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96-3862

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RESOLUTE SAMANTHA LIMITED

ANNUAL REPORT
1995

VOLUME 1/3

EL 22/92
"TOWER HILL"

96-3862

ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 1 OF 3

Grant MacDonald
March 1996
GM611:jh

AMG REFERENCE POINTS ADDED

710002

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1 Brecciated arsenopyritic quartz, New Golden Gate mullock, 20.0 g/t Au

2 Laminated arsenopyritic quartz, Volunteer Consolidated mullock, 64.3 g/t Au

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A Review of Previous Work. Alberton - Mangana Zone.
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B Geological Sections and Structural Data

C Interpretations of Aeromagnetic Data
- J Ashley

D Rock Sample Locations, Descriptions and Assay Results

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G Channel Sample Record Sheets and Assay Results

H Percussion Drill Logs (MT 17, MT 22, MT 23 and 23b and MT 25)

I Percussion Drilling Sample Record Sheets and Assay Results

1.0 SUMMARY

Resolute Samantha Limited explored EL 22/92 "Tower Hill" in the 1994/95 year as part of its programme over a total of six licences in the Mathinna-Mangana area.

Exploration in EL 22/92 consisted initially of historical research followed by gridded (100 m x 50 m) soil sampling over prospective zones in the Mathinna and Mangana areas. Geological mapping led to channel sampling in the Jubilee and Miami West adits. Encouraging soil and channel sample results in the area of the Jubilee workings led to a small drilling programme with encouraging (up to 6 m @ 1.91 g/t Au) but sub-economic results.

Geological mapping has revealed an earlier phase of mineralisation (syn-folding), which has potential for stacked 'saddle-reef' style veining. A later phase may have formed under dextral wrench faulting.

Much of the licence received little attention. The co-existence of old workings and favourable structures interpreted from aeromagnetic data highlights the potential of these areas as well as the Telegraph-Jubilee West soil geochemical/ structure anomaly and Buckland - Alpine old workings.

2.0 INTRODUCTION

2.1 Location

EL 22/92 "Tower Hill" lies between the townships of Mathinna and Mangana, old gold mining towns, in Tasmania's north-east (see Figure 1).

EL 22/92 "Tower Hill" lies ≈ 65 kilometres due east of Launceston.

2.2 Tenure

EL 22/92, previously held by Newcrest Mining (WA) Ltd, was transferred to Resolute Resources Limited (now Resolute Samantha Limited) on 10 October 1994.

EL 22/92 covers an area of ≈ 249 km^2. The licence is due for renewal on 9 October 1996. On 9 October 1997, half of the area must be relinquished.

2.3 Land Status/Usage

Land usage essentially follows topography with the river flats being private land under pasture and the hills, state forest. The only reserve is a very small part of Rosedale Flat in the northern part of the licence. There are no RAPs or other conservation areas within the licence.

2.4 Topography/Vegetation

EL 22/92 essentially covers hilly country with the exceptions being the flood plains of the South East River and the smaller Dans, Evercreech and Tower Rivulets. The hills rise up to a plateau like surface largely defined by the erosional unconformity with the Pemo - Triassic sediments. The exception to this is Tower Hill itself which rises a further 500 m above this level.

As stated, the flats are under pasture. The hills are moderately steep in places (to ≈ 25°) and are almost invariably covered by either very open "iron bark" eucalypt forest with effectively no understorey or radiata pine plantation. The only exception to this is in gullies and south facing slopes where vegetation is dominated by wattles and other understorey species.

2.5 Access

Access both to and within EL 22/92 can be described as excellent. A sealed road provides access from Launceston to the EL whilst within the EL a number of rather strategically located gravel forestry roads, generally along ridge lines, provide 4WD vehicular access to almost all prospective areas.

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AMG REFERENCE POINTS ADDED

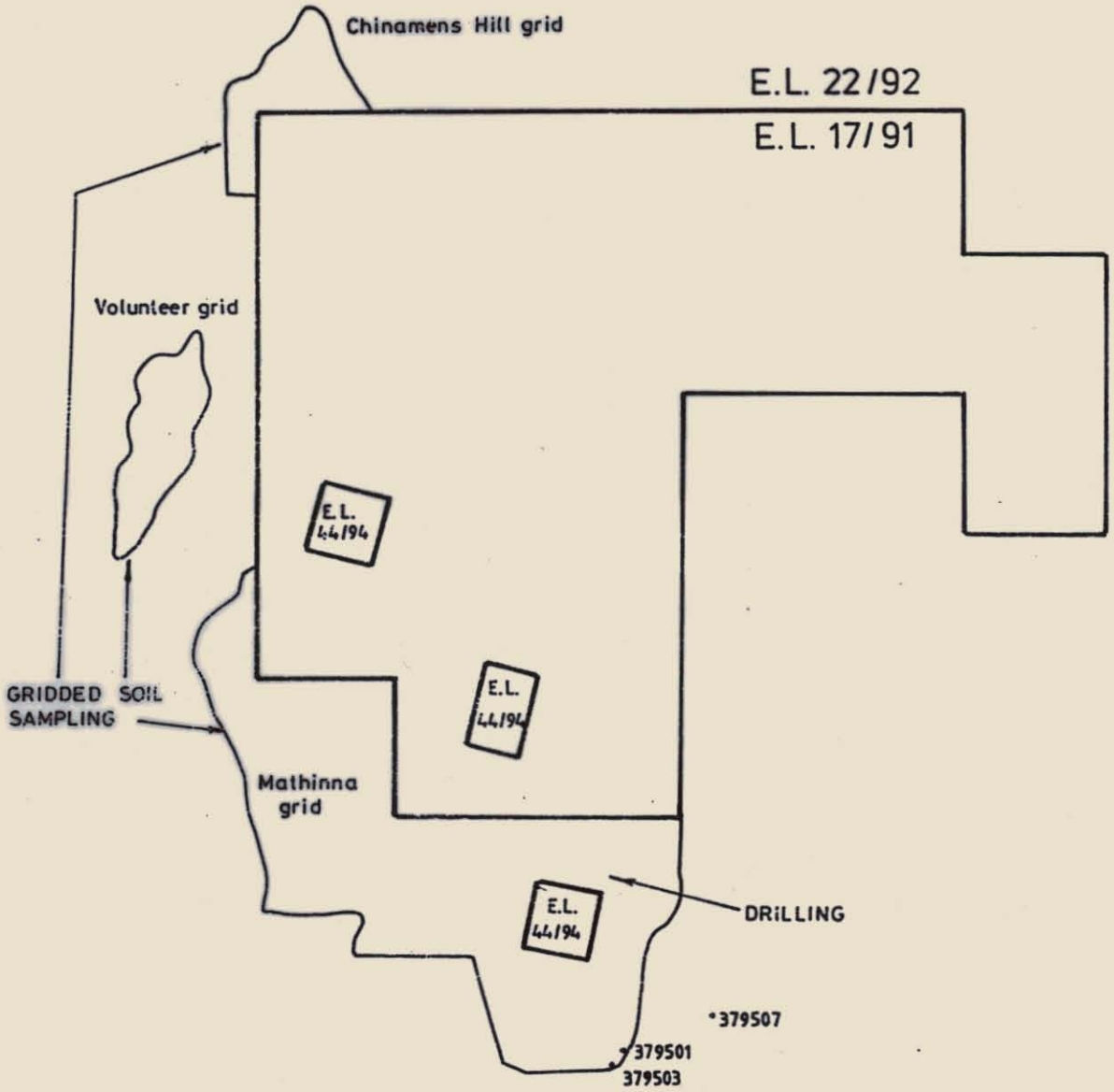


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EL 22/92 "TOWER HILL"

LOCATION

Scale : 1:250000	
Date :	FIGURE 1



KEY

• 379501 Stream BLEG sample location / number

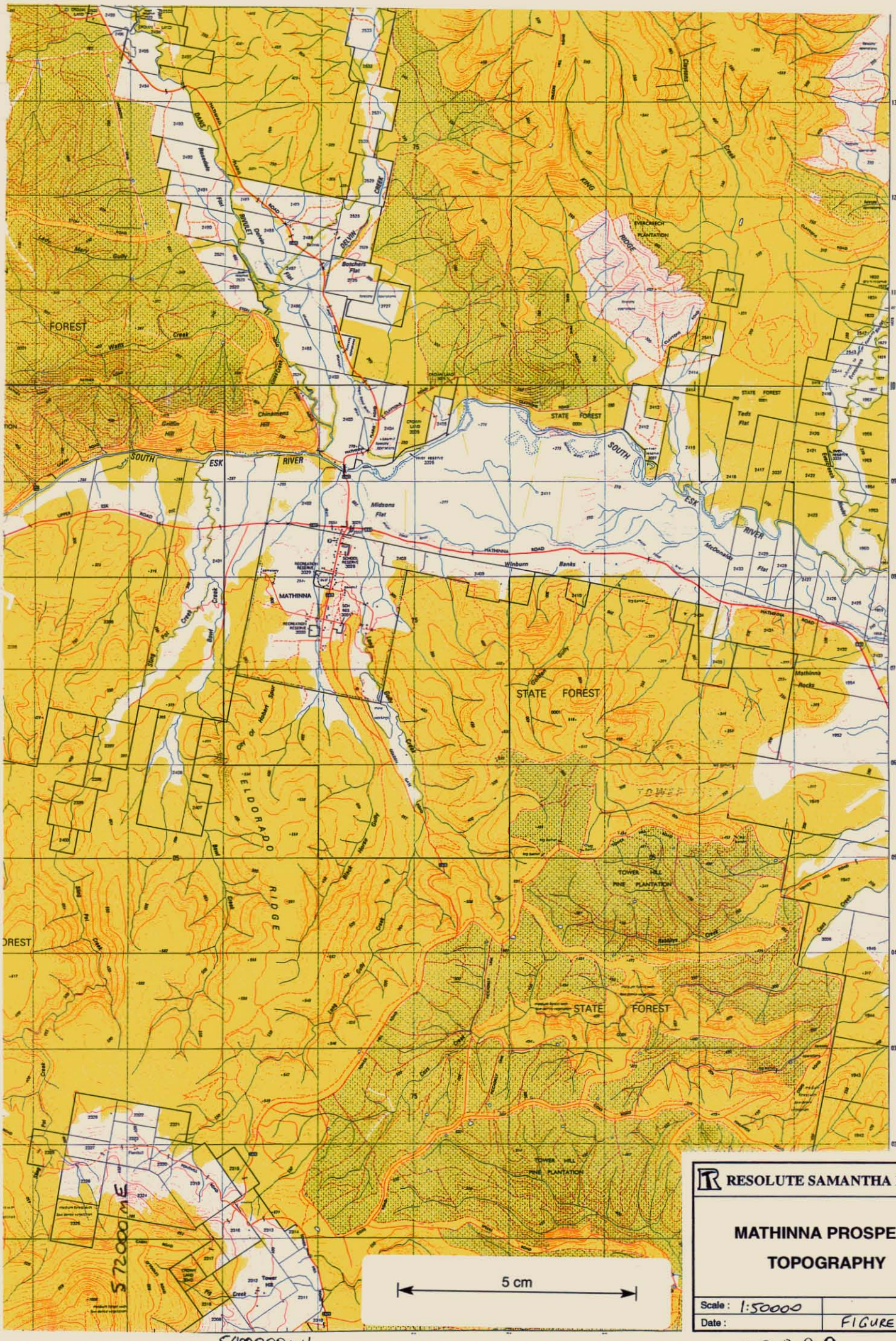
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E.L. 22/92

MATHINNA AREA SUMMARY OF WORK COMPLETED

Author G. Mac D.	Scale 1: 25000	Fig. no.
Drawn O.H.	Date Feb 1996	

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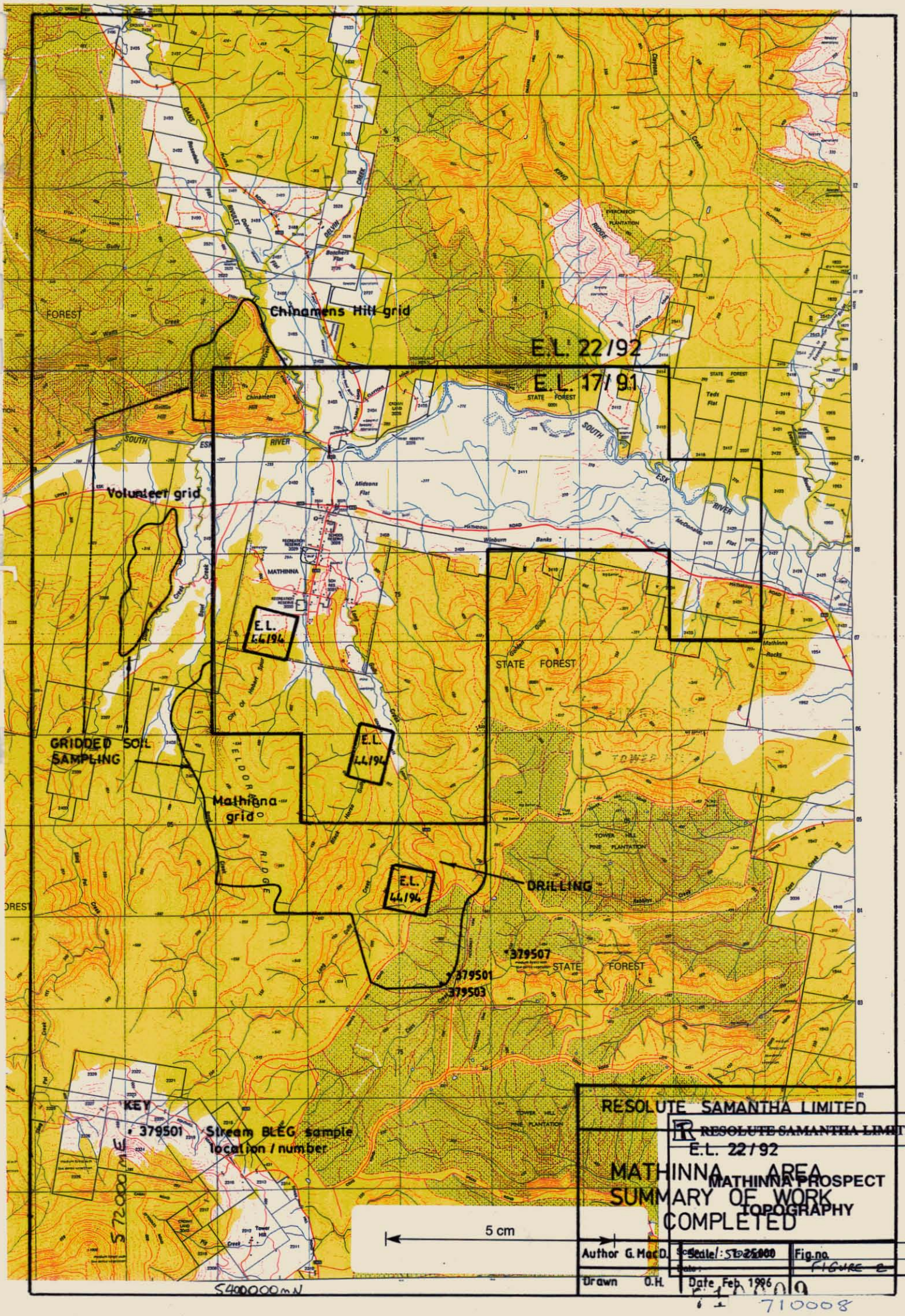
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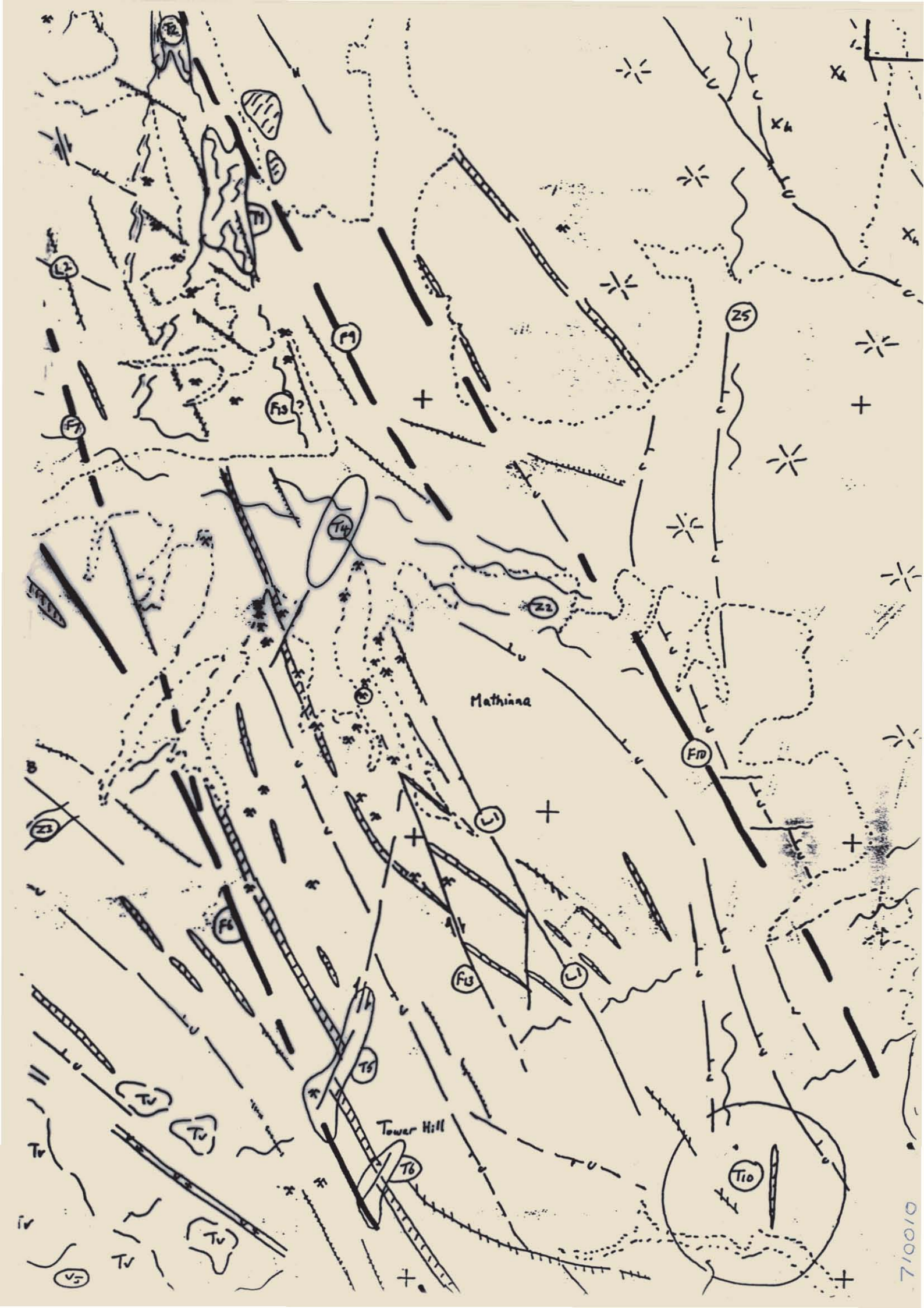
MATHINNA PROSPECT

TOPOGRAPHY

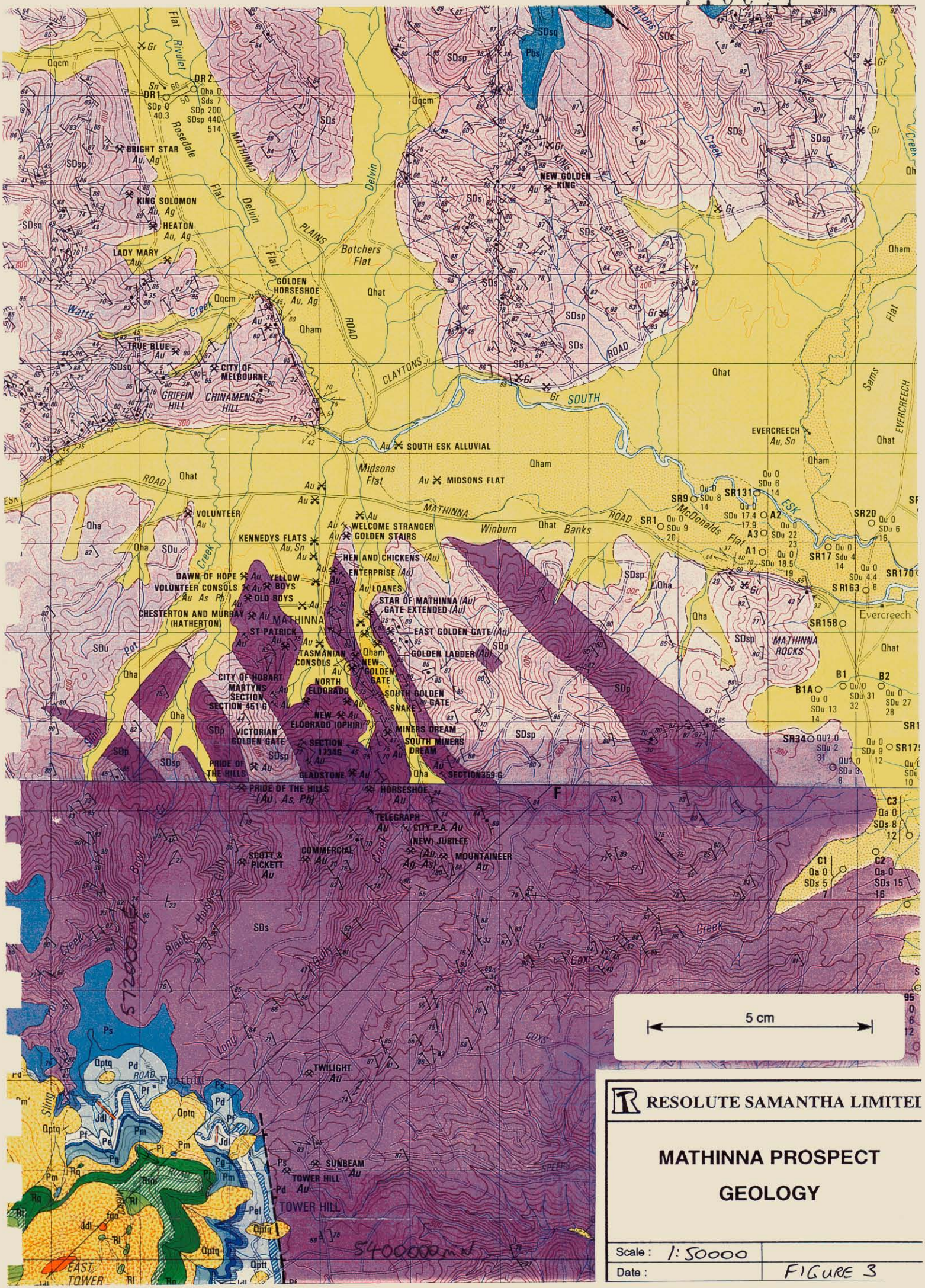
Scale : 1:50000	
Date :	FIGURE 2

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Chinamens Hill grid
E.L. 22/92
E.L. 17/91
Volunteer grid
MATHINNA
E.L. 44194
E.L. 44194
E.L. 44194
GRIDDED SOIL SAMPLING
Mathinna grid
DRILLING
379507
379501
379503
KEY
379501 Stream BLEG sample location / number
5 cm
5720000mN
5400000mN
RESOLUTE SAMANTHA LIMITED
RESOLUTE SAMANTHA LIMITE
E.L. 22/92
MATHINNA AREA
MATHINNA PROSPECT
SUMMARY OF WORK
TOPOGRAPHY
COMPLETED
Author G. MacD.
Scale: 1:25000
Fig.no. FIGURE 2
Drawn O.H.
Date Feb 1996
710008


Mathiana
Tower Hill
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
L1
L2
L3
Z1
Z2
Z3
Z4
Z5
T4
T5
T6
T10
Tv
Vs
Xk

710011

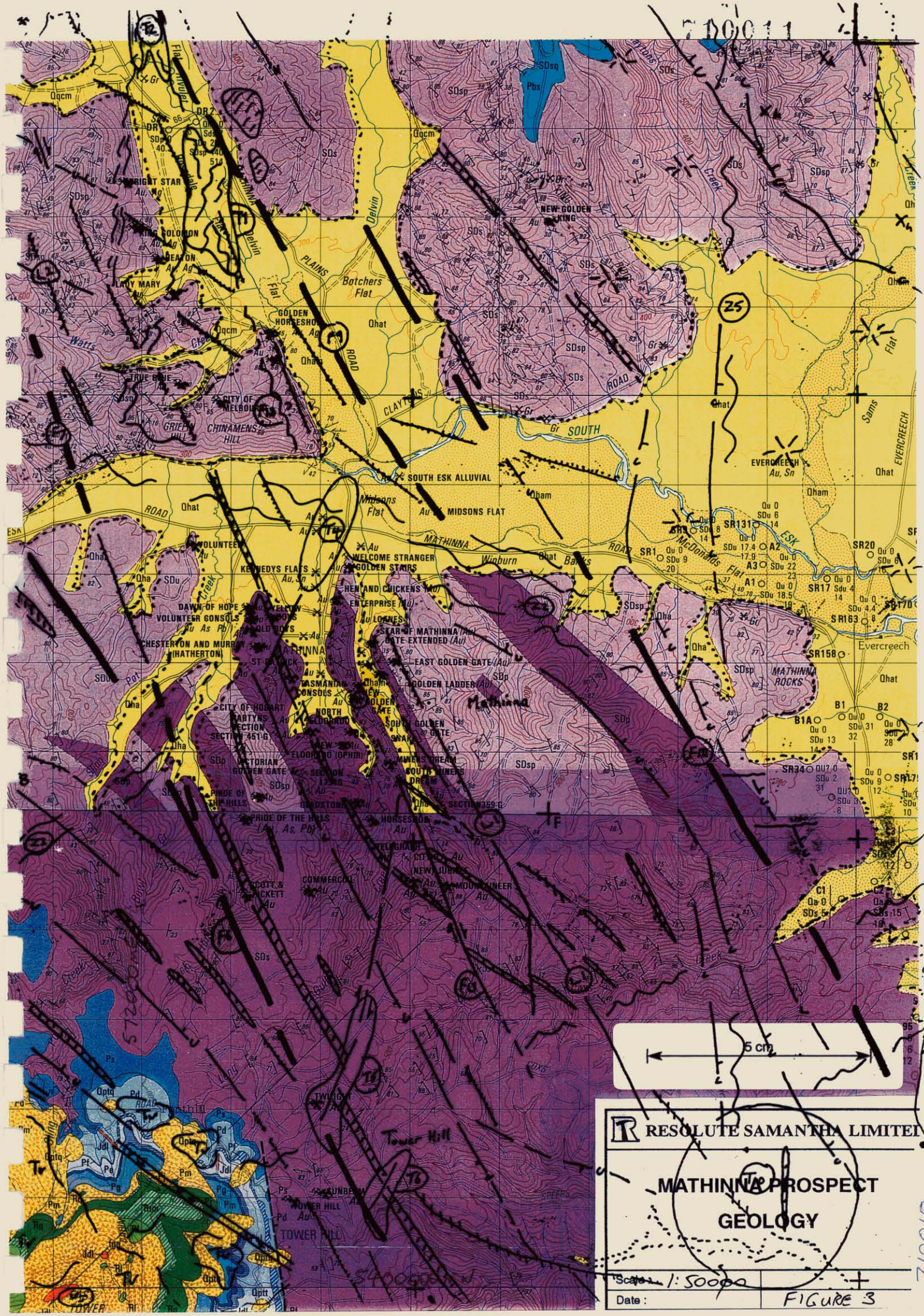


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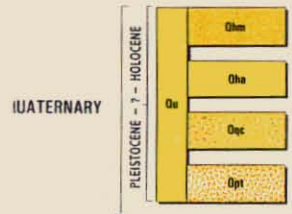
MATHINNA PROSPECT

GEOLOGY

Scale : 1: 50000	
Date :	FIGURE 3


5 cm
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MATHINNA PROSPECT
GEOLOGY
Scale: 1:5000
Date:
FIGURE 3

REFERENCE



Mine tailings and man disturbed ground.

Alluvium and marsh deposits; of modern flood plains (Qham) indicated [ ] ; of high terraces (Qhat); forming fans (Qhaf).

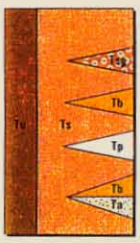
Colluvium; derived from Mathinna Beds (Qacm).

Talus, scree and rare till; consisting of dominantly dolerite boulders (Qptd); of dolerite and subordinate Lower Parmeener Supergroup boulders (Qptp); of dominantly granitic boulders (Qptg).



Probably older boulder deposits; consisting of dominantly dolerite (Ctd); of Lower Parmeener Supergroup conglomerate and sandstone (Ctp).

Erosional surface



Silts, sand and gravels (Tsl); sands and gravels cemented by iron oxides (Tsf); conglomerate with rounded clasts of Mathinna Beds and very rare weathered dolerite, often partially cemented by iron oxides (Tsc).

Quartz granule gravel probably drived from granitic rocks.

Basanite (Tbb) and olivine nephelinite (Tbn). Probable age c. 16Ma in the Ringarooma-Talawa area.

Volcanic breccia, containing angular clasts of Mathinna Beds and olivine-rich basaltic material, known only from an inferred pyroclastic vent, intersected in a drill hole at EO630115.

Alkali olivine basalt (Tba) and basanite (Tbb) in the West Pyengana area. Age 47.4 ± 0.6 Ma at EO771312.

Basaltic agglomerate and tuff near EO800330

Low angle unconformity.



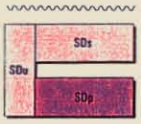
Mudstone and siltstone with abundant marine fossils, at EO691239.
Fine-grained sandstone with phosphatic nodules, at EO796204
(Pf – Foothill Sandstone Member).
Grey mudstone and siltstone (Pe, Pf, Pd – Castle Carey Mudstone.)

Dominantly well-sorted quartz sandstone, usually cross-bedded or laminated, with minor carbonaceous shale (Ps – Aberfoyle Formation).

Mudstone, siltstone and poorly sorted sandstone, with marine fossils in places (Pb); dominantly thick-bedded to massive, medium to coarse-grained quartz sandstone and minor conglomerate (Pbs). (Pb, Pbs – correlates of the Strickland Gorge Formation).

LOWER PARMEENER SUPER GROUP
TAMARIAN STAGE
BERNACCHIAN STAGE
REKUNIAN SERIES

Angular unconformity



Quartzwacke turbidite sequence of interbedded sandstone, siltstone and mudstone (SDu); sequences with significant mudstone indicated (SDsp); dominantly sandstone and siltstone (SDs); some quartzite units indicated (SDsq).

Dominantly mudstone and siltstone (SDp).

MATHINNA BEDS

Metapsammite (SDsm, SDspm), metaquartzite (SDsqm) and metapelite (SDpm SDspm) contact metamorphosed by granitic intrusions indicated by overprint [ ].

IGNEOUS ROCKS



Alkali olivine basalt (Tba), basanite (Tbb) and olivine nephelinite (Tbn). Presence of lherzolite nodules indicated (Tbbx, Tbnx).



Dolerite – grain size 0.2-0.7mm (f) and 0.7-1.5mm (m) indicated.



Dolerite dykes (EO749326, EO826325, EO513116).



Aplite and aplitic granite (Dmag).



Quartz-feldspar porphyry.



Fine-grained quartz monzonite (EO827190).

MAJOR GRANITIC INTRUSIONS
SCOTTSDALE BATHOLITH



Generally equigranular medium to coarse-grained, leucocratic biotite alkali-feldspar granite/adamellite with pale pink feldspar.

Sparsely to moderately porphyritic (quartz and K-feldspar), fine to coarse-grained, biotite granite/adamellite. Coarser grained in southern part of pluton, (Dsae, Dsap – Tombstone Creek pluton).

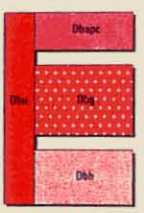
Equigranular, coarse to very coarse-grained, biotite ± hornblende, adamellite/granodiorite, with pale pink to white feldspar. Hornblende- and white feldspar-bearing granodiorite in southern part of pluton. (Dsac – Russells Road pluton).

Variably equigranular, seriate or sparsely porphyritic (K-feldspar phenocrysts up to 30mm), medium- to coarse-grained biotite ± hornblende adamellite/granodiorite; variety with very abundant fine- to coarse-grained quartz diorite xenoliths indicated [Dsawx).
Hornblende-bearing granodiorite in southern part of pluton (Dsaw, Dsawx – Hogarth Road pluton).

Equigranular to seriate (K-feldspar) coarse- to very coarse-grained biotite-hornblende granodiorite (Dsgc); very coarse-grained (>10mm) variety indicated [Dsgcc) (Dsgc, Dsgcc – Upper Blessington pluton).

Equigranular, medium- to coarse-grained biotite-hornblende granodiorite. (Dsg – Porcupine Creek pluton and, in the extreme west, Diddleum pluton).

BLUE TIER BATHOLITH



Coarse-grained porphyritic (K-feldspar) to equigranular, biotite- and biotite-muscovite. granite/adamellite (Dbapc-Poimena pluton).

Medium-grained, equigranular to rarely porphyritic (K-feldspar), hornblende-biotite granodiorite and subordinate biotite granodiorite. Locally with a strong grain foliation. Variably but usually strongly magnetic [κ typically 2 to 8 x 10^{-3}] (Dbgs). Weakly magnetic [$\kappa < 0.5 \times 10^{-3}$] zones (Dbgw) indicated by overprint [ ]. Variety without hornblende (Dbgwb) indicated. (Dbg, etc – Pyengana pluton).

Coarse-grained, equigranular to porphyritic (K-feldspar) biotite adamellite, (generally more melanocratic than Dbapc). In northern part of body, grading to biotite ± hornblende adamellite/granodiorite (Dbhh) with locally developed grain foliation. (Dbh, Dbhh – Haleys New Country pluton).

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Geological boundary-position approximate.

Geological boundary-inferred.

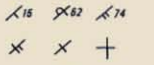
Geological boundary-transitional.

Airphoto Lineament.

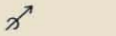
Fault — position approximate, downthrown side indicated

Fault — inferred.


Fault — concealed.


Strike and dip of beds — right way up, overturned, facing unknown.

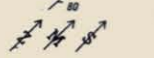

Vertical bedding, facing known, facing unknown; horizontal bedding, right way up.


Generalised palaeocurrent direction.


Strike and dip of primary cleavage, vertical.

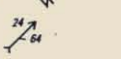

Strike and dip of later cleavage, vertical


Direction and plunge of minor fold hinge line, with direction of dip of axial surface.


Vergence (viewed down plunge)-dextral, no vergence, sinistral.

Direction and plunge of kink-band hinge line, with direction of dip of axial surface, and sense of displacement viewed down plunge.

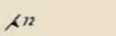

Direction and plunge of chevron-fold hinge line, with direction of dip of axial surface.


Plunge of columnar jointing, vertical.

Strike and dip of dominant joint set, vertical.


Strike and dip of foliation due to alignment of K-feldspar phenocrysts in granitic rock.


Trend of apparent lineation of K-feldspar phenocrysts on horizontal surfaces of granitic rock.


Trend of sulphide-bearing vein.


Macrofossil locality in poorly-fossiliferous sequences.


Field station for adjacent readings on map.

Borehole with identification number, depths in metres to rock types encountered, and final depth.



Notable small outcrop.

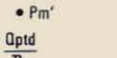


Notable float occurrence.


Talus concealing underlying rock type inferred from magnetometer survey.


Cirque.


Limit of glacial smoothing of dolerite bedrock.


Major mine — closed.


Mine — operating.

Mine abandoned.


Mine or prospect — little or no production.


Alluvial workings — operating.

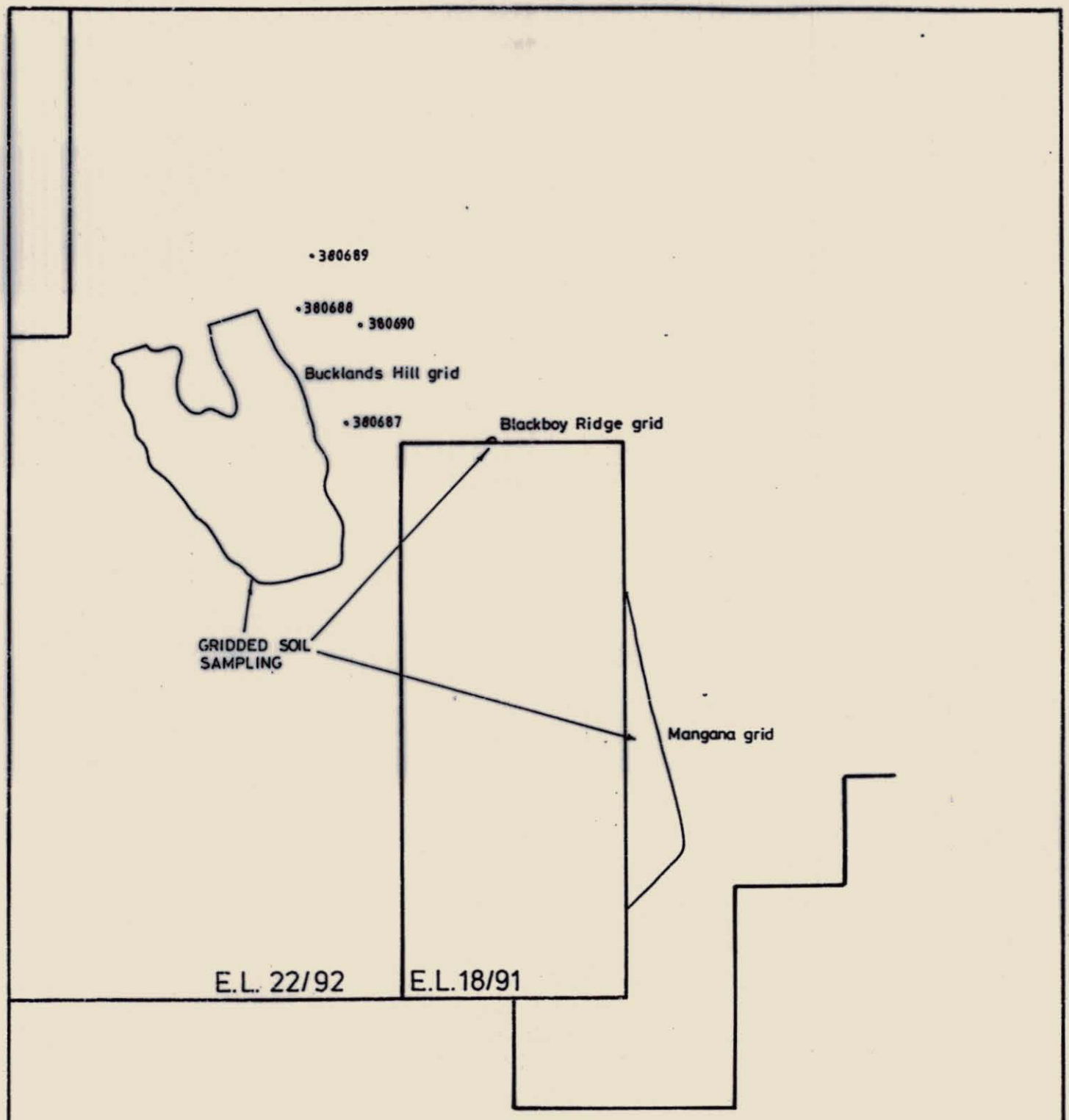

Alluvial workings — abandoned.

(Sn — tin, W — wolfram, Pb — lead, Zn — zinc, Cu — copper, Ag — silver, U — uranium, C — coal (Au — gold, Sn — tin)


Quarry or pit — operating.


Quarry or pit — abandoned.

(Gr — gravel, Bs — building stone)

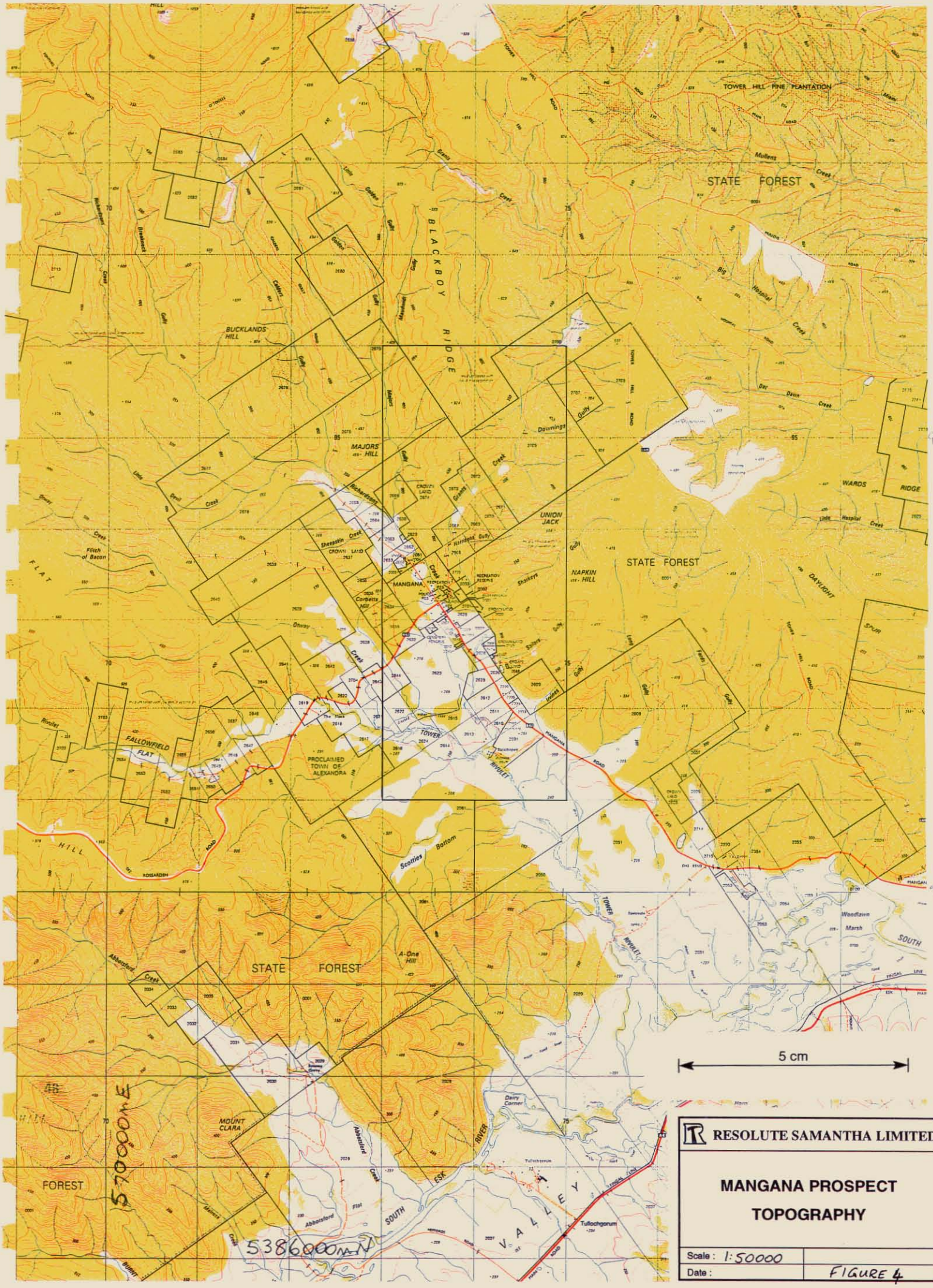


KEY

• 380687 Stream BLEG sample location / number

RESOLUTE SAMANTHA LIMITED		
E.L. 22/92 MANGANA AREA SUMMARY OF WORK COMPLETED		
Author G. Mac D.	Scale 1: 25000	Fig.no.
Drawn O.H.	Date Feb. 1996	

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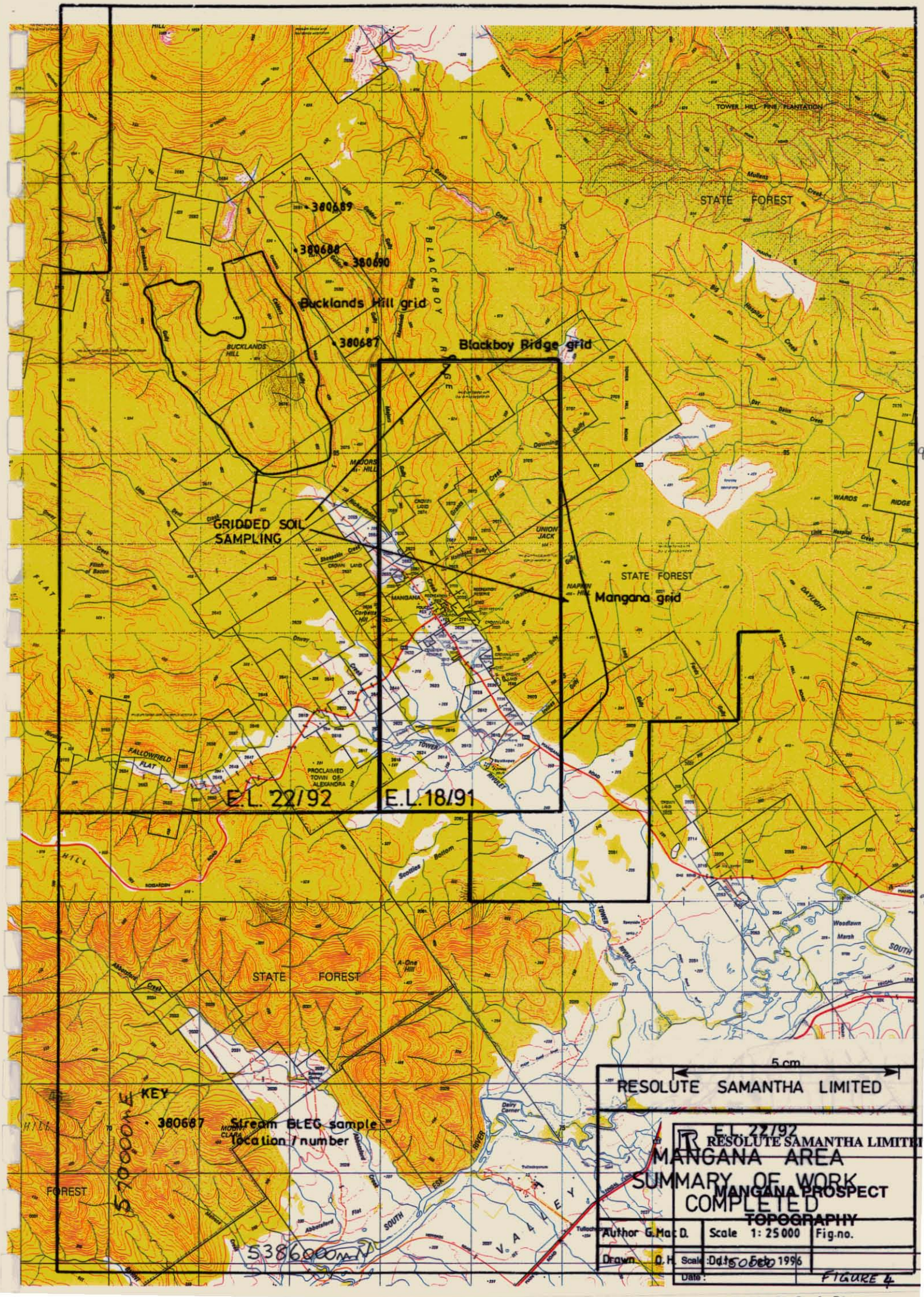


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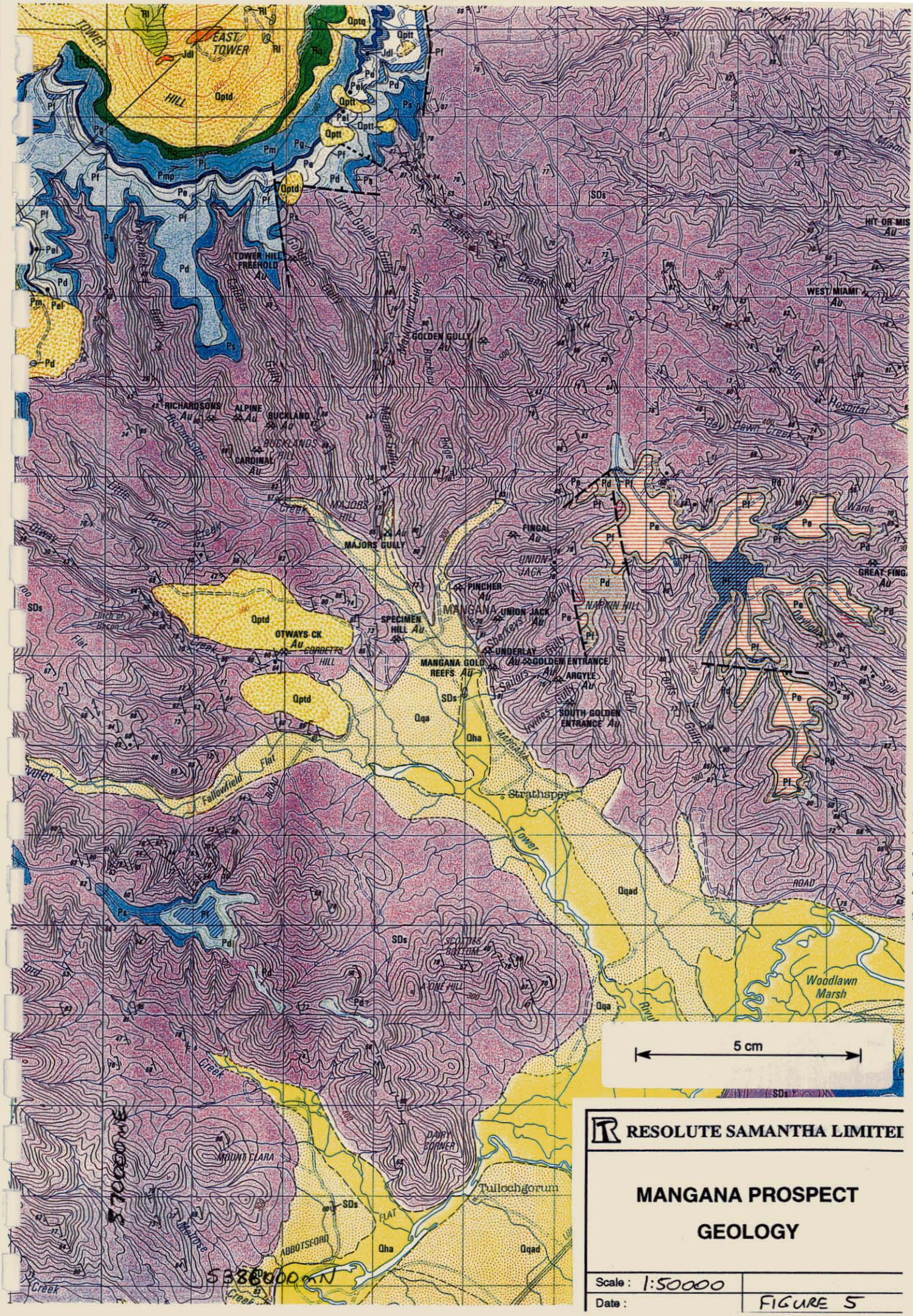
MANGANA PROSPECT
TOPOGRAPHY

Scale : 1:50000	
Date :	FIGURE 4

710615


380689
380688
380690
Bucklands Hill grid
380687
Blackboy Ridge grid
GRIDDED SOIL SAMPLING
Mangana grid
STATE FOREST
TOWER HILL PINE PLANTATION
BLACKBOY RIDGE
BUCKLANDS HILL
MANGANA
FALLOWFIELD FLAT
PROCLAIMED TOWN OF ALEXANDRA
E.L. 22/92
E.L. 18/91
KEY
380687 Stream BLEG sample location / number
5386000mN
5 cm
RESOLUTE SAMANTHA LIMITED
E.L. 22/92
RESOLUTE SAMANTHA LIMITED
MANGANA AREA
SUMMARY OF WORK COMPLETED
MANGANA PROSPECT
TOPOGRAPHY
Author G.Mac D.
Scale 1: 25000
Fig.no.
Drawn
Date: Feb 1996
FIGURE 4

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RESOLUTE SAMANTHA LIMITED

MANGANA PROSPECT

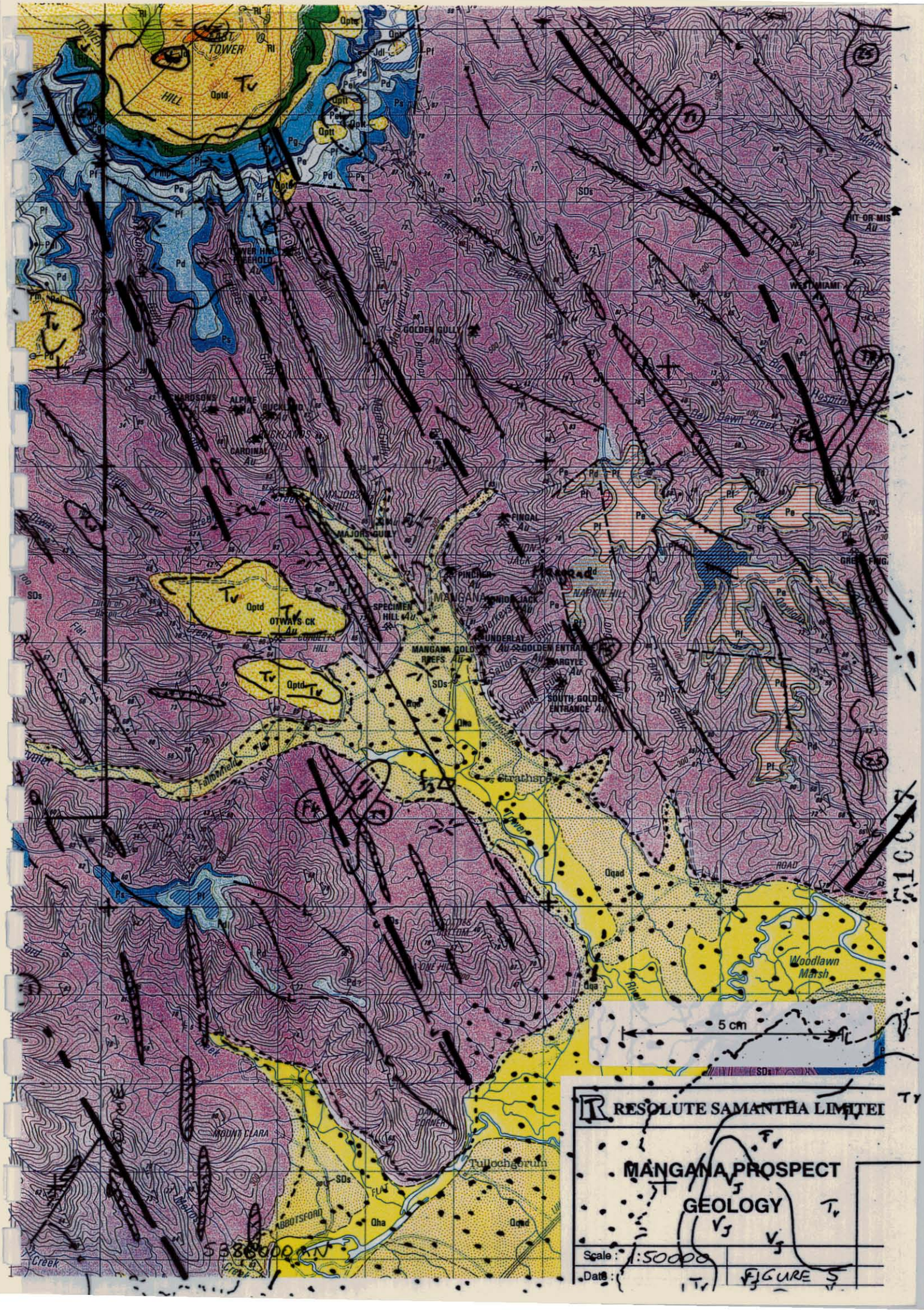
GEOLOGY

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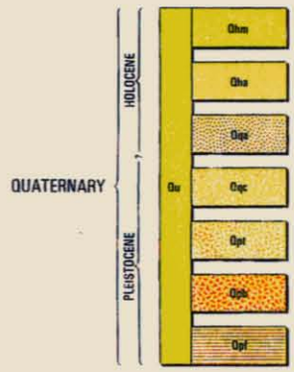
FIGURE 5

216017


TOWER HILL
Qptd
Tv
Qptt
Qpk
Pf
Pd
Pe
Pg
Ps
SDs
Qha
Qaa
Qaad
Qaad
Qaa
Qha
Qaad
Qha
Qaad
Qaa
Qha
Qaad
Qaa
Qha
Qaad
Qaa

710018

REFERENCE



Mine tailings and man-disturbed ground.

Stream alluvium and swamp deposits.

Older alluvium of river terraces; predominantly dolerite-derived (Qqad).

Colluvium — clayey quartz-granule gravel derived from granitic rocks (Qqcg); clayey gravel derived from dolerite (Qqcd); sand derived from Upper Parmeener rocks (Qqcq).

Talus, scree and rare till (moraine ridges indicated • • • • •) consisting of dolerite (Qptd); talus — dolerite and subordinate Upper Parmeener rocks (Qpt), dominantly Upper Parmeener quartz sandstone (Qpta), dominantly Lower Parmeener rocks (Qptp), dominantly granitic rocks (Qptg).

Dolerite block fields, probably underlain by clay from weathered dolerite; with interstitial fines (Qpbs), without interstitial fines (Qpbb).

Toppled dolerite masses (> 100m), coherent or partly disaggregated, produced by cliff failure.

Erosional surface.

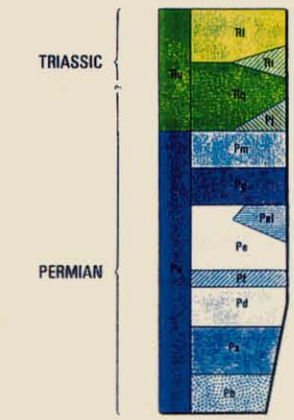


Quartz sand and gravel.

Basalt.

Carbonaceous grey clay, gravel including dolerite boulder beds, and minor conglomerate and lithic sandstone. Only recorded in boreholes in upper South Esk (EP820960) and Henbury (EP660790) areas.

Low-angle unconformity.



Dominantly lithic sandstone with minor mudstone and coal (Rl); in places with minor pebbly layers and conglomerate composed of extrabasinal clasts (Rlc); dominantly mudstone (Rlm).

Quartz-rich lithic sandstone and minor quartz sandstone (Rt); with mudstone and carbonaceous mudstone (Rtm).

Cross-bedded quartz sandstone. (Rq)

Fine-grained, slightly feldspathic quartz sandstone, micaceous shale, and minor carbonaceous mudstone.

Poorly sorted grey mudstone, siltstone and rare sandstone, unfossiliferous except for rare forams. Bed of pebbly sandstone about 1m thick indicated (Pmp). (Pm: Prospect Creek Mudstone).

Thick-bedded, usually poorly sorted, pebbly sandstone passing up into interbedded sandstone, siltstone and mudstone. Marine fossils abundant in places. (Pg: Mistletoe Sandstone).

Marine fossiliferous mudstone, siltstone and minor sandstone and bioclastic limestone (Pe); dominantly bioclastic limestone (Pel: Burnt Gully Limestone.)

Fine-grained pebbly sandstone with phosphatic nodules. Marine fossils present in some areas. Unit about 2m thick. Indicated by line (——) in places. (Pf: Fonthill Sandstone Member).

Mudstone, siltstone and minor poorly sorted sandstone. Uncommon marine fossils. (Pe, Pf, Pd: Castle Carey Mudstone).

Dominantly fine-grained, well sorted quartz sandstone, commonly with interbedded and inter-laminated carbonaceous shale, lesser conglomerate and rare coal (Ps); dominantly very coarse-grained arkosic sandstone and granule conglomerate (Psc). (Ps: Aberfoyle Formation).

Poorly sorted pebbly mudstone, sandstone and minor conglomerate, marine fossils present in places (Pb); dominantly conglomerate (Pbc). (Pb, Pbc: Strickland Gorge Formation).

Areas of partly silicified Lower Parmeener rocks indicated by overprint (▭).

UPPER PARMEENER SUPERGROUP
LYMINGTONIAN STAGE
LOWER PARMEENER SUPERGROUP
BERRIACCHIAN STAGE
TAMARIAN STAGE
REKUNIAN SERIES

Angular unconformity.

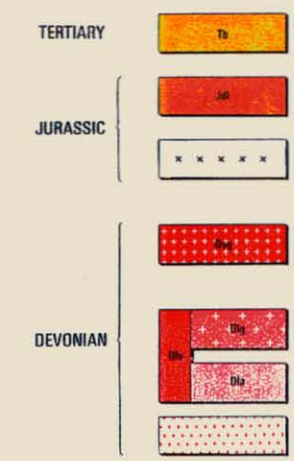


Quartzwacke turbidite sequence of interbedded sandstone, siltstone and mudstone (SDu); dominantly sandstone and siltstone (SDs); dominantly mudstone and siltstone (SDp).

Psammite (SDsm) and spotted pelite (SDpm) contact metamorphosed by granitic intrusions indicated by overprint (▭).

MATHINNA BEDS

IGNEOUS ROCKS



Basalt.

Dolerite — grain size < 0.2mm (vf), 0.2-0.7mm (f), 0.7-1.5mm (m) and > 1.5mm (c) indicated; with orthopyroxene (o), with abundant poorly crystalline mesostasis (e), with intersertal black glass (g). Areas with later very fine-grained dykes shown (d).

Contact metamorphism indicated by overprint.

GRANITIC INTRUSIONS

Biotite-hornblende granodiorite.

BEN LOMOND GRANITE

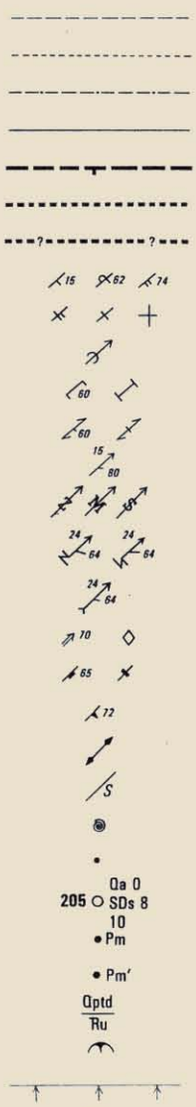
Porphyritic fine- to medium-grained alkali feldspar granite/granite with quartz and variable amounts of K-feldspar phenocrysts.

Equigranular to porphyritic alkali-feldspar granite/granite with variable amounts of K-feldspar phenocrysts (Dla); fine- to medium-grained (Dlaf), coarse-grained (Dlac); areas of surficial pink weathering of K-feldspars indicated by overprint (▭).

Contact metamorphism indicated by overprint. Greisen (G), hydrothermal alteration (H) indicated.

Some areas where rocks units inferred from float indicated, (e.g. SDs', Pm', Jdl').

710619



Geological boundary-position approximate.

Geological boundary-inferred.

Geological boundary-transitional.

Airphoto Lineament.

Fault — position approximate, downthrown side indicated

Fault — inferred.

Fault — concealed.

