intrusions) ranging from syenite to quartz monzonite in composition. The youngest rocks of the Middle Eocene succession are epiclastic breccias or olistostromes of the Klondike Mountain Formation. A Table of Formations is shown in Table I.



MAP UNITS

QUTERNARY

10	UNCONSOLIDATED SEDIMENTS

EOCENE

9	KLONDIKE MOUNTAIN FORMATION: OLISTOSTROME
8	CORYELL INTRUSIONS: SYENITE TO QUARTZ MONZONITE
7	MARRON FORMATION: TRACHYTE TO ANDESITE AND INTRUSIVE EQUIVALENTS
6	KETTLE RIVER FORMATION: FELDSPATHIC AND LITHIC TUFFACEOUS SANDSTONE AND SILTSTONE, MINOR SHALE AND CONGLOMERATE

CRETACEOUS OR TERTIARY

5	QUARTZ FELDSPAR PORPHYRY: DIORITE TO DACITE

JURASSIC

4	NELSON INTRUSIONS: DIORITE TO GRANODIORITE
3	SERPENTINIZED ULTRAMAFICS

TRIASSIC

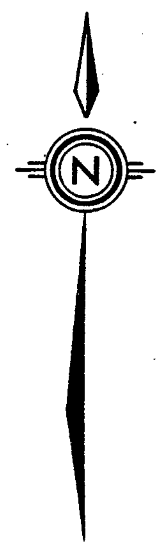
2	BROOKLYN FORMATION: LIMESTONE, SHARPSTONE CONGLOMERATE, MINOR CHERT, SANDSTONE, ARGILLITE

PALEOZOIC

1	CHERT, GREENSTONE, AMPHIBOLITE

FAULT (DEFINED, ASSUMED)

★ TERTIARY EPITHERMAL OCCURRENCES



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REGIONAL GEOLOGY - A PORTION OF THE GREENWOOD MAP - AREA

SCALE As Shown	DRAWN BY: R.W.	FIG. 4
DATE:March 88 REV.	DRAFTED BY: H.R.Z.	
N.T.S. 82E/2	PROJ.: 10136	REPORT:BPVR 87-13

ERA	PERIOD OR EPOCH	GROUP OR FORMATION	MAP UNIT SYMBOL	LITHOLOGY	THICKNESS (metres)
CENOZOIC	PLEISTOCENE AND RECENT			Till, sand, gravel, silt	
	EOCENE Middle	Klondike Mountain Formation	Ekm	Heterogeneous epiclastic breccia of pre-Permian to Middle Eocene rocks	900+
				NON-EROSIONAL UNCONFORMITY WITH MARRON FORMATION	
		Coryell Intrusions	Ec	Syenite, quartz monzonite; minor granite and pulaskite	
		Intrusive equivalents of Marron Formation	Emi	Alkaline syenite, syenite, diorite, and diorite porphyry	
				INTRUSIVE CONTACT	
		Marron Formation	Emv	Soda trachyte, andesite, trachyandesite; minor phonolite and tuff	1525±
		Kettle River Formation	Ekrs	Feldspathic volcanic sandstone, lithic volcanic sandstone, shale, conglomerate	90 to 1200
				UNCONFORMITY	
MESOZOIC	CRETACEOUS OR TERTIARY	Map-unit KTi	KTi	Quartz-feldspar porphyry, quartz porphyry, felsite	
				RELATIONSHIP UNKNOWN	
	CRETACEOUS (?)	Valhalla Intrusions	Kvqm	Granite and quartz monzonite, mainly porphyritic; some pegmatite	
				INTRUSIVE CONTACT	
	JURASSIC AND/OR CRETACEOUS	Nelson Intrusions	JKgd	Granodiorite; minor quartz diorite and diorite	
				INTRUSIVE CONTACT (?)	
	JURASSIC (?)	Ultramafic Intrusions	Jum	Peridotite, pyroxenite, dunite, serpentinite	
				INTRUSIVE CONTACT WITH MAP UNIT Jv (?)	
		Map-unit Js	Js	Siltstone; minor phyllite, sandstone, and conglomerate	300-
		Map-unit Jph	Jph	Black phyllite	500-
		Map-unit Jv	Jv	Flow breccia and massive greenstone; basal (?) conglomerate with limestone clasts; flow breccia with minor interbedded limestone	330+
				UNCONFORMITY	
	TRIASSIC Upper	Map-unit uTsv	uTsv	White limestone, black limestone, grey, black, and buff shale, limestone breccia, purple to maroon agglomerate, minor green cherty argillite	330+
				UNCONFORMITY	
	Middle	Brooklyn Formation	mTl	Limestone, containing some chert grains, skarn; minor chert and sharpstone conglomerate, siltstone, and shale	660
	Middle and (?) Lower		mTs	Sharpstone conglomerate with mainly chert clasts; local chert sandstone; minor black argillite and green argillite	760
				INTERBEDDED WITH RAWHIDE FORMATION; UNCONFORMABLE WITH KNOB HILL GROUP	
	Middle	Rawhide Formation	mTr	Black siltstone; minor black argillite and chert sharpstone conglomerate	120-
PALEOZOIC	CARBONIFEROUS OR PERMIAN	Knob Hill Group	CPkh	Massive chert, greenstone, and amphibolite; minor limestone or marble; locally tan or black argillite, fine grained quartzite, conglomerate	?
		Attwood Formation	CPa	Black to grey bedded argillite; locally some grey chert and cherty siltstone; minor chert sharpstone conglomerate; limestone, with some thin chert interbeds	1000+
				UNCONFORMITY (?)	
	PRE-CARBONIFEROUS (?)	Map-unit Pm	Pm	Quartz-chlorite schist, quartz-biotite-muscovite schist, greenstone, bedded chert with argillaceous partings; minor limestone or marble	?
				RELATIONSHIPS UNKNOWN	
		Map-unit Pa	Pa	Amphibolite; minor greenstone, and bedded chert	?
				RELATIONSHIPS UNKNOWN	
PRECAMBRIAN		Map-unit Pm	Pm	Paragneiss, migmatite; some amphibolite with pegmatite or aplite	?

TABLE I Table of Formations -

Greenwood Map-Area (from Little, 1983)

4. PROPERTY GEOLOGY

A) Introduction

Work by BP geologists in 1987 consisted mainly of confirming previous geological mapping by Kettle River/Dentonia Resources (Fyles, 1983 and Reid and Neilsen, 1984) and Kerr-Addison (1985), resampling known veins, and prospecting for additional veins.

The following section on Property Geology is taken largely from previously-mentioned work supplemented by BP findings.

The main areas of exploration interest are centred on a rusty-weathering zone of siliceous iron carbonate, quartz, and chalcedonic quartz veins known locally as the Picture Rock Quarry, and a nearby gold-silver-base-metal occurrence known as the MIDWAY MINE. The rusty zone is hosted mainly within an irregular body of altered serpentinite which trends west-northwest across the ANNEX, MIDWAY and MF claims. The geology is complicated by at least two periods of intrusion, northeasterly-trending faulting, and multiple episodes of silicification.

B) Lithologies

i) Serpentinite

Serpentinite commonly forms resistant knobs and ledges with distinctive orange-brown weathered surfaces due to common alteration to iron and magnesium carbonate and silica. In localities where serpentinite is not altered, the rock displays the characteristic light to dark green serpentine colours and generally forms more recessive, shaly outcrop. Both altered and unaltered versions are moderately to strongly foliated with general dips at low angles to the north and northeast.

Unaltered serpentinite is a magnetite-rich (5-10% fine-grained disseminated magnetite), talcose rock with no evidence of primary mafic minerals.

Altered serpentinite shows partial to total replacement of serpentine by carbonate (ankerite and siderite) with thin silica veins prominent in the most strongly altered zones. In drill core, alteration appears to be localized primarily by foliation planes and is spatially-associated with dacite porphyry contacts. Magnetic susceptibility readings of core show uniformly decreasing magnetism, due to destruction of magnetite, toward contacts with the porphyry.

Silica veins associated with intense carbonate alteration range from 1 mm to 2 mm in width, can be highly irregular in form, and consist of white, sucrosic to crystalline quartz, locally containing carbonate-altered serpentinite fragments. These veins are considered by the writer to represent late-stage precipitation of silica from fluids derived during carbonate alteration and desilicification of serpentine. Contact metamorphism associated with dacite porphyry appears to be the probable alteration cause.

ii) Dacite Porphyry

A sub-circular body of quartz-feldspar porphyry, approximately 3 km in diameter, is shown on the regional geologic map to underlie the southern portion of the MIDWAY claim. The porphyry is light to medium green in colour and contains 40-60% white, lath-like, commonly-aligned, plagioclase phenocrysts averaging 2-3 mm in length within a fine-grained to aphanitic matrix of hornblende, plagioclase and quartz. Round to square quartz eyes 2-3 mm in diameter locally comprise up to 8% of the rock. In the area of the MIDWAY MINE, a relatively large body of quartz-feldspar porphyry has been mapped (Read and Neilsen, 1984). The relationship between quartz-rich quartz-feldspar porphyritic and quartz-poor feldspar-porphyritic rock is not seen in outcrop, however, in drill core contacts appear to be gradational. Overall composition of the porphyry would appear to lie in the diorite to quartz diorite range. The variability of quartz content may indicate compositional zoning within the porphyry, however, too little data is available as yet to support this.

Field relationships and drill core indicate the porphyry to be intrusive into the serpentinite but contacts between porphyry and Eocene sediments are nowhere exposed.

iii) Kettle River Formation

Pale buff coloured arkose and grey siltstone of the Eocene Kettle River Formation form a number of discontinuous remnants preserved along north-northeast-trending normal faults. Units are generally recessive but available bedding measurements indicate 010-030° strikes and 30-60° southeast dips. The sediments probably unconformably overlie the serpentinite. Faulting appears to have progressively down-dropped these units toward the northwest.

iv) Marron Formation

Volcanic and subvolcanic alkalic rocks of the Marron Formation occur mainly to the north of the serpentinite in the claim area. Amygdular dark grey, feldspar porphyry trachyandesite occurs near the tops of the higher ridges in the southeast portion of the RAINBOW claim and the northwest portion of the ANNEX claim. These flows presumably conformably overlie sediments of the Kettle River Formation.

Elsewhere, Marron rocks are represented by many small plug and dyke-like bodies of biotite monzonite and syenite. Biotite monzonite in the area of the MIDWAY MINE comprises a north-northeast trending body and is distinguished by its equigranular, medium-grained nature, biotite content (15-20%), and relatively strong magnetism.

C) Structure

The claim area represents the apparent intersection of two regional structures. The younger and perhaps more obvious feature is the western margin of the Toroda Graben. On the RAINBOW property, this margin is marked by a series of north-northeast-trending normal faults which have down-dropped units progressively toward the west. The other structure of interest, trending in a general east-west manner, is represented by the serpentinite. Serpentinites in the map-area are considered to have been emplaced tectonically, occurring along faults as young as Eocene age. North to northeast-dipping foliation in the serpentinite on the RAINBOW property may reflect its emplacement along a low-angle, east-west structure (thrust?). Mapping of outcrop along the northern and northeastern lower contact of serpentinite with dacite porphyry suggests that the porphyry intruded an originally shallow-dipping serpentinite body.

Late northwesterly-trending, high-angle faults, such as the one cutting post-mineral biotite monzonite at the MIDWAY MINE, show right-lateral displacements of 30-60 m. Low-angle faults of varying orientations also appear to dislocate mineralized shears and veins in the mine workings.

D) Alteration and Mineralization

Locally intense carbonate-silica alteration of serpentinite is considered by the writer to be of metamorphic origin, probably related to the earliest phase of intrusion (i.e.

dacite porphyry, particularly the quartz-rich variety). Quartz veins associated with this alteration are unmineralized.

The MIDWAY MINE, as described by Reid and Neilsen (1984), consists of sulphide-bearing fissure-fillings within a near-vertical, southeast-striking shear structure hosted by kaolinized, silicified, pyritized quartz-feldspar porphyry. Mineralized lenses averaging .5 m wide contain silver and gold-bearing tellurides, galena, sphalerite and pyrite within a gangue of fine-grained quartz and carbonate. Although this type of mineralization does not appear epithermal in nature, multi-element analysis shows highly anomalous contents commonly associated with high-level systems such as mercury, arsenic, and antimony (see Section 5.A). Mineralization is truncated locally by biotite monzonite, by northwest-trending vertical faults, and by shallow angle faults of varying orientations.

Banded to massive, epithermal, chalcedonic veins and breccia veins containing anomalous gold and silver values occur in two fashions on the property. At the Picture Rock Quarry, white to blue-green, locally well-banded, chalcedonic silica occurs as low-angle, generally northeast to east-dipping veins up to .5 m in width hosted mainly within altered serpentinite. Veins generally subparallel but locally crosscut the foliation. Occurrence of light grey chalcedonic quartz fragments locally within veins suggests at least two episodes of chalcedonic silicification. Clots and bands of white, waxy talc are common in the vein material. North-northeast-trending, white to clear, massive chalcedonic breccia veins from .2 to .6 m wide are seen at two locales where they form relatively distinct resistant spines. In both cases, the veins are hosted in dacite porphyry and contain clasts of altered porphyry.

Because similar chalcedonic silicification at the TAM O'SHANTER prospect, located 7 km to the northeast is hosted within Kettle River Formation sediments, the maximum age of the epithermal mineralization on the RAINBOW claims is assumed to be Eocene.

5. GEOCHEMISTRY

A) Rock Sampling

Table II summarizes significant results of all rock sampling by Kerr-Addison in 1985 and by BP in 1987. Complete multi-element analytical results for BP sampling is provided in Appendix II. Sample locations are included on Figure 4.

From Table II - Section A, it is evident from both Kerr-Addison and BP sampling that chalcedonic veins exposed at the Picture Rock Quarry are anomalous in gold, silver, arsenic and antimony but not enriched in fluorine or mercury. Higher average values from the Kerr-Addison sampling are considered to reflect a combination of the larger number of samples taken and the sporadic nature of mineralization within the veins.

Results from two mineralized samples from the MIDWAY MINE (Table II - Section B), show a strong lead, zinc, silver, arsenic, antimony, mercury and gold enrichment. The significance of the base-metal association with silver, arsenic, antimony, mercury and gold is unknown at this time but the possibility of an epithermal overprint upon an older base-metal dominated episode of mineralization should not be overlooked.

TABLE II. COMPARATIVE ROCK GEOCHEMISTRY

A) Picture Rock Quarry Zone (chalcedonic veins):

i) Kerr-Addison sampling - 31 samples

Element*	Au(ppb)	Ag(ppm)	As(ppm)	Sb(ppm)
Range	5-7300	.1-31.0	15-450	.2-105
Average	428	2.1	230	36

(- Hg analysis for selected samples averaged ≤40 ppb)
(- average Ag/Au = 4.9)
(* fire-assay preconcentation with AA finish, other elements via various chemical digestions with AA finish)

ii) BP sampling - 8 samples

Element*	Au(ppb)	Ag(ppm)	As(ppm)	Sb(ppm)	F(ppm)
Range	39-840	.4-2.9	2-417	2-37	50-230
Average	240	1.6	98	10	86

(- Hg for selected samples averaged ≤70 ppb)
(- average Ag/Au = 6.7)
(* aqua regia digestion with AA finish, Hg analysis by flameless AA, F analysis by specific ion electrode, others by ICP)

B) Midway Mine:

BP Sample No.	Pb (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Au (ppb)
100356	1164	3454	125	2576	83	920	1981
100357	4518	8780	394	3609	317	1900	3778

C) Silica Spines Within Dacite Porphyry:

BP Sample No.	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	F (ppm)	Hg (ppb)
100601	11	.1	25	2	50	70
*(100605	2	.2	14	2	110	10
(100607**	3240	3.2	34	3	85	10

(* two samples from same vein)
(** average of original analysis and reanalysis of pulp)

Results from samples of silica spines within the dacite porphyry (Table II - Section C) again show the sporadic nature of the mineralization. In particular, samples 100605 and 100607, which comprise similar samples from the same vein, display extremely dissimilar values in gold and silver. Arsenic shows weak enrichment in the vein samples, while antimony, fluorine and mercury show no enrichment.

5. B) Soil Survey

i) Introduction

The MIDWAY property soil orientation was undertaken to confirm the Au-As-Sb association reported in soils in proximity to silificied zones in serpentinite. Previous workers had described the sampling of B and C horizon materials at many sample sites. In view of the differing concentration of elements in the two horizons at several sites and an absence of multi-element data, the present study was undertaken for orientation purposes.

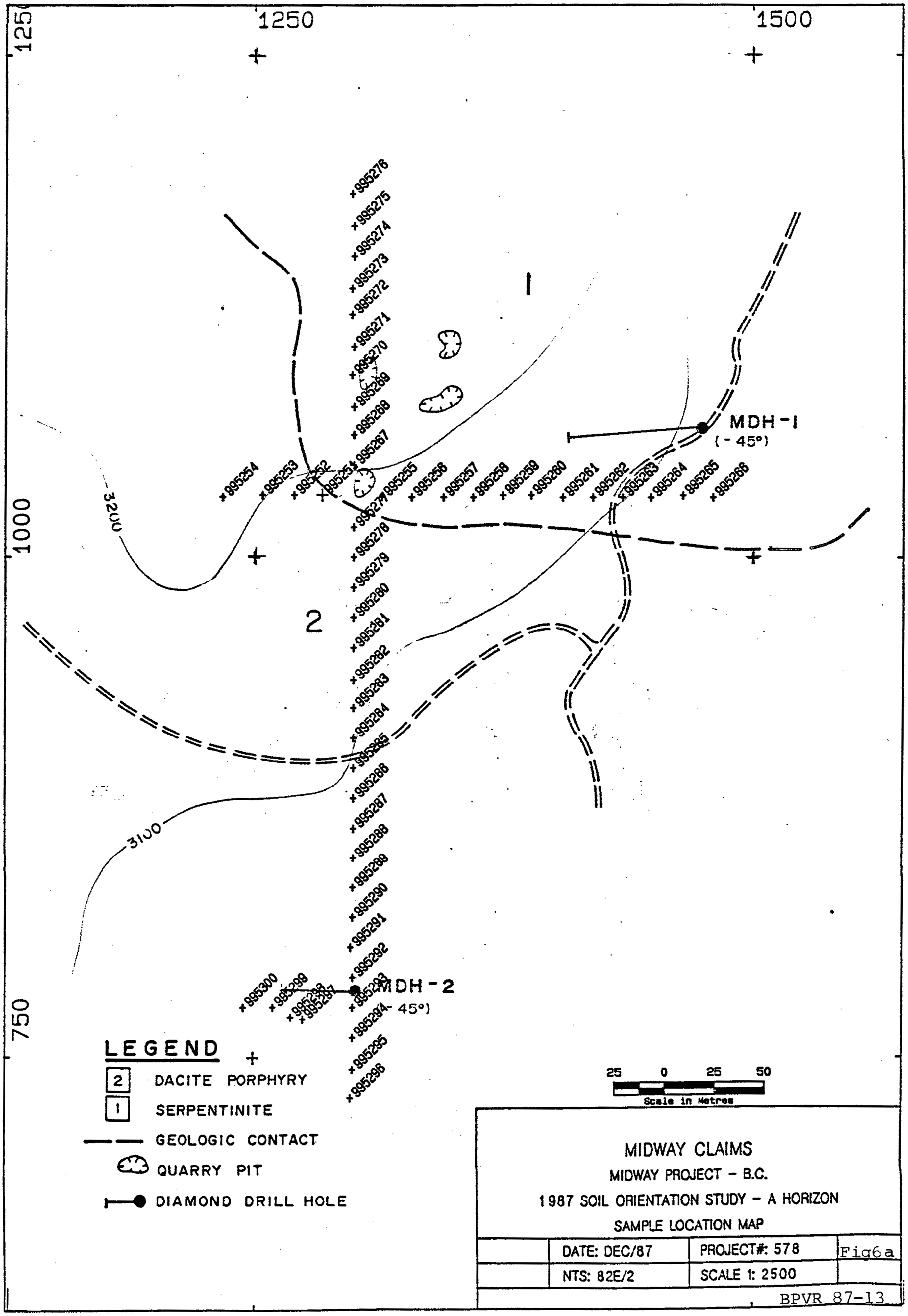
The study area is a gently rolling upland with bedrock well exposed in the hills and locally along the valley bottoms. The region is semi arid. As a consequence, much of the landscape supports only grass which serves as feed for range cattle. Trees comprising Ponderosa pine grow widely separated in forested areas.

Bedrock is exposed over 2% to 5% of the landscape. Surrounding obvious outcrops are areas of rubble crop and other locally derived residuum. Within the valleys, overburden cover is thicker and consists of wash derived from the hills during flash floods. Thicknesses are unknown but could be substantial. Soil profile development is relatively constant. At surface is a thick AH horizon averaging about 30 cm thick, although in places it is thin at 5 cm, whereas in other areas it exceeds 50 cm in thickness. It is recognized by its dark colour produced by decaying organic matter accumulations. Underlying the AH is the BM horizon. The BM is a medium brown colour characterizing weak Fe enrichment.

Previous workers reported sampling the B and C horizons. From the above descriptions, it is likely they sampled the A (AH) and B (BM) horizons.

ii) Sample Collection and Analysis

Soil samples were taken at a 12.5 m intervals along two perpendicular lines centering on the southermost pit of the Picture Rock Quarry which is known to contain some Au. Two samples were taken at each site. The AH zone was sampled within 10 cm of surface (Fig. 6A). The BM horizon was sampled at an average 40 cm depth (Fig. 6B). A total of 50 sites were examined.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1500
1250
1000
750
1
2
MDH-1
(-45°)
MDH-2
(-45°)
3200
3100
995276
995275
995274
995273
995272
995271
995270
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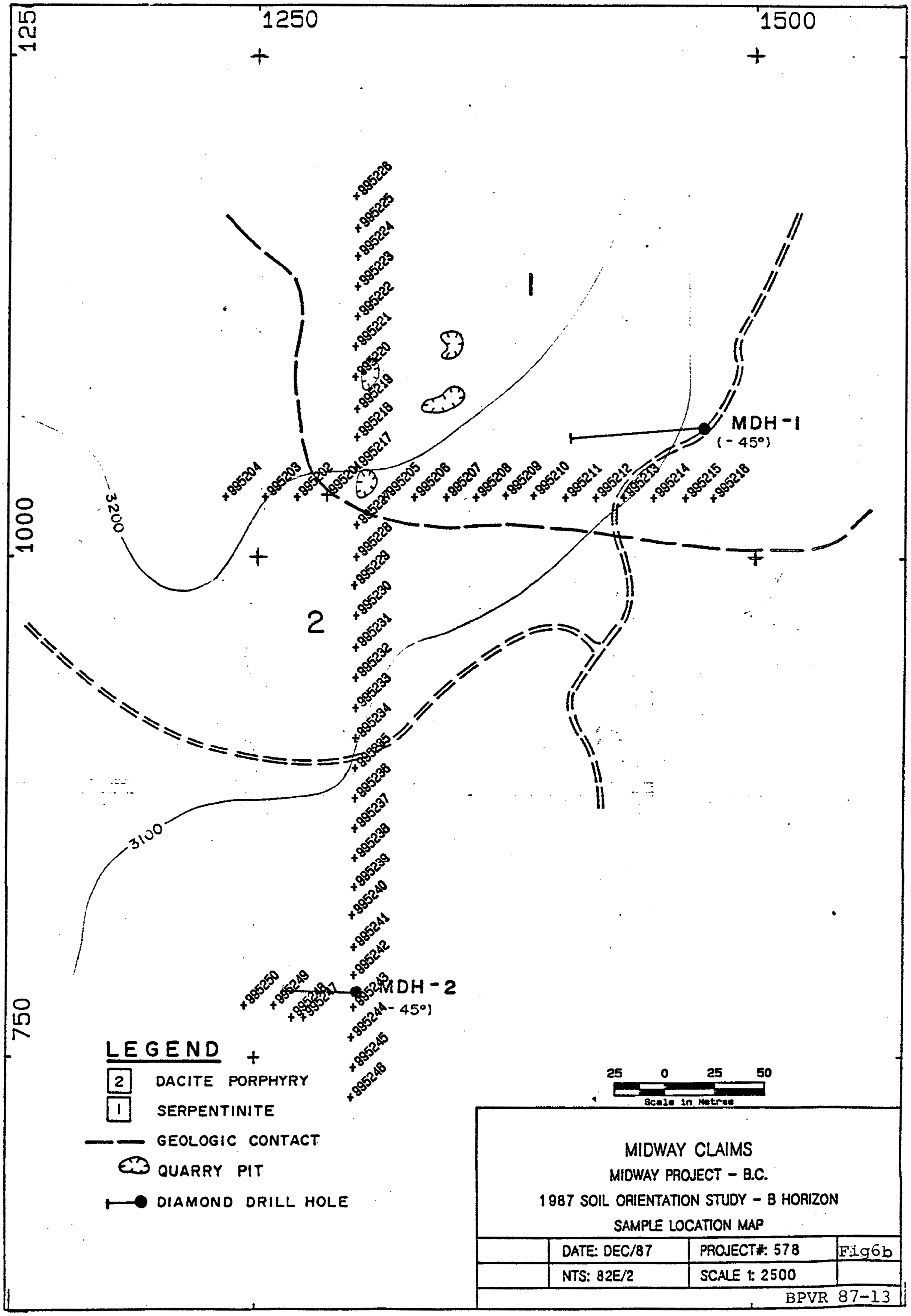
995297
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
25 0 25 50
Scale in Metres
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - A HORIZON
SAMPLE LOCATION MAP
DATE: DEC/87
PROJECT#: 578
Fig6a
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



1250
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125
1000
750
3200
3100
1
2
MDH-1
(-45°)
MDH-2
(-45°)
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995224
995223
995222
995221
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Fig6b
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13

Sample locations along the east-west line recover the previously existing grid. The north-south line was topofilled and crosscuts the existing grid. All station locations are marked by an aluminum tag which was left on site.

Samples were hand delivered to Acme Analytical at the completion of the programme. They were dried and analyzed for Au following an aqua regia digestion, for F following a peroxide fusion and for a suite of 30 elements following a separate aqua regia disgestion. Analytical procedures are reported in Appendix VI.

iii) Method of Data Evaluation

AH soil samples were given sample type code 51 in the listing of data (Appendix V) whereas BM samples were coded as sample type 50. Histograms were drawn for each sample type (Fig. 7A and 7B), respectively. These were then interpreted following procedures outlined in Appendix III.

iv) Description of Results

Geochemical data for the A (Fig. 8A-Z) and B (Fig. 9 A-Z) soil horizons will be described for each element in turn. Figures 8A-Z and 9A-Z can be found in Appendices IV and V, respectively.

Au (Fig. 8A, 9A)

Most Au values report at less than 3 ppb. The central pit area is not reflected by a significant Au feature. The only anomaly of the survey is a two point feature in B soil 15 m south of MDH-2, in an area of residual soils.

As (Fig. 8B, 9B)

Both As distributions are comparable. Anomaly dimensions are about 50 m associated with the central pit. A second two point anomaly (i.e. diameter of 12.5 m) lies adjacent to a second pit 50 m to the north.

Sb (Fig. 8C, 9C)

Any detectable value of Sb (i.e. >2 ppm) has been defined as anomalous. A similar pattern is seen in both sets of data. The anomaly is slightly smaller than the As feature. Downslope movement of Sb in the AH relative to the BM is noted.

Ag (Fig. 8D, 9D)

A two point Ag anomaly lies downslope of the southermost pit. Values of 0.7 to 0.9 ppm in the B horizon are slightly higher that those in the AH.

Bi (Fig. 8E, 9E)

All values are at detection limits.

Mo (Fig. 8F, 9F)

All values are at detection limits.

Cu (Fig. 8G, 9G)

The pit is associated with a Cu anomaly 25 m across in both horizon. In the south, a similarly-sized Cu anomaly is noted, but the zone is a little stronger in the BM and can be seen to dispérse eastward along a gully draining the quartz vein target of MDH-2.

Pb (Fig. 8H, 9H)

Backgrounds are a little higher for Pb in the BM. Both horizons define a similar anomaly around the pit 50 m across. Two weak zones of Pb enhancement in base of slope environments in the BM data are not apparent amongst AH data.

Zn (Fig. 8I, 9I)

Zn anomaly around the pit is high contrast in both surveys, with the BM horizon values slightly higher. The southern quartz vein is also reflected by a weak Zn anomaly. The anomaly is slightly stronger and much larger in BM horizon data compared to AH data.

Fe (Fig. 8J, 9J)

Fe backgrounds in the BM horizon are slightly higher than in the AH. The pit is represented by a 25 m wide anomalous zone in both surveys. A second anomaly is seen 50 m to the east along the southern contact of serpentinite with dacite porphyry. A weak feature also lies 50 m to the north. However, only the BM horizon exhibits Fe enhancement associated with the southern quartz vein.

Mn (Fig. 8K, 9K)

A high contrast Mn anomaly coincides with the pit. The southern quartz vein is associated with elevated Mn values. The anomaly is slightly larger in the AH horizon.

Co (Fig. 8L, 9L)

Co does not follow Mn. High values for both surveys lie along the serpentinite margin.

Ni (Fig. 8M, 9M)

The Ni distribution clearly differentiates mapped geology, and data from both horizons present the same picture. Downslope dispersion off the area of greater than 300 ppm values over the serpentinite is 20 m.

Cr (Fig. 8N, 9N)

Cr values are higher in the AH than in the BM. The Cr distribution highlights only a portion of the serpentinite unit and may be useful in subdividing this unit if necessary.

V (Fig, 8Ø, 9Ø)

V contents do not vary greatly. They vary regularly but do not exhibit much contrast.

Ba (Fig. 8P, 9P)

Contrast amongst Ba contents is weaker in the AH than in the BM where average values are higher. Both the Picture Rock Quarry area and the southern quartz vein area are zones of Ba accumulation. Ba is also elevated in a break of slope region some 200 m downslope of the southermost pit.

Sr (Fig. 8Q, 9Q)

The Sr distribution is somewhat noisy. Anomaly contrast and size is slightly larger in BM horizon soils.

Ca (Fig. 8R, 9R)

The Ca distribution is more homogeneous in AH samples, but both surveys give the same anomalous conditions downslope of the pit and around the southern quartz vein.

Mg (Fig. 8S, 9S)

Mg is similar to Ni in defining the ultramafic rock as Mg-rich. Values are higher in the BM and the geochemical pattern is a little more homogeneous.

K (Fig. 8T, 9T)

Both distributions are similar and define a 100 m long portion of the north-south line to be enhanced, coinciding with a seepage area.

Al (Fig. 8U, 9U)

Al contents are higher in the BM horizon and distribution patterns are more homogeneous. Al is enriched in association with the north-south line at both pits and in the midst of the seepage area.

<u>Ti</u> (Fig. 8V, 9V)

Ti contents are slightly higher in the BM which does not distinguish any portion of the study. By contrast, Ti content of the AH is more or less restricted to the serpentinite unit.

<u>P</u> (Fig. 8W, 9W)

P contents are higher in the BM zone. A high contrast anomaly for both surveys lies along the road to MDH-1. A 12.5 m anomaly is also noted downslope of the pit.

<u>W</u> (Fig. 8X, 9X)

All W values are at detection limits.

<u>F</u> (Fig. 8Y, 9Y)

F backgrounds are higher in the BM. BM horizon data are restricted to the serpentinite unit whereas AH data reflects an area around the southern quartz vein.

La (Fig. 8Z, 9Z)

La levels are higher in the BM than in the AH zone. One anomaly is defined adjacent to a road in the AH zone, but there is not much variation amongst BM data to warrant defining anomalies.

v) Discussion of Results

Differences between distribution patterns for AH and BM horizons are not significant, although selection of the BM zone increases anomaly size for several base and/or pathfinder elements. Anomaly contrast is also a little bit better, perhaps due to dilution by surface wash in grassland areas. For Au, the only anomaly apparent in the data set was found in the BM horizon survey.

Two areas of mineralization serve as focal points for describing geochemical dispersion. Anomalous patterns for each are summarized in Table III. It is likely that to find these types of occurrences, the sample interval can be no larger than 25 m.

The position of the ultramafic unit appears well defined based on the Ni distribution. The serpentinite is reflected by elevated values of Co, Ni, Cr, Mg and F. Subdivision of this unit may be possible, as suggested by level changes for these and other elements. Downslope dispersion is estimated at 25 m. Considerably greater dispersion is likely along gullies where overburden comprises a wash alluvium. The study is not sufficient in extent to document dispersion in the wash environment.

Proper sampling does not appear to be a problem. Variability will be minimized if only one horizon is sampled.

vi) Conclusions

Sampling the BM horizon is suggested for routine work and a sample interval of 25 m is optimum to search for similar or larger-sized prospects. Geochemical surveying appears to be an effective tool for this property.

TABLE III

Geochemical characteristics of elements associated with the Picture Rock Quarry and southern quartz vein prospects.

PICTURE ROCK PIT			SOUTHERN QUARTZ VEIN		
Element	Size	Concentration	Element	Size	Concentration
As	50 m	35- 100 ppm			
Sb	50 m	2- 6 ppm			
Ag	125 m	0.8 ppm			
Cu	30 m	35- 50 ppm	Cu	50 m	35- 50 ppm
Pb	50 m	20- 60 ppm			
Zn	25 m	70- 200 ppm	Zn	50 m	70- 100 ppm
Fe	25 m	3.2-3.5%	Fe	25 m	3.5-3.8%
Mn	25 m	1200-1800 ppm	Mn	30 m	1000-2200 ppm
Ba	25 m	250- 350 ppm	Ba	25 m	250- 300 ppm
Sr	25 m	90- 110 ppm			
Ca	25 m	0.7-0.85%	Ca	30 m	0.7-1.3%
Al	12.5 m	2.6-2.8%			
P	12.5 m	0.1-0.12%			

6. DIAMOND DRILLING

A) Introduction

From November 6-11, 1987, Min-Ex Drilling of New Denver, B.C., completed 159.4 m (523 feet) of NQ drilling from two sites on the MIDWAY claim. A D-8 caterpillar, contracted from J.C. Olsen of Midway, was utilized to prepare the drill-sites, move the Longyear 38 diamond drill, and complete site reclamation.

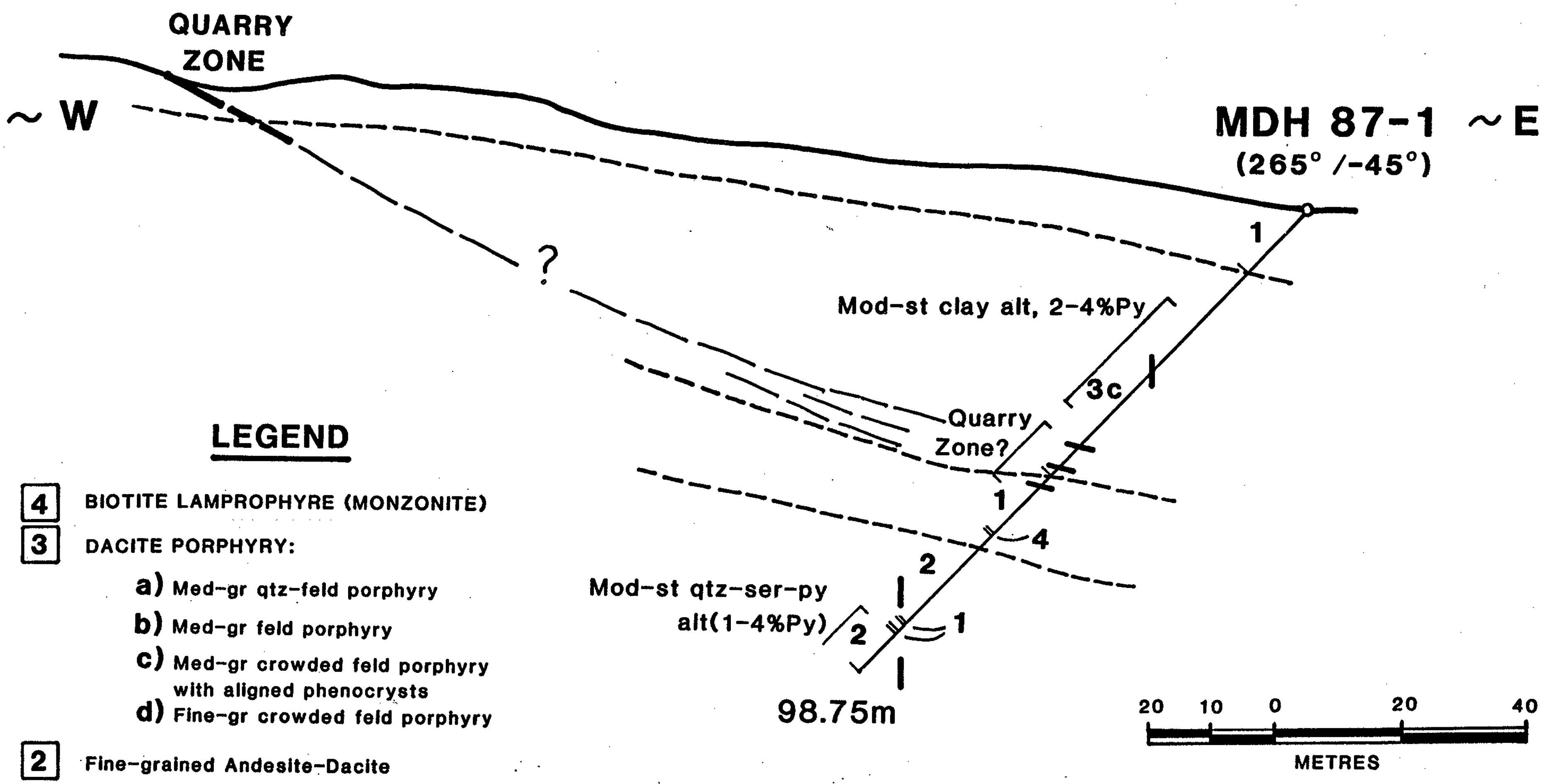
Drill core was logged, split and stored near Greenwood on the property of Kettle River Resources president, George Stewart. Core logs conmpleted by the writer are contained in Appendix VII.

B) Drill Hole MDH 87-1

i) Geology

Drill hole MDH 87-1, oriented 265° azimuth/-45° dip, was located on the road beneath the powerline approximately 175 m east and downslope of the Picture Rock Quarry (Figure 5). The drill hole was intended to test the down-dip potential of chalcedonic veining exposed in the quarry.

The drill hole was collared in variably-altered serpentinite and to 71.9 m consists of serpentinite enclosing a relatively wide (approximately 35 m) body of dacite porphyry (Figure 10). Alignment of phenocrysts in the porphyry form similar core axis angles as foliation in the serpentinite suggesting that the porphyry is a sill-like intrusion conformable within the serpentinite. This would be compatible with observed field relations. Quartz eyes are not evident in the porphyry and it displays a relatively uniform texture and grain size. From approximately 25-50 m, the dacite porphyry displays moderate to strong clay alteration accompanied by 2-4% fine-grained disseminated pyrite. At the approximate centre of this altered and oxidized zone is a 40 cm wide, massive, pale green to white chalcedonic vein containing fragments of oxidized porphyry and clots of white talc. The vein interval corresponds to a loss of circulation of drill water and a noticeable decrease in recovery of wall-rock. From 50.7-56.0 m are three additional zones of chalcedonic veining totalling approximately 1 m in width. It is possible that these latter veins represent the down-dip, digitated extension of the quarry zone hosted here in dacite porphyry and



LEGEND

4 BIOTITE LAMPROPHYRE (MONZONITE)

3 DACITE PORPHYRY:

a) Med-gr qtz-feld porphyry
b) Med-gr feld porphyry
c) Med-gr crowded feld porphyry with aligned phenocrysts
d) Fine-gr crowded feld porphyry

2 Fine-grained Andesite-Dacite

1 Serpentinite

Chalcedonic vein/veining; orientations assumed

Assumed geologic contact

Shear Zone

BP RESOURCES CANADA LIMITED
MINING DIVISION

GEOLOGIC CROSS-SECTION THROUGH MDH 87-1

SCALE 1:1000	DRAWN R.W.	FIG. 10		
DATE March 1988	DRAFTED H.Z.			
N.T.S. 82E/2W	PROJ. 10136	BPVR 87-13		

serpentinite immediately adjacent to their mutual contact. Of the three veins, one closely resembles quarry material (50.7-50.8 m) but one other (55.4-55.6 m) is very similar in appearance to silica breccia intersected in drill hole 87-2.

From 71.9-88.0 m is a greenish, fine-grained andesite-dacite unlike any rock type seen at surface. Locally, it contains what appear to be serpentinite inclusions, thus it is probably similar in age to the dacite porphyry.

The drill hole ends in a strongly altered fine-grained, equigranular to subporphyritic andesite-dacite. Pervasive quartz-sericite-pyrite alteration is cut by prominent carbonate fracture-fillings. Hematite staining of altered feldspar crystals gives these grains a pinkish tinge resembling K-feldspar. This rock looks to be a more strong altered variety of andesite-dacite present from 71.9-88.0 m.

Lithologies intersected in MDH 87-1 suggest that in this area the serpentinite is a relatively thin unit which has been injected by abundant dacite porphyry. True orientations of chalcedonic silica veins in drill core are not possible to determine from available data, however, it is probable that both near-vertical and shallowly east-dipping (quarry zone) attitudes are present. The vein at 33.85 m occurs within an envelope of clay-altered and oxidized porphyry similar to the steeply-dipping vein cut by MDH 87-2 (see below). Thus, silicification may have been localized by a high-angle 'feeder' structure and then spread laterally along low-angle subsidiary structures.

The apparent increase in alteration downhole within the fine-grained andesite-dacite suggests that deepening of this hole may have been advisable.

ii) Geochemistry

Examination of the geochemical profile for MDH 87-1 (Figure 11, in pocket), shows two distinct zones of enhanced values. The uppermost zone is approximately 10 m long, centred on the chalcedonic vein at 33.85 m, and displays anomalous values in gold (up to 149 ppb), silver (up to .8 ppm) and arsenic (up to 128 ppm). Barium (up to 620 ppm) appears to comprise a corresponding but longer (over 20 m) zone of enrichment. Other elements of interest are copper, which appears to show an antipathetic relationship, and fluorine, which appears to constitute a high background throughout the porphyry.

The lowermost zone is centred on two narrow inliers (?) of serpentinite which appear to mark the approximate contact between weakly and strongly altered fine-grained andesite-dacite at about 90 m. Serpentinite from 90.2-90.8 m contains strong stockwork chalcedonic veining. Enhanced levels of gold (up to 210 ppb), silver (up to .8 ppm), arsenic (up to 296 ppm), antimony (up to 13 ppm), zinc (up to 98 ppm), lead (up to 112 ppm), molybdenum (up to 15 ppm), iron (up to 4.0%), strontium (up to 374 ppm), and alumina (up to 2.89%) comprise a zone from 10-12 m in length. High values in cobalt, nickel, chrome and magnesium are associated with the serpentinite. High fluorine (up to 1340 ppm) throughout the fine-grained andesite-dacite supports a genetic association with the coarser dacite porphyry.

