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Sedimentary Holdings NL
in joint venture with
Northwest Bay Co. Ltd

MICROFILMED
FICHE No.014906 -

EL 11/84 PT 5
See folio 27
EL 3/94 PT 2
See folio 5
EL 33/96 PT 1
See folio 51

ANNUAL REPORT

for the

FORSTER PROJECT,

SOUTHERN TASMANIA

AK 9803

EL's 11/84, 3/94 & 33/96

For the Period ended September 1998

T G Summons

Location: Melbourne Office
Mines Department
Mrs H S Forster (North West Bay Co. Ltd)

ANNUAL REPORT- EL'S 11/84, 3/94 & 33/96
FORSTER PROJ. - T G SUMMONS
SEDIMENTARY HOLDINGS

99-4312

Table of Contents

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1. INTRODUCTION
2. GEOLOGICAL RESULTS
 - 2.1. Background
 - 2.2. Regional Structure
 - 2.3. Local Structure
 - 2.4. Alteration
 - 2.5. Mobile Ion Geochemical Survey
 - 2.6. Mineralisation
3. IDENTIFIED RESOURCES
4. RESEARCH
 - 4.1. University of Tasmania
 - 4.2. Miscellaneous Geochemical Data
 - 4.3. Cygnet Goldfield Review
5. MODELS of MINERALISATION
6. EXPENDITURE

Appendices 1 & 2

SUMMARY

The Forster Project is part of a new metallogenic district located at the junction of crustal scale north west and north south trending fault zones. The Project is 50km west of Hobart, and comprises exploration tenements covering 245 sqr km.

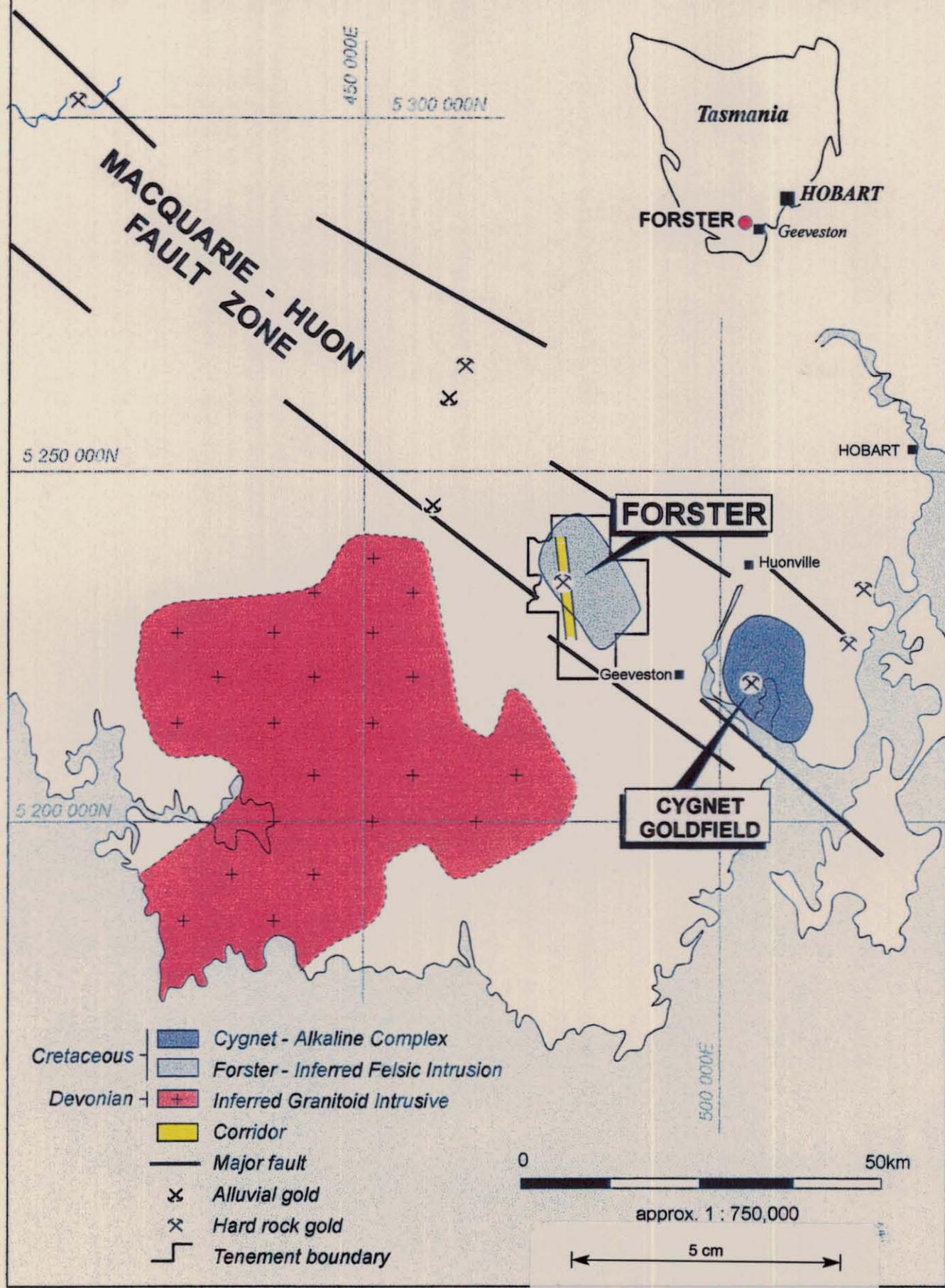
Recent exploration has located a large gold and base metal complex at Forster, the setting and style of which has analogues with world class deposits.

Work to date has outlined resources of gold, nickel and zinc mineralisation within a small area of the prospective corridor zone. There is considerable untested potential both along strike and at depth in the property.



**SEDIMENTARY
HOLDINGS NL**

**Forster
Project**



- Cretaceous — *Cygnet - Alkaline Complex*
- *Forster - Inferred Felsic Intrusion*
- Devonian — *Inferred Granitoid Intrusive*
- *Corridor*
- *Major fault*
- *Alluvial gold*
- ✕ *Hard rock gold*
- *Tenement boundary*

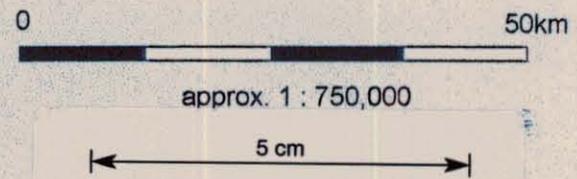


FIGURE 1.

1. INTRODUCTION

A description of the tenements, location, access and the local geology was given in the 1997 Annual Report.

Exploration activity on the Forster Project during the year ended September 1998 consisted of the following :

- compilation and interpretation of the results of all previous exploration, including two drilling programs;
- estimation of in situ resources of gold, nickel and zinc mineralisation at Forster Central;
- research studies, both at the University of Tasmania and in-house;
- development of suitable models of mineralisation in order to provide a better focus for the ongoing exploration, by way of identifying vectors to the various types of mineralisation.

2. GEOLOGICAL RESULTS

2.1. Background

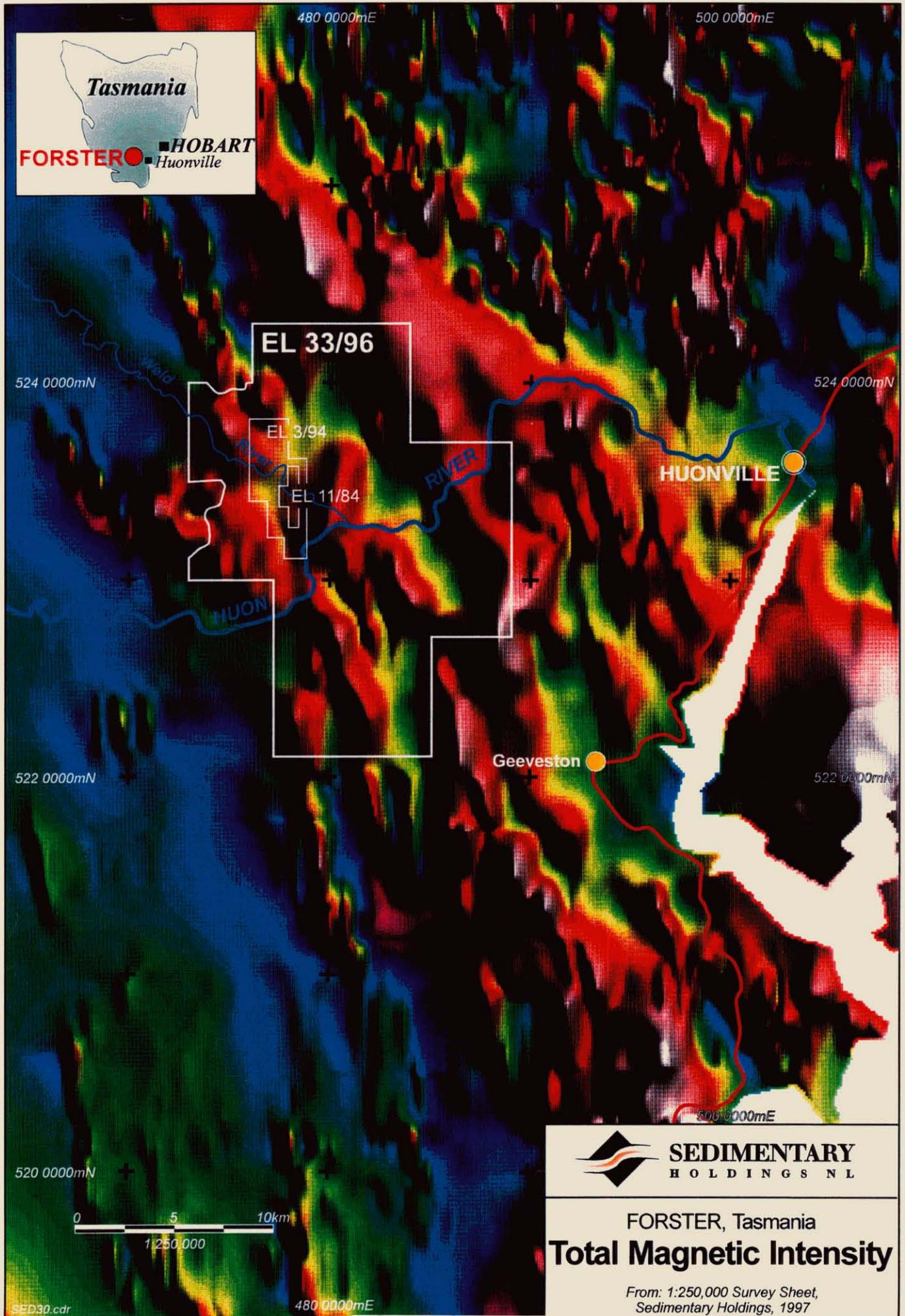
Precambrian age siliciclastic and dolomitic sediments form part of a thrust-faulted package with Cambrian age volcanics and volcanogenic sediments, and are covered by Permian age marine sediments. Intrusives in the region include a Devonian age granitoid, Jurassic age dolerite sills and Cretaceous age acid/intermediate plutons.

2.2. Regional Structure

The structural setting is complex, and involves a prominent NW trending fault structure, informally termed the "*MacQuarie - Huon Fault Zone*", which is cut by a major northerly trending fault zone, locally expressed as the Forster Corridor, as shown in Figure 1.

It is considered that early sinistral movement along the MacQuarie - Huon Fault Zone subsequently reversed to dextral shearing which formed the Forster Corridor between synthetic NS trending dextral shears. Continued right hand movement along these corridor margins would in turn generate NE and NNE fractures within the corridor. *Gold mineralisation at Forster Central is interpreted to occur along both NS and NE/NNE trending faults.*

The shape of the intrusive body under Forster, inferred from airborne magnetic data, suggests a dilational jog structure was developed during the right handed phase of shearing. Such a feature would have facilitated the emplacement of inferred felsic to intermediate intrusives. Details in Figure 2.



5 cm

Figure 2.

2.3. Local Structure

Local structures recognised in road cuts, and in magnetic and gravity data, are aligned NS, NE/NNE and NW. Further details are given in Figure 3.

The BSc Honours studies confirmed the pronounced NS orientation of the Forster Corridor, along with NE, NNW, NW, WNW and WE fracture orientations seen in the project area.

The mobile ion geochemical data [especially Au, Ag, Cu, Ni, Zn & Pb], indicate a strong NE/NNE orientation at Forster South, and accordingly are considered to reflect the same controls on the mineralisation currently outlined at Forster Central.