Strike and dip of beds — right way up, overturned, facing unknown.

Vertical bedding, facing known, facing unknown; horizontal bedding, right way up.

Generalised palaeocurrent direction.

Strike and dip of primary cleavage, vertical.

Strike and dip of later cleavage, vertical

Direction and plunge of minor fold hinge line, with direction of dip of axial surface.

Vergence (viewed down plunge)-dextral, no vergence, sinistral.

Direction and plunge of kink-band hinge line, with direction of dip of axial surface, and sense of displacement viewed down plunge.

Direction and plunge of chevron-fold hinge line, with direction of dip of axial surface.

Plunge of columnar jointing, vertical.

Strike and dip of dominant joint set, vertical.

Strike and dip of foliation due to alignment of K-feldspar phenocrysts in granitic rock.

Trend of apparent lineation of K-feldspar phenocrysts on horizontal surfaces of granitic rock.

Trend of sulphide-bearing vein.

Macrofossil locality in poorly-fossiliferous sequences.

Field station for adjacent readings on map.

Qa 0
205 ○ SDs 8
10
• Pm

Borehole with identification number, depths in metres to rock types encountered, and final depth.

Notable small outcrop.

• Pm'

Notable float occurrence.

Qptd / Ru

Talus concealing underlying rock type inferred from magnetometer survey.

Cirque.

Limit of glacial smoothing of dolerite bedrock.

Major mine — closed.

Mine — operating.

Mine abandoned.

Mine or prospect — little or no production.

Alluvial workings — operating.

Alluvial workings — abandoned.

(Sn — tin, W — wolfram, Pb — lead, Zn — zinc, Cu — copper, Ag — silver, U — uranium, C — coal) (Au — gold, Sn — tin)

Quarry or pit — operating.

Quarry or pit — abandoned.

(Gr — gravel, Bs — building stone)

3.0 GEOLOGY

3.1 Introduction

Geological mapping was a major component of the exploration work conducted this year. That work forms the basis for section 3.3 - Prospect Geology whilst Section 3.2 - Regional Geology is based largely on work by the Tasmanian Mines Department.

3.2 Regional Geology

EL 22/92 lies towards the southern end of the distinctively north-north-west trending lineament of gold deposits which extend from Mangana in the south to Lyndhurst on the coast. The gold deposits occur as auriferous quartz reefs hosted in the Mathinna Beds, a sequence of pelitic to quartzwacke turbidites.

The Mathinna Beds outcrop over much of the north-east and are known to contain units of both Ordovician and Silurian age. They are the oldest known rocks in the north-east.

The Mathinna Beds are intruded by I and S - type granitoids which range in age from Late Devonian to Early Carboniferous. The intrusive sequence has been shown in almost all cases to be granodiorite (oldest), adamellite, alkali felspar granite (youngest). The Lyndhurst-Mangana gold lineament lies along a 'corridor' of the Mathinna Beds bounded to the west by the Scottsdale Batholith and to the east by the Blue Tier Batholith. This 'corridor' widens to the south.

Both the granites and Mathinna Beds are overlain unconformably by Pemo-Triassic glacimarine sediments of the Parmeener Supergroup. These sediments are intruded by Jurassic dolerite sills.

Tertiary basalts occupy palaeotopographic lows with interbedded Tertiary gravels not uncommon.

All rocks are unconformably overlain by Quaternary alluvium in river valleys.

Structure

Regional mapping shows the major structures in the Mathinna Beds to be north-north-west trending horizontal to shallowly plunging, asymmetrical folds with a (usually) south-westerly dipping axial planar surface indicating a regional easterly vergence (Williams and McClenaghan, 1989).

More recent work (Keele, 1994) argues that "the north east terrain of Tasmania can be conceived if as a gently west-dipping thrust wedge ... which had experienced crustal thickening during the Mid-Devonian orogeny".

This folding and/or thrust faulting is interpreted to have taken place in the Mid Devonian in an event correlated with the Tabberabberan Orogeny (McClenaghan, 1994).

To a large degree granitoid intrusion post-dated this deformation phase as evidenced by the truncation of folds in the Mathinna Beds by these granites though some deformation is noted in granitoids and adjacent Mathinna Beds (Goscombe and Findlay, 1989).

The Mid Devonian deformation has produced an "approximate fold axial planar penetrative cleavage (S_1) which is the predominant structural surface present throughout the whole of NE Tasmania" (Goscombe and Findlay, 1989). This cleavage is generally steeply dipping.

Both outcrop and mega-scale kink bands recognisable throughout the north-east are interpreted to post-date granitoid intrusion. They are interpreted to have been produced by a north-north-west trending principal stress regime (Goscombe and Findlay, 1989).

Mineralisation

Gold bearing quartz veins are considered to have formed in the Middle Devonian (Taheri and Bottrill, 1994), however, there is some uncertainty as to the role of the granitoids in gold mineralisation.

Gold mineralisation at both Lisle and Golden Ridge, elsewhere in the north-east, lies in Mathinna beds in the thermal metamorphic aureole of granodiorites and appears to be genetically related (Klominsky and Groves, 1970), however, this spatial relationship does not hold so well in the Mathinna area where the interpretation of aeromagnetic data suggests that Mathinna is underlain by granodiorite (Leaman, 1989) or granite (Richardson and Roach, 1994) at a depth of not less than 2 km.

Recent detailed geochemical work by Taheri and Bottrill (1994) on veining on the Mangana - Forester part of the lineament suggests that most gold bearing quartz veins were probably formed by "deep seated metamorphic fluid, probably resulting from devolatilisation of metamorphic rocks at depth (though) deeply convecting chemically-modified meteoric fluids may also have played an important role".

A number of generations of quartz veining are noted and although paragenetic relations have been interpreted (Goscombe and Findlay, 1989 and Taheri and Bottrill, 1994) "detailed relationships are complex and ambiguous" (Taheri and Bottrill, 1994).

3.3 Prospect Geology

Mathinna

Introduction

The Mathinna Prospect also includes EL 17/91 "Mathinna" with EL 22/92 covering the peripheral parts of the Mathinna area. The geology discussed here is based to a significant degree on work done on EL 17/91.

The geology of the Mathinna is touched on in a number of the early 'Mines Department' reports with significant contributions in Twelvetrees (1906 a) and Finucane (1935). Important contributions have also been made by Threader (1967) and

Turner (1972). More recently detailed work on both the structural setting (Keele, 1994) and geochemistry (Taheri and Bottrill, 1994) of gold mineralisation in the Mangana - Forester area focussed to a large degree on the Mathinna area.

Lithology

The geology largely follows the topography with the hills underlain by Mathinna Beds and the river flats underlain by alluvials ranging in thickness up to a few tens of metres (see Figures 3 and 5). In part, these alluvials are elevated terraces. In the northern part of the licence on Chinamen's Hill is a perched river terrace stands well above the current river flats. The old river channel (which contains coarse alluvial gold) would have flowed west to east.

Resolute Samantha's exploration was directed towards a hard rock gold resource and did not pay much attention to the geology of the alluvials.

Apart from the Mathinna Beds and alluvials, Turner (1972) also refers to a 'Basic Dyke Rock' found around the Jubilee mine. It is described as being "extremely weathered, friable and maroon coloured" (Turner, 1972). Mapping by Resolute Samantha located a rock matching this description in the area, however, it fits our description of 'lode cap' (see later, this section). This is not to suggest that basic igneous dykes may not exist elsewhere as Ashley's interpretation (Appendix C) of the aeromagnetics around Tower Hill supports previous reporting of basic rocks around the Sunbeam mine (Finucane, 1935).

Regardless, it is considered that there are no such basic igneous dykes nor shallow granitoids (< 2 km) of the "Mathinna" prospect.

In more elevated areas in EL 22/92 the Mathinna Beds are overlain unconformably by essentially underformed Pemo-Triassic (and possibly Carboniferous) sediments of the Parmeener Supergroup into which have intruded sills of Jurassic dolerite (Taheri 1992). The unconformity is erosional with the basal sediments marine conglomerates in many parts. Tower Hill is capped by dolerite.

There is some suggestion that some alluvial gold in Majors Gully may have been sourced from these basal conglomerates (Twelvetrees, 1907).

The Mathinna Beds within EL 22/92 range in grain size from a fine sandstone to a fine grained siltstone/shale. Individual grains can generally be seen in the finer unit so it is perhaps technically not a true shale and has been referred to in drill logs as a 'siltstone/shale' though in further discussion in this section, this rock type is referred to as a shale in accordance with previous workers. The coarsest unit in drill logs in the Mathinna area is a 'siltstone'. An intermediate rock type has been logged in a number of holes as a 'fine grained siltstone'.

Siltstones and fine sandstones are generally pale green to dark grey green though most samples seen were of weathered float. They are generally moderately well bedded and most bedding readings come from these rocks.

Shales range from moderate green, grey green to dark grey green and almost black in colour. The dominant surface in these rocks in the S_1 cleavage with bedding often indistinguishable.

Although regionally part of a turbidite sequence the rocks in the Mathinna area do not display the full Bouma sequence though convoluted cross laminations can be seen in the Horseshoe open stope. Shale interbeds between siltstone/sandstone units are rare with interbedding generally on a broader scale.

This interbedding has defined three broad units which can be recognised in the Mathinna area. These units strike north-north-west with their spatial distribution controlled by the north-north-west striking folding. On Caledonian Ridge and to the immediate east, the rocks are predominantly siltstones and finer sandstones with minor shales.

Long Gully and the Church Hill ridge to the west of the New Golden Gate mine are underlain by a predominantly shale rich unit with the rocks west of Black Horse Gully predominantly siltstones and fine sandstones with minor shales.

Depending on the structural interpretation, the coarser grained units may be the same unit or may be separate (see Figure 11 in Keele, 1994).

Alteration

Minor sericite and/or chlorite alteration is occasionally present within and/or immediately adjacent to quartz veining. Disseminated pyrite, and less commonly arsenopyrite, may occasionally be seen in the wall rocks to quartz reefs. The most significant alteration (other than silicification which is discussed under Veining) is carbonate spotting which is present around some reefing at Mathinna.

Folding

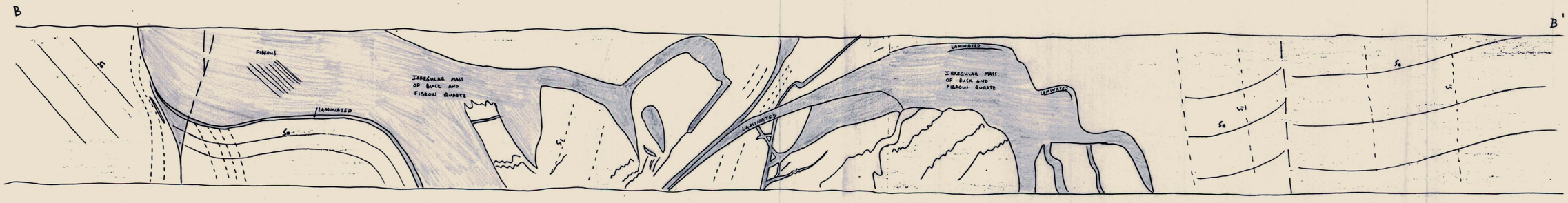
The Mathinna Beds in the Mathinna area have been folded along sub-horizontal north-north-west trending axes as indicated by the distribution of the S_0 readings (see Figure 7). Evidence for these folds can also be seen in the vergence of parasitic folds (eg Golden Hinges, Jubilee) though in a number of cases (New Eldorado, North Eldorado) these parasitic folds are symmetric so no sense of vergence can be deduced.

Figure 17 is an interpretation of the structural geology of the Mathinna field. Four major anticlines have been interpreted from the vergence of parasitic folds in the mapping. This interpretation has some significant similarities to the mapping in Turner (1972).

S0/S1 relationships in the Golden Ladder adit indicate that steeply east-north-east dipping bedding is overturned and lies on the west limb of an overturned anticline whose relatively shallowly dipping eastern limb underlies much of the ground to the east.

West verging parasitic folds in the cuttings around the shaft and mullock quarry of the New Golden Gate mine indicate that there is a syncline underlying the Long Gully. East verging parasitic folds in the Golden Hinges adit indicate the existence of an anticline centred near (or just west) of the New Golden Gate shaft. This interpretation supports that of Twelvetrees (1906 a) who reported the existence of an anticline at the No 12 level in the New Golden Gate mine, though Finucane (1935) disputes this (without seeing the structure himself) stating that the folded surfaces are likely to be the S1 cleavage (ie kinked).

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5 cm

N°2 adit south east wall drawn as if looking towards north west.

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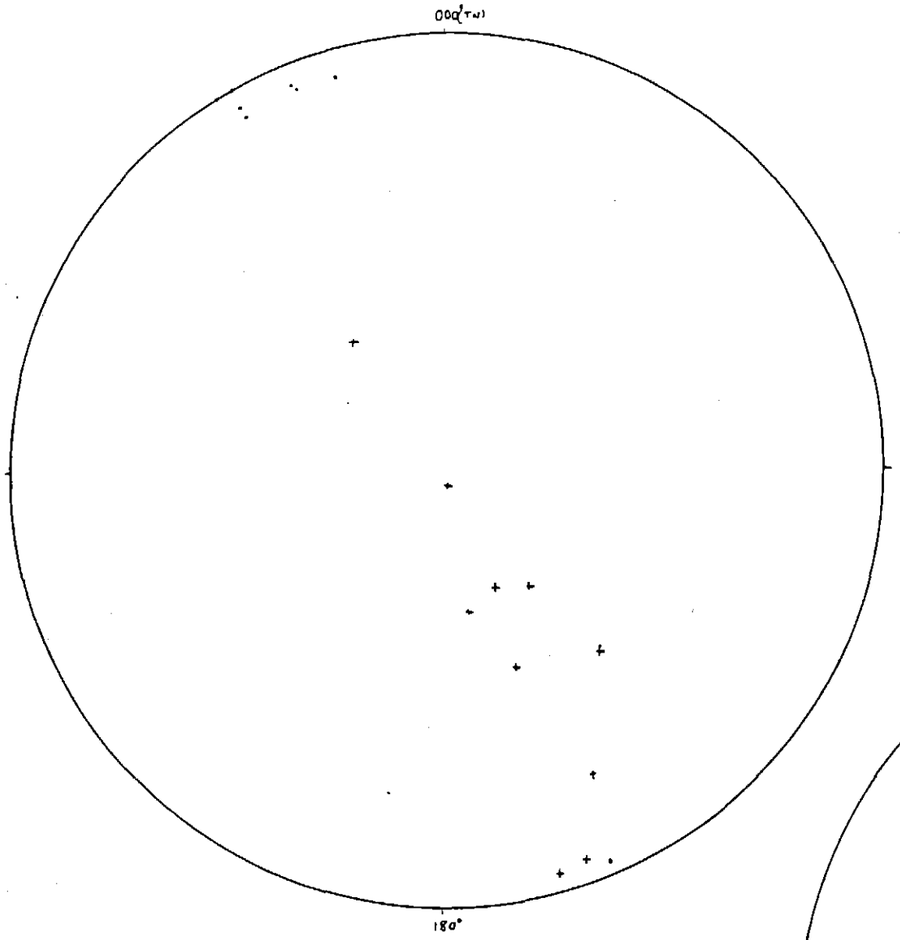
JUBILEE No2 ADIT

FLAT REEF CROSS SECTION

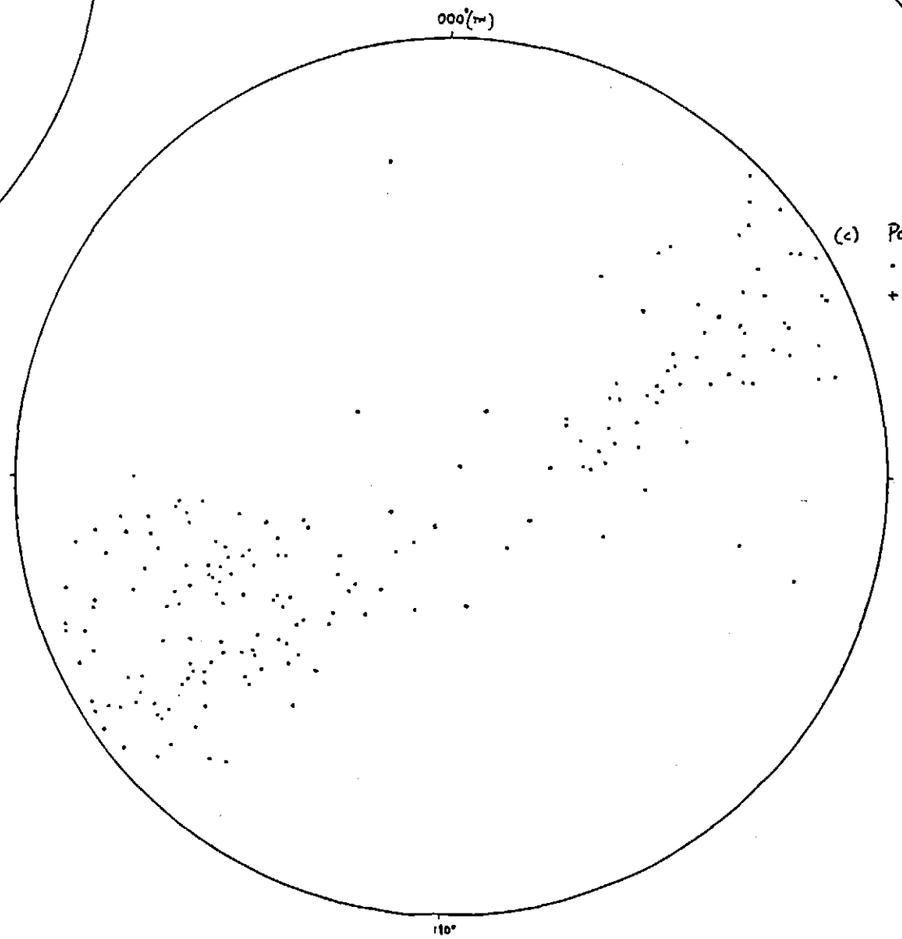
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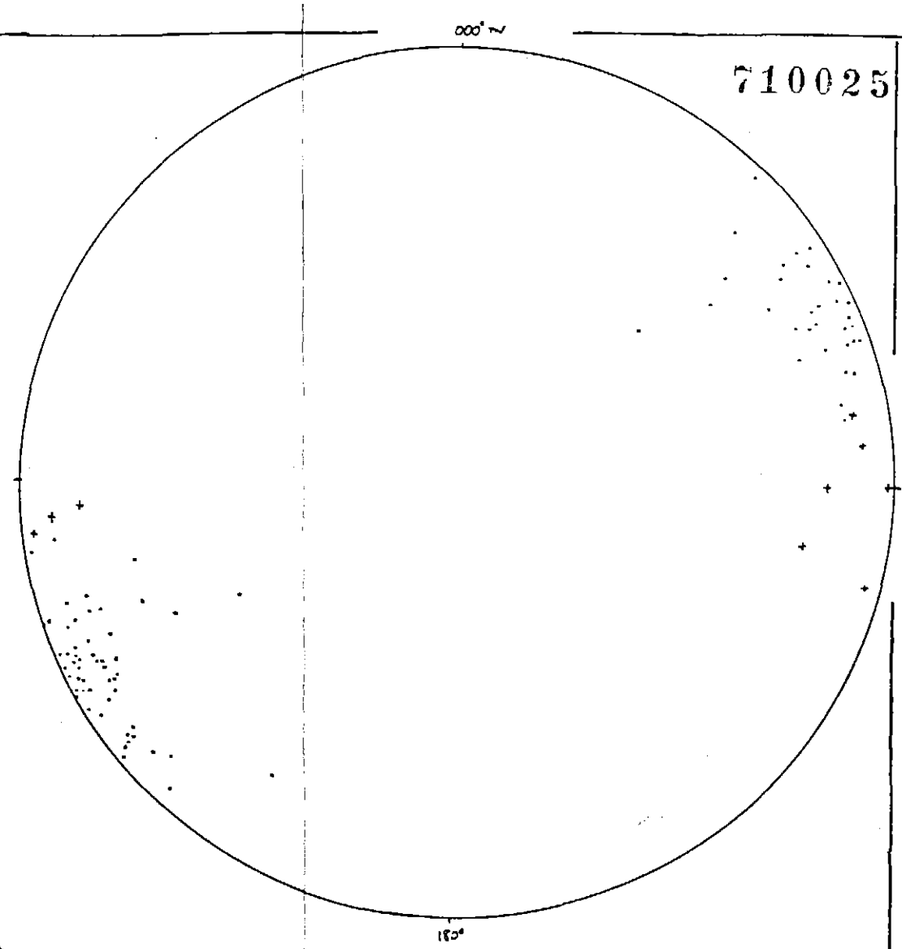
710025



(a) FOLD HINGE LINES
- F_1
+ F_2



(b) POLES TO BEDDING



(c) POLES TO CLEAVAGE
- S_1
+ S_2

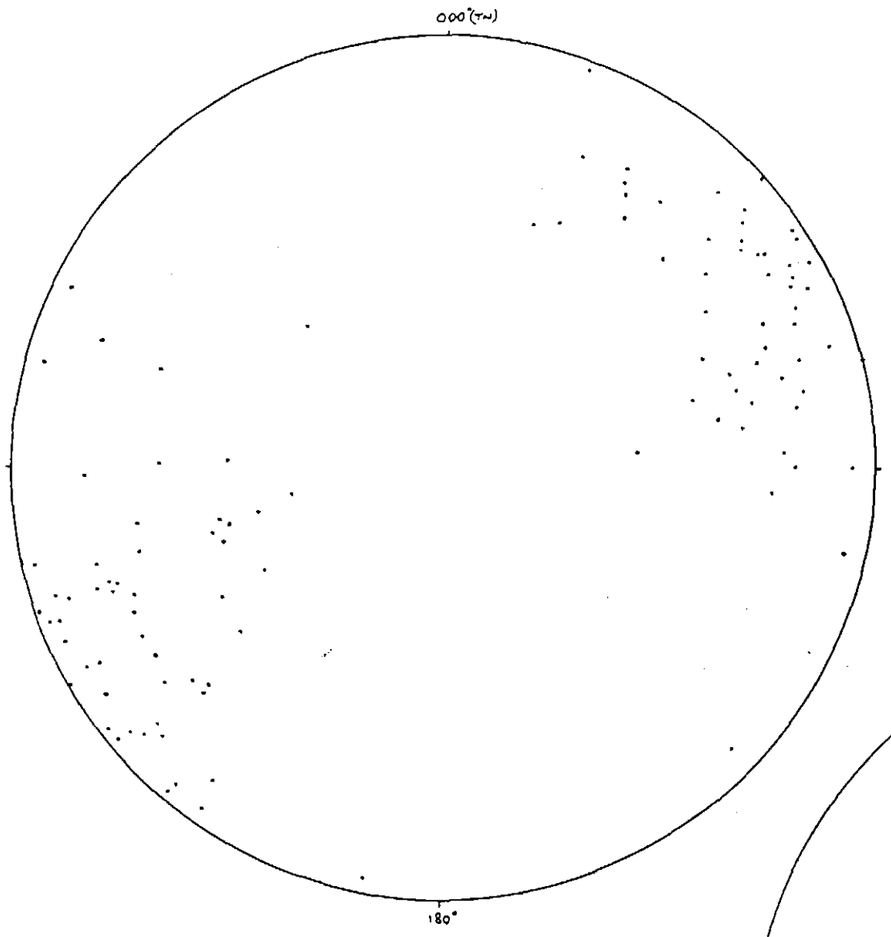
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MATHINNA PROSPECT

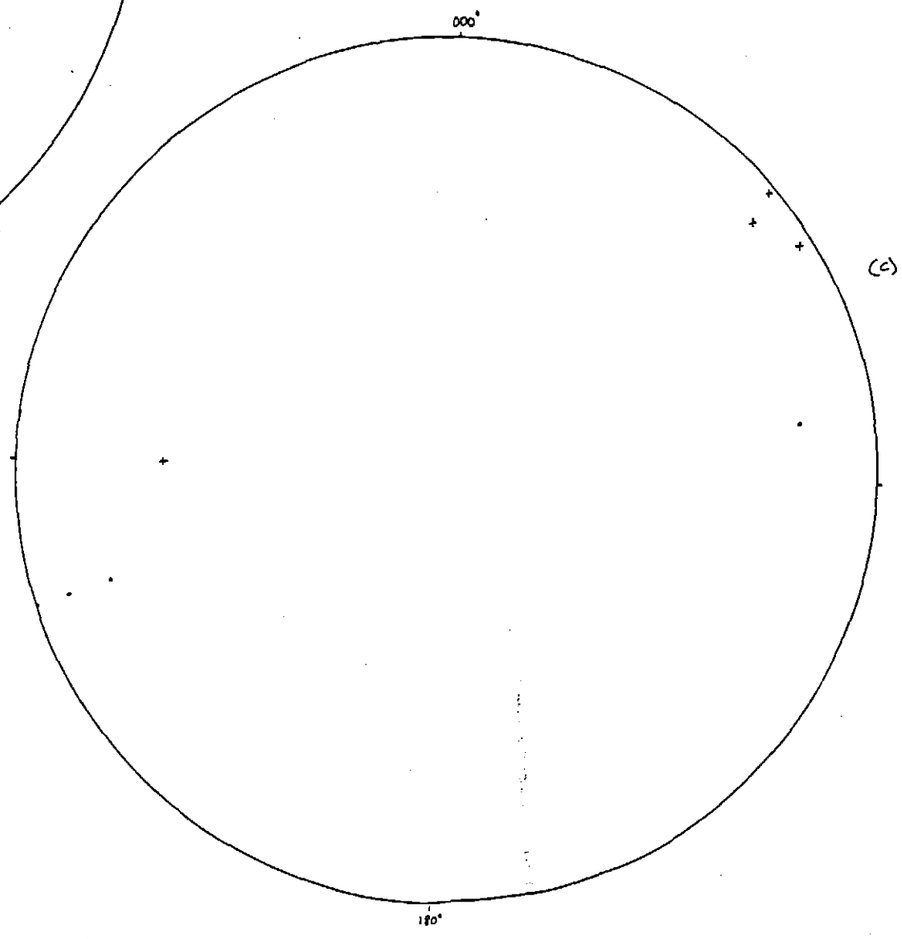
FOLD AXES AND POLES TO BEDDING AND CLEAVAGE

Scale :	

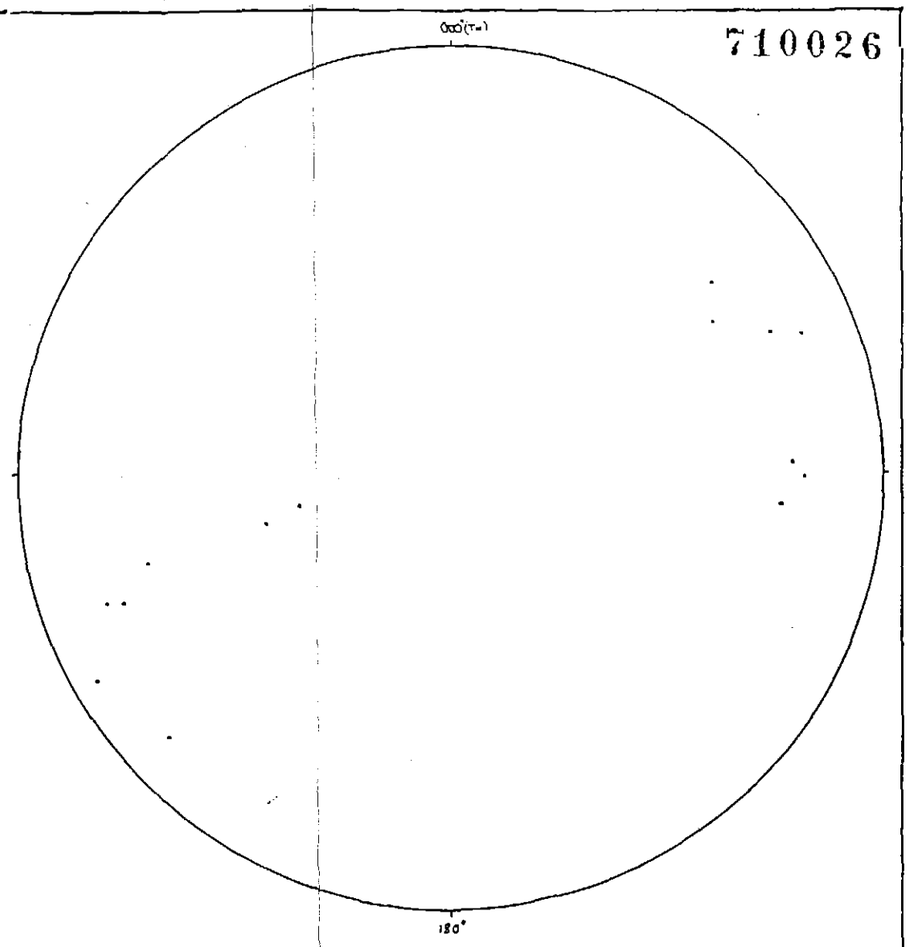
710026



(a) POLES TO ALL FAULTS.



(b) POLES TO FAULTS WITH HORIZONTAL SLICKENSIDES
- DEXTRAL
+ UNKNOWN



(c) POLES TO FAULTS WITH VERTICAL SLICKENSIDES

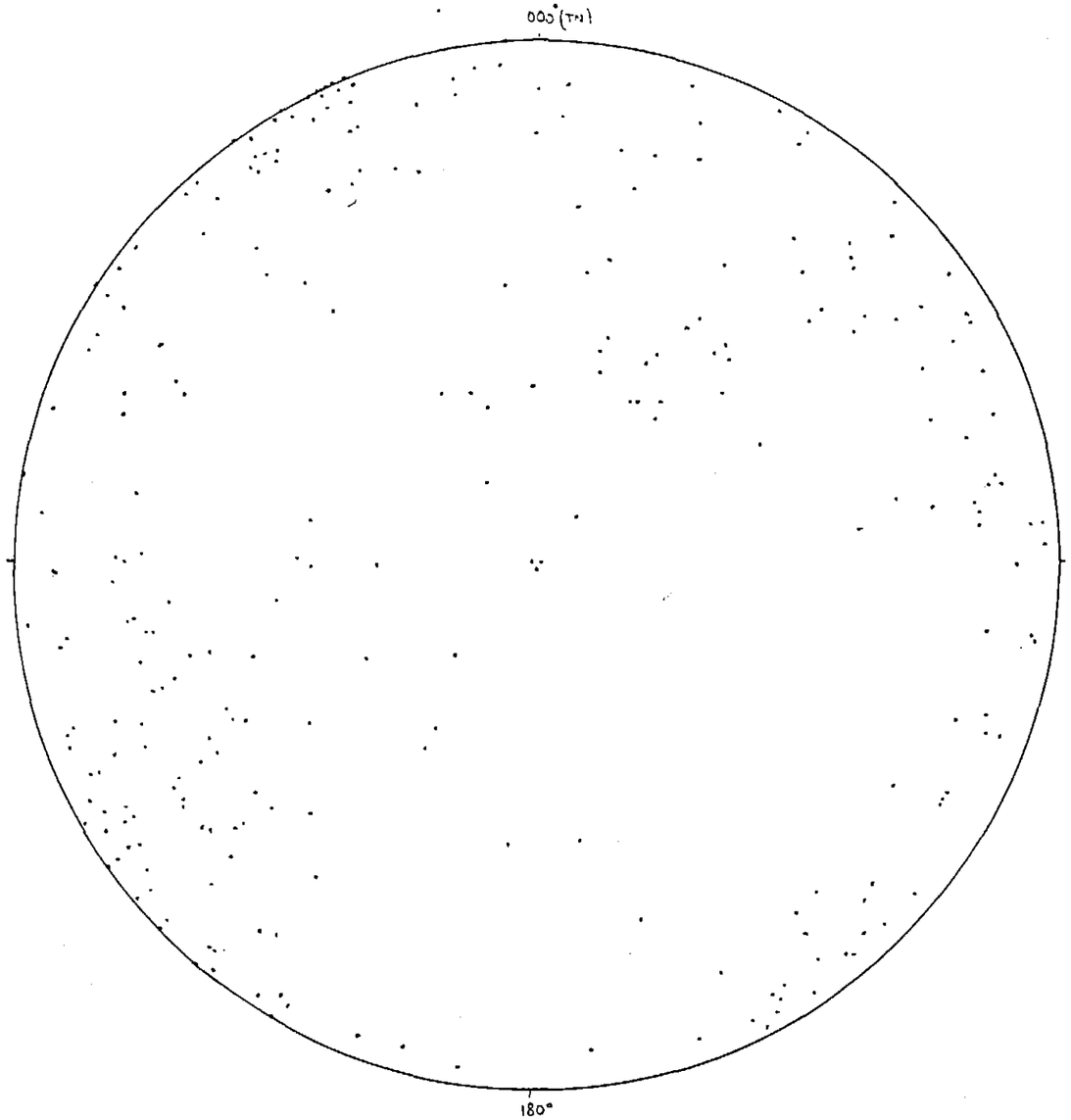
RESOLUTE SAMANTHA LIMITED

MATHINNA PROSPECT

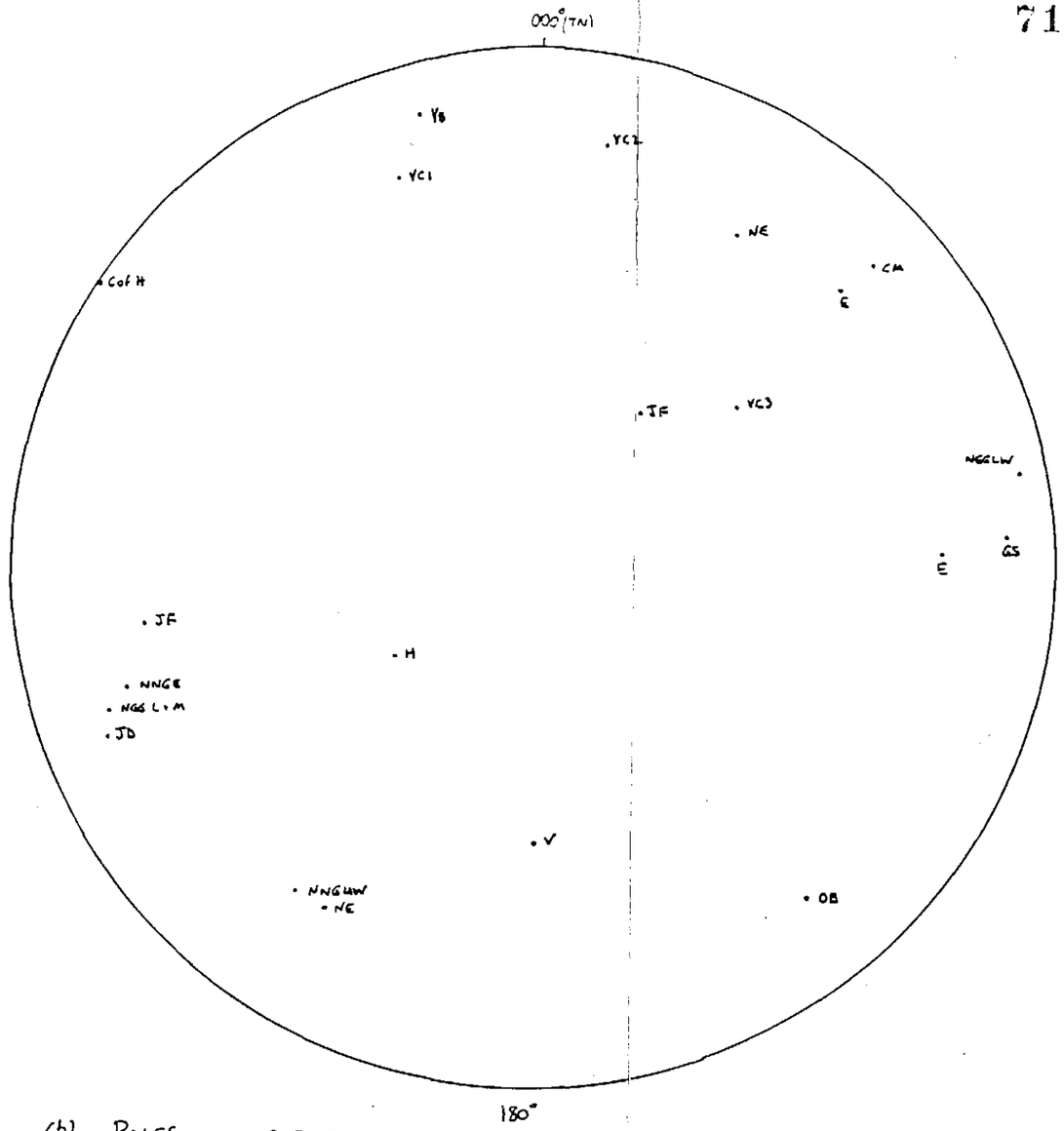
POLES TO FAULTS

Scale :	

710027



(a) POLES TO ALL VEINS



(b) POLES TO MAJOR REEFS

NGGE, uw, LW, L, M - New Golden Gate East, Upper West, Lower West, Loanes, Main;
CM - Charter and Murray; E - Enterprise, V - Volunteer, OB - Old Boys, GS - Golden Stairs;
CofH - City of Hobart; JD, F - Jubilee Derby, Flat; YB - Yellow Boys; YC1, 2, 3 - Volunteer Consolidated 1, 2, 3; NE - New Eldorado; H - Horseshoe

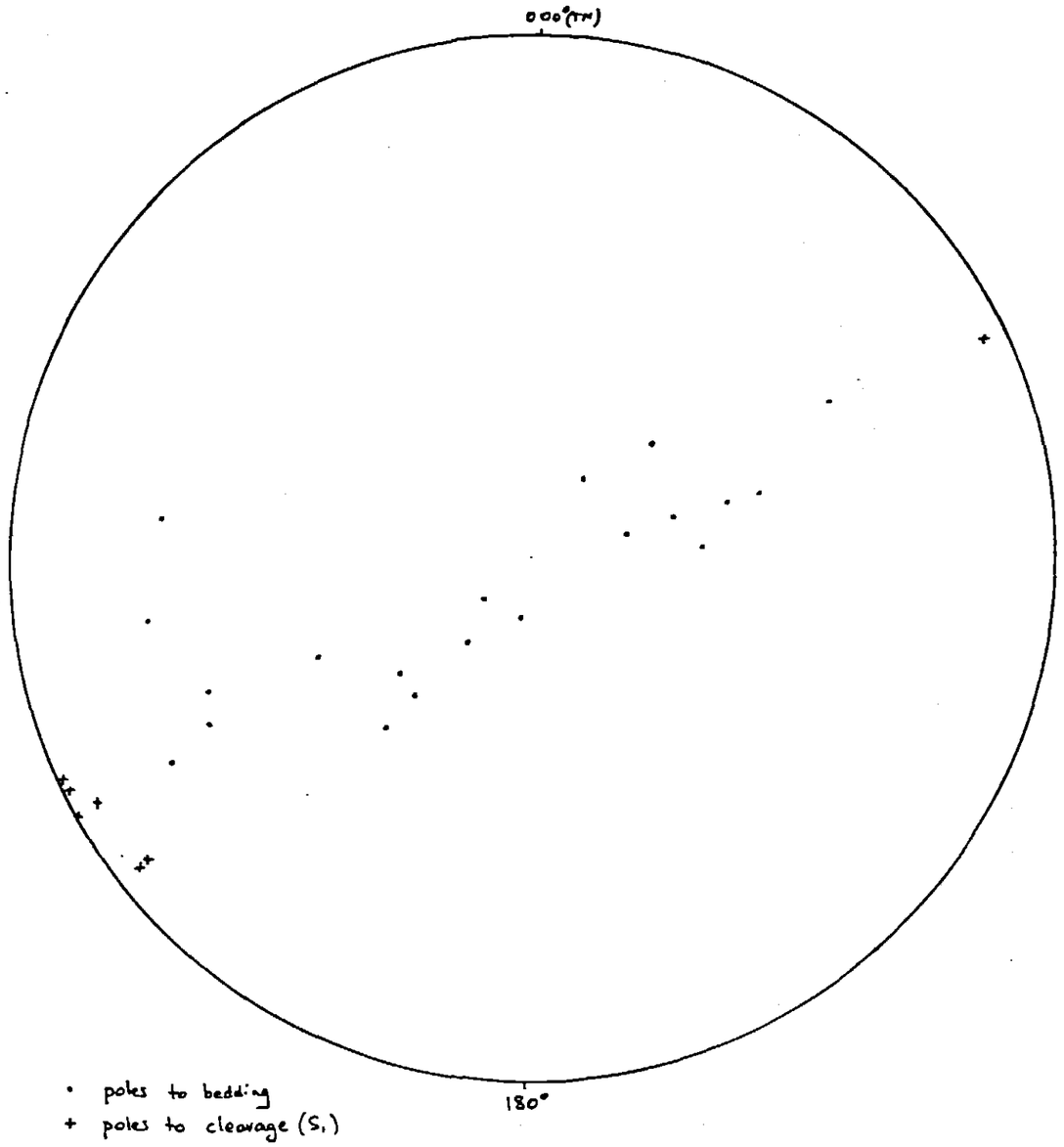
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MATHINNA PROSPECT

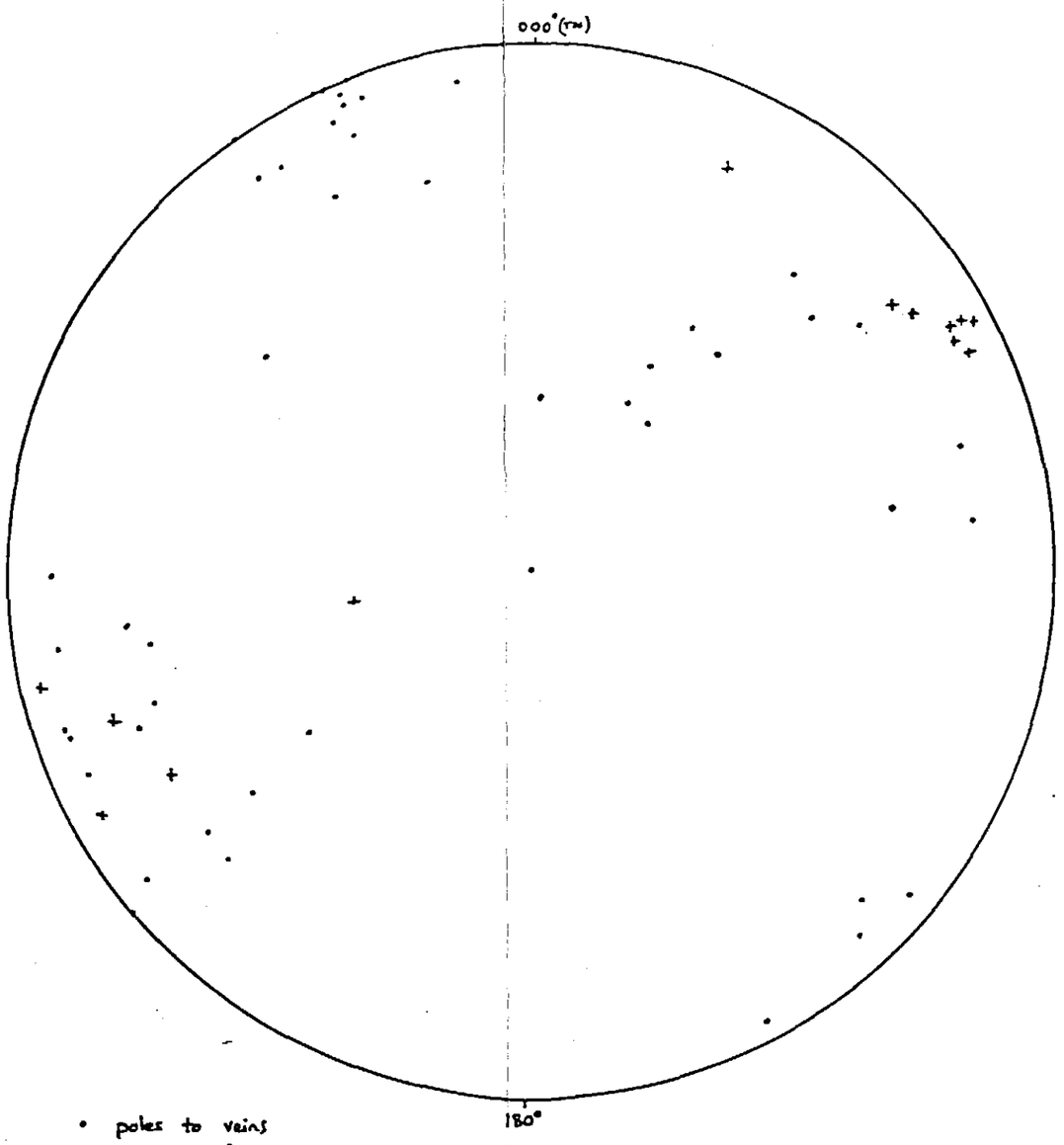
POLES TO VEINS AND MAJOR REEFS

Scale :	
Date :	FIGURE 9

710028



• poles to bedding
+ poles to cleavage (S_1)



• poles to veins
+ poles to faults

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JUBILEE

POLES TO VEINS FAULTS BEDDING AND CLEAVAGE

Scale :

Date

This interpretation of an anticline-syncline pair between the Golden Hinges and Golden Ladder adits ignores any structural dislocation on the Main Slide shear zone which probably has had at least two generations of movement, one being dextral wrench faulting and the other probably high angle reverse faulting (possibly syn-folding). It is unclear as to how much structural dislocation has taken place on the Main Slide shear zone.

West verging folds in the North Eldorado adit support the existence of a syncline between it and the Golden Hinges adit. The positioning of a syncline here is somewhat problematic with structures (based on reconnaissance mapping) in the Miner's Dream workings indicating that such a syncline would be expected to lie east of the Miner's Dream.

The anticline shown running through the western end of the New Eldorado adit is possibly the same fold interpreted from structures mapped in outcrop and old workings south west of Jubilee. The syncline to the west is interpreted from bedding in the section 1734-G and Gladstone adits.

The major anticlines are considered to be asymmetric with a steeply dipping (or occasionally overturned) west limb and a shallow east limb. This east vergence is at odds with the regional interpretation of (McClenaghan and Williams, 1989).

Parasitic folds whilst present in much of the field are particularly common in Finucane's (1935) "zone of close folding" from which the name has been coined. The significance of these parasitic folds to mineralisation is elaborated in the section on veining.

The fold shown on Figure 9 passing just to the east of the Golden Stairs workings is based on very limited outcrop mapping.

The poor correlation between individual drill-holes on sections and between sections suggests that the rocks underlying the Township/Church Hill zone are folded.

Cleavage

The dominant cleavage at Mathinna expresses itself as a spaced cleavage in siltstones and sandstones and slaty cleavage in shales. Regionally, it is not considered to be axial planar though in mapping at Mathinna the discrepancy is not obvious.

The second (S_2) cleavage was recognised by Keele (1994). This mapping felt confident to recognise this cleavage in only a few instances, significantly these adits (South Miner's Dream and North Eldorado) and outcrop on the Tower Hill Road lie on the central fault/fold zone and thus the cleavage is a localised structure possibly related to movement on the Main Slide shear zone or alternatively local tightening of folds. Poles to both cleavages measured throughout the Mathinna prospect are shown in Figure 7.

Faults

Although not always recognisable, most faults probably had more than one phase and sense of movement. In most instances the only evidence of the sense of movement of a fault are slickensides developed on puggy planes within the fault. These slickensides may well be recording the latest phase of movement, possibly even as recent as normal movement under the extensional regime of the Tertiary, though the range in

orientations of these slickensides from horizontal to vertical argues against this interpretation being universally true.

Dislocated quartz veins and drag on veins, bedding and cleavage are occasionally useful, however, the sense or direction of movement on most faults is indeterminable.

Poles to all faults mapped in the Mathinna area are plotted on Figure 8.

The timing relationships between different faults as well as different senses of movement on the same fault are largely impossible to determine due to the non existence of overprinting relationships. Keele's (1994) timing relationships are based on a very few subjective interpretations. The timing interpretations suggested here are based largely on overprinting vein relationships, the principle stress regime expected to produce such veining and the sense of movement and orientation of faults expected under such a stress regime.

This interpretation sees many broadly north-north-west (ie north to north-west) striking faults as commencing life as west directed high angle reverse faults which were activated under the same principal stress regime and at the same time as F1 folding ie, D1.

These faults were later re-activated as dextral wrench faults under the north-south principle stress regime of Findlay in (Taheri, 1992), ie D2.

This model would also account for the predominance of roughly east-north-east to north-east striking faults and reefing elsewhere in the north-east (Denison, Lefroy, Beaconsfield) which would probably have been Riedel shears or extension fractures.

Veining

Evidence of the nature of quartz veining which was pursued by the early miners is hard to come by, as in those workings which can be assessed, such veins have usually been stoped out, whilst mullock heaps around inaccessible shafts usually contain a range of material. Nevertheless, significant amounts of information can be gained from both stoped out adits and mullock heaps.

The following classifications which were used in mapping are based largely upon Dowling and Morrison (1988):-

Buck Quartz	This style of veining is the most common, particularly as float. The quartz is milky to vitreous and is not uncommonly iron stained. The commonly brecciated appearance is presumably due to "fractures, spider veinlets or stylolites that cut the buck quarts" (Dowling and Morrison, 1988). Visible gold may occasionally be see on fracture surfaces in this style of quartz, however, most samples are barren. Large reefs generally consist of buck quartz with local zones with sulphides or comb textures.

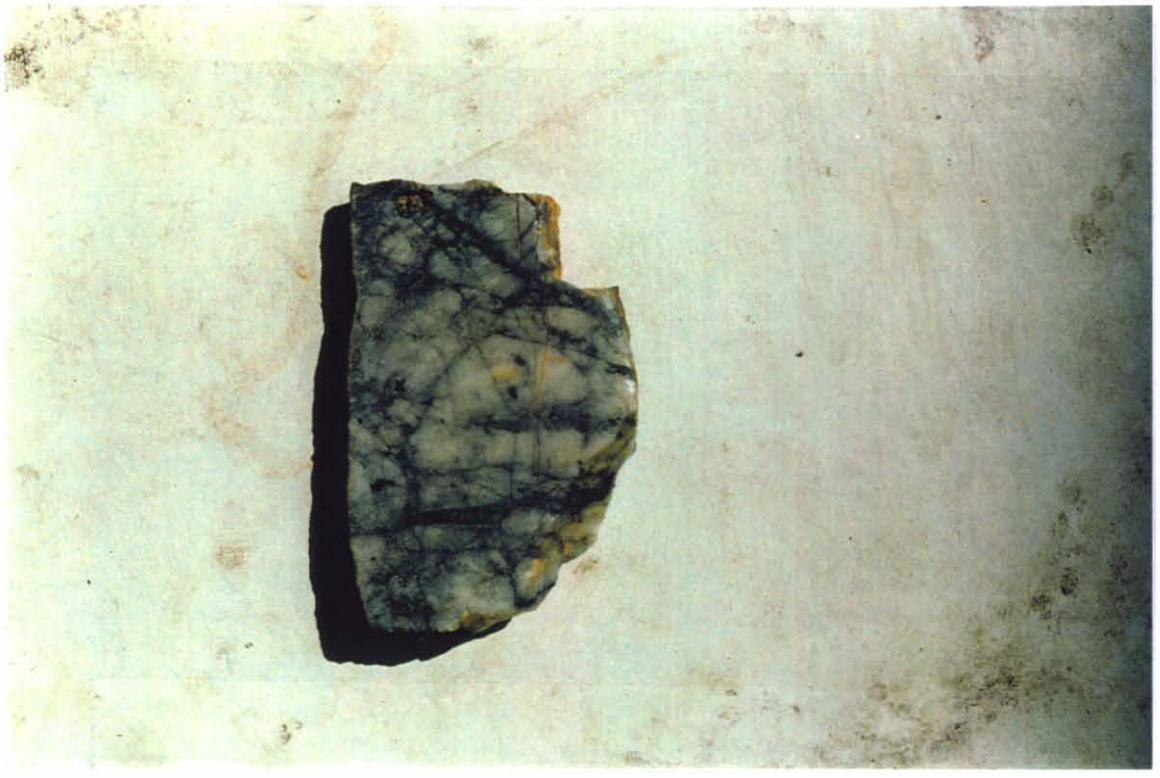


Plate 1 **Brecciated (Arsenopyritic) quartz.**
New Golden Gate Mullock, 20.0 g/t Au

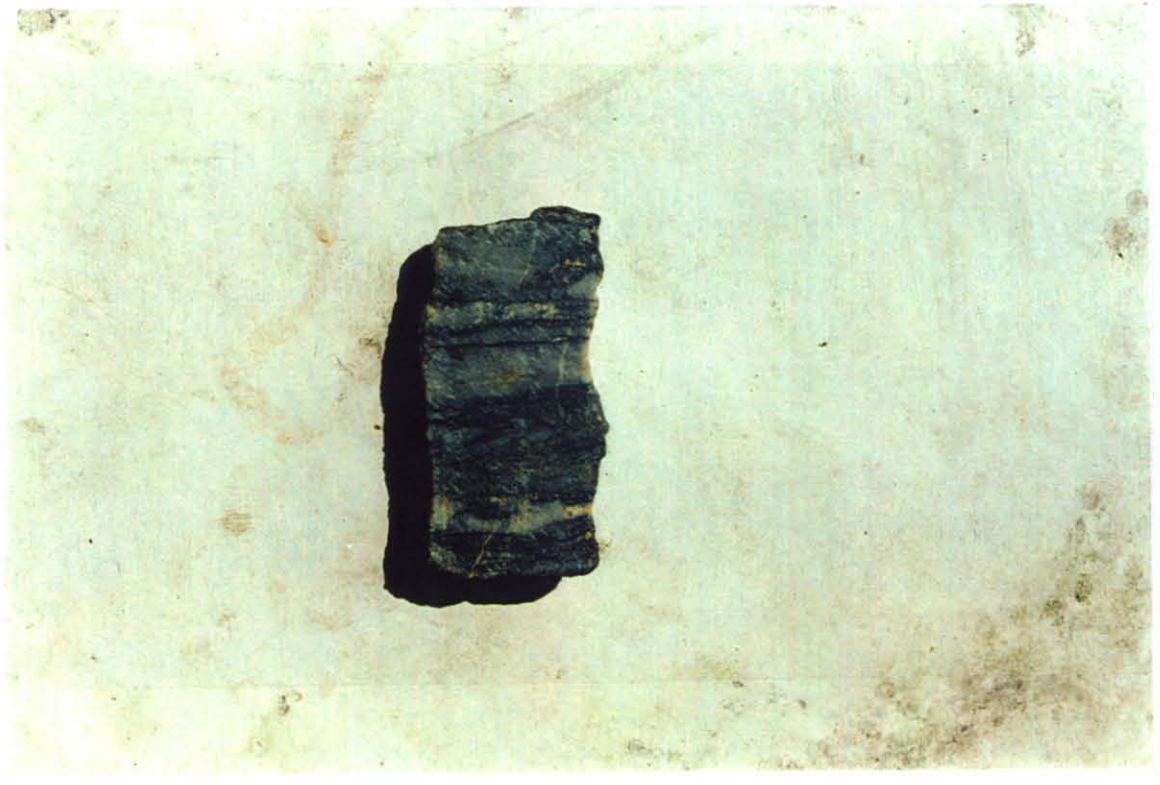


Plate 2 **Laminated (Arsenopyritic) quartz.**
Volunteer Consolidated Mullock, 64.3 g/t Au

Fibre Quartz	This style is very common in adits where it generally forms narrow (5 mm to 20 mm) 'leaders'. A number of instances of much broader fibre quartz veins are noted (eg part of Flat Reef in Jubilee No 2 and in the Miner's Dream incline shaft). Fibres are elongate and grow perpendicular to the vein wall. In the Mathinna area these veins are commonly sub parallel to the cleavage or alternatively cross cut the cleavage as extension veins. These veins can 'blow-out' into masses of bucky quartz. This style of veining is variably auriferous with the extension veins adjacent to auriferous reefs generally significantly auriferous themselves.
Laminated Quartz (Ribbon Quartz of Dowling and Morrison, 1988) (see Plate No 2)	This style of quartz is rare as float with samples from Mathinna area only observed on the Volunteer Consolidated mullock heap. The textures in this style are defined by "sub parallel but discontinuous ribbons of schistose wall rocks or other relatively insoluble (arsenopyrite) phases within quartz walls". (Dowling and Morrison, 1988) Arsenopyrite bearing laminated veins are almost invariably significantly auriferous and were the ore of a number of mines at Mathinna.
Brecciated Quartz (see Plate No 1)	Examples of this style of quartz were found on the New Golden Gatedump. In this style buck quartz is irregularly cross cut by fine arsenopyrite veinlets. It too was the ore of a number of Mathinna Mines.
Replacement Quartz (not used in the sense of Dowling and Morrison, 1988)	A number of examples of quartz veining of a distinctly stratiform nature can be seen in the Mathinna area (eg North Eldorado). A similar vein in the Buckland adit at Mangana can be seen to be formed by the pervasive silicification of a sandstone bed. Similar silicification of shales can be seen at Mathinna in the core of DDH GG 1 and GG 2.
'Lode Cap'	This term coined by the author refers to the often strongly ferruginous float commonly seen around surface workings on reefs. The rock has a pseudo-clastic texture defined by pale clots (2 mm to 15 mm) in a ferruginous matrix. This rock is the 'gossan' which forms over the outcropping quartz reefs.
Quartz Stockwork	This style of quartz veining is more common in the more coherent siltstone and sandstone units. Auriferous samples were collected in a number of localities, the most significant being the Chinamen's Hill sample.

Apart from the 'flat' and 'saddle' reefs discussed later, most auriferous quartz reefs in the Mathinna area are hosted within joints or fault zones which are referred to in the historical literature as 'reef channels'. These reef channels often have a sharply defined 'wall' on one side and a less sharply defined wall on the other. Although these faults may have considerable along strike continuity, the gold bearing shoots are often short with the rest of the 'reef channel' filled with barren bucky quartz and/or 'lode slate', puggy strongly sheared wall rock.

The longest reefs followed are the East Reef on the New Golden Gate (155 m) and Lower West Reef in the New Golden Gate - North Golden Gate mines (310 m). 'Ore shoots', are generally sub-vertical as shown by the long sections of stoping on the New Golden Gate mine. The City of Hobart mine worked a reef which was auriferous along strike for only 36 m but continued to a depth of 176 m, whilst average strike extent of reefing at the New Golden Gate mine was 50 m yet these reefs were worked individually vertically over 200 m.

The range of orientations of the major reefs at Mathinna have previously been described as random (Turner, 1972). The orientations of the major reefs/veins of the Mathinna field are shown in Figure 9 with the full data set for all vein orientations (including narrow leaders, extension, veins etc) for the Mathinna field (including data from the Jubilee area in EL 22/92).

Access to reefs and associated structures in the City of Hobart - Volunteer Consolidated area is limited, hence it is difficult to interpret the structural significance of these reefs. Access is much better to veins and reefs east of the City of Hobart.

Mapping in the Jubilee No 2 adit in EL 22/92 and the Horseshoe open stope (both within the "zone of close folding" Finucane, 1935) indicates that at least some reefing is conformable to folded bedding.

A similar conclusion may be drawn as to the gross relationship between bedding and veining in the Miner's Dream workings though the actual reef has been stoped out.

In the New Eldorado adit further north in this zone of close folding, the fold axis of the reef at the west end of the main cross cut is very similar to both the mapped fold axes of bedding and the fold axes of bedding apparent from stereoplots.
These reefs in this "zone of close folding" have a number of the characteristics of saddle reefs, particularly those described the interpretation of the genesis of the Victorian saddle reefs by Cox et al (1991). In their interpretation saddle reefs form where there is dilation of bedding on fold hinges or on parasitic folds. Saddle reefs are often associated with bedding-concordant high angle reverse faults where bedding is steep, or bedding-discordant reverse faults which propagate across bedding planes (Cox et al 1991).

Cox et al (1991) show that the constraints on the timing of mineralisation with regards to the regional deformation history is tight and go on to state the following:-*"Although much of the mineralisation developed late during regional deformation, some early bedding - concordant veins have formed early during folding, and may even pre date some fold growth. The initial development of saddle reefs and their associated bedding-concordant fault veins is clearly related to flexural slip during fold tightening. However the further development of many of these structures to produce enlarged saddles, neck reefs and associated bedding-discordant fault lodes has continued after folds have locked up and cleavage development had ceased.*

Major bedding discordant fault lodes, such as those of Ballarat East and the Castlemaine area, cut across folds and thus also have movement histories post-dating the major part of fold growth. The kinematics of the fault zones is consistent with their development accommodating further regional east west shortening as folds have begun to lock up. The structures of extension vein arrays associated with fault lodes are consistent with the large scale timing evidence".

The latter extension vein assays are described by Cox et al (1991) as tending to be sub-horizontal due to the sub-vertical orientation of the minimum stress (σ_3).

The sub-horizontal or folded reefs in the Jubilee No 2 adit and Horseshoe open stope are associated with sub-vertical extension veins with an average strike of 050° (TN) (see Figure 9). In the Horseshoe workings these extension veins have an ambiguous overprinting relationship with the bedding-conformable reef whilst in the Jubilee No 2 adit the extension veins appear to be either coeval with the partly bedding conformable Flat Reef or pre-date it (see Figures 6 and 23 to 26).

Although this would appear to be counter to the expected orientations of these extension vein assays this difference can be explained as follows:-

The formation of sub-horizontal reefs concordant to folded bedding requires both a horizontal principle stress (σ_1) regime directed perpendicular to the fold orientation and a sub-vertical minimum stress (σ_3). The first requirement is considered to remain satisfied throughout the formation of the sub-horizontal reefs and associated sub-vertical extension vein arrays, however the magnitude of the local minimum (σ_3) and intermediate (σ_2) may have been similar so that the opening of the extension veins perpendicular to a sub-horizontal north-north-west striking minimum stress may have been sufficient to increase the magnitude of the stress in this orientation so that it exceeded the magnitude of the intermediate stress and thus the orientations of the new minimum and intermediate stresses had effectively swapped. This flipping of (σ_3) and (σ_2) may have occurred more than once or in the opposite direction though this has not necessarily taken place.

It is clear that some tightening of folds continued after the formation of both the extension vein arrays and sub-horizontal reefs. Evidence for the former instance is the fact that some extension vein arrays are folded whilst evidence for the latter is seen in ptygmatically folded small veins common where sub-horizontal veins feather out in the Jubilee No 2 adit.

Cleavage formation was either coeval with, or postdated sub-horizontal reef formation as it deflects around these veins rather than being truncated by them.

The other major set of narrow veins apparent from mapping strike 330° TN (see Figure 9). These are sub-parallel to the cleavage, however, it is clear in a number of places that these veins are post cleavage and are just exploiting the existing cleavage elsewhere. In most instances, fibres in these veins are perpendicular to the vein orientation and thus extensional, however, in parts (eg in outcrop near Horseshoe) these veins have been formed as shear veins under a principle stress regime oblique to the vein orientation. The sense of movement on these veins is ambiguous.

This vein set can be seen to post date the earlier vein set associated with the sub-horizontal reefs.

Conclusion

From the above discussion it is clear that there were two distinct phases of deformation in the Mathinna area with each characterised by the orientation of the principal stress regime.