C) Drill Hole MDH 87-1

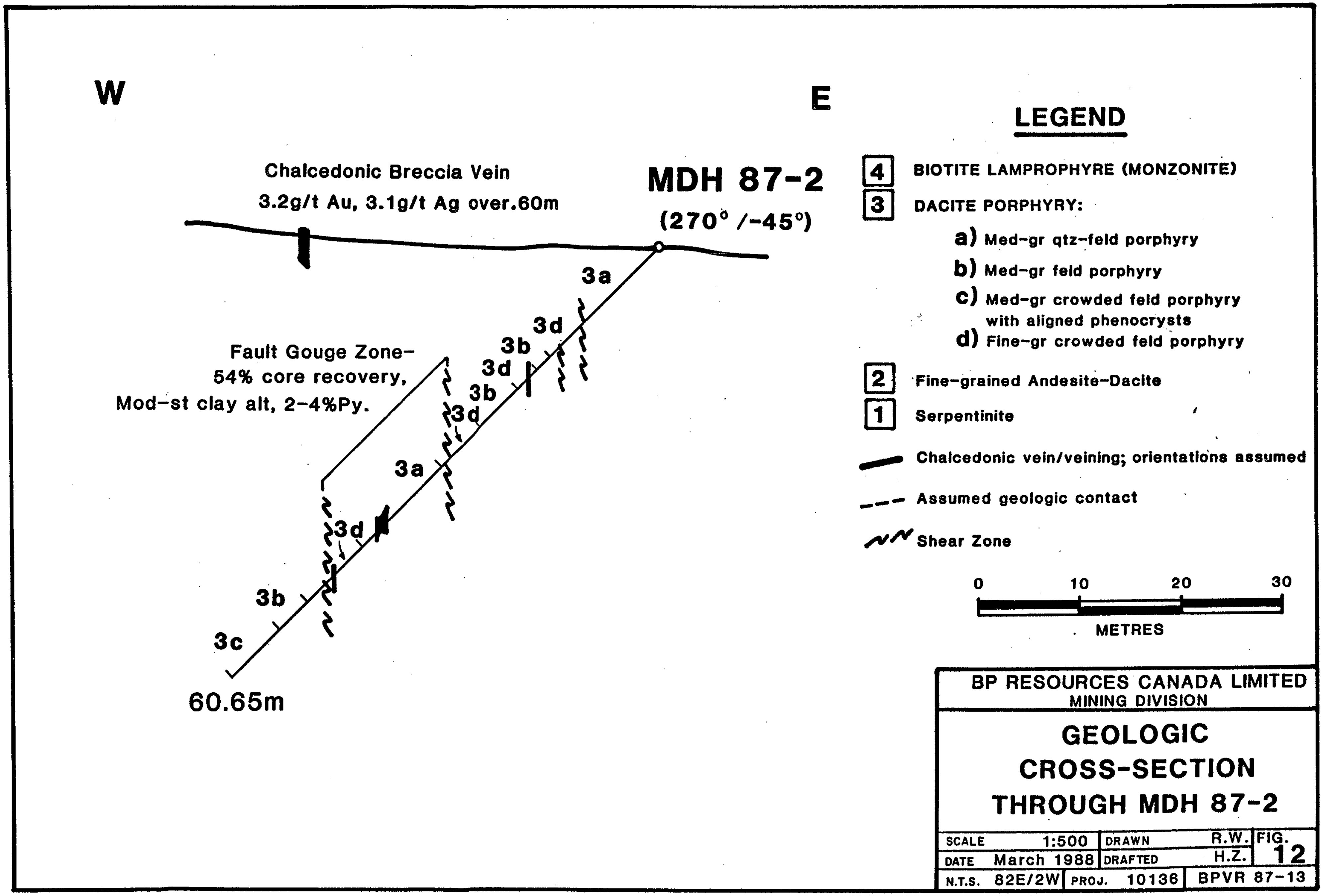
i) Geology

Drill hole MDH 87-2, oriented 270° azimuth/-45° dip, was located 35 m east of a near-vertical chalcedonic breccia vein from which a surface chip sample yielded 3.2 g/t gold and 3.1 g/t silver over 60 cm. The purpose of the drill hole was to test the vein 35-40 m below surface and to investigate any hydrothermal alteration of the wall-rock.

For its entire length of 60.65 m, the drill hole was entirely within dacite porphyry, however, several varieties based on textural and grain size differences were recognized (Figure 12). These include:

- medium-grained, feldspar porphyritic dacite
- medium-grained quartz-feldspar porphyritic dacite (5% quartz eyes, quartz-rich groundmass)
- medium-grained, crowded, feldspar porphyritic dacite with aligned phenocrysts
- fine-grained, crowded, feldspar porphyritic dacite with quartz-rich groundmass.

Contacts between varieties appear to be gradational. The medium-grained, crowded, feldspar porphyry with


W
E
Chalcedonic Breccia Vein
3.2g/t Au, 3.1g/t Ag over.60m
MDH 87-2
(270° /-45°)
Fault Gouge Zone-
54% core recovery,
Mod-st clay alt, 2-4%Py.
3a
3d
3b
3d
3b
3d
3a
3d
3b
3c
60.65m
LEGEND
4 BIOTITE LAMPROPHYRE (MONZONITE)
3 DACITE PORPHYRY:
a) Med-gr qtz-feld porphyry
b) Med-gr feld porphyry
c) Med-gr crowded feld porphyry with aligned phenocrysts
d) Fine-gr crowded feld porphyry
2 Fine-grained Andesite-Dacite
1 Serpentinite
Chalcedonic vein/veining; orientations assumed
Assumed geologic contact
Shear Zone
0
10
20
30
METRES
BP RESOURCES CANADA LIMITED
MINING DIVISION
GEOLOGIC CROSS-SECTION THROUGH MDH 87-2
SCALE 1:500
DRAWN R.W.
FIG. 12
DATE March 1988
DRAFTED H.Z.
N.T.S. 82E/2W
PROJ. 10136
BPVR 87-13

moderate alignment of phenocrysts, which occurs from 57.0 m to the end of the hole, is megascopically very similar to porphyry in the upper portion of MDH 87-1. Fine-grained, crowded, feldpsar porphyry appears spatially associated with quartz-feldspar porphyry and may represent a transitional phase of this rock type with less siliceous medium-grained feldspar porphyry.

Alteration and chalcedonic veining appear to be associated with sheared and fractured zones which are marked by pervasive rusty oxidation. A short interval from 12-16 m shows moderate to strong clay alteration accompanied by 2-3% fine-grained disseminated pyrite. Three 5 cm wide gouge zones are present from 11.0-16.6 m.

From 30-47 m is a major zone of oxidized, clay-altered and pyritized porphyry associated with numerous gouge zones. Core recovery is poor through this interval, averaging approximately 54%. Near the centre of this zone, chalcedonic breccia vein material occurs from approximately 38.1-40.2 m. This vein material is similar in appearance to the outcropping vein and is hosted in similar quartz-feldspar porphyry. However, the drill hole intersection is not situated directly below the vein outcrop, suggesting that either the vein is not uniformly vertical or that some fault offset is evident. Assuming no fault offset, the vein displays an effective dip of approximately 75^{o} east.

From 57 m to the end of the hole, alteration and oxidation diminish and chalcedonic veins are rare.

ii) Geochemistry

The upper zone of alteration from 12-16 m shows no anomalous enhancements of elements on the geochemical drill hole profile (Figure 13). Sample interval 18-20 m, which includes 10 cm of chalcedonic veining containing talc clots, yielded the highest arsenic value in the drill hole (183 ppm).

The lower zone of alteration from 30-47 m shows weak enhancement in gold (up to 72 ppb), silver (up to 1.4 ppm), arsenic (up to 77 ppm), copper (up to 61 ppm), and tungsten (up to 8 ppm) centred on the chalcedonic breccia vein. Corresponding depletions in barium, strontium, calcium, alumina, potassium and phosphorous are evident.

Actual vein material sampled from 38-40 m yielded a rather disappointing 64 ppb gold and 1.4 ppm silver. Low values relative to surface sampling may be attributed to smaller sample size and a nugget effect with respect to mineralization.

In general, arsenic and antimony appear to be much less significant in this drill hole.

Increase in fluorine to values greater than 1000 ppm corresponds exactly with the contact at 57 m of medium-grained, aligned feldspar porphyry. This supports a possible correlation between this unit at the bottom of MDH 87-2 and the similar appearing unit in the upper portion of MDH 87-1.

7. DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The RAINBOW claim group covers an area displaying several features which suggest that a significant system of precious metal mineralization may exist. Tertiary, epithermal, chalcedonic veins and breccias containing anomalous gold, silver, and locally arsenic and antimony, appear to be localized along high-angle, altered, graben-bounding faults comprising the western margin of the Toroda Graben. Epithermal mineralization may be continuous along this structure from the southern portion of the claim group to the TAM O'SHANTER prospect located approximately 7 km to the northeast. A subsidiary east-west structure, represented by the trend of serpentinite, may be important locally as a control to mineralization.

Exploration targets on the property include high-grade bonanza veins, similar to the Knob Hill deposit at Republic, and bulk-tonnage stockwork or replacement-type mineralization similar to the Cannon Mine at Wenatchee. The most favourable host for the latter type may be within permeable sediments of the Kettle River Formation, particularly where they abut graben-bounding faults. Both of these deposits are quartz-adularia systems hosted within Tertiary grabens. Table IV shows the pertinent features of four Tertiary quartz-adularia systems, Knob Hill, Curlew, Wenatchee and Hishikari.

TABLE IV

COMPARISON OF TERTIARY QUARTZ-ADULARIA PRECIOUS METAL DEPOSITS

DEPOSIT	LOCATION	REGIONAL GEOLOGY	TONNAGE + GRADE	Ag/Au Ratio	Host Rock	Alteration Minerals	Ore Minerals	Anomalous Elements
Knob Hill (Republic Camp)	Northern Washington State	Republic Graben, Eocene volcanics and sediments	.60 opt Au, 2.5 opt Ag from 4.5 m tons past production	4.1	Bonanza veins principally within intermediate, calc-alkaline to alkaline Sanpoil volcanic tuffs and flows.	Quartz, adularia, fluorite, carbonate kaolinite.	Electrum, sulfosalts, Ag-sulphides and selenides (naumannite), pyrite, chalcopyrite, sphalerite.	As (100-200 ppm), Sb (10-70 ppm), Se (1-10 ppm), Te (1-4 ppm), Mo (20-40 ppm), F (?) HG (up to 1000 ppb (locally)
Curlew	Northern Washington State (north of Republic Camp)	Republic Graben, Eocene volcanics and basement rocks	Open-pit reserves 3.2 m tons @ .125 opt Au U/g reserves .43 m tons @ .248 opt Au	~4.2	Manto-type replacements within Permian limestone and bonanza lodes in felsic tuffs of Sanpoil volcanics.	Quartz, adularia, fluorite, carbonate kaolinite.	Pyrite, pyrrhotite, magnetite, arsenopyrite in mantos. No information on vein mineralogy.	No information.
Cannon (Wenatchee)	Northern Washington State	Chiwaukum Graben, Eocene sediments and subvolcanic plugs	4.7 mt @ .213 opt Au, .39 opt Ag	1.8	Stockwork veins within pervasively silicified horizon within Eocene fluvial and lacustrine sediments.	Quartz, adularia, carbonate, kaolinite.	Free gold, electrum pyrargyrite, pyrite chalcopyrite, naumannite.	Hg, As, Sb (values unknown).
Hishikari	Kyushu Island, Japan	Kagoshima Graben, Pleistocene Hishikari volcanics and Cretaceous sedimentary basement	1.5 m tons @ 2.6 opt Au, 1.75 opt Ag	.6 to 2.7	Bonanza veins localized at and below unconformity between younger intermediate volcanics and basement Cretaceous shale-siltstone.	Quartz, adularia, montmorillonite, sericite, chlorite, carbonate, rhodocrosite, kaolinite.	Electrum, pyrargyrite, miargyrite, naumannite, aquilarite, stibnite, pyrite, marcasite, chalcopyrite, galena sphalerite.	No information.

While adularia has not been identified in the small number of vein samples from the claim area stained for K-feldspar, current thinking at Wenatchee is that adularia is precipitated within the boiling zone and its distribution closely follows that of gold. Thus, for deposits of this type presence of adularia should indicate close proximity to ore. Apparent lack of adularia on the claims should not be construed as a negative feature as yet.

Ag/Au ratios for the four deposits shown in Table IV range from .6 to 4.1. The average Ag/Au ratio for 31 samples from the claim area taken by Kerr-Addison in 1985 is 4.9.

The Hishikari deposit consists of very high grade bonanza lodes situated at or just below the unconformity between Pleistocene and Cretaceous rocks. The surface expression of the system is a single small, disconnected vein within the Pleistocene rocks approximately 100 m above the unconformity. The unconformity, for one or more possible reasons, appears to have been the main control on localization of economic mineralization. The Eocene unconformity within the RAINBOW claim area should not be overlooked.

Little (1983) suggests that dacite porphyry on the RAINBOW claims may correlate with Scatter Creek rhyodacite in the Republic area. Scatter Creek rhyodacite is Eocene in age and cuts O'Brien Creek Formation sediments, a unit correlative with the Kettle River Formation in the Midway area. In the Republic mining camp, dykes of Scatter Creek rhyodacite show a definite spatial, albeit unknown genetic, relationship to gold-silver-bearing veins. Work to date on the RAINBOW claims suggests however that dacite porphyry may be older than the Kettle River Formation and is definitely older than chalcedonic veining. Compositionally, the RAINBOW dacite porphyry appears to contain much less K-feldspar than reported in the Scatter Creek rhyodacite.

A proposed sequence of geologic events for the Midway area based on available data is as follows:

1) Intrusion of ultramafic bodies in the Jurassic, followed by their tectonic emplacement and serpentinization in pre-Cretaceous time along low-angle, north-dipping structures (thrusts?).

2) Intrusion of high-level dacite porphyry stocks and dykes in Late Cretaceous-Early Tertiary time. Their emplacement may have been controlled by the same east-west

trending structural zone that the serpentinites were localized along. Juxtaposition of porphyries with serpentinites resulted in locally intense carbonate-silica alteration of serpentinite predominantly along the tectonically-induced foliation. Volume reduction accompanying alteration resulted in development of open spaces parallel to foliation. Differentiation within individual dacite porphyry stocks resulted in quartz-rich phases with associated base and precious metal, quartz vein-type mineralization (e.g. MIDWAY MINE).

3) Graben (i.e. rhombochasm) development in the early Eocene resulting from regional strike-slip faulting.

4) Deposition of basal fluvial and lacustrine sediments of the Kettle River Formation in the grabens.

5) Widespread extrusion of Marron Formation alkalic lavas and emplacement of associated dykes and plugs.

6) Epithermal gold-silver-bearing silicification occurred and was controlled primarily by north-northeast-trending, graben-bounding normal faults. Secondary controls included low-angle, conformable channels in altered

serpentinite, and reactivated pre-existing mineralized structures possible represented by the MIDWAY MINE structure. Silicification is definitely younger than the Kettle River Formation (evidenced by silicified sediments at the TAM O'SHANTER), however, it is not known if the Marron Formation pre- or post-dates the mineralization.

The RAINBOW claim group warrants additional work to test for a buried epithermal precious metal deposit. Graben-bounding faults appear to be the most likely features to have acted as primary conduits for mineralizing solutions. Bonanza lodes may exist along these structures. In addition, permeable Kettle River Formation sediments abutting these structures may have been amenable to large-scale replacement to form bulk-tonnage targets.

Because the faults are recessive, mapping and geochemical sampling may prove to be of limited value. Geophysical surveying (IP/VLF) should be utilized to define the structures and any alteration or pyritization associated with them.
Trenching may be feasible to follow-up geophysical anomalies, however, diamond drilling will probably prove to be the most effective technique.

Any diamond drilling should endeavour to penetrate beyond the Eocene unconformity, following the Hishikari example.

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APPENDIX I

Analytical Procedures

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
Telephone: 253-3158

GEOCHEMICAL LABORATORY METHODOLOGY & PRICES - 19[illegible]

Sample Preparation

S80	Soils or silts up to 2 lbs drying at 60 deg.C and sieving 30 gms -80 mesh (other size on request)	$ .75
SJ	Saving part or all reject	.35
S20R	Soils or silts - drying at 60 deg.C and sieving -20 mesh & pulverizing (other mesh size on request.)	3.00
SP	Soils or silts - drying at 60 deg.C pulverizing (approx. 100 gms)	1.50
RP100	Rocks or cores - crushing to -3/16" up to 10 lbs, then pulverizing 1/2 lb to -100 mesh (98%)	3.00
	Over 10 lbs	.35/lb
RPS100	Same as RP100 except sieving to -100 mesh and saving +100 mesh	3.25
RPS100 1/2	Same as above except pulverizing 1/2 the reject	2.50/lb
RPS100 A	Same as above except pulverizing all the reject	2.50/lb
COP	Compositing pulps - each pulp Mixing & pulverizing	.50 1.50
V1	Drying vegetation and pulverizing 50 gms to -80 mesh	3.00
V2	Ashing up to 1 lb wet vegetation at 475 deg.C	2.00
S1	Special Handling	18.00/hr

Sample Storage

Rejects - Approx. 2 lbs of rock or total core are storage for three months and discarded unless claimed.

Pulps are retained for one year and discarded unless claimed.

Supplies

Soil Envelopes	4" x 6"	$110.00/thousand
Soil Envelopes	4" x 6" with gusset	$130.00/thousand
Plastic Bags	7" x 11" 6 ml	$ 10.00/hundred
Plastic Bags	12" x 20" 6 ml	$ 20.00/hundred
Ties		$ 6.00/hundred
Assay Tags		N/C
10% HCl		$ 5.00/liter
Dropping bottles		$ 1.00/each
Zn Test	A & B	$ 10.00/each liter

Conversion Factors

Troy oz	=	31.10 g
oz/ton	=	34.3 ppm = 34.3 g/tonne = 34,300 ppb
%	=	10,000 ppm

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GEOCHEMICAL ANALYSES - Rocks and Soils

Group 1 Digestion

.50 gram sample is digested with 3 mls 3-1-2 HCl-HNO3-H2O at 95 deg.C for one hour and is diluted to 10 ml with water. This leach is almost total for base metals, partial for rock forming elements and very slight for refractory elements. Solubility limits Ag, Pb, Sb, Bi, W for high grade samples.

Group 1A - Analysis by Atomic Absorption.

Element	Detection	Element	Detection	Element	Detection
Antimony*	2 ppm	Copper	1 ppm	Molybdenum	1 ppm
Bismuth*	2 ppm	Iron	0.01 %	Nickel	1 ppm
Cadmium*	0.1 ppm	Lead	2 ppm	Silver	0.1 ppm
Chromium	1 ppm	Lithium	1 ppm	Vanadium	2 ppm
Cobalt	1 ppm	Manganese	5 ppm	Zinc	2 ppm

First Element $2.25 Subsequent Element $1.00

Group 1B - Hydride generation of volatile elements and analysis by ICP.

This technique is unsuitable for sample grading over 1% Ni or Cu.

Element	Detection
Arsenic	0.1 ppm
Antimony	0.1 ppm
Bismuth	0.1 ppm
Germanium	0.2 ppm
Selenium	0.1 ppm
Tellurium	0.3 ppm

First Element $4.00 All Elements $5.00

Group 1C - Hg Detection limit - 5 ppb Price $2.25

Hg in the solutions are determined by cold vapour AA using a F & J scientific Hg assembly. The aliquots of the extract are added to a stannous chloride/hydrochloric acid solution. The reduced Hg is swept out of the solution and passed into the Hg cell where it is measured by AA.

Group 1D - ICP Analysis, same digestion

Element	Detection
Ag	0.1 ppm
Cd,Co,Cr,Cu,Mn,Mo,Ni,Sr,Zn	1 ppm
As,Au,B,Ba,Bi,La,Pb,Sb,Th,V,W	2 ppm
U	5 ppm
Al,Ca,Fe,K,Mg,Na,P,Ti	0.01 %

Any 2 elements	$1.25
5 elements	4.25
10 elements	5.25
All 30 elements	6.00

Group 1E - Analysis by ICP/MS

Element	Detection
Ga	1 ppm
Rh,In,Re,Os,Ir,Tl,Th,U	0.1 ppm

First Element	$ 4.00
Additional Element	1.00
All Elements	15.00

(Minimum batch of 20)

Hydro Geochemical Analysis

Natural water for mineral exploration

26 elements ICP - Mo,Cu,Pb,Zn,Ag,Co,Ni,Mn,Fe,As,Sr,Cd,V,Ca,P, Li,Cr,Mg,Ti,B,Al,Na,K,Ce,Be,Si		$8.00
P by Specific Ion	- detection 20 ppb	$1.50
U by UA3	- detection .01 ppb	1.50
pH	.1 pH	1.50

* Minimum 20 samples or $5.00 surcharge for ICP or AA and $15.00 surcharge for ICP/MS.
All prices are in Canadian Dollars

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Group 2 - Geochemistry by Specific Extraction and Instrumental Techniques

Element	Method	Detection	Price
Barium	0.100 gram samples are fused with .6 gm LiBO2 dissolved in 50 mls 5% HNO3 and analysed by ICP. (other whole rock elements are also determined)	10 ppm	$3.50
Carbon	LECO (total as C or CO2)	.01 %	5.25
Carbon+Sulfur	Both by LECO	.01 %	6.25
Carbon (Graphite)	HCl leach before LECO	.01 %	7.25
Chromium	0.50 gram samples are fused with 3 gm Na2O2 dissolved in 50 ml 20% HCl, analysed ICP.	5 ppm	3.75
Fluorine	0.25 gram samples are fused with NaOH; leached solution is adjusted for pH and analysed by specific ion.	10 ppm	4.25
Sulphur	LECO (Total as S)	.01 %	5.25
Sulphur Insol.	LECO (After 5% HCl leach)	.01 %	7.25
Tin	1.00 gram samples are fused with NH4I. The sublimed iodine is leached with 5 ml 10% HCl, and analysed by Atomic Absorption.	1 ppm	3.25
Tungsten	.50 gram samples are fused with Na2O2 dissolved in 20 ml H2O, analysed by ICP.	1 ppm	3.25

Group 3 - Geochemical Noble Metals

Element	Method	Detection	Price
Au*	10.0 gram samples are ignited at 600 deg.C, digested with hot aqua regia, extracted by MIBK, analysed by graphite furnace AA.	1 ppb	$ 4.25
Au** Pd,Pt,Rh	10.0 gram samples are fused with a Ag inquart with fire assay fluxes. After cupulation, the dore bead is dissolved and analysed by AA or ICP/MS.	1 ppb 2 ppb	8.75 -first element 2.50 -per additional 10.00 -for All

Larger samples - 20 gms add $1.00
30 gms add $2.00

Group 4A - Geochemical Whole Rock Assay

0.100 gram samples are fused with LiBO2 and are dissolved in 50 mls 5% HNO3.

SiO2, Al2O3, Fe2O3, CaO, MgO, Na2O, K2O, MnO, TiO2, P2O5, Cr2O5, LOI + Ba by ICP.

Price: $3.75 first metal $1.00 each additional $9.00 for All.

Group 4B - Trace elements

Element	Detection	Analysis	Price
Co,Cu,Ni,Zn,Sr	10 ppm	ICP	$2.75 first element or
Ce,Nb,Ta,Y,Zr	20 ppm	ICP	$1.00 additional to 4A
			$[illegible].00 for All.
Cs,Rb	10 ppm	AA	$1.50 each.

Group 4C - analysis by ICP/MS.

Be, Rb, Y, Zr, Nb, Sn, Cs, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb,

Lu, Hf, Ta, W, Th, U

Detection: 1 to 5 ppm Price : $17.00 for first element
$20.00 for All.

* Minimum 20 samples or $5.00 surcharge for ICP or AA and $15.00 surcharge for ICP/MS.
All prices are in Canadian Dollars

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Regular Assay

Aluminum	(Al)	$ 1.50	Moisture	(H2O)	$ 5.00
Antimony	(Sb)	[illegible].50	Molybdenum	(Mo)	[illegible].75
Arsenic	(As)	[illegible].50	Molybdenum Sulfide	(MoS2)	[illegible].50
Barium	(Ba)	[illegible].50	Niobium	(Nb)	10.00
Bismuth	(Bi)	[illegible].50	Nickel	(Ni)	[illegible].75
Boron	(B)	[illegible].50	Nickel (Non-sulfide)		[illegible].50
Cadmium	(Cd)	[illegible]	Palladium	(Pd)	12.50
Calcium	(Ca)	[illegible]	Phosphorus	(P)	[illegible].50
Carbon (Total)	(C)	[illegible].50	Platinum	(Pt)	12.50
Carbon (Graphitic)*		[illegible].50	Potassium	(K)	[illegible].50
Carbon plus Sulfur (Total)*		[illegible].00	Rhodium	(Rh)	12.50
Cerium	(Ce)	10.00	Rubidium	(Rb)	[illegible].50
Chromium	(Cr)	[illegible].50	Selenium	(Se)	10.00
Cesium	(Cs)	10.00	Silica	(SiO2)	[illegible].50
Cobalt	(Co)	[illegible].75	Silver	(Ag)	[illegible].75
Copper	(Cu)	[illegible].75	Silver (Fire Assay)		[illegible].00
Copper (non-sulfide)		[illegible].00	Sodium	(Na)	[illegible].50
Europium	(Eu)	10.00	Specific Gravity*	(SG)	[illegible].00
Fluorine	(F)	[illegible].50	Strontium	(Sr)	[illegible].50
Gallium	(Ga)	[illegible].50	Sulfur (Total)*	(S)	[illegible].50
Germanium	(Ge)	[illegible].50	Sulfur (Sulfate)		[illegible].50
Gold	(Au)	[illegible]	Tantalum	(Ta)	[illegible].50
Gold (Fire Assay)		[illegible]	Tellurium	(Te)	10.00
Gold plus Silver (Fire Assay)		[illegible]	Thallium	(Tl)	10.00
Indium	(In)	[illegible].50	Thorium	(Th)	[illegible].50
Iron (Total)	(Fe)	[illegible].50	Tin	(Sn)	[illegible].00
Iron (Ferrous)*		[illegible].00	Titanium	(Ti)	[illegible].50
Lanthanum	(La)	[illegible].50	Tungsten	(W)	[illegible].50
Lithium	(Li)	[illegible].50	Uranium	(U)	[illegible].50
Lead	(Pb)	[illegible].75	Vanadium	(V)	[illegible].50
Loss on Ignition	(LOI)	[illegible].00	Yttrium	(Y)	10.00
Magnesium	(Mg)	[illegible].50	Zinc	(Zn)	6.75
Manganese	(Mn)	[illegible].50	Zirconium*	(Zr)	10.00
Mercury	(Hg)	7.50	Pb Isotope Ratio		20.00

* Minimum 5 samples per batch

Other elements by Mass Spec. on request.

Multi-Element Assay Price

Arsenic, Antimony, Bismuth, Cadmium, Cobalt, Copper, Gold, Iron, Lead, Manganese, Molybdenum, Nickel, Silver, Thorium, Uranium, Zinc.

Price : First element $6.75 Each Additional $3.00 All 16 elements $20.00

Whole Rock Assay Prices

SiO2, Al2O3, Fe2O3, CaO, MgO, Na2O, K2O, MnO, TiO2, P2O5, Cr2O3, LOI.

Price : First oxide $7.50 Each Additional $3.50 All 12 $20.00

Volume Discounts Available.

Special Fire Assay Prices

Gold, Silver, Platinum, Palladium, Rhodium	$20.00
Placer conc. for total precious metal	$15.00

APPENDIX II

Listing of Analytical Results for
Rock Sampling

10113 Files

ACME ANALYTICAL LABORATORIES 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

RECEIVED
JUL 17 1987
SELCO-BP RESOURCES
VANCOUVER, B.C.

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-ROCK P2-3 STREAM SED AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE. HG ANALYSIS BY FLAMLESS AA. F - NAOH FUSION - SPECIFICION ELECTRODE ANALYSIS. TL ANALYSIS BY ICP/MS

DATE RECEIVED: JULY 7 1987 DATE REPORT MAILED: July 15/87 ASSAYER. D. Toye ..DEAN TOYE, CERTIFIED B.C. ASSAYER

SELCO-A DIVISION OF BP PROJECT - 10113-573 File # 87-2246 Page 1

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB	HG PPB	F PPM	TL PPM
8187573 101503	1	10	2	1	1.3	115	4	80	.52	51	5	ND	1	48	1	9	2	2	.78	.003	2	46	.49	23	.01	2	.26	.01	.01	1	810	5	-	.1
8187573 101504	23	5	2	1	1.2	134	5	93	.60	97	5	ND	1	32	1	9	2	2	.52	.003	2	46	.28	60	.01	3	.25	.01	.01	1	72	10	-	.1
STD C	18	56	37	125	7.4	66	29	986	4.02	36	17	8	35	50	18	15	22	56	.49	.091	40	57	.89	177	.09	34	1.91	.07	.14	12	-	-	-	-
8187573 101505	11	8	4	5	1.9	605	26	384	1.99	417	5	ND	1	231	1	37	3	8	3.67	.003	2	354	2.12	1114	.01	2	.30	.01	.01	1	62	30	-	.1

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB	HG PPB	F PPM
8187573 100596	2	10	6	42	2.9	130	9	237	1.07	114	5	ND	2	51	1	16	2	5	.56	.002	8	31	.59	80	.01	2	.41	.01	.03	2	625	20	50
8187573 100597	1	6	2	4	.4	56	3	80	.43	39	5	ND	1	26	1	6	2	3	.32	.001	2	18	.20	31	.01	2	.37	.01	.01	1	39	10	50
8187573 100598	74	3	2	2	1.8	9	1	38	.18	2	5	ND	1	16	1	2	2	1	.12	.001	2	2	.06	66	.01	2	.20	.01	.01	1	180	40	50
RE 8187573 100607	2	10	3	20	3.3	7	2	172	.85	34	5	3	1	8	1	3	2	4	.07	.011	3	3	.03	141	.01	2	.27	.01	.08	2	3090	10	100
8187573 100599	6	9	9	43	2.2	53	5	373	1.35	47	5	ND	2	35	1	3	7	12	.81	.005	7	16	.97	61	.01	2	.71	.01	.02	1	61	20	50
8187573 100600	2	6	4	33	.8	36	7	374	1.67	17	5	ND	1	73	1	2	6	19	.96	.025	4	10	1.58	98	.01	2	1.28	.01	.10	1	41	10	230
8187573 100601	4	6	5	36	.1	45	3	109	1.32	25	5	ND	1	6	1	2	2	7	.02	.010	4	5	.03	89	.01	2	.24	.01	.06	3	11	70	50
8187573 100602	2	8	10	7	9.1	615	25	382	1.60	444	5	3	1	38	1	23	2	5	.68	.002	2	113	.50	14	.01	2	.18	.01	.01	1	2595	40	50
8187573 100603	2	6	13	45	.1	5	3	247	3.36	4	5	ND	11	88	1	2	7	14	.48	.032	67	2	.28	92	.01	7	1.36	.04	.19	1	2	10	420
8187573 100604	1	5	14	29	.1	3	1	268	1.04	3	5	ND	11	207	1	2	2	8	1.15	.035	72	1	.21	62	.01	2	.66	.04	.17	1	1	5	570
8187573 100605	1	6	3	36	.2	9	5	449	1.37	14	5	ND	1	33	1	2	2	12	1.75	.021	2	7	.21	85	.01	2	.31	.01	.07	2	2	10	110
8187573 100606	1	10	4	38	.1	6	7	703	2.62	4	5	ND	1	109	1	2	4	19	3.45	.048	8	3	.91	118	.01	2	1.41	.05	.15	2	2	20	200
8187573 100607	2	8	2	20	3.1	8	2	185	.85	34	5	2	1	8	1	3	2	4	.06	.011	3	5	.03	138	.01	4	.27	.01	.08	1	3390	10	70
STD C/AU-R	19	60	37	131	7.2	70	29	1018	3.93	35	15	8	38	51	18	17	22	57	.45	.086	38	58	.82	179	.06	31	1.95	.06	.13	12	500	1300	-

APPENDIX III

Method of Histogram Intrepretation

RULES FOR CHOICE OF SIZE CODING OR CONTOURING INTERVALS

(1) Examine both arithmetic and logarithmic histograms for each geochemical survey. Choose the histogram which most closely approximates a normal (or lognormal) distribution. If several populations are present on the histogram, subjectively divide the data into a series of (overlapping ?) normal or lognormal distributions. Always avoid interpreting histograms which are strongly skewed. Portions of arithmetic or logarithmic histograms may be chosen over specific metal concentration intervals, if this allows for the best portrayal of the data in graphitical form.

(2) Choose, as two of the coding intervals, points which represent between 90% and 95%, and 95% and 97.5% of the data; two different numbers. These choices highlight from 1 in 10 to 1 in 20 samples which are considered slightly anomalous and definately anomalous, respectively. These limits are optimistic in that the two categories are defined to be anomalous regardless of the distribution of values on the remainder of the histogram. A rigorous statistical approach would suggest that only values above the 97.5 percentile should be considered anomalous. Choice of any of the above percentiles is entirely subjective and meant to highlight the highest values of the survey.

(3) Divide the remaining portion of the histogram into recognizable populations. The dividing point of each of these populations is chosen as a coding interval. Artifacts introduced as a consequence of detection limit considerations are ignored. These artificial breaks in the histogram can be recognized by referring to the laboratory reports and scanning data results.

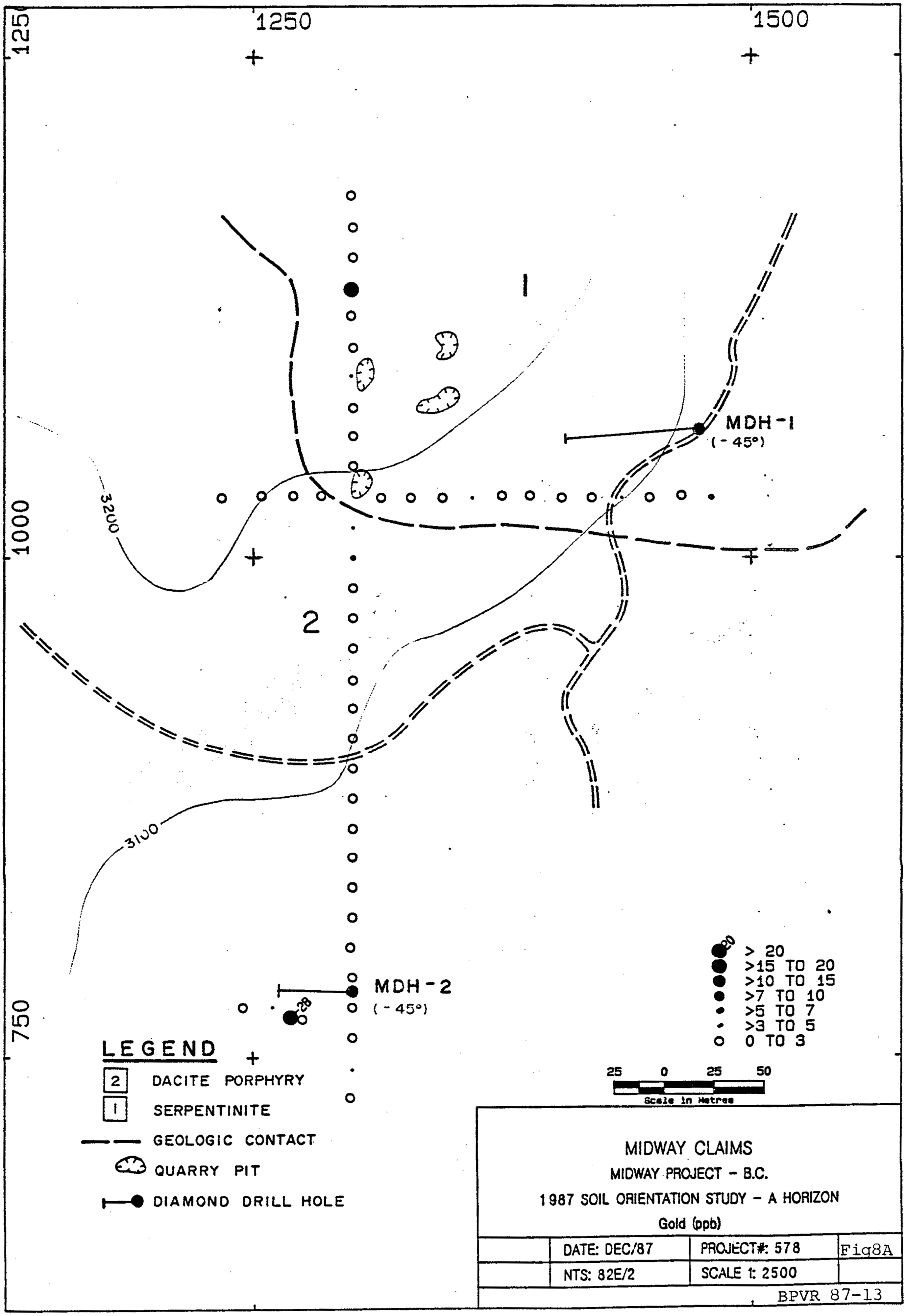
(4) For each population, choose one or two numbers which correspond to the 90% and 95% cumulative frequencies for that population (1 in 10 and 1 in 20 samples for that population). These will also be used to represent anomalous conditions for each population. Coding intervals can be no closer than 2X the detection limit for each element being considered.

(5) A maximum of six numbers can be chosen to plot symbol maps. This number is dictated by the ability to present data in graphical form with sufficiently different symbol sizes for them to be easily distinguishable, particularly if maps are to be reduced. The seven defined concentration classes are normally sufficient to represent geochemical data on a map. More intervals can be chosen if data are to be contoured. Avoid choosing arithmetic intervals without considering rules (1) and (4).

(6) Maps plotted using the preceeding instructions might result in two areas being distinguished from each other by a relatively uniform density of symbol sizes, yet only poor contrast anomalies are indicated. Difference between the two areas, A and B, might be due to underlying geology, overburden character, soils etc. Whatever the cause, the data are not well displayed. If the underlying control distinguishing A and B can be recognized, the data can be divided and re-interpreted following steps (1) to (5). Two sets of maps can be drawn, or both sets of interpreted data can be plotted on a single map. For such superimposed geochemical maps, symbol sizes lose their absolute meaning but assume a more important stance, that of reflecting anomalous conditions regardless of the underlying control. To illustrate, consider the case where A and B are areas underlain by very different geology. Anomalous conditions for low background rock types might be concentrations which are much lower than average values for the high background rock types. Nevertheless, anomalies defined in each area are considered significant. Reliance on absolute concentrations can be misleading in such cases.

APPENDIX IV

A-Horizon Soil Sample Result Plots
(Figures 8A-Z)



MIDWAY CLAIMS

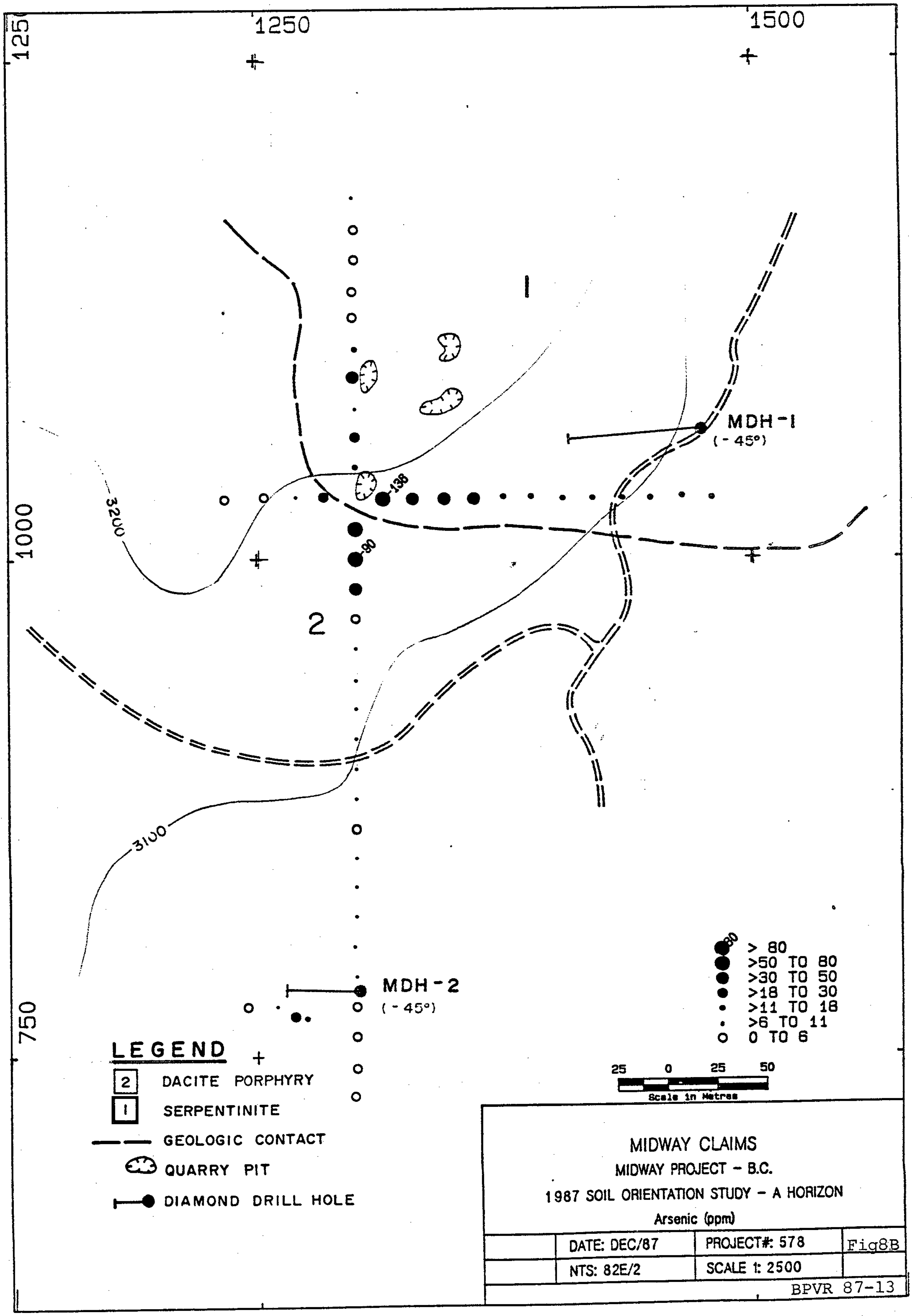
MIDWAY PROJECT - B.C.