2.4. Alteration

Several metamorphic events are recognised mainly in the dolomitic rocks, resulting in both prograde and retrograde skarns, the latter being initiated by multi-phase hydrothermal alteration which has affected both basement and cover rocks. Refer table.

Brecciation phenomena are interpreted to have occurred during thermal decarbonation of dolomite and during alternating silica sealing with hydraulic fracturing. Early epithermal fluid activity caused silicification, argillic alteration and quartz/chalcedony/opal veining in both basement and cover rocks. Late epithermal activity involved hot springs with travertine and siliceous sinter deposits.

2.5. Mobile Ion Geochemical Survey

The Forster South mobile ion geochemical data [n=543] has been Factor analysed, showing 11 elements occurring in 5 factors as follows:

Factor 1 : Cu-Co-Ni-Ag-Pb [-Zn-Au]

Factor 2 : Pt-Pd-Bi-As-Zn-Au

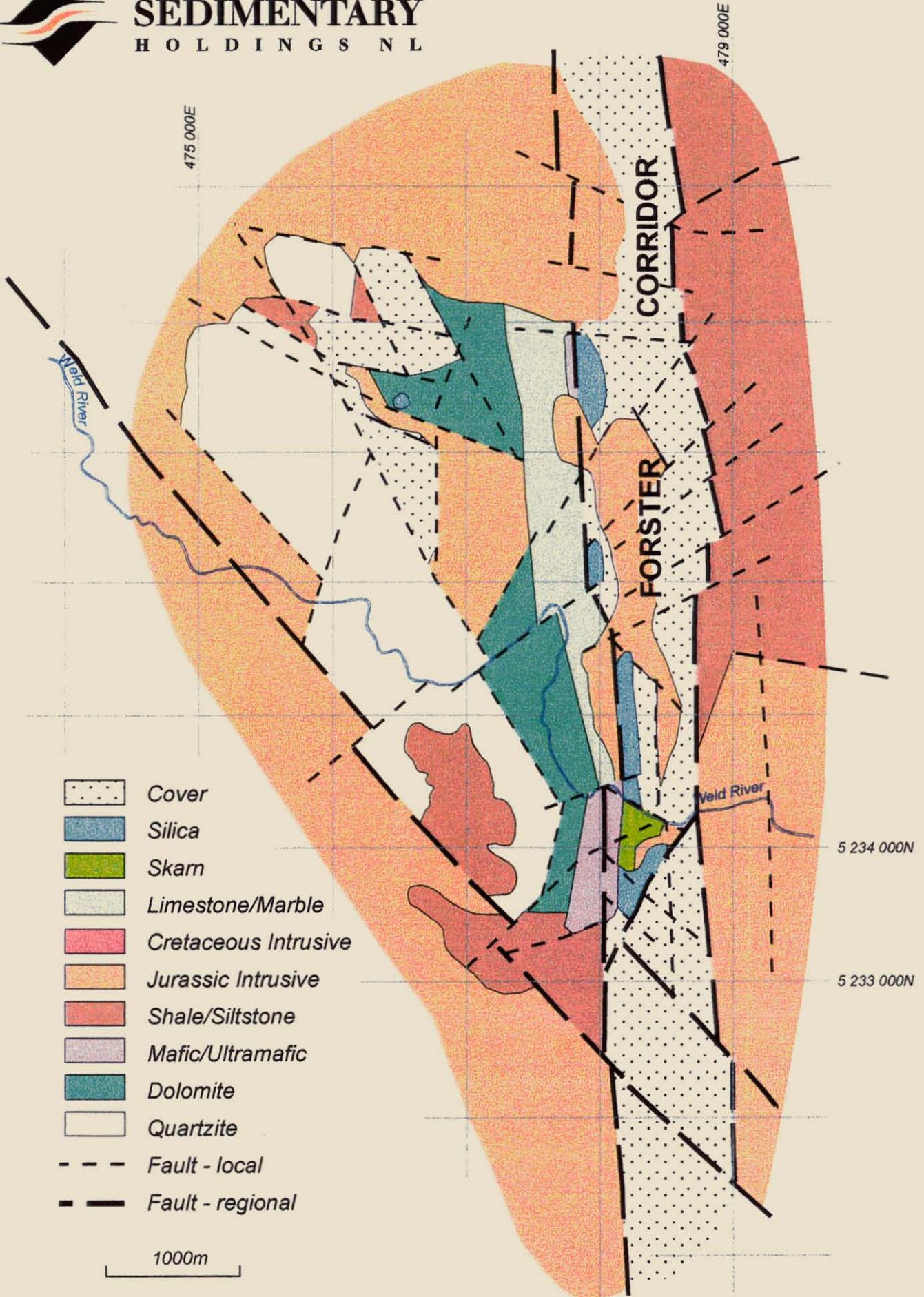
Factor 3 : Au-As

Factor 4 : Pb-Zn-Ag

Factor 5 : Bi [-As]

These are plausible associations, and which can be arranged in a crude time sequence, albeit spanning a possible interval from Devonian to Cretaceous :

The alteration/mineralisation story probably started with a simple Bi [-As] factor reflecting early/hot magmatic fluids, which became hybridised as the Pt-Pd-Bi-As-Zn-Au group reflecting initial high temperature sulphidation of greenstone basement [? destruction of spinels], and the formation of proximal/prograde skarn in dolomite basement.



-  Cover
-  Silica
-  Skarn
-  Limestone/Marble
-  Cretaceous Intrusive
-  Jurassic Intrusive
-  Shale/Siltstone
-  Mafic/Ultramafic
-  Dolomite
-  Quartzite
-  Fault - local
-  Fault - regional

1000m

FORSTER Geological Setting

Figure 3.

5 cm

Unrotated Factors

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Au	.206	.465	.706	-.164	-.287
Pt	-.043	.706	-.232	-.185	-.369
Pd	-.147	.711	-.402	-.174	.066
Cu	.781	.027	-.112	.068	-.118
Pb	.547	.207	.110	.550	.182
Zn	.252	.482	-.340	.414	-.340
Ag	.691	-.064	-.016	.313	.127
As	.082	.533	.715	-.031	.196
Ni	.742	-.051	-.065	-.425	.138
Co	.746	-.055	-.192	-.476	.069
Bi	-.211	.651	-.201	.005	.600

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Retrograde skarn mineralisation appears to be reflected by the Pb-Zn-Ag group, and lithochemical responses from mafic/ultramafic basement form part of the Cu-Co-Ni-Ag-Pb [-Zn-Au] group; the Ag-Pb-Zn-Au component of this factor probably indicates mineralised quartz vein stockworks.

Further cooling of the hybrid fluids and mixing with meteoric fluids resulted in the formation of the epithermal Au-As association.

Although the lack of analyses of elements such as Sb, Te, Hg, Tl etc restricts the degree of interpretation, the sequence outlined above is in surprisingly good agreement with the proposed paragenesis [based on drill sample analyses], envisaged for Forster Central.

Consequently, the mobile ion geochemical sampling has both structural and element association credibility.

2.6. Mineralisation

2.6.1. Paragenesis

Early gold-base metal [Zn Pb Ag Cu As] mineralisation accompanied the formation of the early retrograde *Calcareous Skarn*. Sulphides include pyrite, sphalerite, chalcopyrite, galena and loellingite.

This was followed by a gold-nickel [Ni^{As} Cu Cr] phase of mineralisation accompanying the formation of the late retrograde *Siliceous Skarn*. High calibre nickel sulphides include millerite, polydimite, niccolite, and gersdorffite.

The latest and most significant phase of gold mineralisation occurred during early epithermal argillic alteration and quartz veining as part of the *Silica - Clay* unit. This event affected both basement and cover rocks, including auriferous quartz veins in dolerite.

More complete details are given in the table depicting the interpreted paragenesis.

Drilling to date has encountered broad zones of gold mineralisation, including intersections of 11m grading 3.1 gAu/t. Spatially discrete zones of zinc and nickel mineralisation contain individual grades in drill samples exceeding 1%.

FORSTER POLYMETALLIC COMPLEX - INTERPRETED PARAGENESIS											
Event	Alteration		Fabric		Product		Metal Change - Proximal		Metal Change - Distal		Ligands
	Metamorphism	Hydrothermal	Proximal	Distal	Proximal	Distal	Addition	Loss	Addition	Loss	
Felsic intrusion inducing thermal decarbonation	Prograde			Crackle breccia	Fo-Per-Dp skarn "Diopside Skarn"	Marble					graphite
Magmatic/meteoritic fluid mixing [? boiling]		Mesothermal	Silicified crk bx Jigsaw bx & veined		Silica - quartz	Silicified crk bx Silicified dolomite Jasperoid replacement Massive blue silica	[? Au As]	?	?	?	
	Early		? massive			Serp-Br-Cal-sulphide "Calcareous Skarn"	Zn Pb Ag Fe Cu As Au Cr	Ca		Zn Pb Ag ex dolom Fe Cu ex mafics As Au ex syenite Cr ex UM	Org matter Magnetite S ex SO4
Renewed igneous activity +/- overpressuring of fluids = rupturing of all pre-existing silica			Jigsaw breccia destroyed by Main breccia	Silic. crk bx destroyed by Main Bx							
	Late		Filling of vughs in Main Bx		Qtz-Xon-Sc-Woll "Siliceous Skarn"	Qtz-Xon-sulphide veins	Ca Au Cu Ni Cr	Pb	? Pb	Ca ex Calc Skarn Au Cu - syen/UM Ni Cr [? Au] ex UM	Org matter
Alternate scaling/release of fluids		Early Epithermal	Cockade veining	? veined	Qtz-kaol-hall-smect & preh, laumon "Silica - Clay"	weak silic P sed Illit/smect in P sed	Au Cr	As Zn Ni Pb		Au ? recycled	
		Late Epithermal	Veined	Veined	Chalcedony/Opal	Hot Spring Sinter	Pb				

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2.6.2. Summary

Sulphidation during alteration of the precursor rocks produced base metal mineralisation in two main host rock groups as follows:

Ultramafic host : Nickel mineralisation present as millerite, niccolite & gersdorffite

Skarn ex dolomite host : Zinc mineralisation present as sphalerite, with accessory galena, arsenopyrite & chalcopyrite

Gold mineralisation was associated with the skarn alteration, and again during subsequent hydrothermal alteration affecting all pre-Cretaceous age rocks. The more significant gold mineralisation occurs within silica-clay host materials.

3. IDENTIFIED RESOURCES

In situ resource estimation was based on detailed east-west cross sections compiled from drilling data, with particular emphasis on fault and dyke orientations between sections.

Separate interpretations for gold, nickel and zinc mineralisation were undertaken, following which sectional polygons of mineralisation were wireframed by triangulation in the north-south direction between sections.

The wireframe for each type of mineralisation was filled with blocks measuring 5 x 10 x 5 metres in the W-E, N-S and vertical directions. Volumes were converted to tonneages by use of an assumed SG factor of 2.5. Grades for each block were determined by inverse distance squared interpolation within search ellipsoids elongated N-S and westerly dipping.

Cutoff grades, based on natural breaks in the populations of metal values, are depicted in Tables 1-3, and in Appendix 1, Figures 1-5.

The total Indicated resources estimated are as follows :

Gold - 1,000,156 tonnes @ 0.42 g/t

Nickel - 251,094 tonnes @ 0.11%

Zinc - 221,406 tonnes @ 0.15%

Grade Range (gAu/t)	Tonnes (t)	Grade (gAu/t)
< 0.06	3281	0.04
0.06 - 0.70	857,500	0.28
0.70 - 1.00	65,813	0.81
1.00 - 1.50	36,031	1.15
> 1.50	37,531	2.30
TOTAL	1,000,156	0.42

TABLE 1: Preliminary Block Model Resource figures for Au for the Forster Project, Tasmania.

Grade Range (ppm Ni)	Tonnes (t)	Grade (%Ni)
< 2.00	-	
2.00 - 72.00	-	
72.00 - 700.00	94,531	0.044
700.00 - 1800	125,156	0.119
> 1800	31,406	0.261
TOTAL	251,093	0.11

TABLE 2: Preliminary Block Model Resource figures for Ni for the Forster Project, Tasmania.

Grade Range (ppm Zn)	Tonnes (t)	Grade (%Zn)
< 35.00	-	-
35.00 - 850.00	24,219	0.072
850.00 - 1700.00	136,719	0.115
> 1700.00	60,469	0.27
TOTAL	221,406	0.152

TABLE 3: Preliminary Block Model Resource figures for Zn for the Forster Project, Tasmania.