The earlier phase occurred under a principal stress regime striking 060° (TN) and saw the formation of the sub-horizontal and bedding conformable reefs and the sub-vertical extensional vein set striking 060°. Vein formation commenced whilst folding was still taking place. The later phase occurred under a principle stress regime which probably ranged from around 010° (TN) to 330° (TN) and possibly slightly further west. The second set of extensional veins formed under this regime as did the dextral wrench movements on the Main Slide shear zone.

Strategic sampling (channel and rock chip) of both vein sets indicates that both are auriferous as are the sub-horizontal or bedding-conformable veins at the Jubilee No 2 adit (Flat Reef), Horseshoe, Miner's Dream and New Eldorado.

This interpretation has significance for the "Zone of Close Folding" (Finucane, 1935) shown in Figure 17 as "Zone With Numerous Folds" which trends through the Jubilee area. Cox et al (1991) show that there are numerous examples of stacked reefs in the Victoria goldfields where reefs occupy similar structural settings.

There has been very little work done on interpreting the gold bearing structures in the Mathinna - Mangana area. R Findlay in Taheri (1992) argued that the reefs in the Mathinna - Dans Rivulet - Alberton part of the lineament formed in 'extensional jogs in a (north-north-west striking) dextral wrench system" and thus under a north-south principal compressive stress regime. In this model, "gold lodes pick out what may be interpreted as a Riedel shear pattern related to such faulting". This model which draws from the work by Threader (1967), would correspond to the later phase referred to above.

The most significant producer in the lineament was the New Golden Gate mine at Mathinna (250 000 oz @ 28 g/t Au). An attempt was made to determine which phase of mineralising/ deformation the formation of the New Golden Gate lodes could be attributed, however, mapping in the adit level of the mine did not find sufficient evidence to prove that the New Golden Gate lodes formed under this earlier phase of faulting and hence the dextral jog model of Findlay (in Taheri 1992) must still be considered as equally possible.

Mangana

Due to prioritisation of work on the Mathinna prospect, less attention was paid to geological mapping in the Mangana area, however the geology of EL 18/91 is described in considerable detail by Manzi (1995). Manzi's (1995) conclusions are reproduced here:-

"10.2 SUMMARY AND CONCLUSIONS

Based on geology, structural mapping, magnetic properties; petrological, EPR, and IC analyses; and sulphur and oxygen isotopes, the following conclusions are drawn for the Mangana district:

- The Lower Palaeozoic Mathinna Group of northeast Tasmania consists of a minimum thickness of 300m of fine-grained, thin-bedded, deep water turbidites in the Mangana area. Three main sedimentary associations are recognised; (1) mudstone facies, (2) sandstone facies and (3) mixed facies. No obvious marker horizons occur in the Mangana district.
- The sedimentary rocks at Mangana are tentatively correlated to the Siluro-Devonian Bellingham Formation on the basis of facies characteristics.
- Correlations exist between age and illite crystallinity within the Mathinna Group (Taylor, 1992); the Mangana IC values (0.26 -0.29° 2θ) suggest a Silurian age, which supports a correlation with the Bellingham Formation. The IC values indicate an anchizone metamorphic grade for the Mathinna Group rocks. Higher metamorphic grades are recognised in areas of mineralisation, implying hotter fluids upwelling along structures.
- Homogenous IC values from across the Mangana lodes suggest that no major stratigraphic discontinuity exists across the lodes and hence no large scale vertical throw. The discontinuities detected during mapping probably represent minor vertical displacements along reactivated wrench faults.
- Four main deformation events are recognised in the Mangana district. The Mangana area consists a close zone of NW-trending folds (F_1) with a well-developed axial plane cleavage (S_1). These folds are correlated to the Tabberabberan Orogeny of eastern Australia. D_2 is characterised by mesoscopic short wavelength folds (F_2) and a spaced zonal crenulation cleavage (S_2). These features are associated with NW-trending dextral wrench faults (D_2) which show reactivation as reverse dip-slip faults (D_3). The D_4 deformational event is characterised by ENE-trending dextral shears and metre-scale kinking which can be correlated to regional Mathinna Group kinking of Middle Carboniferous age (Goscombe and Findlay, 1989). D_4 structures offset D_2/D_3 structures and F_1 folds.
- Gold mineralisation is hosted in slates and sandstones of the mixed and mudstone facies, and is associated with D_2/D_3 faults which occur close to, or on the western limbs of F_1 anticlines. The main mineralised quartz veins are sub-parallel to fault planes and may be laterally extensive (up to 1.5km long).

- Three broad generations of quartz ± carbonate ± sulphide veins have been identified in the Mangana district. Typical vein textures associated with gold mineralisation include ribbon, coxcomb, breccia, and buck veins with gold grades between 0.51 - 0.01 ppm. Such textures are characteristic of Slate Belt gold deposits.
- Widespread carbonate wallrock alteration in the Mangana goldfield is characterised by Mg-rich siderite porphyroblasts, which are not associated with any particular vein set. High intensity zones of siderite alteration occur in areas of known or inferred faulting and mineralisation. The mapping of siderite alteration zones may be an effective exploration tool for gold exploration in the Mangana district.
- Electron paramagnetic resonance (EPR) on quartz veins from Mangana appears to differentiate between vein morphologies, with ladder veins exhibiting flattish EPR spectra and coxcomb veins showing typically stronger EPR responses.
- The Mangana quartz veins are weakly paramagnetic, with the exception of a single quartz carbonate vein; the paramagnetism for this vein is attributed to an undeformed euhedral state.
- The positive correlation between gold content and strong EPR signals noted by Van Moort and Russell (1987) for vein quartz in Tasmania is not reflected in the responses of the Mangana quartz veins. However, unlike the latter study, no veins with Au >0.2 ppm were analysed.
- The observed EPR signals were probably generated by the presence of impurities within the quartz crystal lattice, rather than the presence of gold. Such impurities are postulated to be associated with gold mineralisation and hence provide a correlation between gold and EPR responses. This study indicates that visible inclusions such as sericite within quartz may cause the EPR response attributed to lattice impurities.
- Detailed ground magnetics over the Mangana lodes identified the presence of one high amplitude anomaly which corresponds to subtle NNW-trending features in regional aeromagnetics.
- Low susceptibility differences between sandy and silty units (0.0003 SI), as well as the interbedded nature of sediments, indicates magnetic techniques are unable to characterise the Mangana lodes, and that the source of magnetic anomalies are not generated by susceptibility contrasts between lithologies (altered and unaltered).
- Mineralising fluids from the Mangana system are H_2O-CO_2 (CH_4)-rich, have low salinities, temperatures of formation between 250°C to 300°C, heavy oxygen isotopes (9 - 10‰) and sulphur isotopes (5.4 - 13.6‰). Based on all these characteristics the most likely fluid reservoir for Mangana system is a mixture of deep metamorphic waters and connate fluids derived from reduced Devonian seawater."

The author has no reason to dispute any of these conclusions except perhaps for the structural interpretations.

As noted work conducted in the Mathinna area suggests that there was an earlier phase of mineralisation associated with the D1 event which produced the north-north-west trending folds. Evidence for the role played by this mineralising event in EL 18/91 is equivocal.

In the Mangana area a significant proportion of veins in the walls to mined reefs have a similar orientation ie striking 060° - 240° TN, however, it is still equivocal as to whether the reefs formed at the same time as these tension veins.

Manzi's (1995) series of structural cross - sections show high angle reverse faults (direction of faulting should be reversed - R Keele pers comm) coincident with the Mangana Gold Reefs and Argyle-Golden Entrance Reefs but refers to this faulting as her D3 phase, post mineralisation.

This timing of reverse movement is based largely on the work by Keele (1994). Keele (1994) bases his relative timing of fault movements on somewhat equivocal evidence from only a few locations (eg Miami West).

Slickensides on reefs at Mangana record both sub-horizontal and subvertical movements.

In Findlay's dextral wrench fault model, the Mangana reefs would occupy the D shear position. A dextral (or sinistral) wrench model better explains the apparent subvertical nature of ore shoots, however, it less adequately explains the 060° - 240° striking extension veins seen in the walls to stoped out reefs.

Perhaps the only conclusion to be drawn is that more work needs to be done to resolve the role of the two models in controlling mineralisation in the Mangana area but that at this stage there is a strong possibility that the main reefs at Mangana formed in high angle reverse faults under a 060° - 240° principle compressive stress regime.

4.0 EXPLORATION PHILOSOPHY

Summary reports on historical gold mining in the north-east have stressed the generally shallow depths at which mining ceased with reasons generally cited as falling grades, pinching reefs etc. A notable exception to this is the New Golden Gate which was payable to a depth of 600 metres.

It is significant to note that the New Golden Gate was one of the few gold mines to use cyanidation to extract refractory gold.

It is considered that the shallow nature of mining in the Mathinna area is an artefact of the mining and/or metallurgical processes available at the time. Known reefs may continue at depth or undiscovered subcropping reefs may exist.

Initial reconnaissance work indicated the existence of sets of narrow sheeted veins in outcrop and old workings which may not have been sufficiently rich enough for early miners but which may prove economic using modern mining techniques.

It was concluded that outcropping or sub-cropping mineralisation in either narrow high grade reefs or broader sheeted vein sets should have a geochemical signature.

Priority was placed on locating such a shallow deposit amenable to open cut mining before money was committed to deeper diamond drilling of the more problematic high grade reef targets under old workings.

5.0 PREVIOUS EXPLORATION

The Mangana goldfields has seen two phases of exploration. The relatively intense earlier phase commenced in the second half of last century and continued to the early part of this century. This work was carried out by prospectors alone or in groups utilising the techniques of panning, loaming and dollying with sub surface information provided by adits and shafts. All gold deposits in the north-east were found in this phase using these techniques.

This early phase is well summarised in early government reporting by Montgomery (1894), Twelvetrees (1907) and Blake (1939). The best summaries are those of Bottrill (1992), McOnie (1983) and Newnham (1992), though in the authors experience a considerable amount of further detail, sometimes geologically relevant, may be found by systematically searching through the early copies of the "Examiner" newspaper.

The second modern phase is that which has taken place in the second phase of this century. In contrast to the first phase, this second phase has been generally sporadic and poorly focussed and has not resulted in the discovery of any gold deposits. All significant previous exploration in the Mangana area is included in Section 5.0 "Review of Previous Work: Alberton-Mangana Zone" in Newnham (1992). That comprehensive summary is presented as Appendix A.

Newcrest (Pearson, 1993) carried out some exploration over EL 22/92 in the 1992/93 year. That work consisted largely of regional stream (BLEG) geochemical sampling and reconnaissance rock and soil sampling, particularly in the Tower Hill Freehold - Golden Gully area at Mangana.

6.0 WORK CONDUCTED

6.1 Introduction

The major initial tools used in exploration at Mathinna and Mangana were gridded soil sampling, with low detection assaying for gold and arsenic, and the geological mapping of old workings.

Soil sampling was chosen as only parts of the Mathinna area have seen small soil surveys and in these gold was not analysed, whilst Mangana has seen no soil sampling surveys.

The Mathinna area contains a number of accessible adits, generally perpendicular to the strike of bedding and the dominant vein orientation. These adits provide a relatively uninterrupted cross-section of the structure of the host rocks and in a number of cases they also allow access to areas of previous mining ie stoping, winzes and rises etc so that the style of mineralisation and structural setting may be studied. Adits at Mangana generally follow the strike of reefs and so are less useful.

A number of adits were geochemically sampled with either rock chips or, when warranted, channel samples taken.

Both the soil sampling and geological mapping/sampling led to the definition of a number of anomalies. These were followed-up initially with infill soil sampling.

Following all of this work, those anomalies with the potential to overly mineralisation of a style amenable to open cut mining were drill tested. Due to prioritisation of work in the Mathinna area this was chosen to be the old Jubilee workings (within EL 22/92).

6.2 Historical Research

Prior to the commencement of fieldwork time was spent locating and studying the available data on the early mining activities in this area as well as the results of more modern exploration.

This work was aided by a number of excellent company compilations, namely Newnham (1992) "Review of Previous Exploration Information (for) Exploration Licences 22/92 and 23/92" for Newcrest and McOnie (1983) "A Review of the gold potential of north eastern Tasmania" for Goldfields Exploration as well as the government reports generated as part of NETGOLD initiative, namely Taheri (1992) "North East Goldfields: a summary of the Tower Hill, Mathinna and Dans Rivulet Goldfields" and Bottrill (1992) "The Mangana Goldfield and Adjacent Gold Mining Areas".

These compilations are all largely text with relatively few large scale maps and no small scale maps.

A number of the old government reports cited in their compilations contain quite detailed small scale maps of the old workings. Most of these, in addition to a number of old mine plans of variable quality and level of detail, are available in larger scale

format in the Mine Department's archives. The maps accompanying Finucane (1935), Twelvetrees (1906a, 1906b, 1970 and 1914), Montgomery (1892), Reid (1925) and Nye (1924) are most useful for the Mathinna field.

The best map(s) for each old working were copied and all relevant data from the reports of both old mining activities and modern exploration were compiled onto those. These maps served as the basis for later work, particularly adit mapping and the positioning of soil sampling grids. Figures 19 to 22 are the most relevant plans for the Mangana area.

In the Mathinna area these old plans have been reduced and shown on the 1:1000 and 1:10000 geological mapping in Figures 17 and 18.

6.3 Gridded Soil Sampling/Stream BLEGS

Gridded soil sampling was conducted over effectively all areas of known old workings at Mathinna within EL 22/92. Areas gridded and sampled are shown on the overlay to Figures 2 and 4.

The Chinamen's Hill area was targeted as it lies on or adjacent to the strike extensions of the major structural lineament which appears to control the location of mineralisation at the New Golden Gate mine. The area south east of Jubilee was targeted for the same reason.

In order to help constrain the gridded areas to the east and south-east of Mathinna, three stream BLEG samples were taken (locations shown on the overlay to Figure 2).

BLEG samples were analysed as follows:-

Active stream sediment was sieved through 2 mm mesh and the 2 kg sample bottle rolled for 24 hours. Apart from gold to 1 ppb, analysis was also conducted for As, Ag, Sb, Cu, Pb and Zn.

All grids have base lines professionally surveyed (by Hamilton Surveys, Bicheno) with baselines tied to AMG through State control. Wooden survey stakes were placed every 50 m with short star pickets driven into the ground (and protruding around 5 cm) every 200 m. Andrew Hamilton (pers. comm.) asked that verification surveys connecting the loose ends of base lines be carried out to round off any errors however, the accuracy is more than sufficient for this type of work.

A total of 14.4 km of baseline were surveyed at the Mathinna prospect with 8.2 km in EL 17/91 and 6.2 km in EL 22/92.

Baselines at Mathinna were surveyed AMG north-south with baselines orientated so that wing lines would be perpendicular to the dominant strike of significant mineralisation. Although sub east-west reefs are significant eg Volunteer Consolidated, most reefs, including the New Golden Gate reefs, are sub north-south striking at Mathinna.

Baselines were planned so that their AMG easting was a multiple of 100 m whilst wing lines were planned so that their northings were multiples of 100 ms (50 ms for infill wing lines). The coordinate system for sample location was thus set-up so that their coordinate is nominally AMG (minus the prefix). For example, sample location 6700N, 3500E is actually, nominally, the AMG point 5406700 mN, 573500 mE (adding prefix 540 to northings and 57 to eastings).

Surveying of baselines took place in October to December 1994.

Baselines at Mangana were surveyed at 339.70° AMG north, orientated so that wing lines would be perpendicular to the dominant strike of mineralisation which is fairly consistently north-north-west at Mangana. The grid coordinate system used at Mangana is shown in Figures 31 and 32. A total of 6.8 km of baseline were surveyed at Mangana with 3.9 km in EL 18/91 and 2.9 km in EL 22/92.

Soil sampling on both prospects was carried out by a team of up to 10 field assistants working in pairs.

An initial sample spacing of 50 m on 100 m spaced wing lines was chosen as optimal given target size requirements. Infill sampling on 100 m x 25 m and/or 50 m x 25 m was carried out in anomalous areas defined in the 100 m x 50 m sampling.

Sample locations on wing lines were measured using a polychain, suunto compass and clinometer with slope corrections for distance made in the field.

After removing surface litter each soil sample was taken either from shallow B-horizon (top 15 cm of soil) using a shovel or mattock, or augered to a depth of 0.5 m to 0.8 m or bedrock with a 4" manual soil auger (deeper B-horizon).

Soil samples were sieved on site through 2 mm sieves and a sample of nominally 1 kg taken. Sieving was made possible by the dry conditions in October to December 1994. Following heavy rains in late January some samples had to be submitted unsieved with sieving undertaken by the laboratory. Sample sites were marked with plastic pin markers.

Assaying was contracted to Minlab in Perth, WA. All samples were assayed for gold and arsenic. Gold analysis was by fire assay - AAS on a 50 g charge with a detection limit of 1 ppb whilst arsenic was analysed by perchloric acid digest - AAS with a detection limit of 10 ppm.

A further 291 soil samples were collected on 100 m x 25 m and 50 m x 25 m spacings in the Jubilee - Telegraph are to infill a zone of anomalism defined by the 100 m x 50 m sampling and a similar zone on the Chinamen's Hill prospect.

A total of 611 soil samples were taken in the EL 22/92 part of the Mangana prospect on the 100 m x 50 m grid. A further 17 infill samples were taken on 100 m x 25 m spacings.

6.4 Geological Mapping

Mathinna has previously been mapped to 1:6300 by Geophoto Resources Consultants (Turner, 1972) with prospect scale (1:750) mapping in the Jubilee and City of Hobart-Old Boys-Volunteer Consolidated areas (Turner, 1974). This mapping is of good quality with emphasis on surface structures.

Geological mapping conducted by Resolute Samantha Limited placed a strong emphasis on adit mapping. That mapping, in conjunction with mapping of road cuttings and other strategic outcrops is presented at 1:1000 scale for that part of the Jubilee-New Golden Gate-Golden Stairs trend in EL 22/92 (see Figure 18) as a compilation of all data at Mathinna at 1:10000.

Individual adits were mapped to varying degrees of detail. Adit sections prepared in this work are presented in Appendix B.

Considerable attention was paid to geological structures. Structural data is presented on stereoplots for each old working in Appendix B and is compiled onto Figures 7 to 10.

In most adits/old workings, representative rock chip samples were collected. 37 rocks were submitted for analysis with 34 of these analysed for a suite of elements other than gold and arsenic (Ag, Sb, Cu, Pb, Zn, Fe, Mn, Bi, W) with an additional three assayed for Au and As alone.

A number of samples which had been assayed were 'dollied' and there was shown to be a rough correlation between the amount of gold in the pan and assay results.

Based on this orientation work, later rock samples were 'dollied' and visually appraised. This was not done for cost saving but rather for the benefit of knowing very quickly if veins or reefs mapped that day were auriferous or sulphides.

6.5 Aeromagnetics Enhancement/Interpretation

In conjunction with exploration on adjacent ELs 26/94, 27/94 and 28/94, the newly acquired (Tas. Govt survey) aeromagnetic data was processed, enhanced and interpreted by John Ashley of Southern Geoscience Consultants in Perth, WA. His interpretative report is included as Appendix C. In addition, a full set of the slides of the enhanced images produced in this work has been lodged with Mineral Resources Tasmania. A list of those images is included in Appendix C.

In addition a 1:10000 Contour of Magnetic Intensity plan was prepared for the immediate Mathinna area (in Figure 16).

6.6 Channel Samples

134.55 m of channel sampling (100 samples) were taken from the Miami West and Jubilee No 2 adits using an electric pneumatic chipper with power provided by a generator. Sample locations in the Miami West adit are shown in Figure 15 whilst those from the Jubilee No 2 adit are shown in Figures 23 to 26.

116.55 m of sampling (88 samples) was conducted in the Jubilee No 2 adit with samples taken across both vein sets as well as the sub-horizontal Flat Reef.

The remaining 18.00 m (12 samples) of samples were taken from the Miami West adit across a set of sheeted veins.

6.7 Drilling

A total of 5 RC holes for 338 m were drilled on EL 22/92 using Diamond Drilling Tasmania's UDR 250. The attributes of each hole are listed in Table 1. One of these holes (MT 23B) was a redrill of MT 23 which was cancelled due to ground conditions.

Holes were sampled in the following way:-

At the time of drilling, a 4 m composite spiked (40 mm PVC pipe with tapered end) sample was collected and assayed for Au and As. Anomalous composites were subsequently riffle split over 1 m intervals and again assayed for Au and As.

All of the holes were targeted principally on the extensional vein set and sub-horizontal reefs channel sampled in the Jubilee No 2 adit.

The target model was stacked sub-horizontal high grade reefs with selvedges of auriferous extensional veins bulking up to form a deposit with tonnage/grade sufficient for open cut mining.

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Project MATHINNA/MANGANA.

DRILL HOLE SUMMARY

Tenement No. EL 22/92

Order No.	Prospect	Hole No.	Coordinates		Incl.	Azm. (TN)	Depth (m's)	Sample No.s		RL. m±	Date	Total Prog.	Comments
			North	East				From	To				
K09428	JUBILEE (MATHINNA)	MT17	4664	5060	-60	235	99	382501	382514	394			
K09432		"						381604	381612				
K09433		"						382569	382577				
K09429		MT22	4739	5028	-56	235	90	382515	382537	391			
K09432		"						381567	381574				
K09432		"						381580	381587				
—		MT23	4709	5056	-57.5	235	16	—	—	392			
K09430		MT23B	4708	5055	-55	235	58	382538	382550	392			
K09432		"						381575	381579				
K09433		"						381600	381603				
K09430		MT25	4776	5012	-56.5	235	75	382551	382568	381			
K09432		"						381588	381589				

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7.0 RESULTS

7.1 Historical Research

Historical research was used to define those old workings with both potential and which could be tested relatively easily. In the Mathinna area the old reports indicated that the old Jubilee and Volunteer workings had untested potential, whilst in the Mangana area the Buckland - Alpine workings were the most interesting. All of these areas of old workings were covered by gridded soil sampling.

A major conclusion drawn from the research was the relatively shallow depth of the old workings. The exception to this was the New Golden Gate mine at which cyanidation was used to extract gold. The lack of the use of cyanidation at other old workings may explain the belief that gold grades fell below the level of 'secondary enrichment'.

The other problem apparent from the historical research is the short strike extent of the gold shoots within reefs. These sub-vertical shoots may take the form of auriferous quartz within barren quartz or auriferous quartz within puggy or sheared 'lode slates' or 'reef channels'.

The other major point to come from the historical research was the generally narrow nature of the gold bearing reefs with widths less the 0.5m the norm.

7.2 Gridded Soil Sampling

As Figures 2 and 4 show gridded/ soil sampling areas in EL 22/92 lie on the edges of gridded/ sampled areas within ELs 17/91 ie Mathinna prospect and 18/91 Mangana prospect.

Soil sampling on gridded areas in EL 22/92 on the Mangana prospect gave generally disappointing results (see figure 32) with the Buckland - Alpine reefs having no soil geochemical signature.

Disappointing results were also obtained on parts of the Mathinna grid, notably the far south-western, south-eastern and Volunteer areas.

A significant anomaly was defined on the Chinamen's' Hill grid, along strike from more coherent anomalism in the EL 17/91 part of the same grid and in a structurally favourable location. It corresponds partly to the small and low grade Golden Horseshoe workings.

The most significant soil geochemical anomalism was located in the area immediately to the south-west of the Jubilee workings and to a lesser degree around the Jubilee workings themselves.

The latter anomaly is due to the known Jubilee reefs however, the former, which extends in a somewhat broken fashion in a north-north-westerly direction into EL 17/91, has a strike length of 0.75 km in EL 22/91 and corresponds to only minor old workings. Significantly it corresponds to a faulted (?) major anticline interpreted from mapping. This anomaly is known as the Telegraph-Jubilee South West zone.

7.3 Geological Mapping/ Rock Sampling

This section is intended principally to present the location and results of geological (structural) mapping as well as rock sample location/ results. The overall interpretation of this mapping presented in section 3.3.

Appendix B contains all adit maps and stereoplots for work done in EL 22/92. As noted, most of this work was done in the Mathinna area.

Some initial rock sampling was undertaken in the Mathinna prospect in order to differentiate gold bearing styles of quartz samples were taken from mullock heaps around old workings. Results were generally low with best results 3.95, 1.29 and 0.30 g/t Au from the October workings on the west side of Dan's Rivulet; 1.63, 0.47 and 0.29 g/t Au from the Telegraph shaft dump; and 1.04, 0.62 and 0.45 from the mullock at the mouth of the Jubilee No.1 and No. 2 adits.

Three samples of a narrow (<20 mm) vein stoped out in the end of the Jubilee No.3 adit assayed 75.1, 53.5 and 9.8 g/t Au with As to 4340 ppm.

Three samples of basal Permian conglomerate from Buckland Hill were assayed with best result 0.25 g/t Au suggesting that the idea that some of Major's gully's alluvial gold was sourced from these conglomerates is not unreasonable.

Considerably more rock sampling was undertaken on the EL 17/91 part of the Mathinna prospect with results extrapolated to represent EL 22/92 examples.

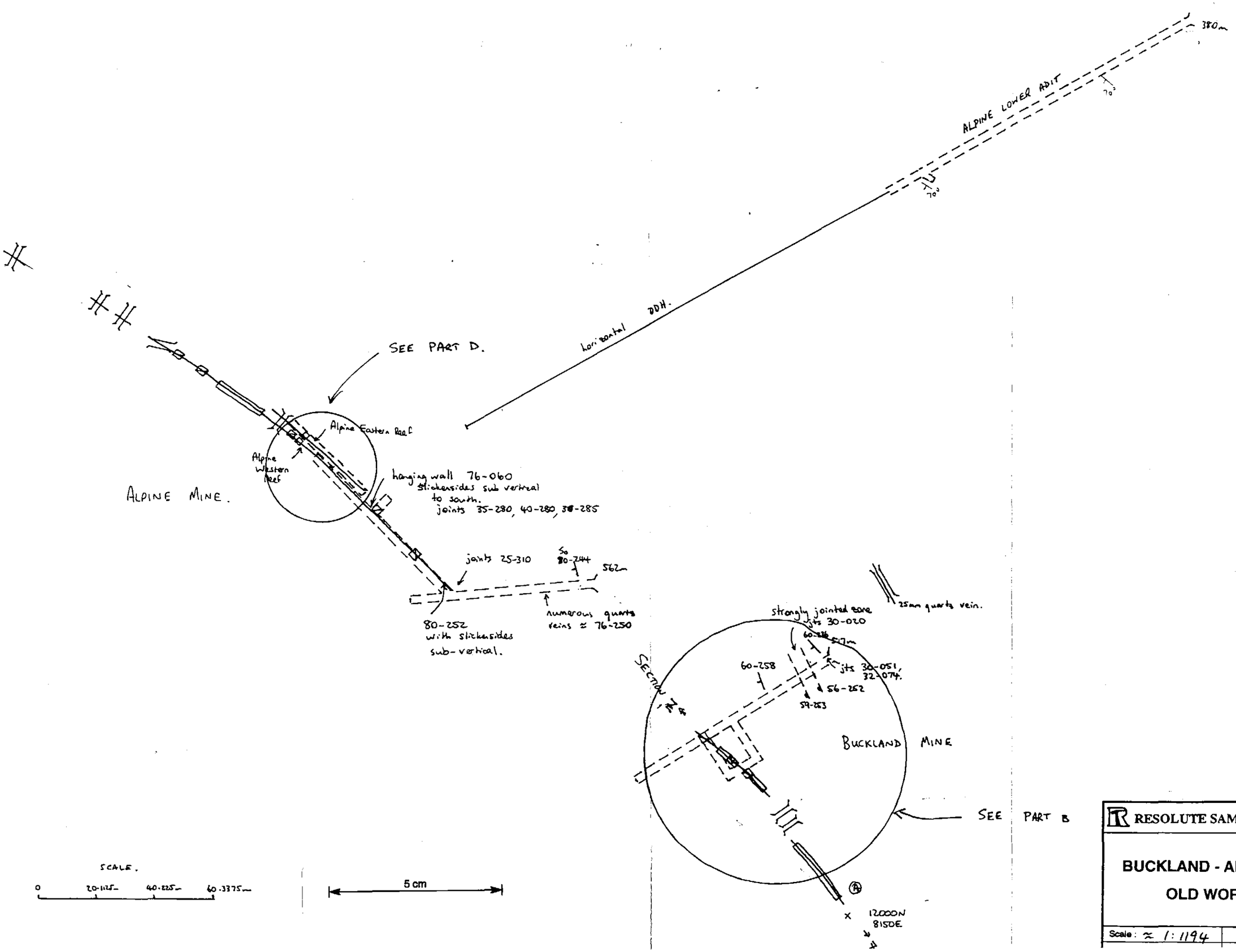
7.4 Aeromagnetics/ Enhancement/ Interpretation

Those parts of John Ashley's aeromagnetic interpretation of the aeromagnetics which cover the Mathinna and Mangana prospects are shown as overlays to figures 3 and 5 with the interpretation for all of EL 22/92 in appendix C.

Significant structures are:-

- Along strike continuity of major north-north-west trending structures F4, F5, F6, F7 and F10.
- 'Vague' north-south faults (T1, T2, T3) on the western edge of the Dan's Rivulet
- Continuity of Main Slide (?) dextral F13 fault south into EL 2/92
- North-north-east trending dextral faults (T5 & T6) in Tower Hill area and further south (T7 & T8) off same structure (F6)
- Inferred magnetic dykes in Tower Hill area
- Tertiary volcanics (?) on east side of EL

710649



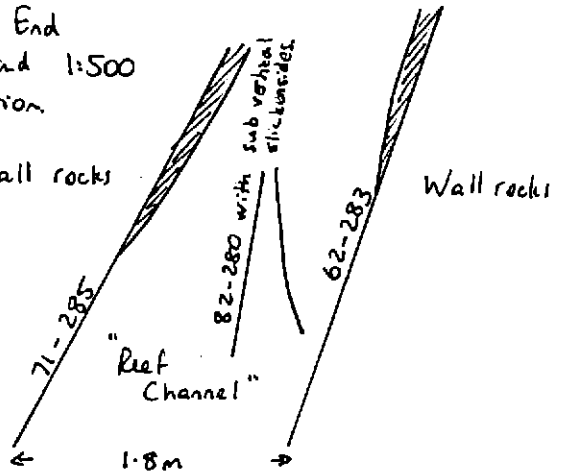
RESOLUTE SAMANTHA LIMITED

BUCKLAND - ALPINE MINES

OLD WORKINGS

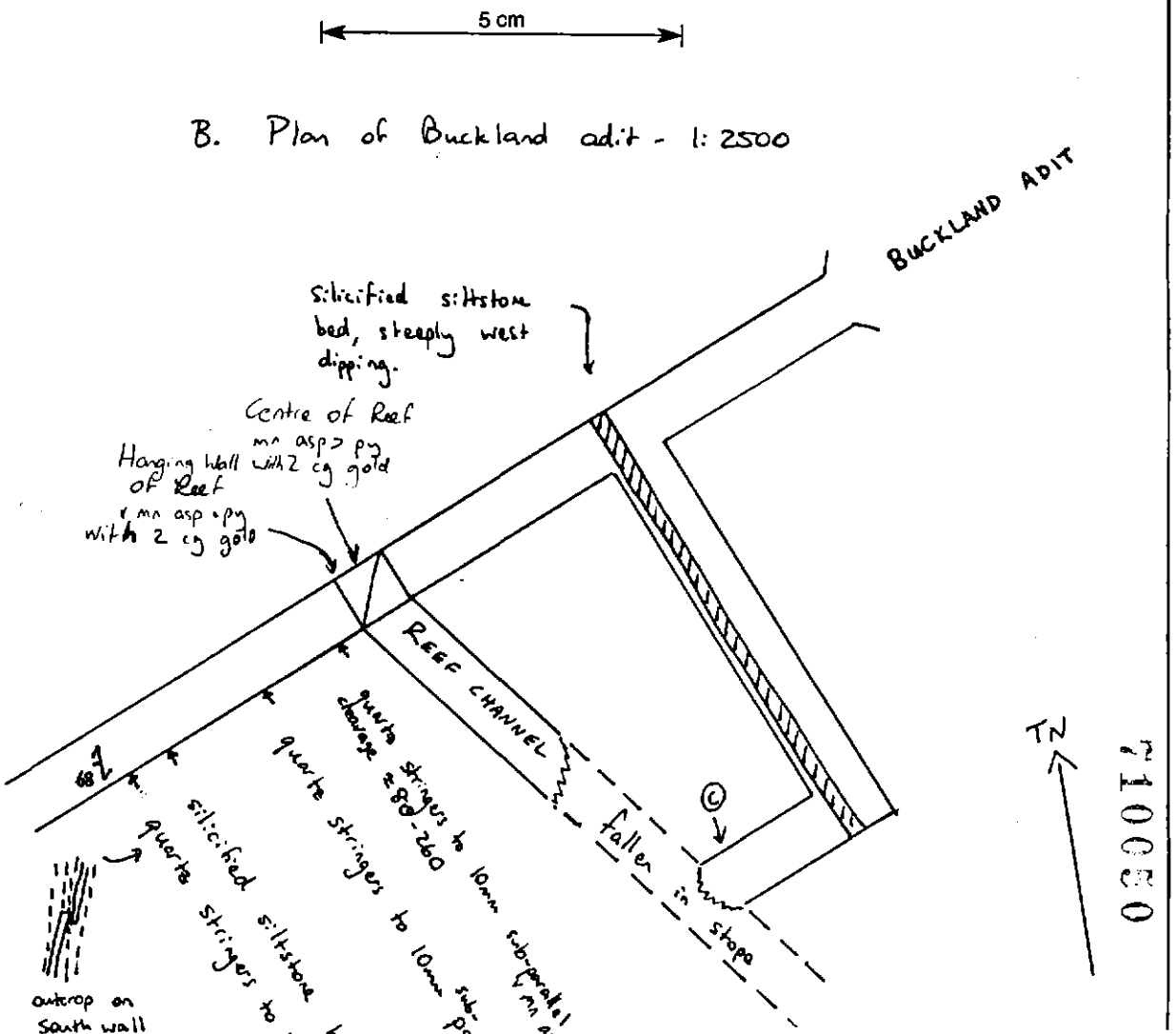
Scale: ≈ 1:1194

A. South End Buckland 1:500 - Section

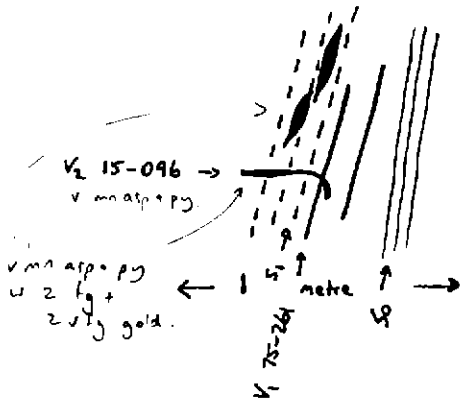


Open stope at south end of Buckland workings - reversed to appear as looking north.

B. Plan of Buckland adit - 1: 2500



C. Schematic section (See location on B) →



'Assays' refer to amount / size of gold in dollied and panned samples.

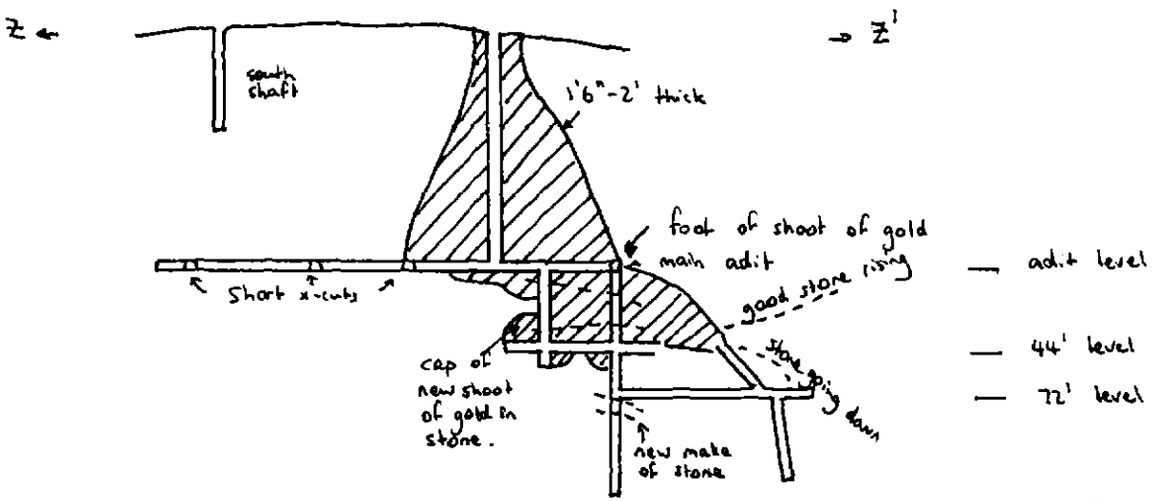
RESOLUTE SAMANTHA LIMITED

BUCKLAND - MINE ADIT LEVEL

SAMPLE LOCATIONS AND STRUCTURES

Scale :	
Date :	FIGURE 12

BUCKLAND MINE
SECTION Z-Z'



5 cm

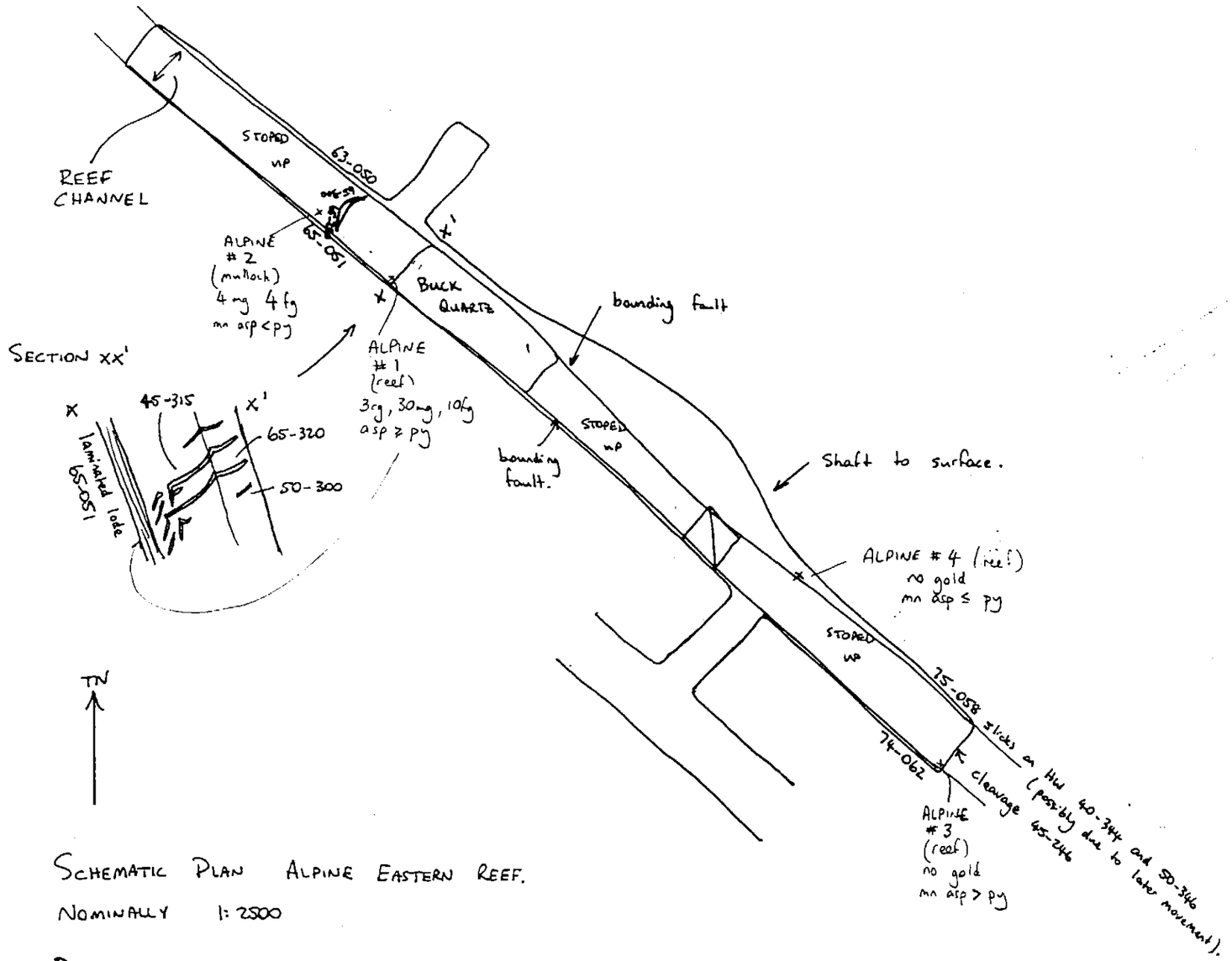
RESOLUTE SAMANTHA LIMITED

BUCKLAND MINE
LONG SECTION

Scale : ≈1:1194	
Date :	FIGURE 13

T1005?

710052



SCHEMATIC PLAN ALPINE EASTERN REEF.
NOMINALLY 1:2500

PART D.

'Assays' refer to amount/size of gold in dollied and panned samples.

5 cm

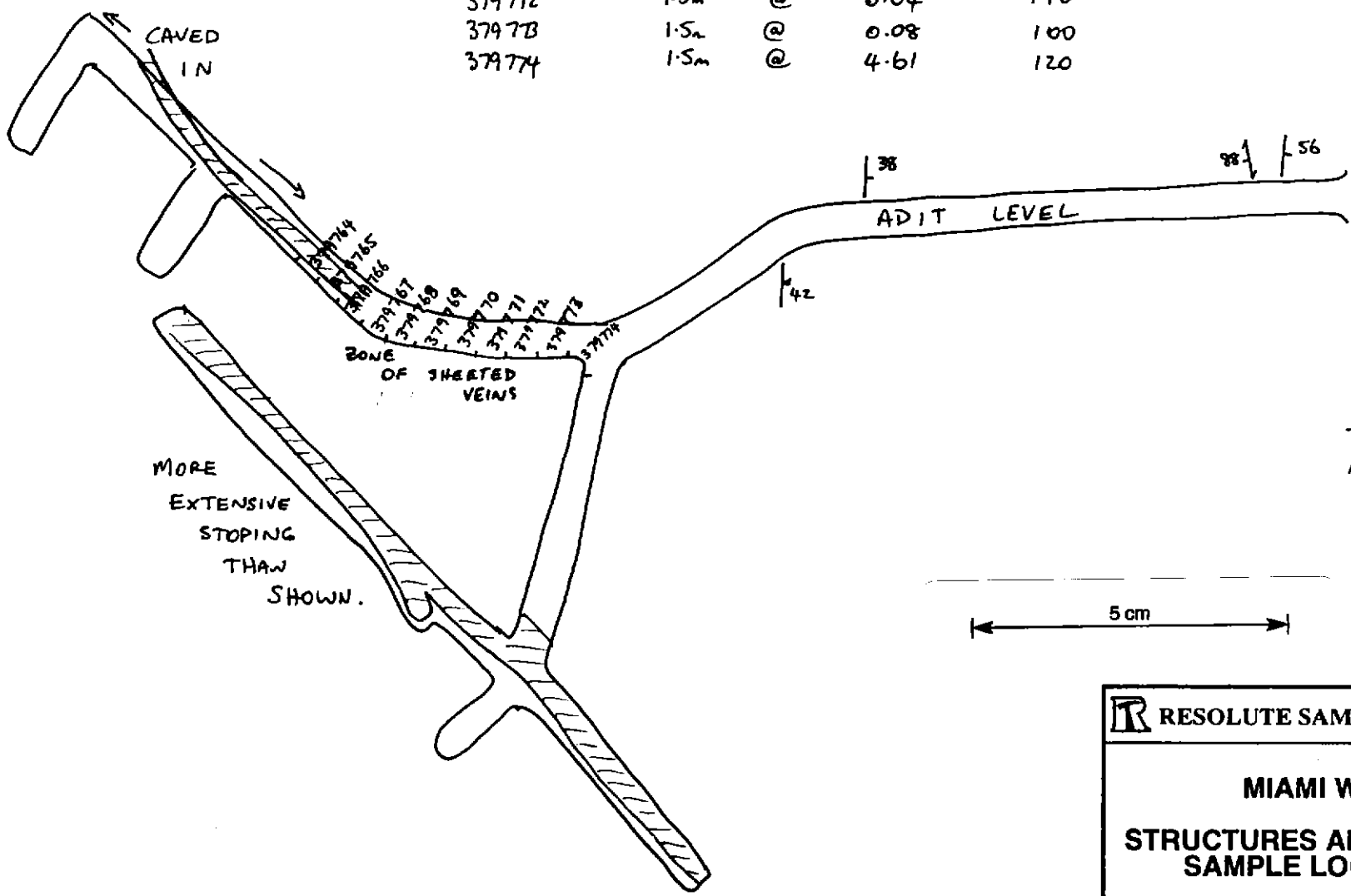
RESOLUTE SAMANTHA LIMITED

ALPINE MINE ADIT LEVELS

SAMPLE LOCATIONS AND STRUCTURES

Scale: 1:2500	
Date:	FIGURE 14

Sample №	Width	@	Au (g/t)	As (ppm)
379764	1.5m	@	0.11	410
379765	1.5m	@	0.45	60
379766	1.5m	@	0.04	30
379767	1.5m	@	0.03	20
379768	1.5m	@	0.02	50
379769	1.5m	@	0.05	80
379770	1.5m	@	0.11	80
379771	1.5m	@	0.08	50
379772	1.5m	@	0.04	140
379773	1.5m	@	0.08	100
379774	1.5m	@	4.61	120



RESOLUTE SAMANTHA LIMITED

MIAMI WEST

STRUCTURES AND CHANNEL SAMPLE LOCATIONS

Scale: 1:300

Date

FIGURE 15

110053

7.5 Channel Sampling

Results of channel sampling in the Jubilee No.2 adit are shown in figures 23 to 26.

Best results were:-

- 8.5m @ 2.57 g/t Au
- 6.8m @ 2.90 g/t Au
- 0.9m @ 8.89 g/t Au

Particularly encouraging was the anomalous value obtained by channel samples over relatively broadly spaced extension veins (both sets ie 060° and 330°TN) in the footwall and hangingwall to the Flat Reef.

Similar sampling in the Miami West adit was more disappointing with best results 1.5 m @ 4.61 g/t Au not supported by other samples.

7.6 Drilling

Problems were encountered with drilling on the Jubilee prospect. The slope of the hill made tracks and drill pads sufficient for the UDR650 too costly and so a bombardier mounted UDR250 with bombardier mounted/ towed compressor was used. This rig had problems with both water and jammed rods hence the redrill of MT 23 and the shortened depths of MTs 23B and 25 (both planned for 90 m).

Drilling results were essentially disappointing although they do appear to show that there is potential for stacked sub-horizontal reefs in the "zone of numerous folds". Both MT 22 and MT 25 intersected two reefs separated by 30 m to 35 m vertical. MT 23B was not drilled deep enough whilst in MT 17 the upper reef appears to have largely feathered out.

The major disappointment was the lack of lower grade extension vein hosted mineralisation between the two reefs.

MT 23B intersected old workings between ≈ 43.5 m and 46.5 m. The exact location of these old workings could not be precisely located, however, they appear to be underneath mullock in the eastern most stoping of the No 3 adit.

Best results are summarised in Table 2. All results are 1 m riffle split samples except below 90 m in MT 17 which is BQ drill core.

Table 2 - Best Results from RC Drilling, Mathinna (Jubilee)

Hole No	From	To	Metres @ g/t Au
MT 17	91m	95m	4m @ 0.85
MT 22	35m	36m	1m @ 4.95
	38m	39m	1m @ 1.36
MT 23B	47m	52m	5m @ 1.42
MT 25	14m	20m	6m @ 1.91

8.0 CONCLUSIONS

Exploration to date has focused on the Mathinna and to a lesser degree Mangana areas and has been carried out largely in conjunction with work on ELs 17/91 and 18/91.

Although the drill testing of anomalous samples/ old workings in the area of the old Jubilee workings has not defined an economically viable resource it appears to have confirmed the validity of the stacked 'saddle-reef' model in the "zone of numerous folds". The most obvious target is the Telegraph - Jubilee West zone which consists of strong Au soil anomalism associated with a faulted (?) major anticline.

Very little attention has been paid to the Dan's Rivulet area with its favourable interpreted structures. The anomalous soil geochemistry associated with the Golden Horseshoe workings should be costeaned and/ or drilled.

Little attention was paid to the Tower Hill field or the Great Fingal - Miami area. Similarly the Tower Hill Freehold - Golden Gully received little attention. These areas should be tested with soil geochemical programmes particularly in areas of favourable interpreted structures.

The old Buckland - Alpine workings also warrant drill testing at depth. Alternatively tributers may be allowed access to one or more of these areas should a mutually favourable deal be possible.

The potential of EL 22/92 has not been fully tested by this and previous years exploration.

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APPENDIX A

Review of Previous Work. Alberton - Mangana Zone.
- L A Newnham

5 REVIEW OF PREVIOUS WORK: ALBERTON-MANGANA ZONE

5.1 Historical Exploration and Development:

Gold was discovered at Mangana in 1852, and as exploration logically extended to the North, further discoveries were made, eventuating in the definition of four significant and distinct zones of mineralisation:

- Lyndhurst to Mangana
- Lisle
- Lefroy
- Beaconsfield

By the 1880's, significant gold mines were operating on all four fields. In the Lyndhurst-Mangana zone, activity was concentrated on the southern section between Mangana and Alberton within a 70 x 5 km belt of deformed turbiditic sediments.

Exploration was intense in this corridor. The classical target was narrow, high grade sulfidic quartz veins. It was recognised at an early stage that these veins were structurally controlled and occurred in a range of orientations and forms within zones of shearing and tectonic deformation.

In these early days, economic grades were 20-30 g/t gold, and cut-off grades 15 g/t.

Recorded production in the Alberton-Mangana area was dominated by the New Golden Gate Mine. The top 10 producers were:

New Golden Gate	254,000 oz	Mathinna
City of Hobart	22,000	
Tasmania Consolidated	11,000	
Volunteer	3,000	
Volunteer Consolidated	2,000	
Ringarooma Gold Mining	9,000	Alberton
Mt. Victoria	5,000	
New River	5,000	
Mercury	2,000	
Golden Entrance	3,000	Mangana

Several of these individual operations were probably working the same orebody, or extensions of nearby deposits, for example, the Tasmania Consolidated reefs were the northern extensions of the New Golden Gate reefs, and the Argyle Mine the southern extension of the Golden Entrance Mine.

A full listing of mine production and mine dimensions appears as Appendix 4. Principal mines are clustered into four districts or "goldfields":

- Alberton
- Dans Rivulet
- Mathinna
- Mangana

Dans Rivulet may simply be a southern extension of the Alberton field, with a belt of younger (post mineralisation) rocks on Mount Victoria artificially dividing the field.

The division of the belt into three or four sub-goldfields, combined with the apparent westerly offset of the Mangana field may be due to important regional structural factors which will be discussed further below.

Significant mine production continued till about 1920. The generally rugged nature of the country allowed easy mine access by either shafts or adits. Typical vein features throughout the belt were:

width	0.1-1.0	up to 5 m
length	10-100m	up to 350m
depth	<100m	up to 580m
grade	15-30g/t	cut off 15g/t
strike variable,	NW to NE dominant	
dip typically steep	70 to 80^0	
mineralisation	quartz, pyrite, arsenopyrite, minor galena, chalcopyrite, sphalerite.	

Individual veins often existed in "lode formations", which tended to be wider structural features carrying several narrower but parallel quartz veins. The fragmented sediments and clays in these formations typically carried low gold grades and the quartz veins were selectively mined.

Outside these formations the host shales and sandstones carry virtually no gold (<0.01g/t)

Several early mills were constructed, principally at Mathinna, Mangana and Alberton. Generally these were simple stamp and gravity mills which recovered most of the coarse free gold, but gold closely associated with sulfides was lost. The New Golden Gate mill experimented with cyanide extraction treatment of their sulfides with limited success.

Initial early exploration was by stream sediment panning, closely followed by widespread pitting, trenching, shallow shaft sinking and adit development. Grades and prospectivity of quartz veins was determined with the dolly pot and test crushings of small parcels of quartz vein material in the numerous small stamp batteries in the district.

Interestingly some prospecting is still undertaken on the field today using these traditional methods.

An important but not unexpected feature of this area is that many of the quartz veins never outcropped, and were only discovered during underground development aimed at other veins. This was conspicuously the case at the New Golden Gate Mine.

By 1920, all significant production and exploration had ceased. Apart from small scale prospecting, the field essentially lay dormant until about 1960.

During this 40 year interval, the Department of Mines attempted to

stimulate activity by completing drilling programs at the Long Struggle, Krushka, Prendergast, O'Briens and New Golden Gate Mines. Drilling results at the Long Struggle (Alberton) and O'Briens (Dans Rivulet) mines were encouraging by contemporary standards, but were not sufficiently so at the time of drilling.

5.2 Contemporary Exploration and Mine Development:

Commencing in the late 1950s the field has been subjected to a mosaic of exploration and mine development programs which have generated much knowledge and information, but little gold. This work is reviewed chronologically below and on a district basis in the succeeding section 6.

5.2.1 E.Z. Company - 1959:

(Ref. Appendix 1/4,5)

In 1959, E.Z. completed an aeromagnetic - EM survey over a large section of North East Tasmania.

Instrumentation and altitude control problems were experienced during the survey, which was undertaken with a fluxgate magnetometer and dual frequency EM equipment. Magnetic results were generally flat, and EM responses were attributed to water filled shear zones.

A number of anomalies were defined in the Fingal-Alberton area and several were ground checked. No detailed follow-up work eventuated.

5.2.2 Geophoto Resource Consultants - 1969-74:

(Ref. Appendix 1/6-13 and 15-22)

Geophoto held EL 6/68 for six years to facilitate major exploration programs for a range of commodities and targets in North East Tasmania.

The south west corner of the 1050 sq. kilometre licence covered the Mathinna-Mangana area.

Regional Studies

Initial work was of a regional nature over the whole licence area and included airborne scintillometer surveys, stream sediment sampling programs and broad geological reviews (1/6,7,8).

They concluded that folding and deformation was more intense in the major mineralised areas and decided to continue exploration for gold in the Mathinna-Mangana area, initially using a regional fracture analysis to highlight areas and to follow these up with gold-arsenic geochemical surveys and geophysical programs in major shear zones.

They also decided to test for alluvial gold in the Mathinna area.

For various reasons, Geophoto had technical difficulties with their fracture analysis study, but eventually produced some useful data (1/8,11). In addition to quantifying major structural features they also attempted to define placer channels beneath Cainozoic cover.

They concluded (on the basis of fracture analysis) that the gold zone was dominated by a primary NW trend overprinted by a later NE trending direction, and proposed that mineralisation was located where NE tension zones cross the NW trend (Fig. 3)

This general structural concept has received independent support from later workers studying local and regional structure in NE Tasmania.

Outside the main Mangana-Mathinna area, Geophoto also highlighted the potential of the Golden Ridge area NNE of Mathinna, which currently lies just outside the Newcrest tenements within E.L. 58/88 (1/10,21). They mapped the area and took 57 soil samples which were assayed for Cu, Pb, Zn, Ag. No further work was undertaken. This area was again highlighted by Billiton in 1991 (see below)

In 1972, Geophoto reduced their Licence to 56 sq. kilometres around Mathinna and directed further work at both detailed ground surveys over several former mines and an evaluation of alluvials in the region.

Detailed Primary Gold Programs (Mathinna Area)

Ground surveys were concentrated on grids established over the Jubilee-Mountaineer area and the City of Hobart- Chester and Murray-Old Boys-Volunteer area to the South and West of the New Golden Gate Mine respectively (see Figure 11 for general location).

These two areas were selected because of their structural setting. The Jubilee-Mountaineer area lay within the "zone of close folding" which ran immediately west of the New Golden Gate and was regarded as an important genetic factor in the development of that deposit(s).

The City of Hobart-Volunteer area lay immediately west of this zone, arguably in a deformed region associated with the "zone of close folding" which would correspond to the New Golden Gate position on the east side of the zone.

The Jubilee Mine also attracted attention because it is one of the few mines in the district interpreted as having been developed on saddle reef stratabound type veins.

Geophoto mapped their whole E.L. at 1:6,300 scale and the specific grid areas at 1:750.

On the **Jubilee Grid**, they experimented with various geophysical techniques including I.P. (dipole-dipole) and VLF. Whilst these methods defined fault zones, Geophoto doubted (quite correctly) their ability to locate concealed mineralised veins.

The grid was soil sampled and assayed for Cu, Ni, Co, Pb, Zn, Ag, As, Mn, Sb, Hg. The As:Cu ratio was considered a useful pathfinder for Au. The logic of this was not explained and must be questioned.

Two trenches dug over the strongest geophysical anomalies were mapped and sampled in detail. Few quartz veins were exposed and assays were disappointing.

Apart from mapping, the City of Hobart-Volunteer Grid was soil sampled, with discouraging results.

Following this grid work, Geophoto concluded:

- structure is important in the genesis and formation of the lodes.
- geophysical methods were of limited value.
- geochemical soil sampling was useful but limited.
- drilling was the best exploration method.

However, they undertook no drilling in their exploration for primary gold deposits.

Alluvial Exploration: (Ref. 1/15, 17, 19-22)

Geophoto had an alluvial search objective of a minimum 0.8Mm^3 of 3g/t Au (seems high?)

They tested alluvial deposits in Black Horse Gully and Long Gully Creek which drain north from Mathinna into the South Esk River, and in the Dans Rivulet north of Mathinna.

They also undertook limited auger sampling of the New Golden Gate tailings.

In **Black Horse Gully**, west of Mathinna, sampling in 1906 by Twelvetrees had indicated 600,000m^3 of 750 mg/m^3.

Geophoto initially took 104 samples from five lines of backhoe pits. Two of these lines indicated a possible 100,000m^3 of 500mg/m^3.

Following a further 94 holes on five lines, they concluded the results were highly erratic with most gold in the bottom 0.5m.

In **Long Gully Creek**, two lines of pits were completed but results were poor.

Following several lines of seismic profiling in the lower **Dans Rivulet** valley, seven backhoe pits and 18 cable drill holes on three lines

were completed along Claytons and Mathinna Falls Road and north of Mathinna Falls road. Difficulty was experienced with water inflows. The alluvium was up to five metres thick and the best grade was 500mg/m^3.

Because their minimum target resource was not apparent in any of the above three areas, no further alluvial exploration was conducted.

5.2.3 **Una-Hinemoa Syndicate 1973-75:** (Alberton and Dans Rivulet)

References 1/14, 23

Special Prospecting Licence 107 was held by a local syndicate over the Strickland, Una, Hinemoa Mines in the North end of the Dans Rivulet goldfield from 1973-75. (These mines straddle the boundary of E.L. 23/92).

They were inspected by representatives of Geopeko (1973) and Mt. Lyell (1975) as potential joint venture partners.

On both occasions, narrow cleavage parallel quartz veins exposed in shallow adits and pits were sampled. Values range from 2-45g/t Au but no further work was undertaken and the tenement was relinquished.

This style of cursory examination and sampling generally adds little to the understanding of geology or potential of these vein systems.

5.2.4 **Stannon Engineering Co. Pty. Limited 1975-76 (Alberton):** References 1/24,25.

This Company (of which little is known) held E.L.'s 6/76, 7/76, 8/76 over the Alberton gold field from 1975-76.

Their interests centred on the main Ringarooma Mine and the adjacent Mercury Mine.

Apart from lengthy dissertations, based on historical data, on the virtues and benefits to be had from drilling, re-opening and developing these two mines, their reports contribute little to knowledge or exploration of the area.

5.2.5 **Amdex Mining Limited 1980 (Alberton):**

Reference 1/31

Amdex Mining Limited and Kibuka Mines Pty. Limited briefly explored E.L. 7/80 of seven sq. kilometres over the main Alberton mines

under an agreement with a local syndicate.

They regarded the Alberton lodes as emplaced by selective replacement of sheared country rock in a linear shear zone of either strike slip or wrench faulting.

Some samples were taken from the Hannah Tunnel on the Ringarooma Mine and the Long Struggle adit.

Results were low grade and no further work was undertaken.

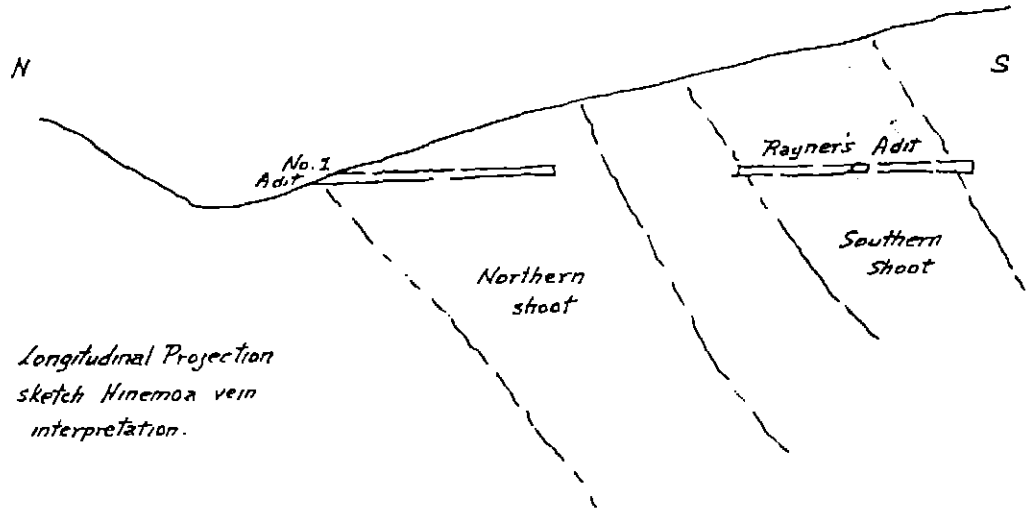
5.2.6 **Sturts Meadows Prospecting Syndicate 1980 (Dans Rivulet area):**

Reference 1/29

This syndicate held E.L. 31/76 over the whole Dans Rivulet gold field, and field work was undertaken by A.C. Howe Australia Pty. Limited.

Most of the area lies outside the Newcrest tenements with the exception of the Hinemoa and Una Mines.

Sturts Meadows thought the **Hinemoa Mine** was developed along a single vein system for 250m by way of three adits and a series of trenches. Two 'ore-shoots' were developed along this north-south vein, each shoot with a strike length of 50-60m, width 0.25m, dip 75^0N, plunge South. The northern shoot was developed in No. 1 adit and the Southern shoot in Rayner's adit.



Longitudinal Projection sketch Hinemoa vein interpretation.

At the **Una Mine**, five adits were interpreted as having been driven into a major shear zone consisting of a number of parallel (?) lodes. The syndicate considered this to be a strong structural NNW trending zone 550m long and 75m wide, which warranted further investigation.

At Una forest reserve area but may be worth a look.

In the event, no further work was undertaken in this area.

5.2.7 **Mineral Holdings Australia Pty. Limited 1980-81 (Dans Rivulet):**

(Reference 1/41)

E.L. 3/80 covered all the Dans Rivulet area and was taken up when Sturts Meadows relinquished E.L. 31/76 (above).