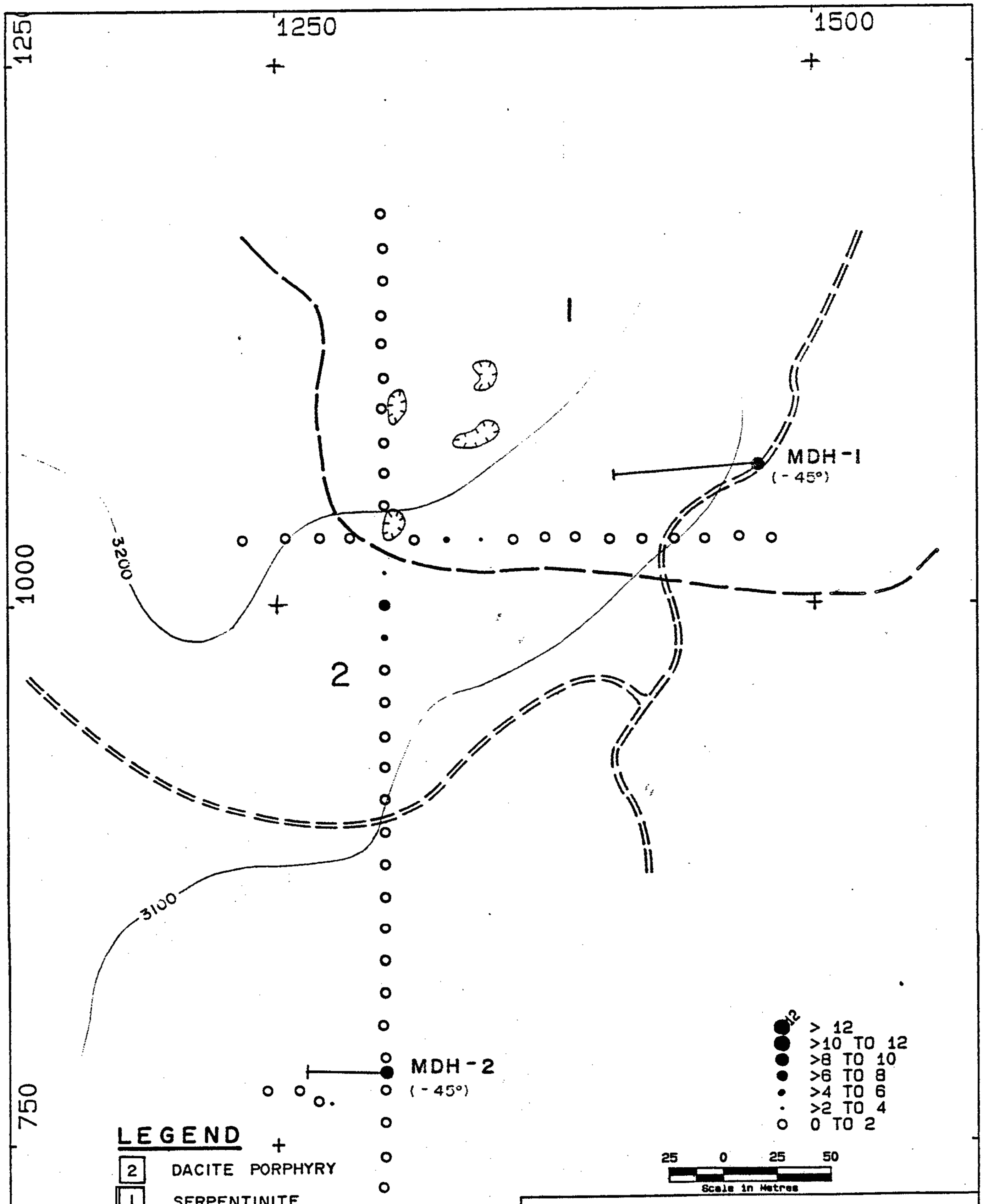
1987 SOIL ORIENTATION STUDY - A HORIZON

Gold (ppb)

DATE: DEC/87	PROJECT#: 578	Fig8A
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13


1250
1250
1500
1000
750
I
2
3200
3100
136
90
80
MDH-1
(-45°)
MDH-2
(-45°)
> 80
>50 TO 80
>30 TO 50
>18 TO 30
>11 TO 18
>6 TO 11
0 TO 6
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
I SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - A HORIZON
Arsenic (ppm)
DATE: DEC/87
PROJECT#: 578
Fig8B
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



MIDWAY CLAIMS

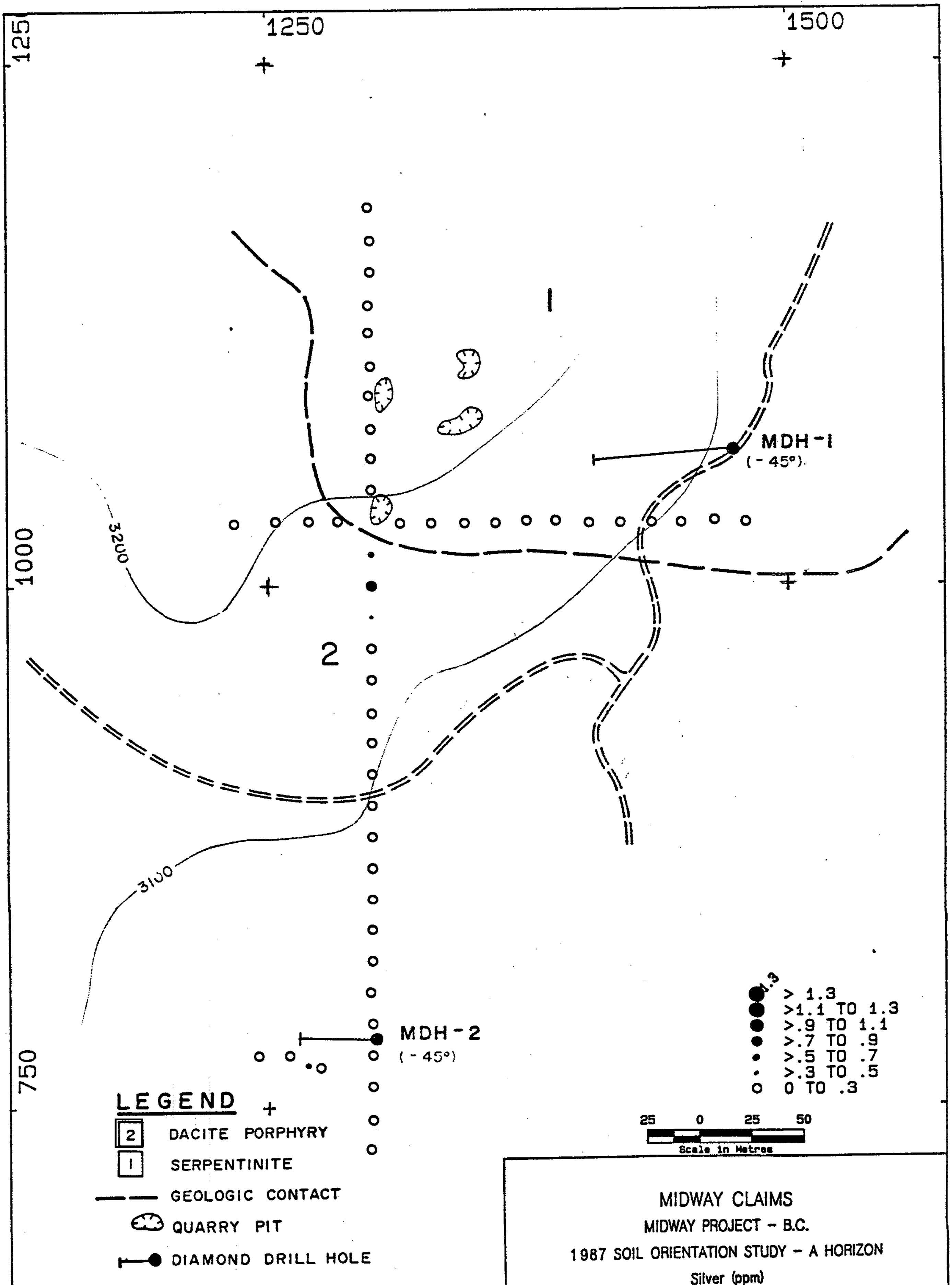
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - A HORIZON

Antimony (ppm)

	DATE: DEC/87	PROJECT#: 578	Fig8C
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

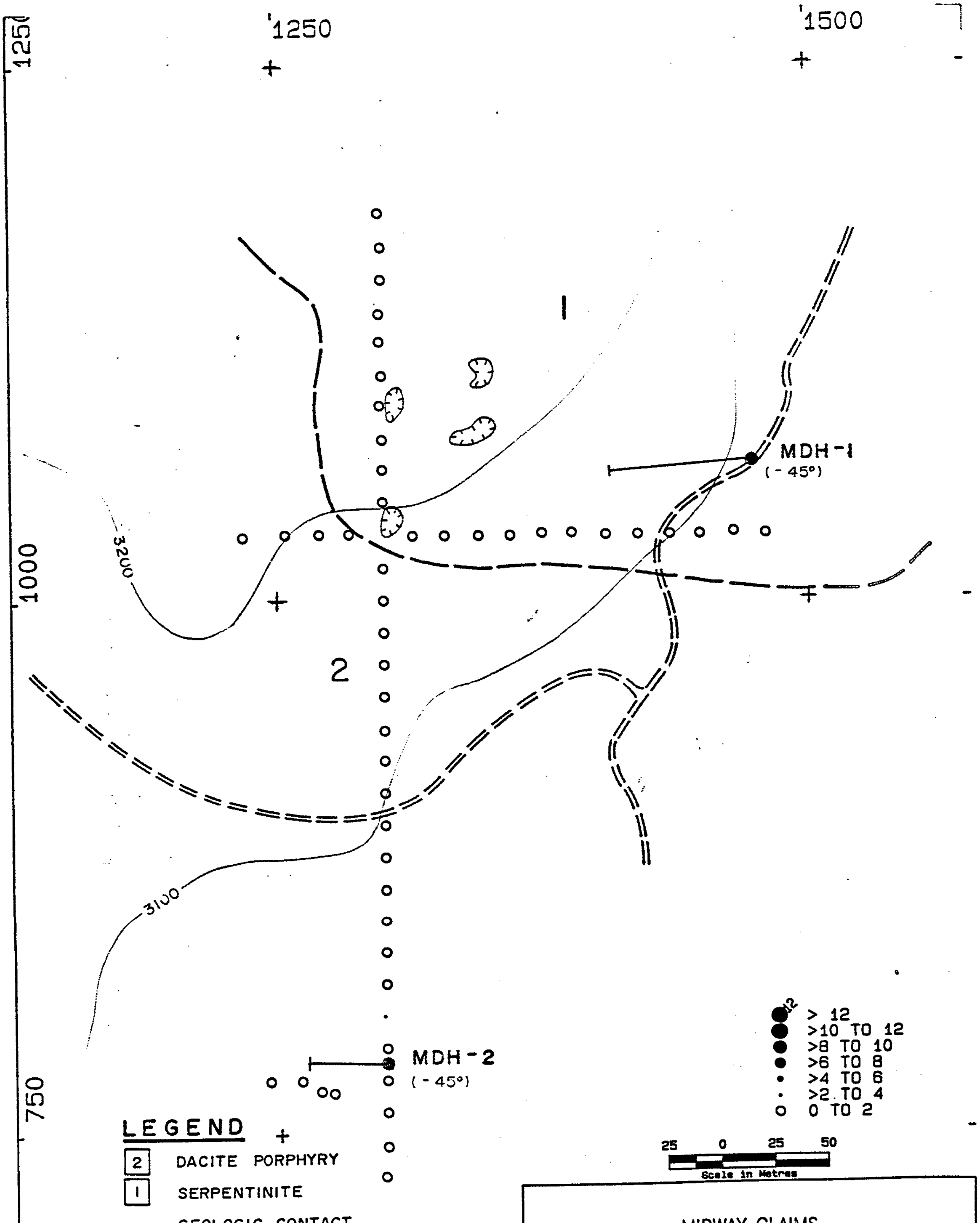
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - A HORIZON

Silver (ppm)

DATE: DEC/87	PROJECT#: 578	Fig8D
NTS: 82E/2	SCALE 1: 2500	

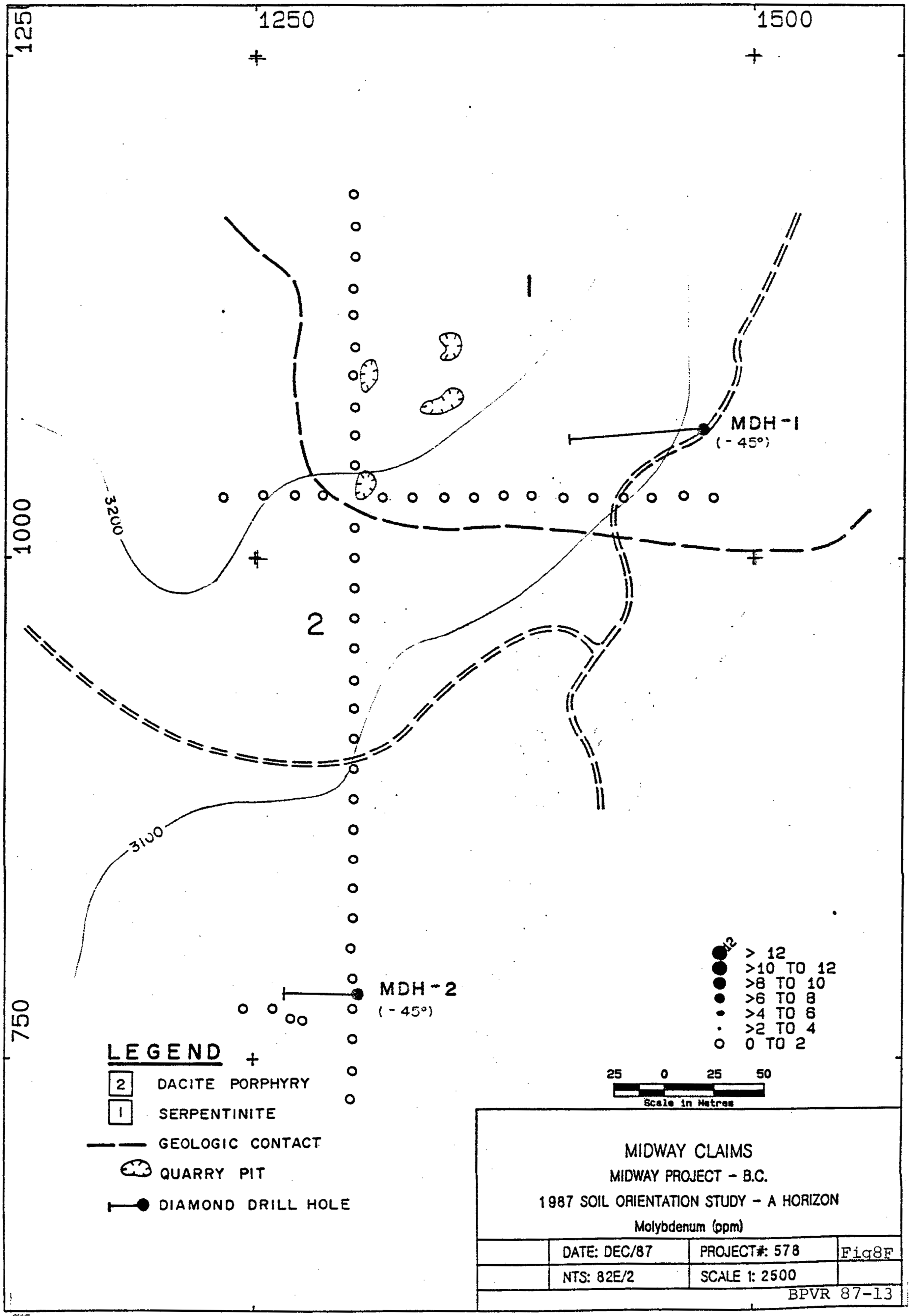
BPVR 87-13

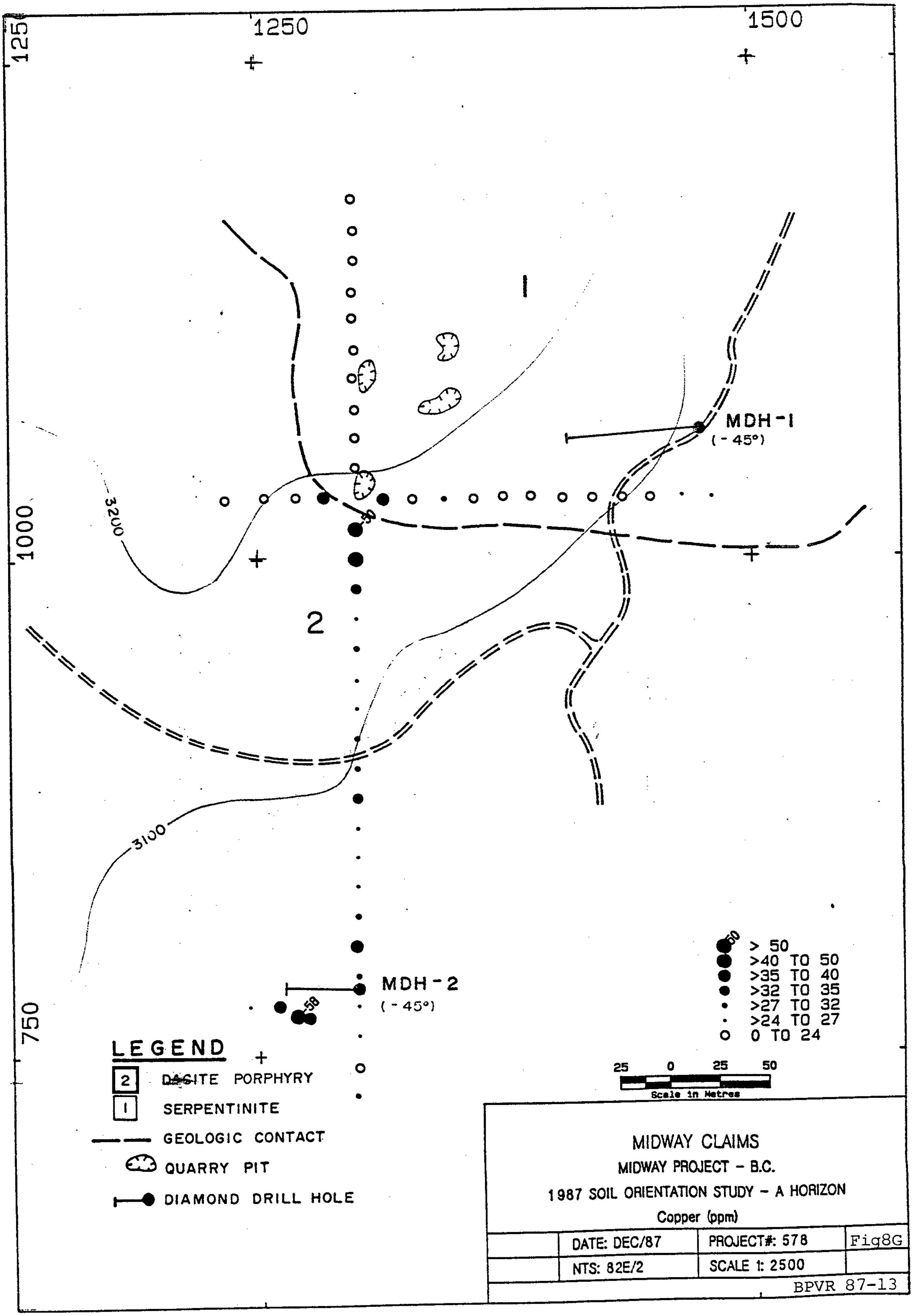


MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - A HORIZON
Bismuth (ppm)

	DATE: DEC/87	PROJECT#: 578	Fig8E
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13


1250
1500
1250
1000
750
1
2
MDH-1
(-45°)
MDH-2
(-45°)
3200
3100
> 12
>10 TO 12
>8 TO 10
>6 TO 8
>4 TO 6
>2 TO 4
0 TO 2
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - A HORIZON
Molybdenum (ppm)
DATE: DEC/87
PROJECT#: 578
Fig8F
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



MIDWAY CLAIMS

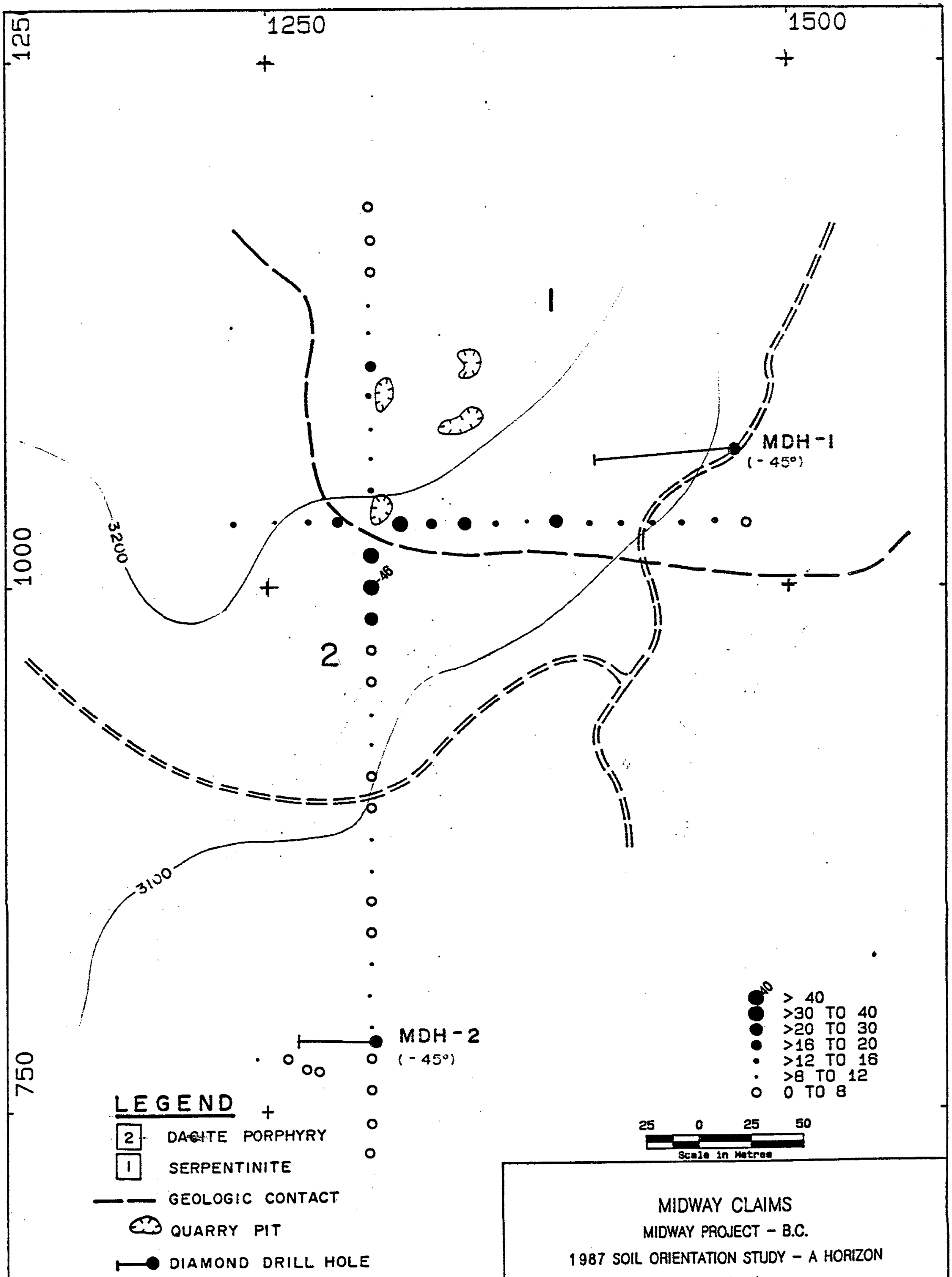
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - A HORIZON

Copper (ppm)

DATE: DEC/87	PROJECT#: 578	Fig8G
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

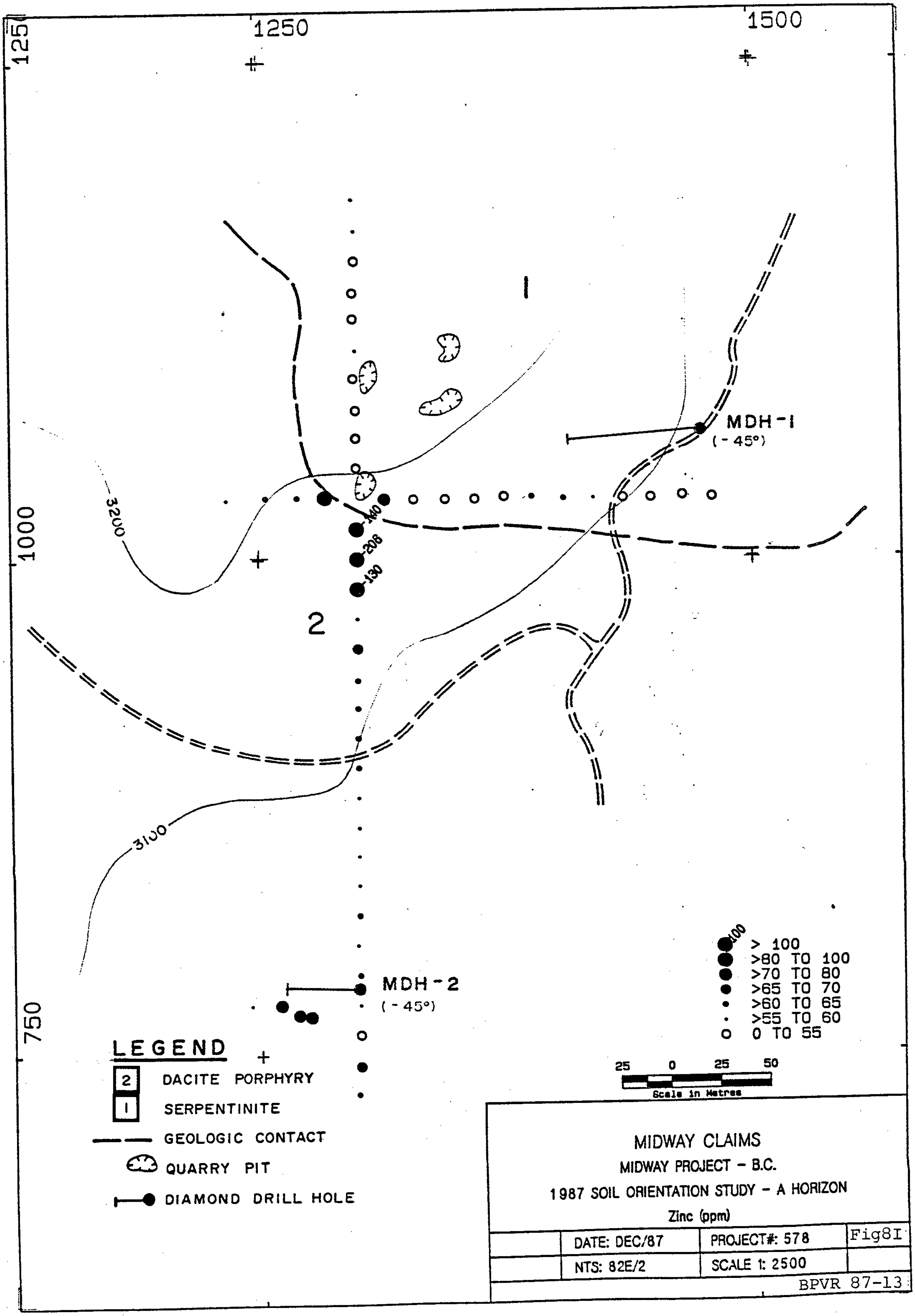
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - A HORIZON

Lead (ppm)

	DATE: DEC/87	PROJECT#: 578	Fig8H
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

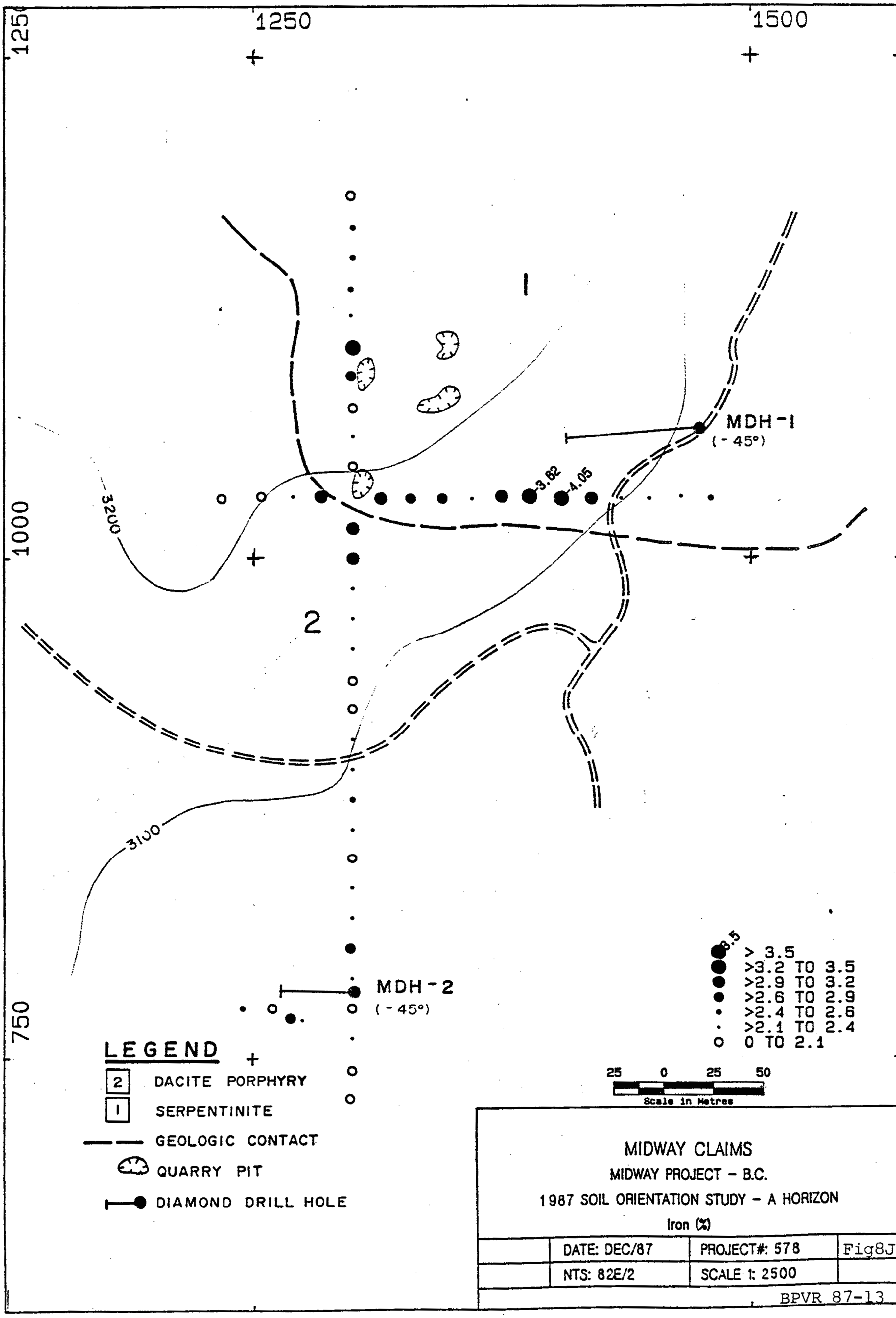
MIDWAY PROJECT - B.C.

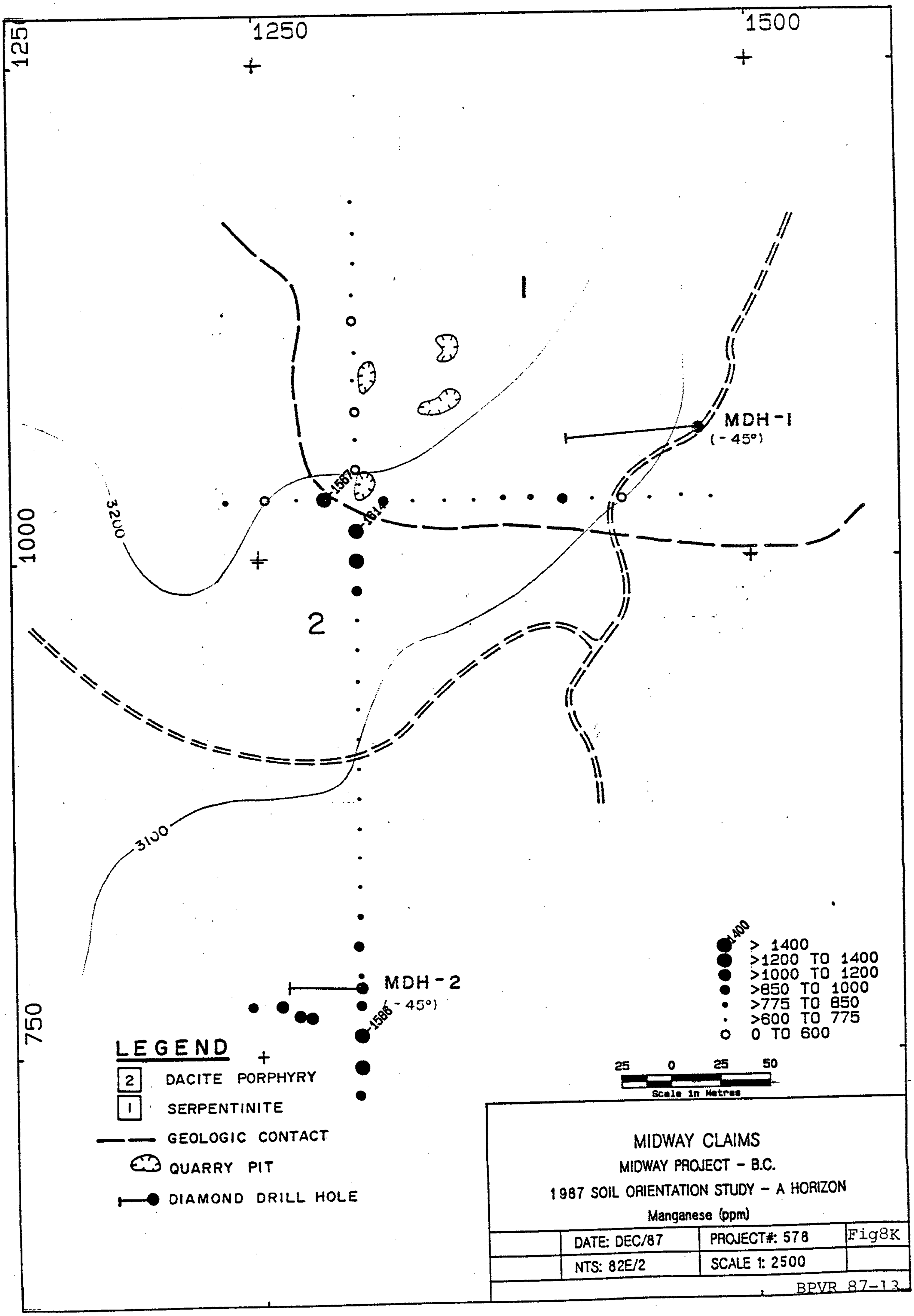
1987 SOIL ORIENTATION STUDY - A HORIZON

Zinc (ppm)

DATE: DEC/87	PROJECT#: 578	Fig8I
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13


1250
1500
1250
1000
750
3200
3100
3.62
4.05
3.5
1
2
MDH-1
(-45°)
MDH-2
(-45°)
> 3.5
>3.2 TO 3.5
>2.9 TO 3.2
>2.6 TO 2.9
>2.4 TO 2.6
>2.1 TO 2.4
0 TO 2.1
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - A HORIZON
Iron (%)
DATE: DEC/87
PROJECT#: 578
Fig8J
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



MIDWAY CLAIMS

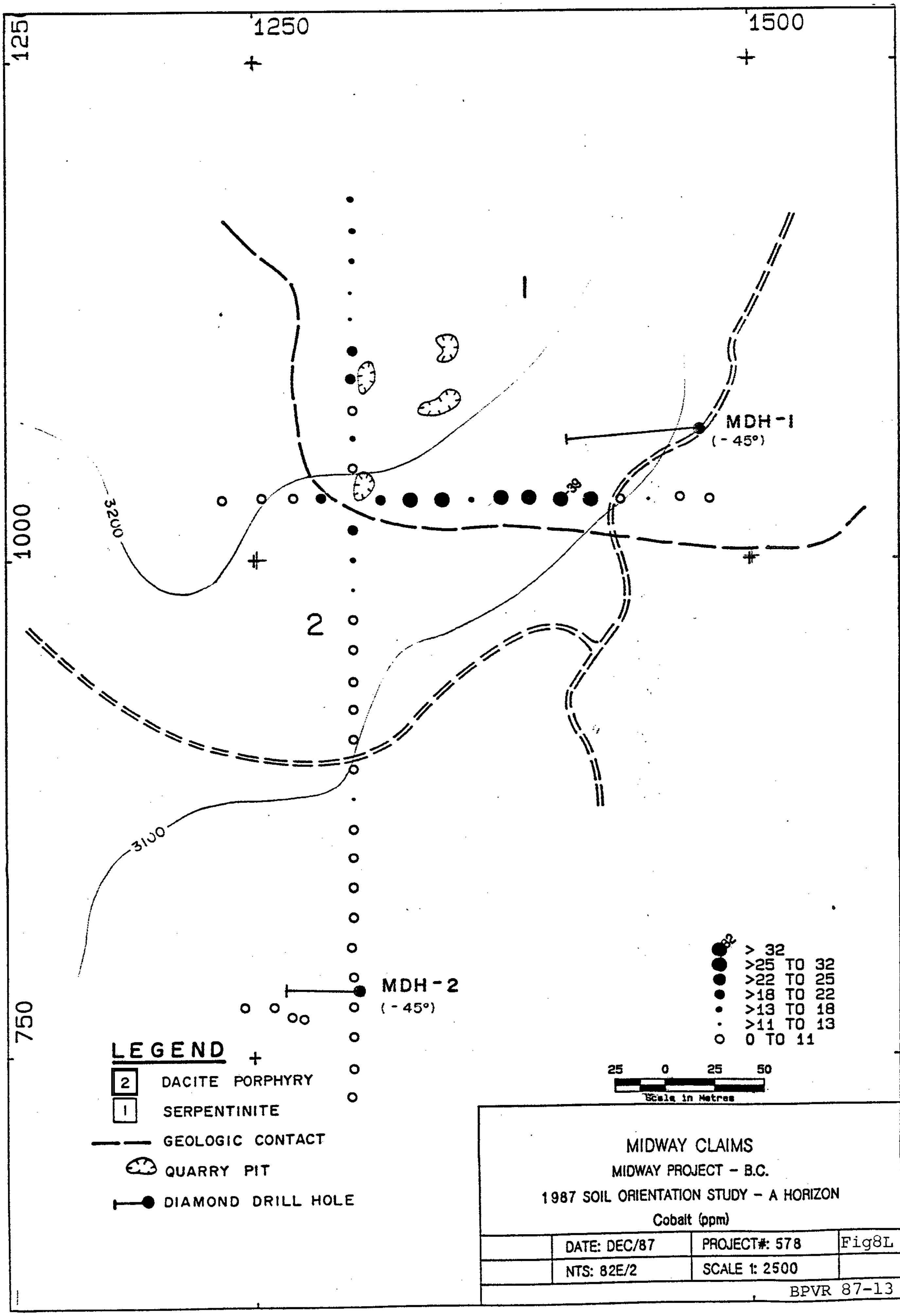
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - A HORIZON

Manganese (ppm)

DATE: DEC/87	PROJECT#: 578	Fig8K
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

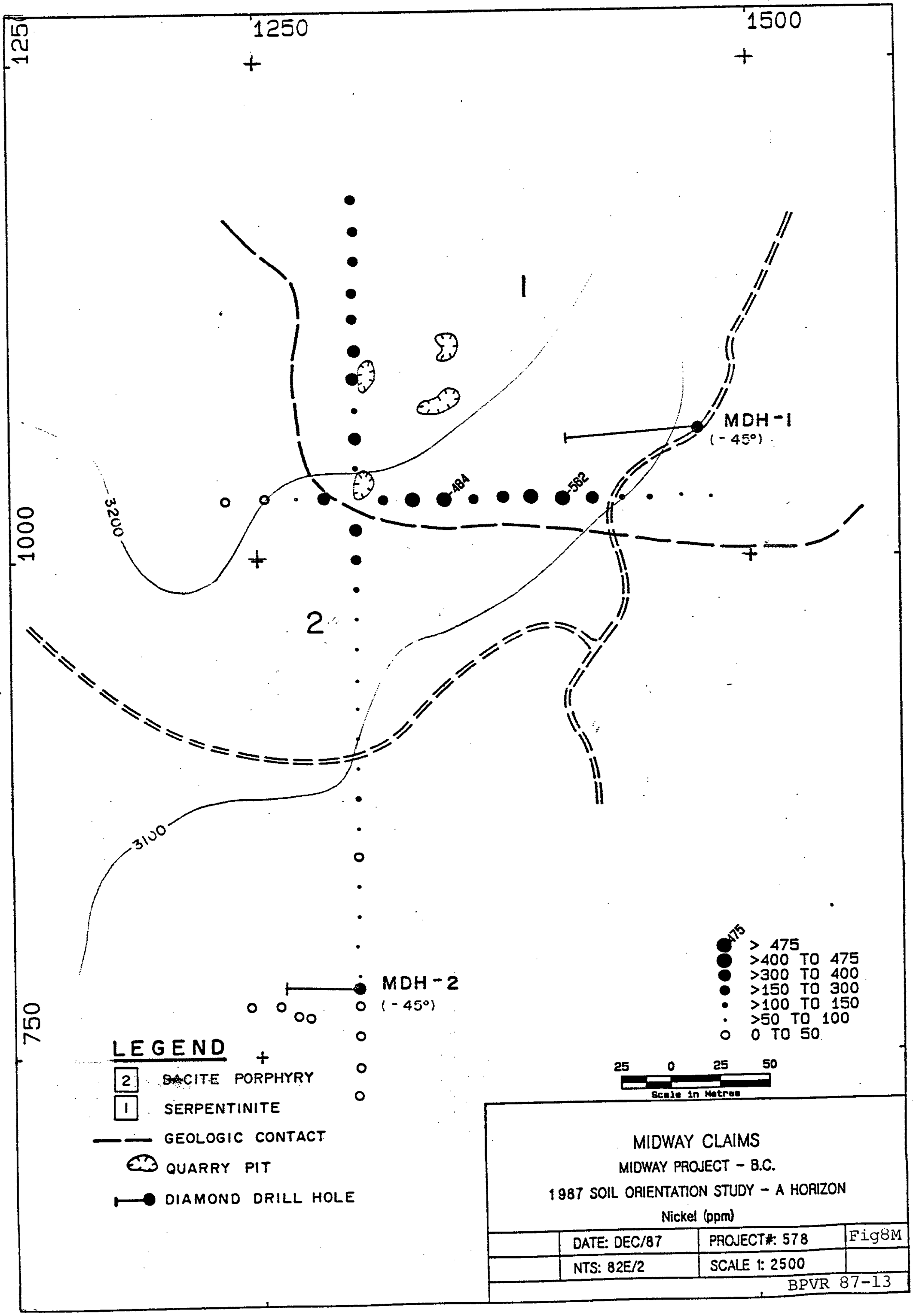
MIDWAY PROJECT - B.C.