4. RESEARCH

4.1. University of Tasmania

The company provided both financial and technical assistance to students Karen Dunstan and Colin Dell who undertook BSc Honours studies at the University of Tasmania during 1997.

4.1.1. Geophysics BSc Honours Project - K Dunstan

Karen Dunstan completed a thesis titled "*Geophysics of the Forster Gold Prospect, Weld River Area, Southern Tasmania*".

The following summarises her work.

The research focussed on collecting, correcting and interpreting gravity data from both the Forster Central and South grids, with some additional semi-regional traversing. Dunstan also reviewed and re-interpreted the magnetic data collected by the company during earlier surveys.

The two dimensional interpretation of the gravity and magnetic data allowed the following conclusions to be reached :

- (1) Granite of probable Devonian age is present beneath Forster at a likely depth of 3-4 km, as inferred from the reduction in the gravity gradient to the west and south west of the project area.
- (2) The rock units responsible for the prominent magnetic signature [$< 70,000$ nT above background], are probably close to surface and to have a layered character. Modelling work suggests a small magnetite body at a depth of < 30 metres could explain the local magnetic character on line 10900N.
- (3) Northerly trending magnetic lineaments are due to similarly aligned talc-hematite-magnetite schists present in and along shear zones.
- (4) Several north-south trending gravity highs are due mainly to skarn lithologies, with lesser contribution from dolerite of inferred Jurassic age.
- (5) The north-south trending gravity low is due to the density contrast of the silica alteration which appears controlled by a north-south fault extending to a depth of 400-500 metres.

Dunstan also observed that the main north-south fault reaches a substantial depth and marked a break in the dolerite sheet. However, structural complications resulting from

thrust tectonics, combined with silica alteration expanding around the intersection of faults, made geophysical modelling difficult.

Dunstan recommended further work on remnant magnetisation, electric [IP, EM] surveys, a radiometric survey and deep drilling sufficient to penetrate the estimated 400m thick dolerite. It should be noted that her drilling recommendation assumes all mineralisation in the project is skarn-hosted with no recognition given to the important post-dolerite mineralising events.

4.1.2. Mineralogy and Geochemistry BSc Honours Project - C Dell

Colin Dell completed a thesis titled "*Mineralogy and Trace Element Geochemistry of Skarn, Skarnoid and Silica Alteration at the Forster Gold prospect, Weld River, Southern Tasmania*".

The following summarises his work.

Structure

Faults

Structural mapping in the area recorded four fault directions in the pre-Permian rocks, namely NS, NW, NE and WE. No faults were seen in the Permian sediments, although they are thought to be in fault contact with Jurassic age dolerite. The dolerite was noted as having mainly NE and WNW fault orientations, with slickensides indicating dextral strike-slip movement toward 120°, interpreted as due to post-dolerite strike-slip faulting. Three fracture trends were seen in massive silica in the river, with faults implied along NE and NW directions.

Joints

Joint trends in Permian age sediments were mainly NE and WE, with minor development of NS, NW and NNW trends. Joints in Jurassic age dolerite are mainly NE and WNW.

Skarn Petrology

Pyroxenes

Both orthopyroxenes and calcic clinopyroxenes were noted, the former typically altered to chlorite and prehnite. One sample in FRC 29, logged as skarn, was identified as boninitic basalt.

Serpentine

Serpentine occurs in three different textural forms, as follows :

- (1) Massive - foliated, with disseminated magnetite and chromite; derived from ultramafic precursor;

- (2) Matrix - common, associated with brucite, calcite and talc;
 (3) Vein - typically associated with calcite.

Brucite occurs as an alteration of serpentine, while xonotlite [a hydrated precursor of wollastonite], has replaced calcite. Calcite is present as both matrix where it is corroded and overprinted by serpentine, and as veinlets.

Silica

Three polymorphs of silica occur in the skarns, namely quartz, chalcedony and opal. Some of the quartz occurs in deformed relict laminae within a calcite-serpentine matrix, and is considered to reflect original siliceous beds in dolomite. Chalcedony occurs as 40 um wide alternating bands in veins, the latest phase being quartz in central vughs. Opaline silica has replaced the calcite matrices.

The proposed paragenesis of the skarns formed from dolomite is as follows :

Prograde Skarn - recrystallisation to calcite marble > orthopyroxene > clinopyroxene > garnet [assoc with talc & vesuvianite].

Retrograde Skarn - serpentine veining > xonotlite ... further serpentine > brucite > calcite > talc calcite/talc/serpentine veinlets & minor alteration of pyroxenes to chlorite. Study of mineralogical zonation showed that the highest gold grades occur with serpentine-calcite-quartz assemblages, and to a lesser extent with quartz-pyroxene-calcite.

Silica Petrology

Massive Silica - microcrystalline pale grey to blue grey quartz, with rare vughs and minor pyrite and galena.

Vuggy Silica - hydrothermal breccias with angular fragments of blue-grey to black microcrystalline silica surrounded by grey and white quartz . The latter contains irregularly shaped vughs from 5-45mm filled with both drusy and euhedral comb quartz.

Vein Quartz - present in dolerite within fault offsets derived from slickensided joints; the veins contain quartz [buck and comb] with a crustiform central zone of chalcedony.

Chalcedony/Opaline Silica - cryptocrystalline and massive chalcedony, multi-coloured.

Sulphides

Previous work identified marcasite, pyrite, sphalerite and galena. Dell also found galena, pyrite, tetrahedrite and ? cobaltite in massive silica and silicified sediments.

Pyrite occurs only in the un-veined part of microcrystalline blue/grey silica, as framboidal aggregates 10-15 um in size, and pre-dates the microveins and the galena. Pyrite was also noted in deformed silicified sediments.

Galena was noted in 100 um wide microveins with vuggy dog tooth quartz crystals, and whilst associated with pyrite, was formed at a different stage.

Geochemistry

An attempt was made to study both mineralised and barren drill samples from the perspective of characterising the lithochemical and mineralisation features. Although no significant element correlations were observed, Dell proposed As-Sb-Tl, Pb-Zn-Cu and Ni-Cu-Co associations. These observations need to be treated with caution due to the insufficient number of samples studied.

Fluid inclusion studies of the quartz veins in dolerite showed low temperatures of homogenisation from 117 -148°C, with low salinity, absence of CO₂ and liquid > vapour. This data was considered to indicate low pressure conditions which were remote from the heat source. Previous work by J Taheri of MRT showed the quartz from the vuggy silica at Forster Central to have originated from low salinity, CO₂ bearing fluids between 254-281°C.

Sulphur isotope studies on pyrite gave values in the range -12.9 to +3.0 per mil indicating a mix of both magmatic and sedimentary sulphur.

Lead isotope studies on galena were inconclusive, and clays, identified by Fourier Transform Infra-red Absorption, were seen to consist of disordered kaolinite, kaolinite, halloysite, illite and smectite.

4.2. Miscellaneous Geochemical Data

The geochemical data collected by student Colin Dell was from 3 drill holes, the quartz stockwork veins in dolerite near the entrance gate and the silica in the adit on the north bank of the river. The maxima for the various elements are shown in the table;

FORSTER PROJECT				
Maximum Values for Trace Elements				
Element	Sample Location			
	Adit	River Bank	RC Drill Holes	Entrance Gate
	Massive Silica	Massive Silica	Silica bx & Clay	Qtz Vn S/W
	n = 7	n = 4	n = 47	n = 7
Ag	3.1	0.95	#	0.2
As	18.5	17.5	601	11.5
Au	0.12	0.1	9.39	0.04
Ba	35	20	53	360
Bi	0.1	0.2	3	0.1
Cd	7	0.2	< 1	0.1
Cu	10	8	74	120
Hg	0.55	0.1	na	0.1
Pb	310	340	1003	5
Mo	1.3	1.5	na	0.5
Sb	5.5	6.5	97	0.4
Tl	< 0.1	< 0.1	3.4	< 0.1
W	na	na	8	na
Zn	270	41	1916	69

Ag not routinely analysed; Pegasus drill hole BC 7 returned 19m @ 0.84 gAu/t and 2.6 gAg/t.

NB All values in Table are in ppm

Although the values shown in the table are from a small number of samples, the levels of Ag, Cd, Hg, Sb and Tl are noteworthy. It may be necessary in the ongoing sampling to expand the elemental suite to more reliably define anomalous areas.

4.3. Cygnet Goldfield Review

The Mineral Resources Tasmania report titled "*Porphyry and Sedimentary-hosted Gold Deposits near Cygnet : New Styles of Gold Mineralisation in Tasmania*" contains some interesting material providing further evidence for a Cretaceous age of the youngest gold mineralisation at Forster. In particular, the styles of alteration and mineralisation, whilst indicative of intrusive-proximal conditions, can be readily extrapolated to the unbreached carapace and/or distal setting pertaining around Forster.

At Cygnet, common alteration styles in the Permian age sedimentary country rocks are *potassic* [adularia-quartz-biotite-pyrite-magnetite], *silicic* [quartz-chalcedony-opal] and *argillic* [Zn smectite-limonite-pyrite-kaolinite-sericite-plumbogummite]. The porphyries show propylitic [epidote-quartz-pyrite], silicic and sericitic alteration.

Mineralisation occurs as two types :

4.3.1. Porphyry-hosted Au +/- Cu +/- Mo Mineralisation

- (1) Disseminated in py/qtz/ser/epid altered porphyries typically Pb rich
- (2) Siliceous and pyritic breccias typically Mo rich
- (3) Quartz veins, massive/laminated/vuggy **Au-Cu-Pb-Mo**
- (4) Pyritic veins associated with minor breccias and Zn-clay **Au-Cu-Pb-Zn-As**

4.3.2. Sediment-hosted Au Mineralisation

- (1) Disseminated, replacing calcareous fossils/clasts and matrix **Cu-Pb-Zn-Au**
- (2) Pyritic veins in breccias assoc with qtz/chert/adul/hem/Zn clay **Au-Cu-Pb-Zn-As**
- (3) Quartz veins in adul/py/hem altered hostfelled sediment **Au-Cu-Pb-Zn-As**

Other parts of the Cygnet report indicate the magmatic fluids were 300-500° C and with salinities < 53% NaCl equiv. Mixing of magmatic and meteoric fluids formed the auriferous pyritic veins [with associated Zn-rich clay alteration] and the disseminated mineralisation in the sediments.

4.3.3. Comments

- (1) There is appreciable coincidence of alteration styles and assemblages between Forster and Cygnet, particularly the silicic and argillic styles in the Permian sedimentary rocks; the presence of quartz-chalcedony-opal at Cygnet is very similar to that seen at Forster, except for the sinter materials present at the latter. The zincian smectite contains < 5% Zn at Cygnet, and could prove useful as a geochemical tool elsewhere.
- (2) Whilst the Cygnet geochemical data has not been factor-analysed, the porphyry style Au [-Cu-Mo] mineralisation may correlate with the Bi [-As] group at Forster South.
- (3) It is also interesting to note, based on the reported metal associations, that the *porphyry-hosted gold mineralisation* at Cygnet extends from high temperature quartz veins out to pyritic veins, and that these mineralising fluids continued still further out to form the *sediment-hosted gold mineralisation*. This is corroborated in the report, which states that the sediment-hosted gold mineralisation is "*generally richer in gold and base metals and more widespread and than the porphyry hosted mineralisation*".
- (4) Furthermore, the authors conclude that in regard to sediment-hosted gold mineralisation "*the real extent and potentialhas not been evaluated in other*

favourable Permian sequences...."

- (5). The tillite, siltstone and mudstone sedimentary units around Cygnet are similar to those in the Forster district, and all contain potentially significant ligands in the form of carbonates, pyrite and hydrocarbons.

5. MODELS OF MINERALISATION

Research by the Special Research Centre for Ore Deposits and Exploration Studies division of the University of Tasmania has concluded that the Forster prospect has many similarities with sediment-hosted gold deposits, typically occurring in Nevada.

Specific criteria supporting this observation include the skarn replacement by silica, the dominance of siliceous and argillic alteration, the Au-As association, ultra-fine grain size, and a general stratabound character parallel to the unconformity at the base of the Permian sediments. The study also found that the silica replacement of skarn, as seen at Forster, is also seen in numerous sediment-hosted gold deposits in the western USA.