Selective samples were taken from known workings, including the Una and Hinemoa, but the results and consequences of this work are of limited value.

5.2.8 **Tasminex N.L., 1978-82 (Mathinna-Mangana Area):**

Reference 1/26,27,28,30,39,40,44,46.

Tasminex held E.L. 17/78 over the Mathinna-Mangana area for a four year period from 1978-82.

Their principal objectives were:

- Explore for alluvial gold deposits
- Explore for primary gold deposits
- Retreatment of tailings

Alluvial gold exploration:

Tasminex's minimum alluvial target was $0.5Mm^3$ at $500mg/m^3$ Au.

They concentrated sampling on Black Horse Gully, Long Gully Creek at Mathinna, Dans Rivulet north of Mathinna, and Richardsons Creek and tributaries north of Mangana.

Initially samples were taken with a backhoe and concentrated on site with a pan to give 50-300g pan concentrate samples.

The method used to reduce a backhoe sized sample to a pan concentrate is not made clear in their reports.

Pan concentrates were grain counted and assayed.

In total 1026 samples were collected from 15 lines on Black Horse Gully and Long Gully Creek, four lines at Mangana, and 16 pits in Dans Rivulet. Sample lines were generally 300m apart, with sample points every 25m.

Of the 317 samples assayed, 169 contained detectable gold. Considerable problems were encountered in reconciling assays with pan

concentrate grain counts.

At Mathinna the alluvials were generally 2-3m thick, at Mangana in excess of 6m, and at Dans Rivulet in excess of 4m.

In contrast with earlier Geophoto sampling, Tasminex found most of their gold at Black Horse Gully near the tops of holes, not the bottoms.

Because of perceived discrepancies with assays, further sampling was undertaken by passing bulk samples (10-160m^3) through a small pilot plant equipped with screens and jigs. Nine samples from Mathinna and four from Mangana were processed in this manner.

Mathinna grades were in the 20-460mg/m^3 range and Mangana (Majors Gully) 70-270mg/m^3.

Volumes were estimated as less than the minimum target and no further alluvial testing was undertaken.

Primary Gold Exploration;

Tasminex explored the Mathinna-Mangana area for primary gold deposits.

Initially they undertook both orientation stream sediment surveys to establish effective district parameters, and compiled available data on known deposits.

Minus 80 mesh active sediments were collected and assayed for Cu, Pb, Zn, As. As a result of this work, Pb and As were considered good pathfinders for mineralised quartz veins.

Forty seven mines were located within the E.L., and sampled. Of the 691 samples taken, 219 were in-situ vein samples and 472 quartz veined dump samples. Samples were crushed and only those with visible gold were assayed. (This whole exercise seems rather pointless).

They evaluated a range of geophysical methods as a way of prioritising these mine targets, but concluded that all available methods were likely to be ineffective in locating the anticipated reef targets sought.

A detailed study of the **New Golden Gate-Tasmania Consolidated Mines** was undertaken, including a thorough analysis of the structural controls on mineralisation.

They concluded:

i) reefs were developed in a folded zone east of a major shear zone, equivalent to the 'slide' or 'zone of close folding' of earlier workers.

ii) gold grades were influenced by changes in strike and dip of the reef.

iii) scope existed for the reefs to extend North at depth.

Based on these conclusions, they proposed a program of four cored holes to test the northern extension of the East Reef and the depth extension of the West Reef beneath the Caledonian Mine.

It was also proposed that the East and West Reefs could be further tested by extending the previous drilled Department of Mines No. 3 hole.

Tasminex identified several other mines within their E.L. which warranted drilling.

At the **Jubilee Mine**, the Flat, Derby and Lyons Reefs were interpreted as part of the same reef transposed by folding along a SSE plunging axis (ie) a disrupted saddle reef. Last production was from the 79m level where 18 tonnes ore averaged 45g/t Au. Tasminex proposed one hole to test the southern extension of this lode.

At the **City of Hobart Mine**, the reef varied in dip around the vertical and was thought to have been displaced by a fault at the 174m level.

The **Miners Dream Mine** was close spaced sampled but results were disappointing.

Tasminex proposed one hole under each of the above two mines.

They regarded the reefs at Mangana to be more strike persistent than at Mathinna. They identified the **Argyle Mine**, which is a SE extension of the Golden Entrance Mine, as warranting investigation.

The main Argyle reef was developed by three adits - the No. 1S, No. 2S, and No. 2N. Production between 1900-1905 was 2400oz. from 604 tonnes ore at an average 124g/t.

Tasminex sampled the No. 1S adit (Figure 12). The vein averaged 0.5m wide and samples averaged 31g/t. They re-opened the lower No. 2S adit for 38m and all eight samples taken from across a 0-2.0m wide sulfidic quartz reef zone were <0.3g/t Au. This is not surprising because the south plunging reef in the No. 1S Adit would be present in the 80m of No. 2S Adit which was not re-opened. They recommended one drill hole to test this reef.

Despite all the recommendations for drilling by Tasminex in the Mathinna-Mangana area, no drilling was undertaken (or at least reported). They appear to have rapidly lost interest in the primary gold potential of the region and turned their remaining attention to tailings retreatment opportunities.

Tailings Retreatment:

Tasminex completed various resource definition and metallurgical studies on a number of tailings dumps in the Mathinna-Mangana area, concentrating on the New Golden Gate tailings.

They decided at an early stage to pursue a heap-leach treatment route. Their resource estimate of the New Golden Gate at 265,000 tonnes 1.5g/t compares with 323,000 tonnes by the Department of Mines in 1948.

Other dams in the district were estimated at:

City of Hobart	6000t	0.43g/t
Mangana Reefs	9000t	0.82
Volunteer	4000t	0.65
Twilight	2000t	2.38
City of Melbourne	1000t	2.07

The total district was therefore about 300,000 tonnes of 1-2g/t material.

Tasminex concluded that the primary, alluvial, and tailings retreatment potential of the area was unattractive and withdrew from the region.

5.2.9 **Australian Anglo American Corporation 1981-82** (South Esk River):

References 1/32-35,37,38,42,43,45.

Anglo identified the South Esk river flats between Fingal and Mathinna as representing a large volume alluvial target containing gold shed from the extensively eroded Mathinna and Dans Rivulet goldfields. (Fig 3)

Initially they attempted to define paleochannels using ground magnetics. This was unsuccessful so drilling commenced in 1981 using a Gemco 210B rotary rig. They acknowledged that this rig was unsatisfactory for anything other than quantifying alluvial volumes (ie) depth to bedrock. However, samples were collected, screened to -20 mesh and panned to a 10-30g concentrate.

In this first program, 47 holes were completed on nine lines on 400 metre centres.

Potentially large volumes of alluvials were indicated in two sedimentary regimes north of Beauty Flat Road:

- lacustrine environment
- fluvial channels on west side of valley.

A second program of 233 holes totalling 2526m was completed on 80m centres along lines 800m apart north of Beauty Flat Road using an RC rig. Samples were deslimed, cradled and panned. This program indicated the alluvials were generally <8m thick and low grade.

A third program of detailed drilling was completed in the Marshalls Flat area where alluvials were up to 14m thick but averaged six metres. Spot values up to 1305mg/m^3 were obtained, with some holes in the 200-500mg/m^3 range. However block grades were generally <100mg/m^3.

Some cable tool drilling was then undertaken north and south of Beauty Flats Road to check the validity of RC sampling.

Cable results were generally 50% of RC results.

Anglo concluded that the most promising area was on Marshalls Flat where alluvials were 6-8m thick and 1-2Mm^3 at 50mg/m^3 were indicated.

This resource did not meet minimum target sizes, so the project was abandoned.

Prior to relinquishing the E.L., Anglo undertook some stream sediment sampling over outcrop areas in the N.E. and W of the licence

area. Orientation studies indicated the -20+40 mesh fraction was best. They then collected 201 samples which were assayed for Cu, Pb, Zn, As, Au.

Au and As anomalies were outlined in the Miami-Mullers-Little Hospital Creek area, which may all be attributed to the scattered small scale mining operations at the Daylight-Great Fingal Mines.

Follow up work was cursory and the E.L. was relinquished.

5.2.10 **Oceania Tasmania Pty Limited 1984-88** (Alberton):

References 1/47,48,54,57,58,63

Oceania held the principal mines of the Alberton district under E.L. 23/82 from 1984-88. Their search objectives were extensions to the lode deposits of the Long Struggle, Mercury and Ringarooma Mines, and to a lesser extent, the alluvials in the Dorset and New Rivers.

They regarded the main primary deposits as occurring in the west limb of a regional N-S anticline which had been deformed and broken by a period of later NE trending cross-folding. Mineralisation was considered strongest where the cross-folding deformation was greatest.

Oceania re-opened the main adits of the above three mines. In the Ringarooma and Mercury Mines they described main vein formations as being 1-1.5m wide, with lode formations 10-20m apart. The ground between the formations is unmineralised.

Apart from clearing out adits, Oceania appears to have done little other work during the currency of the Licence. They experimented in a relatively crude fashion with EM as a means of locating concealed quartz veins. However the results and usefulness of this work is questionable.

In 1987, Renison Goldfields Consolidated Limited was exploring for gold over the north half of the Lyndhurst-Mangana zone. As part of this work, they received permission from Oceania to map and sample the principal workings on the Alberton Field. The results of this work are reviewed in 5.2.11 below.

When Oceania relinquished E.L. 23/82, they acquired three 100 hectare Mining Leases over the main workings to enable them to continue working in the area. These leases are current, and some minor underground exploratory work is in progress.

5.2.11 Renison Goldfields Consolidated 1986-87 (Alberton Area)

Reference 1/59,60,73.

In 1982, RGC commenced a detailed review of all known gold deposits in NE Tasmania (Appendix 12). They produced a comprehensive deposit data base (1/73) for the whole Alberton-Mangana zone. The data base was essentially reproduced and upgraded in the Alberton area for this report (Appendix 5) and used extensively by the Department of Mines for their Mathinna and Mangana reports (Appendices 5,7).

This regional review led RGC to acquire E.L. 17/86 over the northern half of the Lyndhurst-Mangana zone from Branxholm to Dans Rivulet.

Most of the former mines in this zone were located and where accessible, mapped and sampled.

RGC's target was bulk mineable quartz vein stockwork mineralisation. It was rapidly concluded that stockworks adjacent to major veins, or high concentrations of major veins did not exist in their E.L. area.

The Alberton field (held by Oceania) was identified as being the most prospective area for the target model and Oceania gave permission for RGC to map and sample their E.L. 23/82. Fig 10 of the Alberton Field is largely based on the RGC work.

RGC concluded the Alberton mines occurred in a narrow NNW zone of tight folding. Stockwork vein systems were unlikely, but areas of close spaced major veins were possible.

All accessible workings were mapped and sampled in detail. At the Mt. Victoria Mine, an 18m quartz vein stringer zone from 166-184m assayed 2.52 g/t. This zone was apparently evident in the lower two adits but not in the upper adit. It appears to cross-cut bedding and cleavage and may represent fault or fissure in-filling.

They reviewed at length the results of the 1933 Department of Mines underground drilling on the Long Struggle Mine, and concluded:

- Hole 1 intersected 2.5m (horizontal) 15g/t Au representing the northern extension of the Long Struggle Reef which had split into three bedding parallel quartz reefs within an overall reef formation 2.5m wide.
- 33m E of this reef, Hole 1 intersected an extension of the Caxton No 1 Reef which assayed 3.6g/t over 0.6m.
- Hole No 2 was drilled parallel to anticipated reefs.
- Hole No 3 was prematurely abandoned.

RGC withdrew from all exploration activities in N.E. Tasmania in 1987 because of other priorities.

5.2.12 Epoch 1985 (Mathinna)

Reference 1/52

When Tasminex withdrew from the Mathinna area, Epoch Minerals Exploration N.L. acquired E.L. 35/81 with a view to retreating the New Golden Gate tailings.

They thoroughly reviewed all past testwork on the tailings and concluded that whilst the insitu grade was approximately 1.5g/t, various cyanidation extraction routes would recover considerably less than that:

- heap leaching: 0.55g/t recovered
- agitated leaching: 0.75
- grinding followed by agitated leaching 0.85

Epoch was discouraged by these results and decided not to proceed with further studies. They entered into an agreement with Alex White to take over the tenements.

5.2.13 K.A. White 1983-90: (Mathinna-Mangana Area)

(Reference 1/49,51,56,61,65,66,69,77)

E.L. 55/83 has essentially been explored by Alex White for eight years under various names and joint venture: as K.A. White, then Tasmanian Alluvials, then Alcaston Mining N.L., then Pegasus Gold Australia Limited.

Work has been directed at:

- alluvials at Mangana and Mathinna
- tailings and dump retreatment
- primary gold

Alluvials:

White concentrated on testing alluvials in three areas:

- Majors Gully north of Mangana
- Black Horse Gully west of Mathinna
- South Esk River flats north of Mathinna

In 1984, 17 backhoe holes were completed in **Majors Gully.** Results were encouraging but were not followed up until 1985 when a number of trenches and pits were dug and the 800m^3 bulk samples obtained were processed through an on-site pilot plant. The alluvials

averaged 2.7m thick over widths of 55m.

A resource of 300,000m^3 of 307mg/m^3 was estimated, and most of the gold was present in the lower gravel layer.

In 1987, E.L. 55/83 was transferred to Alcaston Mining N.L., who estimated the Tower Rivulet and tributaries (including Majors Gully) contained a possible 7.4Mm^3 of alluvials.

A production processing plant was constructed but subsequent results were disappointing. The plant has not operated now for several years.

The remaining resource in Majors Gully is estimated at 250,000m^3 300mg/m^3.

At **Black Horse Gully** in 1986, three costeans were dug for bulk samples, and 16 excavator holes were dug to establish wash: overburden ratios.

The bulk samples were each approximately 750m^3 and were processed through Alex White's pilot plant at Lisle.

Results were:

Costean 1 (Dunn St) 240mg/m^3
Costean 2 (Upper Esk Road) 160mg/m^3
Costean 3 (Black Horse Gully) 270mg/m^3

A resource estimate was 750,000m^3, including 500,000m^3 of greater than 240mg/m^3.

Average wash depth was 2-3m, and the overburden: wash ratio was in the range 1:1-1:5.

Some limited testing of alluvials on the **South Esk River flats** was apparently undertaken in 1987 in the Midson's Flats area, which is upstream of the areas tested by Anglo in 1981. The target was a large volume of dredgeable material close to where Black Horse Gully and Long Gully Creek join the South Esk River

The work appears to have been limited (possibly by landowners) and no results are reported.

Tailings and Dump Retreatment:

White acquired rights to the New Golden Gate tailings from Epoch. He has recently received government permission to cyanide heap leach the tailings and has established some plant on site. Problems were experienced in 1991 with local sheep graziers down stream, however the problems were not attributed to White and the issue has been resolved.

It is believed no actual retreatment has yet taken place.

In 1985, tailings dams were sampled at several former mines in the district:

Mangana Reef	1.6g/t
Fingal Reef	1.4
Union Reef	2.59

No estimates of tonnages were made.

The Mangana Reef tailings grade is double that obtained by Tasminex.

Primary Gold:

Primary gold exploration on E.L. 55/83 has been concentrated in the New Golden Gate, Tower Hill and Argyle Mine areas, eventuating in drilling programs on the latter two areas.

In 1985, a detailed review of the geology of the whole E.L. was undertaken (Ref. 1/49) and the main conclusions were:

- the NE and NNE quartz reefs were fissure fillings resulting from dextral rotation on a NW-SE shear couple.
- EW (or NE) reefs tend to have longer strike lengths than NW (bedding and cleavage conformable) ones.
- dextral movement on the NW goldfield lineament is conjugate to sinistral movement on the parallel Tamar Fracture System.
- quartz veins were either fault bound (New Golden Gate) or stratabound (Horseshoe, Jubilee, Eldorado, Oldboys, Tower Hill).
- there were two phases of gold mineralisation; an earlier one accompanying sulfides and a later one as discrete gold.
- scope for strataform or saddle reef deposits is limited.

A rather unique and interesting interpretation was placed on the reefs at the New Golden Gate which were interpreted as forming within two main lode channels:

- a 30m wide eastern channel carrying Loanes and Main Reefs.
- a 33m wide western channel carrying central and Western Reefs.
- near surface, these formations consisted of stringer mineralisation and it was only in No. 1 and No. 2 Levels did discrete reef structures develop (it is interesting to rethink the importance of the stringer zone in the lower levels of the Victoria Mine at Alberton in this context).

It was suggested that these two wide lode channels or formations continued northward towards the North Golden Gate Mine.

Tower Hill was interpreted (as by all previous workers) as a 30m wide quartzite unit, approximately 250m long, carrying numerous narrow quartz veins with a random orientation.

The exploration target at this stage was low grade open cut gold mineralisation and the geological studies highlighted three possibilities:

- northern extensions of the two main New Golden Gate shear zones.
- Tower Hill north of Mangana
- Golden Entrance/Argyle Mine at Mangana.

Further work on these areas was apparently not undertaken until 1988 when Alcaston took control of exploration. Under their direction, the following programs were undertaken:

- structural analysis of the Mangana-Mathinna area using satellite imagery.
- sampling and drilling the Golden Entrance/Argyle Mine.

The **structural analysis** work indicated fold structures developed adjacent to both sides of a major structural zone encompassed most of the Mathinna and Mangana deposits.

Cleavage trends around Mangana show a deviation from the regional NNW-NW trend.

This structural analysis was largely repetitive of a number of previous studies and predictably the conclusions were similar.

At the **Argyle Mine** (Fig. 12) Alcaston took 38 chip samples from accessible workings and completed eight percussion holes.

Results of the chip samples were disappointing when compared with the results of the 1981 Tasminex sampling whose samples from No. 1 South adit averaged 31g/t from a reef structure averaging 0.44m wide. Of the 38 Alcaston samples, 21 were <0.1gt and 13 were in the 0.1-0.76g/t range. In the No. 1 South adit, two samples assayed 10g/t and 9g/t whilst in the No. 2 South adit, two samples assayed 4.9g/t and 3.1g/t.

Eight percussion holes totalling 245m were drilled. Logs and sections appear as Appendix 8. It was not clear from reports whether this drilling was open hole percussion or reverse circulation. Samples were collected through a cyclone and sub sampled with a spear. Whilst quartz veins were common, Au and As results were disappointing, with the best result in hole AA7 which intersected 8m 0.18g/t Au just below No. 2 South adit, with the highest assay being 1m 0.33g/t.

The effectiveness of this drilling program must be questioned (Fig. 12). Two of the holes were well west of the reef formation; one hole appears to have tested an adjacent reef to the west at a shallow depth; a further two holes penetrated the Argyle Reef 40m above the upper most workings and two further holes tested the Reef immediately beneath the No. 1 South adit. Only AA7 tested below No. 2 South.

In general, this program could not be regarded as a good test of the depth potential of this long, high grade reef formation.

In 1989, Alcaston entered into a joint venture with Pegasus to continue exploring E.L. 55/83. Pegasus concentrated their initial work on two projects:

- reassessment of previously flown Government aeromagnetics
- evaluation of the quartz veined sandstone units at Tower Hill.

Aeromagnetic data acquired by government as part of their NETGOLD project was reprocessed. It was concluded firstly that there may be some correlation between magnetic lows and gold mineralisation and secondly that carefully controlled magnetic surveys may be able to define quartz vein concentrations and thereby distinguish between mineralised and unmineralised ground.

It was therefore decided in 1990 to refly the area with a high resolution helicopter borne aeromagnetic survey. An interpretation of this data suggested structural trends within the Mathinna Beds may be expressed by subtle, systematic magnetic variations.

At **Tower Hill**, the quartz veined sandstone unit was gridded, mapped, chip sampled, soil sampled and covered with ground magnetic survey (Fig. 12).

Mapping defined two vertical, sub-parallel sandstone beds trending NW and separated and enclosed by slates. Quartz veins in the sandstones generally trend NE.

68 composite rock chip samples were taken from the high density quartz veined areas and assayed for Au, As, Pb; 17 of these samples, including 16 from dumps, assayed > 0.1g/t Au.

Soil samples were taken along grid lines with a hand auger; Pb values were low and Au, As values were patchy and generally low.

Ground magnetic data was spikey but the Mathinna Beds demonstrated relatively uniform magnetic properties. Some gross NW and NE trends were indicated. Magnetic lows existed over the Sunbeam and Tower Hill mines.

To follow up perceived anomalous zones, 13 RC holes were completed at Tower Hill in 1990 (Fig. 12). Logs and sections are attached

(appendix 9). Numerous quartz veins were intersected, some carrying pyrite, arsenopyrite and minor chalcopyrite.

Gold results in the four holes around the Tower Hill Mine were very low.

The best results were obtained in holes TH10 and TH11. These two holes were 50m apart and drilled NW beneath the Sunbeam Mine. Considerable variation was encountered between the original fire/AAS assays and the screen fire assay repeats. This is not unexpected in the Alberton-Mangana region where coarse gold presents assay problems.

TH10	Au (g/t)	Au (screen-fire)	As (p.p.m.)
11-12	0.2	0.20	70
12-13	0.35	0.43	70
13-14	0.81	2.08	85
14-15	0.28	2.26	9
TH11			
33-34	1.79	4.28	1300
34-35	0.63	0.74	3000
35-36	4.54	4.03	4700

It is possible these two intersections were on the same NE trending vein. Adjacent holes TH12 and TH13 were drilled at right angles to TH10 and TH11 (ie) parallel to this possible vein, and their low values suggest they missed the vein.

It is instructive to note the significant width of the As geochemical halo around the intersections in TH10 and TH11 (see logs). This is a useful exploration tool in this region and is commented upon further, later in this report.

At the conclusion of this work, Pegasus and Alcaston appear to have withdrawn from the area and the E.L. relinquished.

Alex White has subsequently applied for E.L. 17/91 and E.L. 18/91 over the Mathinna and Mangana areas respectively.

5.2.14 Mineral Holdings 1989: (Dans Rivulet Area)

Reference 1/67

In 1989, Mineral Holdings tested the alluvials on Rosedale Flat for cassiterite which was indicated by two previously drilled Department of Mines holes.

The Department's holes were drilled primarily to test the theory that the Dans Rivulet represented the northern continuation of the main Mathinna shear zone.

The existence of cassiterite in sludge from one of these holes is regarded as highly suspicious.

However, Mineral Holdings completed 12 churn drill holes and one excavator pit. No cassiterite was found and only very minor gold recorded in several of the churn drill holes.

The area was relinquished.

5.2.15 **Cominex 1989-90: (West Tower Hill area)**

Reference 1/71,76

Cominex is a family company operated by Hugh Nolan. In 1989, it held E.L. 55/88 on the west flank of Tower Hill.

Interest in this area, which lies to the west and outside the main Alberton-Mangana gold zone, was generated by the recent discovery of several narrow quartz veins by local prospectors Wallis and Roddam.

Nolan decided to take advantage of the presence of the aircraft completing the 1989 government aeromagnetic survey of the Alberton-Mangana area, and had them extend the survey west over E.L. 55/88.

Results again confirmed the magnetic blandness of the Mathinna Beds.

Following discouraging assay results from a limited number of chip samples, the Licence was relinquished.

5.2.16 **Placer Exploration Limited 1989-90 (North of Mathinna):**

References 1/74,75,80,81.

From 1989-90, Placer held E.L. 3/90, 10/89 and 8/89 to the NE and NW of Mathinna. Their target was Carlin or Ketza River style gold mineralisation.

Exploration methodology required taking both regional drainage sediment samples for bulk cyanide leaching, and stream sediment samples which were assayed for Cu, Pb, Zn, Ag, Au, As. Sample sizes were 5kg of -6mm material for the BCL tests and 1kg of -20 mesh silt for the stream sediments.

E.L. 8/89 covered the **Evercreech area** north of E.L. 17/91 (White) and in the far NE of Newcrest E.L. 22/92. BCL anomalies were obtained in Claytons and Evercreech Rivulets. Follow up stream sediment sampling on creeks and tributaries defined some low order spotty anomalies which could be traced to localised zones of minor quartz veining. Some anomalies were attributed to the King Mine.

Results were generally considered discouraging and the licence

was relinquished.

E.L. 3/90, **north of Mt. Saddleback** lay largely west of E.L. 23/92 (Newcrest). Similar surveys to those on E.L. 8/89 defined one unexplained anomaly near Olivers Hill. No source was identified by Placer but it may have been related to the Golden Possum workings.

E.L. 10/89, **west of Mt. Saddleback** again lay west of the Newcrest tenements. Similar surveys defined anomalies in three areas:

- Memory Creek
- Tombstone Creek headwaters
- Sweets Creek

The first two anomalous areas appear to fall within the Scottsdale Batholith. Follow up sampling failed to confirm the anomalies.

However, follow up sampling did confirm the Sweets Creek anomaly which was traced to a silicified quartz vein stockworked zone of Mathinna Beds in the headwaters of Sweets Creek. The outcrop area was 5-10m wide and 120m long (ref. 1/81).

The zone was mapped, chip sampled and partially soil sampled. It is strongly cleaved (320-330Mag-80^{0}NE) and brecciated with interstitial hematite, chlorite and mica, but no sulfides at surface. Strong anomalous As and patchy anomalous Au values were recorded in rock chips over a strike length of 200m.

Au and As grades increased to the north where sampling was halted by thick bush.

Placer tested the anomaly no further.

This area at 561600E, 5415600N lies outside Newcrest's E.L. 23/92 (Fig. 3) but is recorded here as an area of significant interest. The anomalous arsenic may represent a geochemical halo surrounding concealed gold mineralisation in a sizeable stockwork zone adjacent to the Scottsdale Batholith.

5.2.17 Billiton Australia 1989-92: (North East Tasmania Regional)

References 1/82,83.

Billiton identified NE Tasmania as a potential target area for the discovery of large tonnage open cut gold deposits, containing a minimum 15t. Au.

To better assess this potential, they undertook a variety of office studies, reconnaissance field mapping, and regional stream sediment surveys. Their initial target area was virtually the whole of NE Tasmania and encompassed the two Newcrest tenements.

They used landsat imagery to complete a fracture analysis of

NE Tasmania (no map sighted) designed to identify dominant structural trends and then integrate the results of this work with existing regional gravity, geology and metallogenic data.

On the basis of this regional review they concluded:

i) gold mineralisation is spatially separate from Sn, W, Cu, Pb, Zn mineralisation in the region.

ii) gold mineralisation is related to NNW structural linears in Mathinna Beds.

iii) gold is genetically associated with granodiorite and some occurs within the contact metamorphic aureole.

iv) many NNW structures exist but only some have associated gold mineralisation.

v) all gold deposits occur in a WNW gold corridor 90km x 25kms from Beaconsfield-Lefroy in the NW to Mangana-Golden Ridge in the SE.

The first four of these conclusions were previously well known features of the area. The fifth conclusion is curious. To place all the gold deposits of NE Tasmania in one WNW "corridor" as opposed to a number of parallel NNW corridors is difficult to support.

Billiton had three deposit models in mind (Fig. 9):

- Sheeted or stockworked quartz vein systems in hornfelsed Mathinna Bed aureoles in strong structural zones near granodiorite intrusions.

- Epithermal Au-Ag mineralisation associated with the St Mary's porphyry.

- Structurally controlled gold in late stage differentiates of Scottsdale and Blue Tier Batholiths.

The latter two models are not applicable to the Newcrest areas.

Billiton selected 40 areas which met most of their exploration and model criteria and further investigated these with reconnaissance mapping, and regional BCL and -80 mesh stream sediment sampling programs.

They regarded the development of prominent contact aureole zones in Mathinna Beds as important to their target search. To this end, they completed a review of contact metamorphism in NE Tasmania (appendix 11), which did not rate the region highly for thermal aureole gold mineralisation. The report appears to genetically link all the gold to granites and places emphasis on gold migration within the thermal aureole.

These genetic and migration models are possibly not applicable or important in NE Tasmania, hence this report possibly adds little to exploration philosophy in the region.

However, the thermal aureole studies combined with regional geochemistry led Billiton to concentrate on two areas:

- Golden Ridges near the Blue Tier Pluton
- Mathinna-Mangana which they identified as gold anomalous (!) and the most extensive hornfelsed roof zone in the region.

Most of their subsequent work was concentrated on the Golden Ridges area, which lies off the NE corner of E.L. 22/92.

In 1991, they entered into an agreement with Aureole N.L., American Horizon Resources Inc., and Federation Resources N.L., who jointly held E.L. 58/88 over the Golden Ridge area.

In this area, Mathinna Beds have been intruded by the Poimena Pluton and the Pyengana Granodiorite. Scattered gold mineralisation occurs in a one kilometre wide zone of hornfelsed sediments which have historically been prospected by a variety of shafts, trenches and adits.

They completed a one sample/sq. kilometre BCL stream sediment survey and decided to relinquish the western half of the Licence in early 1992 and concentrate further work on the Brilliant Creek area.

It is not known if Billiton are still involved with E.L. 58/88

5.2.18 **Department of Mines:**

The Department of Mines has been an active explorer in the Alberton-Mangana region since the 1850s.

Their work can be broadly grouped under three headings:

- Mine and district inspections
- Core drilling programs
- Regional studies.

Mine and district inspection reports are numerous (appendix 2). Collectively they provide a useful insight into the geology and prospectivity of individual mining operations and mining districts.

The more comprehensive district reports include:

- Alberton: Blake 1933 (Ref. appendix 2/4).
  Hughes 1952 (2/23).
  Twelvetrees 1900 (2/56/59).

- Dans Rivulet: Hughes 1947 (2/20).
  Twelvetrees 1904 (2/58).

- Mathinna: Finucane 1935 (2/13).
  Henderson 1941 (2/16).
  Twelvetrees 1906,1907 (60, 61, 63).

- Mangana: Finucane 1935 (2/13).
  Twelvetrees 1907 (2/62).

References to descriptions of individual mines are contained in the deposit data sheets presented in Appendix 5 (Alberton), 6 (Mathinna) and 7 (Mangana).

Core drilling has been undertaken by the Department for two basic reasons:

- test extensions of known deposits
- evaluate geological concepts.

A list of Departmental drilling appears as Appendix 3. Holes which refer to the Newcrest tenements are marked with a full dot while those in adjacent areas are marked with an open dot. This list is neither up to date nor complete because, until recently, private drilling undertaken on Mining Leases did not have to be reported to the Department. Hence much of the drilling completed by both private companies and the Department on the New Golden Gate (underground and surface) is not reported or recorded and logs are difficult to locate.

Departmental **lode extension drilling** programs were completed in the 1930's on the Krushka, Prendergast and Long Struggle mines (Alberton) and on the New Golden Gate (Mathinna); in the 1950s on O'Briens Mine (Dans Rivulet); in the 1960s on the Starlight-Carnegie (Dans Rivulet).

The drilling at **Krushka** and **Prendergast** failed to intersect significant mineralisation or reef structures (Fig. 3).

Of the three underground holes at **Long Struggle**, one was abandoned, another may have drilled parallel to the target and the third intersected north extensions of both the Long Struggle and Caxton reefs. The Long Struggle reef assayed 15g/t over 2.5m (horizontal) and the Caxton 3.6g/t over 0.6m (horizontal).

Records of drilling at the New Golden Gate are difficult to locate, but it is known that several holes were completed north and south of the

mine looking for reef extensions. This data will probably emerge with persistent effort.

Five holes were completed at the O'Briens Mine in 1954-55. One hole intersected 4.5m 10g/t Au.

Two holes were completed east of O'Briens on the Starlight-Carnegie workings. Results were disappointing.

Following completion of a major study of the Waterhouse-Mangana field by Threader, the Department drilled two holes at Mathinna, two at Dans Rivulet and four at Alberton to **test theories** developed in that study (see below).

The results of this conceptual drilling are unclear because most of the holes have not yet been reported upon. However, it is known that no significant mineralisation was intersected.

The Department has undertaken a number of **regional geological and geophysical studies** in order to highlight the region's potential and assist explorers.

In 1967, Threader completed his MSc thesis on the geology of the Mangana-Waterhouse district. One of his main conclusions was that the gold mineralisation was concentrated adjacent to a major NNW structurally deformed zone, offset at regular intervals by later NE trending cross structures.

This structural control on gold mineralisation has been further refined by later Departmental workers. In Unpublished Report 1989/42, the effects of later NE trending mega kink bands on the earlier NNW cleavage are illustrated (Fig. 6(a) and (b)), and the impact of these intersecting structural trends on the location of mineralisation is discussed in Report 1992/10 (appendix 6).

Recently, the Department commenced a major long term project called NETGOLD (North East Tasmania Gold) designed to more fully understand and promote the gold potential of the area. Data reviews of the Dans Rivulet, Mathinna, Mangana areas (appendix 6, 7) were the first step in this project. Future work has been slowed by Government cutbacks.

The Tasmanian Government has co-operated with the BMR to produce a 1:500,000 aeromagnetic map of NE Tasmania, and in 1989 the Department completed a detailed aeromagnetic survey over the Alberton-Mangana area (Fig. 4 - transparency accompanying this report). A brief Departmental report 1989/19 refers to this survey and concluded:

- The area is underlain by granodiorite at 1-2 kilometre depth.

- Gold zone occurs in a narrow depression in the roof of this granodiorite basement.

APPENDIX 2:

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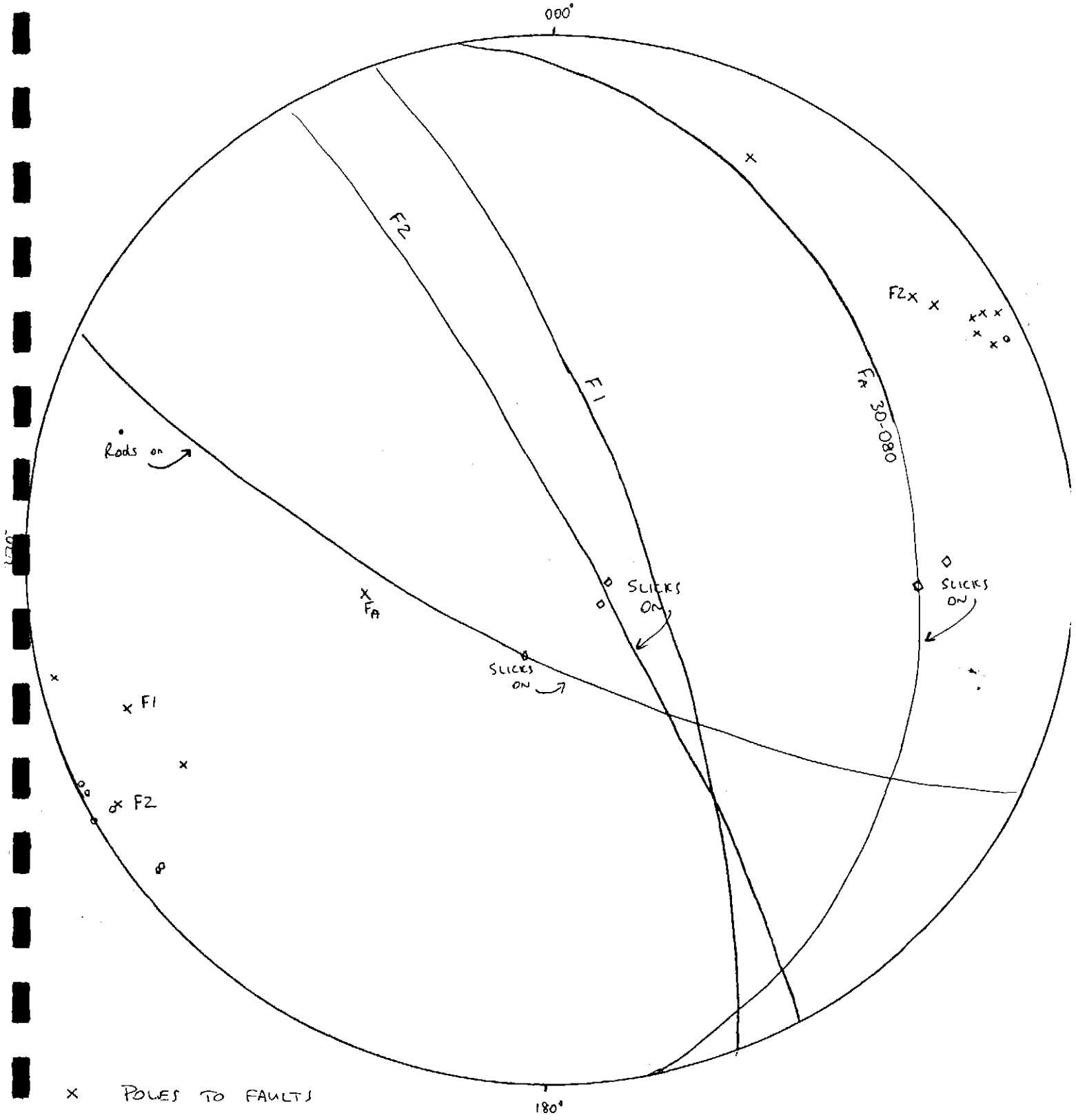
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APPENDIX B

Geological Sections and Structural Data

710094

JUBILEE - FAULTS, CLEAVAGE.



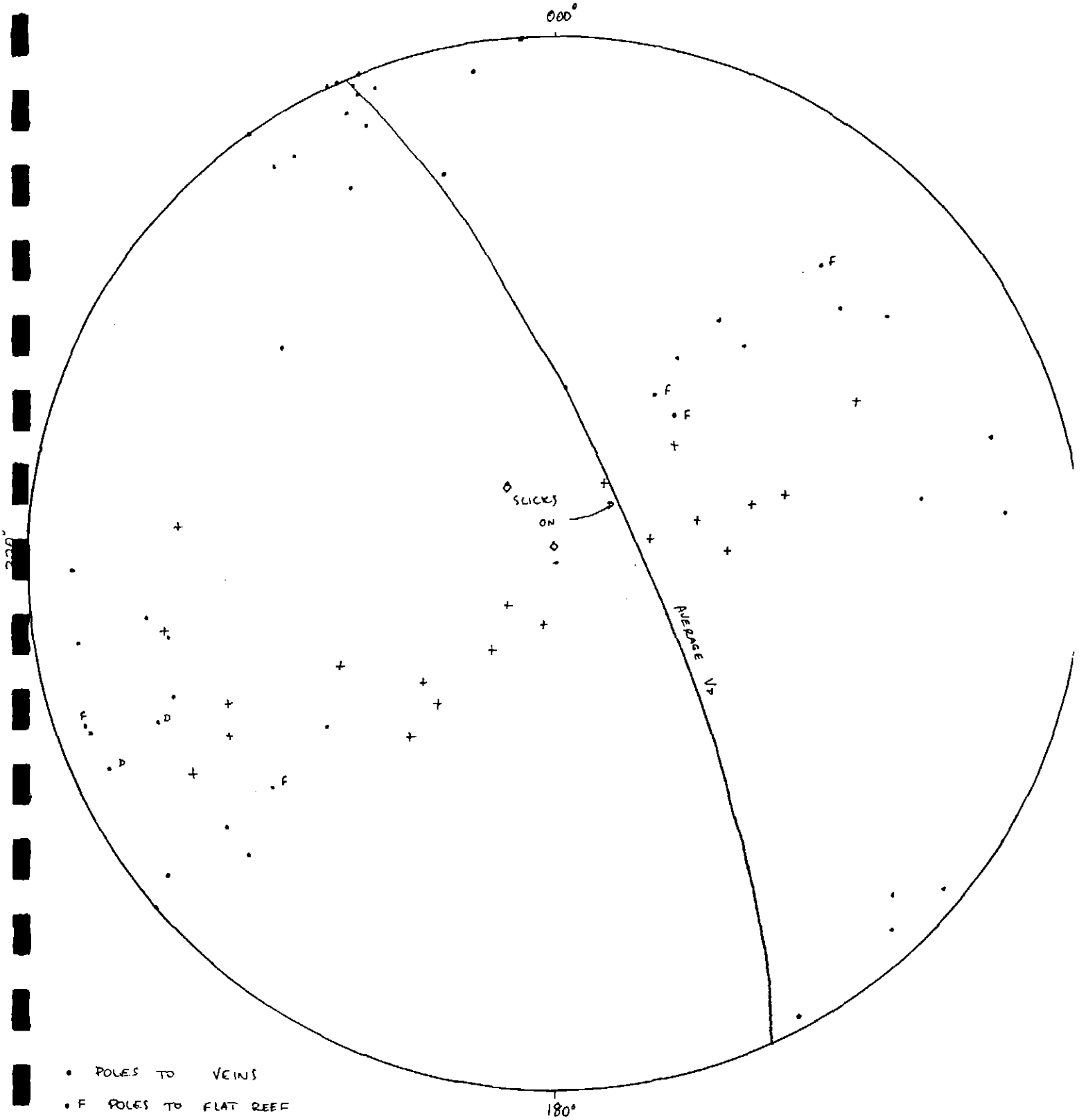
× POLES TO FAULTS

× F2 CUTS ×F1

o POLES TO CLEAVAGE

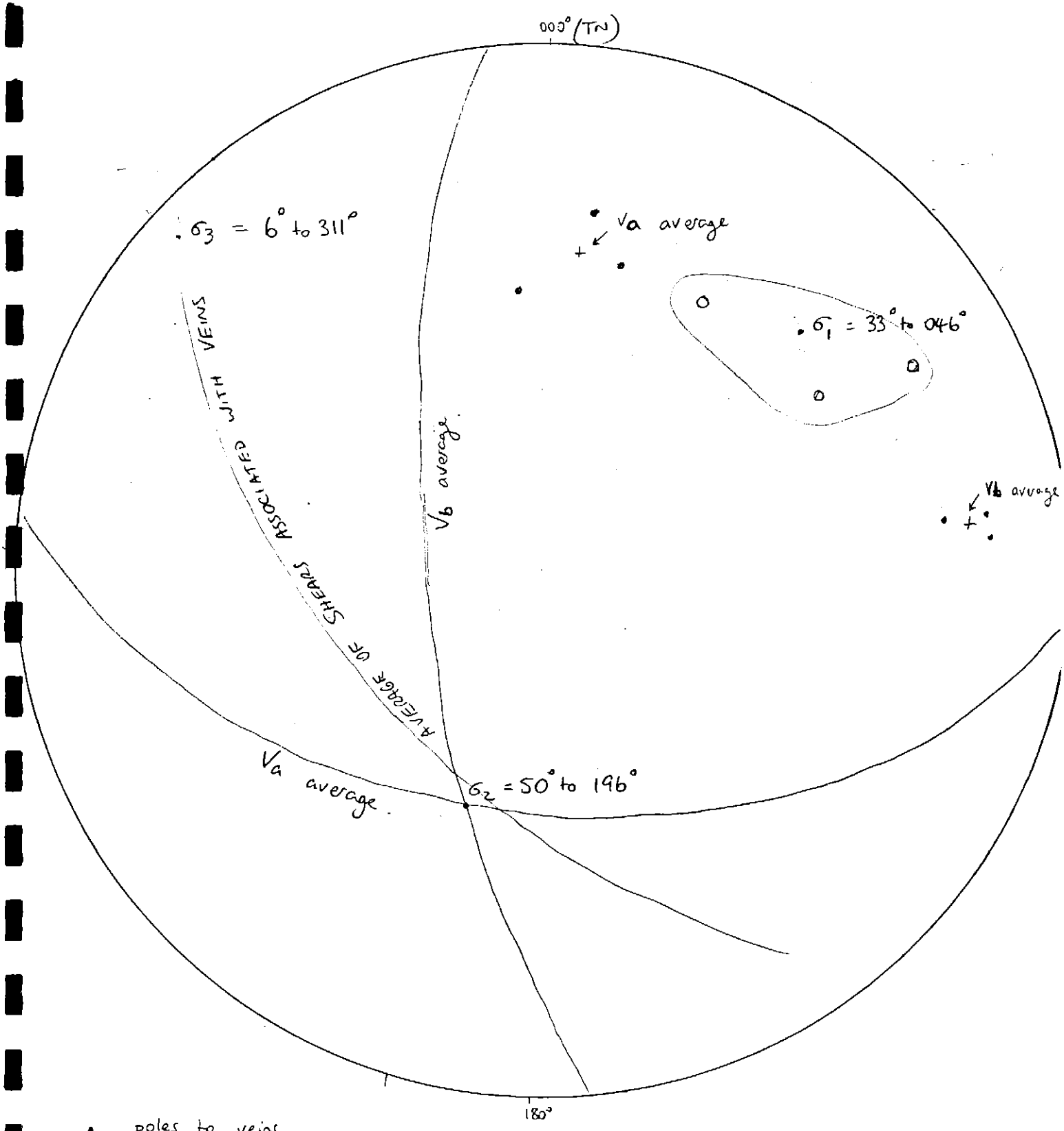
710095

JUBILEE - VEINS AND BEDDING



- POLES TO VEINS
- F POLES TO FLAT REEF
- D POLES TO DERBY REEF

710096



• poles to veins

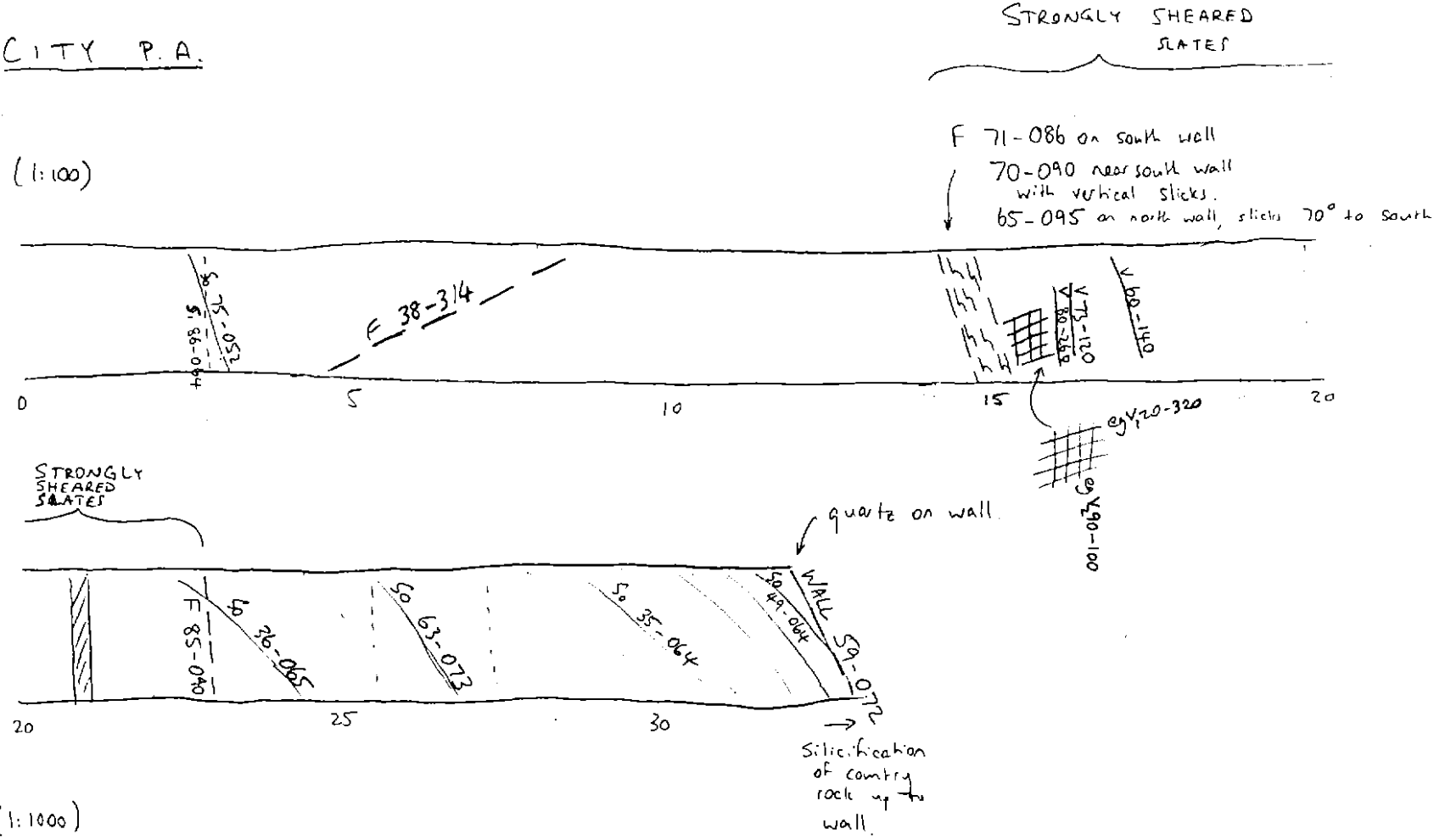
o poles to shears associated with veins.

Shears associated with veins must be reverse faults.

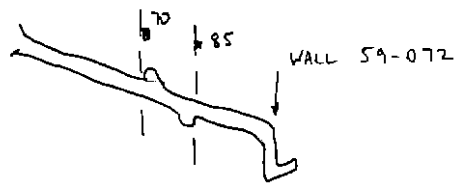
CONJUGATE VEINS
CHINAMENS HILL
OUTCROP

CITY P.A.

A. SECTION (1:100)



B. PLAN (1:1000)

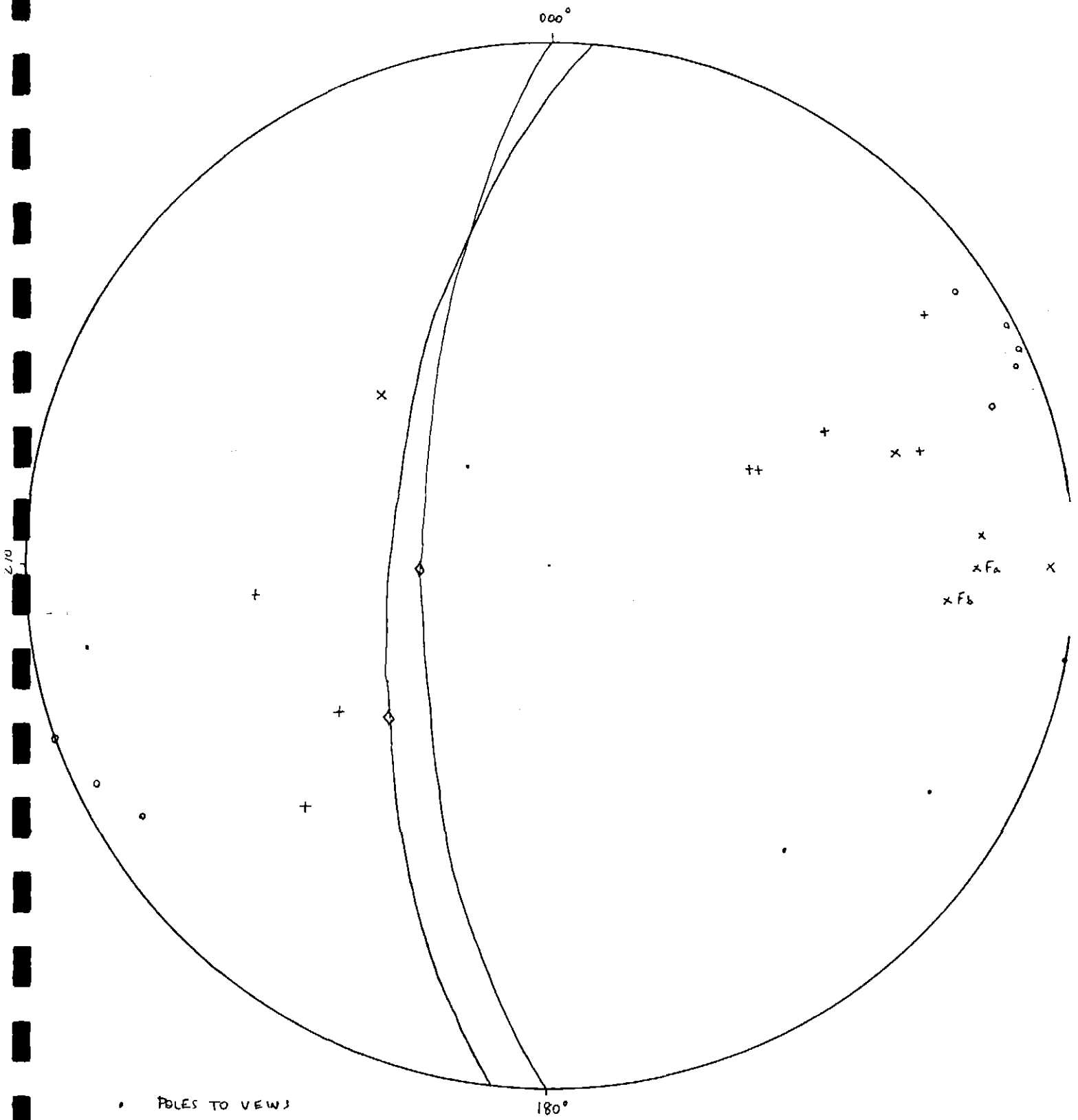


5 cm

71009

710098

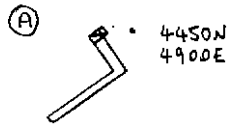
CITY P.A. ADIT
+ OUTCROP NEARBY



- • POLES TO VEINS
- \+ POLES TO BEDDING
- o POLES TO CLEAVAGE (S.)
- × POLES TO FAULTS
- ◇ SLICKENSIDES

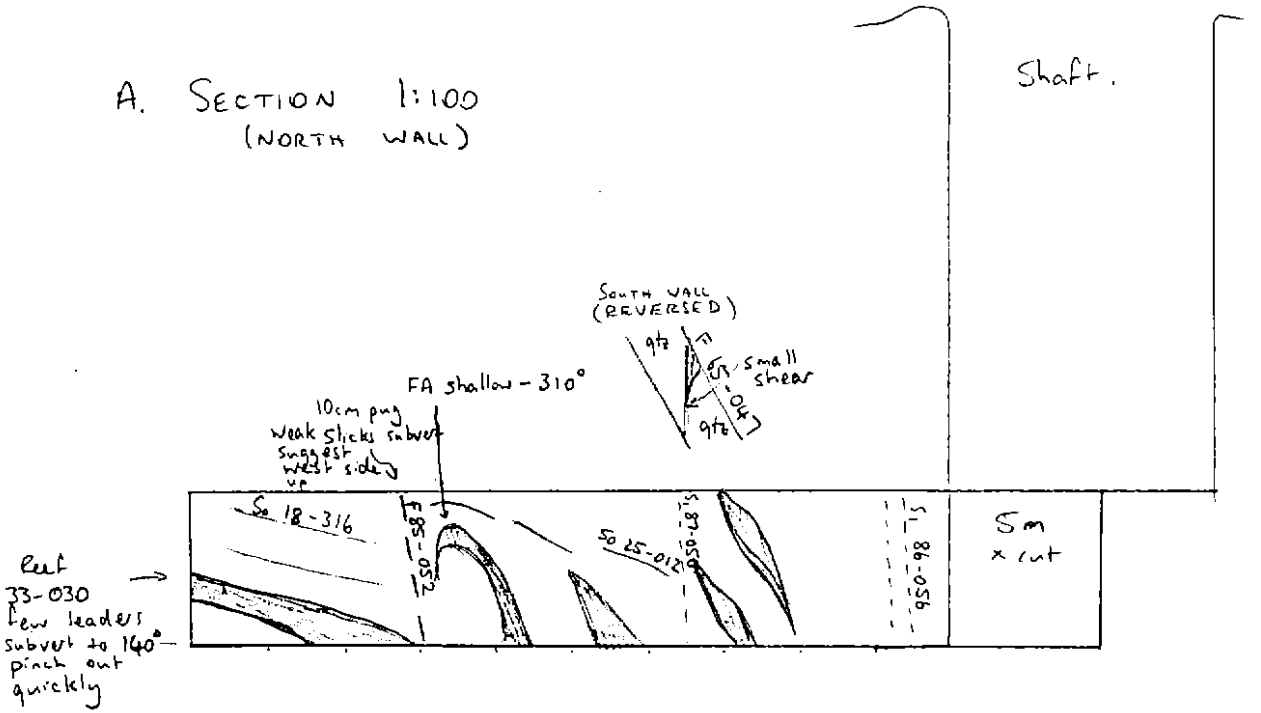
PLAN JUBILEE SOUTH-WEST
1:1000





TN

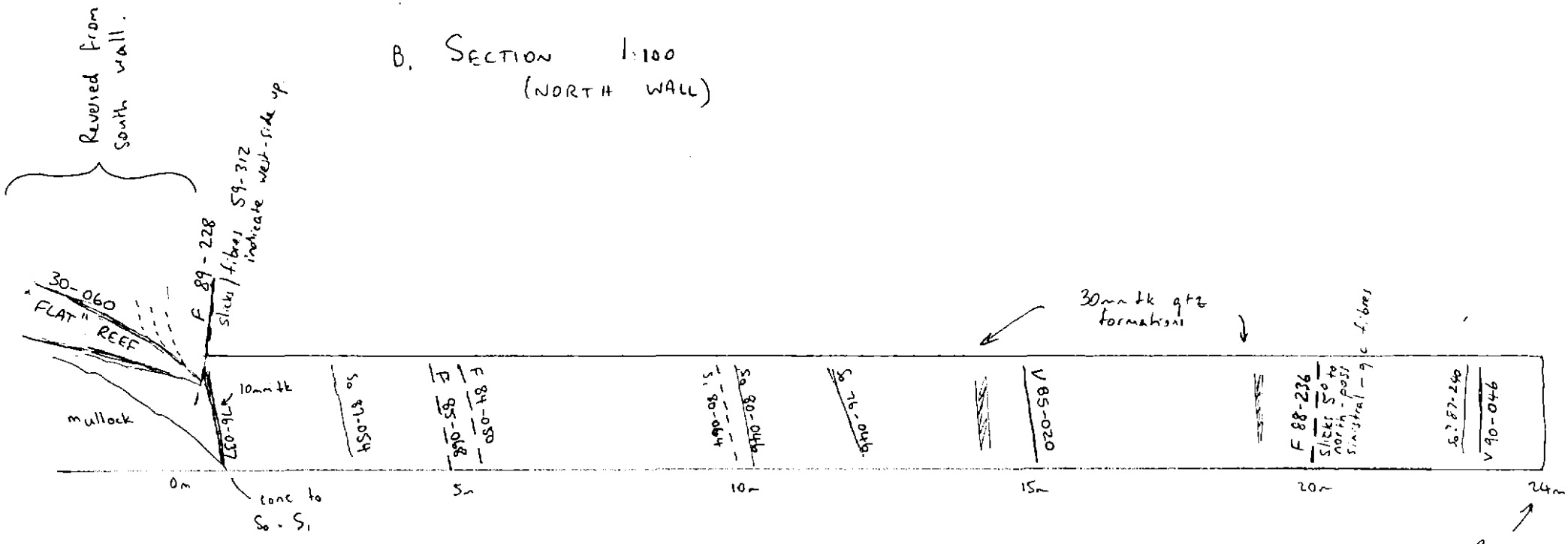
A. SECTION 1:100
(NORTH WALL)



5 cm

66007

B. SECTION 1:100
(NORTH WALL)

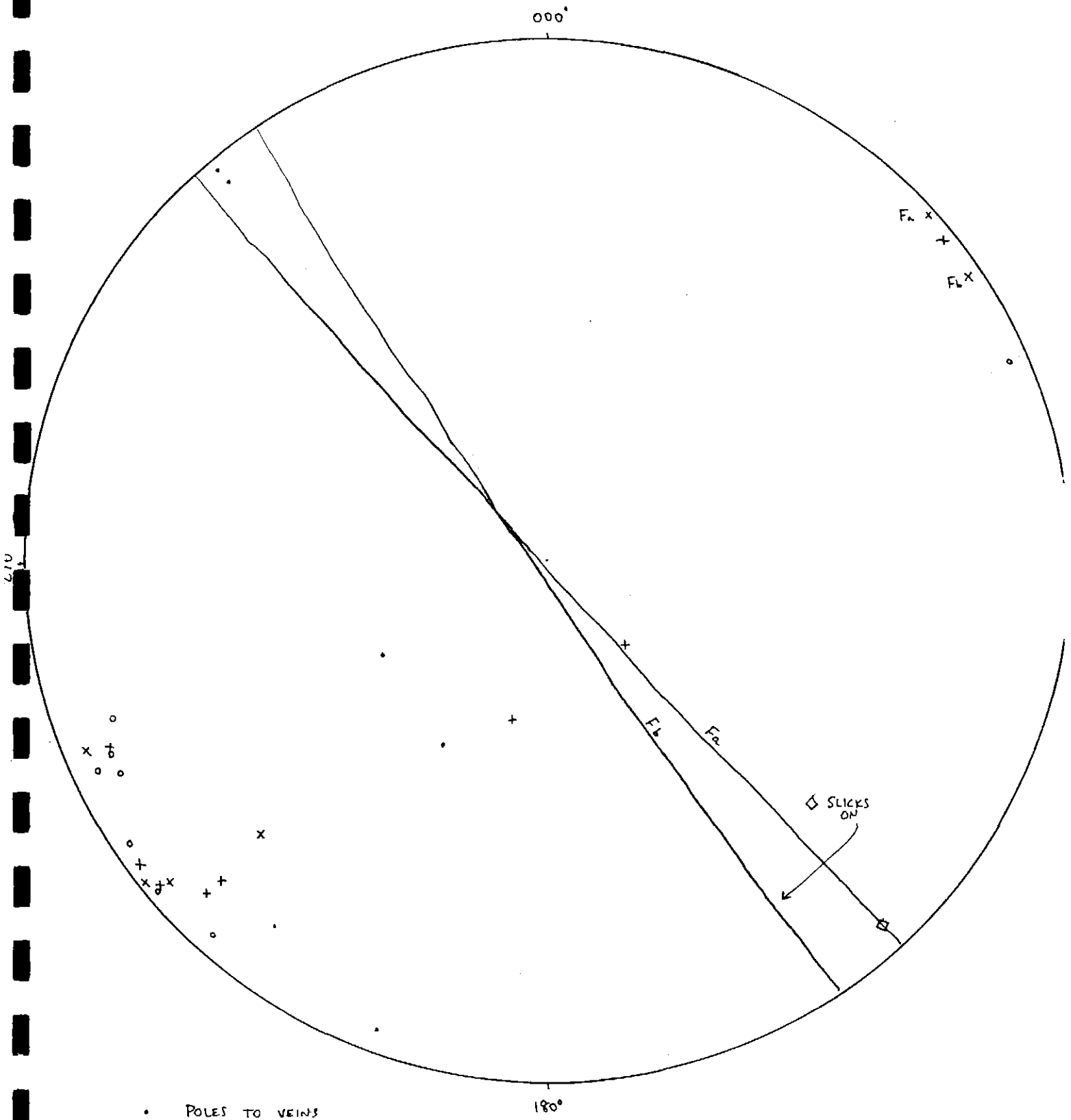


5 cm

00101100

710101

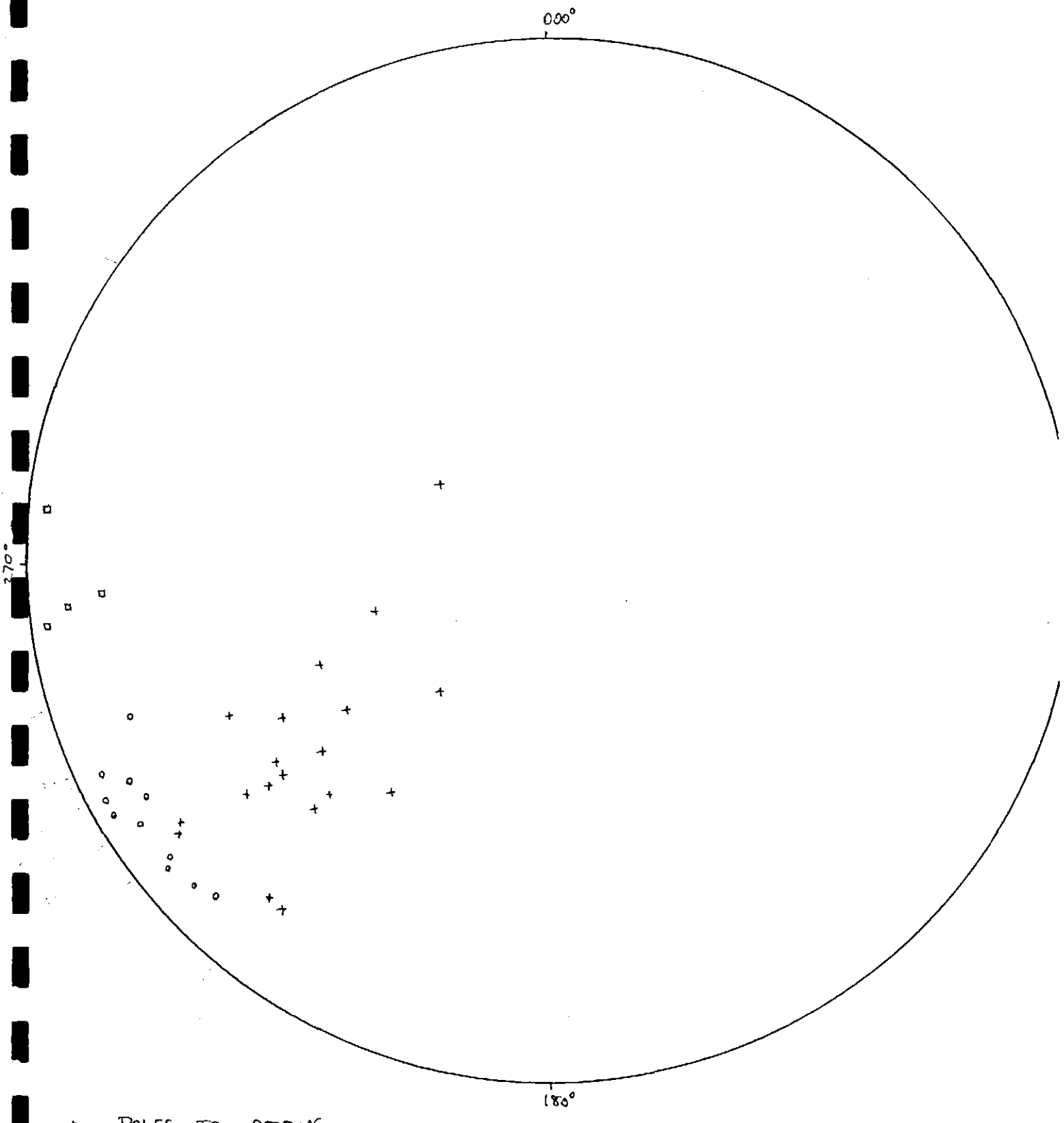
JUBILEE SOUTH-WEST AND OUTCROP NEARBY.