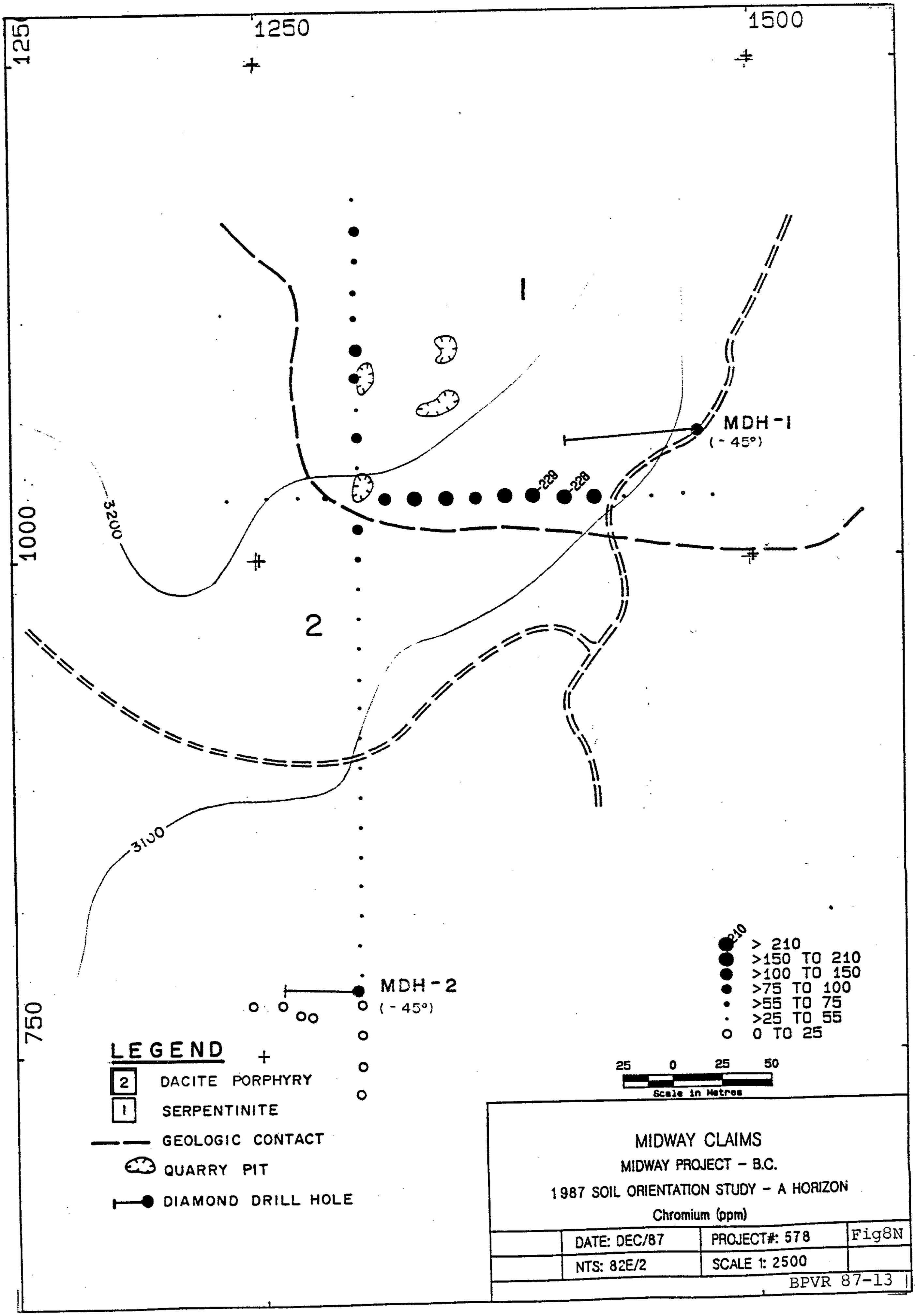
1987 SOIL ORIENTATION STUDY - A HORIZON

Cobalt (ppm)

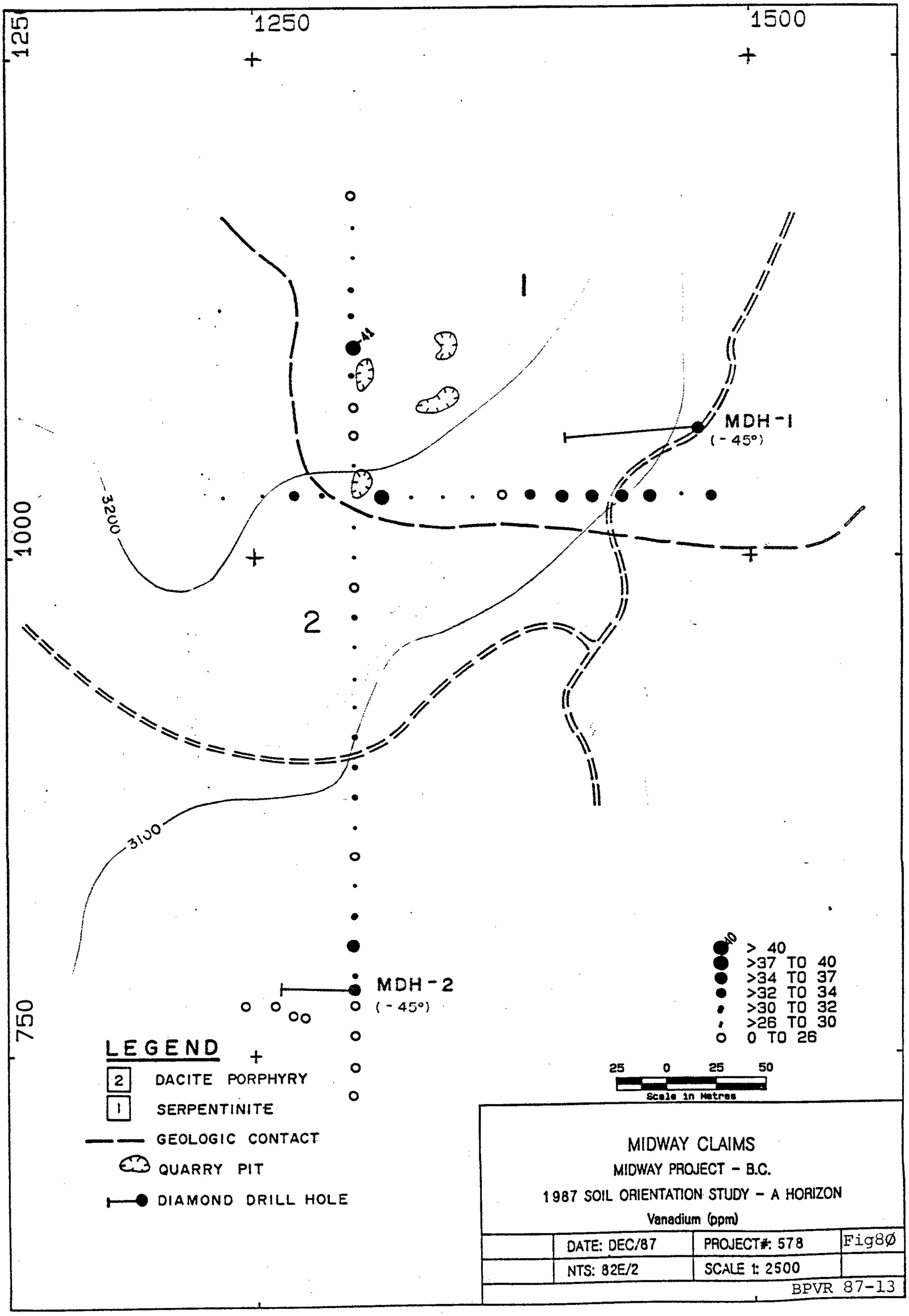
	DATE: DEC/87	PROJECT#: 578	Fig8L
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13

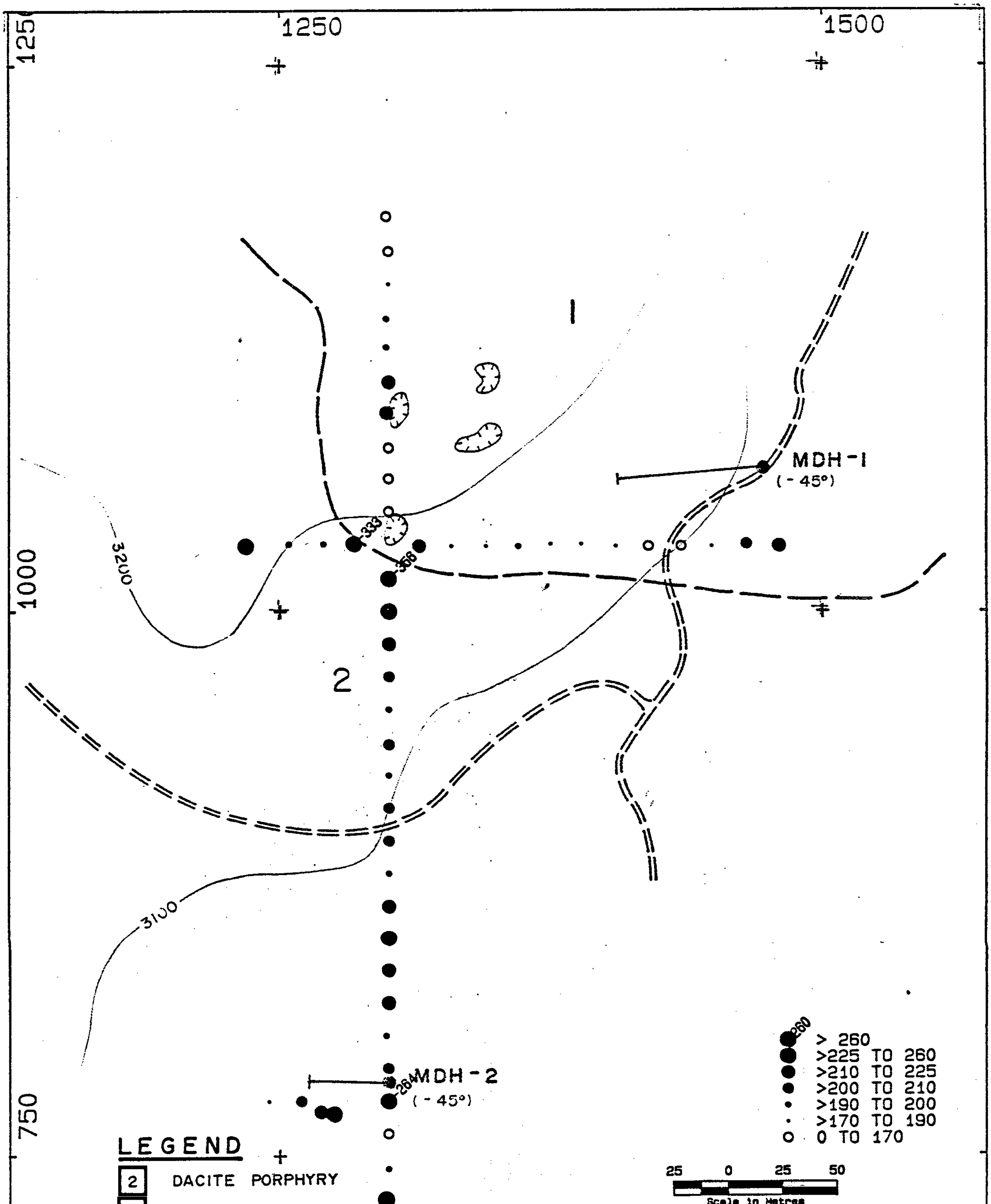

1250
1500
1250
1000
750
3200
3100
1
2
484
582
MDH-1
(-45°)
MDH-2
(-45°)
475
> 475
>400 TO 475
>300 TO 400
>150 TO 300
>100 TO 150
>50 TO 100
0 TO 50
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - A HORIZON
Nickel (ppm)
DATE: DEC/87
PROJECT#: 578
Fig8M
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



1250
1500
125
1000
750
1
2
3200
3100
MDH-1
(-45°)
MDH-2
(-45°)
229
228
210
> 210
>150 TO 210
>100 TO 150
>75 TO 100
>55 TO 75
>25 TO 55
0 TO 25
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - A HORIZON
Chromium (ppm)
DATE: DEC/87
PROJECT#: 578
Fig8N
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



1250
1500
125
1000
750
1
2
41
MDH-1
(-45°)
MDH-2
(-45°)
3200
3100
40
> 40
>37 TO 40
>34 TO 37
>32 TO 34
>30 TO 32
>26 TO 30
0 TO 26
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - A HORIZON
Vanadium (ppm)
DATE: DEC/87
PROJECT#: 578
Fig8Ø
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



MIDWAY CLAIMS

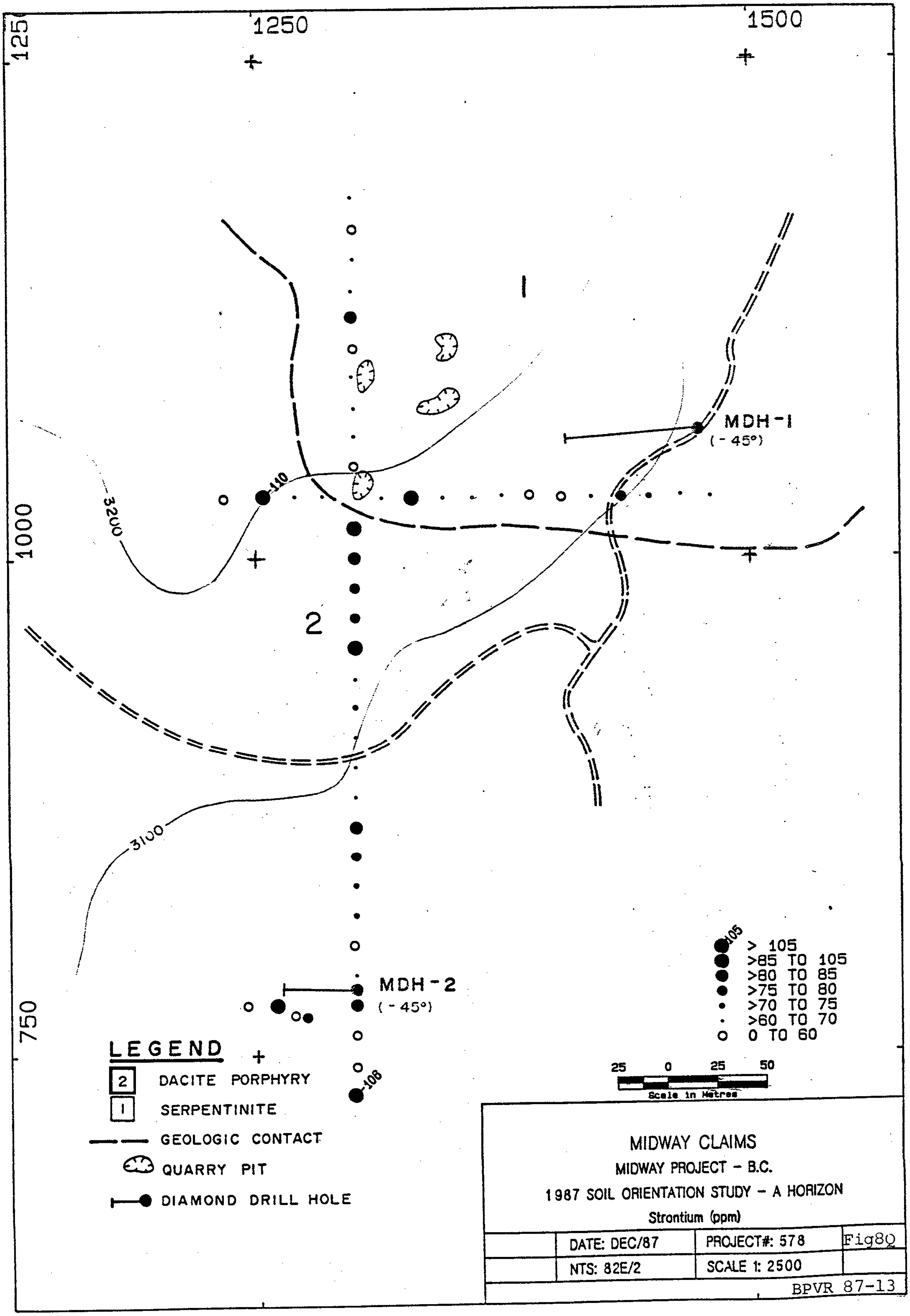
MIDWAY PROJECT – B.C.

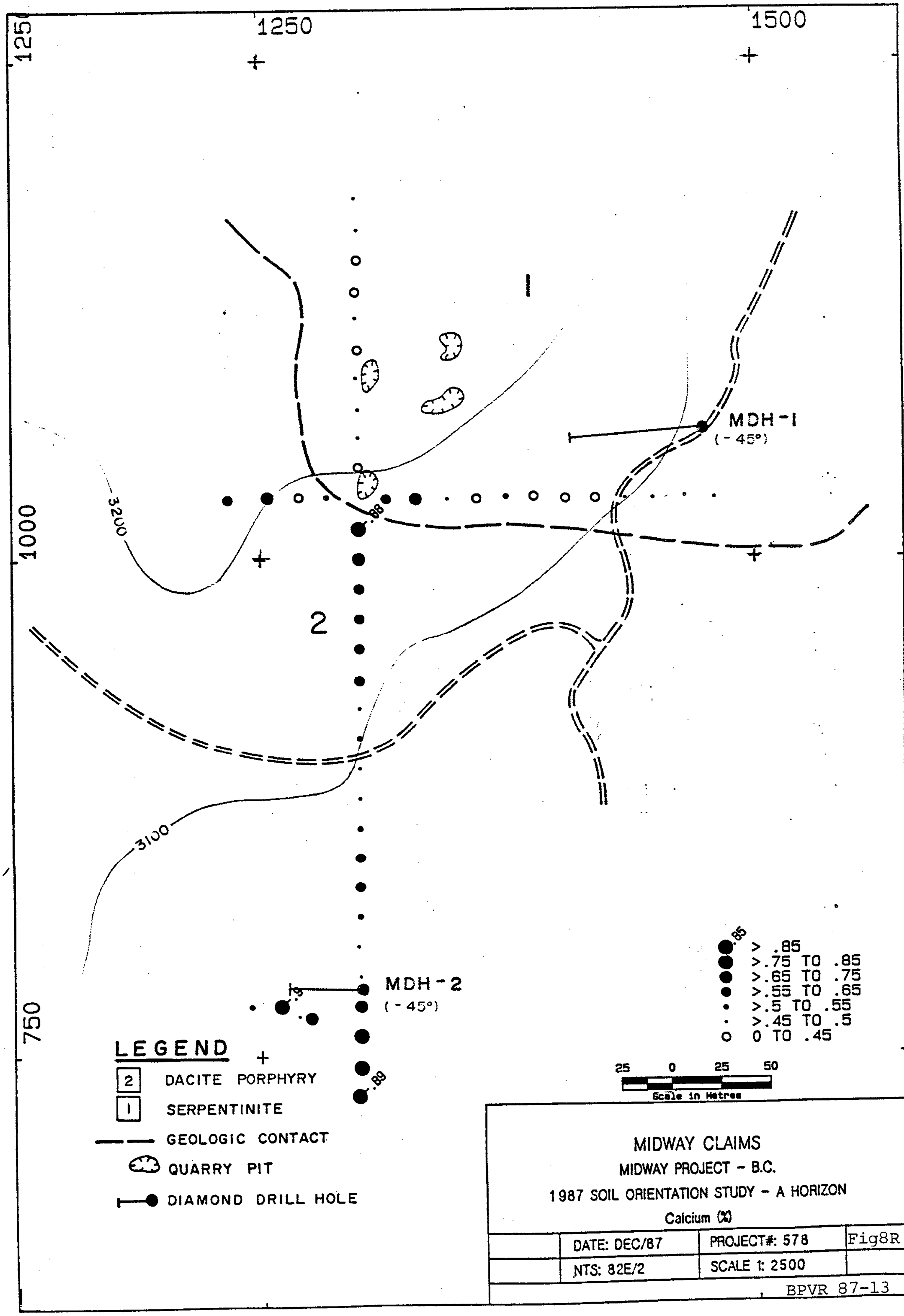
1987 SOIL ORIENTATION STUDY – A HORIZON

Barium (ppm)

	DATE: DEC/87	PROJECT#: 578	Fig8P
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13


1250
1500
125
1000
750
MDH-1
(-45°)
MDH-2
(-45°)
110
3200
3100
106
105
2
1
> 105
>85 TO 105
>80 TO 85
>75 TO 80
>70 TO 75
>60 TO 70
0 TO 60
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - A HORIZON
Strontium (ppm)
DATE: DEC/87
PROJECT#: 578
Fig8Q
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



MIDWAY CLAIMS

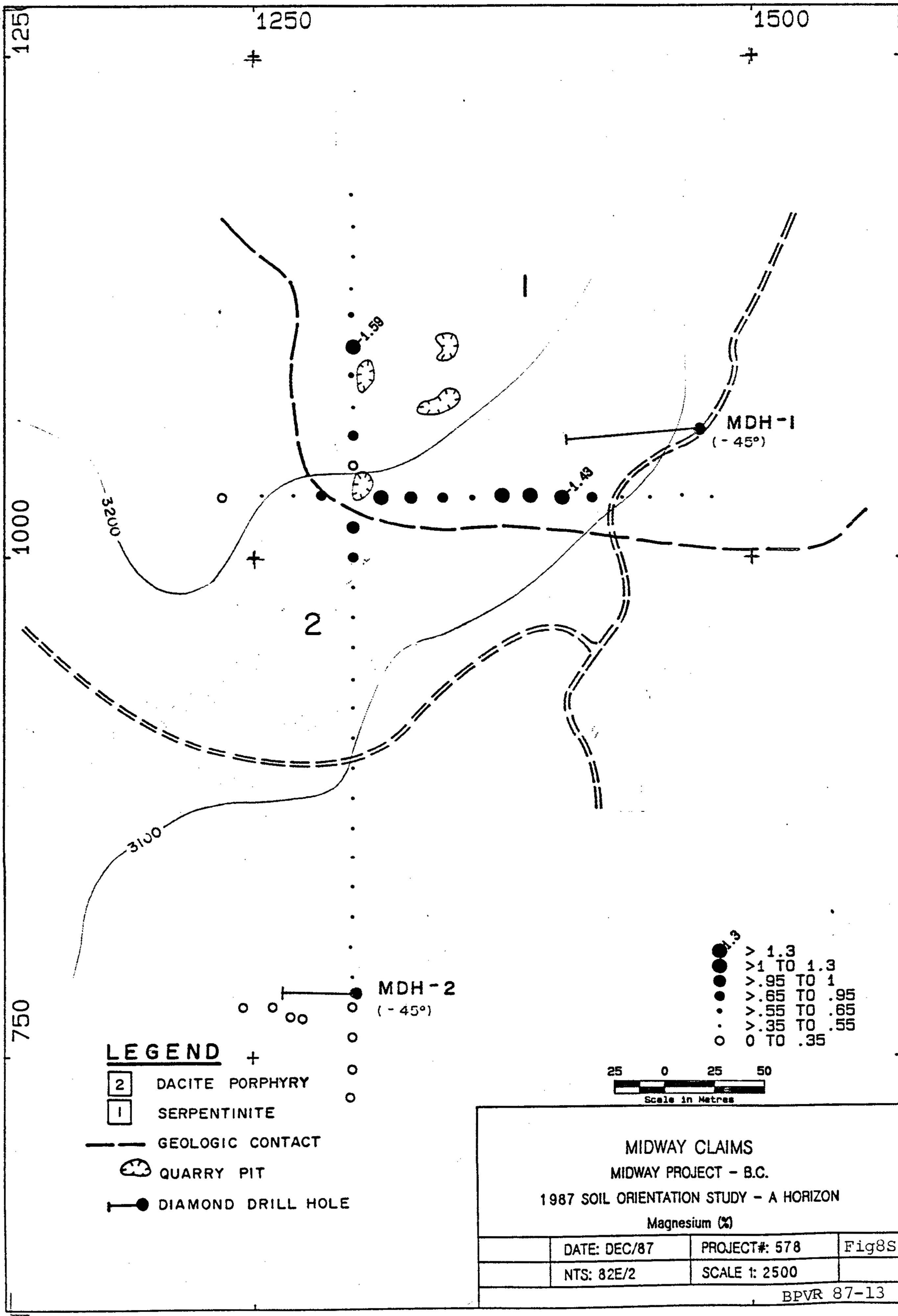
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - A HORIZON

Calcium (%)

	DATE: DEC/87	PROJECT#: 578	Fig8R
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

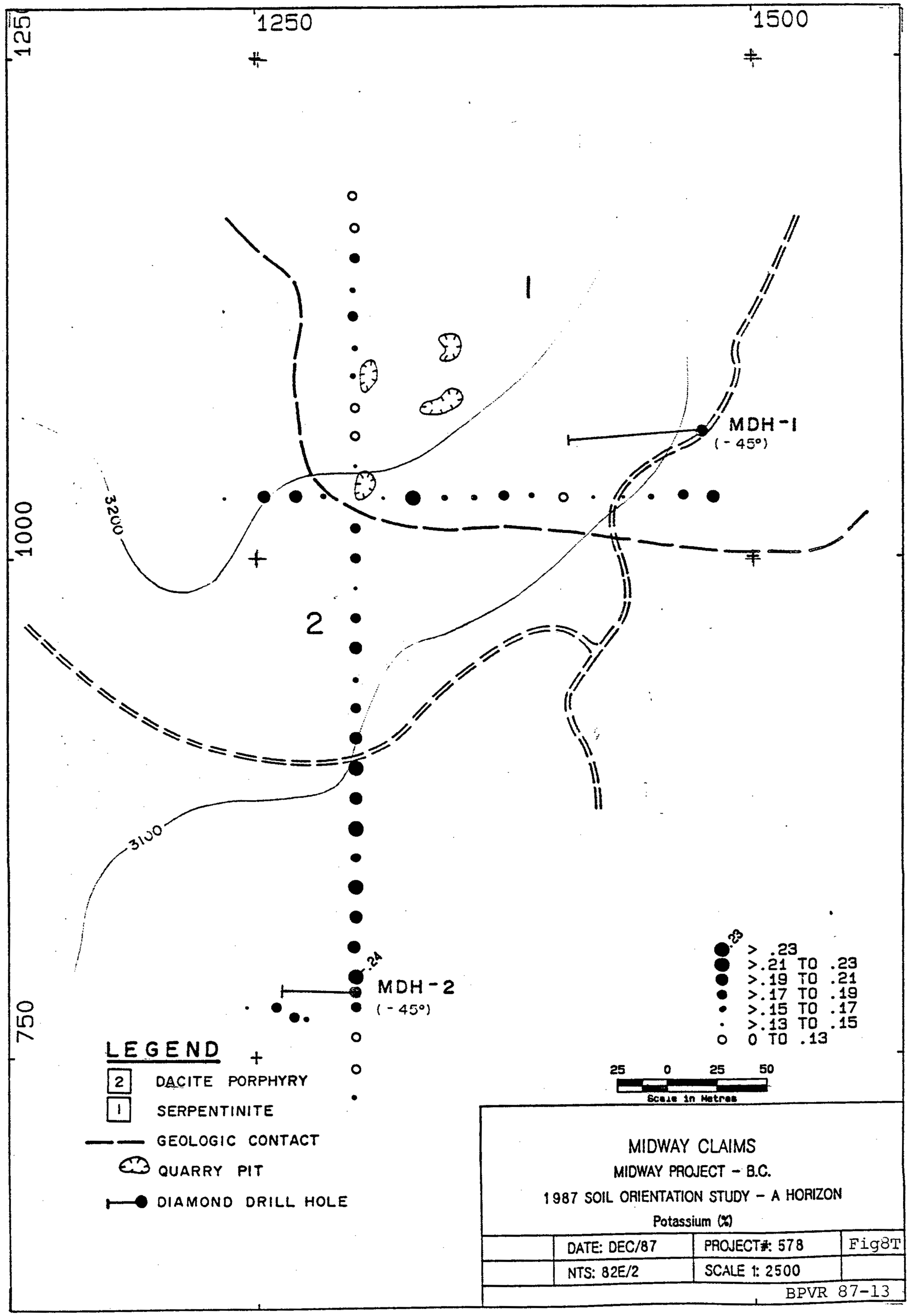
MIDWAY PROJECT - B.C.

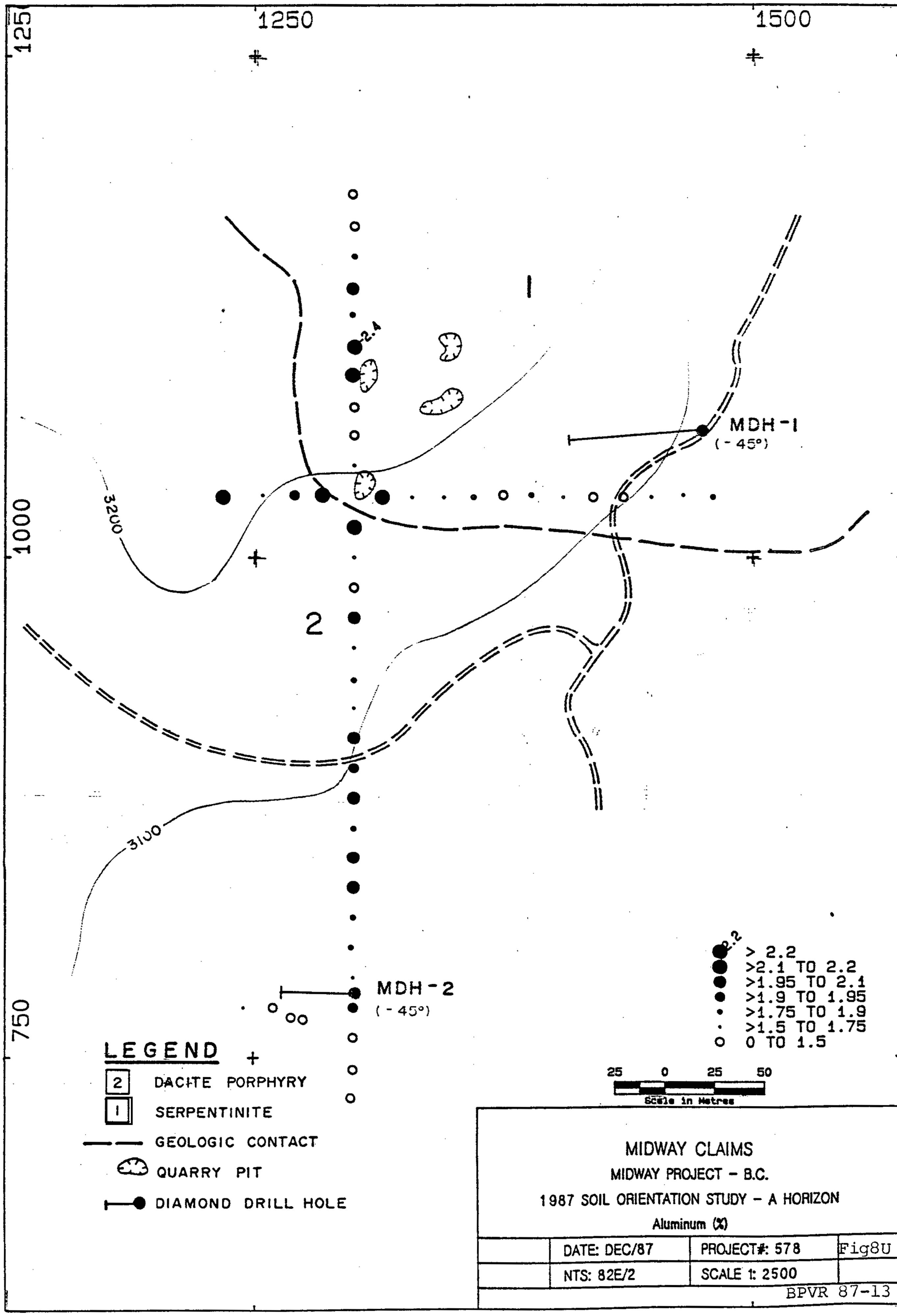
1987 SOIL ORIENTATION STUDY - A HORIZON

Magnesium (%)

	DATE: DEC/87	PROJECT#: 578	Fig8S
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13


1250
1500
1250
1000
750
3200
3100
1
2
MDH-1
(-45°)
MDH-2
(-45°)
.24
.23
> .23
>.21 TO .23
>.19 TO .21
>.17 TO .19
>.15 TO .17
>.13 TO .15
0 TO .13
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - A HORIZON
Potassium (%)
DATE: DEC/87
PROJECT#: 578
Fig8T
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



MIDWAY CLAIMS

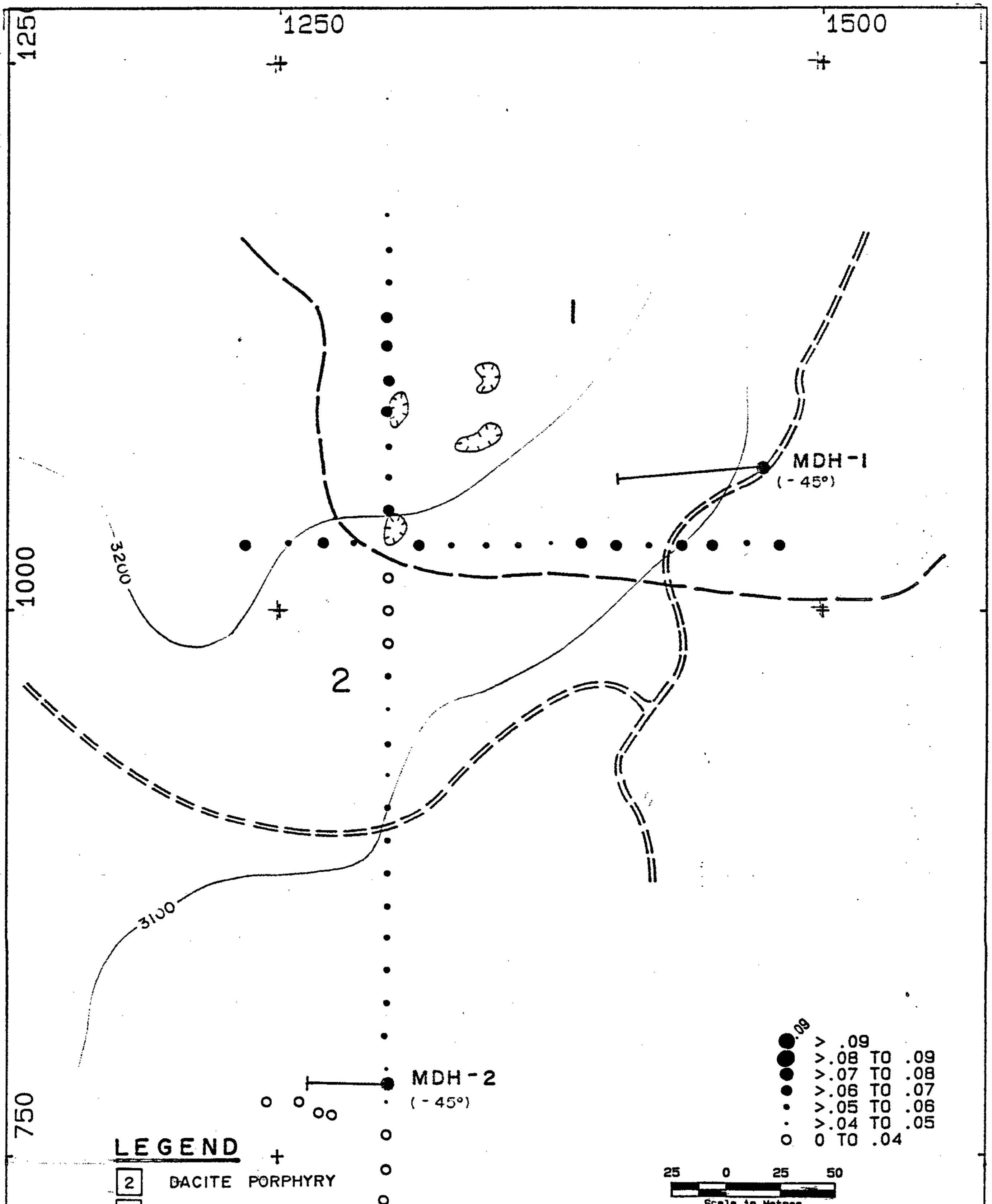
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - A HORIZON

Aluminum (%)

DATE: DEC/87	PROJECT#: 578	Fig8U
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

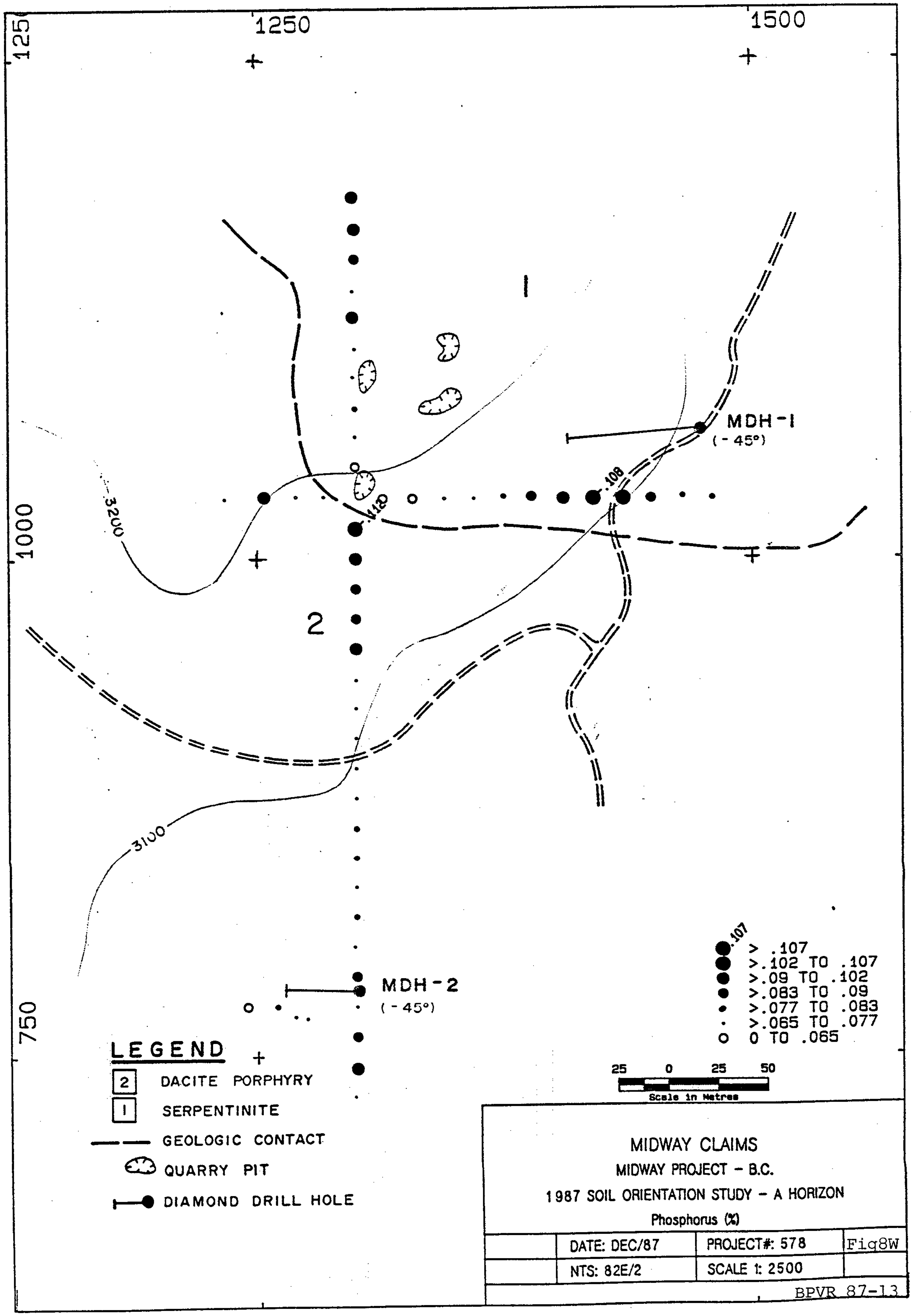
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - A HORIZON

Titanium (%)

	DATE: DEC/87	PROJECT#: 578	Fig8V
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

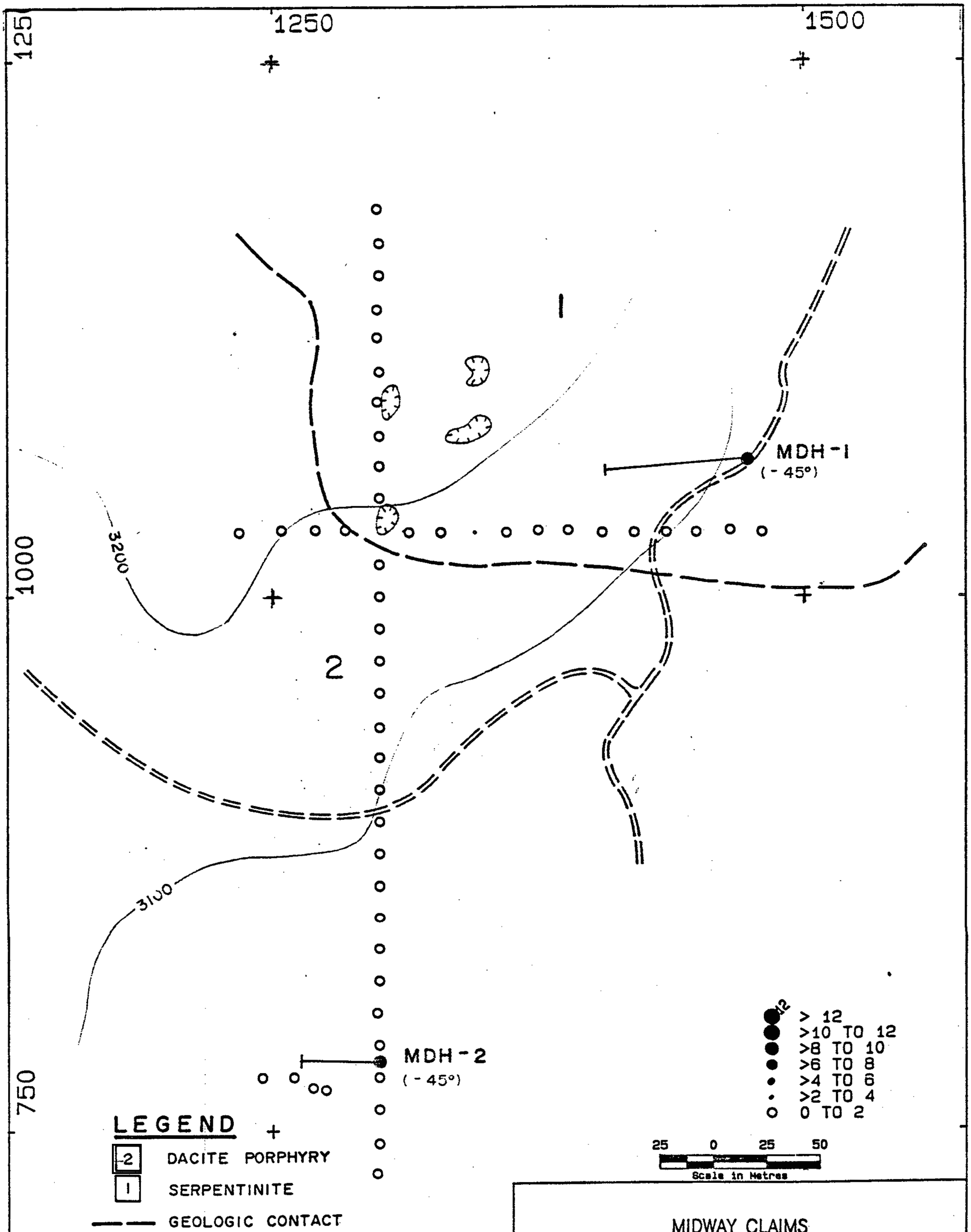
MIDWAY PROJECT – B.C.