The styles of mineralisation at Forster are analogous with numerous world-class deposits including *Bau, Pinson, Gold Acres, Alsar, Mesel, Marlboro Canyon, Jerritt Canyon, Buffalo Valley and Ruby Hill/Archimedes*.

One of the more compelling analogues with Forster is the *Archimedes* deposit in the Battle Mountain - Eureka trend in Nevada. The Ruby Hill deposits in this trend produced 1.65M oz of gold and 39M oz of silver from 1.8M tonnes of ore. The oxide resources at the newly discovered Archimedes deposit total around 1M oz of gold.

A detailed comparison of Forster and Archimedes is presented as both a point summary and in a series of figures in Appendix 2.

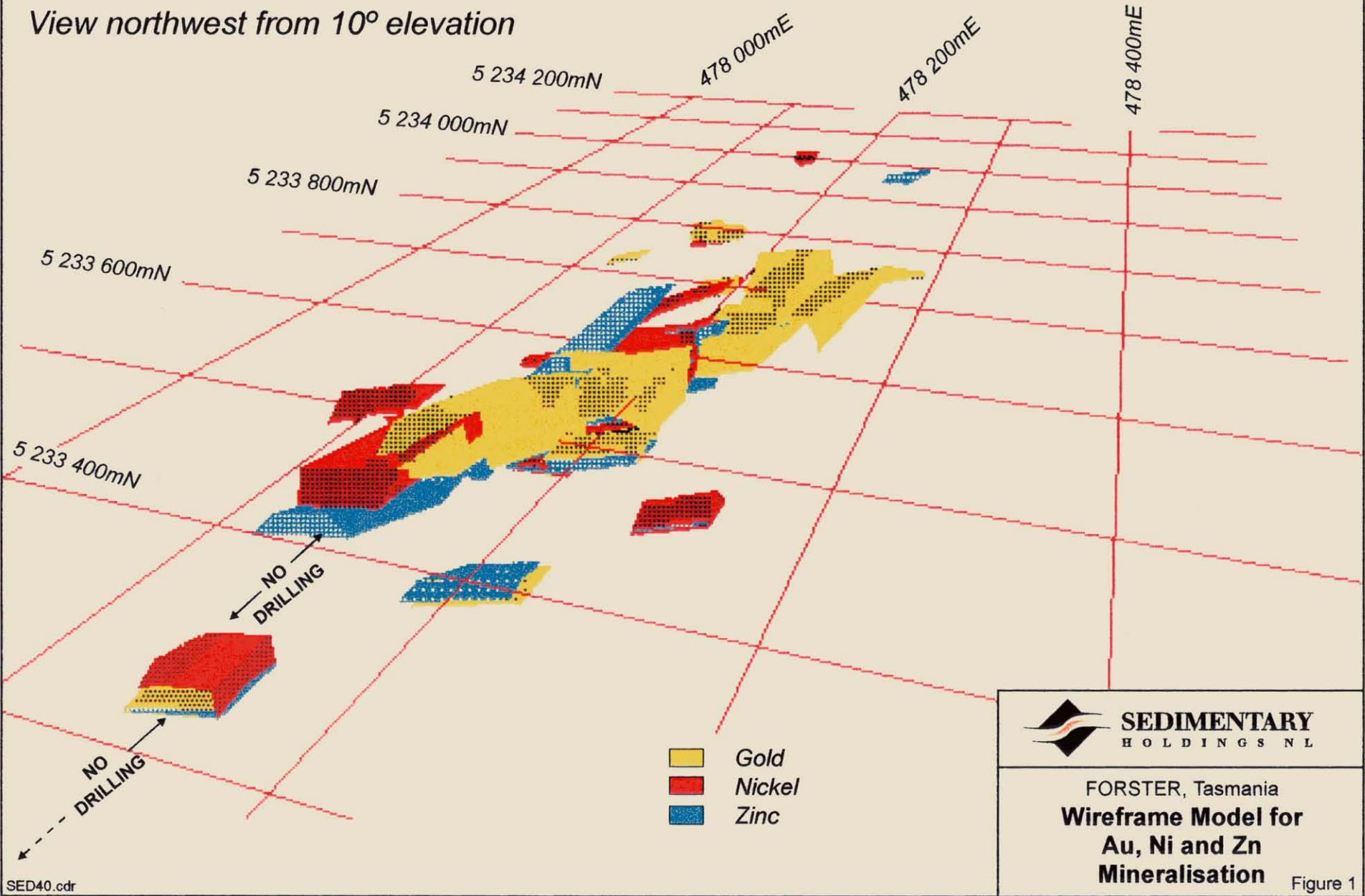
6. EXPENDITURE

Expenditure on the Forster Project for the annual period from Sep 30th 1997 to Sep 30th 1998 was as follows :

Geology	\$43,680
Geochemistry	\$4,458
Geophysics	\$627
Travel/Accom/Administration	\$24,063
Research	\$5,189
<u>Total</u>	<u>\$78,017</u>

APPENDIX 1

View northwest from 10° elevation

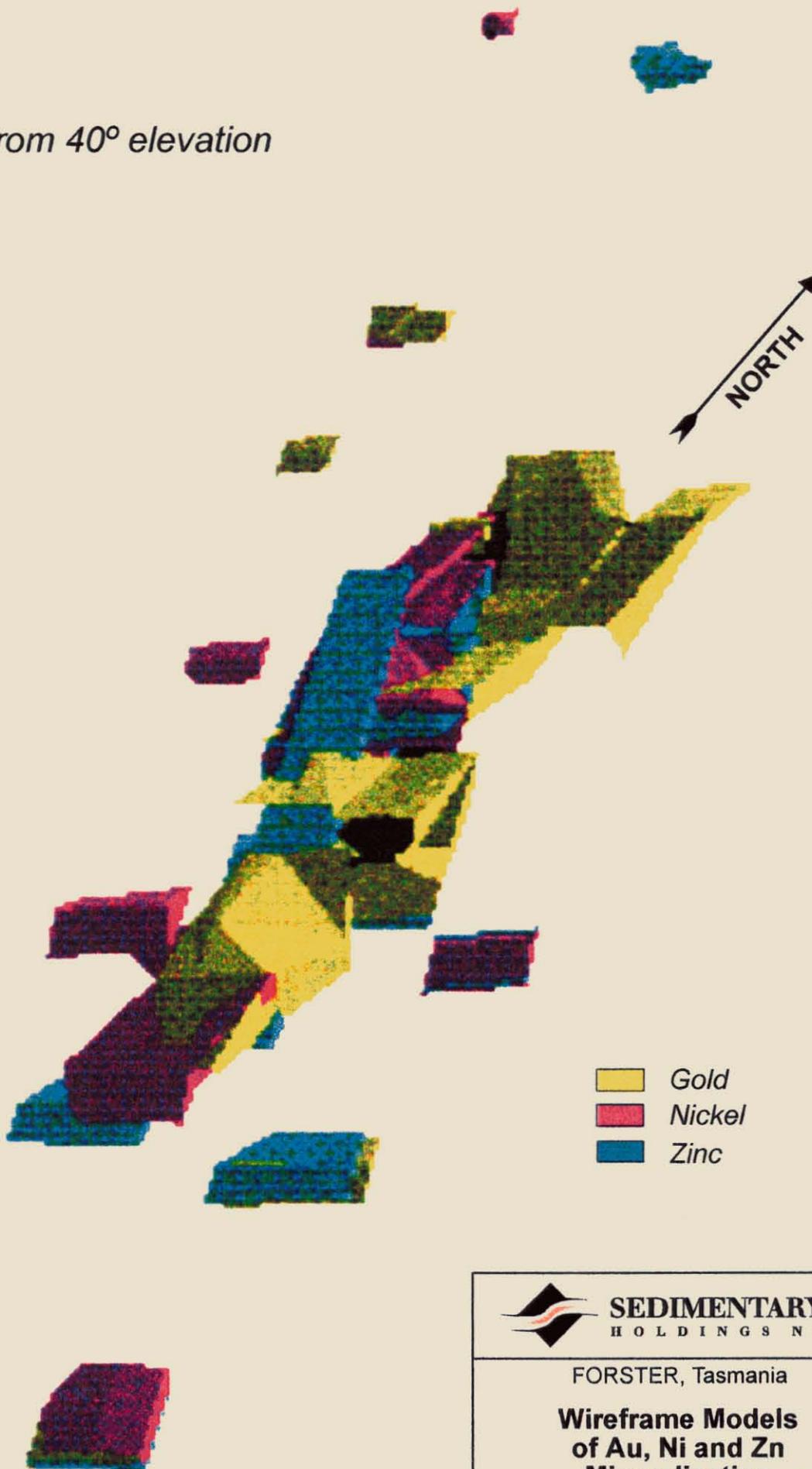


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Figure 1

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View from 40° elevation



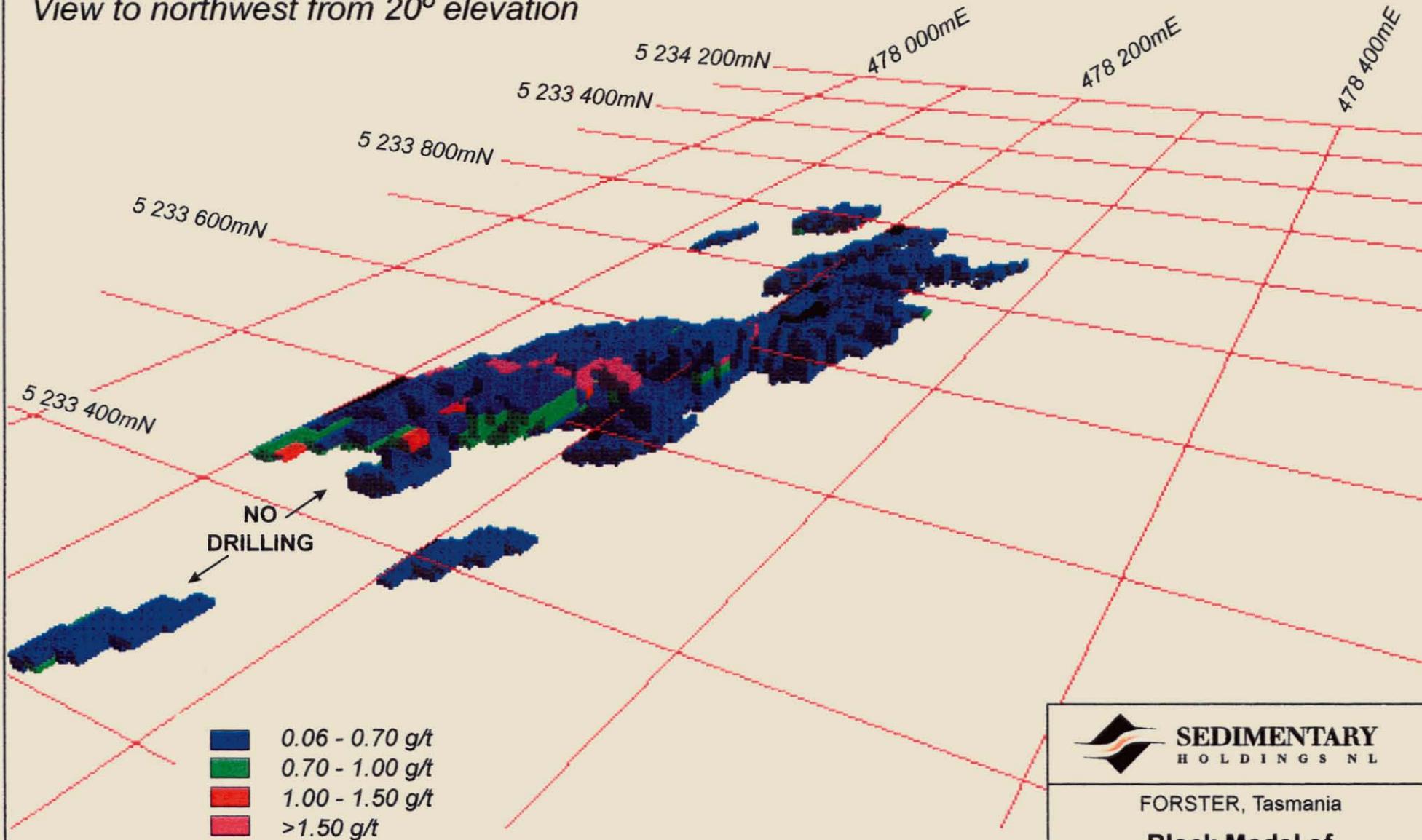
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FORSTER, Tasmania