- POLES TO VEINS
+ POLES TO BEDDING
○ POLES TO CLEAVAGE
× POLES TO FAULTS
◇ SLICKENSIDES

710102

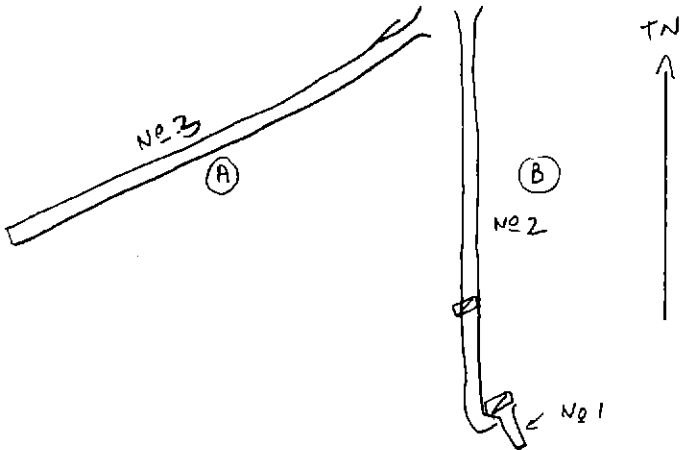
TOWER HILL ROAD ABOVE JUBILEE



+ POLES TO BEDDING
○ POLES TO CLEAVAGE (S_1)
□ POLES TO CLEAVAGE (S_2)

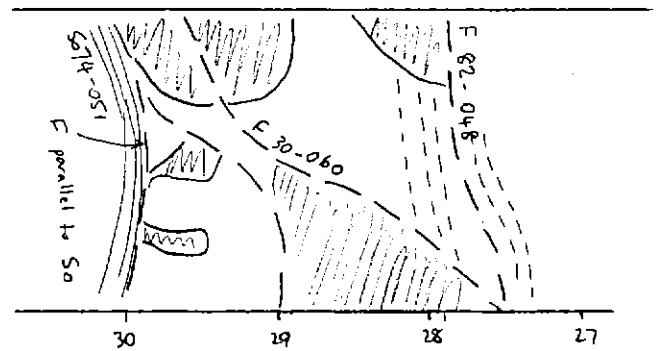
MOUNTAINEER

PLAN
1:1000

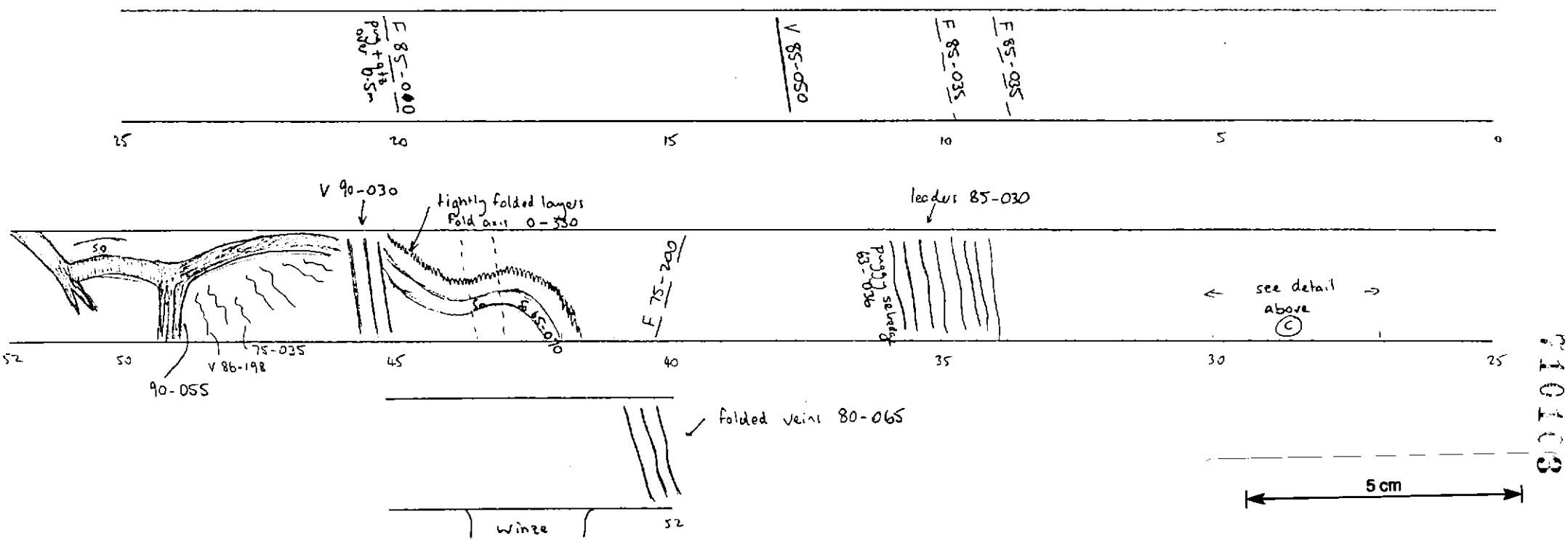


leaders ≈ 90-055, 90-060 also 90-135 - 90-150.

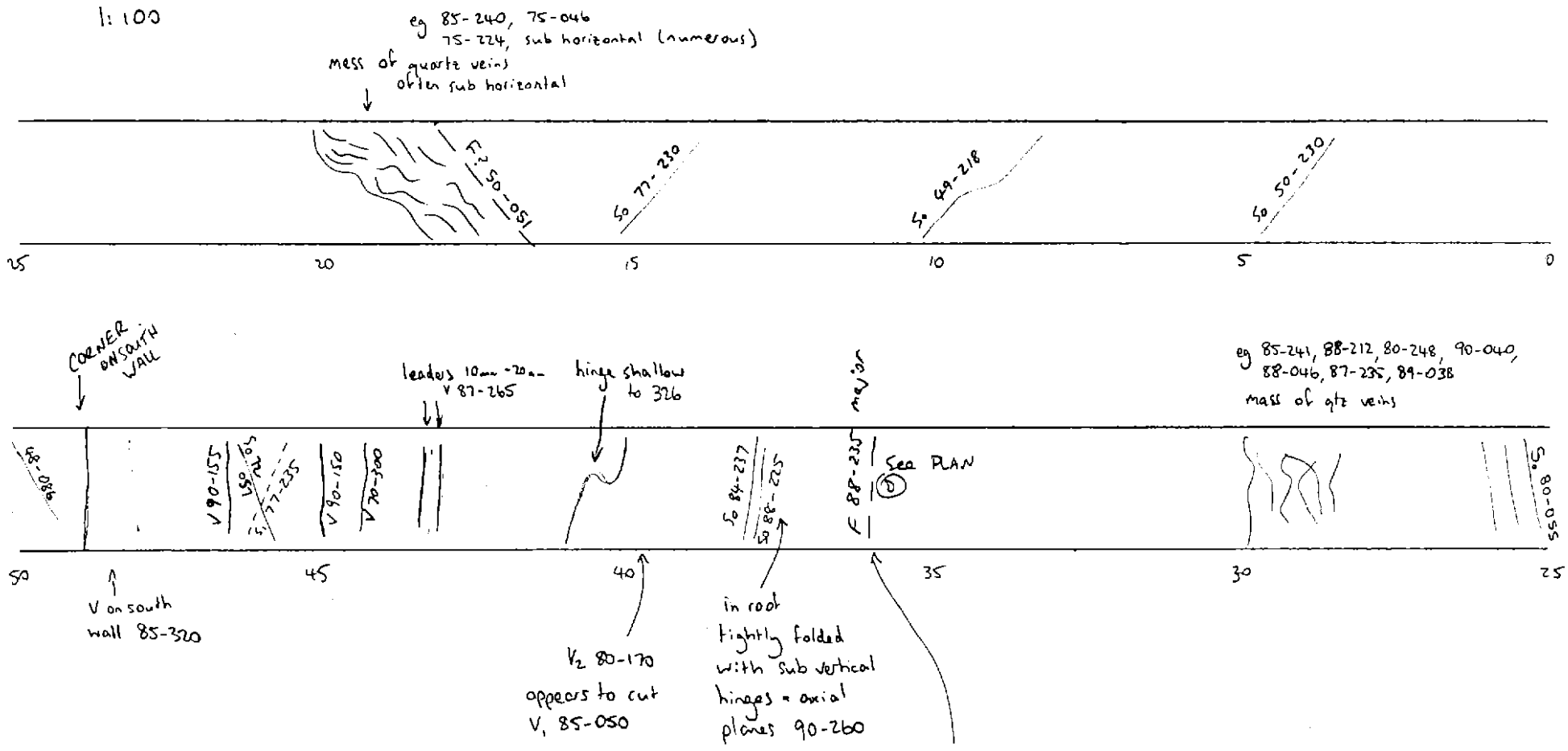
C. SECTION (North Wall)
1:50



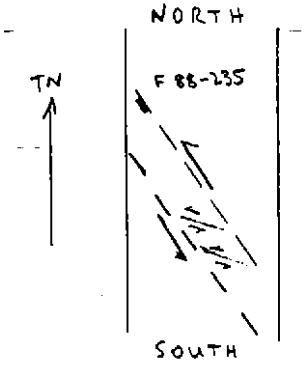
A. SECTION
1:100 (North wall)

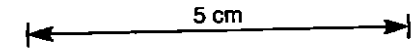


B. SECTION - WEST WALL
1:100



D. PLAN
1:100

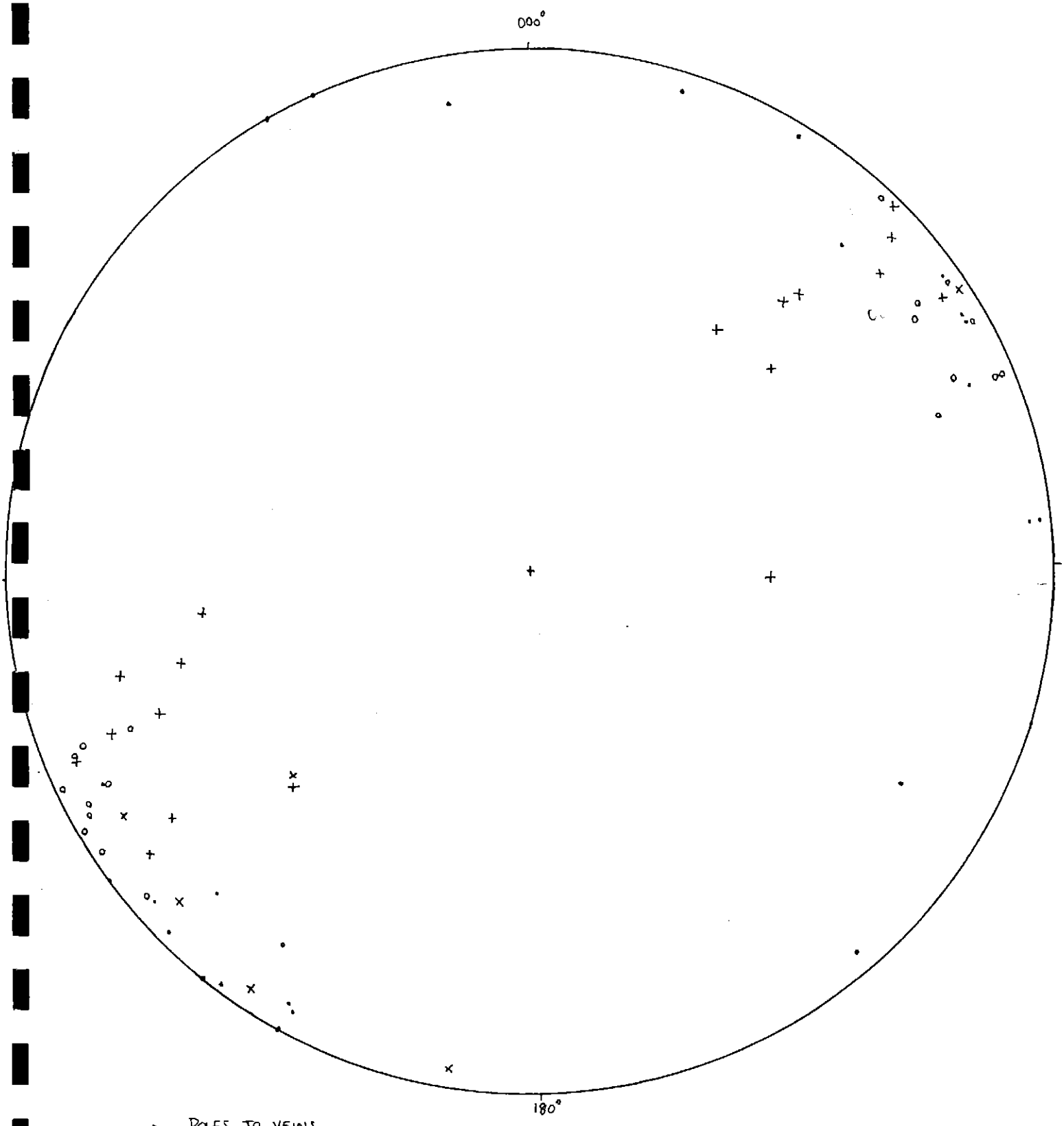




710104

710105

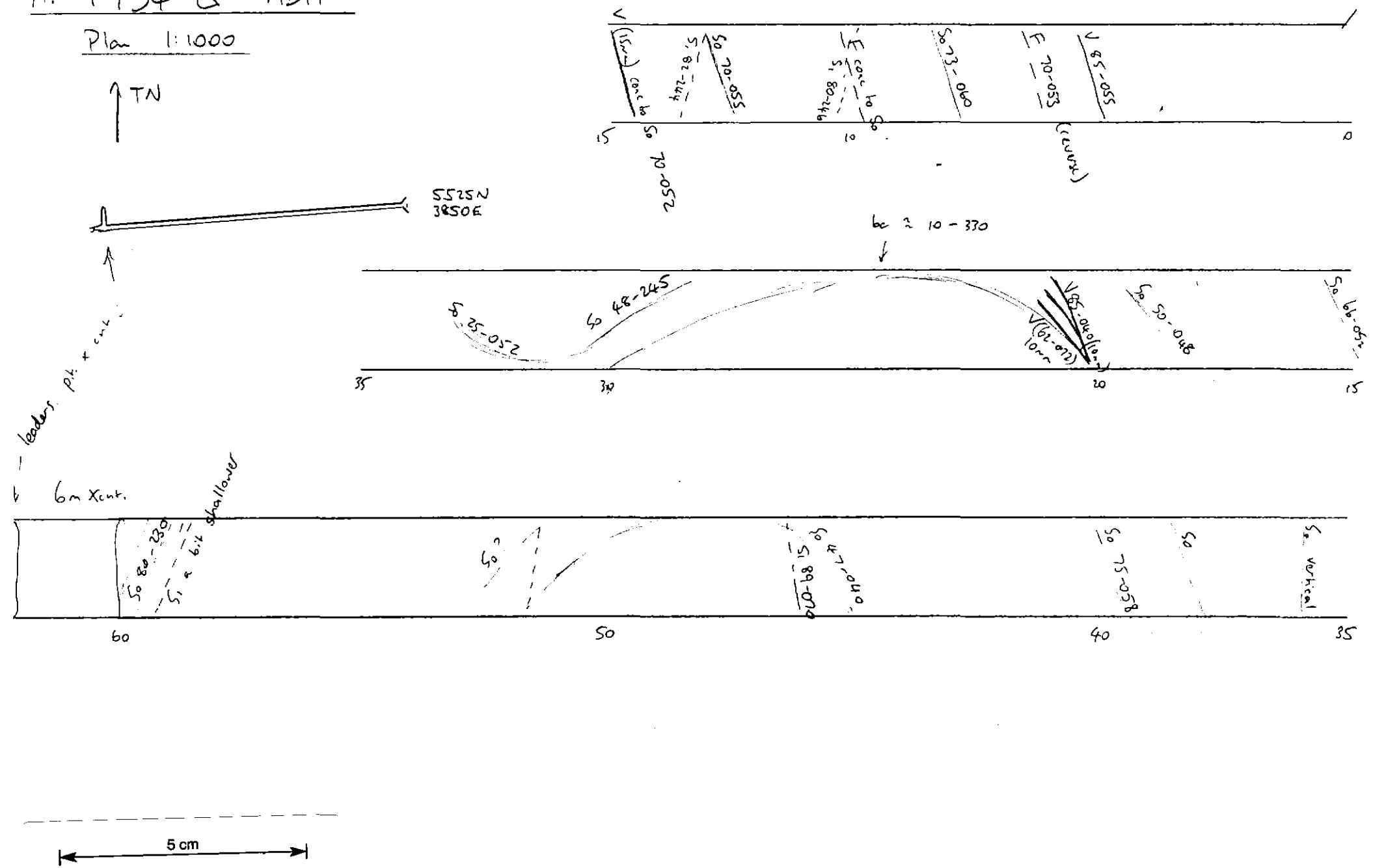
MOUNTAINEER ADITS
AND OUTCROP SOUTH OF WORKINGS



- • POLES TO VEINS
- \+ POLES TO BEDDING
- o POLES TO CLEAVAGE (S.)
- × POLES TO FAULTS

A. 1734-G ADIT

Plan 1:1000

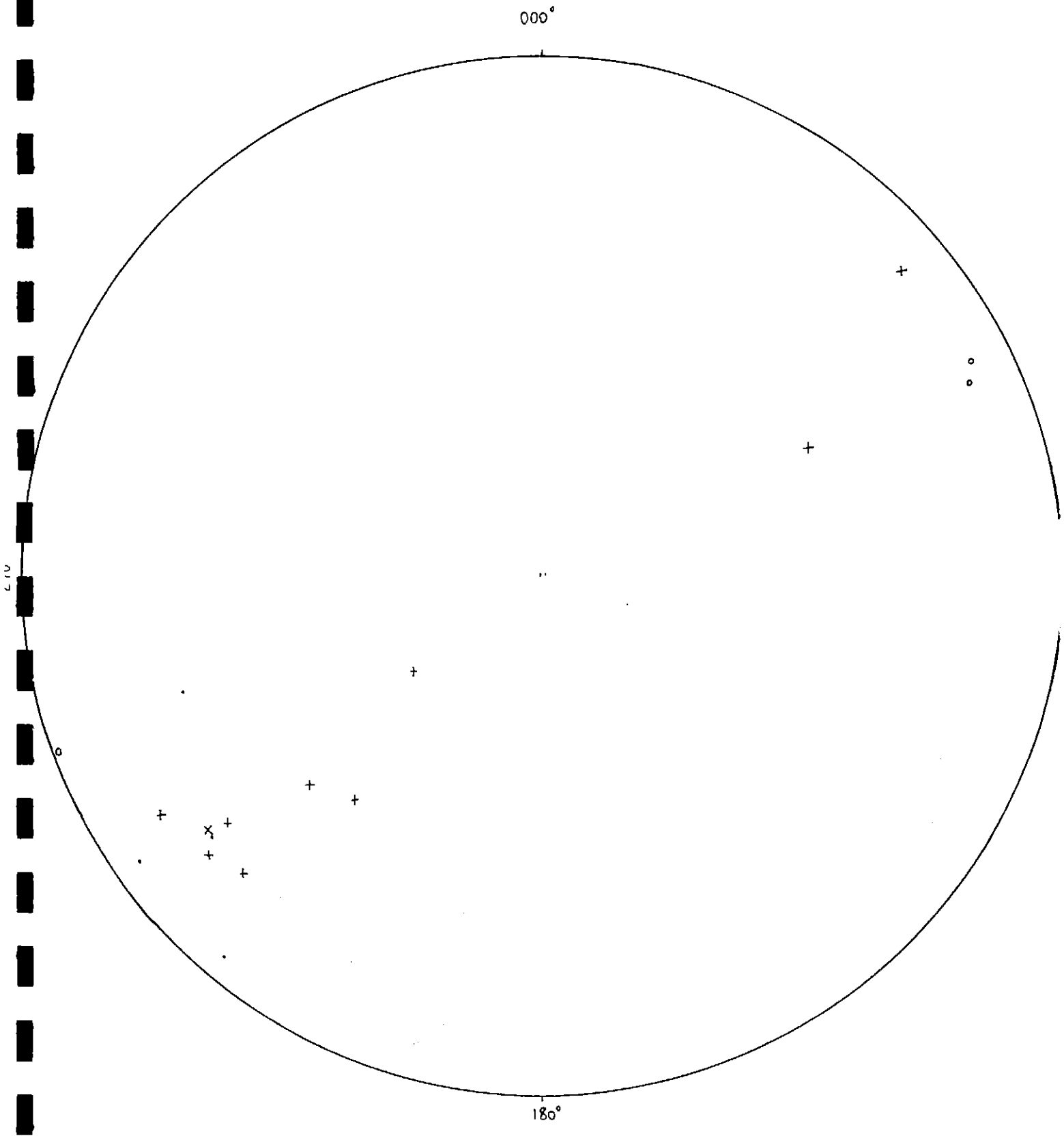


5 cm

110106

1734-6 ADIT

710107

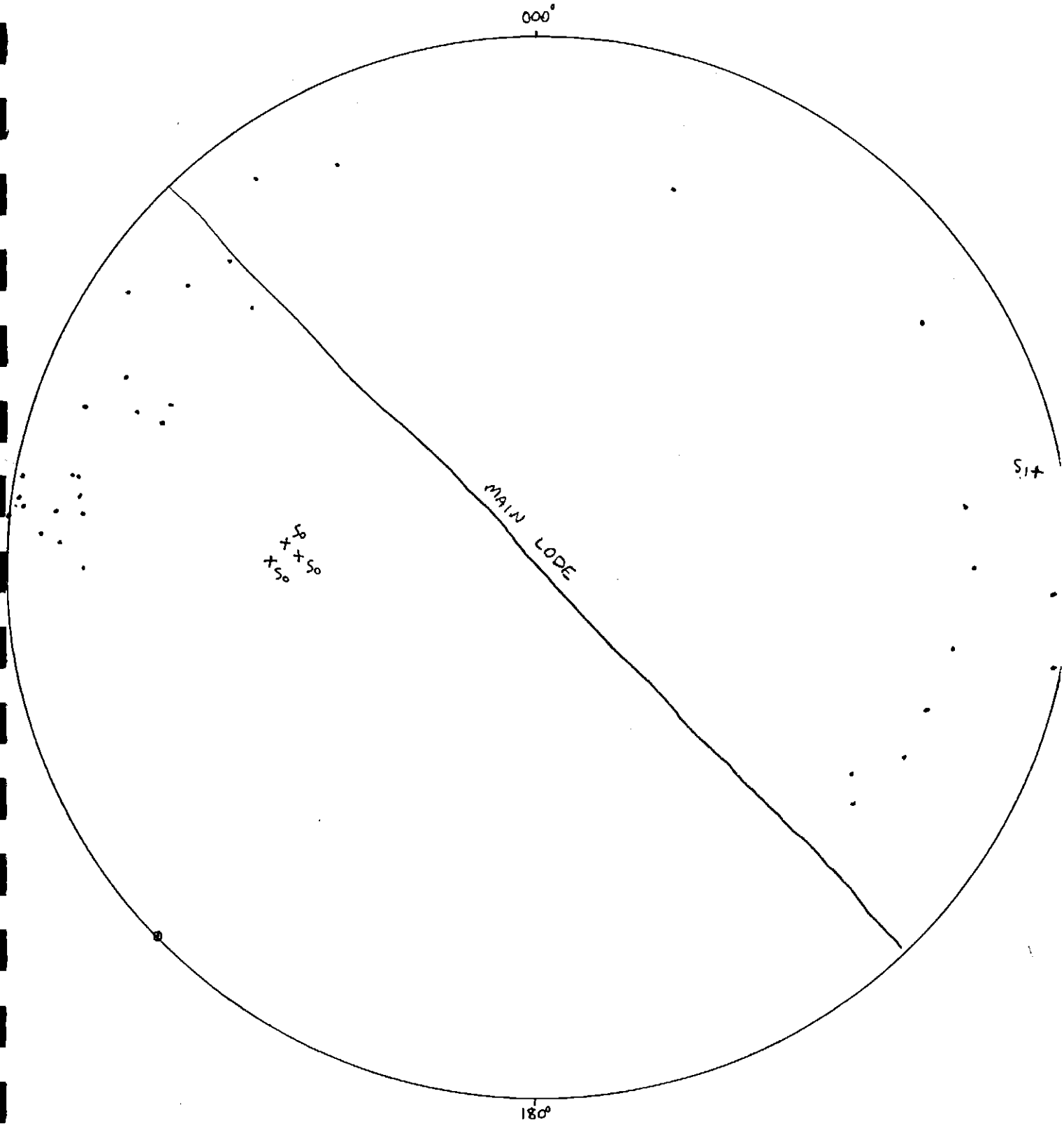


- • POLES TO VEINS
- o POLES TO CLEAVAGE (S_1)
- \+ POLES TO BEDDING
- × POLES TO FAULTS

MIAMI WEST

ORIENTATION OF VEINS IN CHANNEL SAMPLES

710108



• POLES TO VEINS.

+ S_0 POLES TO BEDDING

+ S_1 POLES TO CLEAVAGE

o POLE TO MAIN LODE (APPROX.)

710109

Original Copy
entered on TCR
as:
95-3791 A. G.O.

APPENDIX C

Interpretations of Aeromagnetic Data
- J Ashley

710110

Resolute/Samantha Group

Northeast Tasmania

'Mathinna Project'

Interpretation of Aeromagnetic Data

J.Ashley March 1995

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1. Introduction

2. Discussion

3. Target Areas

ILLUSTRATIONS

Figure 1. Location of Aeromagnetic surveys
Figs 2A, 2B. Interpretation Plans, scale 1:50000
Figs 3A, 3B. Aeromagnetic Contour Maps, scale 1:50000

SUMMARY

Aeromagnetic data over and adjacent to the tenements in the Mathinna area have been interpreted to assist in exploration for gold mineralisation.

In the Tower Hill/Mathinna/Dans Rivulet zone eight target areas, based on dilation zones related to secondary fault structures, are outlined. A general zone of interest is outlined over a proposed 'structural repeat' of the Mathinna setting.

In the Mangana area general zones of interest are outlined adjacent to interpreted major fault structures. One specific target zone is outlined over a dilation zone.

A zone of interest is outlined 4km west of Mathinna over an inferred folded sequence overlying granitoid.

1.INTRODUCTION

An interpretation of aeromagnetic data over and adjacent to EL's 17 - 18/91, 22/92 and 26 - 28/94 has been made to assist in exploration for gold mineralisation.

The aeromagnetic data are from the Netgold Database of northeast Tasmania. Within the study area the data are from three surveys (Figure 1):

Fingal 1993 (Geoinstruments)
- 200m spaced east-west flight lines
- 400m spaced north-south tie lines
- mean terrain clearance 74m (range 24-319m)

Mathinna 1990 (Geoinstruments)
- 150m spaced north-south flight lines
- 400m east-west tie lines
- mean terrain clearance 95m (range 55-207m)

Alberton Manganna 1989 (Austirex)
- 500m spaced east-west flight lines
- 5000m spaced north-south tie lines
- mean terrain clearance 244m (range 38-858m)

These data have been merged, gridded and contour maps at scale 1:50000 have been produced (Figures 3A,B). The data have also been image processed with results being presented on 35mm slides; hardcopy of one image was produced at scale 1:50000.

Geological data made available were the following:

1:250000 Geology map of northeast Tasmania

1:50000 Geology maps for Ringarooma, Alberton, St Helens, Ben Lomond, St Marys, Snow Hill

1:25000 Maps of the Mangana, Mathinna-Tower Hill and Dans Rivulet Goldfields

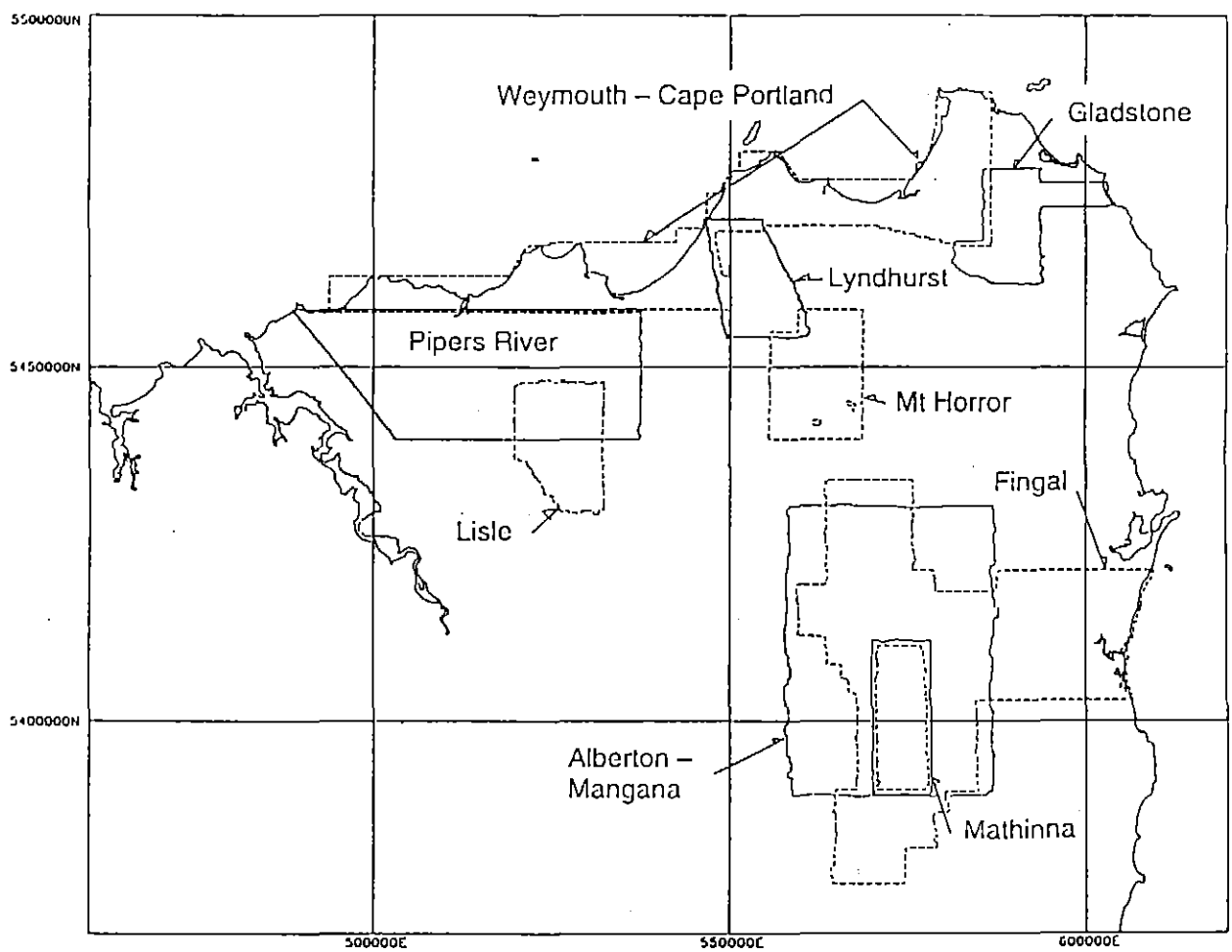

5500000N
5450000N
5400000N
500000E
550000E
600000E
Weymouth – Cape Portland
Gladstone
Lyndhurst
Pipers River
Mt Horror
Fingal
Lisle
Alberton –
Mangana
Mathinna

Figure 1

710116

Mineral Resources Tasmania Reports:

1994/06 Structure and veining in the Devonian aged Mathinna-Alberton Gold Lineament, northeast Tasmania - R.A.Keele

1992/10 Northeast Goldfields: A summary of the Tower Hill, Mathinna and Dans Rivulet Goldfields - J.Tahieri

1994/05 A study of the nature and origin of gold mineralisation, Mangana-Forrester area, northeast Tasmania - J.Tahieri, R.S.Bottrill

1992/29 The Mangana Goldfield and adjacent gold mining areas - R.S.Bottrill

1994/08 An interpretation of recent geophysical surveys, northeastern Tasmania - R.G.Richardson, M.J.Roach

Sundry reports:

Aeromagnetic survey EL 55/83 Mangana - Acquisition Report.....Dr.DE.Leaman, 1990

Gold Exploration and the use of magnetic methods in northeast Tasmania - Dr D.E.Leaman 1992

Regional geophysics of the Alberton-Mangana goldfield, northeast Tasmania - M.J.Roach 1992

An interpretation of the aeromagnetic data is presented at scale 1:50000 in Figures 2A,B.

2. DISCUSSION

The magnetic characteristics of most of the rocks within the study area have been documented by Roach (1992) and Richardson and Roach (1994). The data in the table below are taken from Roach:

	Magnetic Susceptibility ($x10^{-3}$ SI)	
	Range	Mean
Tertiary Basalt	variable	>10
Jurassic Dolerite	variable	10
Permian Sediments	0 - 0.02	~0
Blue Tier Granite	0.02 - 0.15	0.05
Scottsdale Granite	0.02 - 0.20	0.12
Pyengana Granodiorite	3.0 - 10.0	8.0
	0.15 - 0.3	0.22
Mathinna Metasediments	0.06 - 0.32	0.15

(The distribution of the magnetic rocks is best seen in the slide of the coloured, linear, total magnetic intensity).

The highest magnetic relief in the area is produced by sills of Jurassic and Tertiary volcanics; these rocks also occur as talus deposits and in drainage channels where they produce variable, erratic, magnetic relief. The magnetic phase of the Pyengana granodiorite produces a prominent magnetic response. Sediments adjacent to the Blue Tier granite (adamellite) are 'magnetic' as a result of (inferred) contact metamorphism (seen on the St Helens map sheet). Northeast trending dykes (Devonian?) are evident on the St Helens and St Marys map sheets; one southeast trending Jurassic dyke is located just to the west of the Tower Hill gold mining centre. The Mathinna Beds contain some magnetic lithologies which exhibit magnetic relief up to about 40nT (eg adjacent to the Scottsdale batholith). Some of the relief is very low and on the interpreted plans these anomalies are shown as 'trend lines'. The latter are probably very difficult to identify in the field; the former should be recognisable.

There are several low-amplitude 'broad' magnetic anomalies over the sediments (most clearly seen in the slide of the non-linear total magnetic intensity). These have been attributed (Roach 1992) to sub-surface granodiorites similar to the magnetic phase of the Pyengana granodiorite. This is considered to be a valid interpretation; an alterative source could be metamorphosed sediments overlying non-magnetic granitoids. The strongest of these 'deep' anomalies (~80nT) is in the extreme southwest. The source is interpreted to be at depth of 1 - 2km; sediments overlying this, and other 'deep' features, are inferred to be 'grossly' anticlinally folded ie along axes f_1 - f_7. Smaller scale fold structures are evident in the

sediments adjacent to the Blue Tier batholith; a northwest fold axis (f8) is interpreted west of Mathinna where arcuate, weak, magnetic trends are observed.

Several 'major' and many minor (secondary) fault structures are interpreted. 'Major' structures trend north-northwest and northeast (the confidence in the interpretation is indicated by the 'length' of the fault symbol on the maps). The northeast dextral fault (F1) through the Pyengana granodiorite is an obvious feature where it transects the pluton but is not obvious to the southwest. A northeast fault (F2) is interpreted along a 'magnetic contact' adjacent to the South Esk river and is inferred to contain dyke rocks to the northeast (on the St Helens map sheet). Displacement on this fault may be sinistral.

North-northwest faults are mostly interpreted in the west of the area. The fault F3 is based largely on a contact displacement of the 'deep' granitoid south of the Scottsdale batholith - it is not a well defined feature.

The zone bounded by faults F4/F10 contains the bulk of the linear magnetic lithologies in the Mathinna Beds. These faults are rarely well defined and are largely positioned to outline 'packages' of rocks of similar character or, in some places, they are positioned between zones of differing 'magnetic' trends eg parts of F6, F7. The zone bounded by F6 and F9/F10 contains distinctive ovoid magnetic 'lows' (axes L1 - L3).

To the east a north-northwest fault (F11) is inferred along the margin of a tongue of 'non-magnetic' granite. The parallel fault F12 is inferred along a 'magnetic contact'.

From the imaged data additional 'major' faults or deformation zones can be inferred. These are 'weak' features and hence may relate to the earliest stages of deformation.

Such features trend east-southeast (Z1, Z2), east-northeast (Z3, Z4), north-south (Z5) and northeast (Z6, Z7).

Numerous minor or secondary fault structures are interpreted from offsets of magnetic lithologies or from trends seen in the imaged data.

3. TARGET AREAS

Some general observations relating to the distribution of gold mineralisation can be made based on this interpretation of the aeromagnetic data.

The Mathinna, Dans Rivulet and Alberton Goldfields are within a north-northwest structural zone defined here by faults F6 and F9/F10. The gold mines/prospects are grossly aligned at ~345° ie obliquely to the trend of the interpreted structural zone. The Tower Hill goldfield is on the west margin of this zone.

The Mangana Goldfield is interpreted to be within a separate, parallel, structural zone defined here by faults F4 and F5.

Within the Mathinna/Alberton zone the Mathinna mineralisation is located over the northern end of an ovoid magnetic 'low' (axis L1). This 'low' is bounded to the north by an east-southeast magnetic 'high' (the Z2 zone) which is flanked to the north by an east-southeast magnetic 'low' (axis L2). The Alberton mineralisation is more or less over the axis of a near north trending magnetic 'low' (axis L4). The sources of these magnetic 'lows' are not clear but they may represent alteration zones within or beneath the Mathinna Beds.

The Mangana Goldfield and Alberton Goldfield are over inferred 'deep' granodiorites. Similar rocks are inferred beneath the f_2 axis west of Mathinna. This axis more or less coincides with favourable stratigraphy outlined by Keele. This stratigraphic unit was interpreted (Keele) to be the Mathinna unit sinistrally offset by a northeast transfer fault - the latter is not evident in the magnetic data.

In detail, at Mathinna, there is some evidence for a dextral north-northwest fault (F13), along strike, to the south-southeast of the Golden Gate deposit. This is inferred to extend to the north into the Dans Rivulet Goldfield where it merges with F9. Assuming that north-northeast secondary structures are dilational (Reidel faults) then target zones T1 - T3 can be defined where such structures intersect F13/F9. A dextral north-northeast fault is interpreted 1km to the northwest of Golden Gate; a target zone (T4) is outlined along the presumed extension of this fault beneath the alluvium.

A similar fault is well defined in the Tower Hill area thus defining target zone T5. To the south-southeast similar targets (T6 - T8) are outlined.

In the Mangana area specific targets are not defined since specific dilation zones have not been recognised. The vein direction here is dominantly north-northwest and a general zone of interest extends to the north and south adjacent to fault F5. A similar general zone of interest is adjacent to fault F4; a specific target (T9) is outlined where a dextral secondary fault is interpreted.

A structural setting, somewhat similar to that in the Brilliant area, occurs within the tenements over, or adjacent to, the f_8 fold axis west of Mathinna. The f_8/Z3 intersection is suggested as a more specific zone of interest.

If the ovoid magnetic 'low' (axis L1) is a component in the mineralising process then the southern end of the 'low' is considered to be a 'look alike' setting of the Mathinna area. Hence a general zone of interest T10 is postulated.

ENHANCED AEROMAGNETIC IMAGES (SLIDES)

LODGED WITH MINERAL RESOURCES TASMANIA

All images consist of three scenes on separate slides

Intensity Linear Stretch - monochrome

Intensity Linear Stretch - colour

Intensity Non Linear Stretch - monochrome

Intensity Non Linear Stretch - colour

AGC on North Gradient - monochrome

AGC on North East Gradient - monochrome

AGC on East Gradient - monochrome

AGC on South East Gradient - monochrome

North Gradient - monochrome

North East Gradient - monochrome

East Gradient - monochrome

South East Gradient - monochrome

AGC on 2D - monochrome

AGC on FVD - monochrome

First Derivative (LIN) - monochrome

Second Derivative - monochrome

Gradients Blue North East, Green East, Red South East - colour

Blue North East AGC, Green East AGC, Red South East AGC - colour

Intensity (NL) Shaded With 50% North Gradient - colour

Intensity (NL) Shaded With 50% North East Gradient - colour

Intensity (NL) Shaded With 50% East Gradient - colour

Intensity (NL) Shaded With 50% South East Gradient - colour

Intensity (NL) Shaded With 75% North Gradient - colour

Intensity (NL) Shaded With 75% North East Gradient - colour

Intensity (NL) Shaded With 75% East Gradient - colour

Intensity (NL) Shaded With 75% South East Gradient - colour

Intensity (NL) Shaded With 75% FVD Gradient - colour

Intensity (NL) Shaded With 75% 2D Gradient - colour

Allendale

Pyengana Pluton

Blue Tier Batholith

Scottsdale Batholith

Diana Basalt

Mathinna

Brilliant

Tower Hill

LEGEND

- 'Magnetic' granitoid
- Inferred 'magnetic' granitoid at depth
- 'Non-magnetic' granitoid
- Inferred 'non-magnetic' granitoid at depth
- Magnetic lithologies in sediments
- Very weakly magnetic units in sediments
- Inferred hornfelsed sediments
- Discrete magnetic 'highs' in sediments
- Jurassic volcanics
- Triassic volcanics
- Tertiary volcanics
- Volcanics in talus deposits
- Inferred dyke (magnetic low)
- " " (" high)
- Magnetic rocks in drainage channels/flood plains
- Axis of magnetic 'low'
- " " " 'high' (over topo. ridge)
- 'Magnetic contact' (relatively more magnetic on hatched side)
- Inferred fold axis
- " anticline axis
- Interpreted major fault/shear zones
- " minor/secondary faults
- 'Vague' faults/deformation zones (from imaged data)
- Fractures in granitoid
- Drainage channel/flood plain
- Gold mines
- Major gold mine
- Tenement boundary
- Target zones

PROCESSING DETAILS

Processing : Southern Geoscience
Supervision : J. Ashley

5 cm

N

1 000 0 1 000 2000 3000

AUSTRALIAN MAP GRID
AGD84 SPHEROID
SOUTHERN HEMISPHERE

96-3862

ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 1 OF 3

RESOLUTE/SAMANTHA GROUP

NORTH EAST TASMANIA

AEROMAGNETIC SURVEY

INTERPRETATION PLAN

SCENE 1 OF 2 (NORTH)

SCALE 1:50 000	
DATE 17-03-1995	FIGURE 2A

710122

LEGEND

- 'Magnetic' granitoid
- Inferred 'magnetic' granitoid at depth
- 'Non-magnetic' granitoid
- Inferred 'non-magnetic' granitoid at depth
- Magnetic lithologies in sediments
- Very weakly magnetic units in sediments
- Inferred hornfelsed sediments
- Discrete magnetic 'highs' in sediments
- Jurassic volcanics
- Triassic volcanics
- Tertiary volcanics
- Volcanics in talus deposits
- Inferred dyke (magnetic low)
- " " (" high)
- Magnetic rocks in drainage channels/flood plains
- Axis of magnetic 'low'
- " " " 'high' (over topo. ridge)
- 'Magnetic contact' (relatively more magnetic on hatched side)
- Inferred fold axis
- " anticline axis
- Interpreted major fault/shear zones
- " minor/secondary faults
- 'Vague' faults/deformation zones (from imaged data)
- Fractures in granitoid
- Drainage channel/flood plain
- Gold mines
- Major gold mine
- Tenement boundary
- Target zones

PROCESSING DETAILS

Processing : Southern Geoscience
Supervision : J. Ashley

5 cm

N

1 000 0 1 000 2000 3000

AUSTRALIAN MAP GRID
AGD84 SPHEROID
SOUTHERN HEMISPHERE

96-3862

ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD 0
VOLUME 1 OF 3

S ANTS

RESOLUTE/SAMANTHA GROUP
NORTH EAST TASMANIA
AEROMAGNETIC SURVEY
INTERPRETATION PLAN
SCENE 2 OF 2 (SOUTH)

SCALE 1:50,000	
DATE 17-03-1995	FIGURE 25

710123

PROCESSING DETAILS

Processing : Southern Geoscience
Supervision : J. Ashley

PLOT SPECIFICATIONS

Contours:
Lower Level : 1 nT
Middle Level : 5 nT
Upper Level : 20 nT

Grid Cell Size : 50mE x 50mN

1 000 0 1 000 2000 3000

AUSTRALIAN MAP GRID
AGD84 SPHEROID
SOUTHERN HEMISPHERE

96-3862

ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 1 OF 3

SC NTS

RESOLUTE/SAMANTHA GROUP

NORTH EAST TASMANIA

AEROMAGNETIC SURVEY

CONTOURS OF TOTAL MAGNETIC INTENSITY

SCENE 1 OF 2 (NORTH)

SCALE 1: 50, 000	
DATE 17-03-1995	FIGURE 3A

5 cm

710124

PROCESSING DETAILS

Processing : Southern Geoscience
Supervision : J. Ashley

PLOT SPECIFICATIONS

Contours:
Lower Level : 1 nT
Middle Level : 5 nT
Upper Level : 20 nT

Grid Cell Size : 50mE x 50mN

1 000 0 1 000 2000 3000

AUSTRALIAN MAP GRID
AGD84 SPHEROID
SOUTHERN HEMISPHERE

96-3862

ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 1 OF 3

RESOLUTE/SAMANTHA GROUP

NORTH EAST TASMANIA

AEROMAGNETIC SURVEY

CONTOURS OF TOTAL MAGNETIC INTENSITY

SCENE 2 OF 2 (SOUTH)

SCALE 1: 50 000

DATE 07-03-1995 FIGURE 38

5cm

710125

710126

APPENDIX D

Rock Sample Locations, Descriptions and Assay Results

RESOLUTE RESOURCES LIMITED - ROCK SAMPLE

LOCATION / DESCRIPTION / ASSAYS

SAMPLE NO.	SAMPLE LOCATION GRID AMG CO-ORDS OR DESCRIPTIONS	SAMPLE DESCRIPTION	ASSAYS - Fe in %, all other in ppm										
			Au	As	Ag	Sb	Cu	Pb	Zn	Bi	W	Fe	Mn
379504	AMG 5403180N 575570E	bucky quartz, with ferruginous vugs.	0.01	<10			15	45	20				
379505	" " "	"	0.01	<10			10	200	38				
379508	AMG 5403520N 576220E	"	0.01	<10			5	<5	10				
379541	JUBILEE NO1 ADIT DUMP	ferruginous bucky quartz.	0.62	1000	<0.5	4	<5	20	15	<2	<2	0.8	130
379548		ferruginous Permian conglomerate.	0.25	30	<0.5	<2	10	20	65	<2	<2	2.5	55
379549		"	0.01	15	<0.5	<2	5	55	15	<2	<2	4.2	38
379550		"	0.05	190	<0.5	27	10	30	230	<2	27	6.0	220
379572	JUBILEE MAIN SHAFT DUMP	green siltstone with fine quartz carbonate veins.	0.01	130	<0.5	2	15	5	85	<2	2	3.3	910
379573	"	white bucky quartz in sericitized siltstone.	0.45	470	<0.5	2	25	100	55	<2	<2	2.0	1400
379574	"	"	1.04	5500	<0.5	8	5	40	40	<2	<2	1.6	670
379606	Telegraph Shaft Dump MATH GRID 5000N 4610E	ferruginous bucky quartz.	0.47	280	<0.5	5	15	5	45	<2	<2	0.40	415
379646	Telegraph Shaft 5000N MATH GRID 4610E	80cm channel 5m down shaft on N.W. side	1.63	30	0.5	<2	35	30	55	<2	<2	1.80	440
379647	"	60cm channel at bottom of shaft on S.E. side	0.19	50	0.6	<2	25	15	100	<2	<2	2.95	2290
379648	"	60cm channel at bottom of shaft on N.W. side	0.12	<10	0.7	<2	20	15	125	<2	<2	4.60	715
379650	Telegraph Adit	ferruginous bucky quartz 5m into adit	0.01	<10	0.5	<2	5	10	5	<2	<2	0.90	90
379652	October Shaft Dump	v. ferruginous bucky quartz	1.29	<10	<0.5	<2	10	30	<5	<2	<2	0.90	120
379653	"	"	0.30	320	0.6	5	30	20	20	<2	<2	4.40	585
379654	"	"	3.95	970	1.4	<2	8	3900	30	5	<2	1.25	170
379655	"	"	0.06	160	<0.5	<2	30	30	90	<2	<2	2.65	375
379673	4700N 4750E MATH GRID	ferruginous bucky quartz	0.05	<10	<0.5	<2	5	5	15	<2	<2	0.80	235
379674	4700N 4700E "	"	0.03	<10	<0.5	<2	10	<5	5	<2	<2	0.63	90
379675	4700N 4650E "	bucky quartz	0.02	<10	<0.5	<2	<5	5	5	<2	<2	0.65	285
379676	4700N 4600E "	ferruginous bucky quartz	<0.01	<10	<0.5	<2	<5	5	5	5	<2	0.55	70
379677	4800N 4600E "	"	0.02	<10	<0.5	<2	<5	<5	<5	<2	<2	0.55	90
379678	4850N 4625E "	bucky quartz	0.01	<10	<0.5	<2	<5	<5	5	<2	<2	0.55	95
379679	4900N 4675E "	"	0.01	<10	<0.5	<2	<5	5	5	<2	<2	0.65	95
379680	Telegraph Adit	fibrous extension veins at end of adit	0.80	<10	<0.5	<2	15	5	80	<2	<2	2.10	850
379681	"	" "	0.08	<10	<0.5	<2	15	5	70	5	<2	2.15	1530
379682	"	ferruginous quartz 5m into adit	0.07	10	<0.5	<2	20	<5	85	<2	<2	2.70	895
379683	"	bucky quartz "	0.01	<10	<0.5	<2	15	10	30	<2	<2	2.10	110
379684	5000N 4700E MATH GRID	bucky quartz	0.01	<10	<0.5	<2	<5	<5	20	<2	<2	0.95	75
379700	MANGANA GRID 11200N 7875E	ferruginous bucky quartz	0.02	110	<0.5	<2	<5	10	5	<0.01	<2	0.80	55

110123

RESOLUTE RESOURCES LIMITED - ROCK SAMPLE

LOCATION / DESCRIPTION / ASSAYS

SAMPLE NO.	SAMPLE LOCATION GRID AND CO-ORDS OR DESCRIPTIONS	SAMPLE DESCRIPTION	ASSAYS - Fe in %, all other in ppm										
			Au	As	Ag	Sb	Cu	Pb	Zn	Bi	W	Fe	Mn
379701	MANGAWA GRID 12000N 7875E	Ferruginous bucky quartz	001	10	<05	<2	<5	5	5	<001	<2	080	95
379787	JUBILEE No3 ADIT	Narrow "high grade" vein in east end of adit	53.5	2990	NA	->							
379788	"	"	75.1	895	NA	->							
379790	"	"	9.80	4340	NA	->							

210128

710129

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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Lot 484 Criddle St
MT MAGNET WA 6638
Tel: (099) 634 532
Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P52005

Date: 18 NOV 94

Samples Received: 15 NOV 94
Order Number : K9402C
Project Number : N/A
Samples in Batch: 3

AREA COVERED : MATHINNA

SAMPLE TYPE : ROCKS

THIS REPORT HAS BEEN PREPARED FOR

RESOLUTE RESOURCES LTD

AND SHOULD BE READ IN CONJUNCTION WITH THE FINAL PAGE

Authorised by: A Ferguson
(A.J. Ferguson)

ATTN: B SHAW
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

710130

Reference No: P52005 **ATTN: B SHAW** Page: 1

	Au ppm	As ppm	Cu ppm	Pb ppm	Zn ppm
Detn Limit	0.01	10	5	5	5
379504	0.01	<10	15	45	20
379505	0.01	<10	10	85	35
379505 Rpt	0.01	<10	10	315	40
379508	0.01	<10	5	<5	10

MATHINNA

****

Au,
Technique - Fire Assay on a 50 gram charge

As, Cu, Pb, Zn,
Technique - AAS

END OF REPORT

710132

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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Tel: (099) 634 532
Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P52170

Date: 31 DEC 94

AREA COVERED : MATHAMMA

SAMPLE TYPE : ROCKS

Samples Received: 13 DEC 94
Order Number : K9407A
Project Number : N/A
Samples in Batch: 63

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Authorised by: A.J. Ferguson

ATTN: G McDONALD
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

710133

Reference No: P52170 ATTN: G McDONALD Page: 1

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm	Ag ppm	Bi ppm	Cu ppm
Detn Limit	0.01	0.01	0.01	10	0.5	2	5
379541	0.63	0.61		1000	<0.5	<2	<5
379548	0.25			30	<0.5	<2	10
379549	0.01			15	<0.5	<2	5
379550	0.05			190	<0.5	<2	10

Reference No: P52170 **ATTN: G McDONALD** Page: 2

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm	Ag ppm	Bi ppm	Cu ppm
Detn Limit	0.01	0.01	0.01	10	0.5	2	5
379572	0.01			130	<0.5	<2	15
379573	0.45			470	<0.5	<2	25
379574	1.17	0.92	1.02	5500	<0.5	<2	5

INNA

	Fe %	Mn ppm	Pb ppm	Sb ppm	W ppm	Zn ppm
Detn Limit	0.1	1	5	2	2	5
379541	0.8	130	20	4	<2	15
379548	2.5	55	20	<2	<2	65
379549	4.2	38	55	<2	<2	15
379550	6.0	220	30	27	2	230

	Fe %	Mn ppm	Pb ppm	Sb ppm	W ppm	Zn ppm
Detn Limit	0.1	1	5	2	2	5
379572	3.3	910	5	2	2	85
379573	2.0	1400	100	2	<2	55
379574	1.6	670	40	8	<2	40

****

% Implies this result reported in %

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge

As, Ag, Cu, Fe, Mn, Pb, Sb, Zn,
Technique - AAS

Bi,
AAS

W,
Technique - Potassium Bi-Sulphate Fusion/Colorimetric

END OF REPORT

MinLab

710138

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P52231

Date: 09 JAN 95

AREA COVERED: CUNNAMENS HILL, OCTOBER

SAMPLE TYPE: ROCKS

Samples Received: 28 DEC 94
Order Number : K9410B
Project Number : N/A
Samples in Batch: 21

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Authorised by: _____
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

710139

Reference No: P52231 **ATTN: G McDONALD** Page: 1

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm	Ag ppm	Bi ppm	Cu ppm	
Detn Limit	0.01	0.01	0.01	10	0.5	2	5	
379652	1.02	1.63	1.22	<10	<0.5	<2	10	
379653	0.23	0.36		320	0.6	<2	30	
379654	3.04	2.42		970	2.0	5	10	OCTOBER
379654 Rpt	6.40			970	0.8	5	5	
379655	0.06			160	<0.5	<2	30	

Reference No: P52231 **ATTN: G McDONALD**

	Fe %	Mn ppm	Pb ppm	Sb ppm	W ppm	Zn ppm
Detn Limit	0.01	5	5	2	2	5
379652	0.90	120	30	<2	<2	<5
379653	4.40	585	20	5	<2	20
379654	1.30	170	3920	<2	<2	30
379654 Rpt	1.20	170	3880	<2	<2	30
379655	2.65	375	30	<2	<2	90

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge

As, Ag, Cu, Fe, Mn, Pb, Sb, Zn,
Technique - AAS

W,
Technique - Potassium Bi-Sulphate Fusion/Colorimetric

END OF REPORT

MinLab

710142

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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Tel: (099) 634 532
Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P60004

Date: 09 JAN 95

PREP CODE(S) MAT4/MMF

SAMPLE TYPE : ROCKS

Samples Received: 03 JAN 95
Order Number : K9411B
Project Number : N/A
Samples in Batch: 12

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Authorised by: _____
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

710143

Reference No: P60004 ATTN: G McDONALD Page: 1

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm	Ag ppm	Bi ppm	Cu ppm	
Detn Limit	0.01	0.01	0.01	10	0.5	2	5	
379673	0.05			<10	<0.5	<2	5	
379674	0.03			<10	<0.5	<2	10	
379674 Rpt	0.02			<10	<0.5	<2	10	
379675	0.02			<10	<0.5	<2	<5	
379676	<0.01			<10	<0.5	5	<5	
379677	0.02			<10	<0.5	<2	<5	[illegible]
379678	0.01			<10	<0.5	<2	<5	
379679	0.01			<10	<0.5	<2	<5	
379680	0.88	0.58	0.95	<10	<0.5	<2	15	
379681	0.08			<10	<0.5	5	15	
379682	0.07			10	<0.5	<2	20	
379683	0.01			<10	<0.5	<2	15	
379684	0.01			<10	<0.5	<2	<5	

	Fe %	Mn ppm	Pb ppm	Sb ppm	W ppm	Zn ppm
Detn Limit	0.01	5	5	2	2	5
379673	0.80	235	5	<2	<2	15
379674	0.60	80	<5	<2	<2	5
379674 Rpt	0.65	100	<5	<2	<2	5
379675	0.65	285	5	<2	<2	5
379676	0.55	70	5	<2	<2	5
379677	0.55	90	<5	<2	<2	<5
379678	0.55	95	<5	<2	<2	5
379679	0.65	95	5	<2	<2	5
379680	2.10	850	5	<2	<2	80
379681	2.15	1530	5	<2	<2	70
379682	2.70	895	<5	<2	<2	85
379683	2.10	110	10	<2	<2	30
379684	0.95	75	<5	<2	<2	20

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge

As, Ag, Cu, Fe, Mn, Pb, Sb, Zn,
Technique - AAS

Bi,
Technique - AAS

W,
Technique - Potassium Bi-Sulphate Fusion/Colorimetric

END OF REPORT

710146

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 980 174 TRUSTEE FOR THE MINLAB UNIT THUST TRADING AS MINLAB

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ANALYTICAL REPORT

Reference No: P52218

Date: 11 JAN 95

AREA COVERED : MATHINNA / MANGANA

SAMPLE TYPE : ROCKS

Samples Received: 20 DEC 94
Order Number : K9409
Project Number : N/A
Samples in Batch: 54

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Authorised by: _____
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LIMITED
MANGANA RD

Reference No: P52218 **ATTN: G McDONALD** Page: 1

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm	Ag ppm	Bi ppm	Cu ppm
Detn Limit	0.01	0.01	0.01	10	0.5	2	5
379606	0.47			280	<0.5	<2	15

MNTHINNH

Reference No: P52218 **ATTN: G McDONALD**

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm	Ag ppm	Bi ppm	Cu ppm	
Detn Limit	0.01	0.01	0.01	10	0.5	2	5	
379646	1.33	1.19	2.38	30	0.5	<2	35	MATHINNA
379647	0.19			50	0.6	<2	25	
379648	0.12			<10	0.7	<2	20	
379650	0.01			<10	0.5	<2	5	

	Fe %	Mn ppm	Pb ppm	Sb ppm	W ppm	Zn ppm
Detn Limit	0.01	5	5	2	2	5
379606	0.40	415	5	5	<2	45

	Fe %	Mn ppm	Pb ppm	Sb ppm	W ppm	Zn ppm	
Detn Limit	0.01	5	5	2	2	5	
379646	1.80	440	30	<2	<2	55	
379647	2.95	2290	15	<2	<2	100	MATHINNA
379648	4.60	715	15	<2	<2	125	
379650	0.90	90	10	<2	<2	5	

****

% Implies this result reported in %

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge

As, Ag, Cu, Fe, Mn, Pb, Sb, Zn,
Technique - AAS

Bi,
Technique - AAS

W,
Technique - Potassium Bi-Sulphate Fusion/Colorimetric

END OF REPORT

710152

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 660 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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ANALYTICAL REPORT

Reference No: P60038

Date: 31 JAN 95

AREA COVERED: MANGANA, CHINAMEENS HILL
MANGANA BUCKLANDS HILL

SAMPLE TYPE: ROCKS

Samples Received: 23 JAN 95
Order Number : K9414
Project Number : 17/91
Samples in Batch: 17

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Authorised by: A.J. Ferguson
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LIMITED
MANGANA RD
FINGAL TAS 7214

710153

Reference No: P60038 **ATTN: G McDONALD** Page: 1

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm	Ag ppm	Bi ppm	Cu ppm
Detn Limit	0.01	0.01	0.01	10	0.5	0.01	5
379700	0.02			110	<0.5	<0.01	<5
379701	0.01			10	<0.5	<0.01	<5

BUCKLANDS HILL

	Fe %	Mn ppm	Pb ppm	Sb ppm	W ppm	Zn ppm
Detn Limit	0.01	1	5	2	2	5
379700	0.80	55	10	<2	<2	5
379701	0.80	95	5	<2	<2	5

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge

As, Ag, Cu, Fe, Mn, Pb, Sb, Zn,
Technique - AAS

Bi,
Technique - AAS

W,
Technique - Potassium Bi-Sulphate Fusion/Colorimetric

END OF REPORT

MinLab

710156

MINCULTURE LABORATORIES PTY LTD ACN 008 990 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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ANALYTICAL REPORT

Reference No: P60485

Date: 04 APR 95

AREA COVERED : MYATHUNNA

SAMPLE TYPE : ROCKS

Samples Received: 03 APR 95
Order Number :
Submission Sheet: K9419
Project Number : N/A
Samples in Batch: 4

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Authorised by: _____
(A.J. Ferguson)

ATTN: G McDONALD
THE RESOLUTE SAMANTHA GROUP
MANGANA RD
FINGAL TAS 7214

Reference No: P60485 ATTN: G McDONALD

	Au ppm	As ppm
Detn Limit	0.01	10
379787	53.5	2990
379788	63.0	910
379788 Rpt	87.1	880
379790	9.80	4340

MATHIMP

Reference No: P60485 ATTN: G McDONALD

****

Au,
Technique - Fire Assay on a 50 gram charge

As,
Technique - AAS

END OF REPORT

APPENDIX E

Stream Bleg Sample Record Sheets and Assay Results

MinLab

7101C0

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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ANALYTICAL REPORT

Reference No: KG51073

Date: 29 NOV 94

Samples Received: 17 NOV 94
Order Number : ~~N/A~~ K9402
Project Number : TASSIE
Samples in Batch: 8

AREA COVERED : MATHINNA

SAMPLE TYPE : BLEGS.