1987 SOIL ORIENTATION STUDY – A HORIZON

Phosphorus (%)

	DATE: DEC/87	PROJECT#: 578	Fig8W
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

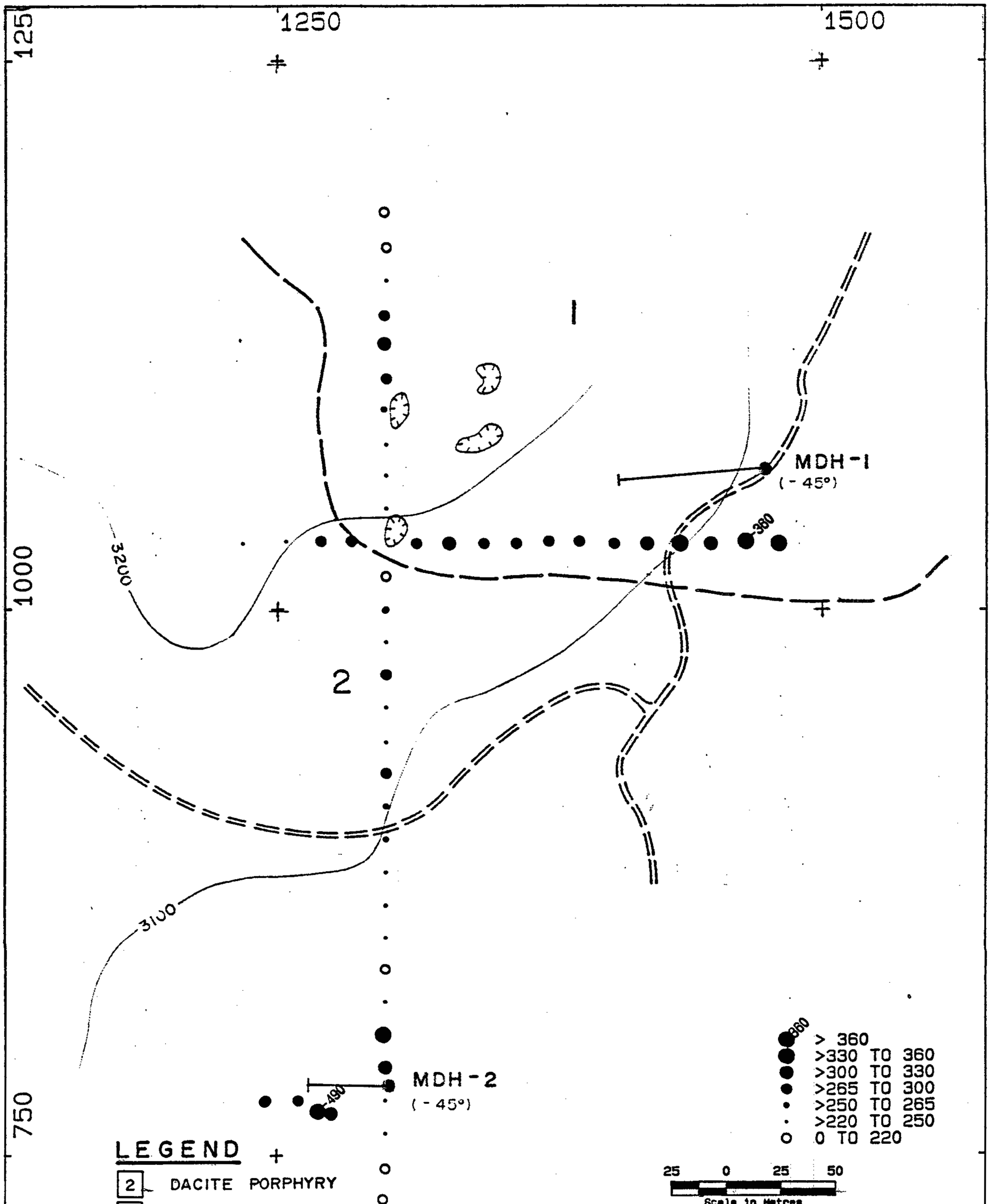
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - A HORIZON

Tungsten (ppm)

	DATE: DEC/87	PROJECT#: 578	Fig8X
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

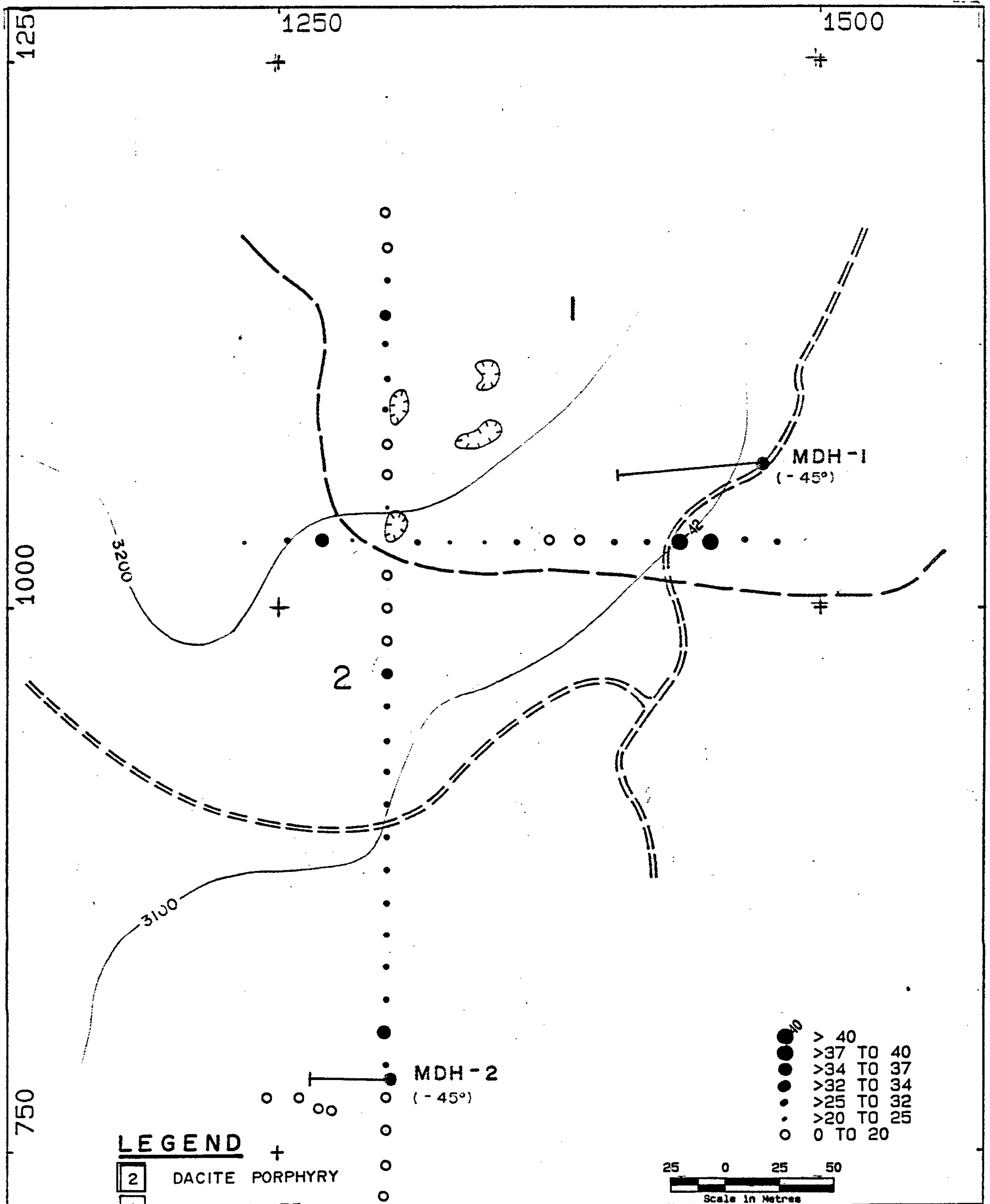
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - A HORIZON

Fluorine (ppm)

	DATE: DEC/87	PROJECT#: 578	Fig8Y
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - A HORIZON

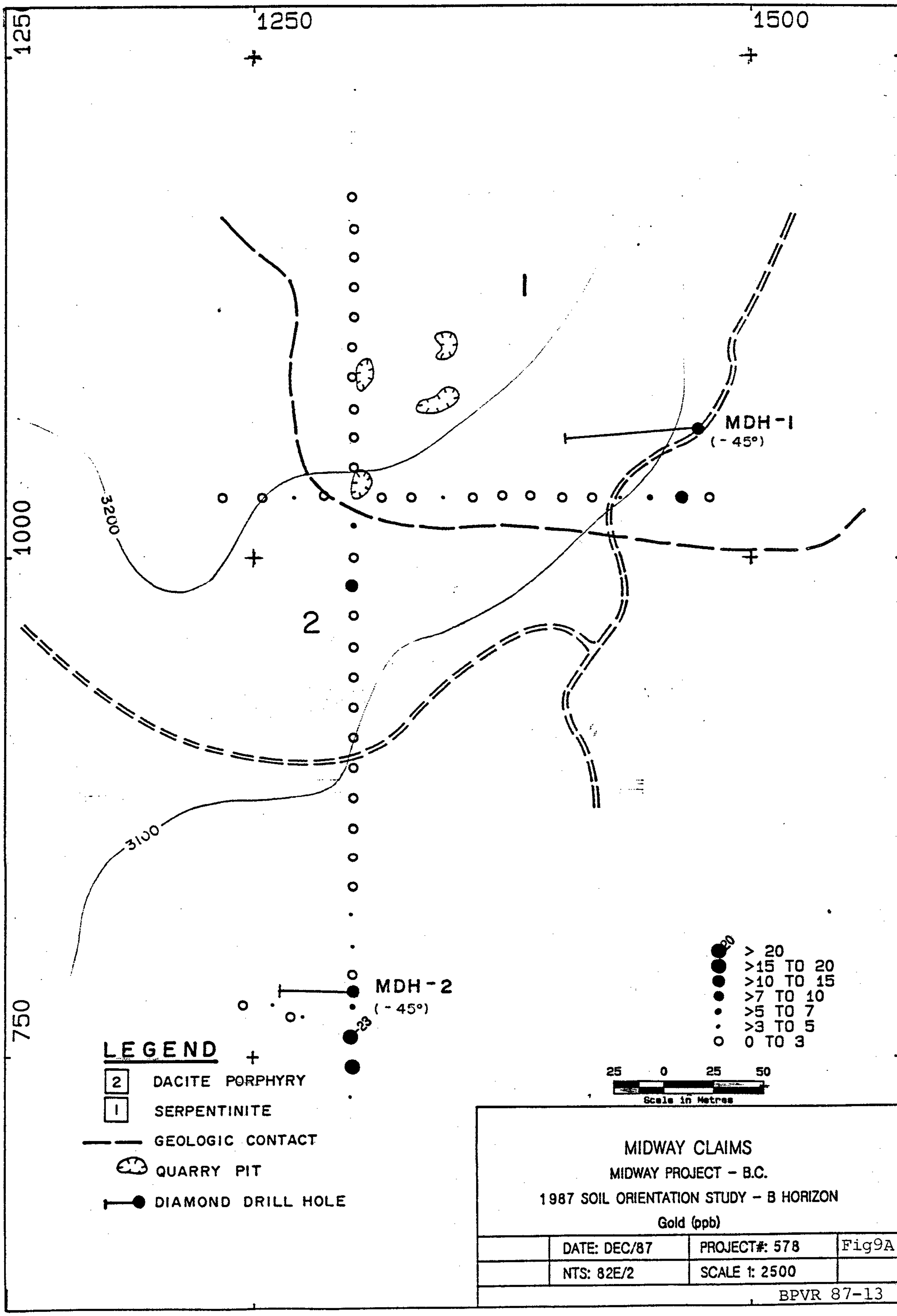
Lanthanum (ppm)

DATE: DEC/87	PROJECT#: 578	Fig8Z
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13

APPENDIX V

B-Horizon Soil Sample Result Plots
(Figures 9A-Z)



MIDWAY CLAIMS

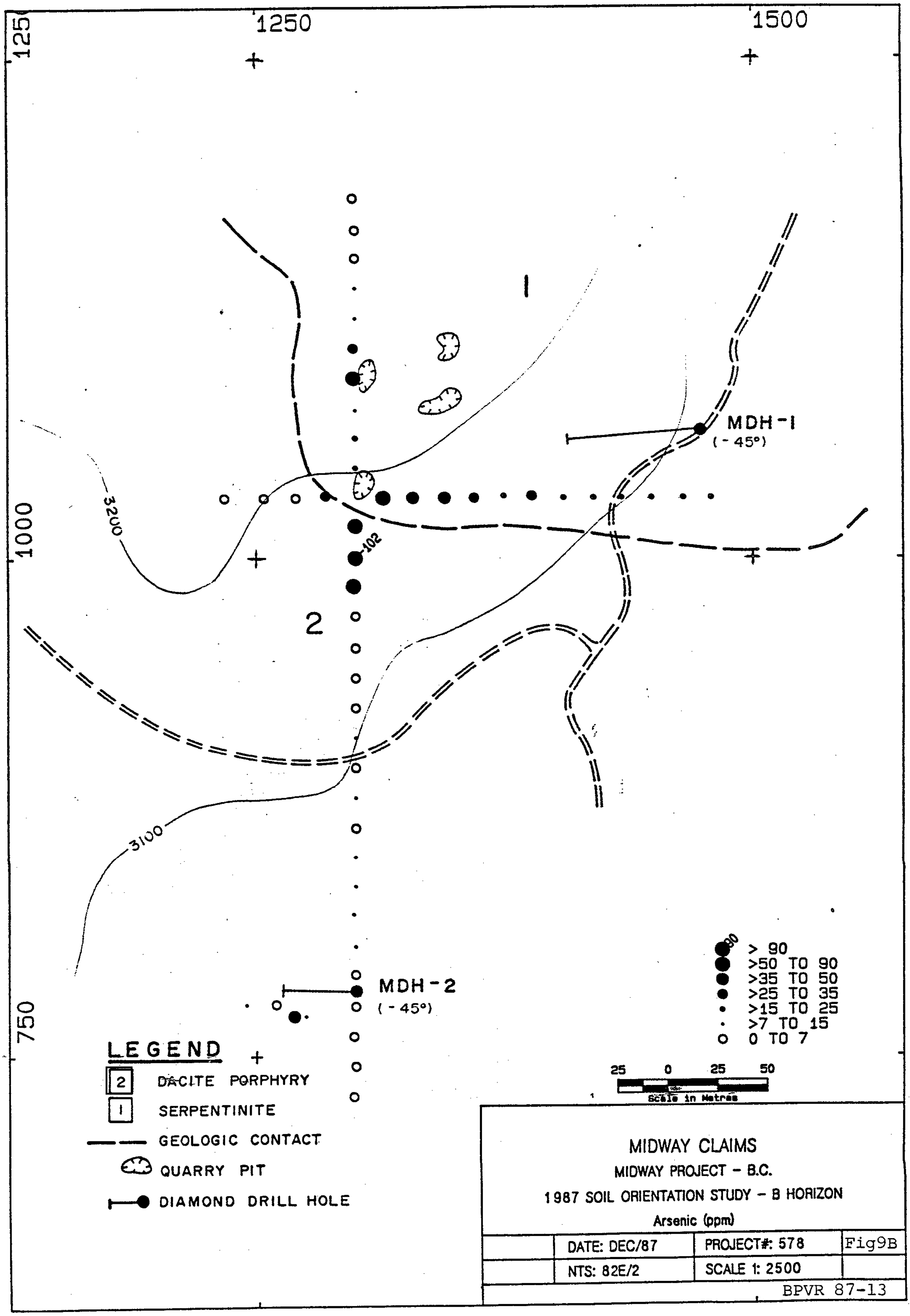
MIDWAY PROJECT – B.C.

1987 SOIL ORIENTATION STUDY – B HORIZON

Gold (ppb)

	DATE: DEC/87	PROJECT#: 578	Fig9A
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

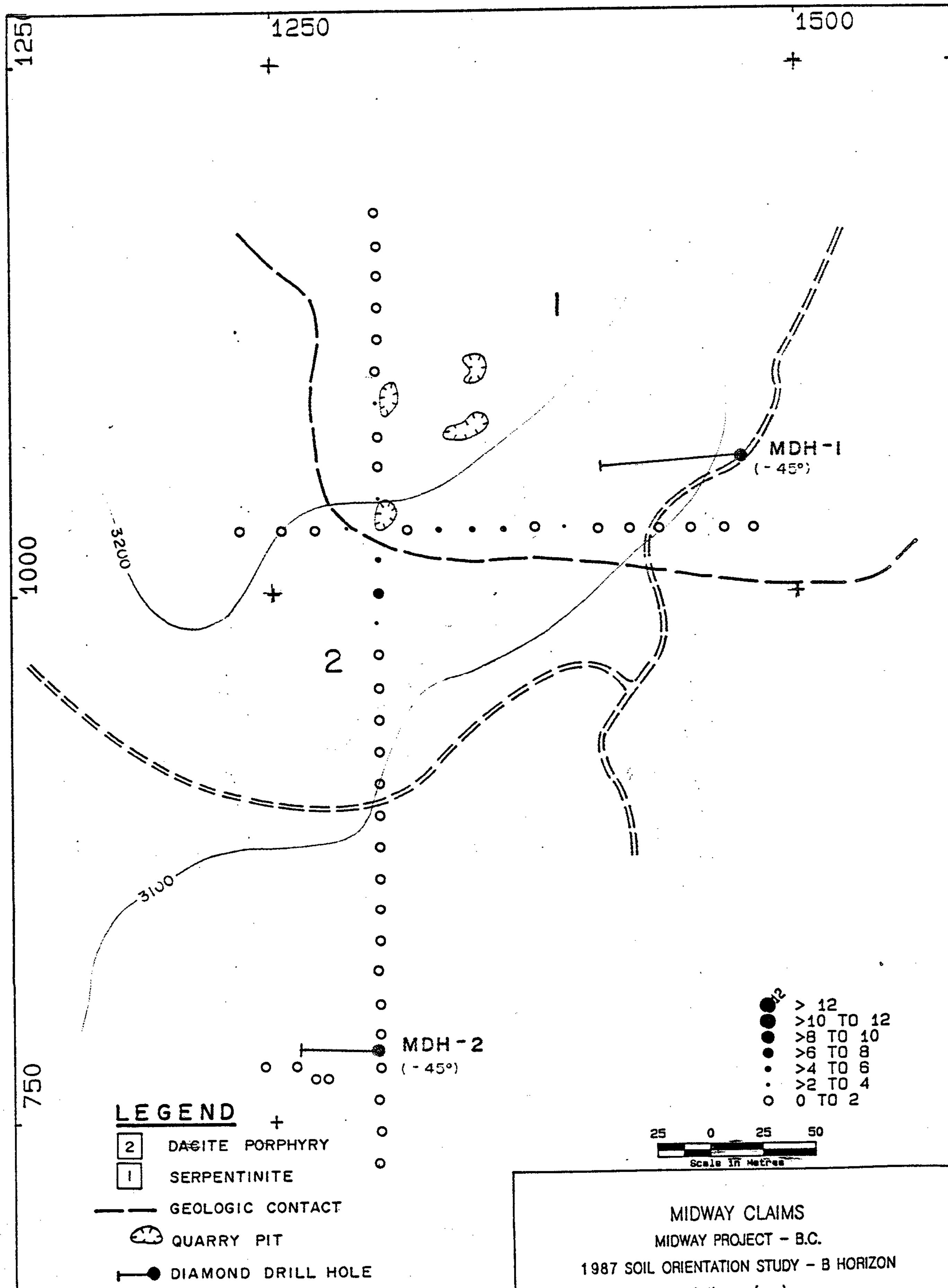
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - B HORIZON

Arsenic (ppm)

	DATE: DEC/87	PROJECT#: 578	Fig9B
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

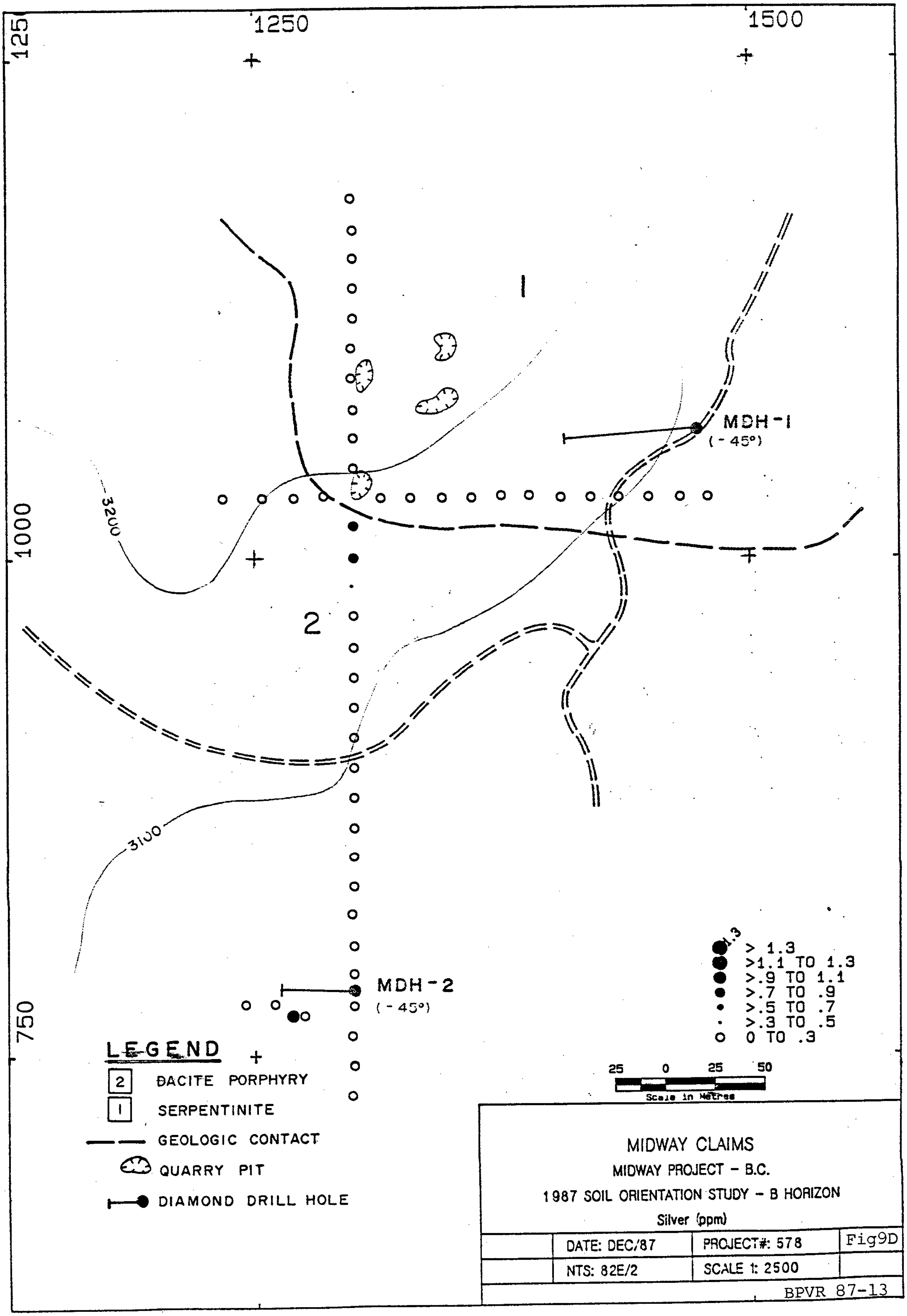
MIDWAY PROJECT – B.C.

1987 SOIL ORIENTATION STUDY – B HORIZON

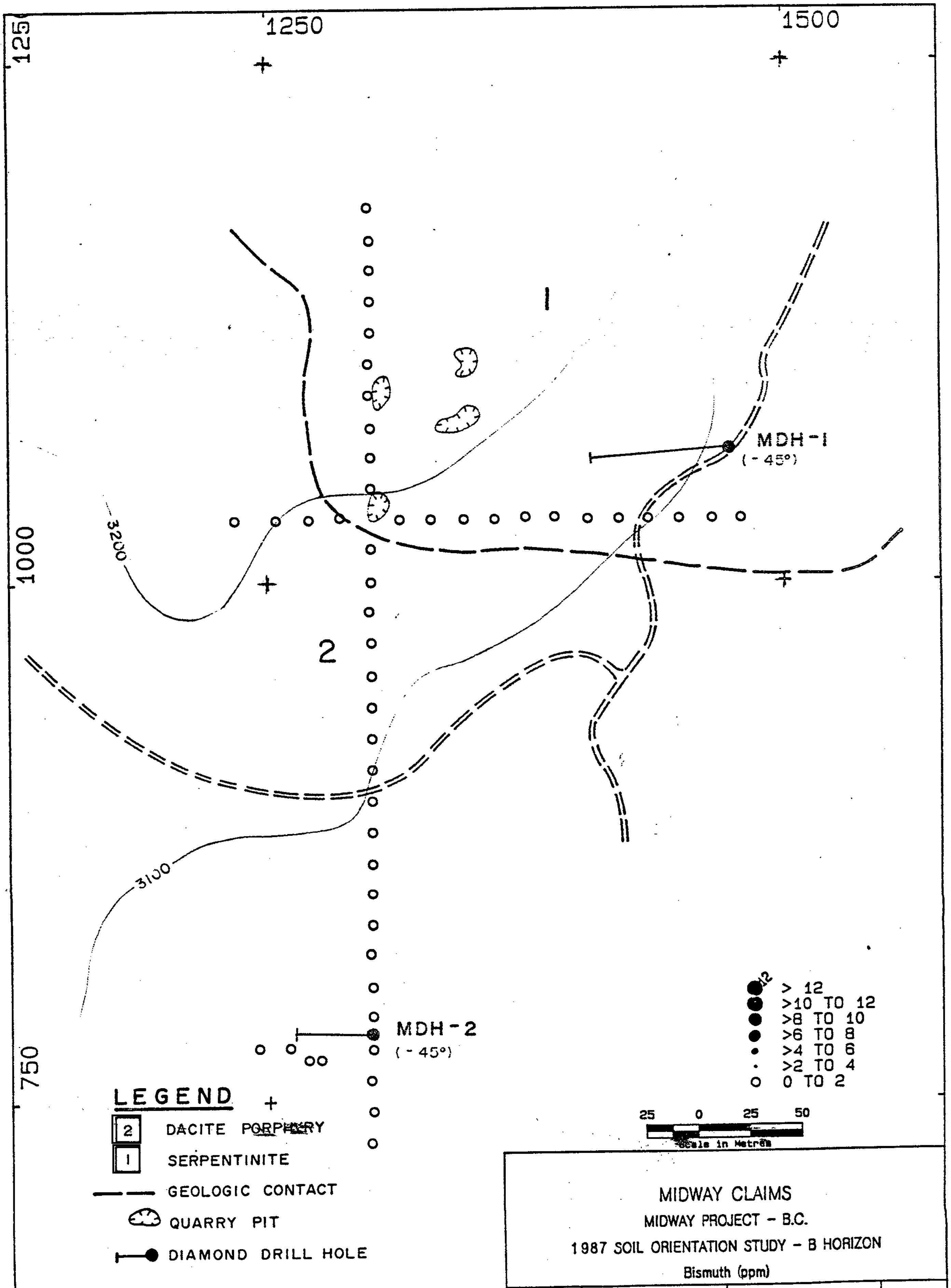
Antimony (ppm)

	DATE: DEC/87	PROJECT#: 578	Fig9C
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



1250
1500
125
1000
750
1
2
MDH-1
(-45°)
MDH-2
(-45°)
3200
3100
> 1.3
>1.1 TO 1.3
>.9 TO 1.1
>.7 TO .9
>.5 TO .7
>.3 TO .5
0 TO .3
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - B HORIZON
Silver (ppm)
DATE: DEC/87
PROJECT#: 578
Fig9D
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



MIDWAY CLAIMS

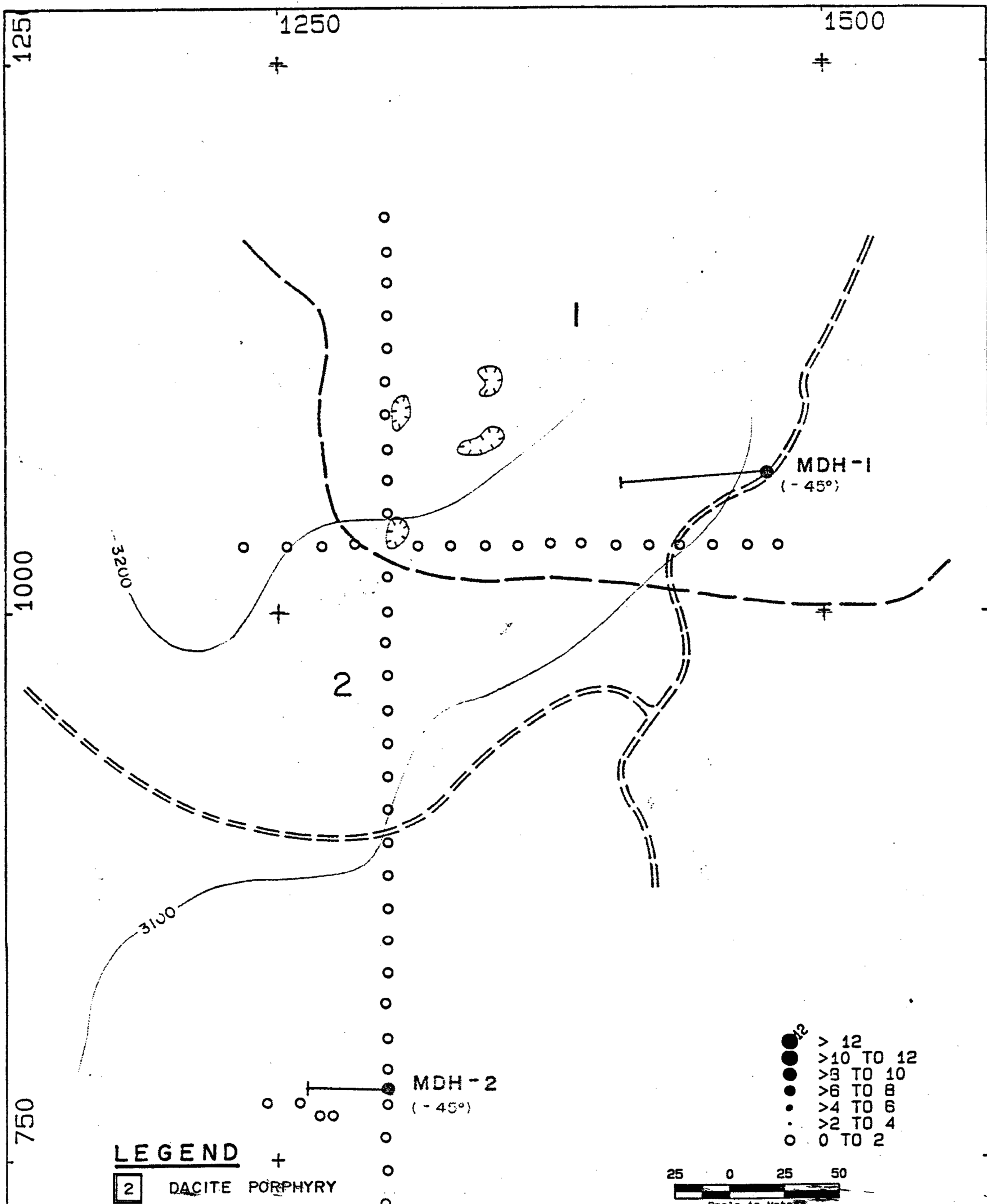
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - B HORIZON

Bismuth (ppm)

DATE: DEC/87	PROJECT#: 578	Fig9E
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

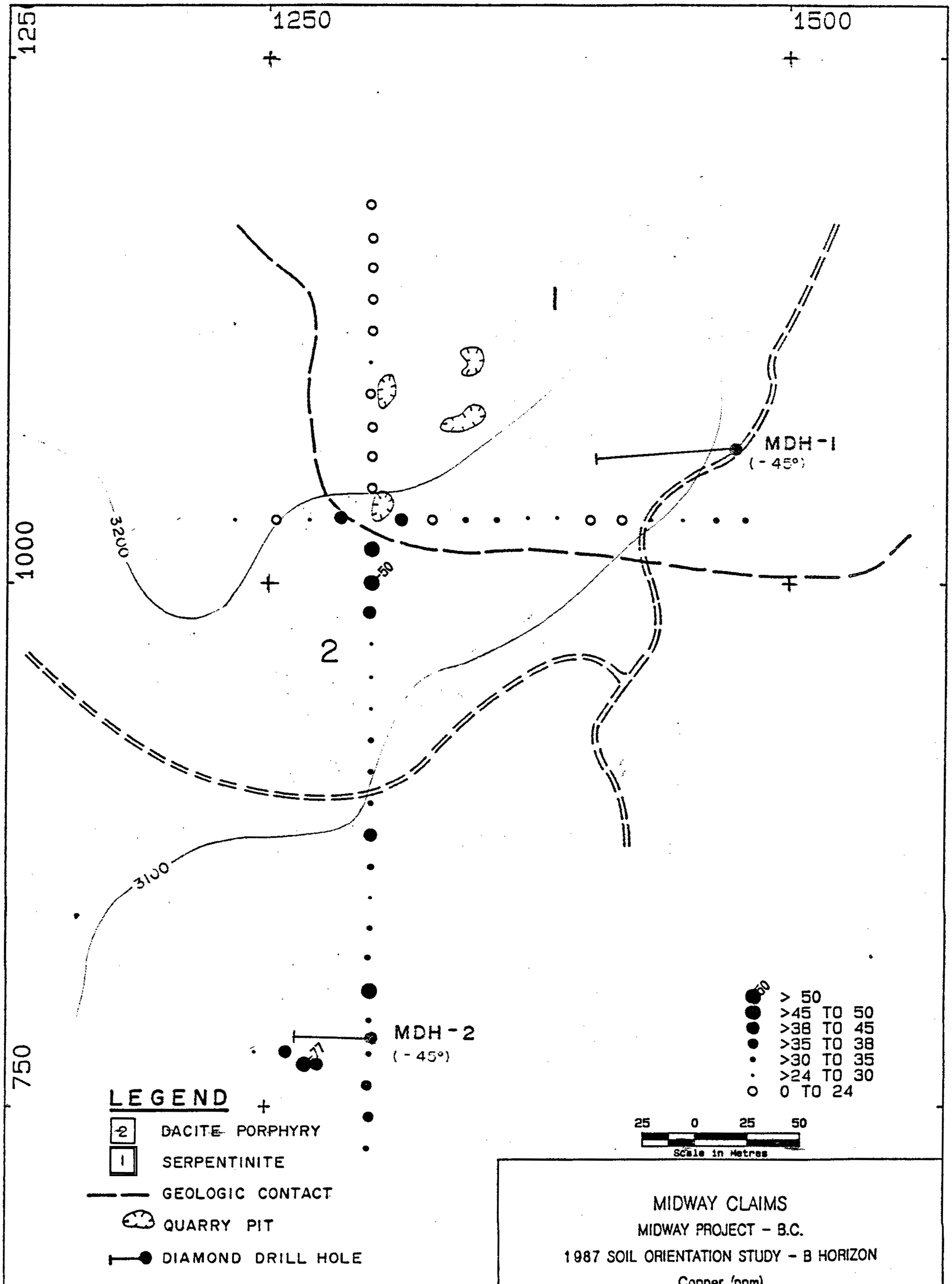
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - B HORIZON

Molybdenum (ppm)

	DATE: DEC/87	PROJECT#: 578	Fig9F
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

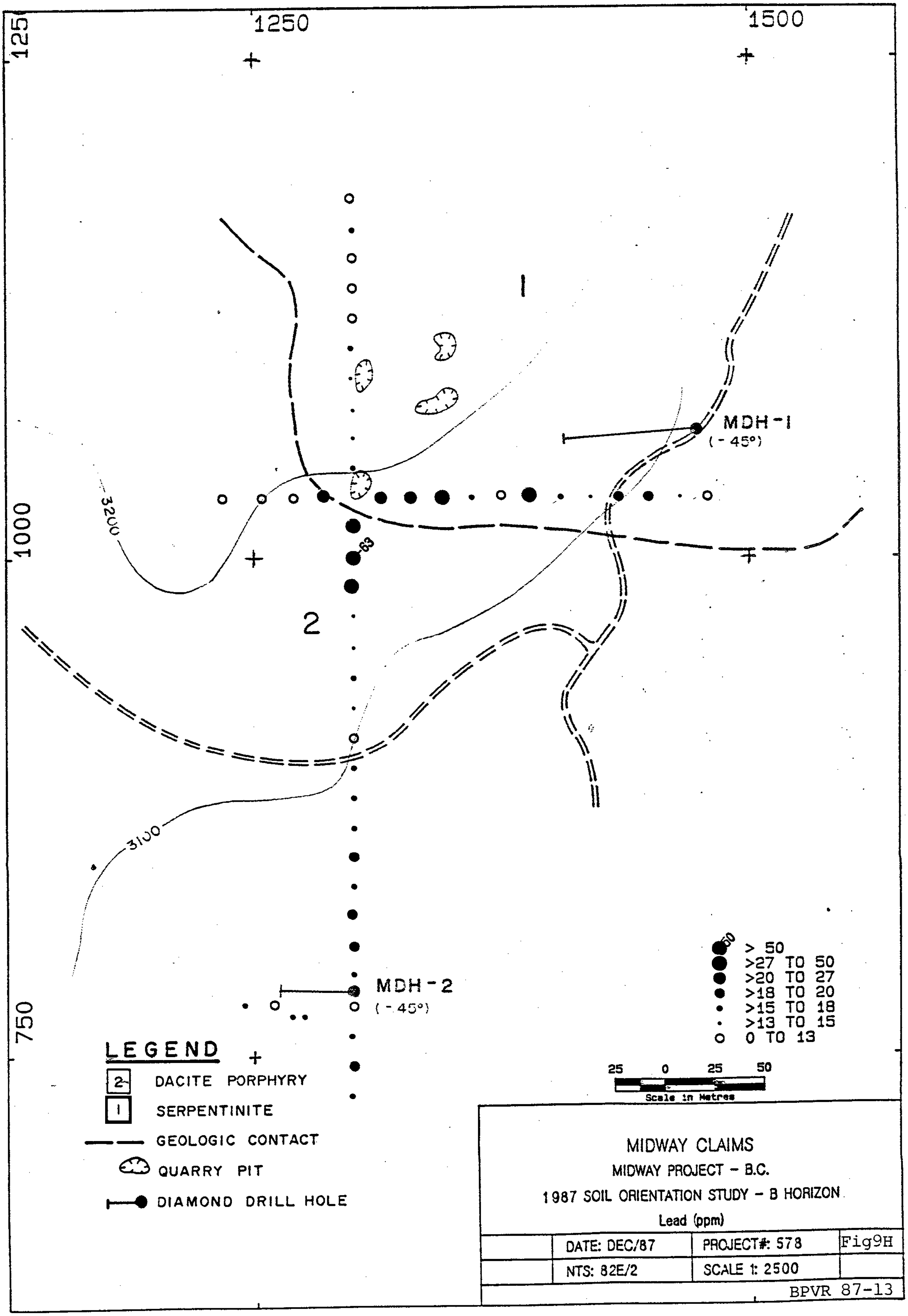
MIDWAY PROJECT – B.C.

1987 SOIL ORIENTATION STUDY – B HORIZON

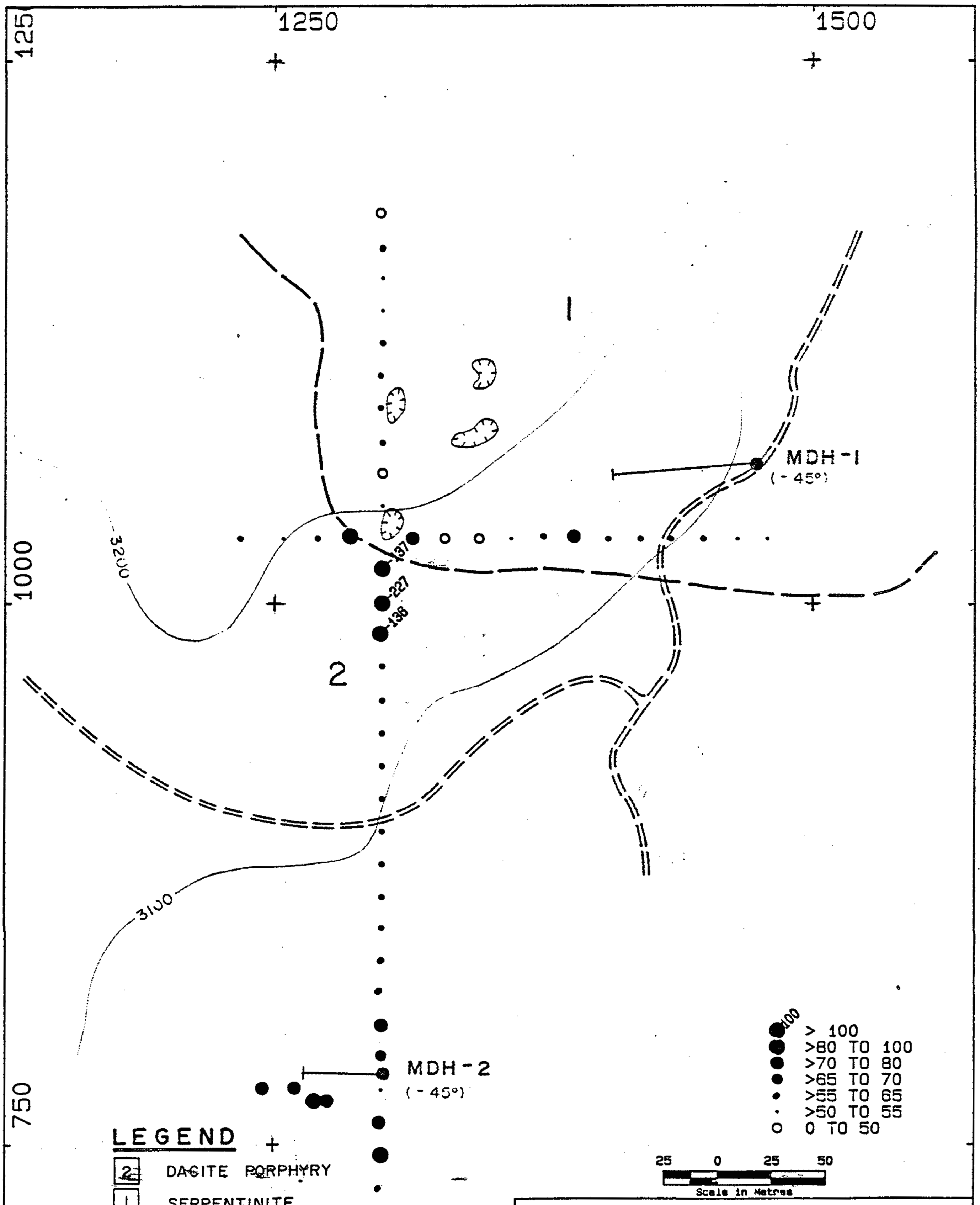
Copper (ppm)

	DATE: DEC/87	PROJECT#: 578	Fig9G
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



1250
1500
1000
750
1
2
3200
3100
63
MDH-1
(-45°)
MDH-2
(-45°)
> 50
>27 TO 50
>20 TO 27
>18 TO 20
>15 TO 18
>13 TO 15
0 TO 13
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - B HORIZON
Lead (ppm)
DATE: DEC/87
PROJECT#: 578
Fig9H
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



MIDWAY CLAIMS

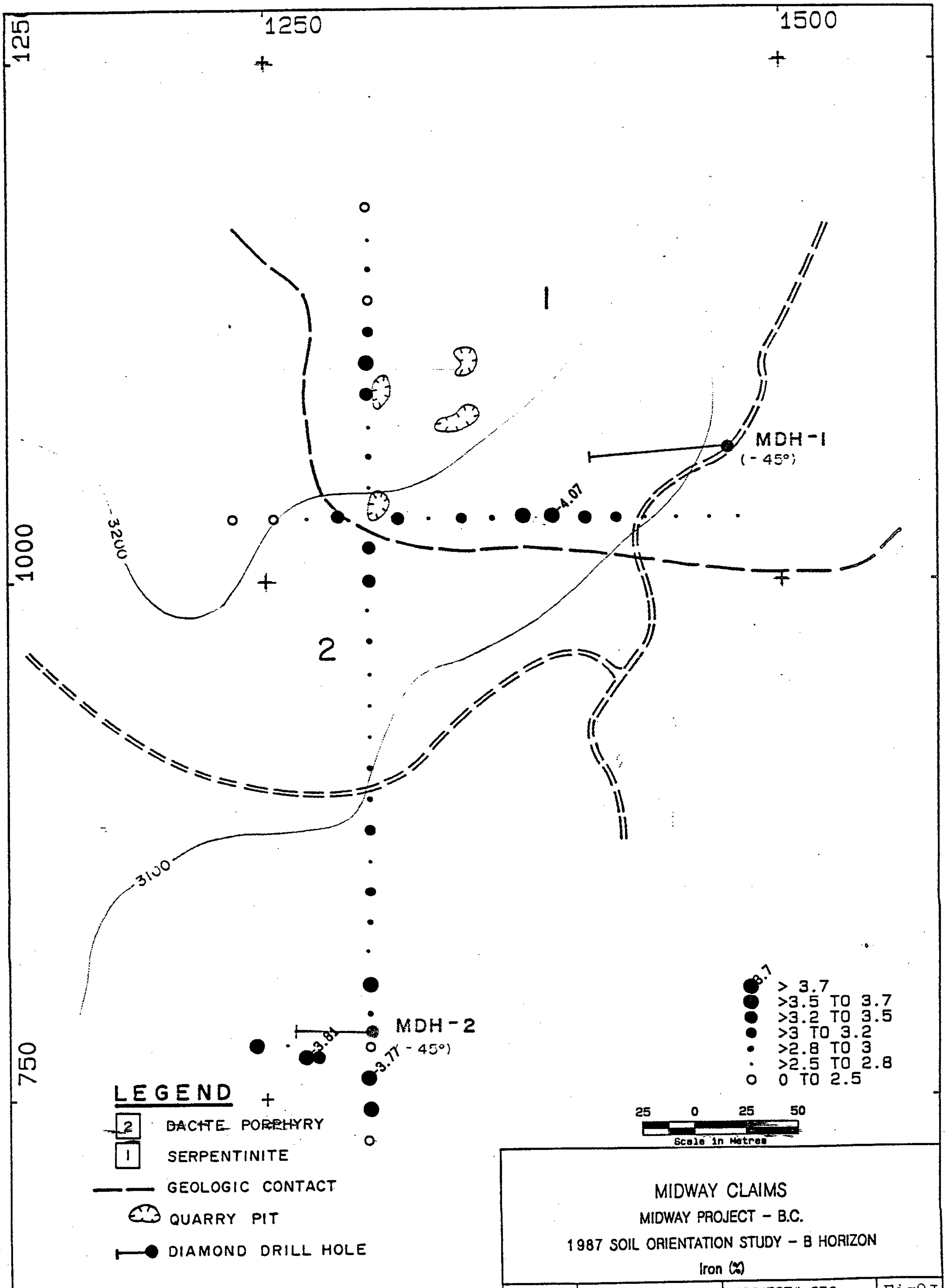
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - B HORIZON

Zinc (ppm)

DATE: DEC/87	PROJECT#: 578	Fig9I
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

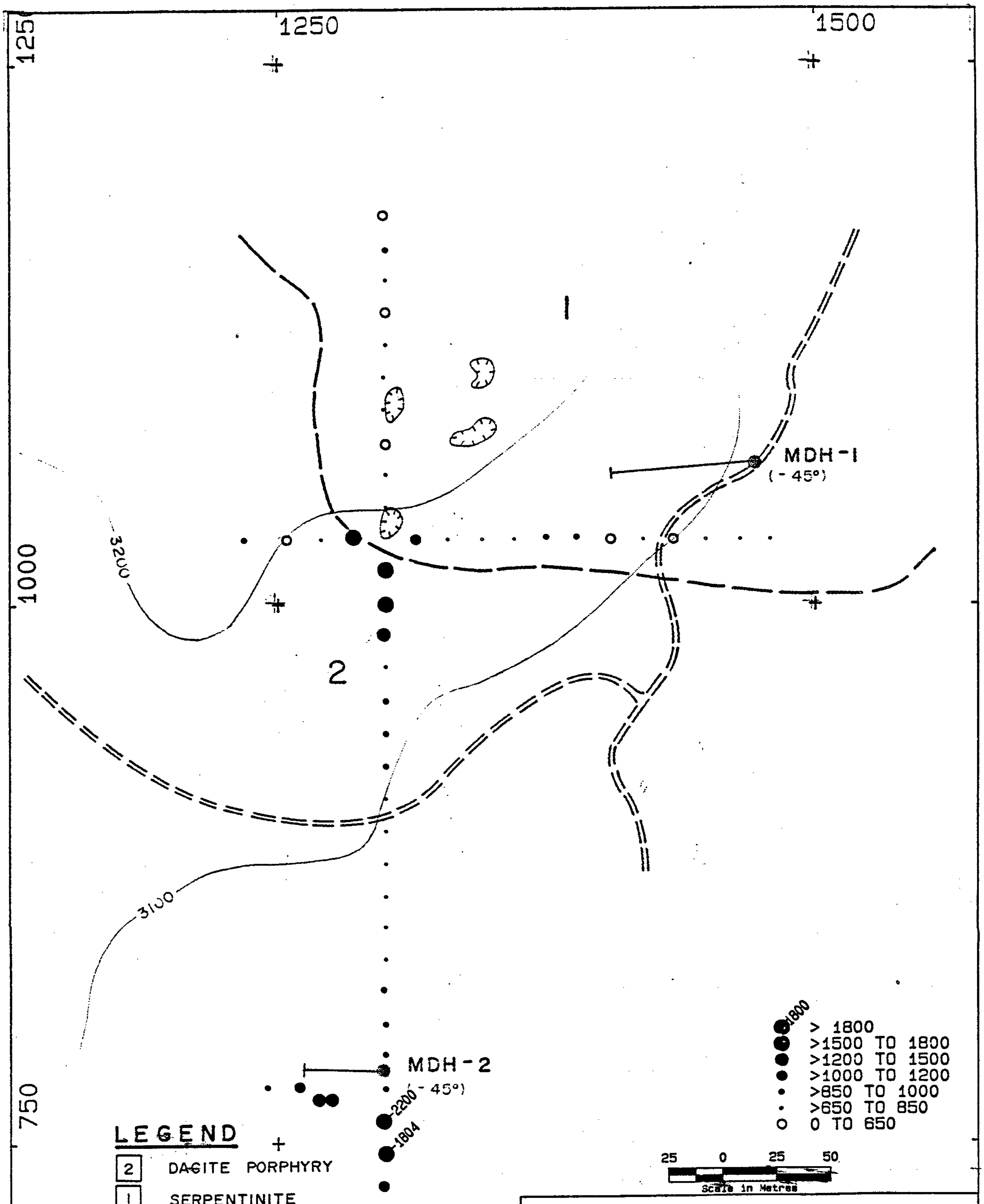
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - B HORIZON