**Wireframe Models
of Au, Ni and Zn
Mineralisation**

Figure 2

View to northwest from 20° elevation



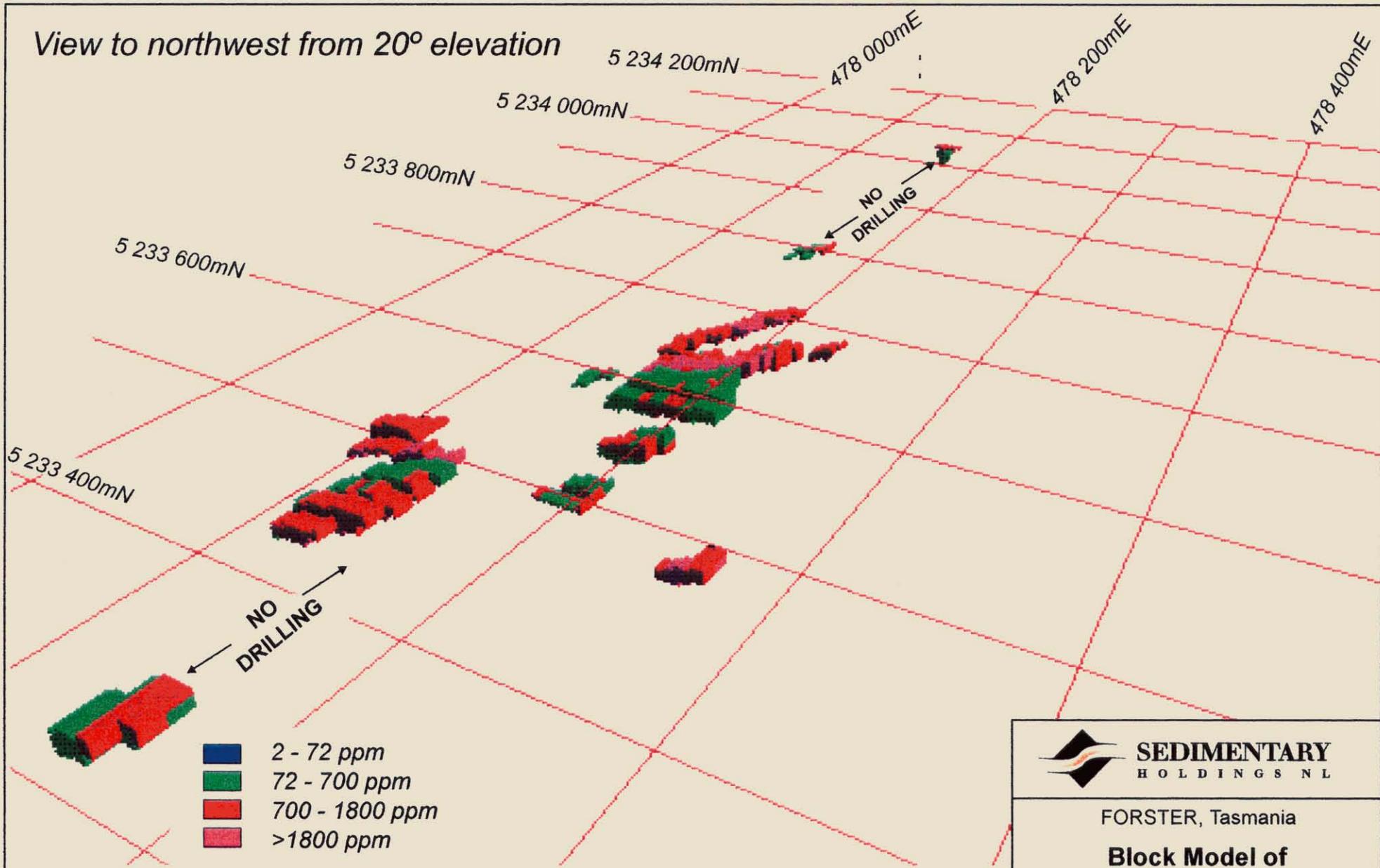
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	SEDIMENTARY HOLDINGS NL
	FORSTER, Tasmania Block Model of Gold Mineralisation

Figure 3

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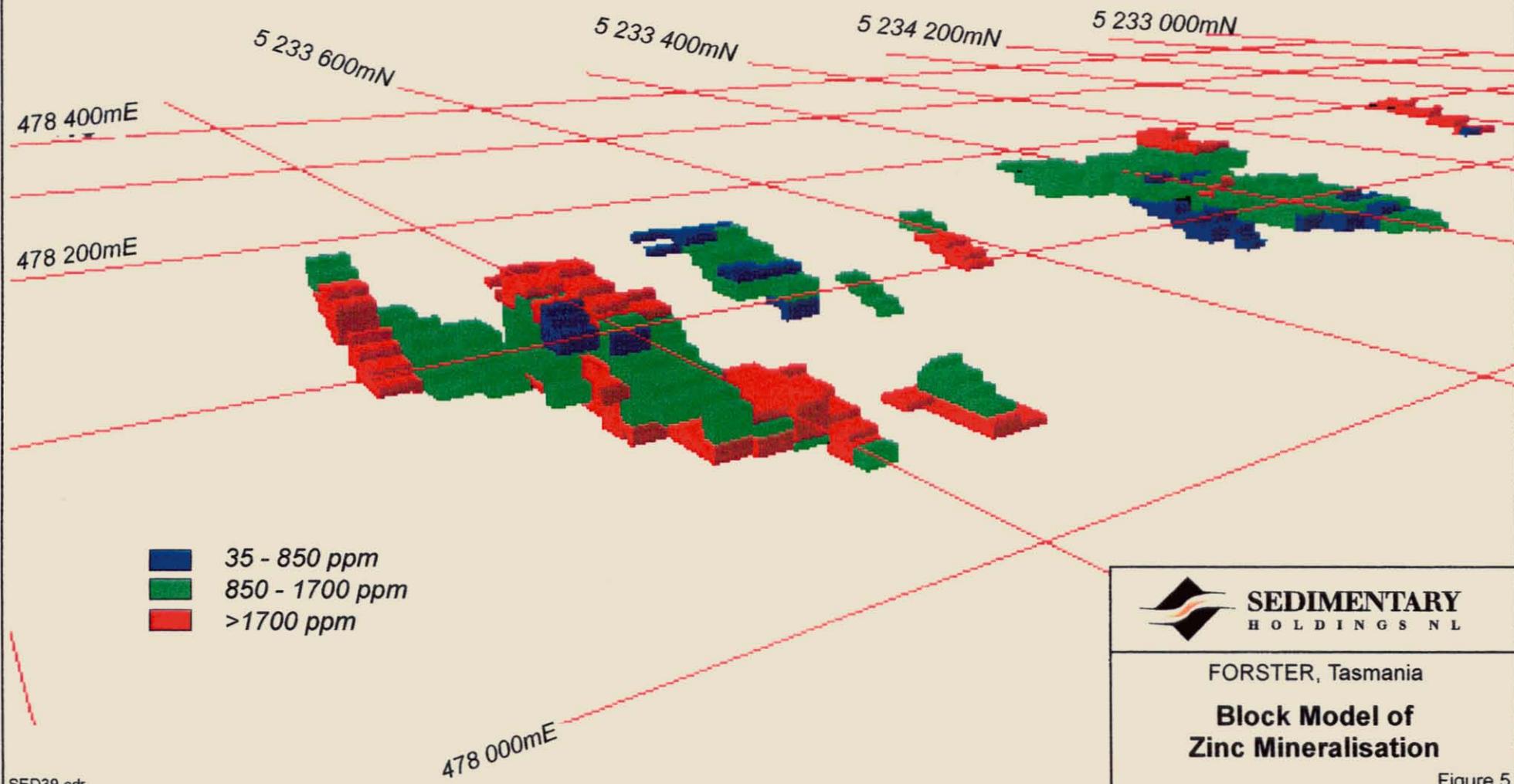
View to northwest from 20° elevation



FORSTER, Tasmania

**Block Model of
Nickel Mineralisation**

View to southeast from 15° elevation



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FORSTER, Tasmania

**Block Model of
Zinc Mineralisation**

Figure 5

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APPENDIX 2

ARCHIMEDES and FORSTER**COMPARISON**

of

GOLD & BASE METAL MINERALISATION**STRUCTURE****Regional**

- Ruby Hill Corridor 1km wide & north trending
- Forster Corridor 1km wide & north trending

Local

- Archimedes on WNW & NE local faults formed by movement on N-S regional faults
- Forster on NS & NE local faults formed by movement on N-S regional faults

HOST**Lithologies**

- Archimedes package is dolomite/siltstone-shale/limestone
- Forster package is dolomite/ siltstone-shale/marble/ultramafic

Age

- Archimedes package is Cambrian-Ordovician
- Forster package is late Precambrian-Cambrian

INTRUSIVES**Type**

- Archimedes district has granodiorite, diorite, andesite porphyry and rhyolite
- Forster district has granite, monzonite, syenite, diorite and dacite

Age

- Cretaceous age around Archimedes
- Cretaceous age around Forster

ALTERATION

Early

- East Archimedes has skarn formed in carbonate precursors
- Forster has skarn formed in carbonate precursors

Late

- Archimedes alteration controlled by local faults, core of silica & rim/adjacent clay. Geochemical character has elevated As - Sb - Hg
- Forster alteration controlled by local faults, core of silica & internal/adjacent clay. Geochemical character has elevated As - Hg

MINERALISATION

Early

- Archimedes East has Pb Zn sulphides as replacements in limestone & accompanying skarn
- Forster has Zn Pb Ni sulphides accompanying skarn formation

Late

- East Archimedes has deep/unoxidised gold in pyrite/arsenopyrite in silica, and in the oxide zone both West and East deposits have gold in silica/clay/iron oxide
- Forster has gold in silica and clay hosts, formed by replacement of dolomite, marble and shale/siltstone.

GOLD RESOURCES

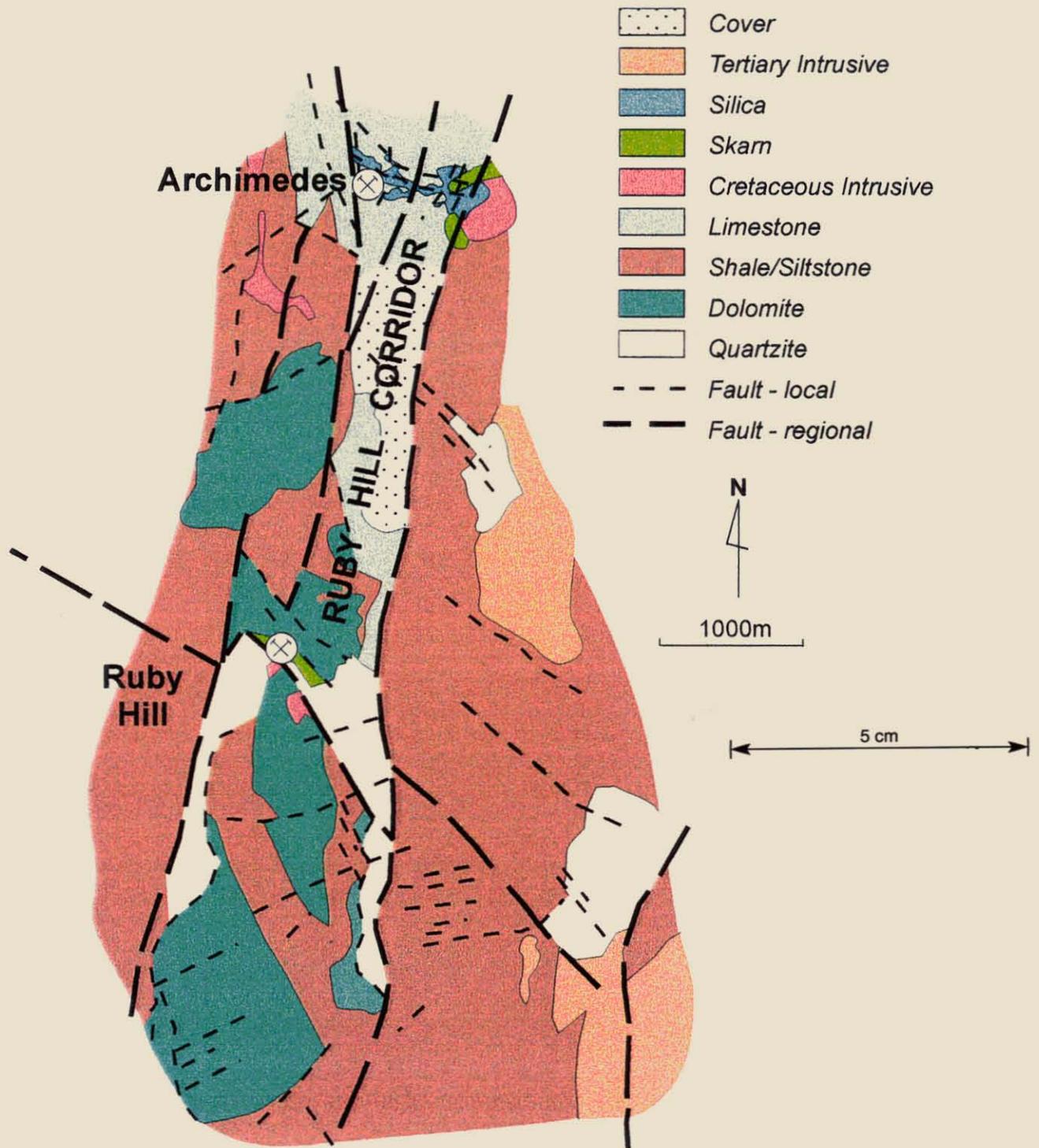
- West Archimedes 1996 oxide reserve * is 6.91M tonnes @ 3.4 gAu/t [755,000 ozs], East Archimedes 1995 oxide resource ** is 3.45M tonnes @ 2.5 gAu/t [273,000 ozs]
- Forster 1997 Indicated oxide resource is 1.0M tonnes @ 0.50gAu/t [16,000 ozs]