THIS REPORT HAS BEEN PREPARED FOR

RESOLUTE RESOURCES LIMITED

AND SHOULD BE READ IN CONJUNCTION WITH THE FINAL PAGE

Authorised by: A Ferguson
(A.J. Ferguson)

ATTN: B SHAW
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

Reference No: KG51073 **ATTN: B SHAW**

	Au ppb	
Detn Limit	1	
		A.M.G. CO-ORDS.
379501	1	5403240 N 575600 E
379503	1	5403180 N 575570 E
379507	2	5403520 N 576220 E.

MATHINNA

****

Au,
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

END OF REPORT

710103

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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Tel: (099) 634 532
Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P52006

Date: 17 NOV 94

Samples Received: 15 NOV 94
Order Number : N/A K094028
Project Number : N/A
Samples in Batch: 8

AREA COVERED : MATHINNA

SAMPLE TYPE : BLEGS.

THIS REPORT HAS BEEN PREPARED FOR

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Authorised by: R Ferguson
(A.J. Ferguson)

ATTN: B SHAW
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

Reference No: P52006 **ATTN: B SHAW** Page: 1

	As ppm	Cu ppm	Pb ppm	Zn ppm
Detn Limit	10	5	5	5
379501	<10	10	15	80
379503	<10	10	15	60
379503 Rpt	<10	10	15	60
379507	<10	5	10	70

MATHINNA

****

As, Cu, Pb, Zn,
Technique - AAS

END OF REPORT

710166

OPEN FILE

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RESOLUTE SAMANTHA LIMITED

ANNUAL REPORT
1995

VOLUME 2|3

EL 22/92
"TOWER HILL"

96-3862

ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 2 OF 3

Grant MacDonald
March 1996
GM611:jh

APPENDIX F

Soil Sample Results Record Sheets and Assay Results

RESOLUTE RESOURCES LIMITED 710168

Project Name: TASMANIA Prospect Name: MATTHINNA Tenement No.: 17/91

Sampler: TIM + JAMES Sample Type: Subsurface Soil Sample Submission No.: K7940-2A

Note: New Area - New Page & New Sample Type - New Page Date: 7/11/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375001				7400	3200
2				7400	3150
3				7500	3200
4				7500	3150
5				7400	3150
6				7400	3200
7				7300	3100
8				7300	3150
9				7300	3200
375010			Sample 5m E of pin	7200	3000
1				7200	3050
2				7200	3100
3				7200	3150
4				7200	3200
5				7100	2950
6				7100	3000
7			Sample downhill from shaft	7100	3050
8			Sample 5m N (next to shaft)	7100	3100
9				7100	3150
375020				7100	3200
1				7000	3000
2				7000	3050
3				7000	3100
4				7000	3150
5				7000	3200
6				6900	3000
7				6900	3050
8				6900	3100
9				6900	3150
375030				6900	3200

Assayed Nord 23.11.94.

RESOLUTE RESOURCES LIMITED 710169

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES + TIM Sample Type: SUBSURFACE SOIL Sample Submission No.: KTAOCA

Note: New Area - New Page & New Sample Type - New Page Date: 8 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375031			SAMPLE TAKEN 5M SOUTH	6800	2950 ~~3100~~
2				6800	3000
3				6800	3050
4				6800	3100
5				6800	3150
6				6800	3200
7				6700	2850
8				6700	2900
9				6700	2950
375040				6700	3000
1				6700	3050
2				6700	3100
3				6700	3150
4				6700	3200
5				6600	2800
6				6600	2850
7				6600	2900
8				6600	2950
9				6600	3000
375050				6600	3050
1				6600	3100
2				6600	3150
3				6600	3200
4				6500	2800
5			CREEK BED EDGE	6500	2850
6			ON DRY CREEK	6500	2900
7				6500	2950
8				6500	3000
9				6500	3050
375060				6500	3100

Assays Back 25.11.94

1

RESOLUTE RESOURCES LIMITED 710170

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES + TIM Sample Type: SUBSURFACE SOIL Sample Submission No.: K79402A

Note: New Area - New Page & New Sample Type - New Page Date: 8 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375061				6500	3150
2				6500	3200
3				6400	2600
4				6400	2650
5				6400	2700
6				6400	2750
7				6400	2800
8				6400	2850
9				6400	2900
375070				6400	2950
1				6400	3000
2				6400	3050
3				6400	3100
4				6400	3150
5				6400	3200
6			⁂ SAMPLE 4m EAST NEXT TO OLD TRACK	6300	2600
7				6300	2650
8				6300	2700
9				6300	2750
375080				6300	2800
1				6300	2850
2				6300	2900
3				6300	2950
4				6300	3000
5				6300	3050
6				6300	3100
7				6300	3150
8				6300	3200
9				6200	2550
375090				6200	2600

Assays Rec'd 23.11.94

RESOLUTE RESOURCES LIMITED 710171

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES + TIM Sample Type: SUBSURFACE SOIL Sample Submission No.: K7940ZA

Note: New Area - New Page & New Sample Type - New Page Date: 9 / 11 / '94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375091				6200	2650
2				6200	2700
3				6200	2750
4				6200	2800
5				6200	2850
6				6200	2900
7				6200	2950
8				6200	3000
9				6200	3050
375100				6200	3100
1				6200	3150
2				6200	3200
3				6100	3200
4				6100	3150
5				6100	3100
6				6100	3050
7				6100	3000
8				6100	2950
9				6100	2900
375110				6100	2850
1				6100	2800
2				6100	2750
3				6100	2700
4				6100	2650
5				6100	2600
6				6000	3200
7				6000	3150
8				6000	3100
9				6000	3050
375120				6000	3000

Assay Done 23.11.94

SENT 10/11/94

A.C.O. 1/12/94 Done 23.11

Done 1/12/94

RESOLUTE RESOURCES LIMITED

710172

Project Name: ~~MATHINNA~~ TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: Tim + James Sample Type: Subsurface soil Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 10/11/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375121				6000	2950
2				6000	2900
3				6000	2850
4				6000	2800
5				6000	2750
6				6000	2700
7				6000	2650
8				6000	2600
9				5900	3200
375130				5900	3150
1				5900	3100
2				5900	3050
3				5900	3000
4				5900	2950
5				5900	2900
6				5900	2850
7				5900	2800
8				5900	2750
9				5900	2700
375140				5900	2650
1				5900	2600
2				5800	3200
3				5800	3150
4				5800	3100
5				5800	3050
6				5800	3000
7				5800	2950
8				5800	2900
9				5800	2850
375150				5800	2800

RESOLUTE RESOURCES LIMITED 710173

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: 7/91

Sampler: Tim - Adrian Sample Type: Soil surface Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 11 / 11 /94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375151				5800	2750
2				5800	2700
3				5800	2650
4				5700	3200
5				5700	3150
6				5700	3100
7				5700	3050
8				5700	3000
9				5700	2950
375160				5700	2900
1				5700	2850
2				5700	2800
3				5700	2750
4				5700	2700
5				5600	3200
6				5600	3150
7				5600	3100
8				5600	3050
9				5600	3000
375170				5600	2950
1				5600	2900
2				5600	2850
3				5600	2800
4				5600	2750
5				5500	3200
6				5500	3150
7				5500	3100
8				5500	3050
9				5500	3000
375180				5500	2950

RESOLUTE RESOURCES LIMITED 710174

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: 17/91

Sampler: Tim + Adrian Sample Type: Sub-surface soil Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 12 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375181				5500	2900
2				5500	2850
3				5500	2800
4				7800	3250
5				7800	3300
6				7800	3350
7				7800	3400
8				7700	3200
9				7700	3250
375190				7700	3300
1				7700	3350
2				7700	3400
3			Sample taken 5m north	7700	3450
4			~~Sample 5m South~~	7600	3250
5			Sample taken 5m South	7600	3300
6				7600	3450
7				7600	3450
8				7600	3500
9				7600	3550
375200				7600	3600
1				7500	3650
2			Sample taken 5m South	7500	3250
3			Sample taken 5m South	7500	3300
4			Sample 3.5m SW	7500	3350
5				7500	3450
6			6M EAST (ROAD)	7500	3500
7			5	7500	3550
8			5M NORTH	7500	3600
9			(6M WEST (BETWEEN WORKINGS)	7400	3250
375210				7400	3300

RESOLUTE RESOURCES LIMITED 710175

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: TIM + ADRIAN Sample Type: SUBSURFACE SOIL Sample Submission No.: K09401

Note: New Area - New Page & New Sample Type - New Page Date: 15 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375301				6100	3550
2			SAMPLE ON BANK OF CREEK 2M FROM P.N	"	3600
3				"	3650
4				"	3700
5				"	3750
6				6000	3250
7				"	3300
8				"	3350
9				"	3400
375310				"	3450
1				"	3500
2			SAMPLE ON BANK OF CREEK	"	3550
3				"	3600
4				"	3650
5				"	3700
6				"	3750
7				5900	3250
8				"	3300
9				"	3350
375320				"	3400
1				"	3450
2				"	3500
3				"	3550
4				"	3600
5				"	3650
6				"	3700
7				"	3750
8				7800	5200
9				"	5150
375330				"	5100

Hole 94 1:2

RESOLUTE RESOURCES LIMITED

710176

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: 17/91

Sampler: Tim + Adrian Sample Type: Sub Surface Soil Sample Submission No.: K09401

Note: New Area - New Page & New Sample Type - New Page Date: 18 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375391				6500	5050
2				"	5000
3				"	4950
4				"	4900
5				"	4850
6				6300	5200
7				"	5150
8				"	5100
9				"	5050
375400				"	5000
1			K09401	"	4950
2			K09403	6100	5200
3				"	5150
4				"	5100
5				"	5050
6				"	5000
7				5900	5200
8				"	5150
9				"	5100
375410				5700	5200
1				"	5150
2				"	5100
3				5500	5200
4			Sample 15m south above creek	"	5150
5				5400	3200
6				"	3250
7				"	3300
8				"	3350
9				"	3400
375420				"	3450

RESOLUTE RESOURCES LIMITED 710177

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: 17/91

Sampler: Tim / Adrian Sample Type: Sub-Surface soil Sample Submission No.: K9403

Note: New Area - New Page & New Sample Type - New Page Date: 18 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375421				5400	3500
2				"	3550
3				"	3600
4				"	3650
5				"	3700
6				"	3750
7				5200	3200
8				"	3250
9				"	3300
375430			None	"	3350
1				"	3400
2				"	3450
3				"	3500
4				"	3550
5				"	3600
6				"	3650
7				"	3700
8				"	3750
9				5400	3150
375440				"	3100
1				"	3050
2				"	3000
3				"	2950
4				"	2900
5				"	2850
6				5300	3150
7				"	3100
8				"	3050
9				"	3000
375450			Sample 8m north, out of creek bed	"	2950

RESOLUTE RESOURCES LIMITED 710178

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: 17/91

Sampler: Tim - Adrian Sample Type: Stesurface soil Sample Submission No.: K09403

Note: New Area - New Page & New Sample Type - New Page Date: 19/11/91

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375451				5200	3150
2				"	3100
3				"	3050
4				"	3000
5				"	2950
6				5100	3150
7				"	3100
8				"	3050
9				"	3000
375460				"	2950
1			Board	5000	3150
2				"	3100
3				"	3050
4				"	3000
5				"	2950
6				4900	3150
7				"	3100
8				"	3050
9				"	3000
375470				4800	3150
1				"	3100
2				"	3050
3				4700	3150
4				"	3100
5				4600	3150
6				"	3100
7				4500	3150
8				"	3100
9				4400	3150
375480				"	3100

RESOLUTE RESOURCES LIMITED 710179

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: 17/91

Sampler: Tim + Adrian Sample Type: Sub Surface Soil Sample Submission No.: K09403

Note: New Area - New Page & New Sample Type - New Page Date: 20 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375481				4300	3150
2				"	3100
3				4400	4300
4				"	4350
5				"	4400
6			None	"	4450
7				"	4500
8				"	4550
9				"	4600
375490				"	4650
1			SUSPECT SAMPLE NEXT TO CREEK (POSSIBLE ALLUVIUM)	"	4700
2				"	4750
3				"	4800
4				"	4850
5			K09403	"	4900
6			~~K09404~~		
7					
8					
9					
375500					
1					
2					
3					
4					
5					
6					
7					
8					
9					
375510					

RESOLUTE RESOURCES LIMITED 710180

Project Name: Tasmania Prospect Name: Mathina Tenement No.: 17/91

Sampler: Tim H. & Gary Sample Type: Sub Surface Soil Sample Submission No.: K9406

Note: New Area - New Page & New Sample Type - New Page Date: 30/11/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375541				6400	5300
2				"	5350
3				"	5400
4				"	5450
5				"	5500
6				"	5550
7				"	5600
8				"	5650
9				"	5700
375550				"	5750
1				"	5800
2			5m East (Outcrop)	"	5850
3				6100	5250
4				"	5300
5				"	5350
6				"	5400
7				"	5450
8				"	5500
9				"	5550
375560				"	5600
1				"	5650
2				"	5700
3				"	5750
4				"	5800
5				"	5850
6			Pine Forest	"	5900
7				"	5950
8				"	6000
9			5m West (workings)	5800N	5250E
375570			5m West (workings)	"	5300E

RESOLUTE RESOURCES LIMITED

10181

Project Name: Tasmania Prospect Name: Mathina Tenement No.: 17/91

Sampler: Tim.H. & Gary Sample Type: Subsurface soil Sample Submission No.: K09426

Note: New Area - New Page & New Sample Type - New Page Date: 1/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375571				5800	5350
2				"	5400
3				"	5450
4				"	5500
5				"	5550
6			10m South (Disturbance)	"	5600
7			2m North (Tree)	"	5650
8				"	5700
9				"	5750
375580			None	"	5800
1				"	5850
2			5m North (Tree)	"	5900
3				"	5950
4				"	6000
5			5m West (Road)	"	6050
6				5300	5250
7				"	5300
8				"	5350
9			2m South (creek)	"	5400
375590				"	5450
1				"	5500
2				"	5550
3				"	5600
4				"	5650
5				"	5700
6				"	5750
7				"	5800
8				"	5850
9			10m East (outcrop)	"	5900
375600			5m North (Road)	"	5950

RESOLUTE RESOURCES LIMITED 710182

Project Name: Tasmania Prospect Name: Mathina Tenement No.: 17/91

Sampler: Tim H. & Gary Sample Type: Subsurface Soil Sample Submission No.: K0942

Note: New Area - New Page & New Sample Type - New Page Date: 1/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375601			Pine Plantation	5300	6000
2				4900	5250
3				"	5300
4				"	5350
5				"	5400
6				"	5450
7				"	5500
8				"	5550
9				"	5600
375610				"	5650
1				"	5700
2				"	5750
3				"	5300
4				"	5850
5				"	5900
6				"	5950
7				"	6000
8				4000	5300
9				"	5350
375620			4M NORTH (DISTURBED GROUND)	"	5400
1				"	5450
2				"	5500
3				"	5550
4				"	5600
5				"	5650
6				"	5700
7				"	5750
8				3700	5200
9				"	5250
375630				"	5300

RESOLUTE RESOURCES LIMITED 710183

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.:

Sampler: NIGEL + WILL Sample Type: SUBSURFACE SOILS Sample Submission No.: K09406

Note: New Area - New Page & New Sample Type - New Page Date: 4 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375631				3700	5050
2				"	5000
3				"	4950
4				"	4900
5				"	4850
6				"	4800
7				"	4750
8				"	4700
9				3700	5250
375640				"	5303
1				"	5350
2				"	5400
3				"	5450
4				"	5500
5				"	5550
6				"	5600
7				"	5650
8				"	5700
9				"	5750
375650				3400	5200
1				"	5150
2				"	5100
3				"	5050
4				"	5000
5				"	4950
6				"	4900
7				"	4850
8			4m EAST (ROAD)	"	4800
9				"	4750
375660				"	4700

Done

RESOLUTE RESOURCES LIMITED 710184

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.:

Sampler: NIGEL + WILL Sample Type: SUBSURFACE SOILS Sample Submission No.: K09406/

Note: New Area - New Page & New Sample Type - New Page Date: 5/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375661				3400	5250
2				"	5300
3				"	5350
4				"	5400
5				"	5450
6				"	5500
7				"	5550
8				"	5600
9				"	5650
375670				3300	5200
1				"	5150
2				"	5100
3				"	5050
4				"	5000
5				"	4950
6				"	4900
7				"	4850
8				"	4800
9				"	4750
375680				"	4700
1				3300	5250
2					5300
3					5350
4			10M EAST (ROAD/CREEK)		5400
5					5450
6					5500
7					5550
8			K09406		5600
9					
375690					

RESOLUTE RESOURCES LIMITED

710185

Project Name: TASMANIA Prospect Name: MARIANA Tenement No.:

Sampler: Greg & GARRY Sample Type: SURFACE SOIL Sample Submission No.: K09408

Note: New Area - New Page & New Sample Type - New Page Date: 7/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375691			WORKINGS 5m AWAY (BIT SLOPE FANS AWAY)	8600	10,000
2			SAMPLE TAKEN 17m NORTH (ABOVE ROAD)	" "	9,950
3				" "	9900
4				" "	9850
5				" "	9800
6				" "	9750
7				" "	9700
8				" "	9650
9				" "	9600
375700				" "	9550
1				" "	9500
2				" "	9450
3				" "	10,050
4				" "	10,100
5				" "	10,150
6			SAMPLE TAKEN 3m SOUTH (DISTURBANCE)	" "	10,200
7				" "	10,250
8				" "	10,300
9				" "	10,350
375710				" "	10,400
1				" "	10,450
2				" "	10,500
3			SAMPLE TAKEN 3m EAST (OLD TRACK)	" "	10,550
4				" "	10,600
5				8500	10,000
6				" "	9,950
7				" "	9900
8				" "	9850
9				" "	9800
375720			SAMPLE TAKEN 10m S (WORKINGS)	" "	9750

RESOLUTE RESOURCES LIMITED 710186

Project Name: JEMANIA Prospect Name: HANGANA Tenement No.:

Sampler: CRAIG & GARRY Sample Type: SOIL/SURFACE SOIL Sample Submission No.: K09408

Note: New Area - New Page & New Sample Type - New Page Date: 7/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375721				8500	9700
2				"	9650
3				"	9600
4			SAMPLE TAKEN 5m SOUTH (DIGGINGS)	"	9550
5				"	9500
6				"	9450
7			SAMPLE TAKEN 20m EAST (SHAFT & TAILINGS)	"	10,050
8				"	10,100
9				"	10,150
375730				"	10,200
1				"	10,250
2				"	10,300
3				"	10,350
4				"	10,400
5				"	10,450
6				"	10,500
7			SAMPLE TAKEN 5m NORTH (OLD WORKINGS)	"	10,550
8				8400	10,050
9				"	10,100
375740				"	10,150
1				"	10,200
2				"	10,250
3				"	10,300
4			SAMPLE TAKEN 7m EAST (CREEK)	"	10,350
5				"	10,400
6				"	10,450
7				"	10,500
8				"	10,550
9				"	10,000
375750				"	9950

RESOLUTE RESOURCES LIMITED 710187

Project Name: TASMANIA Prospect Name: MANGANA Tenement No.:

Sampler: CRAIG & GARRY Sample Type: SURFACE SOIL Sample Submission No.: K0408

Note: New Area - New Page & New Sample Type - New Page Date: 8/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375751				8400	9900
2				" "	9850
3			SAMPLE TAKEN 15mN BELOW TREE (TAILINGS ABOVE)	" "	9800
4			" " " 12mS " " " " " "	" "	9750
5			" " " " 16mN " " " " "	" "	9700
6				" "	9650
7			SAMPLE TAKEN 5mS, (DIGGINGS)	" "	9600
8				" "	9550
9				" "	9500
375760				" "	9450
1				8700	10,000
2				" "	9950
3			SAMPLE TAKEN 5mS, BELOW TREE	" "	9900
4				" "	9850
5				" "	9800
6			SAMPLE TAKEN 4mSE, (WORKINGS)	" "	9750
7				" "	9700
8			SAMPLE TAKEN 5mS (CREEK)	" "	9650
9				" "	9600
375770				" "	9550
1				" "	9500
2				" "	9450
3				" "	10,050
4				" "	10,100
5				" "	10,150
6				" "	10,200
7				" "	10,250
8				" "	10,300
9				" "	10,350
375780				" "	10,400

RESOLUTE RESOURCES LIMITED 710188

Project Name: TASMANIA Prospect Name: NANGANA Tenement No.:

Sampler: CRAIG & GARRY Sample Type: SUBSURFACE SOIL Sample Submission No.: K09408

Note: New Area - New Page & New Sample Type - New Page Date: 8/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375781				8700	10,450
2				" "	10,500
3				" "	10,550
4				" "	10,600
5				8900	10,000
6			SAMPLE TAKEN 7m NE (WORKINGS)	" "	9950
7				" "	9900
8				" "	9850
9				" "	9800
375790			None	" "	9750
1				"	9700
2			5M NORTH (BELOW TREE)	"	9650
3				"	9600
4				"	9550
5				"	9500
6				"	9450
7				"	9400
8				8900	10050
9			4M SOUTH (ROCKY OUTCROP)	"	10100
375800				"	10150
1				"	10200
2				"	10250
3				"	10300
4				"	10350
5				"	10400
6				"	10450
7				"	10500
8				"	10550
9				"	10600
375810			10M WEST (ROAD)	8800	10050

RESOLUTE RESOURCES LIMITED 710189

Project Name: TASMANIA Prospect Name: MANGANA Tenement No.:

Sampler GARY + GRANT Sample Type: SUBSURFACE SOIL Sample Submission No.: K09408

Note: New Area - New Page & New Sample Type - New Page Date: 9/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375811				8500	10100
2				"	10150
3				"	10200
4			2M NORTH (ROCKY OUTCROP)	"	10250
5				"	10300
6				"	10350
7				"	10400
8				"	10450
9				"	10500
375820				"	10550
1				"	10600
2				8800	10000
3				"	9950
4				"	9900
5			3M SOUTH (BELOW TREE)	"	9850
6				"	9800
7			3M WEST (BELOW TREE)	"	9750
8				"	9700
9			15M SOUTH EAST (ABOVE ALLUVIAL)	"	9650
375830			" "	"	9600
1			20M NORTH (ALLUVIAL/GROUND DISTURBANCE)	"	9550
2				"	9500
3				"	9450
4				9400	10050
5				"	10100
6				"	10150
7				"	10200
8				"	10250
9				"	10300
375840				"	10350

RESOLUTE RESOURCES LIMITED

710190

Project Name: TASMANIA Prospect Name: MANGANA. Tenement No.:

Sampler: GARY GRANT Sample Type: SUBSURFACE SOILS Sample Submission No.: K09403

Note: New Area - New Page & New Sample Type - New Page Date: 10 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375841				9400	10400
2				"	10450
3				"	10500
4			ROCKY OUTCROP	"	10550
5			"	"	10600
6			"	"	10650
7				9350	10050
8				"	10100
9				"	10150
375850				"	10200
1			None	"	10250
2				"	10300
3				"	10350
4				"	10400
5				"	10450
6				"	10500
7				"	10550
8				"	10600
9				"	10650
375860				9300	10000
1			8M SOUTH (BELOW TREE) OLD WORKINGS	"	9950
2				"	9900
3			6M SOUTH " "	"	9850
4				"	9800
5				"	9750
6			8M NORTH " "	"	9700
7				"	9650
8				"	9600
9				"	9550
375870				"	9500

RESOLUTE RESOURCES LIMITED 710191

Project Name: TASMANIA Prospect Name: MANGANA / BOCKLANDS Tenement No.:

Sampler: GARY + GRANT Sample Type: SUBSURFACE SOILS Sample Submission No.: K0940 8

Note: New Area - New Page & New Sample Type - New Page Date: 10 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375871				9300	9450
2				"	9400
3				11600	8000
4				"	7950
5			5M NORTH (WORKINGS)	"	7900
6				"	7850
7				"	7800
8				"	7750
9			BASE OF TREE (DOWNHILL	"	7700
375880				"	7650
1				"	7600
2				"	7550
3				11600	8050
4				"	8100
5				"	8150
6				"	8200
7				"	8250
8			20M WEST (SOIL SAMPLE / OLD WORKINGS?)	"	8300
9			" "	"	8350
375890			5M NORTH " "	"	8400
1				"	8450
2				"	8500
3				"	8550
4				"	8600
5				11700	8000
6			10M SOUTH WEST (COSTEAN / ROAD)	"	7950
7				"	7900
8				"	7850
9				"	7800
375900				"	7750

RESOLUTE RESOURCES LIMITED 710192

Project Name: TASMANIA Prospect Name: BUCKLAND HILL Tenement No.:

Sampler: BRIAN + GRANT Sample Type: SUBSURFACE SOILS Sample Submission No.: K09408

Note: New Area - New Page & New Sample Type - New Page Date: 11 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375901				11700	7700
2				"	7650
3				"	7600
4				"	7550
5				11700	8050
6				"	8100
7				"	8150
8				"	8200
9				"	8250
375910				"	8300
1				"	8350
2				"	8400
3				"	8450
4				"	8500
5				"	8550
6				"	8600
7				"	8650
8				12200	8000
9				"	8050
375920			10M N/EAST (BELOW COSTEAN)	"	8100
1				"	8150
2				"	8200
3				"	8250
4				"	8300
5				"	8350
6				"	8400
7				"	8450
8				"	8500
9				"	8550
375930				"	8600

RESOLUTE RESOURCES LIMITED 710193

Project Name: Tasmania Prospect Name: Beckards Hill Tenement No.:

Sampler: Gary + Grant Sample Type: Subsurface soil Sample Submission No.: K09403/10

Note: New Area - New Page & New Sample Type - New Page Date: 13/12/

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375931				12200	8600
2				"	8650
3			K09408	"	8700
4			K09410	12200	7950
5				"	7900
6				"	7850
7				"	7800
8				"	7750
9				"	7700
375940				"	7650
1				"	7600
2				"	7550
3				"	7500
4				"	7450
5				12500	8000 7400
6				" "	~~7350~~ 7500
7				" "	7900
8				" "	7850
9				" "	7800
375950				" "	7750
1				" "	7700
2				" "	7650
3			sample taken 6 in E. below tree	" "	7600
4				" "	7550
5				" "	7500
6				" "	7450
7				" "	7400
8				" "	7350
9				" "	7300
375960				" "	7250

RESOLUTE RESOURCES LIMITED

710194

Project Name: TASMANIA Prospect Name: BUCKLANDS HILL + VOLUNTEER Tenement No.:

Sampler: CRAIG & MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09 410/11

Note: New Area - New Page & New Sample Type - New Page Date: 14/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375961			SAMPLE TAKEN 5m SW (Disturbance)	12500	8050
2				" "	8100
3				" "	8150
4				" "	8200
5				" "	8250
6				" "	8300
7				" "	8350
8				" "	8400
9				" "	8450
375970				" "	8500
1				" "	8550
2				" "	8600
3				" "	8650
4				" "	8700
5				" "	8750
6			Sample taken 5m NE, beneath Sallen tree cavity	12900	8250
7				" "	8300
8			Sample taken 5m W, beneath Sallen tree cavity	" "	8350
9				" "	8400
375980				" "	8450
1			Sample taken 15m W, creek gully	" "	8500
2				" "	8550
3				" "	8600
4				" "	8650
5			K09 410	" "	8700
6	K09 411		* START OF VOLUNTEER PROSPECT	7800	2200
7	↓			" "	2150
8				" "	2100
9			SURFACE DISTURBANCE	" "	2050
375990				" "	2250

BUCKLANDS HILL

VOLUNTEER

RESOLUTE RESOURCES LIMITED

710195

Project Name: TASMANIA Prospect Name: VOLUNTEER Tenement No.:

Sampler: GARY & GRANT. Sample Type: SUBSURFACE SOIL Sample Submission No.: K09411

Note: New Area - New Page & New Sample Type - New Page Date: / /

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
375991				7800	2300
2				" "	2350
3				" "	2400
4				" "	2450
5				" "	2500
6				8000	2200
7				" "	2150
8			5m S (DISTURBANCE)	" "	2100
9				" "	2250
376000				" "	2300
1				" "	2350
2				" "	2400
3				" "	2450
4				" "	2500
5				" "	2550
6				" "	2600
7				8200	2200
8				" "	2150
9				" "	2100
376010			6m E.S.E (ROAD)	" "	2250
1				" "	2300
2				" "	2350
3				" "	2400
4				" "	2450
5				" "	2500
6			7m N. (TAILINGS)	" "	2550
7				8400	2450
8				" "	2500
9			PIN LOCATION 2m W (ROAD) SAMPLE TAKEN 10m E (ROAD) ↑ K09411	" "	2550
376020			INFILL MATHINNA ↓ K09410	4800	4425

Done

RESOLUTE RESOURCES LIMITED

710196

Project Name: TASMANIA Prospect Name: BLACKBOY RIDGE Tenement No.:

Sampler: CRAIG & MIKE Sample Type: SUBSURFACE Sample Submission No.: K0940

Note: New Area - New Page & New Sample Type - New Page Date: 15/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376111				10400	9650
2				" "	9600
3				" "	9550
4				" "	9500
5				" "	9450
6				" "	9400
7				" "	9350
8				" "	9300
9				" "	9250
376120				" "	9200
1				" "	9150
2				10600	9700
3				" "	9650
4				" "	9600
5				" "	9550
6				" "	9500
7				" "	9450
8			PEG MOVED 5m W (ROAD)	" "	9395
9				" "	9350
376130				" "	9300
1		↑ MAINGANA		" "	9250
2			C HORIZON TAKEN (ALLUVIUM PILE 7m W)	" "	9200
3			C HORIZON TAKEN FROM ROAD EMBANKMENT CUTTING CHINAMANS HILL INFILL, TAKEN 10m W,	10700	3430
4		↓ MATHINNA	TAKEN 3m SW (OLD ROAD)	" "	3375
5				" "	3325
6			TAKEN IN PINE PLANTATION, DEEP SAMPLE TAKEN	" "	3275
7			DEEP SAMPLE TAKEN (PINE PLANTATION)	10600	3325
8			TAKEN 12m E (ROAD)	" "	3375
9				" "	3425
376140			SAMPLE TAKEN OUT OF ROAD EMBANKMENT CUTTING (C HORIZON)	" "	3470

RESOLUTE RESOURCES LIMITED

710197

Project Name: TASMANIA Prospect Name: CHINAMAN'S HILL Tenement No.: ~~KO9410~~ KO9411

Sampler: CRAIG ADRIAN Sample Type: ~~SOIL~~ SURFACE SOIL Sample Submission No.: ~~KO9411~~ KO9411

Note: New Area - New Page & New Sample Type - New Page Date: 19/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376141			TAKEN IN PINE PLANTATION	10500	3375
2				" "	3425
3				" "	3475
4				10400	3525
5				" "	3475
6				" "	3425
7				" "	3375
8				10300	3375
9				" "	3425
376150				" "	3475
1			TAKEN 3m E IN LEE OF TREE (OLD ROAD)	" "	3525
2			TAKEN 5m SE (OLD ROAD)	" "	3575
3				10200	3625
4				" "	3575
5				" "	3525
6				" "	3475
7				" "	3425
8				" "	3375
9				10100	3425
376160				" "	3475
1				" "	3525
2				" "	3575
3				" "	3625
4			KO9410 ~~MANGANA~~ MATHINNA	" "	3675
5			STEEP EMBANKMENT TO EAST (TOPOGRAPHIC EASTING) T.E. SLOPE CORRECTED	" "	3713
6			BLACKBOY INFILL MATHINNA	10800	9700
7			KO9411 MANGANA	" "	9650
8				" "	9600
9				" "	9550
376170				" "	9500

RESOLUTE RESOURCES LIMITED 710198

Project Name: TASMANIA Prospect Name: BLACKBOY RIDGE Tenement No.:

Sampler: CRAIG & ADRIAN Sample Type: SUBSURFACE SOIL Sample Submission No.: K09411

Note: New Area - New Page & New Sample Type - New Page Date: 20 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376171				10800	9450
2			TAKEN 15m NW (GULLY)	"	9400
3				"	9350
4				"	9300
5			TAKEN 5m N (OUTCROP)	"	9250
6				"	9200
7			ALLUVIAL WORKINGS TO WEST, TAKEN 10m N	"	9150
8				11000	9700
9				"	9650
376180				"	9600
1			PEG MOVED 0.5m E (OUTCROP)	"	9550
2			TAKEN 5m W (GULLY)	"	9500
3				"	9450
4				"	9400
5				"	9350
6				"	9300
7				"	9250
8				"	9200
9				11600	9700
376190				"	9650
1				"	9600
2				"	9550
3				"	9500
4				"	9450
5			TAKEN 15m SE (GULLY)	"	9400
6				"	9350
7			TAKEN 7m E (DEBRIS)	"	9300
8				11000	9750
9				"	9800
376200				"	9850

RESOLUTE RESOURCES LIMITED 710199

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.:

Sampler: CRAIG & GARRY Sample Type: C-HORIZONS Sample Submission No.: K09412 K09413

Note: New Area - New Page & New Sample Type - New Page Date: 29/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376321			very deep	5800	5250
2			" " " "	" "	5300
3			3/4 AUGER TO ROCK	"	5350
4			2/3 " TO BED ROCK	"	5400
5			2/3 " TO ROCK ↑ K09412	"	5450
6			2/3 " TO BED ROCK	"	5500
7			1/2	5900	5550
8			1/2 ↓ K09	"	5900
9			full	"	5950
376330			2/3	"	6000
1			1/3 very rocky	"	6050
2			Medium	5800	5800
3			Medium	"	5850
4			Deep	"	5900
5			Deep	"	5950
6			Medium	"	6000
7			Medium	"	6050
8			Deep	5700	5800
9			Deep	"	5850
376340			Med	"	5900
1			Med	5600	5700
2			Deep	"	5750
3			Deep	"	5800
4			Deep	"	5850
5			Deep	"	5900
6			Deep	"	5950
7			1/3	5500	5450
8			Shallow	5500	5500
9			1/3	"	5550
376350			Deep	"	5600

K09412 K09413

RESOLUTE RESOURCES LIMITED 710200

Project Name: Tasmania Prospect Name: [redacted] Tenement No.:

Sampler: Tim, Adrian, Gary Sample Type: C-Horizon Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 30/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376351			Full	5500	5650
2			Deep	"	5700
3			Full	"	5750
4			Deep	"	5800
5			Medium	5400	5550
6			Deep	"	5600
7			Deep	"	5650
8			Deep	"	5700
9			Medium	"	5750
376360			Full Auger length	5300	5550
1			Full	"	5600
2			Full	"	5650
3			3/4	"	5700
4			3/4	"	5750
5			Full	"	5800
6			3/4	"	5850
7			Shallow	5200	5750
8			Medium	"	5800
9			Medium	"	5850
376370			Shallow	"	5900
1			Full Auger	"	5050
2			3/4	"	5100
3			Deep	"	5150
4			Deep	"	5200
5			Deep	"	5250
6			Deep	5100	5050
7			Deep	5000	5050
8			Deep	5000	5000
9			Deep	5100	5900
376380			Medium	5100	5950
376381				5100	6000

RESOLUTE RESOURCES LIMITED 710201

Project Name: TASMANIA Prospect Name: MATHINNA INFILL CHINAMANS HILL A HORIZON Tenement No.:

Sampler: GARY & MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09415

Note: New Area - New Page & New Sample Type - New Page Date: 20 / 1 /95

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376441				9550	3575
2				"	3600
3				"	3375
4				"	3350
5			6 m. NORTH (SUSPECT - OLD WORKINGS)	9450	3400
6				"	3425
7				"	3450
8				"	3475
9				"	3500
376450				"	3525
1				"	3550
2				"	3575
3				"	3600
4				9350	3400
5				"	3425
6			SUSPECT -(POSSIBLE OLD WORKINGS ABOVE)	"	3450
7				"	3475
8				"	3500
9				"	3525
376460				"	3550
1				"	3575
2				"	3600
3				10650	3400
4			5m SOUTH EAST (ROAD)	"	3425
5			6m WEST ROAD - (PIN 3½ m WEST)	"	3450
6				"	3475
7				10550	3400
8			6m SOUTH (SUSPECT- NEAR WORKINGS)	"	3425
9			5m WEST (ROAD)	"	3450
376470			4m WEST (ROAD)	"	3475

RESOLUTE RESOURCES LIMITED

710202

Project Name: TESTWORK MATHINNA Prospect Name: CHINAMANS HILL INFILL Tenement No.:

Sampler: GARY & MIKE Sample Type: SUBSURFACE B HORIZON SOIL Sample Submission No.: KO9415

Note: New Area - New Page & New Sample Type - New Page Date: 20/1/95

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376471				10550	3500
2				10450	3400
3				"	3425
4				"	3450
5				"	3475
6				"	3500
7				10350	3400
8				"	3425
9				"	3450
376480				"	3475
1			None	"	3500
2				10250	3400
3				"	3425
4				"	3450
5				"	3475
6				"	3500
7				"	3525
8				"	3550
9				"	3575
376490				"	3600
1			4m NORTH (ROAD)	"	3375
2			KO9415	10350	3525
3			(START OF JUBILEE INFILL)	5250	4325
4				"	4350
5				"	4375
6			10m WEST (OLD WORKINGS)	"	4400
7				"	4425
8			3m EAST (ROAD)	"	4450
9			10m SOUTH-WEST (PIN AT ENTRANCE TO ADIT)	"	4475
376500			SUSPECT - (NEAR MULLOCK HEAPS & ALLUVIAL CREEK)	"	4500

RESOLUTE RESOURCES LIMITED

710203

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 12 / 11 / '94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376561				6200	3850
2				"	3800
3				"	4350
4				"	4400
5			SUSPECT SAMPLE NEXT TO OLD CREEK BED	"	4450
6				"	4500
7			NEXT TO GRAVEL ROAD	"	4600
8				"	4650
9				6000	4300
376570				"	4250
1			NEXT TO OLD TRACK	"	4200
2				"	4150
3				"	4100
4			COSTEANS 6M ABOVE	"	4050
5				"	4000
6				"	3950
7				"	3900
8				"	3850
9				"	3800
376580			DOWN + SLIGHTLY TO SIDE OF TAILINGS	"	4350
1				"	4400
2				"	4450
3				"	4500
4				5800	4300
5				"	4250
6				"	4200
7				"	4150
8				"	4100
9				"	4050
376590				"	4000

RESOLUTE RESOURCES LIMITED

710204

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 171

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 13 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376591				5800	3950
2				"	3900
3				"	3850
4				"	3800
5				"	4350
6				"	4400
7				"	4450
8				5600	4300
9				"	4250
376600			SAMPLE 2m WEST NEXT TO MINE TAILINGS	"	4200
1				"	4150
2				"	4100
3			DOWN FROM COSTEAN	"	4050
4			DOWN FROM COSTEAN	"	4000
5			DOWN + TO SIDE (1M) FROM COSTEAN	"	3950
6				"	3900
7				"	3850
8				"	3800
9				"	4350
376610				"	4400
1				5700	4300
2				"	4250
3				"	4200
4				"	4150
5			SAMPLE 2M WEST	"	4100
6				"	4050
7				"	4000
8				"	3950
9			NEXT TO COSTEAN	"	3900
376620				"	3850

More at 1:12 at

RESOLUTE RESOURCES LIMITED 710205

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 14 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376621				5700	3800
2				"	4350
3				"	4400
4			DOWN FROM COSTEAN	5500	4300
5				"	4250
6				"	4200
7				"	4150
8				"	4100
9				"	4050
376630				"	4000
1				"	3950
2				"	3900
3				"	3850
4				"	3800
5				"	4350
6				"	4400
7			DOWN & TO SIDE OF COSTEAN	"	4450
8				5900	4300
9				"	4250
376640				"	4200
1			DOWN FROM COSTEAN	"	4150
2			SAMPLE 7M NORTH NEXT TO & DOWN FROM COSTEANS	"	4100
3				"	4050
4				"	4000
5				"	3950
6				"	3900
7				"	3850
8				"	3800
9				"	4350
376650				"	4400

RESOLUTE RESOURCES LIMITED

710206

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 14 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376651				5900	4450
2				6100	4300
3				"	4250
4				"	4200
5				"	4150
6				"	4100
7				"	4050
8				"	4000
9				"	3950
376660			BESIDE OLD CREEK (ON BANK)	"	3900
1				"	3850
2				"	3800
3				"	4350
4				"	4400
5				"	4450
6				5500	3250
7				"	3300
8			DOWN FROM ROAD RUBBLE	"	3350
9				"	3400
376670				"	3450
1				"	3500
2				"	3550
3				"	3600
4				"	3650
5				"	3700
6				"	3750
7				5600	3250
8			3M AWAY FROM COSTEAN	"	3300
9				"	3350
376680				"	3400

RESOLUTE RESOURCES LIMITED 710207

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09401

Note: New Area - New Page & New Sample Type - New Page Date: 15 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376681				5600	3450
2				"	3500
3				"	3550
4				"	3600
5				"	3650
6				"	3700
7				"	3750
8				5700	3250
9				"	3300
376690				"	3350
1				"	3400
2				"	3450
3				"	3500
4			DOWN FROM SMALL COSTEAN	"	3550
5				"	3600
6				"	3650
7				"	3700
8				"	3750
9				5800	3250
376700				"	3300
1				"	3350
2				"	3400
3				"	3450
4			PEG 1M WEST SAMPLE WEST 3M ON BANK OF CREEK	"	3500
5				"	3550
6				"	3600
7				"	3650
8				"	3700
9				"	3750
376710				7300	5200

None left

RESOLUTE RESOURCES LIMITED

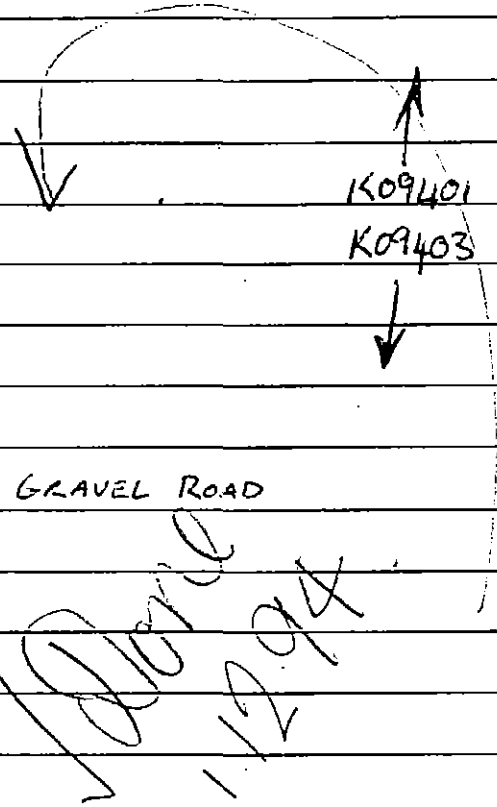
710208

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09401/03

Note: New Area - New Page & New Sample Type - New Page Date: 19 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376771				6400	5050
2				"	5000
3				"	4950
4				"	4900
5				6200	5200
6				"	5150
7				"	5100
8				"	5050
9			BELOW GRAVEL ROAD	"	5000
376780				6000	5200
1				"	5150
2				"	5100
3				"	5050
4				5800	5200
5				"	5150
6			SAMPLE 4M NORTH NEXT TO ROAD	5600	5200
7				"	5150
8				"	5100
9			None	5300	3200
376790				"	3250
1				"	3300
2				"	3350
3				"	3400
4				"	3450
5				"	3500
6				"	3550
7				"	3600
8			PEG 2M WEST SAMPLE 2M SOUTH OF PEG	"	3650
9				"	3700
376800				"	3750



RESOLUTE RESOURCES LIMITED 710209

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09403

Note: New Area - New Page & New Sample Type - New Page Date: 18 / 11 / '94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376801				5100	3200
2				"	3250
3				"	3300
4				"	3350
5				"	3400
6				"	3450
7				"	3500
8				"	3550
9				"	3600
376810			SUSPECT SAMPLE (SANDY ALLUVIAL)	"	3650
1				"	3700
2				"	3750
3				4900	3200
4				"	3250
5				"	3300
6				"	3350
7				"	3400
8				"	3450
9				"	3500
376820				"	3550
1				"	3600
2				"	3650
3				"	3700
4				4700	3200
5				"	3250
6				"	3300
7				"	3350
8				"	3400
9				"	3450
376830				"	3500

RESOLUTE RESOURCES LIMITED 710210

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K094C3

Note: New Area - New Page & New Sample Type - New Page Date: 19 / 11 /94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376831				4700	3550
2				"	3600
3			PEG 1M SOUTH SAMPLE 5M SOUTH OF PEG	"	3650
4				4500	3200
5				"	3250
6				"	3300
7				"	3350
8				"	3400
9				"	3450
376840			BELOW COSTEAN, ON EDGE OF CREEK	"	3500
1				"	3550
2				"	3600
3				"	3650
4				4300	3200
5				"	3250
6				"	3300
7				"	3350
8				"	3400
9				"	3450
376850				"	3500
1				"	3550
2				"	3600
3				"	3650
4				"	3700
5				"	3750
6				5300	4300
7				"	4250
8				"	4200
9				"	4150
376860				"	4100

RESOLUTE RESOURCES LIMITED 710211

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09403

Note: New Area - New Page & New Sample Type - New Page Date: 20 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376861				5300	4050
2				"	4000
3				"	3950
4				"	3900
5				"	3850
6				"	3800
7				5300	4350
8				"	4400
9				"	4450
376870				"	4500
1				"	4550
2				"	4600
3				"	4650
4				"	4700
5				"	4750
6				"	4800
7				"	4850
8				5100	4300
9				"	4250
376880				"	4200
1				"	4150
2				"	4100
3				"	4050
4				"	4000
5				"	3950
6				"	3900
7				"	3850
8				"	3800
9				"	4350
376890				"	4400

None

RESOLUTE RESOURCES LIMITED 710212

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: MIKE + BRIAN Sample Type: SUBSURFACE SOILS Sample Submission No.: K09403

Note: New Area - New Page & New Sample Type - New Page Date: 20/11/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376891				5100	4450
2				"	4500
3				"	4550
4				"	4600
5				"	4650
6				"	4700
7				"	4750
8				"	4800
9				"	4850
376900			None	4900	4300
1				"	4250
2				"	4200
3				"	4150
4				"	4100
5				"	4050
6				"	4000
7				"	3950
8				"	3900
9				"	3850
376910				"	3800
1				4900	4350
2				"	4400
3				"	4450
4				"	4500
5				"	4550
6				"	4600
7				"	4650
8				"	4700
9			NEAR DEEP ADIT	"	4750
376920				"	4300

RESOLUTE RESOURCES LIMITED

710213

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: MIKE SHAWRY Sample Type: SUBSURFACE SOILS Sample Submission No.: K0940S

Note: New Area - New Page & New Sample Type - New Page Date: 22 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376921				4900	4850
2				4700	4300
3				"	4250
4				"	4200
5				"	4150
6				"	4100
7				"	4050
8				"	4000
9				"	3950
376930				"	3900
1				"	3850
2				"	3800
3				4700	4350
4				"	4400
5				"	4450
6				"	4500
7				"	4550
8				"	4600
9				"	4650
376940				"	4700
1				"	4750
2				"	4800
3				4500	4300
4				"	4250
5				"	4200
6				"	4150
7				"	4100
8				"	4050
9				"	4000
376950				"	3950

Above

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710214

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: MIKE + BRIAN Sample Type: SUBSURFACE SOILS. Sample Submission No.: K09403

Note: New Area - New Page & New Sample Type - New Page Date: 23 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376951				4500	3900
2				"	3850
3				"	3800
4				4500	4350
5				"	4400
6				"	4450
7				"	4500
8				"	4550
9				"	4600
376960				"	4650
1			PEG + SAMPLE 5M WEST (4695E)	"	4695
2				"	4800
3				"	4850
4				"	4900
5				4300	4300
6				"	4350
7				"	4200
8				"	4150
9				"	4100
376970				"	4050
1				"	4000
2				"	3950
3				"	3900
4				"	3850
5				"	3800
6				4300	4350
7					4400
8					4450
9					4500
376980					4550

Done

RESOLUTE RESOURCES LIMITED

710215

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: NIGEL + MIKE Sample Type: SUBSURFACE SOILS Sample Submission No.: K09403

Note: New Area - New Page & New Sample Type - New Page Date: 24 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
376981				4300	4600
2				"	4650
3				"	4700
4				"	4750
5				"	4800
6				"	4850
7				4200	4300
8				"	4250
9				"	4200
376990				"	4150
1				"	4100
2				"	4050
3				"	4000
4				"	3950
5				"	3900
6				"	3850
7				"	3800
8				4200	4350
9				"	4400
377000				"	4450
1				"	4500
2				"	4550
3				"	4600
4				"	4650
5				"	4700
6				"	4750
7				"	4800
8				"	4850
9				4000	4300
377010				"	4250

None

RESOLUTE RESOURCES LIMITED 710216

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: NIGEL + MIKE Sample Type: SUBSURFACE SOILS Sample Submission No.: K09403/04

Note: New Area - New Page & New Sample Type - New Page Date: 24 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377011				4000	4200
2				"	4150
3			None	"	4100
4				"	4050
5				"	4000
6				"	3950
7				"	3900
8				"	3850
9			10m WEST (CREEK) K09403	"	3800
377020			K09404	4000	4350
1				"	4400
2				"	4450
3				"	4500
4				"	4550
5				"	4600
6			None	"	4650
7				"	4700
8				"	4750
9			K09403	"	4800
377030			K09404	"	4850
1				"	4900
2				"	4950
3				"	5000
4				"	5050
5				5300	5200
6				"	5150
7				"	5100
8				5200	5200
9				"	5150
377040				"	5100

RESOLUTE RESOURCES LIMITED

710217

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: NIGEL + MIKE Sample Type: SUBSURFACE SOILS Sample Submission No.: K09404

Note: New Area - New Page & New Sample Type - New Page Date: 25/11/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377041			PIN + SAMPLE 5M EAST (CREEK)	5200	5055
2				5100	5200
3			3M EAST (DRAIN)	"	5150
4				"	5100
5			PIN + SAMPLE 5M EAST (ROAD)	"	6055
6				5000	5200
7				"	5150
8				"	5100
9				"	5050
377050				"	5000
1				4900	5200
2				"	5150
3				"	5100
4				"	5050
5				"	5000
6			10M EAST (FLOOD PLAIN)	"	4950
7				4800	5200
8				"	5150
9				"	5100
377060				"	5050
1			VISIBLE GOLD IN QUARTZ	"	5000
2			5M EAST (ROAD)	"	4950
3				4700	5200
4			10M EAST (ROAD)	"	5150
5				"	5100
6				"	5050
7			23M EAST (OLD WORKINGS/DUMPS)	"	5000
8			BELOW OLD WORKINGS/TRACK?	"	4950
9			SUSS SAMPLE - ALLUVIUM?	"	4900
377070				4600	5200

RESOLUTE RESOURCES LIMITED

710218

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 1791

Sampler: MIKE & SHALEY Sample Type: SUBSURFACE SOILS Sample Submission No.: K09404/0

Note: New Area - New Page & New Sample Type - New Page Date: 26/11/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377071			K09404	4600	5150
2			CHINAMANS HILL K09405	10000	3400
3			↓	"	3350
4				"	3300
5				"	3250
6			Dard	"	3200
7			↓	"	3150
8				"	3100
9				"	3050
377080				"	3000
1				"	2950
2				"	2900
3				"	2850
4				"	2800
5				10000	3450
6				"	3500
7				"	3550
8				"	3600
9				"	3650
377090				"	3700
1			PEG + SAMPLE 15M WEST (3735E) - ROAD.	"	3735
2			↓ 9404A	9800	3400
3				"	3350
4				"	3300
5				"	3250
6			Dard	"	3200
7				"	3150
8				"	3100
9				"	3050
377100				"	3000

RESOLUTE RESOURCES LIMITED

17/91

Project Name: TASMANIA Prospect Name: CHINAMENS HILL MATHINNA Tenement No.: [redacted]

Sampler: MIKE + SHARRY Sample Type: SUBSURFACE SOILS Sample Submission No.: K09405

Note: New Area - New Page & New Sample Type - New Page Date: 26/11/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377101				9800	2950
2				"	2900
3				"	2850
4				"	2800
5				9800	3450
6				"	3500
7				"	3550
8				"	3600
9				"	3650
377110				"	3700
1				"	3750
2				"	3800
3				9600	3400
4				"	3350
5				"	3300
6				"	3250
7				"	3200
8				"	3150
9				"	3100
377120				"	3050
1				"	3000
2				"	2950
3				"	2900
4				"	2850
5				"	2800
6				9600	3450
7				"	3500
8				"	3550
9				"	3600
377130				"	3650

RESOLUTE RESOURCES LIMITED

710220

Project Name: TASMANIA Prospect Name: CHINAMANS HILL MATHINNA Tenement No.:

Sampler: MIKE & SHANE Sample Type: SUBSURFACE SOILS Sample Submission No.: K09405

Note: New Area - New Page & New Sample Type - New Page Date: 28 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377131				9600	3700
2				"	3750
3				"	3800
4				"	3850
5				"	3900
6			5m S/west	"	3950
7				9450	3400
8				"	3350
9				"	3300
377140				"	3250
1				"	3200
2				"	3150
3				"	3100
4				"	3050
5				"	3000
6			4m EAST (WORKINGS)	"	2950
7				"	2900
8				"	2850
9				"	2800
377150				9400	3450
1				"	3500
2				"	3550
3				"	3600
4				"	3650
5				"	3700
6				"	3750
7				"	3800
8				"	3850
9				"	3900
377160				"	3950

RESOLUTE RESOURCES LIMITED

710221

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: ~~K9405~~

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K9405/04

Note: New Area - New Page & New Sample Type - New Page Date: 29 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377161			PEG + SAMPLE ~~AT~~ (3980E) ROAD K09405	9400	3980
2			K09404	7600	5250
3			↓	"	5300
4				7500	5250
5				"	5300
6				7400	5250
7				"	5300
8				7300	5250
9				"	5300
377170				"	5350
1				7200	5250
2				"	5300
3				"	5350
4				"	5400
5				7100	5250
6				"	5300
7				"	5350
8				7100	5400
9				"	5450
377180				6900	5250
1			SAMPLE ON BANK OF CREEK	"	5300
2				"	5350
3				"	5400
4				"	5450
5				"	5500
6				"	5550
7				"	5600
8				"	5650
9				"	5700
377190				6700	5250

None

RESOLUTE RESOURCES LIMITED

710222

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: [redacted]

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09426

Note: New Area - New Page & New Sample Type - New Page Date: 30 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377221				6200	5500
2				"	5550
3				"	5600
4				"	5650
5				"	5700
6				"	5750
7				"	5800
8				"	5850
9			48m BECAUSE OF FIRE TRACK SAMPLE AREA DOZED	"	5896
377230				"	5950
1				5900	5250
2			None	"	5300
3				"	5350
4				"	5400
5				"	5450
6			SAMPLE 3m NORTH NEAR COSTEAN	"	5500
7				"	5550
8				"	5600
9				"	5650
377240				"	5700
1				"	5750
2				"	5800
3			SAMPLE EAST 3m, AWAY FROM ROAD	"	5850
4			" 10m NORTH, TOP SIDE OF ROAD	"	5900
5				"	5950
6				"	6000
7			7m SOUTH-EAST (AREA LIGHT DOZING)	"	6050
8				5500	5250
9				"	5300
377250				"	5350

RESOLUTE RESOURCES LIMITED

710223

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: [redacted]

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K0940

Note: New Area - New Page & New Sample Type - New Page Date: 1 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377251			SAMPLE 5M NORTH ABOVE TRACK	5500	5400
2			SAMPLE 2M NORTH " "	"	5450
3				"	5500
4			" 9M NORTH ABOVE TRACK	"	5550
5				"	5600
6				"	5650
7			SAMPLE 3M NORTH TOPSIDE OF TREE	"	5700
8				"	5750
9				"	5800
377260				"	5850
1				"	5900
2				"	5950
3				"	6000
4				5100	5250
5				"	5300
6				"	5350
7			PEG 45M 'COS ROAD, SAMPLE 4M SOUTH 'COS ROAD	"	5395
8			SAMPLE 10M SOUTH ABOVE ROAD	"	5450
9			SAMPLE 5M NORTH-EAST BUT BELOW ROAD	"	5500
377270				"	5550
1				"	5600
2			Sample taken 5m South (disturbance above peg)	"	5650
3				"	5700
4				"	5750
5			Sample taken 10m North north east (disturbance above peg)	"	5800
6				"	5850
7			Sample taken 5m Westerly (Outcrop)	"	5900
8				"	5950
9				"	6000
377280				4700	5250

RESOLUTE RESOURCES LIMITED

710224

Project Name: Tasmania Prospect Name: Mathinna Tenement No.:

Sampler: Craig, Brian, Mike Sample Type: Subsurface Soil Sample Submission No.: 609496

Note: New Area - New Page & New Sample Type - New Page Date: / /

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377281				4700	5300
2				" "	5350
3				" "	5400
4			Road 8 metres to East	" "	5450
5				" "	5500
6				" "	5550
7				" "	5600
8				" "	5650
9				" "	5700
377290				" "	5750
1			Sample taken 3 m South (Gully)	" "	5800
2				" "	5850
3				" "	5900
4				" "	5950
5				" "	6000
6			Sample taken 6 m west (Road)	" "	6050
7				4500	5450
8			Sample taken 5m East (Road)	" "	5500
9			Sample taken 2m West (outcrop)	" "	5550
377300				" "	5600
1			Road 5m to east below sample site	" "	5650
2				" "	5700
3				" "	5750
4			Sample taken 3 m West, 2m South (outcrop)	" "	5800
5			Very deep loamy soil	" "	5850
6			~~Sample taken 5m East (outcrop)~~	" "	5900
7				" "	5950
8			Sample taken 10m South (outcrop)	" "	6000
9			" " " " 15m East (Road)	" "	6050
377310				4300	5400

RESOLUTE RESOURCES LIMITED 710225

Project Name: Tasmania Prospect Name: Hellyers Tenement No.:

Sampler: Craig, Brian, Mike Sample Type: Subsurface Soil Sample Submission No.: K09406

Note: New Area - New Page & New Sample Type - New Page Date: / /

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377311			Sample taken 15m East (Road)	4300	5450
2				" "	5500
3				" "	5550
4			Sample taken 5m North, 1st sample in cleared pine forest	" "	5600
5			very clay rich soil, pine forest (cleared)	" "	5650
6			Sample taken 7m north (Road, act of pine)	" "	5700
7			Sample taken 10m South (above road)	" "	5750
8				" "	5800
9			Bord	" "	5850
377320				" "	5900
1				" "	5950
2				" "	6000
3			15E Sample taken in cleared pines	4100	5350
4			in cleared pines	" "	5400
5			" ——— "	" "	5450
6			" ——— "	" "	5500
7			" ——— "	" "	5550
8			" ——— "	" "	5600
9			" ——— "	" "	5650
377330			" ——— ", soil clay rich	" "	5700
1			" ——— ", peg 0.5m north (tree), soil clay rich	" "	5750
2			", peg 0.5m east (road), sample taken in standing pine	" "	5800
3			sample in ~~the standing~~ cleared pine.	3800	5200
4			cleared pine	" "	5150
5			5m east (above Road), clearedpine	" "	5100
6			into native bush	" "	5050
7				" "	5000
8				" "	4950
9				" "	4900
377340				" "	4850

RESOLUTE RESOURCES LIMITED 710226

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: [illegible]

Sampler: Gary + Mike Sample Type: Subsurface soil Sample Submission No.: K9146

Note: New Area - New Page & New Sample Type - New Page Date: 5/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377341				3800	4800
2				"	4750
3				"	4700
4				"	4650
5			in cleared pine	"	5250
6			" "	"	5300
7			", 4m west (debris)	"	5350
8			" "	"	5400
9			" "	"	5450
377350			" "	"	5500
1			" "	"	5550
2			Sample taken 4m south (debris)	"	5600
3				"	5650
4			Sample taken 2m east (tree trunk)	"	5700
5			Sample taken 10m east (above road)	"	5750
6				3500	5200
7				"	5150
8				"	5100
9				"	5050
377360				"	5000
1				"	4950
2			SAMPLE TAKEN 15m W., ROAD.	"	4900
3				"	4850
4				"	4800
5				"	4750
6				"	4700
7				"	5250
8				"	5300
9				"	5350
377370				"	5400

RESOLUTE RESOURCES LIMITED

710227

Project Name: TASMANIA Prospect Name: MATHINA Tenement No.: XJ/9

Sampler: GARY & MIKE Sample Type: SUB-SURFACE SOIL Sample Submission No.: K09404/38

Note: New Area - New Page & New Sample Type - New Page Date: 5/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377371				3500	5450
2			SAMPLE TAKEN 10 M SW, ROAD	"	5500
3				"	5550
4				"	5600
5				"	5650
6				"	5700
7				3200	5200
8				"	5150
9				"	5100
377380			None	"	5050
1				"	5000
2				"	~~4950~~
3				"	4900
4				"	4850
5				"	5250
6				"	5300
7				"	5350
8				"	5400
9				"	5450
377390				"	5500
1				"	5550
2			K09406	"	5600
3			K09408	~~7900~~	~~10000~~
4			BELOW COSTEAN, BUT DUG SAMPLE DEEP	"	~~9950~~
5	NOT USED		8M SOUTH AWAY FROM ROAD	"	~~9900~~
6			6M " ABOVE ROAD	"	~~9850~~
7			~~6M SOUTH ABOVE ROAD~~	"	~~9800~~
8			6M SOUTH ABOVE ROAD	"	~~9750~~
9				"	~~9700~~
377400				"	~~9650~~