Iron (%)

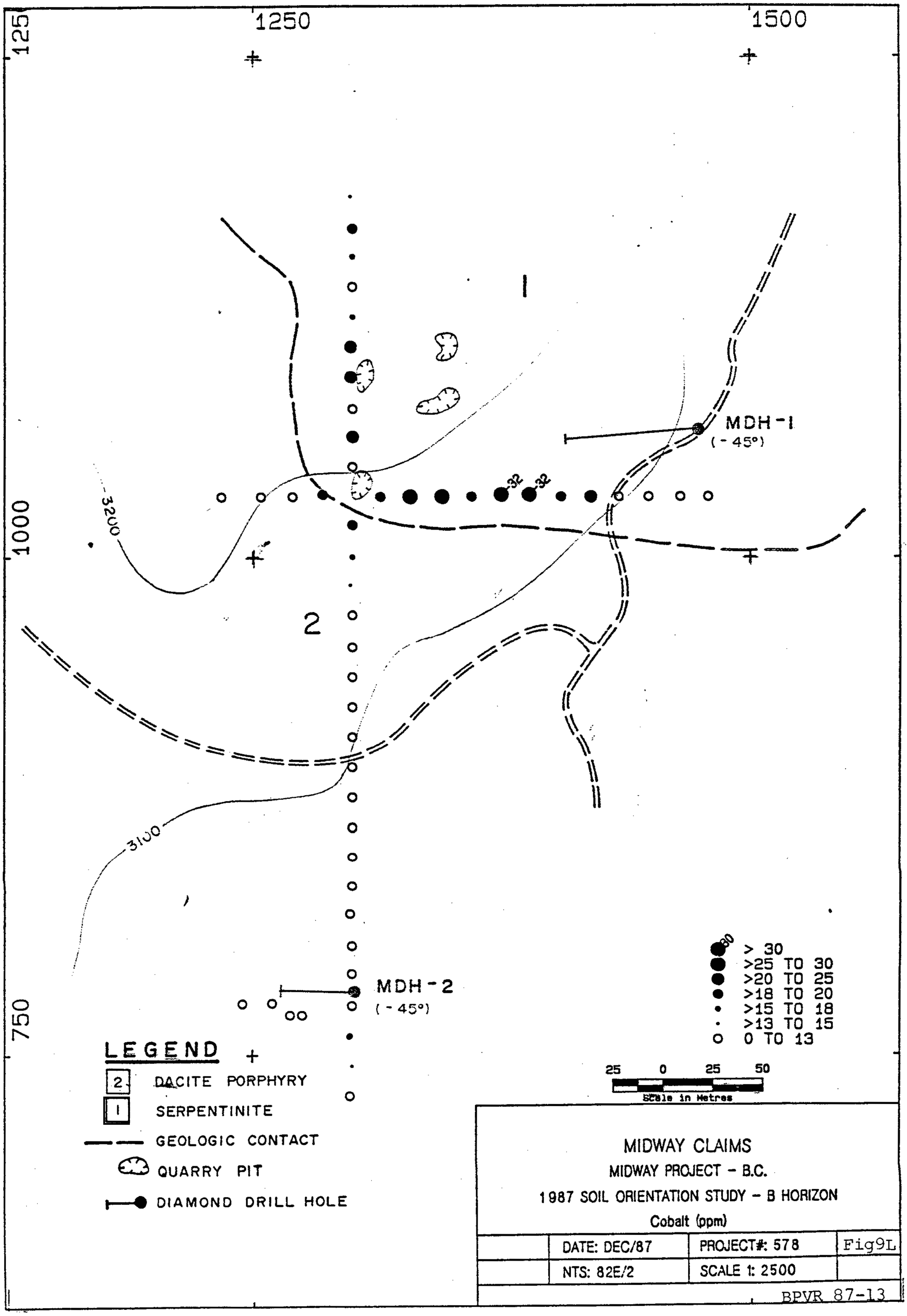
DATE: DEC/87	PROJECT#: 578	Fig9J
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13

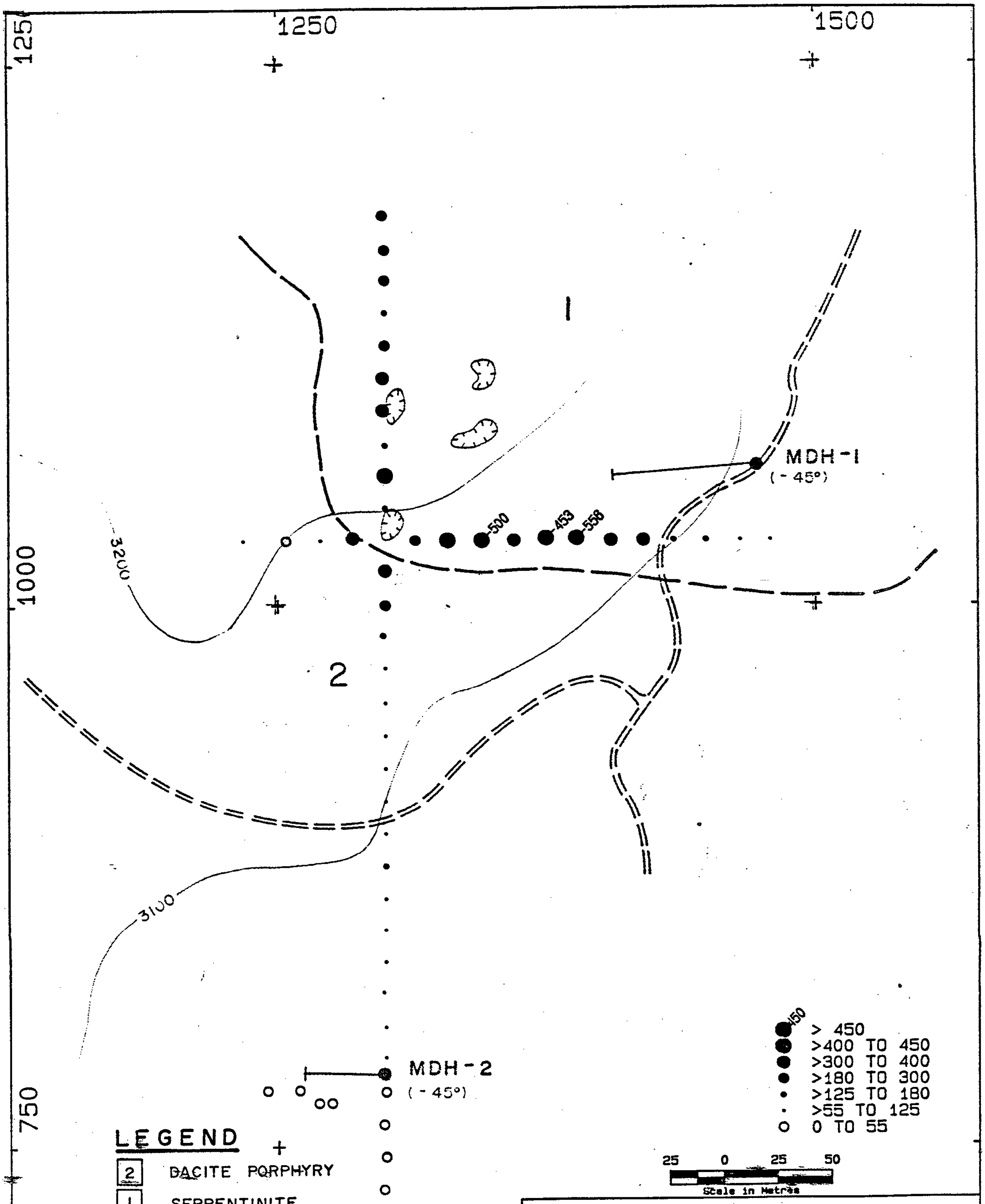


MIDWAY CLAIMS MIDWAY PROJECT – B.C. 1987 SOIL ORIENTATION STUDY – B HORIZON Manganese (ppm)		
DATE: DEC/87	PROJECT#: 578	Fig9K
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



1250
1500
1250
1000
750
1
2
3200
3100
32
32
MDH-1
(-45°)
MDH-2
(-45°)
30
> 30
>25 TO 30
>20 TO 25
>18 TO 20
>15 TO 18
>13 TO 15
0 TO 13
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - B HORIZON
Cobalt (ppm)
DATE: DEC/87
PROJECT#: 578
Fig9L
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



MIDWAY CLAIMS

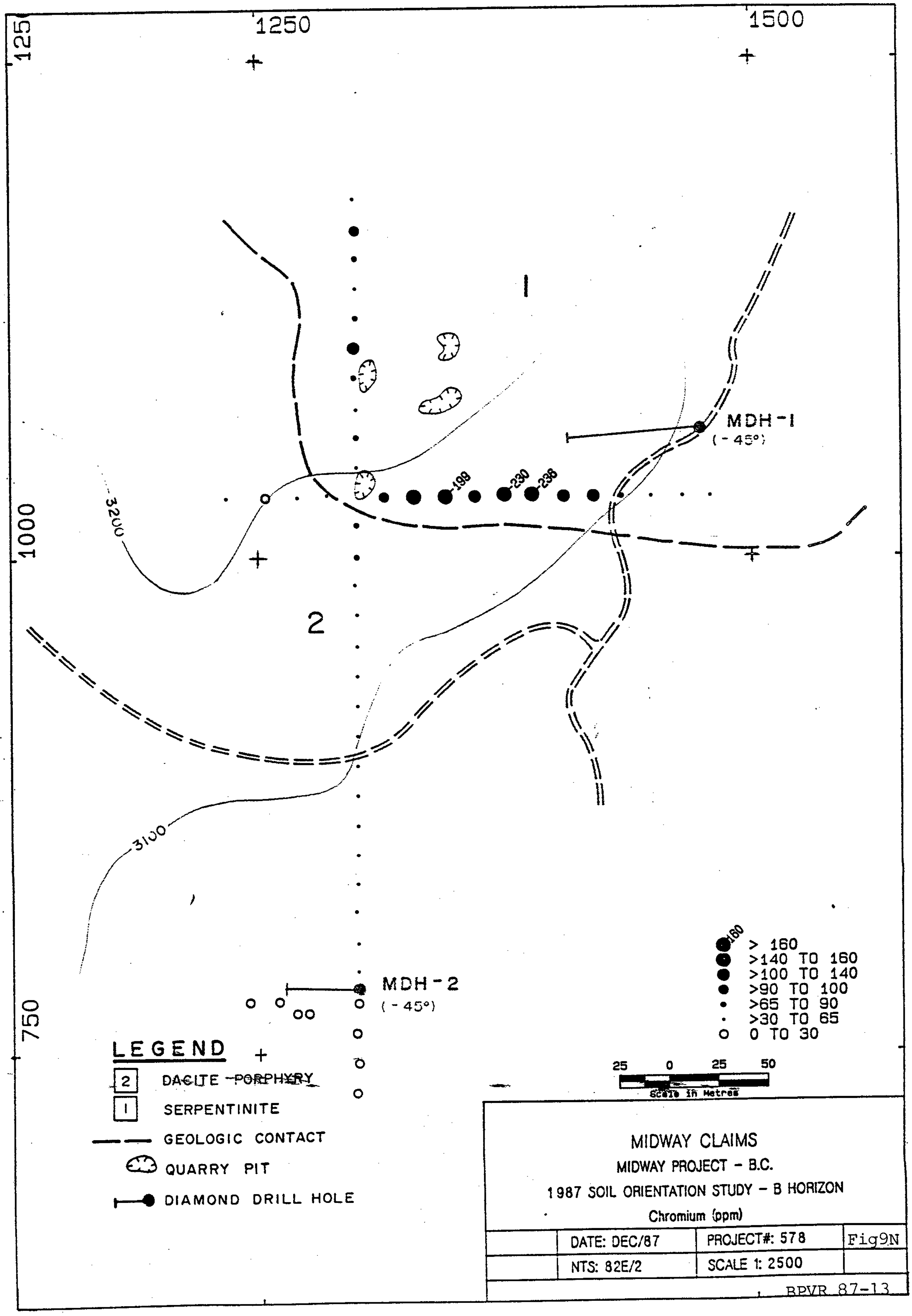
MIDWAY PROJECT - B.C.

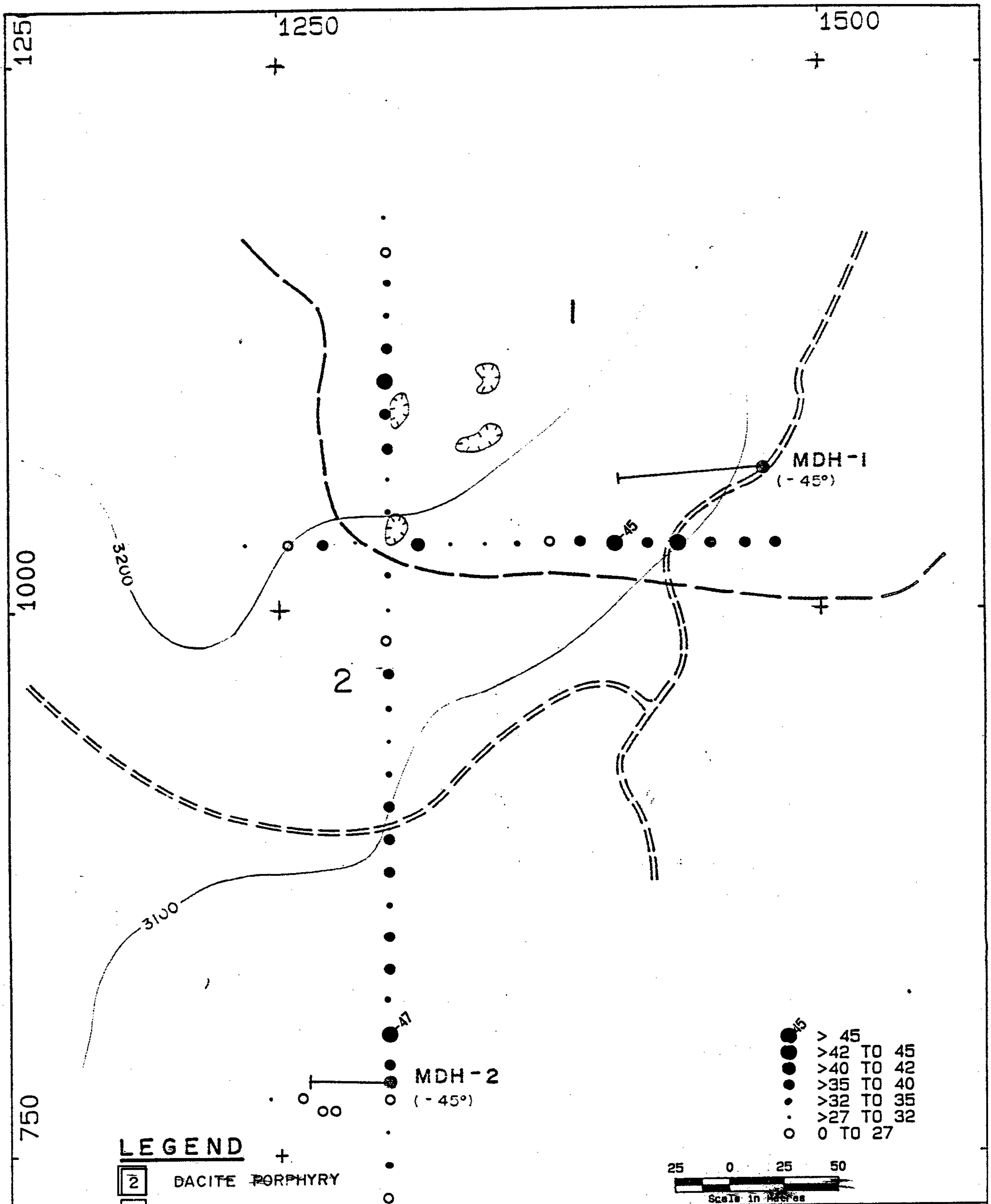
1987 SOIL ORIENTATION STUDY - B HORIZON

Nickel (ppm)

DATE: DEC/87	PROJECT#: 578	Fig9M
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13


1250
1500
1250
1000
750
1
2
MDH-1
(-45°)
MDH-2
(-45°)
199
230
236
3200
3100
160
> 160
>140 TO 160
>100 TO 140
>90 TO 100
>65 TO 90
>30 TO 65
0 TO 30
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - B HORIZON
Chromium (ppm)
DATE: DEC/87
PROJECT#: 578
Fig9N
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



MIDWAY CLAIMS

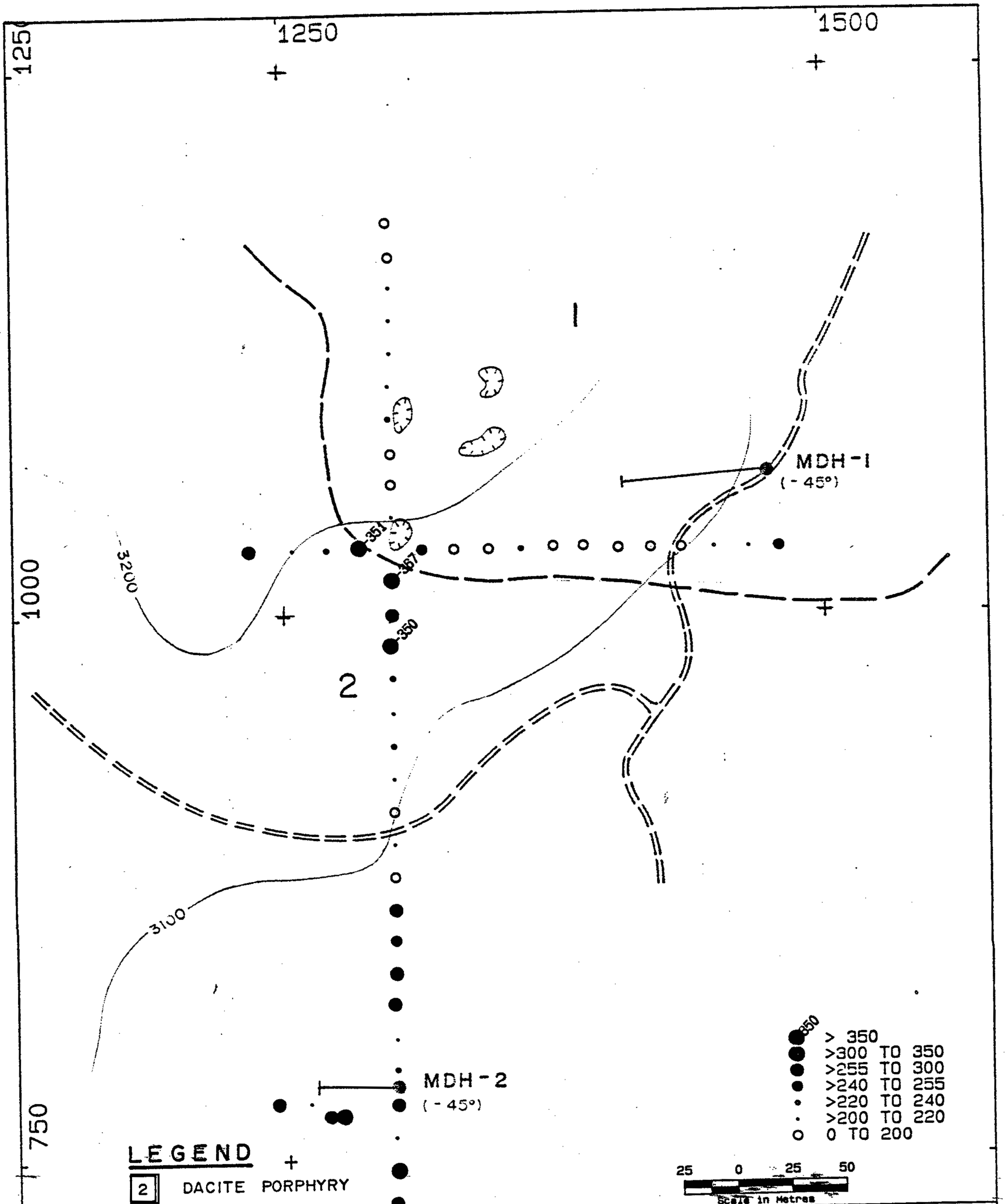
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - B HORIZON

Vanadium (ppm)

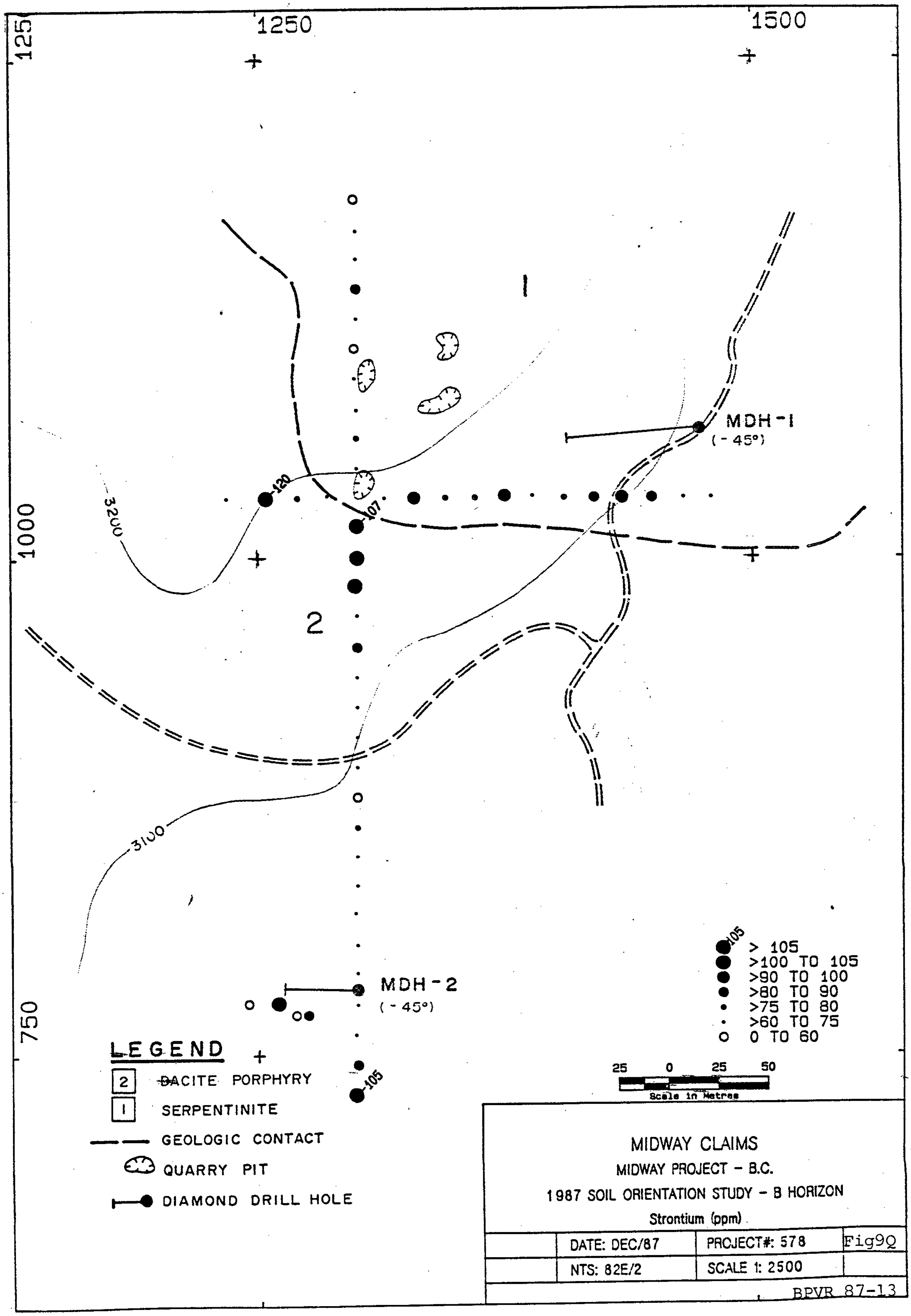
	DATE: DEC/87	PROJECT#: 578	Fig9Ø
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS MIDWAY PROJECT - B.C. 1987 SOIL ORIENTATION STUDY - B HORIZON Barium (ppm)			
	DATE: DEC/87	PROJECT#: 578	Fig9P
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

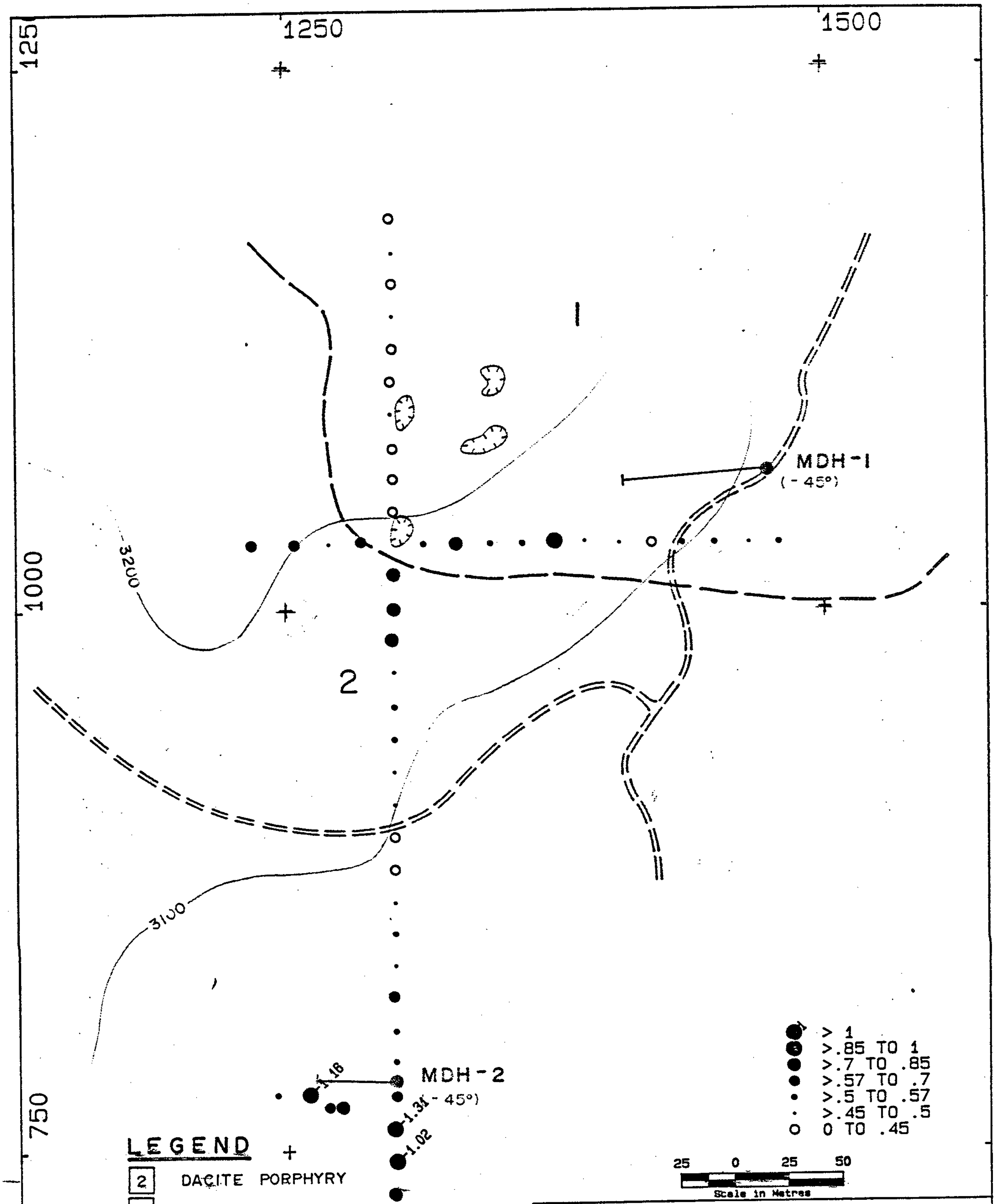
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - B HORIZON

Strontium (ppm)

	DATE: DEC/87	PROJECT#: 578	Fig9Q
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



LEGEND

2 DACITE PORPHYRY

1 SERPENTINITE

GEOLOGIC CONTACT

QUARRY PIT

DIAMOND DRILL HOLE

MIDWAY CLAIMS

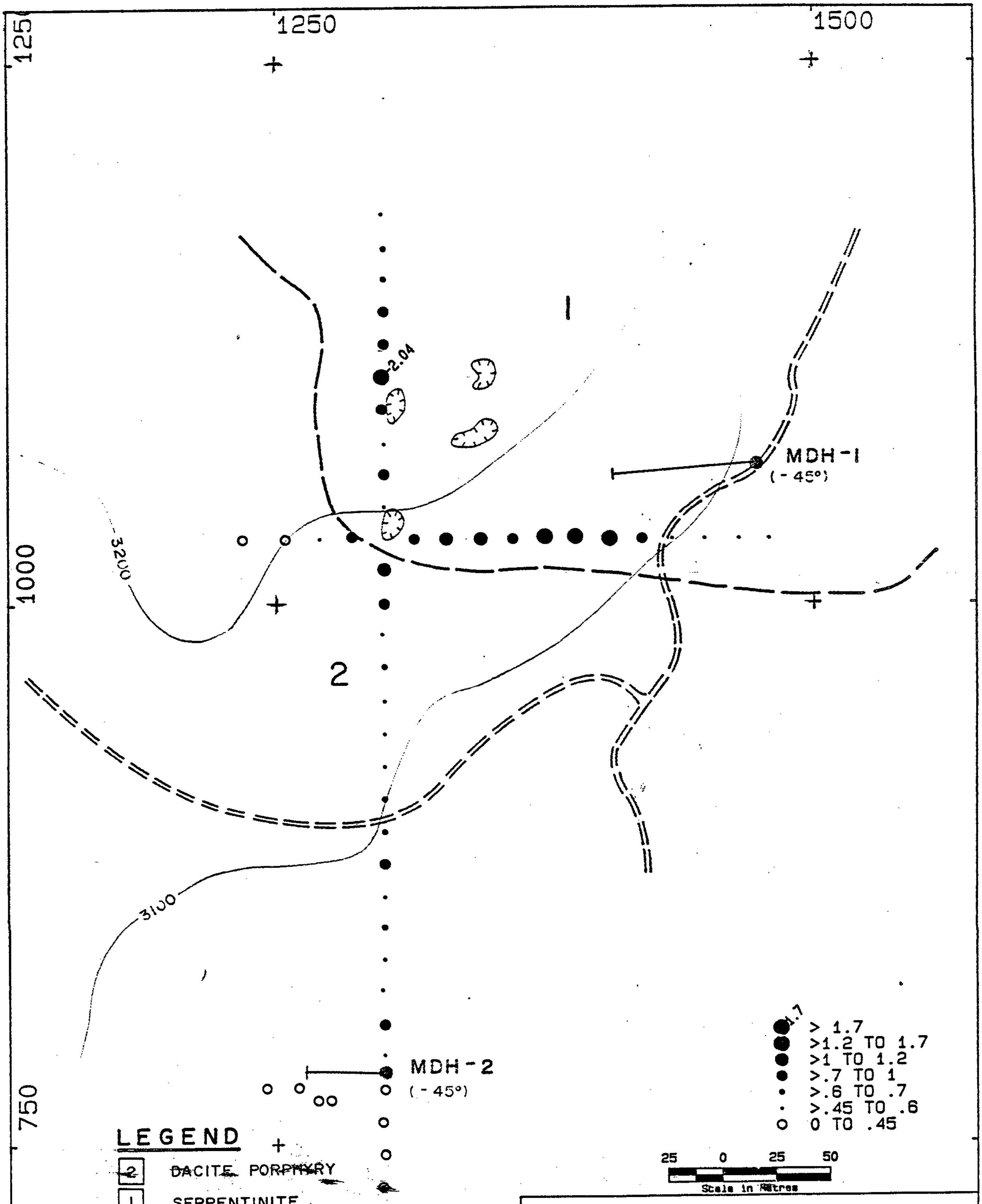
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - B HORIZON

Calcium (%)

DATE: DEC/87	PROJECT#: 578	Fig9R
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

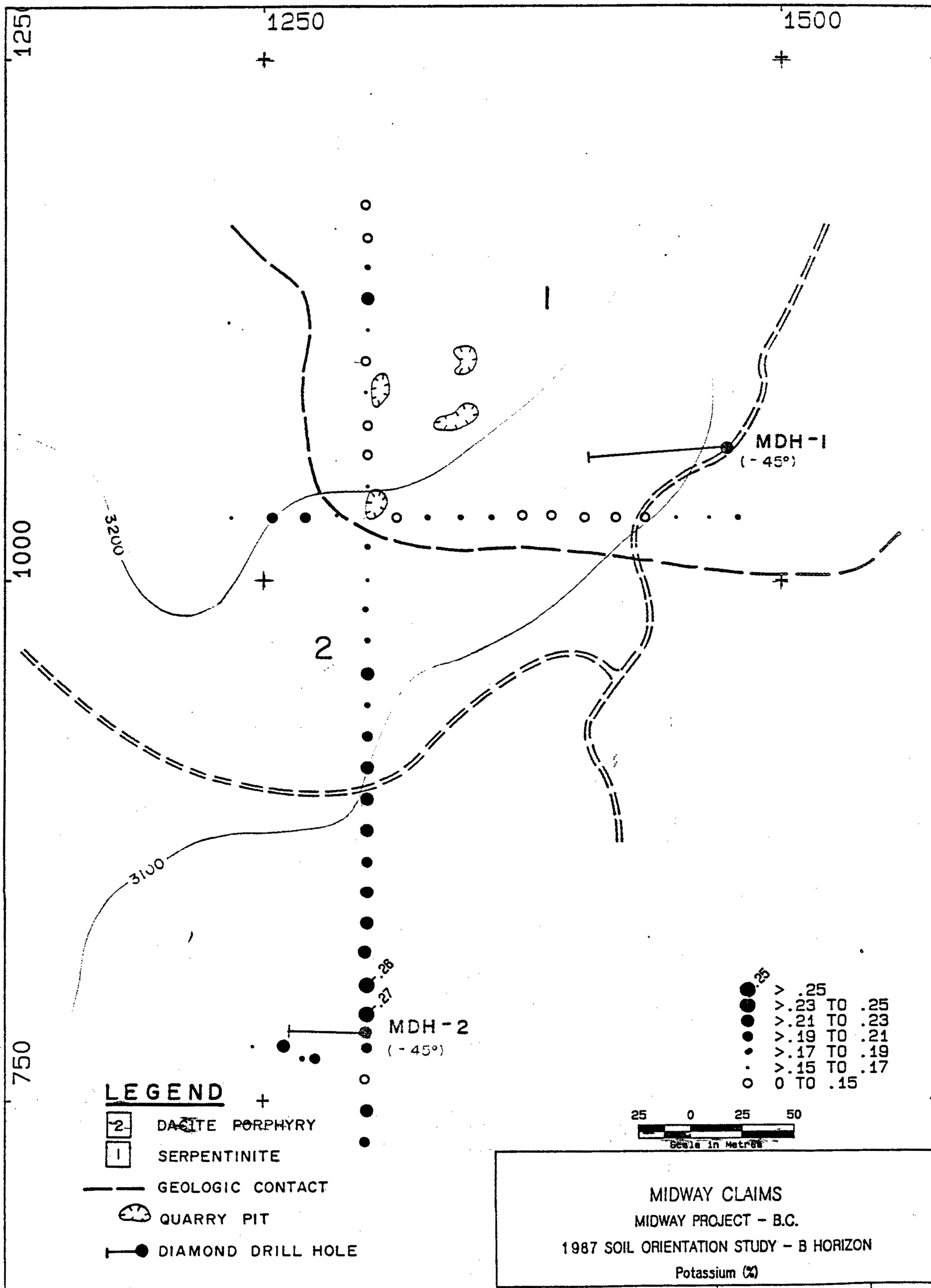
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - B HORIZON

Magnesium (%)

DATE: DEC/87	PROJECT#: 578	Fig9S
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

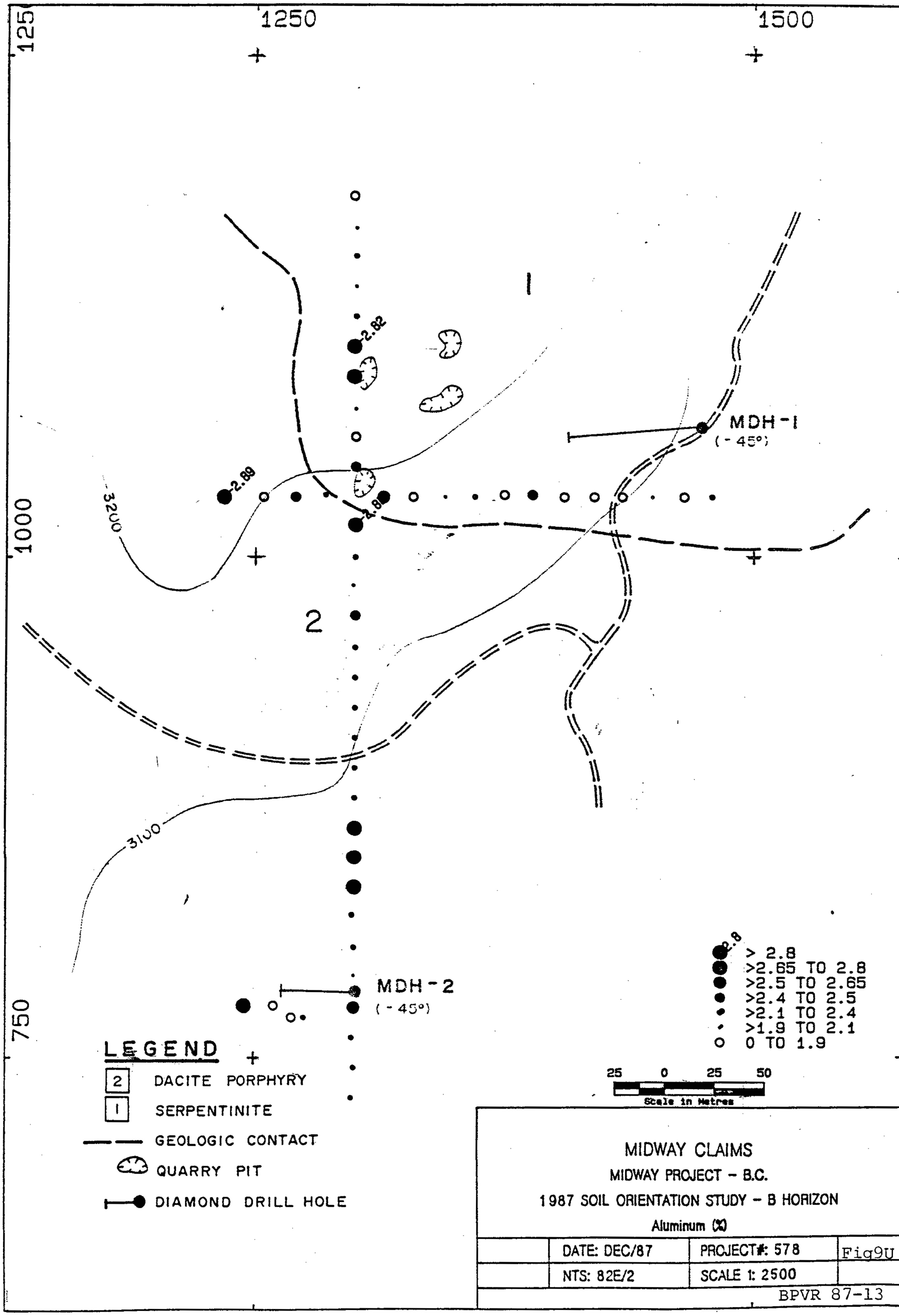
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - B HORIZON

Potassium (%)

DATE: DEC/87	PROJECT#: 578	Fig9T
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

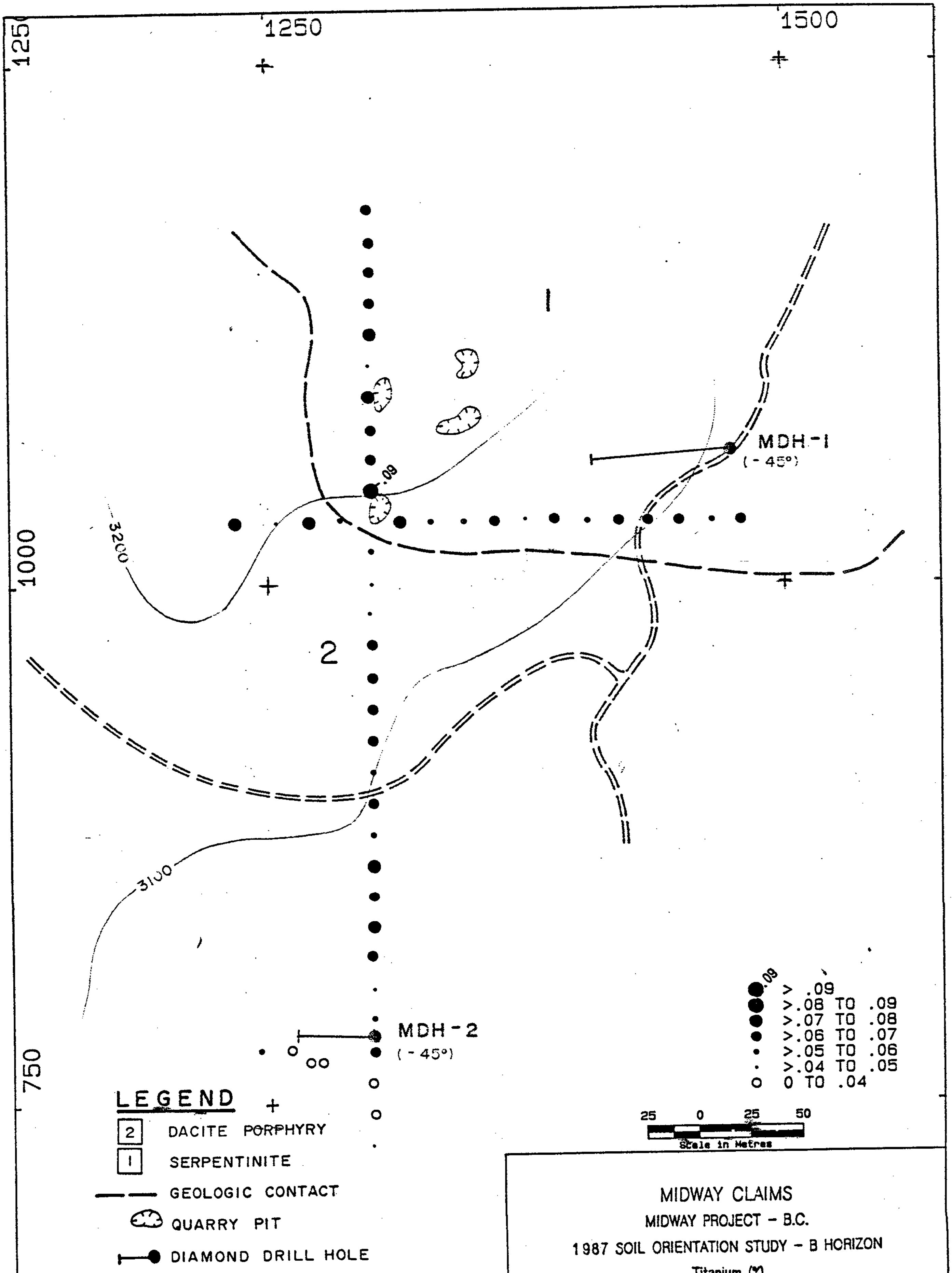
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - B HORIZON