[* Homestake Mining Coy 1997 Third Quarter Report]

[** Dillies PA, et al; Geol & Ore Deps of the American Cordillera; Geol Soc Nev Symp Proc April 1995]

EXPLORATION INTENSITY

- Based on a typical section [figures 2a & 2b], the extent of drill testing at Forster is less than 5% of that at Archimedes. This ratio, combined with the limited testing along strike of the Forster Corridor, indicates the considerable potential of the Forster district.

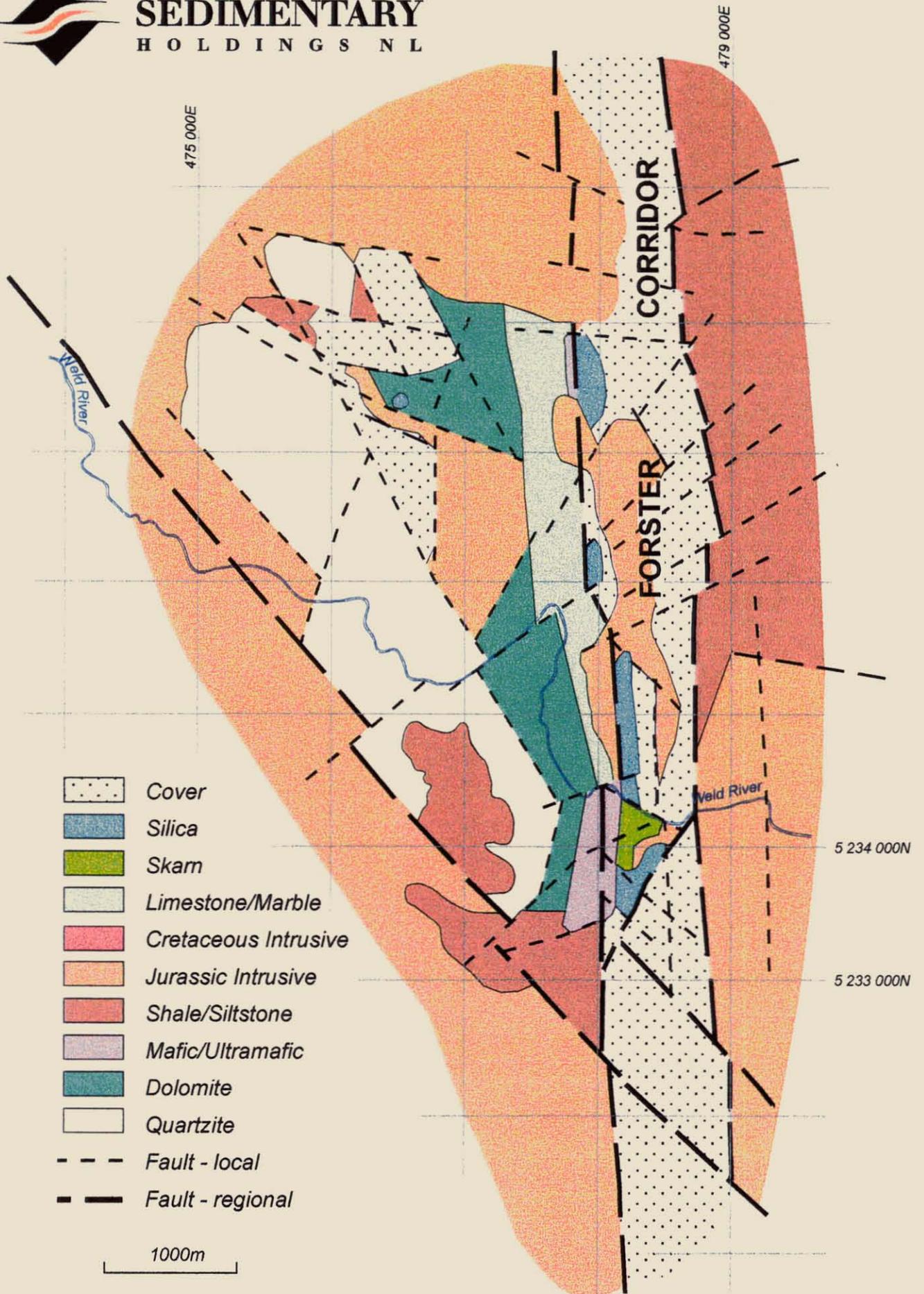


RUBY HILL & ARCHIMEDES
Geological Setting

Figure 1a

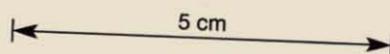


SEDIMENTARY
HOLDINGS NL

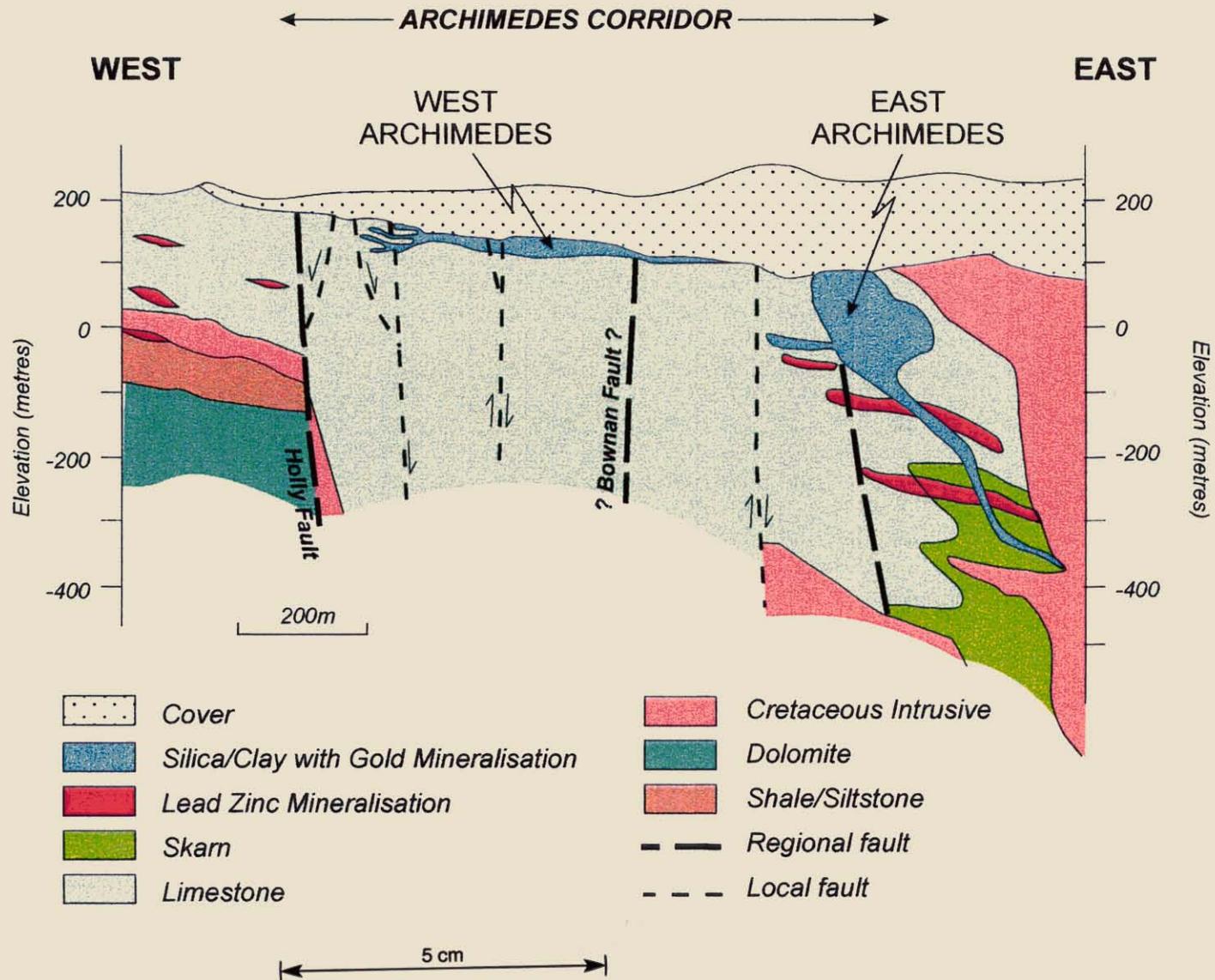


FORSTER Geological Setting

Figure 1b



ARCHIMEDES Regional Cross Section looking North



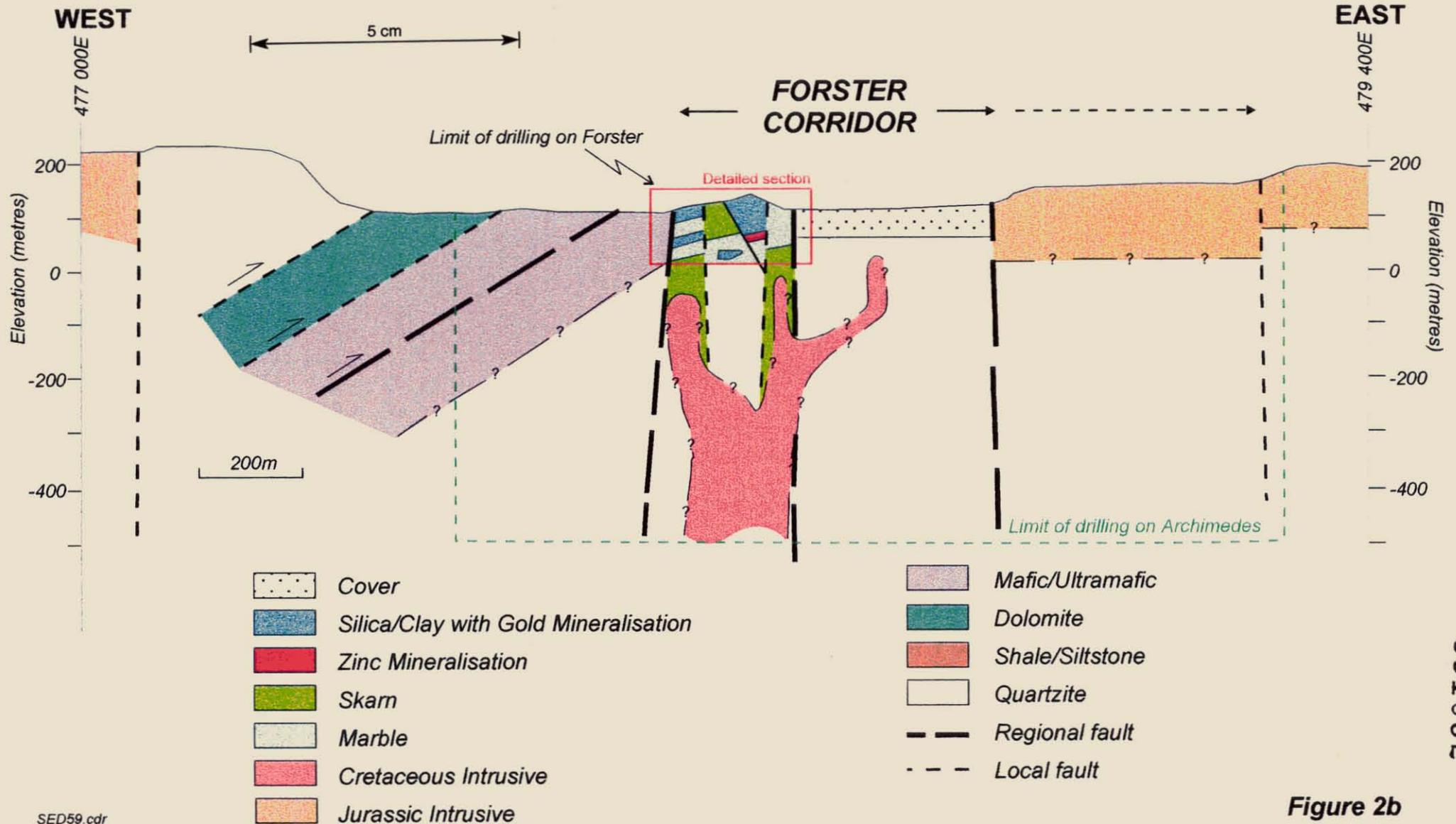
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Figure 2a