RESOLUTE RESOURCES LIMITED 710228

Project Name: TASMANIA Prospect Name: MANGANA Tenement No.:

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09408

Note: New Area - New Page & New Sample Type - New Page Date: 8/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377431					
2					
3			NOT USED		
4					
5					
6					
7					
8					
9				8000	10000
377440				"	9950
1				"	9900
2				"	9850
3				"	9800
4				"	9750
5				"	9700
6			None	"	9650
7				"	9600
8				"	9550
9				"	9500
377450				"	9450
1				"	9400
2				"	10050
3				"	10100
4				"	10150
5				"	10200
6				"	10250
7				"	10300
8				"	10350
9			SAMPLE 3M EAST	"	10400
377460				"	10450

RESOLUTE RESOURCES LIMITED 710229

Project Name: TASMANIA Prospect Name: MANGANA Tenement No.:

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09408

Note: New Area - New Page & New Sample Type - New Page Date: 9 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377461			SAMPLE 4M EAST DUE TO CREEK	8000	10500
2				7800	10000
3				"	9950
4				"	9900
5				"	9850
6				"	9800
7				"	9750
8				"	9700
9				"	9650
377470			None	"	9600
1				"	9550
2				"	9500
3				"	9450
4			SAMPLE 9M NORTH/NORTH-WEST ABOVE COSTEAN	"	10050
5				"	10100
6				"	10150
7				"	10200
8			SAMPLE 5M SOUTH ABOVE COSTEAN	"	10250
9				"	10300
377480				"	10350
1				"	10400
2				"	10450
3				"	10500
4				7900	10000
5				"	9950
6			SAMPLE 9M SOUTH DUE TO ROAD	"	9900
7			" 4M SOUTH ABOVE ROAD	"	9850
8				"	9800
9				"	9750
377490				"	9700

RESOLUTE RESOURCES LIMITED

710230

Project Name: TASMANIA Prospect Name: MANGANA Tenement No.:

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: KD940R

Note: New Area - New Page & New Sample Type - New Page Date: 10 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377491				"	9650
2			SAMPLE 4M SOUTH AWAY FROM ROAD	"	9600
3				"	9550
4				"	9500
5				"	9450
6			SAMPLE 15M NORTH TO SIDE OF TAILINGS	"	9400
7				7900	10,050
8				"	10100
9				"	10150
377500				"	10200
1				"	10250
2				"	10300
3			None	"	10350
4				"	10400
5				"	10450
6				"	10500
7				9000	10 000
8				"	9950
9				"	9900
377510				"	9850
1				"	9800
2				"	9750
3			SAMPLE 4M NORTH TO SIDE OF COSTEAN	"	9700
4				"	9650
5				"	9600
6				"	9550
7				"	9500
8				"	9450
9				"	10050
377520			SAMPLE 10 M NORTH-WEST TO SIDE + ABOVE COSTEANS	"	10100

RESOLUTE RESOURCES LIMITED 710231

Project Name: TASMANIA Prospect Name: MANGANA Tenement No.:

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09408

Note: New Area - New Page & New Sample Type - New Page Date: 10 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377521				9000	10150
2				"	10200
3				"	10250
4				"	10300
5				"	10350
6				"	10400
7				"	104.50
8				"	10500
9				"	10550
377530				"	10600
1				9100	10000
2				"	9950
3			SAMPLE 4M NORTH ABOVE COSTEAN	"	9900
4				"	9850
5				"	9800
6				"	9750
7				"	9700
8			SAMPLE 7M SOUTH AWAY FROM COSTEAN(TO SIDE)	"	9650
9				"	9600
377540				"	9550
1				"	9500
2			NOT USED		
3			SAMPLE 3M SOUTH TO SIDE OF COSTEAN	9100	10050
4				"	10100
5			SAMPLE 4M EAST ABOVE SUSPECT WORKING	"	10150
6				"	10200
7				"	10250
8				"	10300
9				"	10350
377550				"	10400

RESOLUTE RESOURCES LIMITED 710232

Project Name: TASMANIA Prospect Name: MANGANA [redacted] Tenement No.:

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K0440S

Note: New Area - New Page & New Sample Type - New Page Date: 11 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377551				9100	10450
2				"	10500
3				"	10550
4				"	10600
5				9200	10000
6				"	9950
7			SAMPLE 15M EAST TO SIDE OF ADIT TAKINGS + COSTEANS	"	9900
8			" MAYBE SUSPECT BELOW OLD TRACK FROM WORKING	"	9850
9				"	9800
377560				"	9750
1				"	9700
2				"	9650
3				"	9600
4			SAMPLE 8M SOUTH/SOUTH-EAST TO SIDE OF COSTEANS	"	9550
5				"	9500
6				"	9450
7				"	9400
8			SAMPLE 3M SOUTH (PEG GROUND ON WOOD DECAY)	"	10050
9				"	10100
377570				"	10150
1				"	10200
2				"	10250
3				"	10300
4				"	10350
5				"	10400
6				"	10450
7				"	10500
8				"	10550
9				"	10600
377580				"	10650

RESOLUTE RESOURCES LIMITED

710233

Project Name: TASMANIA Prospect Name: BUCKLANDS HILL Tenement No.:

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09408

Note: New Area - New Page & New Sample Type - New Page Date: 11 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377581				11400	8000
2				"	7950
3				"	7900
4				"	7850
5				"	7800
6				"	7750
7				"	7700
8				"	7650
9				"	7600
377590				"	8050
1				"	8100
2				"	8150
3				"	8200
4			SAMPLE 8M NORTH AWAY FROM ROAD	"	8250
5				"	8300
6				"	8350
7				"	8400
8				"	8450
9			SAMPLE 5M WEST ABOVE TRACK	"	8500
377600				"	8550
1				"	8600
2				"	8650
3			SAMPLE 14M E ABOVE ROAD	"	8700
4				11900	8000
5				"	7950
6				"	7900
7				"	7850
8				"	7800
9				"	7750
377610				"	7700

RESOLUTE RESOURCES LIMITED 710234

Project Name: TASMANIA Prospect Name: BUCKLANDS HILL Tenement No.:

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09408

Note: New Area - New Page & New Sample Type - New Page Date: 11 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377611				11900	7650
2				"	7600
3				"	7550
4				"	7500
5			SAMPLE 20M EAST (SO AS NOT ON RIVER FLAT)	"	7450
6				"	8050
7				"	8100
8				"	8150
9				"	8200
377620				"	8250
1				"	8300
2			None	"	8350
3				"	8400
4				"	8450
5				"	8500
6				"	8550
7				"	8600
8				"	8650
9				"	8700
377630			SAMPLE 8M WEST BUT IS BELOW ROAD	"	8750
1				12300	8000
2				"	8050
3				"	8100
4			SAMPLE 6M NORTH-WEST TO SIDE OF COSTEAN	"	8150
5				"	8200
6				"	8250
7			SAMPLE 10M WEST ON BANK ABOVE CREEK	"	8300
8				"	8350
9				"	8400
377640				"	8450

RESOLUTE RESOURCES LIMITED 710235

Project Name: TASMANIA Prospect Name: BUCKLANDS HILL Tenement No.:

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No. K09408/10

Note: New Area - New Page & New Sample Type - New Page Date: 12 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377641				12300	8500
2			SAMPLE 8m WEST UP FROM CREEK	"	8550
3				"	8600
4				"	8650
5				"	8700
6			K09408	"	8750
7			~~K09410~~	12300	7950
8				"	7900
9				"	7850
377650				"	7800
1				"	7750
2				"	7700
3			5m East (creek)	"	7650
4				"	7600
5				"	7550
6				"	7500
7				"	7450
8				"	7400
9			SAMPLE MAYBE SUSPECT	12700	8150
377660				"	8200
1				"	8250
2			SAMPLE 8m SOUTH TO SIDE OF COSTEAN	"	8300
3				"	8350
4				"	8400
5				"	8450
6				"	8500
7				"	8550
8				"	8600
9				"	8650
377670				"	8700

RESOLUTE RESOURCES LIMITED

710236

Project Name: TASMANIA Prospect Name: BUCKLANDS HILL Tenement No.:

Sampler: JAMES + GRANT Sample Type: SUBSURFACE SOIL Sample Submission No.: K09410

Note: New Area - New Page & New Sample Type - New Page Date: 14 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377671			SAMPLE 15M EAST ABOVE ROAD	12700	8750
2			SUSPECT	"	8000
3			"	"	7950
4			"	"	7900
5			"	"	7850
6			"	"	7800
7			"	"	7750
8			"	"	7700
9			" TAKEN 5M WEST DUE TO ROCKY CONDITION	"	7650
377680			SAMPLE 8M SOUTH TO SIDE OF COSTEAN	"	7600
1			"	"	7550
2			"	"	7500
3			"	"	7450
4			"	"	7400
5			"	"	7350
6			"	"	7300
7			"	"	7250
8			VOLUNTEER	7900	2200
9			"	"	2150
377690			"	"	2100
1			"	"	2050
2			"	"	2250
3			"	"	2300
4			"	"	2350 ~~3350~~
5			"	"	2400 ~~3400~~
6			SAMPLE 10M NORTH TO SIDE OF EARTH PILE	"	2450 ~~3450~~
7			" 8M, AWAY FROM ROAD	"	2500 ~~3500~~
8			"	"	2555 ~~3550~~
9			"	8100	2200
377700			CONTINUED ON 380001	"	2150

MANGANA

MATHINNA

RESOLUTE RESOURCES LIMITED 710237

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: ~~X7H9H~~

Sampler: CRAIG K. & BRIAN S. Sample Type: SUBSURFACE SOIL Sample Submission No.: K094C6

Note: New Area - New Page & New Sample Type - New Page Date: 1/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377701				5700	5250
2			15m ~~East~~ SOUTH (~~Outcrop~~) TRACK	5700	5300
3			10m South (track)	5700	5350
4			7m South (track)	" "	5400
5				" "	5450
6				" "	5500
7			15m East (workings)	" "	5550
8			5m South (workings)	" "	5600
9				" "	5650
377710			15m East (Road)	" "	5700
1				" "	5750
2			3m South (Outcrop)	" "	5800
3			8m North West	" "	5850
4			Very loamy	" "	5900
5			15m East, 5m North (Gully)	5400	5250
6			15m North (Adit)	" "	5300
7				" "	5350
8				" "	5400
9				" "	5450
377720				" "	5500
1			20m North West (above workings	" "	5550
2			5m North	" "	5600
3			3m West	" "	5650
4			5m South	" "	5700
5				"	5750
6				"	5800
7				"	5850
8				"	5900
9				"	5950
377730			8m NORTH (ROADS)	"	6000

RESOLUTE RESOURCES LIMITED 710238

Project Name: TASMANIA Prospect Name: MANGANA Tenement No.:

Sampler: GRAEME SAWERT Sample Type: SUBSURFACE SOILS Sample Submission No.: K09406/08

Note: New Area - New Page & New Sample Type - New Page Date: 5/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377731				11000	8000
2			20M NORTH (ROADS)	"	8050
3			10M EAST (ROAD)	"	8100
4				"	8150
5				"	8200
6				"	8250
7				"	8300
8				"	8350
9				"	8400
377740				"	8450
1				"	8500
2			25M EAST (ROAD)	"	8550
3				11100	8000
4			5M EAST (COSTEAN)	"	7950
5				"	7900
6				"	7850
7			20M ~~EAST~~ (ROAD) K09406	"	7800
8			K09408	7300N	10000E
9			5m West (Workings)	"	9950E
377750				"	9900
1				"	9850
2				"	9800
3				"	9750
4				"	9700
5				"	9650
6				"	9600
7				7400	10,000
8			2m North (Fallen Tree)	"	10,050
9					10,100
377760					10,150

RESOLUTE RESOURCES LIMITED

710239

Project Name: Tasmania Prospect Name: Mangana Tenement No.:

Sampler: Tim H, Adrian, Craig Sample Type: Subsurface Soil Sample Submission No.: K9408

Note: New Area - New Page & New Sample Type - New Page Date: 6/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377761				7400	10200
2				7400	10250
3				"	9950
4				"	9900
5				"	9850
6				"	9800
7				"	9750
8				"	9700
9				"	9650
377770				"	9600
1			None	7500	10,000
2				"	10,050
3				"	10,100
4				"	10,150
5				"	10,200
6				"	10,250
7			2m East (tree trunk)	"	10,300
8			3m North (thick scrub)	"	10,350
9			5m East (surface scree)	"	10,400
377780				"	9,950
1				"	9,900
2				"	9,850
3				"	9,800
4				"	9,750
5				"	9,700
6				"	~~9,750~~ 9650
7				"	9,600
8				7600	10,000
9				7600	10,050
377790				"	10,100

RESOLUTE RESOURCES LIMITED 710240

Project Name: Tasmania Prospect Name: Mangana Tenement No.:

Sampler: Tim & Grant Sample Type: Sub surface Soil Sample Submission No.: K07403

Note: New Area - New Page & New Sample Type - New Page Date: 7/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377791				7600	10150
2				"	10200
3				"	10250
4				"	10300
5				"	10350
6				"	10400
7				"	10450
8				"	9950
9			1m East (Disturbed Ground)	"	9900
377800				"	9850
1			10m South (Alluvium)	"	9800
2			20m South (Alluvium)	"	9750
3			10m North (Alluvium	"	9700
4				"	9650
5				"	9600
6				"	9550
7			None	"	9500
8				7700	10,000
9				"	10,050
377810			5m South (Disturbed)	"	10,100
1				"	10,150
2				"	10,200
3				"	10,250
4				"	10,300
5				"	10,350
6				"	10,400
7				"	10,450
8				"	10500
9				"	9950
377820			5m North (Fallen tree)	"	9000 9900

RESOLUTE RESOURCES LIMITED

Project Name: Tasmania Prospect Name: Mangana Tenement No.: 7/10241

Sampler: Tim & Grant Sample Type: Subsurface Soil Sample Submission No.: K04408

Note: New Area - New Page & New Sample Type - New Page Date: 8/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377821			2m North (Burrows)	7700	9850
2				"	9800
3				"	9750
4			3m North (Disturbed)	"	9700
5				"	9650
6			Base of tree	"	9600
7				"	9550
8				"	9500
9				"	9450
377830			5m South East (workings)	8100	10,000
1				"	10,050
2			5m South (workings)	"	10,100
3				"	10,150
4			3m South (Scree)	"	10,200
5				"	10,250
6			2m South (Borrow)	"	10,300
7				"	10,350
8				"	10,400
9			Marl	"	10,450
377840				"	10,500
1				"	9950
2			2m South (below tree)	"	9900
3				"	9850
4			15m ESE (costean, road, workings)	8100	9800
5			15m SE (creek Alluvium)	"	9750
6			15m SE (" ")	"	9700
7			25m NW (" ")	"	9650
8			20m SE (" ")	"	9600
9			25m SE (" ")	"	9550
377850			30m SE (" ")	"	9500

RESOLUTE RESOURCES LIMITED

710242

Project Name: Tasmania Prospect Name: Mangana Tenement No.:

Sampler: Tim & Craig Sample Type: Sub Surface Soil Sample Submission No.: K0940

Note: New Area - New Page & New Sample Type - New Page Date: 9/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377851				8100	9450
2			Actual Co-ordinates 8200N, 10,000E	~~8200~~	~~10,000~~
3				8200	10,050
4			Sample taken 10m S, (mullet dump)	" "	10,100
5			road 25m S, sample taken behind tree	" "	10,150
6				" "	10,200
7				" "	10,250
8				" "	10,300
9				" "	10,350
377860			None	" "	10,400
1				" "	10,450
2				" "	10,500
3				" "	9950
4			Sample taken 5m E of bark at cutting	" "	9900
5				" "	9850
6			Sample taken 40m NW (open stopes)	" "	9800
7				" "	9750
8				" "	9700
9			Sample taken 5m N, at base of tree	" "	9650
377870				" "	9600
1				" "	9550
2				" "	9500
3				" "	9450
4				" "	9400
5				8300	10,000
6				" "	10,050
7			Sample taken 3m SE behind tree	" "	10,100
8				" "	10,150
9				" "	10,200
377880			Sample taken 4m NE (outcrop)	" "	10,250

RESOLUTE RESOURCES LIMITED

710243

Project Name: TASMANIA Prospect Name: MANGANA Tenement No.:

Sampler: JIM & CRAIG Sample Type: SUBSURFACE SOIL Sample Submission No.: KO9406

Note: New Area - New Page & New Sample Type - New Page Date: 9/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377881				8300	10,300
2				"	10,350
3				"	10,400
4				"	10,450
5				"	10,500
6			pg. south east because of road	"	10,553
7			sample taken 5m NW (eastern)	"	9,950
8				"	9900
9				"	9850
377890			Sample taken 20m N (adit)	"	9800
1				"	9750
2				"	9700
3				"	9650
4			None	"	9600
5				"	9550
6				"	9500
7				"	9450
8			slope corrected easting (ie. topographic)	"	9425
9			(Bucklands hill)	11300	8000
377900				"	7950
1				"	7900
2				"	7850
3				"	7800
4				"	7750
5				"	7700
6				"	7650
7			Sample taken 10m NW (workings)	"	8100
8			Sample taken 10m SE (workings)	"	8150
9				"	8200
377910				"	8250

RESOLUTE RESOURCES LIMITED 710244

Project Name: TASMANIA Prospect Name: BUCKLAND HILL Tenement No.:

Sampler: CRAIG & TIM Sample Type: SOIL SURFACE Sample Submission No.: K094085

Note: New Area - New Page & New Sample Type - New Page Date: 11/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377911			Sample taken 10m W (Road)	11300	8300
2				"	8350
3				"	8400
4				"	8450
5				"	8500
6			Sample taken 5m W (creek)	"	8550
7				"	8600
8			Sample taken 0m N (possible workings)	"	8650
9				"	8700
377920				12000	8000
1				"	7950
2				"	7900
3				"	7850
4			Sample taken 7m NW (Rock scree)	"	7800
5				"	7750
6				"	7700
7				"	7650
8				"	7600
9				"	7550
377930				"	7500
1				"	7450
2				"	8050
3				"	8100
4			10 m NW (Adit)	"	8150
5			5m SW (outcrop)	"	8200
6				"	8250
7			10m South (disturbed ground)	"	8300
8				"	8350
9			15m West (workings)	"	8400
377940			5m North (gully)	"	8450

RESOLUTE RESOURCES LIMITED

710245

Project Name: Tasmania Prospect Name: Buckland Hill Tenement No.:

Sampler: Tim & Craig Sample Type: Sub surface soil Sample Submission No.: K09409/10

Note: New Area - New Page & New Sample Type - New Page Date: 13/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377941			Fossible Alluvium	12000	8500
2			3m East (Gully)	" "	8550
3				" "	8600
4				" "	8650
5				" "	700
6			5m East (Road)	" "	750
7				12400	8000
8				" "	8050
9				" "	8100
377950				" "	8150
1				" "	8200
2				" "	8250
3			5m North (outcrop)	" "	8300
4				" "	8350
5				" "	8400
6				" "	8450
7				" "	8500
8				" "	8550
9				" "	8600
377960				" "	8650
1				" "	8700
2			10m East (Road) K09408	" "	8750
3			K09410	" "	7950
4				" "	7900
5				" "	7850
6				" "	7800
7				" "	7750
8			10m West out of Gully.	" "	7700
9				" "	7650
377970				" "	7600

RESOLUTE RESOURCES LIMITED

Project Name: TASMANIA Prospect Name: ~~BUCKLAND HILL~~ MANGANA Tenement No. 10246

Sampler: TIM & GARY Sample Type: ~~SUBSURFACE SOIL~~ A-HORIZON Sample Submission No.: K09H10

Note: New Area - New Page & New Sample Type - New Page Date: 13/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
377971				12400	7550
2				"	7500
3				"	7450
4				"	7400
5				"	7350
6				"	7300
7			13 m ESE start of Mathinna beds	12800	~~8500~~ 8200
8					~~8250~~ 8250
9					~~8000~~ 8300
377980			1m N out of creek		~~8350~~ 8350
1					~~8400~~ 8400
2					~~8450~~ 8450
3					~~8500~~ 8500
4					~~8550~~ 8550
5					~~8600~~ 8600
6					~~8650~~ 8650
7					~~8700~~ 8700
8			3m N above road		~~8750~~ 8750
9			Mathinna bed start after permain beds		~~8000~~ 7600
378000				12800	~~7750~~ 7500
1					~~7800~~ 7500
2					~~7450~~ 7500
3					~~7400~~ 7450
4					~~7350~~ 7400
5					~~7300~~ 7350
6					~~7250~~ 7300
7					~~7200~~ 7250
8					
9					

HILLS DOWN?

RESOLUTE RESOURCES LIMITED

710247

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: NIGEL + BRIAN Sample Type: SUBSURFACE SOIL Sample Submission No.: K09401/03

Note: New Area - New Page & New Sample Type - New Page Date: 11 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378031				6300	3800
2				"	4350
3				"	4450
4				"	4500
5				"	4550
6			SAMPLE 6M EAST BELOW GRAVEL ROAD K09401	"	4600
7			K09403	5000.	3200
8				"	3250
9				"	3300
378040				"	3350
1				"	3400
2				"	3450
3				"	3500
4				"	3550
5				"	3600
6				"	3650
7				"	3700
8				"	3750
9				4800	3200
378050				"	3250
1				"	3300
2				"	3350
3				"	3400
4				"	3450
5				"	3500
6				"	3550
7				"	3600
8				"	3650
9				"	3700
378060				"	3750

RESOLUTE RESOURCES LIMITED 710248

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: NIGEL, SHAUN Sample Type: SURFACE SOILS Sample Submission No.: K09403

Note: New Area - New Page & New Sample Type - New Page Date: 19/11/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378061			8m South (CREEK)	4600	3200
2				"	3250
3				"	3300
4				"	3350
5				"	3400
6				"	3450
7				"	3500
8				"	3550
9				"	3600
378070				"	3650
1				"	3700
2				"	3750
3				4400	3200
4				"	3250
5				"	3300
6				"	3350
7				"	3400
8				"	3450
9				"	3500
378080				"	3550
1				"	3600
2				"	3650
3				"	3700
4				"	3750
5				5400	4300
6				"	4250
7				"	4200
8				"	4150
9				"	4100
378090				"	4050

RESOLUTE RESOURCES LIMITED 710249

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: 17/91

Sampler: Tim + Adrian Sample Type: Soil Surface Soil Sample Submission No.: K91403

Note: New Area - New Page & New Sample Type - New Page Date: 21 / 11 / 91

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
373091				5400	4000
2				"	3950
3				"	3900
4				"	3850
5				"	3800
6				"	4350
7				"	4400
8				"	4450
9				"	4500
378100			Sample 3m E of pin above creek	"	4550
1				"	4600
2				"	4650
3				"	4700
4				"	4750
5				"	4800
6			Sample 5m W of pin above old workings	"	4850
7				"	4900
8				5200	4300
9			Sample 6m W of Pin above old workings	"	4250
373110				"	4200
1			Sample 5m W of Pin above old workings	"	4150
2				"	4100
3			road at 4052E mark	"	4052
4				"	4000
5				"	3950
6				"	3900
7				"	3850
8				"	3800
9				"	4350
378120				"	4400

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710250

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: 17/91

Sampler: Tim + Adrian Sample Type: Sub surface soil Sample Submission No.: KC9403

Note: New Area - New Page & New Sample Type - New Page Date: 21 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378121				5200	4450
2				"	4500
3				"	4550
4				"	4600
5				"	4650
6				"	4700
7				"	4750
8				"	4800
9			None	"	4850
373130				5000	4300
1				"	4250
2				"	4200
3				"	4150
4				"	4100
5				"	4050
6				"	4000
7				"	3950
8				"	3900
9				"	3850
373140				"	3800
1			6M EAST (WORKINGS.	5000	4350
2				"	4400
3				"	4450
4				"	4500
5				"	4550
6				"	4600
7				"	4650
8				"	4700
9				"	4750
378150				"	4800

RESOLUTE RESOURCES LIMITED 710251

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: NIGEL & MICHAEL Sample Type: SURFACE SOILS Sample Submission No.: K09403

Note: New Area - New Page & New Sample Type - New Page Date: 22 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378151				5000	4550
2				4800	4300
3				"	4250
4				"	4200
5				"	4150
6				"	4100
7				"	4050
8				"	4000
9				"	3950
378160				"	3900
1				"	3850
2				"	3800
3				4800	4350
4				"	4400
5				"	4450
6				"	4500
7				"	4550
8				"	4600
9				"	4650
378170				"	4700
1				"	4750
2				"	4800
3			SAMPLE PEG AT 4840E	"	4840
4				4600	4300
5				"	4250
6				"	4200
7				"	4150
8				"	4100
9				"	4050
378180				"	4000

RESOLUTE RESOURCES LIMITED

710252

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: NIGEL + MICHAEL Sample Type: SUBSURFACE SOIL Sample Submission No.: K09403

Note: New Area - New Page & New Sample Type - New Page Date: 23 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
373181				4600	3950
2				"	3900
3				"	3850
4				"	3800
5				4600	4350
6				"	4400
7				"	4450
8				"	4500
9				"	4550
378190				"	4600
1				"	4650
2				"	4700
3				"	4750
4			Suspect sample (possibly alluvium)	4600	4800
5				"	4850
6				"	4900
7			2m Short of prospect (Jubilee)	"	4945
8				4400	4250
9				"	4200
373200				"	4150
1			Down to side of costean	"	4100
2				"	4050
3				"	4000
4				"	3950
5				"	3900
6				"	3850
7			To side of small diggings	"	3800
8				4100	4300
9				"	4250
378210				"	4200

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710253

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: 17/91

Sampler: James + Adrian Sample Type: S>6 - Surface soil Sample Submission No.: K09403/05

Note: New Area - New Page & New Sample Type - New Page Date: 24/11/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378211				4000	4150
2				"	4100
3				"	4050
4				"	4000
5				"	3950
6				"	3900
7				"	3850
8				"	3800
9				4100	4350
378220				"	4400
1				"	4450
2				"	4500
3				"	4550
4				"	4600
5				"	4650
6				"	4700
7				"	4750
8			K09403/~~04~~	"	4800
9			CHINAMENS HILL K09405	10700	3400
378230				"	3350
1				"	3300
2			SAMPLE 17M (120° S.E.) DUE TO FORESTRY ROAD	"	3250
3			BELOW FORESTRY ROAD CUT	"	3450
4				10600	3400
5				"	3350
6				"	3300
7				"	3250
8				"	3450
9				"	3500
378240				10500	3400

RESOLUTE RESOURCES LIMITED

710254

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES, TIM, ADRIAN Sample Type: SUBSURFACE SOIL Sample Submission No.: K09405

Note: New Area - New Page & New Sample Type - New Page Date: 25 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378241				10500	3350
2				"	3300
3				"	3250
4				"	3200
5				"	3150
6			BELOW TRACK ROAD	"	3450
7			" FORESTRY ROAD CUT	"	3500
8			SAMPLE 5M S.E.	10400	3400
9				"	3350
378250				"	3300
1				"	3250
2				"	3200
3			SAMPLE 4M WEST NEXT TO ROAD	"	3150
4				"	3100
5			SAMPLE 3M WEST (DISTURBED GROUND)	"	3050
6				"	3450
7				"	3500
8			40M BECAUSE CLIFF + ROAD	"	3540
9				10300	3400
378260				"	3350
1			SAMPLE 3M WEST DUE TO ROAD TRACK	"	3300
2				"	3250
3				"	3200
4				"	3150
5				"	3100
6				"	3050
7				"	3000
8				"	2950
9				"	3450
378270				"	3500

RESOLUTE RESOURCES LIMITED 710255

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES, TIM, ADRIAN Sample Type: SUBSURFACE SOIL Sample Submission No.: KO9405

Note: New Area - New Page & New Sample Type - New Page Date: 28 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
373271				10300	3550
2			40M MARK BECAUSE OF CLIFF + ROAD	"	3600
3				10200	3400
4				"	3350
5				"	3300
6				"	3250
7				"	3200
8				"	3150
9				"	3100
378280				10200	3050
1				"	3000
2				"	2950
3				"	2900
4				"	2850
5				"	2800
6				10200	3450
7				"	3500
8			Sample 2mE of pin out of creek	"	3550
9				"	3600
373290				"	3650
1				10100	3400
2				"	3350
3				"	3300
4				"	3250
5				"	3200
6				"	3150
7				"	3100
8				"	3050
9				"	3000
378300				"	2950

RESOLUTE RESOURCES LIMITED

710256

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 1219

Sampler: JAMES, TIM, ADIAN Sample Type: SUBSURFACE SOIL Sample Submission No.: K09405

Note: New Area - New Page & New Sample Type - New Page Date: 28 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378301				10100	2900
2			Sample 4m S of Pin away from track	"	2850
3				"	2800
4				10100	3450
5				"	3500
6				"	3550
7				"	3600
8				"	3650
9				"	3700
378310				9900	3400
1				"	3350
2			Sample Done	"	3300
3				"	3250
4				"	3200
5				"	3150
6			Sample 4m E, out of gully	"	3100
7				9900	3050
8				"	3000
9				"	2950
378320				"	2900
1				"	2850
2				"	2800
3				"	3450
4				"	3500
5				"	3550
6				"	3600
7				"	3650
8				"	3700
9				"	3750
378330			CUT SHORT DUE TO CLIFF	"	3785

RESOLUTE RESOURCES LIMITED 710257

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: ~~[illegible]~~

Sampler: JAMES, TIM, ADRIAN Sample Type: SUBSURFACE SOIL Sample Submission No.: K0745

Note: New Area - New Page & New Sample Type - New Page Date: 28 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378331				9700	3400
2				"	3350
3				"	3300
4				"	3250
5			SAMPLE 4M NORTH DUE TO ROAD RUBBLE	"	3200
6			BELOW GRAVEL ROAD	"	3150
7				"	3100
8			SAMPLE 2M WEST BELOW ~~ROAD~~ GRAVEL ROAD NEXT TO COSTEAN	"	3050
9				"	3000
378340				"	2950
1				"	2900
2				"	2850
3				"	2800
4				"	3450
5				"	3500
6				"	3550
7				"	3600
8			SAMPLE 4M SOUTH ABOVE COSTEAN	"	3650
9				"	~~3~~3700
378350				"	3750
1				"	3800
2				"	3850
3				"	3900
4				9500	3400
5				"	3350
6				"	3300
7				"	3250
8				"	3200
9				"	3150
378360				"	3100

None

RESOLUTE RESOURCES LIMITED

710258

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.: 17/91

Sampler: JAMES TIM, ADRIAN Sample Type: SUBSURFACE SOIL Sample Submission No.: K09405

Note: New Area - New Page & New Sample Type - New Page Date: 29 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378361				9500	3050
2				"	3000
3				"	2950
4				"	2900
5				"	2850
6				"	2800
7				9500	3450
8			SAMPLE 7M NORTH ABOVE COSTEAN	"	3500
9				"	3550
378370				"	3600
1				"	3650
2			SAMPLE 3M SOUTH ABOVE COSTEAN	"	3700
3				"	3750
4			None	"	3800
5				"	3850
6				"	3900
7				"	3950
8			K09405	"	3975
9			Start of 5200 Baseline K09406	7000	5250
378380				"	5300
1				"	5350
2				"	5400
3				"	5450
4			None	"	5500
5				"	5550
6				"	5600
7				6800	5250
8				"	5300
9				"	5350
378390				"	5400

RESOLUTE RESOURCES LIMITED

710259

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: 17/91

Sampler: Tim + Adrian Sample Type: sub surface soil Sample Submission No.: K09406

Note: New Area - New Page & New Sample Type - New Page Date: 30 / 11 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
373421				6300	5650
2				"	5700
3				"	5750
4				"	5800
5				"	5850
6				"	5800
7				"	5950
8				6000	5250
9				"	5300
373430				"	5350
1				"	5400
2				"	5450
3				"	5500
4				"	5550
5				"	5600
6				"	5650
7				"	5700
8			Sample 10m S of Pin away from road	"	5750
9			Sample 5m S of Pin	"	5800
373440			Sample 9m NW of Pin away from road	"	5850
1				"	5900
2				"	5950
3				"	6000
4				"	6050
5				5600	5250
6				"	5300
7				"	5350
8				"	5400
9				"	5450
378450				"	5500

RESOLUTE RESOURCES LIMITED 710260

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: [illegible]

Sampler: Tim + Adrian Sample Type: Sub Surface Soil Sample Submission No.: K0946

Note: New Area - New Page & New Sample Type - New Page Date: 31/11/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378451			Sample 1.5m NE of Pin	5600	5550
2				"	5600
3				"	5650
4			Sample 8.5m SE of pin way from road	"	5700
5				"	5750
6				"	5800
7				"	5850
8			Sample 10m ESE of pin, out of creek	"	5900
9				"	5950
378460				"	6000
1				5200	5250
2			None	"	5300
3				"	5350
4				"	5400
5				"	5450
6				"	5500
7			6m E above creek	"	5550
8				"	5600
9				"	5650
378470				"	5700
1				"	5750
2				"	5800
3				"	5850
4				"	5900
5				"	5950
6				"	6000
7			4m S, below road	5000	5250
8				"	5300
9				"	5350
378480				"	5400

RESOLUTE RESOURCES LIMITED

710261

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: [redacted]

Sampler: Tim - Adrian Sample Type: Soil - Surface soil Sample Submission No.: K09406

Note: New Area - New Page & New Sample Type - New Page Date: 2/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
373481				5000	5450
2			4m S away from workings	"	5500
3				"	5550
4				"	5600
5			7m E away from creek	"	5650
6			~~4m SSW out of gully~~	"	5700
7				"	5750
8				"	5800
9				"	5850
373490				"	5900
1			Done	"	5950
2				"	6000
3				4800	5250
4				"	5300
5			4m SSW out of gully	"	5350
6			6m S a	"	5400
7			4m E surrounded by parallel coshines	"	5450
8			6m SW away from coshine	"	5500
9				"	5550
373500				"	5600
1			9m S away from old cart track	"	5650
2				"	5700
3				"	5750
4				"	5800
5				"	5850
6				"	5900
7				"	5950
8				"	6000
9				4600	5250
378510			12m NE across road	"	5300

RESOLUTE RESOURCES LIMITED

710262

Project Name: Tasmania Prospect Name: MATHINNA Tenement No.: ~~[illegible]~~

Sampler: Adrian + Tim Sample Type: Soil - Surface soil Sample Submission No.: K09406

Note: New Area - New Page & New Sample Type - New Page Date: 3-4/12/94

Sample No.	Drillhole	Interval	Description NB. Where base of sample taken = closest tree (large)	Coordinates N	Coordinates E
378511				4600	5350
2				"	5400
3				"	5450
4				"	5500
5				"	5550
6				"	5600
7				"	5650
8				"	5700
9				"	5750
378520				"	5800
1				"	5850
2				"	5900
3			2m S	"	5950
4				"	6000
5				"	6050
6				4400	5400
7			15m E above road	"	5444
8				"	5500
9				"	5550
378530				"	5600
1				"	5650
2				"	5700
3				"	5750
4				"	5800
5				"	5850
6			2m E	"	5900
7			2m E	"	5950
8				"	6000
9			8m N	4200	5400
378540			4m S	"	5469

RESOLUTE RESOURCES LIMITED

710263

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: ~~[illegible]~~

Sampler: Tim - Adrian Sample Type: Soil - Surface soil Sample Submission No.: K0940

Note: New Area - New Page & New Sample Type - New Page Date: 4-5/12/95

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378541				4200	5510
2			16m S	"	5550
3				"	5600
4			1m S	"	5650
5			3m S	"	5700
6			7m SSW	"	5750
7			12 m ENE	"	5800
8				"	5850
9			6m N	"	5900
378550			7m N	3900	5200
1			12m S	"	5150
2			2m W	"	~~5000~~ 5102
3				"	5050
4				"	5000
5			rock outcrop	"	4950
6				"	4900
7				"	4850
8				"	4800
9				"	4750
378560				"	4700
1				"	4650
2			6m S	"	4600
3			15m E out gully	"	4550
4				~~3950~~ "	5250
5			5m N		5300
6			16m N		5350
7			2m S		5400
8			11m S		5450
9			6m WNW		5500
378570			8m E		5550

RESOLUTE RESOURCES LIMITED

10264

Project Name: Tasmania Prospect Name: Mathinna Tenement No.: K9406

Sampler: Tim - Adrian Sample Type: Sub-surface soil Sample Submission No.: K09406/08

Note: New Area - New Page & New Sample Type - New Page Date: 25/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378571			22m N	3900	5600
2				"	5650
3				"	5700
4			18.5m ENE across road	"	5750
5				3600	5200
6			3m N	"	5150
7				"	5100
8			11m NNW	"	5050
9				"	5000
378580				"	4950
1				"	4900
2				"	4850
3				"	4800
4				"	4750
5			4m NNW	"	4700
6				"	4650
7			12m N across road	3600	5250
8				"	5300
9			16m N	"	5350
378590				"	5400
1				"	5450
2			15m N	"	5500
3				"	5550
4				"	5600
5				"	5650
6			K09406	"	5700
7			Nangana. K09408	9900	9950
8			24m SSW above house site	9950	9950
9				9900	9900
378600				9900	9850

Done

BASE

710265

RESOLUTE RESOURCES LIMITED

Project Name: Tasmania Prospect Name: Mangana Tenement No.:

Sampler: Tim + Adrian Sample Type: Subsurface Soil Sample Submission No.: KC9408

Note: New Area - New Page & New Sample Type - New Page Date: 9/12/99

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378691				9600	10600
2				"	10650
3				"	10700
4				"	9950
5				"	9900
6				"	9850
7				"	9800
8				"	9750
9				"	9700
378700				"	9650
1				"	9600
2				"	9550
3				"	9500
4				"	9450
5				"	9402
6				9500	10000
7			10m ESE away from shaft	"	10050
8				"	10100
9				"	10150
378710				"	10200
1				"	10250
2				"	10300
3				"	10350
4				"	10400
5				"	10450
6				"	10500
7				"	10550
8				"	10600
9				"	10650
378720				9500	9950

710266

RESOLUTE RESOURCES LIMITED

Project Name: Tasmania Prospect Name: Mangana Tenement No.:

Sampler: Tim - Adrian Sample Type: Subsurface Soil Sample Submission No.: KC940

Note: New Area - New Page & New Sample Type - New Page Date: 24/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378721				9500	9900
2				"	9850
3				"	9800
4				"	9750
5				"	9700
6				"	9650
7				"	9600
8				"	9550
9				"	9500
378730				"	9450
1				9400 ~~10000~~	10000 ~~9400~~
2			4m NNE out of gully	"	9950
3			2m N	"	9900
4			Hack shale outcrop	"	9850
5			2m N out of gully	"	9800
6				"	9750
7				"	9700
8				"	9650
9				"	9600
378740				"	9550
1			8m S away from uphill mullock heap	"	9500
2			5m S	"	9450
3				"	9400
4				11100	8050
5				"	8100
6				"	8150
7				"	8200
8				"	8250
9				"	8300
378750			6m NW away from road	"	8350

710267

RESOLUTE RESOURCES LIMITED

Project Name: Tasmania Prospect Name: ~~Hourigan~~ Bucklands Hill Tenement No.:

Sampler: Tim + Adrian Sample Type: Sub-Surface soil Sample Submission No.: K094C

Note: New Area - New Page & New Sample Type - New Page Date: 10/12/84

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378751			7m NNE away from workings	11100	8400
2				"	8450
3			12m W above tramway	"	8500
4				"	8550
5				11200	8000
6				"	7950
7				"	7900
8				"	7850
9				"	7800
378760			Void	"	7750
1				11200	8050 ~~7700~~
2				"	8100 ~~7650~~
3				"	8150 ~~7600~~
4			3m E out of creek bed	"	8200 ~~7550~~
5				"	8250 ~~7500~~
6				"	8300
7				"	8350
8				"	8400
9				"	8450
378770			Sample 4W above tramway	"	8500
1			15m E above creek	"	8550
2				"	8600
3				11500	8000
4				"	~~7950~~
5			7m E at base of tree away from creek	"	7900
6				"	7850
7				"	7800
8				"	7750
9				"	7700
378780				"	7650

RESOLUTE RESOURCES LIMITED

710268

Project Name: Tasmania Prospect Name: Bucklands Hill Tenement No.:

Sampler: Tim + Adrian Sample Type: Sub Surface Soil Sample Submission No.: K09408

Note: New Area - New Page & New Sample Type - New Page Date: 11/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
373781				11500	7600
2			8m E out of creek	"	7550
3				11500	8050
4				"	8100
5			~~4m E away from workings~~	"	8150
6				"	8200
7				"	8250
8				"	8300
9				"	8350
373790				"	8400
1			just above tramway	"	8450
2				"	8500
3				"	8550
4				"	8600
5			11m S away from road	"	8650
6				11800	8000
7			10m SE away from cashie	"	~~8650~~ 7950
8				"	~~8700~~ 7900
9				"	~~8750~~ 7850
378800				"	~~8~~ 7800
1				"	7750
2				"	7700
3				"	7650
4				"	7600
5				"	7550
6				"	8050
7				"	8100
8				"	8150
9				"	8200
378810				"	8250

710269

RESOLUTE RESOURCES LIMITED

Project Name: Tasmania Prospect Name: Backlands Hill Tenement No.:

Sampler: Tim+Adrian Sample Type: Subsurface soil Sample Submission No.: K09408/

Note: New Area - New Page & New Sample Type - New Page Date: 12/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
373811				11800	8300
2				"	8350
3				"	8400
4			tramway 20m downhill	"	8450
5				"	8500
6				"	8550
7				"	8600
8				"	8650
9			2m ENE undoi road	"	8700
373820				12100	8000
1				"	8050
2				"	8100
3				"	8150
4			10m WSW out of gully	"	8200
5				"	8250
6				"	8300
7				"	8350
8				"	8400
9				"	8450
373830				"	8500
1			6m ENE pit in log	"	8550
2				"	8600
3				"	8650
4			K09408	"	8700
5			K09410	12100	7950
6				"	7900
7				"	7850
8				"	7800
9				"	7750
373840				"	7700

RESOLUTE RESOURCES LIMITED

710270

Project Name: Tasmania Prospect Name: Bucklands Hill Tenement No.:

Sampler: Tim + Adrian Sample Type: Soil - Surface Soil Sample Submission No.: K09440

Note: New Area - New Page & New Sample Type - New Page Date: 13/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
378841				12100	7650
2				"	7600
3				"	7550
4				"	7500
5				"	7450
6			22m E uphill avg base plain	"	7400
7				12600	8000E
8				"	7950
9			5m N (Scree)	"	7900
378850				"	7850
1				"	7800
2				"	7750
3				"	7700
4				"	7650
5				"	7600
6				"	7550
7				"	7500
8				"	7450
9				"	7400
378860				"	7350
1				"	7300
2				"	7250
3				12600	8050
4				"	8100
5				"	8150
6				"	8200
7				"	8250
8				"	8300
9			10m South (Workings)	"	8350
378870				"	8400

RESOLUTE RESOURCES LIMITED

Project Name: Tasmania Prospect Name: Bucklands hill 9 VOLUNTEER. Tenement No.:

Sampler: Tim H & Adrian Sample Type: Sub surface soil Sample Submission No.: K09440

Note: New Area - New Page & New Sample Type - New Page Date: 14/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
373871			5m North (creek/costean)	12600	8450
2				"	8500
3			10 m East (Creek)	12800	8550
4				"	8600
5				"	8650
6				"	8700
7				"	8750
8				12900	7600
9				"	7550
373880				"	7500
1				"	7450
2				"	7400
3				"	7350
4				"	7300
5				"	7250
6			K09440↑	"	7200
7			K09441↓	7600	2200
8				"	2150
9				"	2100
373890			4m SSW away from graded track	"	2050
1				7600	2250
2				"	2300
3				"	2350
4				"	2400
5				"	2450
6				"	2500
7				7400	2200 ~~3788~~
8			6m N away from road	"	2150
9				"	2100
378900				"	2050

BUCKLANDS HILL

VOLUNTEER

710271

RESOLUTE RESOURCES LIMITED

710272

Project Name: Tasmania Prospect Name: Volunteer - MATHINNA Tenement No.:

Sampler: Tim + Adrian Sample Type: Subsurface Soil Sample Submission No.: K0440

Note: New Area - New Page & New Sample Type - New Page Date: 15/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
373901				7400	2000
2				7400	2250
3				"	2300
4				"	2350
5				"	2400
6				7300	2200
7				"	2150
8				"	2100
9				"	2050
378910				"	2000
1				7350	2250
2				"	2300
3			possible workings above	7050	2200
4				"	2150
5			VOLUNTEER	"	2102
6				"	2050
7			7m S over-road	"	2000
8				8100	4300
9			MATHINNA	"	4250
373920			Assumed C-HORIZON	"	4300
1				"	4400
2				8000	4300
3				"	4250
4				"	4350
5				"	4400
6				7900	4300
7				"	4250
8				"	4200
9				"	4150
378930				7900	4350

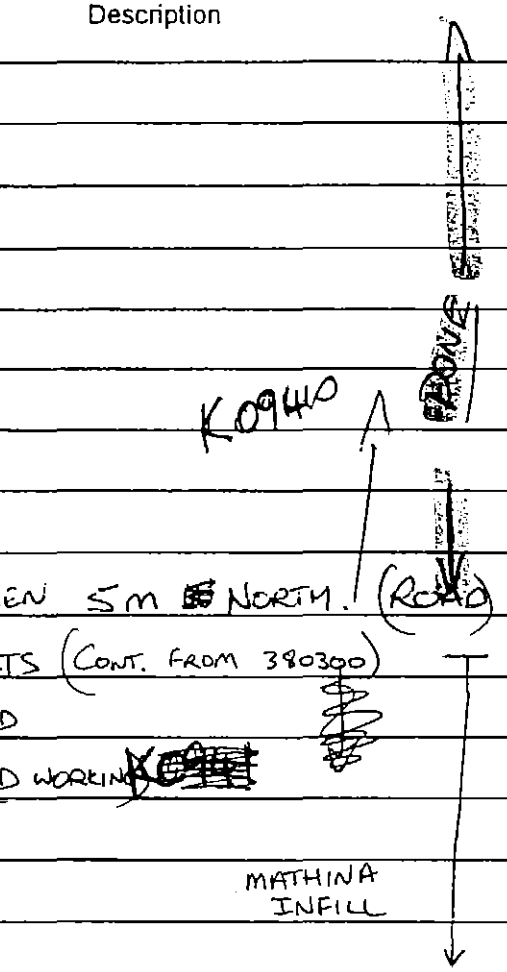
RESOLUTE RESOURCES LIMITED 710273

Project Name: TASMANIA Prospect Name: ~~BLACKBOY RIDGE~~ MANGANA A- HORIZON Tenement No.:

Sampler: GARY & TIM Sample Type: ~~SUBSURFACE SOIL~~ Sample Submission No.: K09410 K09411

Note: New Area - New Page & New Sample Type - New Page Date: 18 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
373991				10700	9700
2				" "	9650
3				" "	9600
4				" "	9550
5				" "	9500
6				" "	9450
7				" "	9400
8				" "	9350
9	MANGANA A-HORIZON		SAMPLE TAKEN 5m ~~S~~ NORTH. (ROAD)	" "	9300
374000	MATHINNA? C-HORIZON		TRACE QUARTS (CONT. FROM 380300)	4750	4950
1			NOT SIEVED	"	4975
2			8m EAST (OLD WORKING ~~K09410~~)	"	5000
3				"	5025
4				"	5050
5				"	5075
6				"	5100
7				"	5125
8				"	5150
9			ABUN. QUARTS	4850	5125
374010				"	5100
1			TRACE QUARTS	"	5075
2				"	5050
3			TRACE QUARTS	"	5025
4			NOT SIEVED	"	5000
5			" " — TRACE QUARTS	"	4975
6			" " — MINOR "	4950	4975
7			" "	"	5000
8			" " — MINOR QUARTS	"	5025
9			" " — " "	"	5050
374020			MINOR QUARTS	"	5075



RESOLUTE RESOURCES LIMITED 710274

Project Name: TASMANIA Prospect Name: MATHINA INFILL Tenement No.:

Sampler: GARY & ADRIAN Sample Type: RC HORIZON Sample Submission No.: K0946

Note: New Area - New Page & New Sample Type - New Page Date: 8/2/95

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
379021			MINOR QUARTS	4950	5100
2			TRACE QUARTS	5050	5075
3			MINOR QUARTS	"	5050
4			ABUN. QUARTS	"	5025
5			NOT SIEVED - TRACE QUARTS	"	5000
6			" " " "	5100	5050
7			TRACE QUARTS	"	5100
8				5200	5200
9				"	5150
379030				"	5100
1			MINOR QUARTS	7050	4200
2			ABUN "	"	4225
3			NOT SIEVED - ABUN QUARTS	"	4250
4			" " - TRACE "	"	4275
5			TRACE QUARTS	"	4300
6			" "	"	4325
7			ABUN "	"	4350
8			NOT SIEVED - MINOR QUARTS	"	4375
9			" " - " "	"	4400
379040				"	4175
1				"	4150
2				"	4125
3			NOT SIEVED	"	4100
4			MINOR QUARTS	"	4075
5			TRACE " - NOT SIEVED	"	4050
6			ABUN. QUARTS	6950	4200
7			TRACE "	"	4225
8			MINOR QUARTS	"	4250
9				"	4275
379050			MINOR QUARTS	"	4300

RESOLUTE RESOURCES LIMITED + MANGANA

710275

Project Name: TASMANIA Prospect Name: MATHINNA INFILL Tenement No.:

Sampler: SHAWRY Sample Type: SUBSURFACE SOILS Sample Submission No.: K09410

Note: New Area - New Page & New Sample Type - New Page Date: 16/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
379831			16M NORTH (SHAFT TO SOUTH)	6300	3575
2				6200	3575
3				"	3525
4				"	3475
5			10M SOUTH (COSTEAN)	6300	4025
6				"	3975
7			16M SOUTH (COSTEAN)	6400	4025
8				"	4075
9			CONTINUED FROM 380600 (MATHINNA INFILL)	4900	5025
379840			TAKEN 5m W (ROAD), ON FLAT BTW RIDGES	" "	4975
1			TAKEN 4m SE (GULLY)	5000	4975
2				" "	5025
3				" "	5075
4				" "	5125
5				" "	5175
6				" "	5225
7				5100	5225
8				" "	5175
9				" "	5125
379850				" "	5075
1			TAKEN 4m N (ON ALLUVIUM FLAT, CREEK 2m W)	" "	5025
2			TAKEN ON ALLUVIUM FLAT, CREEK 15m E	5200	5025
3				" "	5075
4				" "	5125
5				" "	5175
6				" "	5225
7				6100	3775
8			SINISH OF MATHINNA INFILL	" "	3825
9				10300	9700
379860			SAMPLE TAKEN 10 M WEST (SCREE)	" "	9750

None

MATHINNA

MANGANA

RESOLUTE RESOURCES LIMITED 710276

Project Name: TASMANIA Prospect Name: VOLUNTEER Tenement No.:

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL + C HORIZON Sample Submission No.: KO9410 KO9412

Note: New Area - New Page & New Sample Type - New Page Date: 15 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
379981			DEEP AUGER SAMPLE	6600	4400
2			MEDIUM DEPTH (SLATE)	" "	4450
3			DEEP AUGER SAMPLE	6400	4400
4			MEDIUM DEPTH (VERY ROCKY), SUSPECT	" "	4450
5			SUSPECT (MEDIUM DEPTH SLATE)	" "	4500
6				" "	4550
7				6300	4500
8				" "	4550
9				" "	4600
379990				6200	4600
1				" "	4650
2				5800	5150
3				" "	5200
4				" "	5250
5				" "	5300
6				" "	5350
7				" "	5400
8				" "	5450
9				" "	5500
380000			CONTINUED ON 376302 KO9412	" "	5550
1			CONTINUED FROM 377700 KO9410	8100	2100
2				"	2250
3				"	2300
4				"	2350
5				"	2400
6			SAMPLE 5M WEST AWAY FROM TRACK	"	2450
7			" 10M SOUTH-WEST AWAY FROM ROAD	"	2500
8				"	2550
9			SAMPLE 15M SOUTH SURROUNDED BY SHAFTS + TAILINGS	"	2600
380010				8300	2200

+ C HORIZON

RESOLUTE RESOURCES LIMITED 710277

Project Name: TASMANIA Prospect Name: VOLUNTEER Tenement No.:

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: KO~~1~~10

Note: New Area - New Page & New Sample Type - New Page Date: 15 / 12 /94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380011				8300	2250
2			SAMPLE 15M WEST OUT OF DOZED AREA	"	2300
3				"	2350
4			SAMPLE 10M SOUTH ABOVE ROAD	"	2400
5			" 5M NORTH-EAST DOZED AREA SUSPECT	"	2450
6				"	2500
7				"	2550
8			MATHINNA INFILL	4900	4475
9				"	4525
380020				"	4575
1				"	4625
2			SAMPLE 4M SOUTH-WEST ABOVE COSTEAN	"	4675
3			JUST ABOVE ADIT	"	4725
4				"	4775
5				"	4825
6				"	4875
7				5000	4875
8			SAMPLE 2M WEST ABOVE COSTEAN	"	4825
9				"	4775
380030				"	4725
1				"	4675
2			SAMPLE 4M EAST OFF DOZED TRACK	"	4625
3				"	4575
4				"	4625
5				"	4475
6				5100	4425
7			SAMPLE 4M ABOVE COSTEAN	"	4475
8				"	4525
9				"	4575
380040			SAMPLE 10M EAST TO SIDE OF COSTEAN	"	4625

Done

RESOLUTE RESOURCES LIMITED 710278

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.:

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No: C09410

Note: New Area - New Page & New Sample Type - New Page Date: 19 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380071			NOT SENT 19.12.94	9700	3875
2			NOT SENT 19.12.94	9800	3825
3			↑	"	3775
4				"	3725
5				"	3675
6			SAMPLE 7M SOUTH ABOVE COSTEAN	"	3625
7				"	3575
8				"	3525
9			SAMPLE 5M SOUTH ABOVE COSTEAN	"	3475
380080			" 8M WEST ABOVE CUT	"	3425
1				"	3375
2			Done	"	3325
3				"	3275
4				9900	3425
5				"	3475
6				"	3525
7			↓	"	3575
8			NOT SENT 19.12.94	"	3625
9			NOT SENT 19.12.94	"	3675
380090			NOT SENT 19.12.94	"	3725
1			NOT SENT 19.12.94	"	3775
2			NOT SENT	10000	3725
3			NOT SENT	"	3675
4			NOT SENT	"	3625
5			NOT SENT	"	3575
6			NOT SENT	"	3525
7				"	3475
8			SAMPLE 3M WEST ABOVE COSTEAN	"	3425
9			NOT USED		
380100			NOT USED		

RESOLUTE RESOURCES LIMITED

710279

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.:

Sampler: GARDE + GRANT Sample Type: SUBSURFACE SOIL Sample Submission No.: 10940

Note: New Area - New Page & New Sample Type - New Page Date: 19 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380101			NOT USED		
2				9600	3025
3				9600	2975
4				9500	2825
5				"	2775
6				"	3025
7				"	3075
8				"	3125
9				"	3225
380110				"	3275
1				9400	3225
2				"	3275
3				"	3425
4				"	3475
5				"	3525
6				"	3575
7				"	3625
8				"	3675
9				"	3725
380120				"	3775
1				"	3825
2				"	3875
3			NOT SENT 19.12.94	"	3925
4				9500	3875
5				"	3825
6				"	3775
7				"	3725
8				"	3675
9				"	3625
380130				"	3575

RESOLUTE RESOURCES LIMITED

710280

Project Name: TASMANIA Prospect Name: ~~BLACKBOY RIDGE~~ MANGANA A - HORIZON Tenement No.:

Sampler: GARY & GRANT Sample Type: ~~SUBSURFACE SOIL~~ Sample Submission No.: ~~K09411~~ K09411

Note: New Area - New Page & New Sample Type - New Page Date: 21/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380191				11400	10050
2			DONE	" "	10100
3				" "	10150
4				" "	10200
5	MANGANA A-HORIZON		K09411	" "	10250
6			K09415		
7					
8					
9	~~MATHIANA~~ A-HORIZON		JUBILEE INFILL	4950	4625
380200				"	4650
1				"	4675
2				"	4700
3				"	4725
4				"	4750
5				"	4775
6			5m NORTH WEST - (OLD WORKINGS)	"	4800
7				4850	4450
8				"	4475
9				"	4500
380210			5m WEST - (ROAD)	"	4525
1				"	4550
2				"	4575
3				"	4600
4				"	4625
5				"	4650
6				"	4675
7				"	4700
8				"	4725
9				"	4750
380220				"	4775

RESOLUTE RESOURCES LIMITED

710281

ame: TASMANIA Prospect Name: JUBILEE INFILL Tenement No.:

GARY & MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.: K09415

Note: New Area - New Page & New Sample Type - New Page Date: 22/1/95

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380221				4850	4300
2				4750	4500
3				"	4525
4				"	4550
5				"	4575
6				"	4600
7				"	4625
8				"	4650
9				"	4675
380230				"	4700
1				"	4725
2				"	4750
3				"	4775
4				"	4800
5				"	4825
6				"	4850
7				4650	4575
8				"	4600
9				"	4625
380240				"	4650
1				"	4675
2				"	4700
3				"	4725
4				"	4750
5				"	4775
6				"	4800
7				↑	4675
8	MATHINNA A HORIZON		5m SOUTH - EARTHWORKS.	K09415 "	4700
9	MATHINNA C HORIZON		qb. quartz. Augered	K09416 7000	4325
380250			mn quartz	"	4350

RESOLUTE RESOURCES LIMITED

710282

Project Name: TASMANIA Prospect Name: INFILL MATHINNA Tenement No.:

Sampler: GARY & MIKE Sample Type: C-HORIZON Sample Submission No.: K09416

Note: New Area - New Page & New Sample Type - New Page Date: 7 / 2 /95

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
330251			quartz	7000	4375
2			quartz	"	4275
3				"	4225
4				"	4175
5				"	4125
6			sid silt	"	4075
7				7100	4025
8				"	4075
9				"	4125
330260			None	"	4175
1				"	4225
2				"	4275
3				"	4325
4				"	4350
5	MATHINNA C-HORIZON			"	4375
6	MATHINNA A-HORIZON		NOT SENT - ALLUVIAL	~~4400~~	~~4400~~
7	CHORIZON		ABUN. QUARTS	4550	4800
8	↓		MINOR "	"	4825
9	↓		NOT SIEVED	"	4850
380270			NOT SIEVED	"	4875
1				"	4900
2				"	4925
3				4450	4925
4	CHORIZON		TRACE QUARTS	"	4900
5			MINOR "	"	4875
6			TRACE "	"	4850
7				"	4825
8			TRACE QUARTS	"	4800
9	↓			"	4775
380280			MINOR QUARTS.	"	4750

RESOLUTE RESOURCES LIMITED

710283

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.:

Sampler: GARY & ADRIAN. Sample Type: HORIZON Sample Submission No.: K09446

Note: New Area - New Page & New Sample Type - New Page Date: / /

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380281			MINOR QUARTS	4350	4850
2			TRACE "	"	4875
3			" "	"	4900
4				4650	4825
5			TRACE QUARTS	"	4850
6				"	4875
7			TRACE QUARTS	"	4900
8				"	4925
9			MINOR QUARTS	"	4950
380290			" " - NOT SIEVED	"	4975
1			NOT SIEVED	"	5000
2			" "	"	5025
3			MINOR QUARTS	"	5050
4				"	5075
5				"	5100
6			TRACE QUARTS	"	5125
7			NOT SIEVED	"	5150
8			" "	"	5175
9			TRACE QUARTS	"	5200
380300			ABUN. QUARTS K09446	4750	4925
1			1/2 AUGER TO BED ROCK CONTINUED FROM 380486	6200	5250
2			2/3 " TO " "	"	5300
3			3/4 " TO " "	"	5350
4			2/3 " TO HARD CLAY	"	5400
5			1/2 " TO " "	"	5450
6			1/3 " TO BED ROCK	"	5500
7			3/4 " TO HARD CLAY	"	5550
8			1/2 " TO BED ROCK	6000	5050
9			3/4 " TO HARD CLAY	"	5100
380310			3/4 " TO BED ROCK	"	5150

RESOLUTE RESOURCES LIMITED

710284

Project Name: TASMANIA Prospect Name: MATHINNA C HORIZON Tenement No.:

Sampler: JAMES + MIKE Sample Type: ~~SUBSURFACE SOIL~~ C HORIZON Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 28 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380311			1/2 AUGER TO BED ROCK	6000	5200
2			3/4 " TO HARD CLAY	"	5250
3			1/3 " TO BED ROCK	"	5300
4			1/3 " TO " "	"	5350
5			1/3 " TO " "	"	5400
6			FULL DRIVE	"	5450
7			1/2 AUGER TO BED ROCK	"	5500
8			1/2 " TO " "	"	5550
9			3/4 " TO HARD CLAY	"	5600
380320			1/3 " TO BED ROCK	"	5650
1			2/3 " TO " "	"	5700
2			1/3 " TO " "	"	5750
3			1/3 " TO " "	"	5800
4			2/3 " TO TREE ROOT	6000	5850
5			1/2 " TO HARD CLAY	"	5900
6			3/4 " TO BED ROCK	5700	5100
7			1/3 " TO HARD CLAY	"	5150
8			FULL AUGER STILL @ HARD CLAY	"	5200
9			" " HARD CLAY	"	5250
380330			3/4 AUGER TO HARD CLAY	"	5300
1			FULL AUGER	"	5350
2			1/3 AUGER TO BED ROCK	"	5400
3			2/3 " TO HARD CLAY	"	5450
4			1/2 " TO ROCK	"	5500
5			1/2 " TO BED ROCK	"	5550
6			1/2 " TO " "	"	5600
7			1/2 " TO " "	"	5650
8			2/3 " TO " "	"	5700
9			FULL AUGER	"	5750
380340			~~1/2 AUGER TO ROCK~~	~~11800~~ 5300	~~8125~~ 5350

MOVED 200N 50E

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710285

Project Name: TASMANIA Prospect Name: ~~BOCCLANOS HILL INFILL~~ MANGANA Tenement No.:

Sampler: JAMES + MIKE Sample Type: ~~SUBSURFACE SOIL~~ A- HORIZON Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: ~~27~~ 30 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380341	MANGANA		~~A HORIZON~~	11800	8175
2				11700	8175
3				"	8125
4				11600	8075
5				"	8125
6				"	8175
7				11500	8175
8				11500	8125
9				11300	7825
380350				"	7775
1				11200	7875
2				"	7825
3				"	7775
4				"	7725
5				11100	7875
6				"	7825
7			SUSPECT SAMPLE ON DOZED AREA	8100	9775
8			SAMPLE 3M SOUTH ABOVE TRACK	"	9825
9			BELOW ROAD CUT	"	9875
380360				8000	9925
1				"	9875
2				"	9825
3				"	9775
4				7900	9825
5			6M SOUTH DUE TO COSTEAN	"	9875
6				"	9925
7				8900	9425
8	MANGANA		A HORIZON	"	9475
9	MANGANA A HORIZON		4m SOUTH WEST (CREEK) (JUBILEE INFILL)	5150	4350
380370			4m NORTH WEST (CREEK & ROAD)	"	4375