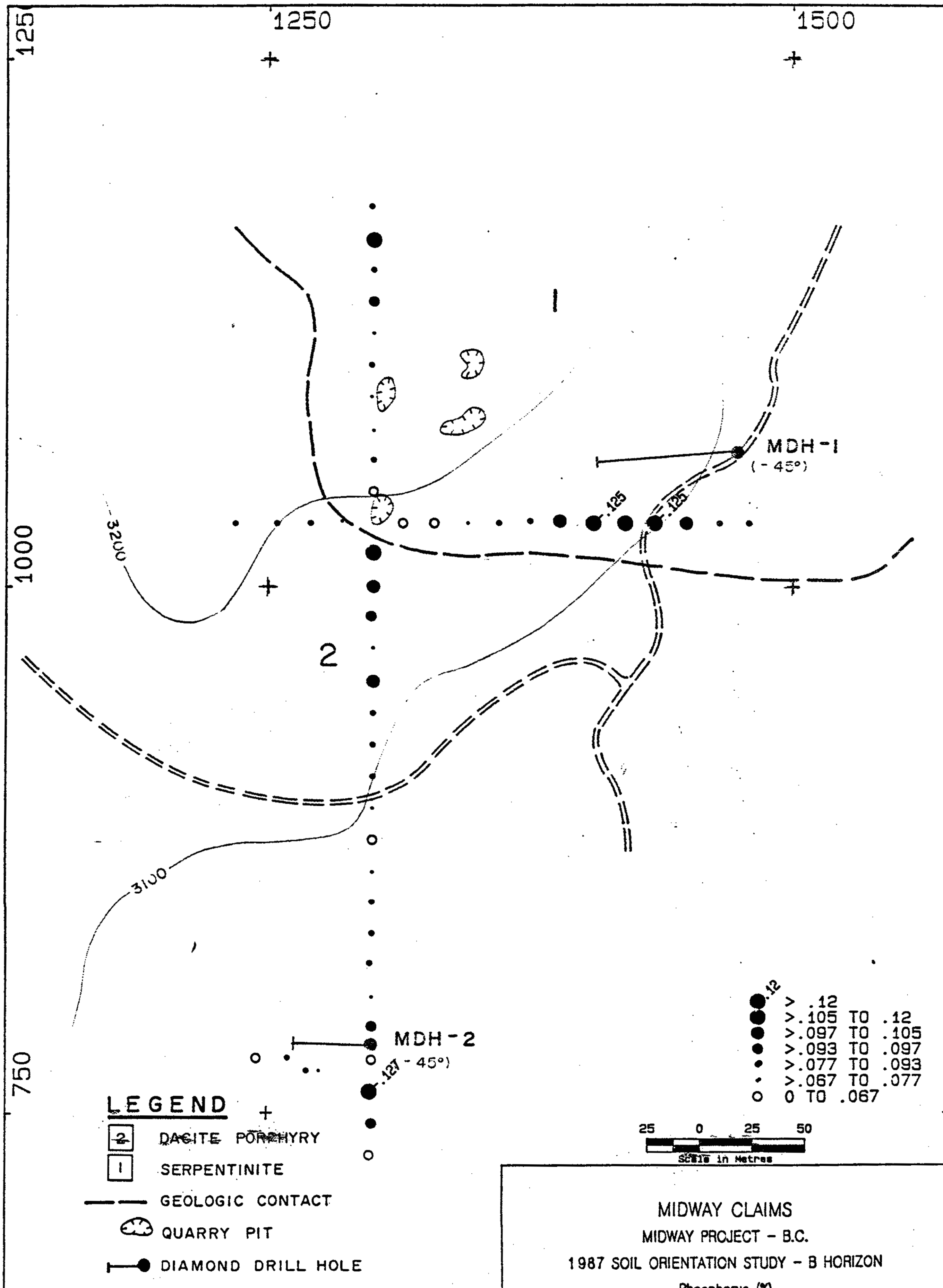
Aluminum (%)

	DATE: DEC/87	PROJECT#: 578	Fig9U
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS MIDWAY PROJECT – B.C. 1987 SOIL ORIENTATION STUDY – B HORIZON Titanium (%)			
	DATE: DEC/87	PROJECT#: 578	Fig9V
	NTS: 82E/2	SCALE 1: 2500	
BPVR 87-13			



MIDWAY CLAIMS

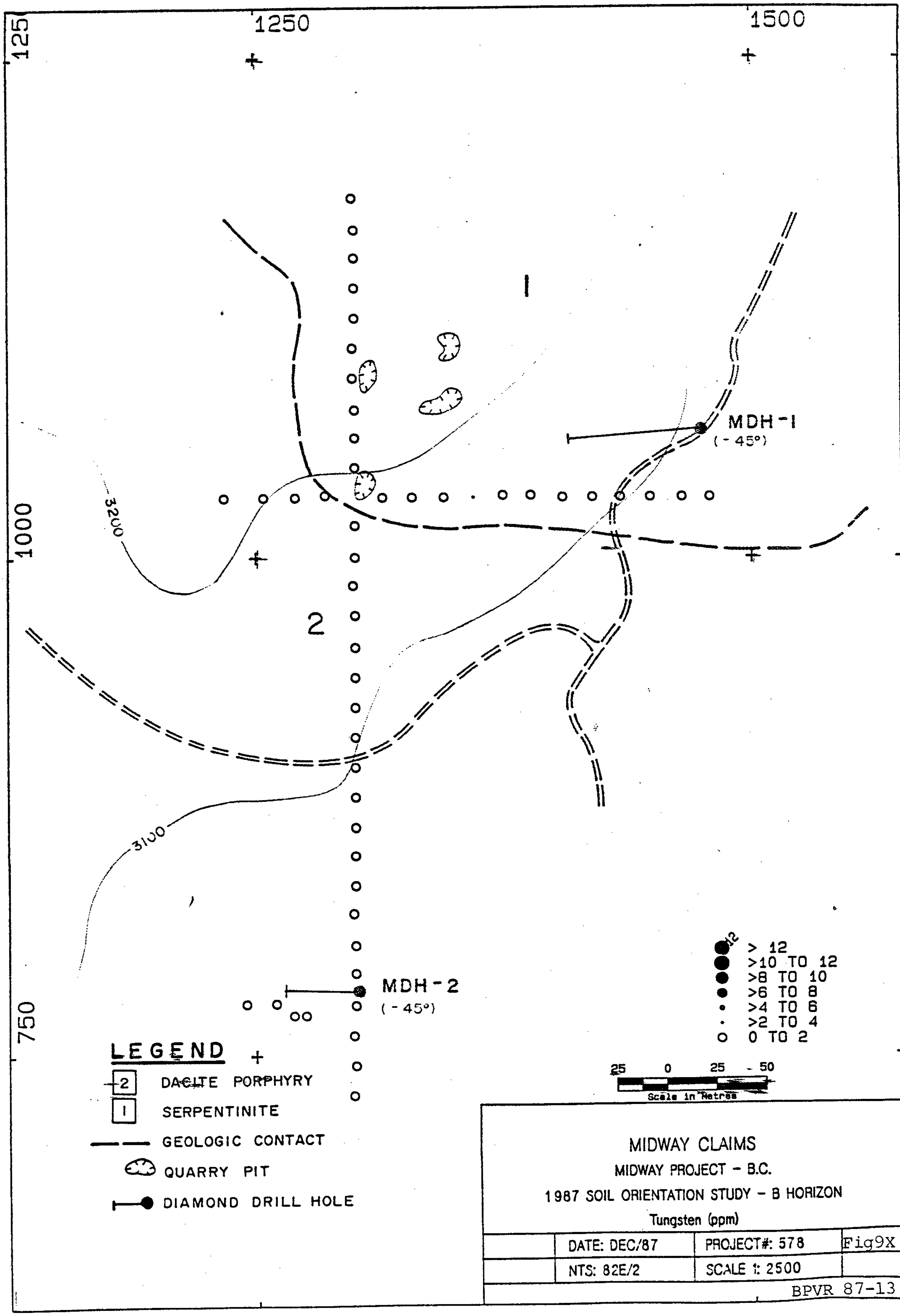
MIDWAY PROJECT - B.C.

1987 SOIL ORIENTATION STUDY - B HORIZON

Phosphorus (%)

	DATE: DEC/87	PROJECT#: 578	Fig9W
	NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13



MIDWAY CLAIMS

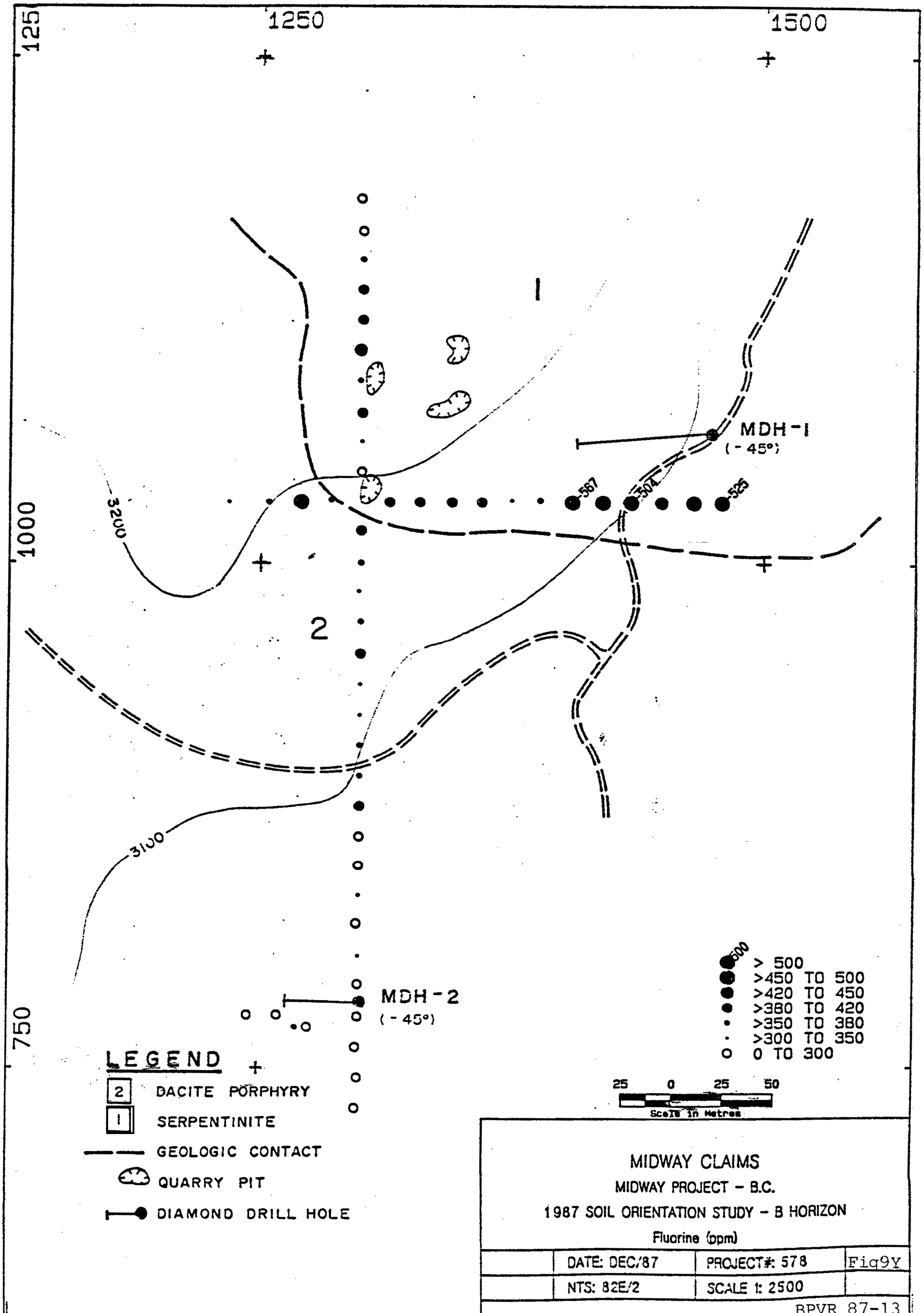
MIDWAY PROJECT - B.C.

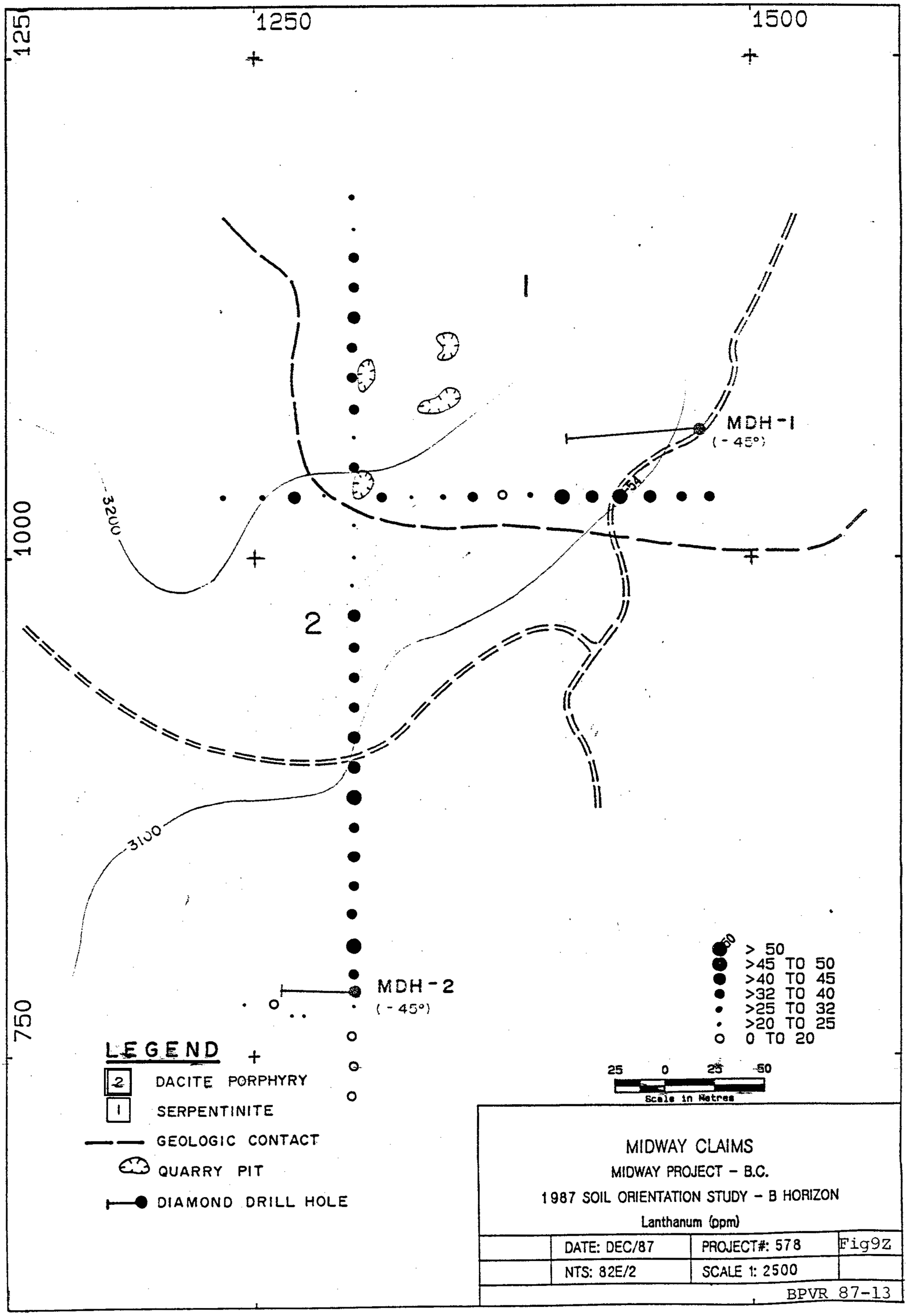
1987 SOIL ORIENTATION STUDY - B HORIZON

Tungsten (ppm)

DATE: DEC/87	PROJECT#: 578	Fig9X
NTS: 82E/2	SCALE 1: 2500	

BPVR 87-13


1250
1500
125
1000
750
MDH-1
(-45°)
MDH-2
(-45°)
567
504
525
3200
3100
1
2
500
> 500
>450 TO 500
>420 TO 450
>380 TO 420
>350 TO 380
>300 TO 350
0 TO 300
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - B HORIZON
Fluorine (ppm)
DATE: DEC/87
PROJECT#: 578
Fig9Y
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13



1250
1500
125
1000
750
1
2
3200
3100
MDH-1
(-45°)
MDH-2
(-45°)
54
> 50
>45 TO 50
>40 TO 45
>32 TO 40
>25 TO 32
>20 TO 25
0 TO 20
25 0 25 50
Scale in Metres
LEGEND
2 DACITE PORPHYRY
1 SERPENTINITE
GEOLOGIC CONTACT
QUARRY PIT
DIAMOND DRILL HOLE
MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - B HORIZON
Lanthanum (ppm)
DATE: DEC/87
PROJECT#: 578
Fig9Z
NTS: 82E/2
SCALE 1: 2500
BPVR 87-13

APPENDIX VI

Listing of Analytical Results for
Soil Sampling

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

NOV 25 1987
VANCOUVER, B.C.

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H20 AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: SOIL AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE. F - NAOH FUSION - SPECIFIC ION ELECTRODE ANALYSIS.

DATE RECEIVED: NOV 13 1987 DATE REPORT MAILED: Nov 24/87 ASSAYER. D. Toye .DEAN TOYE, CERTIFIED B.C. ASSAYER

SELCO - A DIVISION OF BP PROJECT-573 File # 87-5644 Page 1

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB	F PPM
5087573 955201	1	41	26	90	.1	323	20	1735	3.30	30	5	ND	3	68	1	3	2	31	.58	.077	24	63	.85	351	.06	8	2.32	.03	.16	1	1	367
5087573 955202	1	29	12	61	.1	98	10	718	2.69	5	5	ND	3	78	1	2	2	38	.48	.085	45	45	.55	227	.08	4	2.50	.03	.21	1	4	483
5087573 955203	1	24	12	55	.1	55	8	628	1.89	4	5	ND	2	120	1	2	2	27	.70	.091	31	28	.43	214	.05	7	1.66	.04	.20	1	1	378
5087573 955204	1	27	11	58	.1	58	9	881	2.46	3	5	ND	1	70	1	2	2	31	.58	.078	32	35	.41	300	.08	5	2.89	.04	.16	1	3	326
5087573 955205	1	42	26	73	.1	230	19	1068	3.41	87	5	ND	3	74	1	2	2	42	.54	.056	33	99	.93	250	.08	4	2.65	.04	.13	1	1	388
5087573 955206	1	23	22	47	.1	408	26	740	2.60	42	5	ND	3	95	1	5	2	28	.76	.054	22	149	1.03	176	.06	8	1.65	.04	.19	2	1	420
5087573 955207	1	33	28	49	.1	500	29	807	3.02	48	5	ND	1	76	1	5	2	32	.52	.075	29	199	1.05	198	.06	8	2.07	.03	.18	2	4	399
STD C	19	61	38	132	7.0	67	28	1130	4.09	41	16	8	39	50	18	16	19	56	.47	.085	38	58	.86	173	.06	32	1.92	.06	.14	13	-	-
5087573 955208	1	33	16	52	.2	338	19	769	2.83	35	5	ND	3	80	1	5	2	34	.54	.085	35	134	.82	232	.07	5	2.34	.03	.18	3	2	420
5087573 955209	1	28	12	56	.2	453	32	988	3.53	17	5	ND	2	92	1	2	2	27	.87	.090	19	230	1.65	200	.05	6	1.75	.03	.15	1	1	336
5087573 955210	1	27	30	72	.1	556	32	967	4.07	26	5	ND	3	70	1	3	2	39	.50	.101	30	236	1.47	200	.07	7	2.43	.03	.15	1	2	378
5087573 955211	1	21	18	60	.1	355	20	639	3.26	20	5	ND	4	76	1	2	2	45	.46	.125	49	130	1.25	126	.06	5	1.55	.02	.09	1	1	567
5087573 955212	1	20	15	57	.1	329	22	701	3.10	20	5	ND	4	81	1	2	2	39	.44	.112	41	136	.99	158	.07	6	1.57	.03	.13	1	3	493
5087573 955213	1	28	19	58	.2	143	11	620	2.74	17	5	ND	4	95	1	2	2	43	.54	.125	54	66	.58	155	.07	3	1.71	.03	.13	1	4	504
5087573 955214	1	28	20	56	.1	170	13	741	2.71	23	5	ND	3	81	1	2	2	37	.51	.105	44	64	.59	201	.07	5	1.99	.03	.17	1	6	430
5087573 955215	1	31	15	55	.3	116	12	759	2.72	23	5	ND	3	71	1	2	2	37	.47	.090	36	52	.50	201	.06	4	1.86	.03	.17	1	13	472
5087573 955216	1	33	11	53	.1	102	11	750	2.78	20	5	ND	3	71	1	2	2	37	.52	.093	37	53	.49	243	.07	3	2.31	.03	.19	1	3	525
RE 5087573 955230	1	24	17	60	.1	95	10	736	2.87	8	5	ND	3	68	1	2	2	38	.49	.074	43	49	.61	226	.07	5	2.48	.02	.19	1	1	409
5087573 955217	1	21	16	52	.2	157	13	723	2.65	19	5	ND	4	61	1	4	2	35	.37	.063	34	56	.46	207	.09	7	2.42	.03	.17	2	2	273
5087573 955218	1	19	14	49	.1	433	21	721	2.81	23	5	ND	2	79	1	2	2	29	.45	.090	24	88	.74	171	.07	4	1.89	.03	.13	1	1	336
5087573 955219	1	21	15	56	.1	154	12	583	2.72	12	5	ND	4	67	1	2	2	39	.41	.071	38	58	.55	167	.07	3	1.96	.03	.15	1	1	388
5087573 955220	1	24	14	57	.1	384	21	817	3.29	53	5	ND	3	72	1	4	2	37	.47	.069	37	87	.74	236	.08	4	2.74	.03	.16	1	1	378
5087573 955221	1	25	16	57	.1	384	22	801	3.64	29	5	ND	3	59	1	2	2	44	.45	.078	35	137	2.04	220	.05	3	2.82	.02	.15	1	1	441
5087573 955222	1	21	12	56	.1	277	17	669	3.15	10	5	ND	5	64	1	2	2	40	.33	.072	41	90	.91	205	.08	5	2.37	.03	.16	1	2	399
5087573 955223	1	22	12	51	.1	169	12	635	2.42	10	5	ND	2	86	1	2	2	33	.46	.094	33	59	.74	201	.07	8	1.99	.03	.22	1	1	420
5087573 955224	1	20	12	55	.1	200	16	765	2.83	5	5	ND	4	66	1	2	2	33	.40	.087	35	77	.62	201	.07	3	2.13	.03	.18	1	1	367
5087573 955225	1	20	16	56	.1	235	20	946	2.80	7	5	ND	2	62	1	2	2	27	.50	.112	21	91	.63	184	.07	6	1.92	.03	.11	1	1	273
5087573 955226	1	16	10	49	.1	187	15	621	2.34	6	5	ND	2	60	1	2	2	28	.37	.088	26	60	.50	146	.07	3	1.69	.03	.10	2	1	241
5087573 955227	1	47	49	137	.8	340	20	1640	3.48	75	5	ND	1	107	1	5	2	33	.82	.111	24	83	1.12	367	.06	8	2.83	.03	.18	1	7	399
5087573 955228	1	50	63	227	.8	278	18	1702	3.48	102	5	ND	1	101	1	7	2	31	.78	.098	23	80	.99	266	.05	7	2.17	.03	.16	1	1	367
5087573 955229	1	42	39	136	.5	165	14	1336	2.64	56	5	ND	2	102	1	3	2	27	.73	.096	23	52	.60	350	.05	6	1.99	.03	.18	1	12	336
5087573 955230	1	25	15	61	.1	94	10	740	2.90	7	5	ND	3	69	1	2	2	38	.49	.074	44	49	.61	225	.07	6	2.49	.02	.19	1	1	378
5087573 955231	1	29	15	63	.1	86	10	856	2.59	6	5	ND	2	84	1	2	2	34	.57	.101	37	41	.54	211	.07	7	2.14	.03	.22	1	1	388
5087573 955232	1	29	16	63	.1	84	10	873	2.58	5	5	ND	2	74	1	2	2	32	.57	.085	36	41	.51	235	.07	4	2.24	.03	.18	1	1	346
5087573 955233	1	32	15	65	.1	92	10	896	2.72	4	5	ND	3	72	1	2	2	35	.46	.083	37	46	.57	220	.07	6	2.27	.03	.20	1	1	346
5087573 955234	1	35	10	60	.2	92	11	834	2.95	8	5	ND	3	63	1	2	2	38	.49	.078	42	52	.65	190	.06	6	2.25	.02	.22	1	1	378
5087573 955235	1	33	17	61	.1	93	11	847	2.90	7	5	ND	3	69	1	2	2	38	.45	.072	42	52	.63	205	.07	3	2.30	.02	.22	2	2	378
5087573 955236	1	43	16	60	.2	129	13	828	3.17	9	5	ND	4	54	1	2	2	39	.41	.058	46	64	.84	189	.06	8	2.16	.02	.22	1	1	399
STD C/AU-S	19	59	37	133	7.1	69	29	1162	4.21	41	18	7	39	52	18	17	21	57	.47	.087	39	61	.88	181	.07	30	1.98	.06	.13	12	50	-

SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	AU*	F
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB	PPM
5087573 955237	1	31	17	59	.1	73	10	795	2.69	6	5	ND	2	80	1	2	2	35	.50	.077	39	41	.54	261	.08	5	2.68	.03	.21	1	1	290
5087573 955238	1	30	19	60	.1	85	10	788	3.16	9	5	ND	3	66	1	2	2	40	.52	.079	42	51	.64	245	.07	4	2.78	.02	.23	1	2	280
5087573 955239	1	31	17	58	.3	78	11	798	2.95	8	5	ND	3	67	1	2	2	38	.50	.080	38	46	.60	259	.08	6	2.70	.03	.23	1	1	310
STD C	19	59	41	132	7.5	70	28	1044	4.11	43	18	7	40	50	18	16	18	57	.48	.086	40	62	.87	182	.07	32	1.95	.06	.14	12	-	-
5087573 955240	1	34	19	64	.1	68	10	932	2.78	9	5	ND	2	74	1	2	2	35	.64	.091	40	38	.47	265	.07	7	2.34	.03	.23	1	4	270
5087573 955241	1	46	19	71	.1	88	13	976	3.65	11	5	ND	3	61	1	2	2	47	.53	.075	49	54	.71	205	.05	5	2.25	.02	.26	1	5	350
5087573 955242	1	33	17	69	.1	72	10	908	2.88	7	5	ND	3	68	1	2	2	37	.51	.095	37	41	.53	236	.06	7	2.01	.02	.27	1	1	300
5087573 955243	1	32	11	54	.2	26	8	943	2.33	5	5	ND	2	73	1	2	2	26	.59	.064	24	17	.33	297	.07	6	2.65	.04	.20	1	7	290
5087573 955244	1	36	18	77	.1	21	17	2200	3.77	4	5	ND	1	63	1	2	2	32	1.31	.127	16	19	.36	217	.03	6	2.27	.02	.13	1	23	240
5087573 955245	1	36	20	83	.1	21	14	1804	3.60	2	5	ND	2	85	1	2	2	34	1.02	.097	18	21	.44	339	.03	5	2.34	.02	.23	1	19	220
5087573 955246	1	34	16	60	.1	24	9	1063	2.41	5	5	ND	1	105	1	2	2	23	.84	.057	19	17	.36	267	.05	8	2.11	.04	.20	1	4	290
5087573 955247	1	43	18	79	.2	24	11	1282	3.21	13	5	ND	1	88	1	2	2	27	.76	.071	22	16	.40	310	.04	5	2.27	.02	.21	1	5	300
RE 5187573 955259	1	23	15	53	.2	385	27	798	3.15	16	5	ND	2	66	1	2	2	28	.56	.082	18	184	1.25	172	.05	8	1.45	.03	.19	1	6	-
5087573 955248	2	77	17	92	1.1	18	12	1359	3.81	36	5	ND	1	27	1	2	2	21	.65	.083	21	10	.21	269	.01	4	1.60	.01	.19	1	2	370
5087573 955249	1	39	12	75	.1	11	9	1161	2.63	4	5	ND	1	101	1	2	2	20	1.16	.084	15	9	.28	220	.03	10	1.78	.03	.22	1	4	260
5087573 955250	1	26	17	74	.3	12	9	863	3.64	9	5	ND	2	44	1	2	2	32	.54	.059	22	12	.23	262	.06	2	2.70	.02	.17	1	1	280
5187573 955251	1	36	17	87	.1	306	20	1567	3.18	30	5	ND	2	65	1	2	2	31	.52	.076	24	63	.80	333	.06	4	2.14	.03	.16	1	1	290
5187573 955252	1	21	13	62	.1	90	10	635	2.33	7	5	ND	4	69	1	2	2	33	.44	.074	35	43	.47	194	.07	5	1.91	.03	.21	1	1	280
5187573 955253	1	23	9	63	.1	48	7	552	1.79	3	5	ND	1	110	1	2	2	27	.66	.099	27	27	.37	195	.06	9	1.53	.03	.21	1	1	250
5187573 955254	1	21	13	58	.1	43	8	786	2.06	5	5	ND	1	57	1	2	2	27	.57	.070	24	27	.31	243	.07	5	2.16	.03	.14	1	2	240
5187573 955255	1	37	34	72	.2	275	21	939	2.96	136	5	ND	4	64	1	2	2	38	.60	.061	27	114	1.02	224	.07	5	2.15	.03	.15	1	1	300
5187573 955256	1	23	18	48	.2	442	27	712	2.72	48	5	ND	3	86	1	5	2	29	.66	.059	22	161	.96	180	.06	8	1.67	.03	.22	2	3	320
5187573 955257	1	30	25	48	.1	484	30	728	2.84	48	5	ND	1	64	1	4	2	30	.47	.067	23	208	.94	179	.06	9	1.65	.03	.17	3	1	290
5187573 955258	1	23	14	45	.1	256	17	650	2.37	31	5	ND	2	64	1	2	2	29	.45	.066	27	114	.65	191	.06	8	1.85	.03	.16	2	4	280
5187573 955259	1	23	11	52	.1	386	27	798	3.08	12	5	ND	1	65	1	2	2	25	.55	.081	17	183	1.21	173	.05	8	1.45	.02	.19	1	2	270
5187573 955260	1	20	24	63	.1	437	29	828	3.62	17	5	ND	2	56	1	2	2	33	.42	.085	19	229	1.26	186	.07	6	1.90	.03	.17	1	1	290
5187573 955261	1	21	16	61	.1	562	39	870	4.05	13	5	ND	3	58	1	2	2	37	.38	.101	27	228	1.43	179	.07	7	1.74	.03	.13	1	1	300
5187573 955262	1	17	13	56	.1	336	26	705	3.18	14	5	ND	2	67	1	2	2	35	.42	.108	29	158	.93	166	.06	8	1.40	.03	.14	1	1	310
5187573 955263	1	21	15	55	.2	104	10	545	2.28	14	5	ND	5	77	1	2	2	37	.48	.105	42	52	.42	147	.07	4	1.46	.03	.14	1	4	340
5187573 955264	1	22	14	55	.1	122	12	637	2.38	17	5	ND	3	74	1	2	2	35	.48	.090	38	53	.45	188	.07	3	1.66	.02	.16	1	1	320
5187573 955265	1	26	15	50	.2	91	10	638	2.22	16	5	ND	3	66	1	2	2	30	.48	.082	30	42	.38	210	.06	6	1.62	.03	.18	2	1	360
5187573 955266	1	27	7	51	.2	88	10	648	2.42	17	5	ND	3	63	1	2	2	33	.50	.079	30	48	.41	224	.07	5	1.84	.03	.20	1	6	350
5187573 955267	1	16	14	48	.1	116	11	554	2.01	16	5	ND	2	47	1	2	2	28	.31	.055	23	44	.35	146	.07	5	1.71	.03	.14	2	1	230
5187573 955268	1	20	11	43	.1	326	18	647	2.29	20	5	ND	2	70	1	2	2	24	.50	.077	17	76	.66	162	.06	8	1.46	.03	.12	1	3	250
5187573 955269	1	22	9	42	.2	144	11	589	1.91	11	5	ND	2	67	1	2	2	25	.50	.082	20	47	.38	153	.06	3	1.48	.03	.11	2	1	240
5187573 955270	1	21	14	52	.1	349	20	761	2.81	45	5	ND	3	69	1	2	2	32	.49	.072	27	82	.56	218	.07	6	2.11	.03	.16	1	5	260
5187573 955271	1	22	20	59	.1	354	21	759	3.28	16	5	ND	6	53	1	2	2	41	.40	.073	29	142	1.59	218	.07	8	2.40	.03	.17	1	2	280
5187573 955272	1	20	12	54	.1	153	12	590	2.24	6	5	ND	2	81	1	2	2	32	.49	.093	29	56	.62	195	.07	8	1.82	.03	.19	1	3	310
STD C/AU-S	19	58	36	132	7.4	67	29	1032	4.11	41	18	8	39	49	18	17	19	56	.46	.086	38	60	.86	179	.06	36	1.91	.06	.14	12	48	-

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB	F PPM
5187573 955273	1	21	9	48	.1	173	13	614	2.45	6	5	ND	2	61	1	2	2	32	.35	.075	34	60	.53	191	.07	3	2.07	.03	.16	2	16	280
5187573 955274	1	21	5	52	.1	173	16	697	2.48	5	5	ND	3	63	1	2	2	30	.41	.089	29	68	.53	186	.06	5	1.79	.03	.18	1	1	250
5187573 955275	1	20	6	59	.1	176	16	723	2.41	6	5	ND	1	59	1	2	2	29	.47	.102	18	76	.47	142	.06	4	1.48	.03	.11	1	1	135
5187573 955276	1	21	4	59	.2	176	15	634	1.96	8	5	ND	2	64	1	2	2	23	.46	.099	19	49	.37	127	.05	3	1.28	.03	.12	1	3	210
5187573 955277	1	50	36	140	.6	337	21	1614	3.03	69	5	ND	1	102	1	4	2	27	.88	.112	16	81	.98	356	.04	9	2.15	.02	.19	1	4	190
5187573 955278	1	44	46	206	.8	265	17	1370	3.00	90	5	ND	2	85	1	7	2	28	.69	.093	19	74	.86	239	.04	7	1.72	.02	.18	1	6	260
5187573 955279	1	34	27	130	.4	139	12	982	2.16	49	5	ND	2	79	1	6	2	24	.61	.087	18	43	.48	223	.04	7	1.46	.03	.15	1	1	240
5187573 955280	1	26	8	58	.1	71	9	687	2.28	4	5	ND	1	79	1	2	2	32	.64	.086	34	38	.44	205	.06	4	1.98	.02	.18	1	1	280
5187573 955281	1	29	4	67	.2	68	9	748	2.18	8	5	ND	1	87	1	2	2	30	.64	.100	31	35	.44	197	.05	7	1.65	.02	.20	1	1	250
5187573 955282	1	25	10	63	.1	61	8	727	2.07	7	5	ND	1	68	1	2	2	27	.56	.072	27	31	.39	207	.06	5	1.79	.02	.17	1	1	230
5187573 955283	1	26	9	64	.1	65	10	717	2.04	8	5	ND	1	71	1	2	2	27	.49	.072	28	35	.41	191	.05	5	1.60	.02	.18	1	1	280
5187573 955284	1	31	4	61	.1	69	10	759	2.35	8	5	ND	3	65	1	2	2	31	.51	.070	32	38	.46	204	.06	5	1.97	.02	.20	1	1	260
5187573 955285	1	31	3	63	.1	70	9	735	2.37	8	5	ND	2	70	1	2	2	32	.48	.075	32	39	.48	201	.06	2	1.94	.02	.22	1	1	260
5187573 955286	1	34	10	58	.3	105	12	767	2.48	7	5	ND	4	63	1	2	2	32	.49	.072	32	50	.55	198	.06	5	1.96	.02	.21	1	1	240
5187573 955287	1	27	11	60	.1	59	9	715	2.11	4	5	ND	2	82	1	2	2	28	.54	.078	28	32	.43	218	.06	5	1.87	.02	.22	1	1	240
5187573 955288	1	26	7	59	.1	49	8	704	2.03	7	5	ND	1	79	1	2	2	26	.61	.082	26	29	.36	233	.06	5	1.96	.02	.19	1	1	230
5187573 955289	1	27	7	60	.1	53	8	733	2.23	7	5	ND	2	72	1	2	2	29	.61	.077	28	31	.42	224	.06	4	2.04	.02	.22	1	1	190
5187573 955290	1	30	11	62	.1	52	9	788	2.29	9	5	ND	2	71	1	2	2	31	.55	.078	30	32	.40	216	.06	5	1.83	.02	.21	2	2	240
5187573 955291	1	36	10	59	.2	67	11	864	2.72	7	5	ND	3	57	1	2	3	36	.47	.074	36	38	.52	193	.06	3	1.82	.02	.21	1	3	350
5187573 955292	1	29	11	64	.1	53	9	796	2.33	8	5	ND	3	65	1	2	2	31	.48	.085	28	33	.42	201	.05	6	1.55	.02	.24	2	1	320
5187573 955293	1	26	2	58	.2	27	7	893	1.92	2	5	ND	1	82	1	2	2	22	.73	.073	20	16	.29	264	.05	6	1.92	.02	.19	1	1	230
5187573 955294	1	26	7	55	.1	12	10	1586	2.22	4	5	ND	1	45	1	2	2	23	.77	.089	10	10	.22	164	.03	4	1.33	.02	.11	1	1	250
5187573 955295	1	23	7	67	.1	11	9	1308	2.07	2	5	ND	1	58	1	2	2	23	.81	.094	9	12	.25	193	.02	4	1.07	.02	.12	1	5	190
RE 5187573 955285	1	29	7	61	.1	68	9	716	2.32	10	5	ND	3	69	1	3	2	32	.47	.074	32	40	.47	196	.06	3	1.90	.02	.21	1	1	-
5187573 955296	1	31	7	62	.1	16	7	983	1.71	3	5	ND	1	106	1	2	2	18	.89	.075	13	12	.26	233	.04	5	1.33	.02	.16	1	1	200
STD C	19	63	41	130	7.3	68	29	1022	4.03	37	17	8	41	50	18	16	18	56	.45	.088	38	62	.87	167	.06	31	1.91	.06	.13	11	-	-
5187573 955297	1	39	7	74	.1	17	8	1101	2.23	13	5	ND	1	76	1	3	2	21	.75	.077	14	11	.26	246	.03	5	1.30	.02	.17	2	2	330
5187573 955298	2	58	4	80	.7	17	10	1121	2.87	28	5	ND	2	29	1	2	2	21	.48	.068	14	9	.19	213	.02	2	1.40	.02	.19	2	28	490
5187573 955299	1	37	8	76	.1	9	7	1059	2.07	9	5	ND	1	90	1	2	2	17	.90	.083	12	6	.22	202	.03	7	1.34	.02	.18	1	5	290
5187573 955300	1	26	11	58	.2	8	7	890	2.48	4	5	ND	2	39	1	2	2	24	.51	.058	14	8	.16	181	.04	2	1.55	.02	.15	1	1	290
STD C/AU-S	19	60	40	132	7.1	67	28	1040	4.10	41	18	8	39	52	17	15	20	58	.47	.085	39	61	.89	179	.06	34	1.97	.06	.14	14	50	-

APPENDIX VII

Drill Hole Logs

(MDH 87-1 and MDH 87-2)

SELCO INC. EXPLORATION WESTERN CANADA

DRILL LOG

HOLE NO. MDH 87-1

DRILLING CO.	LOCATION SKETCH	DEPTH	TESTS DIP ANGLE	AZIMUTH				
MIN-EX DRILLING LTD.		COLLAR	-45°	265°	DATE STARTED:	Nov 6, 1987	PROJECT:	MIDWAY OPTION
					DATE COMPLETED:	Nov 9, 1987	N.T.S.:	82E/2W
					COLLAR ELEV.:	935m	LOCATION:	4 km northwest of Midway, B.C.
					NORTHING:	106N		
					EASTING:	147.5E		
					AZIMUTH:	265°		
					DEPTH:	98.75m (324ft)	DATE LOGGED:	Nov 8-10, 1987
HOLE TYPE: DDH					CORE SIZE:	NQ	LOGGED BY:	R. Wong

INTERVAL (m) FROM	TO	ROCK TYPE	COLOUR	ALTERATION	STRUCTURE (FRACTURES, FAULTS, FOLDING, BEDDING, ETC.) / REMARKS (MINERALIZATION, TYPE, AGE RELATIONS)
0	.9	Overburden, weathered bdrk, ground core.			(NB) Log rewritten/revised following binocular microscope examination of representative suite. Nov 23/87. RW.
.9	12.4	Ankeritized Serpentinite: remnant patches of black, Mt-rich, talcose serp within mod to st ankerite (qtz-magnesite) alt. Locally magnetic.	lt orange to black	40-90% ankeritized, alt less intense toward contact at 12.4m. 5-10% diss euhedral Mt in remnant serpentinite patches. Wk veining by white to clear sucrosic qtz veins @ 10° and 45-60° CA.	Foliation @ 30-45° CA. Ankerite alt occurs along foliation and is developed as envelopes around 3-5cm wide clay gouge zones (also @ 30-45° CA). White qtz veins up to 2cm wide have cockscomb margins and massive centres. Vein 3.4-3.7m is offset by 2-4mm grey silica veinlets.

*Serpentinization predates ankerite alt; silicification post-dates ankerite alt but appears to be preferentially hosted in ankerite zones. At least two ages of silica veining evident, early white qtz veins may be associated with ankerite alt.