SEDIMENTARY
H O L D I N G S N L

FORSTER Regional Cross Section 5 233 700N looking North



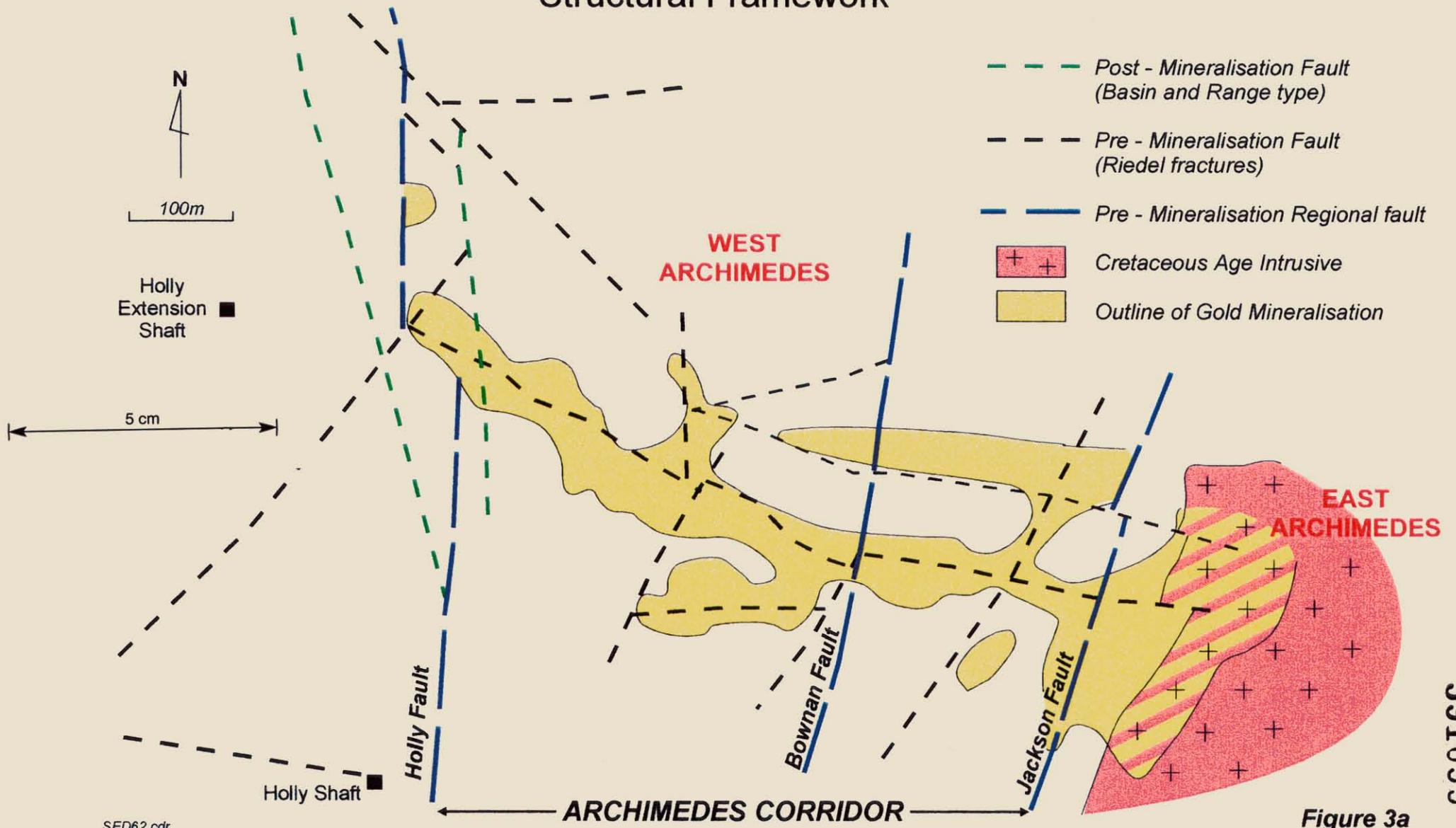
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Figure 2b

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ARCHIMEDES GOLD DEPOSIT

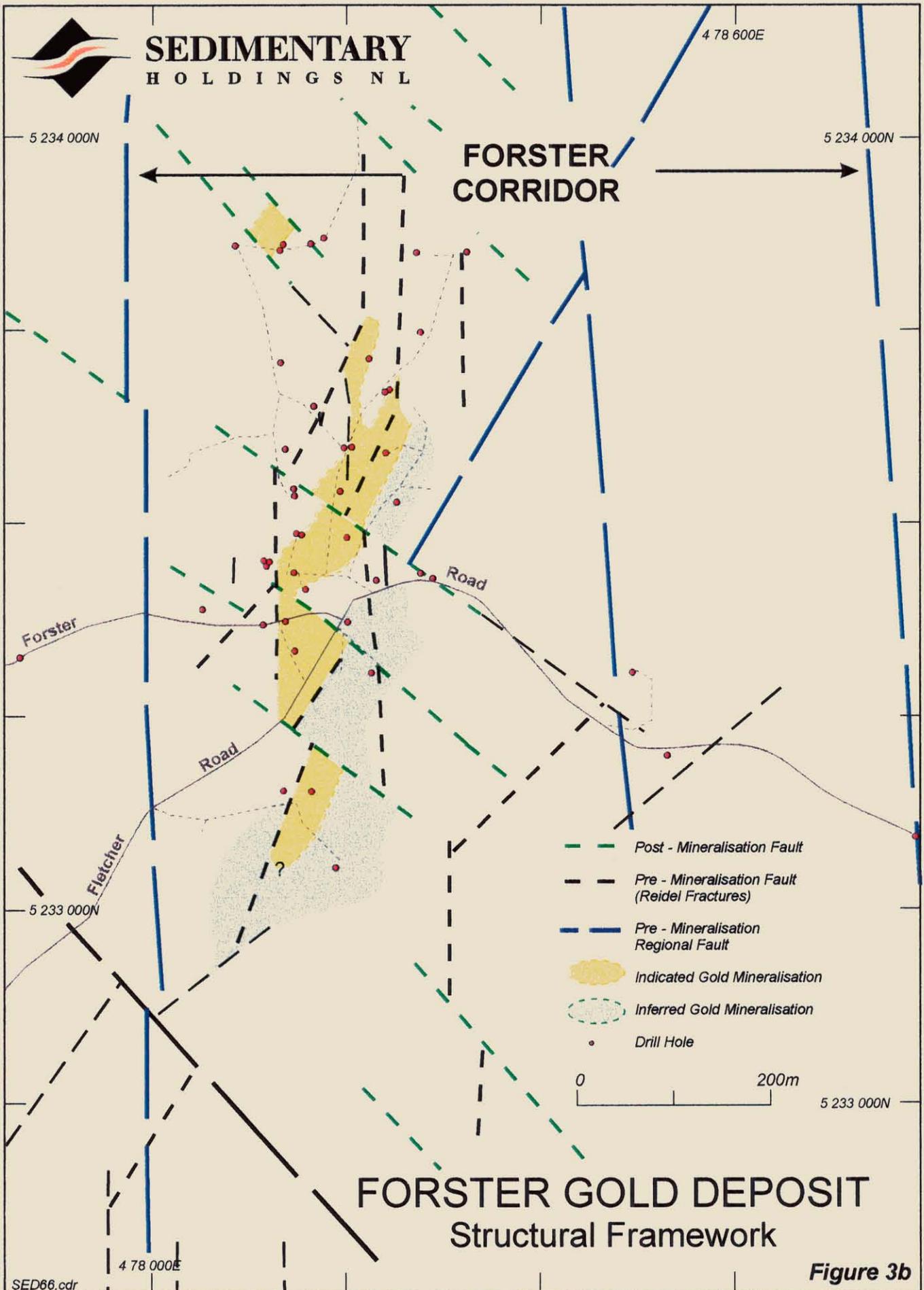
Structural Framework



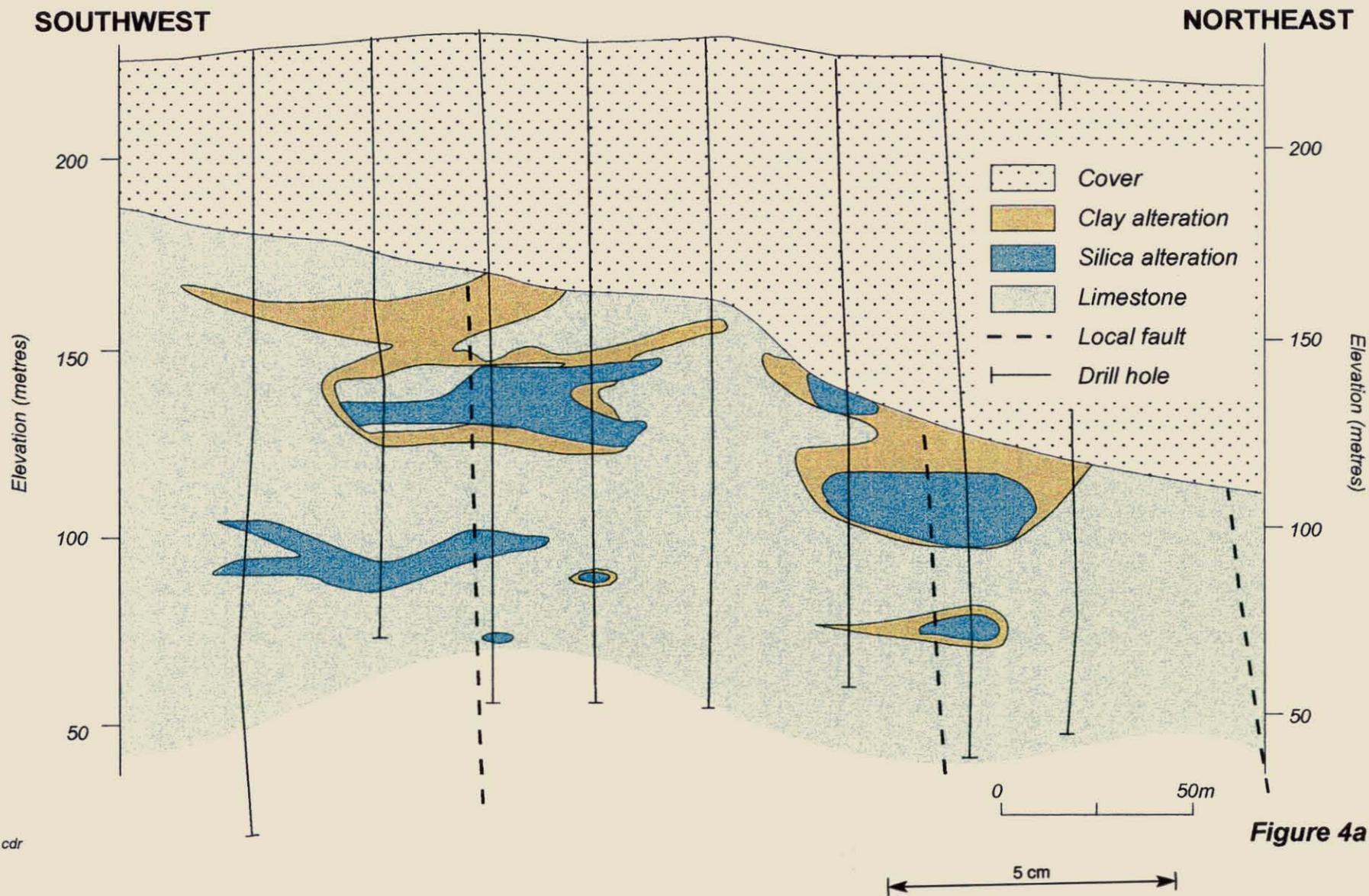
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Figure 3a

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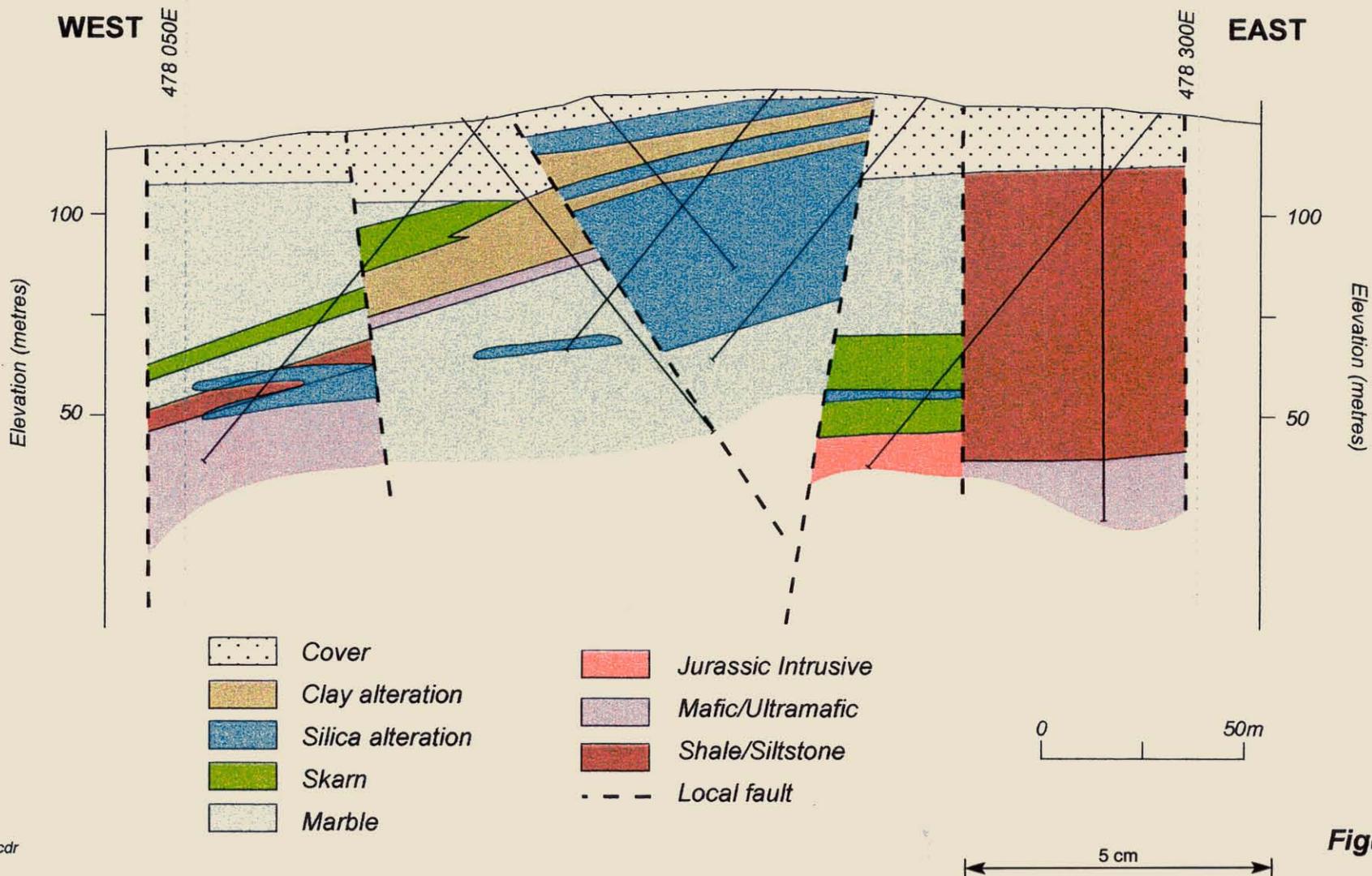
WEST ARCHIMEDES Detailed Cross Section looking Northwest



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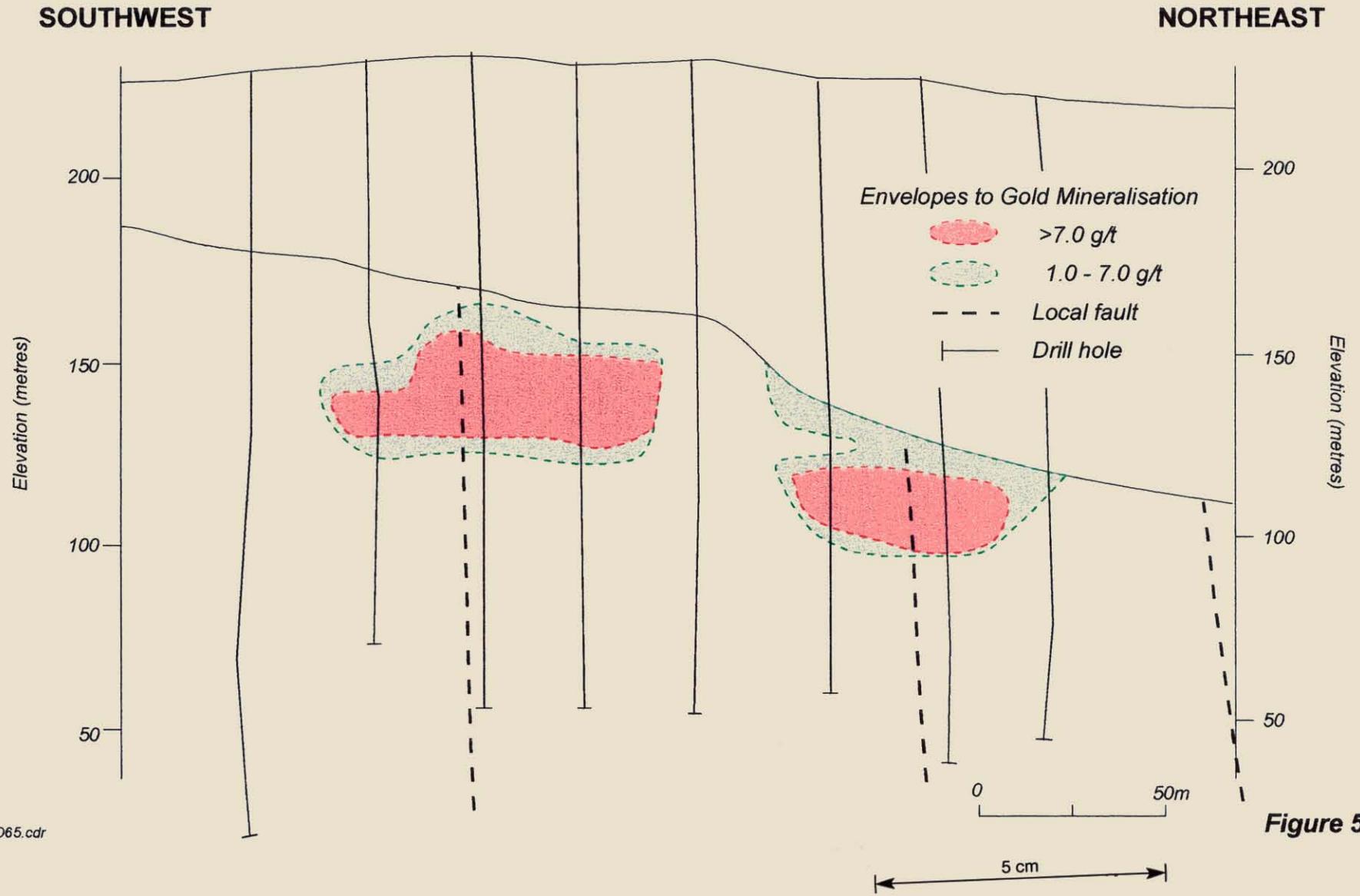
FORSTER Detailed Cross Section 5 233 540N looking North



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Figure 4b

WEST ARCHIMEDES Gold Mineralisation

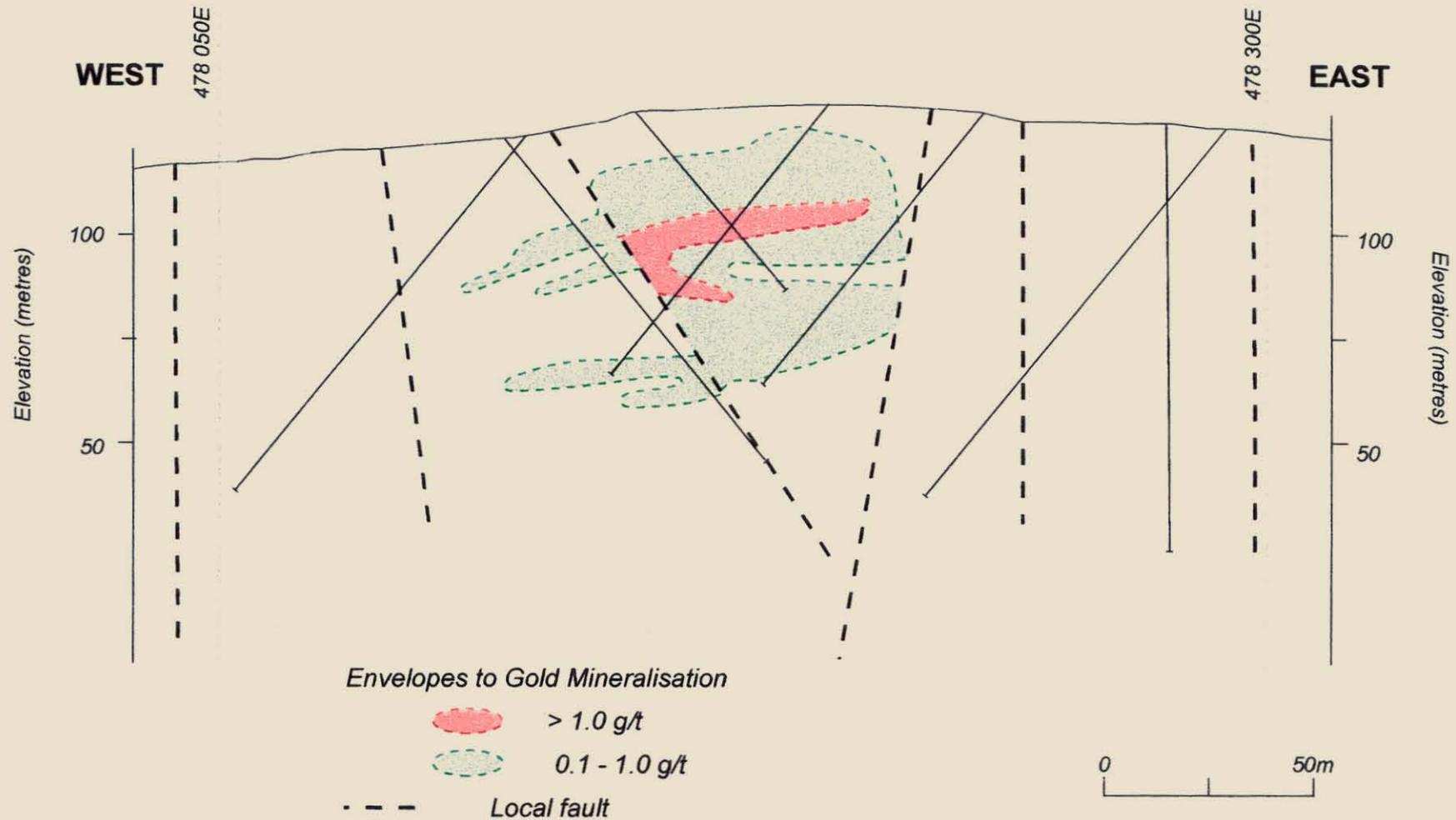


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Figure 5a



FORSTER Gold Mineralisation



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5 cm

Figure 5b