SELCO EXPLORATION WESTERN CANADA

DRILL LOG

HOLE NO. MDH 87-1

INTERVAL (m) FROM	TO	ROCK TYPE	DESCRIPTION: COLOUR	ALTERATION	STRUCTURE (FRACTURES, FAULTS, FOLDING, BEDDING, ETC):	REMARKS: MINERALIZATION, TYPE, AGE RELATIONS
12.4	56.5	Porphyritic dacite/ qtz diorite: 40-50% gen aligned (@ 35° CA) plag phenos 2-8mm length (avg 2-3mm). Acicular Hb 15-25% range. 5-3mm (avg 1mm). 15% fg plag, 10-15% fg qtz. ~40-50% of this section is oxidized and bleached 46m mod align phenos @ 45° CA	lt to dk green orange to lt grey-green 33-56.5m QUARRY ZONE ?	wk calc-hem fr-fill predates silica veining, wk propylitic alt to 17.4m wk-mod silica veining and clay alt. 31-40m relatively unalt zone (not bleached, no Py) 33.85-56.5m slight increase (mod) in pervasive clay alt^n and silica veining with heavy Py locally (eg. 41m has patchy zones of Py up to 50%), locally strong oxidation obscures alt. 50.7m - 10cm wide chalced bx vein @ 55° CA, poorly-dev banding, top of vein coincides with circulation loss 55.4-55.6m - chalced bx vein @ 55-60° CA 55.1-56.0m - mod-st silica veining Serp clast 51.5-51.8 contains up to 5% Cp over a few cm	12.4-12.8 m pale green, non-magnetic contact zone (altered chill zone ? in porphyry); <u>not</u> a fault contact. 17.4-56.5m numerous oxidized fract envelopes with associated bleaching of porphyry. Fe stain probably due to oxidation of vfg diss Py (1-3%) within bleached zones. Chalced qtz veinlets @ 45-60° CA occur within bleached/oxidized zones (mod to strong clay alt of plag, mod to strong chloritization of Hb). Circulation loss at 33.85-34.25 m coincides with massive pale green to white chalcedonic vein @ 50-60° CA containing fragments of rusty wall-rock and clots of talc (pyrophyllite ?). 44.4-45.0m is perv pale pink alt of groundmass and pale green (sericite ?) alt of plag phenos. Local drusy silica fract coatings with fg py in botryoidal white waxy talc (?) coating silica (eg 49.6m). 54.3m fine bladed calcite on vuggy silica vein. 51.5-51.8m silicified hematized serpent clast within silicified porphyry. Similar zone at 59.2-59.5m. These are probably xenoliths and indicate proximity to intrusive contact at 56.5m. (NB - silicification is localized at these inclusions)	

SELCO EXPLORATION WESTERN CANADA

DRILL LOG

HOLE NO. MDH 87-1

INTERVAL (m) FROM	TO	ROCK TYPE	DESCRIPTION: COLOUR	DESCRIPTION: ALTERATION	STRUCTURE (FRACTURES, FAULTS, FOLDING, BEDDING, ETC): / REMARKS: MINERALIZATION, TYPE, AGE RELATIONS
56.5	71.9	Serpentinite: poor to mod devel foliation 45-60° CA Ankerite alt x-cuts and parallels foliation; developed sporadically in fr envelopes up to 30cm wide	Grey to black with local orange (ankerite) mottling	Ankerite alt much weaker than in upper serpent and has correspondingly higher magnetism Very wk silica veining mainly within ankerite zones	56.5m sharp contact marked by 3cm of med gouge @ 55-70° CA. 2cm blue-gr chalced vein @ 20° CA occurs in porph immed above contact. 58.6-58.8m lt grey to clear, vaguely banded chalced veins @ 45-80° CA 59.7m - 5cm wide strong clay gouge 71.3m - 2cm wide vuggy qtz vein @ 45° CA
(69.4	69.8m)	Biot Lamprophyre: 10% biotite (.5-1mm diameter) in non-magnetic vfg to aphanitic gm; med to dk green, sharp 45-50° CA contacts; cut by minor carbonate veinlets			
71.9	88.0	Fg andesite ± dacite: 15% Hb avg 1mm, 60% fg plag (vfg interstitial qtz), 5% irreg, elongate 1-2mm carbonate cavity fillings (vesicles?) aligned locally at 55° CA	Med to dk green from 71.9-76.0m Med to lt green 76-79m → Lt green 79-88m →	71.9-76.0m mod-st perv chlorite, wk qtz-carb fr-fill increasing perv sericite, (0 → wk) tr Py wk-mod sericite with 2-4% vfg diss Py, wk chalced silica veining @ 45° and 70° CA, strong chlorite alt of Hb	71.9m - sharp contact ~45° CA marked by 5cm of weak gouge. 74.2m - 2cm wide serpent inclusion 86.6-87.8m serpent inclusion with strong silica veining, clots of talc 84.6m is vuggy calcite in chalced vein, fg Py cubes line vugs

SELCO EXPLORATION WESTERN CANADA

DRILL LOG

HOLE NO. MAH 87-1

INTERVAL FROM	INTERVAL TO	ROCK TYPE	DESCRIPTION: COLOUR	DESCRIPTION: ALTERATION	STRUCTURE (FRACTURES, FAULTS, FOLDING, BEDDING, ETC):	REMARKS: MINERALIZATION, TYPE, AGE RELATIONS
88.0	89.0	Serpentinite: strong foliation @ 50-70°CA,	Green-black-tan	Alternating magnetic serp and qtz-magnesite bands Tr diss Py 88.4-88.7m banded and vuggy chalced veining	Sharp upper (30° CA) and lower (60° CA) contacts.	
89.0	90.2	Andesite dyke; chlorite pseudomorphs of Hb up to 3mm length form glomerophyric clusters	Med to dk green	Strong perv chloritization, local strong silicification and bleaching	Sharp lower contact at 20° CA	
90.2	90.8	Serpentinite:	black/white	Strong silica veining - (stockwork) banded and vuggy white to grey chalced veins @ variable angles; 2% Py replacing serpentinite	Sharp lower contact at >45° CA	
90.8	98.75 END HOLE	Fg subporph altered Andesite (Dacite?): 20-25% tabular pinkish feld phenos avg 1mm have clay-alt rims, 35% subhedral plag ≤1mm altered to pale green sericite, 35% groundmass of vfg qtz-sericite (could be altered equivalent of andesite 71.9-88.0m)	Lt green	wk-mod fine qtz veining (non-chalcedonic). Mod-strong perv sericite with 1-4 % vfg diss Py. Local chalced veining. 93.1m - 5cm wide silica-bx vein @ 30°CA 97.5-98.3m - mod-st chalced veins @ 45-70°CA 94m - soft black non-metallic mineral (manganite?) forms matrix to 1cm wide bx zone @ 20°CA	Alteration along irreg stkwk fractures with 1-2mm white carbonate fr-fill and envelopes of greyish sericite-qtz. Intervening rock bleached pale pink to pale green. (phyllic alteration - qtz-ser-py) (superimposed by carbonate fr-fill and hematite staining)	

DRILL HOLE NO: MAH 87-1

SELCO EXPLORATION WESTERN CANADA

DRILL LOG sample data

SAMPLE NUMBER	FROM	TO	TOTAL METRES	MS Sp. Gr	CORE RECOVERY %	AMT. LOST	VISUAL ESTIMATES (% ORE MINERALS)	Au (ppb)	Ag (ppm)	As (ppm)	F (ppm)			
	.9	2.0	1.1	1.4	55									
	2.0	3.3						1	.1	13	960			
51001 { 51002	3.3	3.66	2.0	.5	95			17	.1	17	750			
	3.66	4.0												
	4.0	6.0	2.0	.4	90									
51003	6.0	8.0	2.0	.5	93			36	.1	9	760			
	8.0	10.0	2.0	.4	80									
51004	10.0	12.0	2.0	.5	95			2	.1	11	170			
	12.0	14.0	2.0	.5	90									
51005	14.0	16.0	2.0	0	90			1	.1	4	580			
	16.0	17.4						5	.1	5	660			
51006 { 51007	17.4	17.7	2.0	.1	95			65	.4	74	1000			
	17.7	18.0												
51008	18.0	20.0	2.0	.1	93			3	.1	27	900			
51009	20.0	22.0	2.0	.1	85			8	.1	35	1200			
51010	22.0	24.0	2.0	.1	95			1	.2	25	970			
51011	24.0	26.0	2.0	.1	95			2	.1	30	720			
51012	26.0	28.0	2.0	.3	90			1	.1	16	910			
51013	28.0	30.0	2.0	.1	95			18	.1	21	1100			
51014	30.0	32.0	2.0	.1	75			8	.2	55	1000			
51015	32.0	33.85	1.85	0	70			69	.3	109	1180			
51016	33.85	34.25	.4	0				28	.7	20	270			
51017	34.25	36.0	1.75	0	90			90	.5	110	1500			
51018	36.0	38.0	2.0	.1	95			17	.3	32	870			
51019	38.0	39.4	1.4	.2	93			2	.1	2	670			
51020	39.4	40.0	.6					149	.8	128	790			

DRILL HOLE NO. MDH 87-1

SELCO EXPLORATION WESTERN CANADA

DRILL LOG sample data

SAMPLE					CORE RECOVERY		VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS						
NUMBER	FROM	TO	TOTAL METRES	Sp. Gr	%	AMT. LOST		Au (ppb)	Ag (ppm)	As (ppm)	F (ppm)			
51021	40	42	2	0	97			33	.2	84	1100			
51022	42	44	2	0	83			17	.2	48	990			
51023	44	46	2	0	95			4	.2	26	940			
51024	46	48	2	0	99			20	.1	34	1080			
51025	48	50	2	0	95			6	.1	31	1300			
51026	50	52	2	0	90			19	.3	56	1100			
51027	52	54	2	.1	95			22	.3	54	1200			
51028	54	56	2	.1	80			4	.2	71	870			
	56	58	2	.3	85									
	58	60	2	.9	95									
51029	60	62	2	1.1	98			1	.1	5	710			
	62	64	2	1.9	100									
	64	66	2	2.4	98									
51030	66	68	2	1.2	98			2	.1	6	690			
	68	70	2	1.9	93									
51031	70	72	2	.4	95			3	.1	19	150			
	72	74	2	0	90									
51032	74	76	2	.1	95			2	.1	2	720			
	76	78	2	.2	100									
51033	78	80	2	.1	85			27	.1	10	1300			
51034	80	82	2	0	93			39	.2	21	1340			
51035	82	84	2	0	90			6	.3	13	1050			
51036	84	86	2	0	90			2	.3	46	1300			
51037	86	88	2	0	80			181	.7	138	1200			
51038	88	90	2	0	98			23	.8	296	510			
51039	90	92	2	.1	97			210	.5	152	980			

DRILL HOLE NO. MDH 87-1

SELCO EXPLORATION WESTERN CANADA

DRILL LOG sample data

SAMPLE NUMBER	FROM	TO	TOTAL METRES	Sp. Gr	CORE RECOVERY %	AMT. LOST	VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS Au(ppb)	Ag(ppm)	As(ppm)	F(ppm)			
51040	92	94	2	0	98			16	.4	80	1240			
51041	94	96	2	0	98			6	.1	12	820			
51042	96	98	2	0	92			7	.1	13	740			
51043	98	98.75	0.75	.1	100			1	.3	17	640			
		End of Hole												

DRILL HOLE NO. MDH 87-1

SELCO INC. EXPLORATION WESTERN CANADA

DRILL LOG

HOLE NO. MDH 87-2

DRILLING CO.	LOCATION SKETCH	DEPTH	TESTS DIP ANGLE	AZIMUTH	DATE STARTED: Nov. 10, 1987	PROJECT: MIDWAY OPTION
MIN-EX DRILLING LTD.	N	COLLAR	-45°	270°	DATE COMPLETED: Nov 11, 1987	N.T.S.: 82E/2W
					COLLAR ELEV.: Approx 915m	LOCATION: 4 km northwest of Midway, B.C.
					NORTHING: 77.25N	
					EASTING: 130.5E	
					AZIMUTH: 270°	
					DEPTH: 60.65m (199 ft)	DATE LOGGED: Nov 11-12, 1987
HOLE TYPE DDH					CORE SIZE: NQ	LOGGED BY: R. Wong

INTERVAL FROM	INTERVAL TO	ROCK TYPE	DESCRIPTION: COLOUR	DESCRIPTION: ALTERATION	STRUCTURE (FRACTURES, FAULTS, FOLDING, BEDDING, ETC) / REMARKS (MINERALIZATION, TYPE, AGE RELATIONS)
0	1.8	Casing - overburden			NB Log rewritten/revised Nov 23, 1987 RW
1.8	60.65 END HOLE	QFP Dacite/Qtz Diorite: gradational from med gr qtz-feld porph (tabular plag phenos 1-3mm comprise 25%, 2-3mm round to squarish qtz eyes comprise 5%, ~20% Hb laths .1-1mm, qtz-rich groundmass with fg plag 50%) to a fg crowded feld porph (1mm plag phenos comprise 50%, qtz eyes not evident, groundmass is Hb ~10-12% avg .5mm, plag and 10+% qtz) Fg crowded phase - 10-15.4m, 17.2-20m, 25.3-31.3m, 42-50m	Dk to med green with oxidized Fe envelopes	Variable wk to strongly clay alt related to oxidized gouge zones, wk to strong chloritization of Hb. 12-16m mod to strong clay alt with 2-3% vfg diss Py 1.8-18.0m only minor chalced silica veining @ 45-70° CA	5cm wide gouge zones at 11.0m (40° CA), 13.7m (45° CA), 16.6m (20° CA) 3.9m - minor Cp in 5 cm wide qtz-carb vein @ 65° 15m wk alignment of plag phenos @ 45° CA 7m - 1cm wide white chalced vein @ 60° 11.8m - 1-2mm wide discontinuous lt blue chalced veins in centre of oxidized envelope 18.1m - 10 cm of good chalcedonic to drusy silica veining @ 45° CA accompanied by white waxy talc(?).

SELCO EXPLORATION WESTERN CANADA

DRILL LOG

HOLE NO. MAH 87-2

INTERVAL FROM	INTERVAL TO	ROCK TYPE	DESCRIPTION: COLOUR	DESCRIPTION: ALTERATION	STRUCTURE (FRACTURES, FAULTS, FOLDING, BEDDING, ETC):	REMARKS (MINERALIZATION, TYPE, AGE RELATIONS)
(20-	25.3)	coarser plag porph (phenos to 6mm) comprise 20-30%, no qtz eyes), mod alignment @ 45°CA		wk clay and chl alt; tr diss Py		
(30-	57m)	Oxidized Ft/ fault zone	Lt orange	wk silica veining 18-38m 28-30m wk perv clay alt with 1+% vfg Py 30-47m strongly oxidized, perv carbonate, mod-st clay alt with 2-3% vfg diss Py. Locally strong chalcedonic veining.	~30m is start of intense oxidation, corresponds with low recoveries and numerous gouge zones with spatially-related grey to white chalcedonic veins and bx veins (much broken and ground core. Gouge zones predom @ 50°CA, strong oxidation obscures alt and pyritization. Silica pebbles recovered from most gouge zones. 38.1-39.0m approx centre of fault-gouge zone, only 30cm of core recovered consists of chalced silica bx, locally drusy, 30% oxidized wallrock clasts (similar to vein outcrop), 2-4% diss hematite crystals. 39.0-40.2m only six small pieces of chalced bx recovered (potential width of silica bx from 38.1-40.2m) 45.9-46.2m strong silica veining in sheared host 50-57m periphery of fault-gouge zone, better recoveries, minor silica veins 1-4mm @ 45-50° CA.	
(57-	60.65) END HOLE	Unoxidized Dacite Porph: plag phenos tabular 1-4mm (avg 2mm), wk-mod alignment (variable angles) 35-40%, no qtz eyes, 10% Hb, mod clay alt of phenos, minor silica veining, no Py.	Med grey-green			

SELCO EXPLORATION WESTERN CANADA

DRILL LOG sample data

SAMPLE					CORE RECOVERY		VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS						
NUMBER	FROM	TO	TOTAL METRES	M.S.	%	AMT. LOST		Au(ppb)	Ag(ppm)	As(ppm)	F(ppm)			
	2	4	2	0	85									
	4	6	2	0	80									
51044	6	8	2	0	85			1	.1	27	440			
	8	10	2	.1	97									
51045	10	12	2	0	87			1	.3	7	600			
	12	14	2	.1	78									
51046	14	16	2	0	92			1	.1	38	580			
	16	18	2	0	98									
51047	18	20	2	0	70			5	.1	183	680			
51065	20	22	2	.1	77			6	.2	2	600			
51048	22	24	2	.1	95			1	.2	2	550			
	24	26	2	.1	85									
51049	26	28	2	0	85			1	.1	2	470			
	28	30	2	.1	95									
51050	30	32	2	0	83			6	.1	19	690			
51051	32	34	2	.1	65			1	.2	5	740			
51052	34	36	2	.1	35			8	.1	48	1100			
51053	36	38	2	0	23			30	.4	77	990			
51054	38	40	2	0	20			64	1.4	63	620			
51055	40	42	2	0	45			3	.1	27	520			
51056	42	44	2	0	40			6	.1	72	800			
51057	44	46	2	0	98			72	.3	42	820			
51058	46	48	2	.1	75			4	.1	28	730			
51059	48	50	2	.1	97			3	.1	8	620			
51060	50	52	2	0	78			3	.1	25	760			
51061	52	54	2	0	99			2	.2	22	1000			

SELCO EXPLORATION WESTERN CANADA

DRILL LOG sample data

SAMPLE NUMBER	FROM	TO	TOTAL METRES	M.S. (~~Sp. Gr~~)	CORE RECOVERY %	AMT. LOST	VISUAL ESTIMATES (% ORE MINERALS)	Au (ppb)	Ag (ppm)	As (ppm)	F (ppm)			
51062	54	56	2	0	97			5	.1	36	1280			
51063	56	58	2	0	90			1	.2	34	1240			
51064	58	60.65	2.65	.1	96			4	.3	6	1090			
		END HOLE												

APPENDIX VIII

Listing of Analytical Results for
Drill Core

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE. F - NAOH FUSION - SPECIFIC ION ELECTRODE ANALYSIS.

RECEIVED NOV 1987 SELCO RESOURCES VANCOUVER, B.C.

DATE RECEIVED: NOV 13 1987 DATE REPORT MAILED: Nov 25/87 ASSAYER. D. Toye. .DEAN TOYE, CERTIFIED B.C. ASSAYER

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SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB	F PPM
8587573 51001	2	8	7	10	.1	519	36	608	2.94	13	5	ND	2	52	1	2	2	4	1.03	.004	2	163	12.41	18	.01	2	.12	.01	.01	1	1	960
8587573 51002	2	6	2	13	.1	716	37	501	2.42	17	5	ND	2	129	1	2	2	4	1.85	.003	2	119	10.60	20	.01	2	.09	.01	.01	1	17	750
8587573 51003	2	4	2	10	.1	697	38	654	3.08	9	5	ND	2	57	1	2	2	4	.67	.003	2	208	13.84	14	.01	4	.08	.01	.01	1	36	760
8587573 51004	1	2	2	10	.1	248	22	400	2.43	11	5	ND	2	126	1	2	2	3	2.24	.002	2	281	7.39	27	.01	2	.09	.01	.01	1	2	170
8587573 51005	1	74	13	91	.1	25	12	839	3.30	4	5	ND	2	157	1	2	2	63	2.86	.081	6	42	1.68	85	.01	2	1.38	.03	.12	1	1	580
8587573 51006	1	104	6	49	.1	22	11	1028	3.54	5	5	ND	2	185	1	2	2	62	3.76	.080	6	37	1.79	142	.01	2	1.17	.02	.11	1	5	660
8587573 51007	1	81	3	49	.4	27	13	969	3.56	74	5	ND	2	96	1	3	2	42	2.87	.082	6	33	1.45	142	.01	2	.96	.01	.12	1	65	1000
8587573 51008	1	80	7	46	.1	22	13	782	3.20	27	5	ND	1	135	1	2	3	54	2.80	.087	6	33	1.07	201	.01	2	1.03	.04	.12	1	3	900
8587573 51009	1	76	4	43	.1	14	11	881	3.30	35	5	ND	2	128	1	2	3	43	3.61	.076	6	26	1.42	70	.01	2	.90	.01	.12	1	8	1200
8587573 51010	1	56	6	49	.2	41	14	882	3.50	25	5	ND	2	132	1	2	2	60	4.16	.080	8	38	1.14	209	.01	2	1.20	.02	.09	2	1	970
STD C	18	58	38	125	7.0	68	27	1072	3.89	39	17	8	37	48	17	16	23	62	.47	.084	36	56	.80	161	.06	38	1.78	.06	.13	14	-	-
8587573 51011	1	64	2	44	.1	20	12	808	3.19	30	5	ND	2	140	1	2	2	54	3.19	.078	6	36	1.43	102	.01	2	1.30	.02	.08	1	2	720
8587573 51012	1	33	7	47	.1	26	12	859	3.11	16	5	ND	1	166	1	2	2	54	3.96	.079	6	36	1.22	379	.01	2	1.26	.02	.10	1	1	910
8587573 51013	1	35	3	50	.1	31	12	933	3.41	21	5	ND	1	93	1	2	3	43	3.88	.080	6	32	1.14	176	.01	2	1.33	.01	.12	1	18	1100
8587573 51014	1	51	5	54	.2	29	11	837	3.07	55	5	ND	2	93	1	2	2	36	3.66	.073	7	30	1.11	135	.01	2	1.21	.01	.12	1	8	1000
8587573 51015	1	70	4	59	.3	23	12	882	3.48	109	5	ND	2	74	1	2	3	28	2.55	.083	6	28	1.14	139	.01	2	1.14	.01	.11	1	69	1180
8587573 51016	2	7	6	12	.7	8	2	79	.38	20	5	ND	1	14	1	2	2	3	.16	.006	2	7	.08	173	.01	2	.27	.01	.03	1	28	270
8587573 51017	1	38	4	46	.5	28	10	893	2.93	110	5	ND	1	120	1	2	4	23	4.18	.071	5	15	1.46	134	.01	2	.76	.01	.19	2	90	1500
8587573 51018	1	34	8	48	.3	29	12	955	3.15	32	5	ND	2	149	1	2	3	32	4.05	.069	6	25	1.87	620	.01	2	.96	.01	.14	1	17	870
8587573 51019	1	35	3	50	.1	17	12	833	3.11	2	5	ND	1	104	1	2	3	47	3.21	.077	6	35	1.65	193	.01	2	1.22	.02	.12	1	2	670
8587573 51020	1	97	9	49	.8	19	13	756	3.64	128	5	ND	2	110	1	2	2	31	2.68	.079	4	27	1.72	76	.01	4	1.10	.01	.13	1	149	790
8587573 51021	1	41	6	52	.2	24	11	845	3.26	84	5	ND	2	99	1	2	2	27	2.97	.073	5	22	1.56	72	.01	2	1.03	.01	.14	2	33	1100
RE 8587573 51004	1	1	2	11	.1	253	22	404	2.42	11	5	ND	2	125	1	2	2	3	2.22	.001	2	287	7.41	26	.01	2	.09	.01	.01	1	1	-
8587573 51022	1	32	2	40	.2	46	9	860	2.56	48	5	ND	1	108	1	2	3	16	3.83	.065	4	14	1.12	213	.01	2	.61	.01	.17	1	17	990
8587573 51023	1	31	5	39	.2	22	10	821	2.62	26	5	ND	2	127	1	2	3	18	4.68	.068	5	10	1.48	181	.01	2	.52	.01	.19	1	4	940
8587573 51024	1	10	6	48	.1	23	11	851	3.08	34	5	ND	1	129	1	2	2	32	3.53	.076	5	23	1.80	259	.01	2	1.01	.01	.16	1	20	1080
8587573 51025	1	10	6	43	.1	24	10	863	2.81	31	5	ND	1	117	1	2	2	23	4.01	.069	5	16	1.51	151	.01	4	.80	.01	.18	1	6	1300
8587573 51026	1	148	3	40	.3	158	15	854	2.85	56	5	ND	1	219	1	2	2	29	4.93	.052	4	33	2.76	84	.01	2	1.02	.01	.13	1	19	1100
8587573 51027	1	81	6	32	.3	173	14	858	2.51	54	5	ND	1	183	1	2	4	16	6.35	.054	3	40	2.07	139	.01	2	.58	.01	.16	1	22	1200
8587573 51028	1	42	2	32	.2	316	17	806	2.61	71	5	ND	1	250	1	6	3	15	5.53	.045	2	139	2.60	203	.01	2	.58	.01	.13	1	4	870
8587573 51029	2	7	2	11	.1	482	27	581	2.82	5	5	ND	1	73	1	2	2	8	.81	.001	2	415	11.49	11	.01	3	.11	.01	.01	1	1	710
8587573 51030	2	5	2	8	.1	492	31	638	2.89	6	5	ND	1	96	1	2	2	3	1.30	.001	2	201	11.57	85	.01	2	.08	.01	.01	1	2	690
8587573 51031	1	2	2	14	.1	772	36	761	2.78	19	5	ND	2	426	1	2	2	6	5.24	.004	2	223	10.54	20	.01	2	.19	.01	.02	1	3	150
8587573 51032	1	6	8	59	.1	49	9	1271	2.89	2	5	ND	2	143	1	2	2	21	3.14	.094	10	15	1.91	154	.01	2	1.08	.01	.22	1	2	720
8587573 51033	1	31	9	67	.1	28	8	1091	2.72	10	5	ND	2	134	1	2	3	10	2.80	.078	6	4	1.62	92	.01	2	.64	.01	.25	1	27	1300
8587573 51034	1	24	11	93	.2	27	7	1218	2.78	21	5	ND	2	151	1	2	4	14	3.81	.078	5	4	1.78	104	.01	3	.59	.01	.21	1	39	1340
8587573 51035	1	30	112	98	.3	29	8	1220	2.77	13	5	ND	2	139	1	2	3	13	3.76	.078	8	3	1.82	63	.01	2	.64	.01	.23	1	6	1050
8587573 51036	1	12	8	55	.3	25	8	1052	2.81	46	5	ND	2	152	1	4	4	11	2.95	.080	6	3	1.47	49	.01	2	.63	.01	.23	1	2	1300
STD C/AU-R	19	58	40	133	7.3	69	28	1129	4.10	39	15	8	38	50	18	18	22	56	.45	.086	38	60	.85	182	.06	31	1.90	.06	.14	13	495	-

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AU* PPB	F PPM
8587573 51037	3	18	8	52	.7	104	15	715	3.24	138	5	ND	3	289	1	5	3	23	3.46	.092	37	48	2.62	71	.01	2	.68	.01	.15	1	181	1200
8587573 51038	15	33	42	91	.8	698	36	896	4.03	296	5	ND	1	257	1	13	2	49	3.11	.046	7	311	7.18	23	.01	2	2.89	.01	.05	1	23	510
8587573 51039	2	47	10	44	.5	332	28	897	3.85	152	5	ND	1	374	1	4	2	44	6.00	.048	9	116	5.36	82	.01	2	.70	.01	.14	1	210	980
8587573 51040	2	56	15	49	.4	211	22	889	3.89	80	5	ND	1	290	1	4	2	43	4.71	.064	11	94	4.41	107	.01	2	.87	.01	.17	1	16	1250
8587573 51041	1	12	9	55	.1	31	7	843	2.28	12	5	ND	1	167	1	2	2	10	3.59	.050	6	3	2.15	56	.01	2	.54	.01	.22	1	6	820
RE 8587573 51054	1	13	7	25	1.5	12	4	323	1.29	63	5	ND	1	19	1	2	2	8	.23	.038	7	8	.17	198	.01	6	.42	.01	.12	2	71	640
8587573 51042	1	17	10	62	.1	32	10	851	2.70	13	5	ND	1	152	1	2	2	10	3.21	.049	7	3	1.93	53	.01	2	.48	.01	.21	1	7	740
8587573 51043	1	13	9	56	.3	26	10	691	2.25	17	5	ND	1	136	1	2	2	11	2.76	.050	6	2	1.54	41	.01	2	.57	.02	.21	1	1	640
8587573 51044	1	6	2	55	.1	15	11	735	2.93	27	5	ND	1	97	1	2	2	38	3.42	.045	7	38	1.45	98	.01	2	1.73	.03	.10	1	1	440
8587573 51045	1	25	7	53	.3	5	9	709	3.10	7	5	ND	1	61	1	2	3	22	2.23	.063	12	4	.78	129	.01	2	1.19	.02	.13	2	1	600
8587573 51046	1	4	7	40	.1	6	8	726	2.64	38	5	ND	1	93	1	3	2	22	3.62	.051	9	8	1.17	45	.01	3	1.26	.02	.11	1	1	580
8587573 51047	1	9	6	52	.1	8	8	759	3.06	183	5	ND	1	46	1	2	2	17	1.74	.059	10	4	.96	114	.01	2	1.28	.02	.18	1	5	680
8587573 51048	1	27	7	64	.2	28	11	1080	3.57	2	5	ND	1	142	1	2	2	42	4.54	.088	8	35	1.41	91	.01	3	.95	.03	.14	1	1	550
8587573 51049	1	4	4	52	.1	3	7	1141	2.72	2	5	ND	1	117	1	2	3	13	5.19	.053	8	1	1.34	65	.01	2	.54	.02	.18	1	1	470
8587573 51050	1	11	4	49	.1	6	9	978	2.92	19	5	ND	1	109	1	2	2	19	4.76	.068	9	5	.51	181	.01	2	.63	.02	.18	1	6	690
8587573 51051	1	58	8	46	.2	9	10	969	3.10	5	5	ND	1	133	1	2	2	16	5.92	.088	3	7	1.15	232	.01	4	.49	.02	.21	2	1	740
8587573 51052	2	20	8	44	.1	17	12	1050	3.03	48	5	ND	1	107	1	2	2	14	3.97	.103	4	10	.17	167	.01	5	.57	.01	.19	4	8	1100
8587573 51053	2	44	11	45	.4	40	10	896	2.65	77	5	ND	1	62	1	3	2	15	1.69	.087	4	12	.13	114	.01	3	.52	.01	.22	8	30	990
8587573 51054	1	13	7	25	1.4	12	4	323	1.30	63	5	ND	1	19	1	2	2	8	.22	.036	7	7	.17	193	.01	2	.42	.01	.12	2	64	620
8587573 51055	1	6	5	56	.1	15	10	878	2.74	27	5	ND	1	57	1	2	2	20	2.69	.045	5	20	.89	214	.01	2	1.07	.02	.14	1	3	520
STD C	19	61	40	128	7.4	68	29	1040	4.00	42	18	7	37	52	18	16	18	58	.46	.089	40	59	.85	173	.07	32	1.91	.06	.14	12	-	-
8587573 51056	2	7	5	55	.1	17	8	613	2.84	72	5	ND	1	26	1	2	2	17	.66	.060	10	6	.78	109	.01	2	1.28	.02	.14	2	6	800
8587573 51057	1	48	8	47	.3	11	9	691	2.97	42	5	ND	1	34	1	2	2	19	.92	.057	10	7	.77	117	.01	3	1.36	.01	.15	2	72	820
8587573 51058	2	6	2	73	.1	25	9	809	2.93	28	5	ND	1	44	1	4	2	16	1.53	.057	11	4	.77	117	.01	2	1.34	.01	.15	1	4	730
8587573 51059	1	6	6	64	.1	8	7	809	2.71	8	5	ND	1	105	1	2	2	18	4.15	.057	11	3	.85	115	.01	3	1.38	.01	.18	1	3	620
8587573 51060	1	6	8	61	.1	10	7	770	2.89	25	5	ND	1	51	1	2	2	15	1.72	.064	11	4	.73	130	.01	2	1.20	.01	.17	1	3	760
8587573 51061	2	14	10	55	.2	15	14	1251	3.00	22	5	ND	1	80	1	2	2	20	4.47	.090	6	12	.28	239	.01	2	.66	.01	.17	1	2	1000
8587573 51062	2	40	12	50	.1	14	11	1008	2.91	36	5	ND	1	86	1	2	2	23	3.78	.099	6	14	.18	170	.01	2	.57	.01	.20	2	5	1280
8587573 51063	1	28	6	49	.2	12	11	888	2.51	34	5	ND	1	122	1	2	2	25	4.03	.088	6	14	1.07	112	.01	2	.75	.01	.21	1	1	1240
8587573 51064	1	31	10	43	.3	15	12	750	2.61	6	5	ND	1	135	1	2	2	38	3.84	.086	6	21	1.61	484	.01	2	1.08	.01	.21	1	4	1090
8587573 51065	1	28	10	63	.2	9	13	1080	3.74	2	5	ND	1	169	1	2	4	54	4.54	.097	7	22	1.43	477	.01	5	1.11	.03	.12	1	6	600
STD C/AU-R	20	61	41	130	7.7	70	30	1091	4.18	45	22	7	39	53	19	18	19	61	.46	.093	40	63	.88	181	.07	35	1.94	.07	.14	12	515	-

APPENDIX IX

Statement of Costs

STATEMENT OF COSTS

1) LABOUR

R. Wong, geologist: 15 days @ $200 (June 20; Sept. 13,17,18; Nov.. 3-13, 1987)	$ 3,000
W. Bleaney, assistant geologist: 1 day @ $110 (June 20, 1987)	110
Alan Inglis, assistant geologist: 3 days @ $100 (Sept. 13,17,18, 1987)	300
W. Piotrowski, technician: 3 days @ $80 (Nov. 7-8, 1987)	240
S. Hoffman, geochemist: 2 days @ $300 (Nov. 7-8, 1987)	600
	$ 4,250

2) ACCOMMODATION

23 man-days @ $25	$ 575

3) VEHICLE

Four-wheel drive: 15 days @ $36	$ 540

4) GEOCHEMICAL ANALYSIS

65 Core samples	for ICP + AU, F	$ 1,056
100 Soil samples	for " " "	1,450
15 Rock samples	for " " "	240
		$ 2,746

5) DIAMOND DRILLING

159.4 m NQ drilling	$13,160

6) ROAD AND SITE PREPARATION COSTS	$ 2,500
7) FUEL, SUPPLIES	$ 300
8) DRAFTING/TYPING	$ 350
TOTAL	$24,421

APPENDIX X

Statement of Qualifications

STATEMENT OF QUALIFICATIONS

R.H. Wong

I, Russell H. Wong of #700 - 890 West Pender Street, in Vancouver, in the Province of British Columbia, do hereby state:

1. That I am a graduate of the University of British Columbia, Vancouver, B.C., where I obtained a B.Sc. in Geology in 1975.

2. That I have been active in mineral exploration since 1973.

3. That I am a member, in good standing, of the Geological Association of Canada and Association of Exploration Geochemists.

4. That I have practised my profession continuously as a staff geologist for BP Resources Canada Limited since 1979.

5. That I have no interest in the properties or securities of Dentonia Resources Ltd. or Kettle River Resources Ltd., nor do I expect to receive any.

6. That I supervised the programmme of work described in this report.

Russell H. Wong

Russell H. Wong
Project Geologist

March, 1988
Vancouver, B.C.

STATEMENT OF QUALIFICATIONS

S.J. Hoffman

BSc 1969 - McGill University (Hons., Geology and Chemistry)

MSc 1972 - The University of British Columbia (Geochemistry)

PhD 1976 - The University of British Columbia (Geochemistry)

List of Publications (to December 1987)

2 - Theses (unpublished)

13 - Scientific papers in referred journals (3 in the last 3 years)

1 - Published Geochemical Manual (report writing)

1 - Unpublished Manual - Organization of a Geochemical Symposium

1 - Book (Reviews in Economic Geology - Volume 3)

3 - Scientific papers in unreferred journals (2 in press)

1 - Scientific paper in preparation

List of Memberships

1. Member Geological Association of Canada, since 1967; Fellow since 1986
2. Canadian Institute of Mining and Metallurgy, since 1973
3. Association of Exploration Geochemists, since 1973
4. American Society of Agronomy, since 1973
5. Geochemical Society, since 1983
6. International Association of Geochemistry and Cosmochemistry, since 1986

Other Organizations

1. Association of Exploration Geochemists council member of symposium committee chairman, 1980-1986, president (1987-1988)
2. Lecturer, B.C. Department of Mines Prospecting Course, (1977-1987), B.C. & Yukon Chamber of Mines (1987), Northwest Mining Association (1979, 1985), Brokers Course (1984, 1985)
3. Chairman, GOLD-81 and GEOEXPO/86 Symposia

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,162

DISTRIBUTION HISTOGRAMS

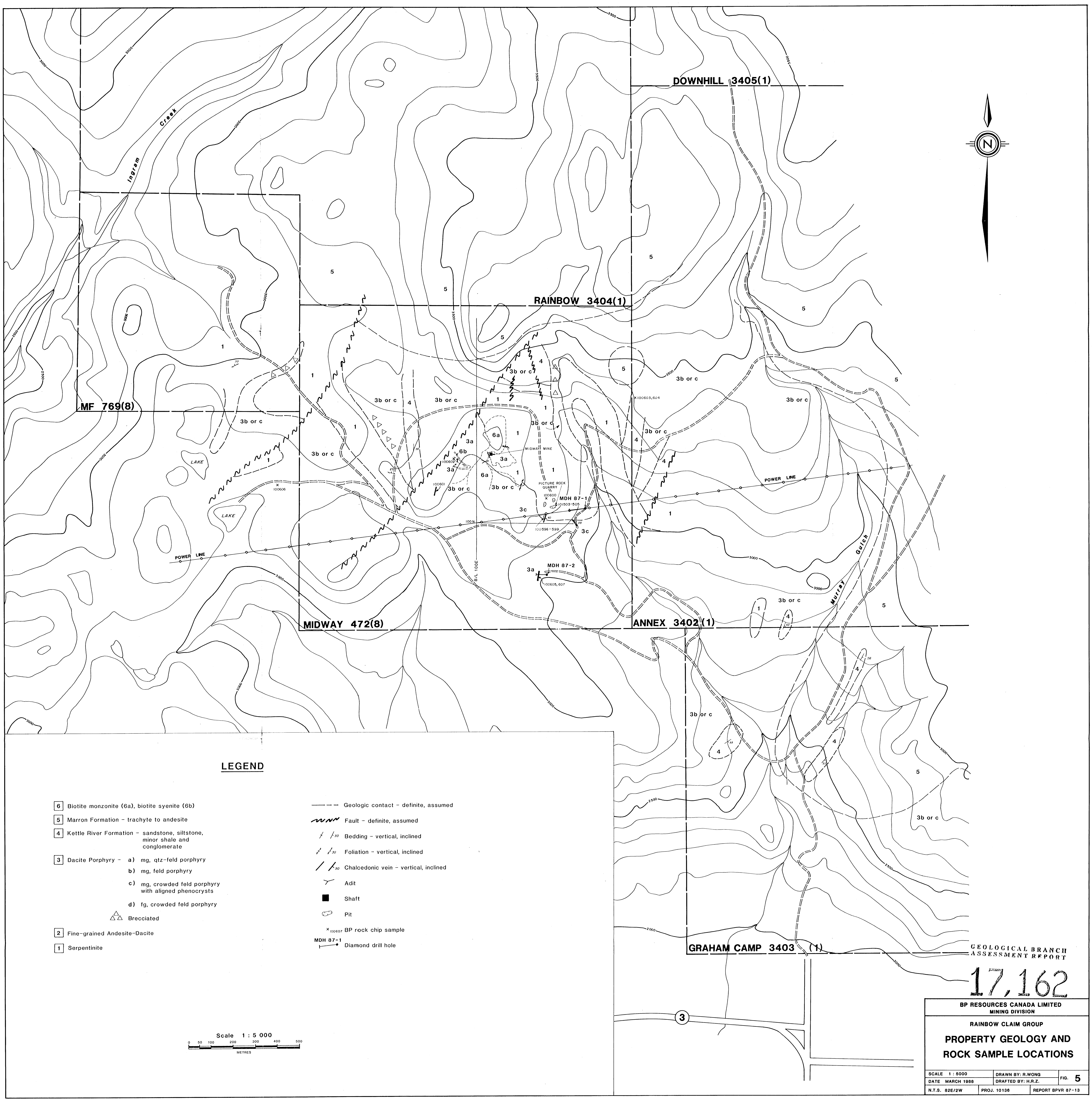
LIN = LINEAR
LOG = LOGARITHMIC
LINT= TRUNCATED LINEAR
LOGT= TRUNCATED LOGARITHMIC

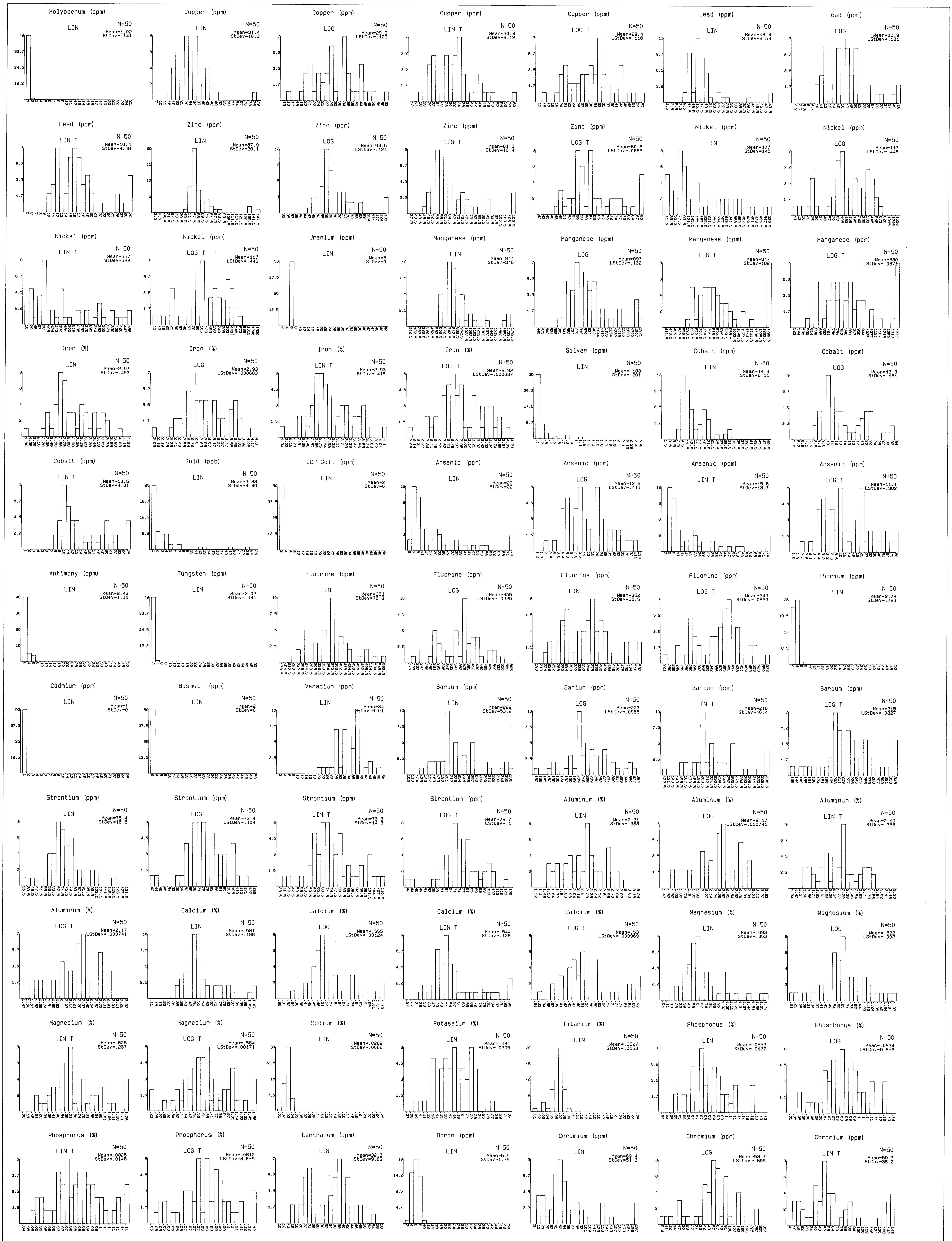
SAMPLE SELECTION CRITERIA:

SAMPLE TYPE	51
PROPERTY CODE	ALL
LSE CODE	ALL
OB ORIGIN	ALL
SAMPLE TEXTURE	ALL
SOIL HORIZON	ALL
BEDROCK GEOLOGY	ALL
NORTH LIMIT	NONE
SOUTH LIMIT	NONE
EAST LIMIT	NONE
WEST LIMIT	NONE

MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - A HORIZON
HISTOGRAMS

DATE: DEC/87	PROJECT#: 578
NTS: 82E/2	FIG. 7A
BPVR 87-13	


DOWNHILL 3405(1)
RAINBOW 3404(1)
MF 769(8)
MIDWAY 472(8)
ANNEX 3402(1)
GRAHAM CAMP 3403 (1)
Ingram Creek
Murray Gulch
LAKE
LAKE
POWER LINE
POWER LINE
MIDWAY MINE
PICTURE ROCK QUARRY
MDH 87-1
MDH 87-2
B/L 100E
LEGEND
6 Biotite monzonite (6a), biotite syenite (6b)
5 Marron Formation - trachyte to andesite
4 Kettle River Formation - sandstone, siltstone, minor shale and conglomerate
3 Dacite Porphyry - a) mg, qtz-feld porphyry
b) mg, feld porphyry
c) mg, crowded feld porphyry with aligned phenocrysts
d) fg, crowded feld porphyry
Brecciated
2 Fine-grained Andesite-Dacite
1 Serpentinite
Geologic contact - definite, assumed
Fault - definite, assumed
Bedding - vertical, inclined
Foliation - vertical, inclined
Chalcedonic vein - vertical, inclined
Adit
Shaft
Pit
100607 BP rock chip sample
MDH 87-1
Diamond drill hole
Scale 1 : 5 000
0 50 100 200 300 400 500
METRES
GEOLOGICAL BRANCH
ASSESSMENT REPORT
17,162
BP RESOURCES CANADA LIMITED
MINING DIVISION
RAINBOW CLAIM GROUP
PROPERTY GEOLOGY AND
ROCK SAMPLE LOCATIONS
SCALE 1 : 5000
DRAWN BY: R.WONG
DATE MARCH 1988
DRAFTED BY: H.R.Z.
FIG. 5
N.T.S. 82E/2W
PROJ. 10136
REPORT BPVR 87-13



GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,162

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LSE CODE	ALL
OB ORIGIN	ALL
SAMPLE TEXTURE	ALL
SOIL HORIZON	ALL
BEDROCK GEOLOGY	ALL
NORTH LIMIT	NONE
SOUTH LIMIT	NONE
EAST LIMIT	NONE
WEST LIMIT	NONE

MIDWAY CLAIMS
MIDWAY PROJECT - B.C.
1987 SOIL ORIENTATION STUDY - B HORIZON
HISTOGRAMS

DATE: DEC/87	PROJECT#: 578
NTS: 82E/2	FIG. 7B
BPVR 87-13	

DRAWING NUMBER	DATE	PROJECT NUMBER	ANALYSIS 1	ANALYSIS 2	ANALYSIS 3	ANALYSIS 4		PROJECT NAME	FIGURE NUMBER
	DEC/87	578	MULTIELEMENT	GOLD	FLUORINE		MINING DIVISION	MIDWAY CLAIMS	11
DRAWN BY	SCALE	NTS	LAB METHOD 1	LAB METHOD 2	LAB METHOD 3	LAB METHOD 4		DRILLHOLE NUMBER	REPORT NUMBER
SJH	1:500	82E/2	AQUA REGIA	AQUA REGIA	FUSION		BP RESOURCES CANADA LIMITED	MDH-87-1	BPVR 87-13

DRAWING NUMBER	DATE	PROJECT NUMBER	ANALYSIS 1	ANALYSIS 2	ANALYSIS 3	ANALYSIS 4	MINING DIVISION	PROJECT NAME	FIGURE NUMBER
	DEC/87	578	MULTIELEMENT	GOLD	FLUORINE			MIDWAY CLAIMS	13
DRAWN BY	SCALE	NTS	LAB METHOD 1	LAB METHOD 2	LAB METHOD 3	LAB METHOD 4	BP RESOURCES CANADA LIMITED	DRILLHOLE NUMBER	DOCUMENT NUMBER
SJH	1:500	82E/2	AQUA REGIA	AQUA REGIA	FUSION			MDH-87-2	BPVR 87-13

17,162