RESOLUTE RESOURCES LIMITED

710286

Project Name: TASMANIA Prospect Name: JUBILEE INFILL A HORIZON Tenement No.:

Sampler: GARY & ADRIAN Sample Type: SUBSURFACE SOIL Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 21/1/95

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380371				5150	4400
2			SUSPECT - (OLD WORKINGS)	"	4425
3			SUSPED - (OLD WORKINGS)	"	4450
4			7m SOUTH EAST - (OLD WORKINGS)	"	4475
5				"	4500
6				"	4525
7				"	4550
8				"	4575
9				5050	4400
380380				"	4425
1				"	4450
2				"	4475
3				"	4500
4				"	4525
5				"	4550
6				"	4575
7				"	4600
8			4m SOUTH WEST - (WORKINGS)	"	4625
9				"	4650
380390				"	4675
1				"	4700
2				"	4725
3				4950	4425
4				"	4450
5				"	4475
6				"	4500
7				"	4525
8				"	4550
9				"	4575
380400			4m NORTH WEST - (ROAD)	"	4600

RESOLUTE RESOURCES LIMITED

710287

Project Name: TASMANIA Prospect Name: BLACK BOYS RIDGE Tenement No.:

Sampler: JAMES + MIKE Sample Type: SUBSURFACE SOIL Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 21 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380431				11100	9750
2				"	9800
3				"	9850
4				"	9900
5			SAMPLE 4M EAST AWAY FROM ROAD	"	9950
6				"	10000
7				"	10050
8				"	10100
9				"	10150
380440				"	10200
1				11500	9750
2				"	9800
3				"	9850
4				"	9900
5				"	9950
6				"	10000
7				"	10050
8			SAMPLE 3M EAST AWAY FROM ROAD	"	10100
9				"	10150
380450				"	10200
1			AUGER SAMPLE MATHINNA C horizon	7200	4550
2			" "	"	4600
3				"	4650
4				"	4700
5				"	4750
6				"	4800
7				6800	4750
8			SAMPLE SLIGHTLY SHALLOWER THAN NORMAL	"	4800
9				"	4850
380460				"	4900

RESOLUTE RESOURCES LIMITED

710288

Project Name: TASMANIA Prospect Name: HATHINNA VOLUNTEER Tenement No.:

Sampler: CRAIG & TIM Sample Type: SUBSURFACE SOIL Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 15 / 12 / 94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380491			A HORIZON	6200	4325
2			TAKEN 4m W (OLD SHAFT)	" "	4275
3			TAKEN 20m N (OLD MULLOCK HEAP	6100	4325
4				6300	4275
5				6400	4325
6			ABUNDANT FLOATING QUARTZ ON TOP OF IN SOIL	" "	4275
7				" "	4225
8				6300	4275
9				" "	4325
380500			TAKEN 6m W (AVOID ALLUVIUM FLATS)	" "	4375
1			KOGHILL A heritage 7100N, 2200E	"	
2			" "N, 2150E	"	
3			" "N, 2100E	"	
4			" "N, 2050E	"	
5			" "N, 2250E	"	
6			" "N, 2300E	"	
7			TAKEN 3m N (ROAD) " "N, 2350E	"	
8			" "N, 2400E	"	
9			TAKEN 7m S (WOOD PILE) " "N, 2450E	"	
380510			TAKEN 2m W (DISTURBANCE) " "N, 2500E	"	
1			7500N, 2200E	"	
2			" "N, 2150E	"	
3			TAKEN 10m SW (DISTURBANCE) " "N, 2100E	"	
4			" "N, 2050E	"	
5			TAKEN 6m W (ROAD) " "N, 2000E	"	
6			" "N, 2250E	"	
7			TAKEN 6m N (ROAD) " "N, 2302E	"	
8			" "N, 2350E	"	
9			" "N, 2400E	"	
380520			TAKEN 6m W (SCRUB PILE) " "N, 2450E		

RESOLUTE RESOURCES LIMITED

710289

Project Name: TASMANIA Prospect Name: MATHINNA VOLUNTEER Tenement No.:

Sampler: CRAIG & TIM Sample Type: SUBSURFACE SOIL Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 15/12/94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380521				7500	2500
2			TAKEN 4m NW (FALLEN TREE)	7200	2200
3				"	2150
4			TAKEN 5m E (SURFACE DEBRIS)	"	2100
5				"	2050
6			TAKEN 10m W (GULLY)	"	2000
7				"	2250
8				7100	2300
9				"	2150
380530				"	2100
1				"	2050
2				"	2000
3			MATHINNA INFILL	6000	4325
4				"	4275
5				"	4075
6				"	3975
7				"	3925
8				"	3875
9				5900	3925
380540				"	3975
1				"	4025
2				"	4075
3			TAKEN 5m SW (COSTEAN)	"	4125
4				5800	4025
5				"	4075
6				"	4125
7				"	4175
8			TAKEN 5m NW (DIGGING)	"	4225
9				"	4275
380550				"	4375

RESOLUTE RESOURCES LIMITED

710290

Project Name: TASMANIA Prospect Name: MATHINNA Tenement No.:

Sampler: CRAIG & ADRIAN Sample Type: SURFACE SOIL Sample Submission No.:

Note: New Area - New Page & New Sample Type - New Page Date: 17 / 12 /94

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
380581				4600	5175
2				" "	5225
3				4700	5225
4				" "	5175
5				" "	5125
6				" "	5075
7			SAMPLE TAKEN IN C HORIZON POSSIBLE CONTAMINATION (MINE HEAP)	4700N, 4975E	" "
8			DEEP SAMPLE TAKEN MINE HEAP 30m UP SLOPE	" ", 4925E	" "
9				" ", 4875E	" "
380590			SAMPLE TAKEN 6m W (CREEK)	4500N, 4925E	" "
1				4500N, 4975E	4500
2				" ", 5025E	" "
3				" ", 5075E	" "
4				" ", 5125E	" "
5			TAKEN 3m SE (ROAD)	" ", 5175E	" "
6			TAKEN 4m S	" ", 5225E	" "
7			TAKEN 5m E (GULLY)	4900N, 5225E	" "
8				4900	5175
9				"	5125
380600			CONTINUED ON 379839	"	5075
1				"	"
2				"	"
3				"	"
4				"	"
5					
6					
7					
8					
9					
380610					

710291

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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MT MAGNET WA 6638
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22/92

ANALYTICAL REPORT

Reference No: P52052

Date: 29 NOV 94

AREA COVERED: MATHINNA

SAMPLE TYPE : SUB-SURFACE SOIL

Samples Received: 24 NOV 94
Order Number : K9401
Project Number : 17/91
Samples in Batch: 605

THIS REPORT HAS BEEN PREPARED FOR

RESOLUTE RESOURCES LTD

AND SHOULD BE READ IN CONJUNCTION WITH THE FINAL PAGE

Authorised by: R Ferguson
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

710292

Reference No: P52052 **ATTN: G McDONALD** Page: 1

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375107	<1			<10
375108	<1			<10
375109	<1			<10
375109 Rpt	<1			<10
375110	<1			<10
375111	<1			<10
375112	<1			<10
375113	<1			<10
375114	<1			<10
375115	<1			<10
375116	<1			<10
375117	<1			<10
375118	<1			<10
375119	<1			<10
375120	<1			<10
375121	<1			<10
375122	<1			<10
375122 Rpt	<1			<10
375123	<1			<10
375124	<1			<10
375125	2			<10
375126	<1			<10
375127	2			<10
375128	<1			<10
375129	<1			<10
375130	<1			<10
375131	<1			<10
375132	<1			<10
375133	<1			<10
375134	<1			<10
375135	<1			<10
375136	<1			<10
375137	<1			<10
375138	<1			<10
375139	<1			<10
375140	4	4		10
375140 Rpt	<1	4		10
375141	6			<10
375142	<1			<10
375142 Rpt	<1			<10
375143	<1			<10
375144	<1			<10
375145	<1			<10
375146	<1			<10
375147	<1			<10
375148	<1			<10
375149	<1			<10
375150	<1			<10
375151	1			<10
375152	<1			<10
375153	<1			<10
375154	<1			<10

MATHINNA

Reference No: P52052 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375154 Rpt	<1			<10
375155	<1			<10
375156	<1			<10
375156 Rpt	<1			<10
375157	<1			<10
375158	<1			<10
375159	<1			<10
375160	<1			<10
375161	1			<10
375162	<1			<10
375163	<1			10
375164	6	1		<10
375165	<1			<10
375166	<1			<10
375167	<1			<10
375168	<1			<10
375169	<1			<10
375170	<1			<10
375171	2			<10
375172	2			<10
375173	2			<10
375173 Rpt	2			<10
375174	2			<10
375175	2			<10
375176	3			<10
375176 Rpt	2			<10
375177	3			<10
375178	2			<10
375179	2			<10
375180	1			<10
375181	2			<10
375182	1			<10
375183	2			<10

MATHINNA

Reference No: P52052 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375306	2			<10
375306 Rpt	2			<10
375307	<1			<10
375308	2			<10
375309	2			<10
375310	<1			<10
375311	<1			<10
375312	2			<10
375313	2			<10
375314	3			<10
375315	2			<10
375316	2			<10
375317	2			<10
375318	2			<10
375319	4			10
375320	5			<10
375321	1			<10
375322	2			<10
375323	2			<10
375323 Rpt	3			<10
375324	3			<10
375325	4			20
375326	3			<10
375327	1			<10

MATHINNA

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
[illegible]	[illegible]			[illegible]
[illegible]	[illegible]	[illegible]		
376575	24			<10
376576	<1			<10
376577	62			<10
376578	<1			<10
376579	<1			<10

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376590	2			<10
376590 Rpt	<1			<10
376591	2			<10
376592	<1			<10
376592 Rpt	<1			<10
376593	<1			<10
376594	<1			<10
376604	<1			<10
376605	2			<10
376606	<1			<10
376607	<1			<10
376607 Rpt	<1			<10
376608	<1			<10
376609	<1			<10
376617	<1			<10
376618	<1			<10
376619	<1			<10
376620	<1			<10
376620 Rpt	2			<10
376621	<1	<1		<10
376622	178	8		<10
376630	<1			<10
376631	<1			<10
376632	<1			<10
376633	2			<10

Reference No: P52052 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376634	<1			<10
376644	<1			<10
376645	2			<10
376646	<1			<10
376647	2			<10
376648	<1			<10
376666	<1			<10
376667	2			<10
376668	<1			<10
376669	<1			<10
376670	<1			<10
376671	<1			<10
376672	<1			<10
376673	<1			<10
376674	<1			<10
376675	<1			<10
376676	<1			<10
376676 Rpt	<1			<10
376677	<1			<10
376678	<1			<10
376679	2			<10
376680	<1			<10

MATHINNA

Reference No: P52052 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376681	<1			<10
376682	<1			<10
376682 Rpt	<1			<10
376683	<1			<10
376684	<1			<10
376685	<1			<10
376686	<1			<10
376687	<1			<10
376688	<1			<10
376689	<1			<10
376690	<1			<10
376691	<1			<10
376691 Rpt	<1			<10
376692	<1			<10
376693	2			<10
376694	<1			10
376695	<1			<10
376696	<1			<10
376697	<1			<10
376698	<1			<10
376699	<1			<10
376700	<1			<10
376701	<1			<10
376702	<1			<10
376703	4			<10
376704	<1			<10
376705	<1			<10
376706	<1			<10
376706 Rpt	<1			<10
376707	<1			<10
376708	<1			<10
376709	<1			<10

MATHINNA

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

710300

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P52004

Date: 21 NOV 94

Samples Received: 15 NOV 94
Order Number : K9402A
Project Number : 17/91
Samples in Batch: 106

AREA COVERED : MATHINNA

SAMPLE TYPE : SUB-SURFACE SOIL

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AND SHOULD BE READ IN CONJUNCTION WITH THE FINAL PAGE

Authorised by: R Ferguson
(A.J. Ferguson)

ATTN: B SHAW
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

710301

Reference No: P52004 **ATTN: B SHAW** Page: 1

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
375010	10			<10	
375015	6			<10	
375016	8			<10	MATHINNA
375021	4			<10	
375026	1			<10	
375031	2			<10	
375031 Rpt	2			<10	
375032	1			<10	
375032 Rpt	3			<10	
375037	2			<10	
375038	1			<10	
375039	2			<10	
375040	2			<10	
375045	2			<10	
375045 Rpt	2			<10	
375046	2			<10	
375047	6			<10	

Reference No: P52004 **ATTN: B SHAW**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375048	2			<10
375049	<1			<10
375054	4			<10
375055	4			<10
375056	4			<10
375057	2			<10
375058	<1			<10
375063	2			<10
375064	2			<10
375065	2			<10
375066	2			<10
375067	2			<10
375068	<1			<10
375069	<1			<10
375070	4			<10
375071	<1			<10
375076	2			<10
375076 Rpt	4			<10
375077	<1			<10
375078	2			<10
375079	2			<10
375079 Rpt	2			<10
375080	2			<10
375081	4			<10
375082	2			<10
375083	2			<10
375084	2			<10
375089	<1			<10
375090	2			<10
375090 Rpt	1			<10
375091	1			<10
375092	1			<10
375093	<1			<10
375094	2			<10

MATHINNA

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375095	2			<10
375096	1			<10
375097	<1			<10
375098	1			<10

MATHINNA

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

710305

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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ANALYTICAL REPORT

Reference No: P52105

Date: 07 DEC 94

Samples Received: 02 DEC 94
Order Number : K9403
Project Number : N/A
Samples in Batch: 501

AREA COVERED : MATHINNA

SAMPLE TYPE : SUB-SURFACE SOIL

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Authorised by: R Ferguson
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

Reference No: P52105 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375415	2			<10
375416	<1			<10
375417	<1			<10
375418	<1			<10
375419	<1			<10
375419 Rpt	<1			<10
375420	<1			<10
375421	<1			<10
375422	<1			10
375423	<1			<10
375424	<1			<10
375425	1			<10
375426	<1			<10
375427	<1			<10
375428	<1			10
375429	1			<10
375430	<1			<10
375431	<1			<10
375432	<1			<10
375433	<1			<10
375434	<1			<10
375435	<1			<10
375435 Rpt	<1			<10
375436	<1			<10
375437	<1			<10
375438	<1			<10
375439	<1			<10
375440	2			<10
375441	<1			<10
375442	<1			<10
375442 Rpt	<1			<10
375443	<1			<10
375444	<1			<10
375445	<1			<10
375446	2			<10
375446 Rpt	8			<10
375447	<1			<10
375448	<1			<10

MATHINNA

Reference No: P52105 ATTN: G McDONALD

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375449	<1			<10
375450	<1			<10
375451	<1			<10
375452	<1			<10
375453	<1			<10
375454	<1			<10
375455	2			50
375456	<1			<10
375457	<1			<10
375458	<1			<10
375459	<1			<10
375460	<1			<10
375461	<1			<10
375462	<1			<10
375463	<1			<10
375463 Rpt	<1			<10
375464	2			<10
375465	<1			40
375466	<1			<10
375467	<1			<10
375468	32	42		<10
375469	<1			10
375470	<1			<10
375471	<1			<10
375472	2			60
375473	2			30
375473 Rpt	<1			20
375474	<1			70
375475	<1			<10
375476	<1			<10
375477	8	1		<10
375478	<1			<10
375479	<1			<10
375480	<1			<10
375480 Rpt	<1			<10
375481	<1			<10
375482	<1			<10
375483	<1			<10
375484	<1			<10
375485	2			<10
375486	2			<10
375487	8			<10
375487 Rpt	6			<10
375488	8	2		<10
375489	4			<10
375489 Rpt	4			<10
375490	6			<10
375491	4			<10
375492	4			<10
375493	4			<10
375494	2			<10
375495	6			<10

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376789	6			<10
376790	4			<10
376791	2			<10
376792	2			<10
376793	4			<10
376794	4			<10
376794 Rpt	6			<10
376795	6			<10
376796	4			<10
376796 Rpt	2			<10
376797	2			<10
376798	<1			<10
376799	2			<10
376800	4			<10
376801	2			<10
376802	2			<10
376803	<1			<10
376804	2			<10
376805	2			<10
376806	2			<10
376807	14	1		<10
376808	8			<10
376809	<1			<10
376813	<1			<10
376814	<1			<10
376814 Rpt	<1			<10
376815	<1			<10
376816	2			<10
376817	8			<10
376818	2			<10
376819	<1			<10
376820	<1			<10
376824	2			<10
376825	18	2		60
376825 Rpt	6			50
376826	2			30
376827	2			<10
376828	2			<10

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376829	2			<10
376830	<1			<10
376831	<1			<10
376832	4			<10
376834	6			<10
376835	2			<10
376836	<1			<10
376836 Rpt	<1			<10
376837	<1			<10
376837 Rpt	<1			<10
376838	<1			<10
376839	2			<10
376840	2			<10
376841	2			<10
376842	2			<10
376844	4			<10
376845	4			<10
376846	2			<10
376847	<1			<10
376848	8	6		<10
376849	<1			<10
376862	<1			<10
376863	<1			<10
376864	<1			<10
376865	<1			<10
376866	2			<10
376884	2			<10

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376885	<1			<10
376885 Rpt	<1			<10
376886	2			<10
376887	6			<10
376888	<1			<10
376900	<1			<10
376901	<1			<10
376902	2			<10
376903	<1			<10
376904	4			<10
376905	<1			<10
376906	<1			<10
376907	<1			<10
376908	<1			<10
376909	<1			<10
376910	2			<10
376910 Rpt	<1			<10
376911	<1			<10
376912	<1			<10
376913	<1			<10
376914	12			<10
376915	30	1		<10
376915 Rpt	6			<10
376916	20	52	26	<10
376917	16			<10
376918	8			<10
376919	8			<10
376920	12			<10
376921	10			<10
376922	<1			<10
376923	<1			<10
376924	<1			<10
376925	2			<10
376926	2			<10
376927	2			10
376927 Rpt	2			10
376928	2			<10
376929	4			20
376930	2			<10
376931	<1			<10

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376932	<1			<10
376933	4			<10
376934	<1			<10
376935	2			<10
376936	2			10
376937	4			<10
376938	4			20
376939	38	104	54	10
376940	32			<10
376941	68			<10
376942	14	92	32	20
376943	<1			<10
376943 Rpt	<1			<10
376944	2			<10
376945	<1			<10
376946	2			<10
376947	2			<10
376947 Rpt	<1			<10
376948	2			10
376949	2			<10
376950	<1			<10
376951	2			<10
376952	<1			<10
376953	<1			<10
376954	2			<10
376955	<1			<10
376956	<1			<10
376956 Rpt	2			<10
376957	2			<10
376958	4			<10
376959	6			<10
376960	2			<10
376961	2			<10
376962	62	16	10	<10
376963	28			<10
376964	18	38	4	<10
376965	<1			<10
376966	<1			<10
376967	<1			<10
376968	2			<10
376969	2			<10
376970	<1			<10
376971	2			<10
376972	<1			<10
376973	4			<10
376974	4			<10
376975	2			<10
376976	4			<10
376977	2			<10
376978	<1			<10
376979	4			<10
376980	4			<10

METHOD?

Reference No: P52105 ATTN: G McDONALD

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376981	<1			<10
376982	4			<10
376982 Rpt	6			<10
376983	4			<10
376984	4			<10
376984 Rpt	4			<10
376985	4			<10
376986	4			<10
376987	<1			<10
376988	<1			<10
376989	<1			<10
376990	<1			<10
376991	<1			<10
376991 Rpt	<1			<10
376992	<1			<10
376993	<1			<10
376994	<1			<10
376995	<1			<10
376995 Rpt	<1			<10
376996	<1			<10
376997	<1			<10
376998	<1			<10
376999	<1			<10
377000	<1			<10
377001	1			<10
377002	<1			<10
377003	<1			<10
377004	1			<10
377005	<1			<10
377006	<1			<10
377007	<1			<10
377008	<1			<10
377009	<1			<10
377010	<1			<10
377011	<1			50
377012	1			<10
377013	<1			<10
377014	<1			<10
377015	<1			<10
377016	<1			<10
377017	<1			<10
377017 Rpt	<1			<10
377018	<1			<10
377019	<1			<10
378037	1			<10
378038	<1			<10
378038 Rpt	<1			<10
378039	<1			<10
378040	2			<10
378041	<1			<10
378042	2			<10
378043	2			<10

PLATINUM

Reference No: P52105 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
378044	<1			<10
378049	2			<10
378050	<1			<10
378051	2			<10
378052	<1			<10
378053	<1			<10
378054	<1			<10
378054 Rpt	<1			<10
378055	<1			<10
378056	<1			<10
378057	<1			<10
378061	<1			<10
378062	<1			<10
378063	<1			<10
378064	<1			<10
378065	2			<10
378066	2			<10
378066 Rpt	<1			<10
378067	<1			30
378068	2			<10
378069	2			<10
378073	2			<10
378074	4			<10
378075	<1			<10
378076	<1			<10
378077	4			<10
378078	2			<10
378079	<1			<10
378091	<1			<10
378092	<1			<10
378093	2			<10
378094	<1			<10
378094 Rpt	<1			<10
378095	<1			<10

MATHIAS/VI

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
378114	4			<10
378115	6			<10
378116	2			<10
378117	4			<10
378118	4			<10
378130	6			<10
378131	6			<10
378132	4			<10
378133	6			<10
378134	4			<10
378135	4			<10
378136	4			<10
378137	4			<10
378138	6	1		<10
378139	4			<10
378140	4			<10
378140 Rpt	4			<10
378141	4			70
378142	6			<10
378143	4			<10
378144	10			<10
378145	12	1		<10
378146	34	186	26	<10
378147	6			<10
378148	124			<10
378149	8			<10
378150	6			10
378151	20			80
378151 Rpt	22			50
378152	6			<10
378153	4			<10

Reference No: P52105 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
378154	6	1		<10
378155	4			<10
378156	6			<10
378157	4			<10
378158	6			<10
378159	6			<10
378160	4			<10
378161	4			<10
378162	4			<10
378163	6			<10
378164	6	1		<10
378165	8			<10
378165 Rpt	6			<10
378166	12			<10
378167	6			<10
378168	36	58		<10
378169	38			<10
378170	8			<10
378171	14			<10
378172	12	12		<10
378173	4			<10
378174	<1			<10
378174 Rpt	<1			<10
378175	<1			<10
378176	<1			<10
378177	<1			<10
378178	<1			<10
378179	<1			10
378180	<1			<10
378181	<1			<10
378182	<1			<10
378183	<1			<10
378183 Rpt	<1			<10
378184	<1			<10
378185	<1			<10
378186	<1			<10
378188	<1			<10
378189	<1			<10
378190	2			20
378191	5			30
378192	32	10	20	<10
378193	32			10
378194	6			<10
378195	6			<10
378196	24			<10
378196 Rpt	14			<10
378197	12	26	8	20
378198	<1			<10
378199	<1			<10
378200	<1			<10
378201	<1			<10
378201 Rpt	<1			<10

Reference No: P52105 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
378202	<1			<10
378203	<1			<10
378204	<1			10
378205	<1			<10
378206	<1			<10
378207	2			<10
378208	<1			<10
378209	<1			<10
378210	<1			<10
378211	2			<10
378212	4			<10
378213	2			<10
378214	4			<10
378215	4			<10
378216	4			<10
378217	4			<10
378218	2			<10
378219	4			<10
378220	6			<10
378220 Rpt	6			<10
378221	4			<10
378222	4			<10
378223	6			20
378223 Rpt	4			40
378224	10	2	4	10
378225	6			10
378226	6			<10
378227	6			<10
378228	4			<10

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

710318

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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ANALYTICAL REPORT

Reference No: P52124

Date: 15 DEC 94

AREA COVERED : MATHINNA / CHINAMENS HILL

SAMPLE TYPE : SUB-SURFACE SOIL

Samples Received: 06 DEC 94
Order Number : K9404A
Project Number : N/A
Samples in Batch: 322
INC: K9405

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Authorised by: _____
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

Reference No: P52124 ATTN: G McDONALD

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
377020	4			<10
377021	2			<10
377022	4			<10
377023	6			<10
377024	4			<10
377025	2			<10
377026	6			<10
377027	4			<10
377028	6			<10
377029	4			<10
377029 Rpt	4			<10
377030	2			<10
377031	4			<10
377032	6			<10
377033	2			<10
377034	4			<10
377056	12			<10
377057	10			<10
377057 Rpt	10			<10
377058	10			<10
377059	6			<10
377060	8			<10
377061	14	14		<10
377062	30	12	24	<10
377063	14			<10
377064	20			<10
377065	12			<10
377066	8			<10
377067	10			<10
377068	38			30
377069	18			10
377070	6			<10
377071	8			<10
377072	20	22	22	<10
377073	6			<10
377074	4			<10
377075	2			<10
377076	2			<10
377077	4			<10
377078	4			<10
377079	2			<10

CHINAMANS HILL

Reference No: P52124 ATTN: G McDONALD

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
377100	2			<10
377100 Rpt	<1			<10
377101	4			<10
377102	4			<10
377103	4			<10
377103 Rpt	4			<10
377104	2			<10
377121	16	32	30	<10
377122	2			<10
377123	12			<10
377124	2			<10
377124 Rpt	2			<10
377125	4			<10

CHINAMEN'S HILL

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
377145	<1			<10	
377146	<1			<10	
377146 Rpt	<1			<10	CHINAMEN'S HILL
377147	<1			<10	
377148	<1			<10	
377149	6			<10	

MATHINNA

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
378229	10			<10
378230	8			<10
378231	8			40
378232	8			<10
378233	26	36		<10
378234	10			<10
378235	14			<10
378236	10			<10
378237	6			<10
378238	28			<10
378239	22			<10
378240	6			<10
378241	6			<10
378242	8			<10
378243	4			<10
378244	4			<10
378245	4			<10
378246	8			10
378247	8			<10
378248	6			<10
378249	6			<10
378249 Rpt	4			<10
378250	6			<10
378251	6			<10
378252	6			<10
378253	6	8		<10
378254	6			<10
378255	8			<10
378256	6			<10
378257	16			<10
378257 Rpt	32			<10
378258	12			<10
378259	6			<10
378260	10	12	8	<10
378261	6			<10
378262	4			<10
378263	6			<10
378264	6			<10

MATHINNA

CHINAMENS HILL

Reference No: P52124 **ATTN: G McDONALD** Page: 5

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
378265	6			<10	
378266	6			<10	
378266 Rpt	4			<10	
378267	4			<10	
378268	6			<10	
378269	6			50	
378270	8			<10	
378271	18	10	10	20	
378272	12			70	
378273	6			<10	
378274	4			<10	
378275	4			<10	
378275 Rpt	4			<10	
378276	4			<10	
378277	6			<10	
378278	4			<10	
378279	4			<10	
378280	4			<10	
378281	4			<10	
378282	4			<10	CHINAMENS HILL
378283	4			<10	
378284	12	16	22	<10	
378285	4			<10	
378286	4			<10	
378287	6			<10	
378287 Rpt	4			<10	
378288	6			<10	
378289	6			<10	
378290	10			50	
378291	6			<10	
378292	6			<10	
378293	10			<10	
378294	4			<10	
378295	4			<10	
378296	6			<10	
378297	6			<10	
378298	4			<10	
378299	4			<10	
378300	6			<10	
378301	4			<10	
378302	4			<10	
378302 Rpt	2			<10	
378303	6			<10	
378304	2			<10	
378305	28	34	32	50	
378306	6			<10	
378307	6			<10	
378308	6			<10	
✓ 378309	8			<10	

Reference No: P52124 **ATTN: G McDONALD** Page: 6

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
378318	6			10
378319	4			<10
378320	6			<10
378321	8			<10
378322	6			<10
378339	10			<10
378340	12			<10
378340 Rpt	12			<10
378341	10			<10
378342	8			<10
378342 Rpt	10			<10
378343	12			<10

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
378362	10			<10
378363	10			<10
378364	10			<10
378365	12			10
378366	24			<10
378366 Rpt	40			<10

CHINAMENS HILL

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

MinLab

710327

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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ANALYTICAL REPORT

Reference No: P52126

Date: 12 DEC 94

AREA COVERED: MIATHINNA, CHINAMENS HILL

SAMPLE TYPE: SUB-SURFACE SOIL

Samples Received: 06 DEC 94
Order Number :
Submission Sheet: K9404B
Project Number : N/A
Samples in Batch: 32

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Authorised by: _____
(A.J. Ferguson)

ATTN: G McDONALD
THE RESOLUTE SAMANTHA GROUP
MANGANA RD
FINGAL TAS 7214

Reference No: P52126 ATTN: G McDONALD 710328 Page: 1

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
377045	20	30	28	60	
377046	8			<10	
377047	12			20	
377048	8			<10	
377049	20	36	20	40	MATHINNA
377050	14			40	
377051	8			10	
377052	12			<10	
377053	10			<10	
377053 Rpt	10			10	
377054	12			10	
377055	4			20	
377080	4			<10	
377081	6			<10	
377082	6			<10	
377083	10			<10	
377084	22	14	20	<10	
377085	8			10	
377086	6			<10	CHINAMENS HILL
377087	4			<10	
377087 Rpt	4			<10	
377088	6			<10	
377089	10			<10	
377090	8			20	
377091	10	26	14	60	

MATHINNA

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

710330

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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ANALYTICAL REPORT

Reference No: P52169

Date: 21 DEC 94

Samples Received: 13 DEC 94
Order Number : K9406
Project Number : N/A
Samples in Batch: 583

AREA COVERED: MATHINNA / MANGANA

SAMPLE TYPE: SUB-SURFACE SOIL

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Authorised by: C.A. Jenkins
(C.A. Jenkins)

ATTN: G McDONALD
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

Reference No: P52169 **ATTN: G McDONALD** Page: 1

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375568	<1			<10
375568 Rpt	1			<10
375584	14			60
375585	4			20

Reference No: P52169 **ATTN: G McDONALD** Page: 2

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375601	26			<10
375602	2			10
375603	2			<10
375604	2			<10
375605	4			<10
375606	<1			<10
375607	4			<10
375607 Rpt	2			<10
375608	2			<10
375609	<1			<10
375610	14			10
375611	4			<10
375612	6			20
375613	4			<10
375614	12	2		30
375615	8			<10
375616	2			<10
375617	2			<10
375618	<1			<10
375619	<1			<10
375620	2			<10
375620 Rpt	2			<10
375621	4			<10
375622	2			<10
375623	<1			<10
375624	<1			<10
375624 Rpt	<1			<10
375625	<1			<10
375626	2			<10
375627	6			<10
375628	2	2		<10
375628 Rpt	10			<10
375629	<1			<10
375630	<1			<10
375631	2			<10
375632	2			<10
375633	<1			<10

MATHINNA

Reference No: P52169 **ATTN: G McDONALD** Page: 3

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375634	2			<10
375635	2			<10
375636	<1			<10
375637	<1			<10
375638	2			<10
375639	2			<10
375640	4	2		<10
375641	2			<10
375642	2			<10
375643	4			<10
375644	2			<10
375645	6	4		<10
375646	8			<10
375646 Rpt	6			<10
375647	2			<10
375647 Rpt	2			<10
375648	<1			<10
375649	1			<10
375650	<1			<10
375651	<1			<10
375652	2			<10
375653	2			<10
375654	2			<10
375655	2			<10
375656	<1			<10
375657	<1			<10
375658	2			<10
375659	<1			<10
375660	2			<10
375661	2			<10
375662	2			<10
375663	2			<10
375664	<1			<10
375665	<1			<10
375666	4			<10
375666 Rpt	4			<10
375667	2			<10
375668	2			<10
375669	2			<10
375670	2			<10
375670 Rpt	2			<10
375671	2			<10
375672	2			<10
375673	2			<10
375674	2			<10
375675	4	1		<10
375676	4			<10
375677	<1			<10
375678	2			<10
375679	4			<10
375680	2			<10
375681	2			<10

MATHINNA

Reference No: P52169 **ATTN: G McDONALD** Page: 4

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375682	4			<10
375683	2			<10
375684	2			<10
375685	2			<10
375686	4			<10
375687	3			<10
375688	3		—	<10

YINNA

Reference No: P52169 **ATTN: G McDONALD** Page: 5

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
377246	2			<10
377247	20			30
377263	22			10
377279	10			30
377280	8			20
377281	4			<10
377282	10			<10
377282 Rpt	10			<10
377283	12			<10
377284	6			<10
377285	4			<10
377286	8			<10
377287	12			<10
377288	52			110
377288 Rpt	46			120
377289	24			80
377290	16			30

Reference No: P52169 **ATTN: G McDONALD** Page: 6

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
377291	10			10
377291 Rpt	12			<10
377292	12			<10
377293	12			20
377294	8			<10
377295	10			<10
377296	6			<10
377297	6			<10
377298	8			<10
377299	6			10
377300	6			<10
377301	6			<10
377302	8			<10
377303	14			10
377304	24	10	16	20
377305	24			70
377306	6			<10
377306 Rpt	6			<10
377307	10			<10
377308	10	10		10
377309	4			<10
377310	6			<10
377311	2			<10
377311 Rpt	4			<10
377312	4			<10
377313	2			<10
377314	4			<10
377315	6			<10
377316	2			<10
377317	4			<10
377318	6			<10
377319	6			<10
377320	8			<10
377321	4			<10
377322	4			<10
377323	4			<10
377324	4			<10
377325	4			<10
377326	4			<10
377327	4			<10
377328	2			<10
377329	2			<10
377330	6			30
377331	6			<10
377332	4			<10
377333	<1			<10
377334	4			<10
377335	4			<10
377336	4	4		<10
377337	4			<10
377338	2			<10
377338 Rpt	2			<10

MATHINNA

Reference No: P52169 **ATTN: G McDONALD** Page: 7

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
377339	2			<10
377340	2			<10
377341	4			<10
377342	4			<10
377343	2			<10
377344	2			<10
377344 Rpt	6			<10
377345	4			<10
377346	<1			<10
377347	<1			<10
377348	<1			<10
377349	2			<10
377350	4			<10
377351	2			<10
377352	4			<10
377353	4			<10
377354	4			<10
377355	4			<10
377356	2			<10
377357	2			<10
377358	4			<10
377359	2			<10
377360	2			<10
377360 Rpt	4			<10
377361	2			<10
377362	4			<10
377363	2			<10
377364	4			<10
377364 Rpt	6			<10
377365	4			<10
377366	4			<10
377367	2			<10
377368	4	2		<10
377369	2			<10
377370	4			<10
377371	2			<10
377372	4			<10
377373	2			<10
377374	2			<10
377375	4			<10
377376	2			<10
377377	2			<10
377378	4			<10
377378 Rpt	2			<10
377379	4			<10
377380	2			<10
377381	2			<10
377381 Rpt	2			<10
377382	2			<10
377383	4	2		<10
377384	2			<10
377385	2			<10

MATHINNA

Reference No: P52169 **ATTN: G McDONALD** Page: 8

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
377386	2			<10
377387	4			<10
377388	4			<10
377389	6			<10
377390	2			<10
377391	4			<10
377392	2			<10
377730	4			<10
377731	8			<10
377732	4			<10
377733	2			<10
377733 Rpt	4			<10
377734	4			<10
377735	2			<10
377736	6			<10
377737	2			<10
377738	2			<10
377739	4			<10
377740	4			<10
377741	4			10

MANGANA

Reference No: P52169 **ATTN: G McDONALD** Page: 9

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
377742	4			<10
377743	10			<10
377744	4			30
377745	2			<10
377746	4			10
377747	2			<10

MANGANA

YINNA

Reference No: P52169 **ATTN: G McDONALD** Page: 10

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
378443	4			<10
378444	6			<10
378460	8			<10
378460 Rpt	8			10
378476	8			<10
378477	1			<10
378478	4			<10
378479	10			<10
378480	2			<10
378481	1			<10
378481 Rpt	1			<10
378482	1			<10
378483	4			<10
378484	2			<10
378485	8			10
378486	4			<10
378487	2			<10
378488	4			<10

Reference No: P52169 **ATTN: G McDONALD** Page: 11

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
378489	10			<10	
378490	14			20	
378491	20	26	28	<10	
378492	8			<10	
378493	4			<10	
378494	4			20	
378494 Rpt	2			10	
378495	1			<10	
378496	2			<10	
378497	4			<10	
378498	6			<10	
378499	6			<10	
378500	10			<10	
378501	6			10	
378502	34	36	24	120	
378503	8			<10	
378504	12			<10	
378505	10			<10	
378505 Rpt	12			<10	
378506	6			<10	
378507	14			<10	
378508	8			<10	MATHINNA
378508 Rpt	6			<10	
378509	6			<10	
378510	6			<10	
378511	6			<10	
378512	8	20		<10	
378513	4			<10	
378514	4			<10	
378515	6			<10	
378516	4			<10	
378517	2			<10	
378518	10			<10	
378519	26	18	18	<10	
378520	12			10	
378521	22			<10	
378522	10			<10	
378523	6			<10	
378523 Rpt	8			<10	
378524	14			<10	
378525	8			<10	
378526	4			<10	
378527	6			<10	
378528	8			<10	
378529	2			<10	
378530	6			<10	
378530 Rpt	6			<10	
378531	2			<10	
378532	6			<10	
378533	8			<10	
378534	12	8		<10	
378535	14			<10	

Reference No: P52169 **ATTN: G McDONALD** Page: 12

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
378536	30			<10	
378537	10			<10	
378538	6			<10	
378539	2			<10	
378539 Rpt	4			<10	
378540	2			<10	
378541	6			<10	
378542	4			<10	
378543	4			<10	
378544	4			<10	
378544 Rpt	2			<10	
378545	2			<10	
378546	2			<10	
378547	4			<10	
378548	2			<10	
378549	4			<10	
378550	2			<10	
378551	4			<10	
378552	1			<10	
378553	6			10	
378554	4			<10	MATTHINNA
378555	2			<10	
378556	4			<10	
378557	1			<10	
378558	1			<10	
378559	1			<10	
378560	<1			<10	
378561	<1			<10	
378562	<1			<10	
378563	<1			<10	
378564	<1			<10	
378565	2			<10	
378566	<1			<10	
378567	2			<10	
378568	<1			<10	
378569	<1			<10	
378570	<1			<10	
378571	<1			<10	
378572	<1			<10	
378572 Rpt	<1			<10	
378573	2			<10	
378574	<1			<10	
378575	<1			<10	
378576	<1			<10	
378577	2			<10	
378578	<1			<10	
378578 Rpt	2			<10	
378579	<1			<10	
378580	2			<10	
378581	<1			<10	
378582	<1			<10	
378583	<1			<10	

Reference No: P52169 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
378583 Rpt	<1			<10
378584	<1			<10
378585	<1			<10
378586	<1			<10
378587	<1			<10
378588	<1			<10
378588 Rpt	<1			<10
378589	<1			<10
378590	<1			<10
378591	<1			<10
378592	<1			<10
378593	<1			<10
378594	<1			<10
378595	<1			<10
378596	2			<10

MATHINNA

****

I/S = Insufficient Sample for determination of this element

Au, Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

Au(R1),
Technique - Fire Assay on a 50 gram charge

As,
Technique - AAS

END OF REPORT

710345

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 980 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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MT MAGNET WA 6638
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Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P52217

Date: 28 DEC 94

Samples Received: 20 DEC 94
Order Number : K9408
Project Number : N/A
Samples in Batch: 904

AREA COVERED : MANGANA / BUCKLANDS HILL

SAMPLE TYPE : SUB-SURFACE SOIL

THIS REPORT HAS BEEN PREPARED FOR

RESOLUTE RESOURCES LIMITED

AND SHOULD BE READ IN CONJUNCTION WITH THE FINAL PAGE

Authorised by: _____
(C.A. Jenkins)

ATTN: G McDONALD
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

710346

Reference No: P52217 **ATTN: G McDONALD** Page: 1

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375709	8			<10
375710	6			<10
375711	10			<10
375712	8			<10
375713	8			<10
375714	8			<10
375732	10			<10
375733	4			<10
375734	2			<10
375735	4			<10
375735 Rpt	6			<10
375736	4			<10
375736 Rpt	4			<10

CANA

Reference No: P52217 **ATTN: G McDONALD** Page: 2

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375737	4			<10
375743	6			10
375744	4			<10
375745	4			<10
375746	4			<10
375747	6			<10
375748	6			<10
375780	6			<10
375780 Rpt	6			<10
375781	4			<10
375782	6			<10
375783	6			<10
375784	4			<10
375785	8			10

Reference No: P52217 **ATTN: G McDONALD** Page: 3

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375806	2			10
375807	<1			<10
375808	4			10
375809	<1			<10
375818	2			<10
375819	6			<10
375820	4			<10
375821	4			<10

ANGANA

Reference No: P52217 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
375846	4			<10	MANGANA
375846 Rpt	4			<10	
375858	4			<10	
375859	4			<10	
375873	8			20	
375874	8			<10	
375875	6			<10	
375876	8			<10	
375877	8			<10	BUCKLANDS HILL
375878	12			<10	
375879	8			<10	
375880	8			<10	

Reference No: P52217 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
375881	8			10	
375881 Rpt	8			10	
375882	8			30	
375883	6			<10	
375884	8			<10	
375885	12			<10	
375886	10			10	
375887	10			10	
375888	8			<10	
375888 Rpt	8			<10	
375889	6			<10	
375890	10			<10	
375891	6			<10	
375892	22	6		<10	
375893	6			<10	
375894	6			<10	
375895	8			<10	
375896	8			<10	BUCKLANDS HILL
375897	4			<10	
375898	6			<10	
375899	6			10	
375900	6			<10	
375901	8			<10	
375902	8			30	
375903	8			<10	
375904	8			<10	
375905	8			<10	
375906	22	16		<10	
375907	12			10	
375907 Rpt	12			<10	
375908	8			<10	
375909	8			30	
375910	10			<10	
375911	6			<10	
375912	10			<10	
375913	8			<10	
375914	8			<10	
375914 Rpt	8			<10	
375915	8			<10	
375916	6			<10	
375917	6			<10	
375918	8			<10	
375919	8			<10	
375920	8			<10	
375921	12			<10	
375922	8			<10	
375923	4			<10	
375924	4			<10	
375925	8			<10	
375926	4			<10	
375927	4			<10	
375928	4			10	

Reference No: P52217 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
375928 Rpt	6			10	
375929	10			<10	
375930	4			<10	BUCKLANDS HILL
375931	4			<10	
375931 Rpt	4			<10	
375932	2			<10	
375933	4			<10	
377454	8			20	
377454 Rpt	6			10	
377455	6			<10	
377456	4			10	MANGANA
377457	6			<10	
377458	4			<10	
377459	4			<10	
377460	4			<10	
377461	4			<10	
377461 Rpt	4			<10	
377474	4			<10	
377475	8			10	
377476	8			10	
377477	8			50	
377478	4			20	
377479	10	10		20	
377479 Rpt	8			<10	
377480	8			<10	

Reference No: P52217 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
377481	4			<10
377482	6			<10
377483	4			<10
377498	6			<10
377498 Rpt	6			<10
377499	4			<10
377500	6			<10
377501	4			<10
377502	4			<10
377503	4			<10
377504	4			<10
377505	4			<10
377506	4			<10

MANCANA

Reference No: P52217 **ATTN: G McDONALD** Page: 8

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
377528	2			<10
377529	8			20
377530	<1			<10
377553	8			<10
377554	6			<10

MAHONNA

Reference No: P52217 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
					MANGANA
377579	6			<10	
377580	8			<10	
377581	6			<10	
377582	8			<10	
377583	6			<10	
377584	6			<10	
377585	28	10	12	<10	
377586	6			<10	
377587	6			10	
377587 Rpt	6			<10	
377588	4			<10	
377589	6			<10	
377590	6			<10	
377591	4			<10	
377592	10			<10	
377592 Rpt	6			<10	BUCKLANDS HILL
377593	6			<10	
377594	6			<10	
377595	4			<10	
377596	4			<10	
377597	4			<10	
377598	4			<10	
377598 Rpt	4			<10	
377599	4			<10	
377600	4			<10	
377601	4			<10	
377602	6			<10	
377603	8			<10	
377604	4			<10	
377605	4			<10	
377606	4			<10	
377607	14	4		<10	
377608	6			<10	
377609	4			<10	
377610	4			<10	
377611	4			<10	
377611 Rpt	6			<10	
377612	6			<10	
377613	6			<10	
377614	10			<10	
377615	6			<10	
377616	8			<10	
377617	8			<10	
377618	16	<1		<10	
377619	10			<10	
377619 Rpt	12			<10	
377620	10			10	
377621	8			<10	
377622	12			<10	

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
377623	10			<10	
377624	12			<10	
377625	10			<10	
377626	10			<10	
377627	8			<10	
377628	10			<10	
377629	256	170		<10	
377630	10			<10	
377631	10			<10	BUCKLANDS HILL
377631 Rpt	8			<10	
377632	12			<10	
377633	8			<10	
377634	10			<10	
377635	10			<10	
377636	10			<10	
377637	10			30	
377638	4			<10	
377639	4			<10	
377640	4			20	
377641	6			<10	
377641 Rpt	4			<10	
377642	2			<10	
377643	4			10	
377644	4			<10	
377645	6			<10	
377646	6			<10	
377646 Rpt	4			<10	
377748	4			<10	
377749	4			<10	
377750	4			<10	
377751	6			<10	
377757	4			<10	
377758	6			<10	
377759	12	2		<10	
377760	6			<10	MANGANA
377761	8			<10	
377762	8			<10	
377763	8			<10	
377763 Rpt	6			<10	
377764	8			<10	

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
377771	8			<10
377772	10			<10
377773	12			<10
377774	10			<10
377775	10			<10
377776	8			<10
377777	10			<10
377778	10			<10
377779	10			<10
377780	10			<10
377788	4			<10
377789	6			<10
377790	6			<10
377791	10			40
377792	10			30
377793	6			<10
377793 Rpt	8			<10
377794	6			<10
377795	6			<10
377796	8			<10
377797	10			<10
377797 Rpt	14			<10
377808	8			<10
377809	8			<10
377810	8			<10
377811	8			10
377812	8			<10
377813	8			<10
377814	8			<10
377814 Rpt	6			<10
377815	6			<10
377816	24	24		<10
377817	8			<10
377818	8			10
377819	10			<10

MANGANA

Reference No: P52217 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
[illegible]				<10
[illegible]				
377833	<1			<10
377834	2			<10
377835	2			10
377836	<1			<10
377837	2			<10
377838	2			<10
377839	<1			<10
377840	2			<10
377856	14			<10
377857	6			<10
377858	6			<10
377859	6			<10
377860	4			<10
377861	6			10
377862	6			10

MANCHINA

Reference No: P52217 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
377880	6			<10
377881	8			<10
377882	2			<10
377882 Rpt	2			<10
377883	4			<10
377884	4			<10
377885	6			<10
377886	4			<10
377899	6			<10
377900	10			20
377901	6			<10
377901 Rpt	6			<10
377902	14			70
377903	12			10
377904	20	4		<10
377905	8			<10
377906	6			<10
377907	4			<10
377908	6			<10
377909	6			<10
377910	6			<10
377911	6			<10
377912	6			<10
377913	6			<10
377914	8			<10

VGANA

BUCKLANDS HILL

Reference No: P52217 **ATTN: G McDONALD** Page: 14

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
377915	6			<10	
377916	8			<10	
377917	4			<10	
377918	8			<10	
377919	10			<10	
377920	54	42	68	<10	
377921	6			<10	
377922	8			<10	
377923	8			<10	
377923 Rpt	10			<10	
377924	<1			<10	
377924 Rpt	2			<10	
377925	6			10	
377926	8			<10	
377927	<1			10	
377928	<1			<10	
377929	6			<10	
377930	8			<10	BUCKLANDS HILL
377931	10			<10	
377932	6			<10	
377933	12			<10	
377934	2	2		<10	
377935	10			<10	
377936	6			10	
377937	8			<10	
377938	8			30	
377939	6			<10	
377939 Rpt	10			<10	
377940	6			<10	
377941	8			<10	
377942	8			<10	
377943	6			<10	
377944	10			10	
377945	8			<10	
377945 Rpt	8			<10	
377946	4			<10	
377947	6	8		<10	
377948	6			<10	
377949	18			180	
377949 Rpt	16			140	
377950	8			<10	
377951	10			<10	
377952	10			30	
377953	10			110	
377954	10			30	
377955	16			40	
377956	4			30	
377957	6			<10	
377958	4			<10	
377959	6			<10	
377959 Rpt	8			<10	
377960	8			20	

Reference No: P52217 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
377961	8			<10	BUCKLANDS HILL
377962	6			<10	

Reference No: P52217 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
					ANA
378744	1			<10	
378745	2			50	
378746	1			<10	
378746 Rpt	1			<10	
378747	6			<10	
378748	<1			<10	
378749	2			<10	
378750	4			<10	
378751	4			<10	
378752	6			10	
378753	4			<10	
378754	6			<10	
378755	4			<10	
378756	4			<10	
378757	4			<10	
378758	8			30	
378759	6			20	
378760	14	16		<10	BUCKLANDS HILL
378761	4			<10	
378762	8			<10	
378763	6			10	
378764	8			<10	
378765	6			<10	
378765 Rpt	6			<10	
378766	4			<10	
378766 Rpt	4			<10	
378767	4			<10	
378768	4			<10	
378769	2			<10	
378770	6			<10	
378771	6			<10	
378772	16	16		10	
378773	10			<10	
378774	10			<10	
378775	4			<10	
378776	4			<10	
378777	6			<10	
378778	8			<10	
378779	6	4		<10	
378780	8			<10	
378781	8			<10	
378782	6			<10	
378783	6			<10	
378783 Rpt	8			<10	
378784	8			<10	
378785	8			<10	

Reference No: P52217 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
378786	6			<10	
378787	6			<10	
378787 Rpt	8			<10	
378788	6			<10	
378789	8			<10	
378790	10			<10	
378791	6			<10	
378792	8			<10	
378793	6			<10	
378794	4			<10	
378794 Rpt	6			<10	
378795	6			<10	
378796	6			<10	
378797	10			<10	
378798	10			<10	
378799	8			<10	
378800	6			<10	
378801	4			<10	
378802	4			<10	
378803	12			<10	
378804	20			<10	
378805	8			10	
378806	6			<10	BUCKLANDS HILL
378807	8			<10	
378808	20	12	14	<10	
378809	6			<10	
378810	12			<10	
378810 Rpt	10			<10	
378811	14			<10	
378812	10			<10	
378813	8			<10	
378814	10			<10	
378815	10			<10	
378815 Rpt	8			<10	
378816	10			<10	
378816 Rpt	10			<10	
378817	8			10	
378818	8			<10	
378819	12			<10	
378820	10			<10	
378821	8			<10	
378822	8			<10	
378823	8			<10	
378824	12	10		<10	
378825	8			<10	
378826	8			10	
378827	10			10	
378828	12			10	
378829	10			<10	
378830	6			<10	
378831	10			20	
378832	8			20	

Reference No: P52217 **ATTN: G McDONALD** Page: 20

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
378833	12			<10	
378834	<1			<10	BUCKLANDS HILL

****

M Implies this result reported in ppm

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

710365

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 980 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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MALAGA WA 6062
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Fax: (090) 91 2200

Lot 484 Criddle St
MT MAGNET WA 6638
Tel: (099) 634 532
Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P52226

Date: 31 DEC 94

Samples Received: 28 DEC 94
Order Number : K9410A
Project Number : N/A
Samples in Batch: 776

FREM COVERED: NIHITHINNA, CHINMIENS HILL
BUCKLANDS HILL, BLACKBOY RIDGE.

SAMPLE TYPE:
SUR - SURFACE SOIL

THIS REPORT HAS BEEN PREPARED FOR

RESOLUTE RESOURCES LTD

AND SHOULD BE READ IN CONJUNCTION WITH THE FINAL PAGE

Authorised by: A. Ferguson
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

710366

Reference No: P52226 **ATTN: G McDONALD** Page: 1

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
375934	14			<10
375935	14			<10
375936	14			<10
375937	16	8		<10
375938	14			<10
375938 Rpt	12			<10
375939	12			<10
375940	18			10
375941	16			<10
375942	14			<10
375943	18			<10
375944	14			10
375945	10			<10
375945 Rpt	10			<10
375946	14			10
375947	10			<10
375948	12			<10
375949	16			10
375950	14			10
375951	12			10
375952	22	8	8	<10
375953	12			10
375954	14			10
375955	10			<10
375956	36	10	12	<10
375957	8			<10
375958	12			<10
375959	8			<10
375960	8			<10
375961	10			<10
375962	8			<10
375962 Rpt	10			<10
375963	10			<10
375964	10			<10
375965	12			50
375966	14			40
375966 Rpt	10			50
375967	12			30
375968	10			40
375969	14			90
375970	12			30
375971	8			<10
375972	10			20
375973	10			20
375974	8			60
375975	10			10
375976	4			10
375977	10	10		100
375978	2			60
375979	4			40
375980	2			50
375981	2			30

BUCKLANDS HILL

Reference No: P52226 **ATTN: G McDONALD** Page: 2

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
375982	4			20	
375983	2			10	BUCKLANDS HILL
375984	<1			<10	
375985	2			10	
375986	<1			<10	
375987	<1			<10	
375987 Rpt	2			<10	
375988	<1			<10	
375989	<1			<10	
375990	<1			<10	
375991	<1			<10	
375992	2			<10	
375993	2			<10	
375994	4			<10	
375994 Rpt	2			<10	
375995	2			<10	
375996	<1			<10	
375997	<1			<10	
375998	4			<10	
375999	<1			<10	
376000	2			<10	
376001	<1			<10	
376002	10			40	
376003	16	20		<10	
376004	14			20	MATHINNA
376005	6			30	
376006	<1			10	
376006 Rpt	<1			<10	
376007	<1			<10	
376008	2			<10	
376009	<1			<10	
376010	<1			<10	
376011	<1			<10	
376012	<1			<10	
376012 Rpt	<1			<10	
376013	<1			<10	
376014	6			<10	
376015	8			30	
376016	6			<10	
376017	<1			<10	
376018	4			<10	
376019	2			<10	
376020	<1			<10	
376020 Rpt	6			10	
376021	10			10	
376022	6			10	
376022 Rpt	4			<10	
376023	180	28	88	<10	
376024	60			<10	
376025	16			<10	
376026	24			<10	
376027	6			<10	

Reference No: P52226 **ATTN: G McDONALD** Page: 3

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376028	10			<10
376029	60	152	42	<10
376030	4			<10
376031	30			10
376032	36			<10
376033	22			<10
376034	8			<10
376035	<1			<10
376036	4			<10
376037	4			30
376038	2			40
376039	40			<10
376040	20			<10
376041	14			<10
376042	28			<10
376043	26			<10
376044	128	28	170	<10
376045	58			<10
376046	4			<10
376047	4			<10
376048	4			<10
376049	104	150		<10

MATHINNA

'OY RIDGE

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
					Y RIDGE
376133	38	30		30	
376134	8			<10	
376137	4			<10	
376138	8			<10	
376138 Rpt	8			<10	
376139	10			50	
376140	20			40	
376141	2			<10	
376142	2			<10	
376143	6			<10	CHINAMENS HILL
376144	14			<10	
376144 Rpt	14			<10	
376145	36			40	
376146	<1			<10	
376147	4			<10	
376148	<1			<10	
376149	12			<10	
376150	6			<10	
377647	<1			<10	
377648	<1			<10	
377649	<1			<10	
377650	28	48		<10	
377650 Rpt	4			<10	
377651	4			<10	
377652	<1			30	
377653	4			40	
377654	6			10	
377655	<1			20	
377656	<1			10	
377657	<1			<10	
377658	<1			<10	
377659	6			<10	
377659 Rpt	6			<10	BUCKLANDS HILL
377660	<1			<10	
377661	6			<10	
377662	4			<10	
377663	8			60	
377664	8			30	
377665	8			50	
377666	<1			20	
377666 Rpt	4			10	
377667	10			20	
377668	4			<10	

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
377669	4			<10	
377670	4			<10	
377671	4			<10	
377672	<1			<10	
377673	4			<10	
377674	<1			<10	
377675	8			<10	
377675 Rpt	8			<10	
377676	4			<10	BUCKLANDS HILL
377677	4			<10	
377678	4			<10	
377679	24			<10	
377680	<1			200	
377681	5			<10	
377682	4			<10	
377683	6			<10	
377684	4			<10	
377685	<1			<10	
377686	6			<10	
377687	<1			<10	
377688	<1			<10	
377689	4			<10	
377690	4			<10	
377691	8			<10	
377692	4			<10	
377693	6			<10	
377694	6			<10	
377695	8			<10	
377696	18			<10	MATHINNA
377697	10			20	
377698	16			10	
377698 Rpt	10			<10	
377699	6			<10	
377700	6			<10	

377963	8	<10	BUCKLANDS HILL

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
377963 Rpt	<1			<10	
377964	2			<10	
377965	22	62	6	<10	
377966	6			<10	
377967	4			<10	
377968	2			<10	
377969	2			<10	
377970	2			<10	
377971	2			<10	
377972	2			<10	
377973	<1			10	BUCKLANDS HILL
377974	<1			<10	
377975	<1			<10	
377976	10	12		170	
377977	<1			<10	
377978	<1			<10	
377978 Rpt	<1			<10	
377979	4			30	
377980	2			50	
377981	<1			<10	
377982	<1			20	
377983	<1			10	
377984	<1			10	
377985	2			<10	
377986	<1			30	

NA

Reference No: P52226 **ATTN: G McDONALD** Page: 9

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
378835	<1			<10
378836	2			<10
378837	2			<10
378838	<1			<10
378839	4			<10
378840	4			<10
378841	2			<10
378842	2			<10
378843	4			<10
378844	6			<10
378844 Rpt	2			<10
378845	4			<10
378846	4			<10
378847	4			<10
378848	8			<10
378849	2			<10
378849 Rpt	2			<10
378850	4			<10
378851	2			<10
378852	2			<10
378853	2			<10
378854	4			<10
378855	4			<10
378856	6			<10
378857	2			<10
378858	6			<10
378859	6			<10
378860	6			<10
378861	8			<10
378861 Rpt	4			<10
378862	4			<10
378863	4			<10
378864	4			<10
378865	6			<10
378866	8			<10
378867	10			<10
378868	4			<10
378869	12			20
378870	14			50
378871	24			110
378871 Rpt	18			100
378872	14			10

...Y RIDGE

BUCKLANDS HILL

Reference No: P52226 **ATTN: G McDONALD** Page: 10

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
378873	12			<10	
378874	12			<10	
378875	12			<10	
378876	12			<10	
378877	14			<10	
378878	12			<10	
378879	12			<10	BUCKLANDS HILL
378880	12			<10	
378881	10			<10	
378882	12			<10	
378883	12			<10	
378884	10			<10	
378884 Rpt	8			<10	
378885	22			140	
378886	12			<10	
378887	10			<10	
378888	10			<10	
378889	12			<10	
378890	10			<10	
378891	10			<10	
378892	10			<10	
378893	8			<10	
378894	12			<10	
378895	10			<10	
378896	12			<10	
378897	10			<10	
378898	10			<10	
378898 Rpt	10			<10	
378899	12			<10	
378900	10			<10	
378901	12			<10	
378902	10			<10	
378903	14	14		<10	
378904	14			<10	MATHINNA
378905	12			<10	
378905 Rpt	12			<10	
378906	12			<10	
378907	14			<10	
378908	10			<10	
378909	8			<10	
378910	8			<10	
378911	8			<10	
378912	8			<10	
378913	8			<10	
378914	10			<10	
378915	10			<10	
378916	6			<10	
378917	6			<10	
378917 Rpt	6			<10	

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
380001	<1			<10
380002	<1			<10
380003	4			<10
380004	<1			<10
380004 Rpt	<1			<10
380005	6			<10
380006	<1			<10
380007	4			<10
380007 Rpt	6			<10
380008	8			<10
380009	66	112		10
380010	6			<10
380011	6			<10
380012	<1			<10
380013	10			<10
380014	<1			<10
380015	8			<10
380016	4			<10

BLACKBOY RIDGE

MATHINNA

Reference No: P52226 **ATTN: G McDONALD** Page: 13

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
380017	4			<10
380018	6			<10
380019	28			<10
380020	12			<10
380021	20			<10
380021 Rpt	18			<10
380022	14			<10
380023	238	30	34	<10
380024	18			10
380025	10			<10
380026	12			<10
380027	8			10
380028	6			<10
380029	10			<10
380030	10			<10
380031	8			<10
380031 Rpt	8			<10
380032	4			<10
380033	4			<10
380034	4			<10
380035	14			<10

MATHINNA

DENS HILL

Reference No: P52226 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
380097	72	14	22	<10
380098	56			20
380103	16			<10
380104	10			<10
380105	14			<10

Reference No: P52226 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
380501	4			<10	
380502	4			<10	
380503	6			<10	
380504	6			<10	
380505	4			<10	
380506	6			<10	
380507	6			<10	
380508	6			<10	
380508 Rpt	6			<10	
380509	6			<10	
380510	6			<10	
380511	4			<10	
380512	4			<10	
380513	4			<10	
380514	4			<10	
380515	4			<10	
380516	4			<10	
380517	6			<10	
380518	6			<10	
380519	6			<10	
380520	4			<10	
380521	6			10	MATHINNA
380522	6			<10	
380522 Rpt	6			<10	
380523	8	4		<10	
380524	6			<10	
380525	8			<10	
380526	4			<10	
380527	4			<10	
380527 Rpt	6			<10	
380528	6			<10	
380529	6			<10	
380530	8			<10	
380531	6			<10	
380532	8			<10	
380537	14			<10	
380538	10			<10	
380539	12			<10	
380540	10			<10	
380541	20			<10	
380541 Rpt	24			<10	

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
380581	4			<10
380582	4			10
380583	8			<10
380584	4			<10
380585	4			<10
380586	8			<10
380587	44	50	60	10
380588	22			80
380589	44			10
380590	16			10
380591	34	40		10
380592	10			<10
380592 Rpt	8			<10
380593	6			10

Reference No: P52226 **ATTN: G McDONALD** Page: 17

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
380594	4			<10	
380595	8			10	
380596	6			<10	
380596 Rpt	4			<10	
380597	<1			<10	MATHINNA
380598	6			20	
380599	8			<10	
380600	6			<10	
377987	10			30	
377988	6			<10	
377989	10			<10	
377990	6			<10	
377991	6			<10	
377992	6			<10	BUCKLANDS HILL
377993	8			<10	
377994	6			<10	
377995	6			<10	
377995 Rpt	6			<10	
377996	4			10	

****

M Implies this result reported in ppm

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

710281

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 036 980 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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ANALYTICAL REPORT

Reference No: P60304

Date: 18 MAR 95

AREA COVERED : MATHINNA

SAMPLE TYPE : SUB-SURFACE SOIL

Samples Received: 14 MAR 95
Order Number :
Submission Sheet: K9410C
Project Number : FINGAL
Samples in Batch: 18

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Authorised by: _____
(A.J. Ferguson)

ATTN: G McDONALD
THE RESOLUTE SAMANTHA GROUP
MANGANA RD
FINGAL TAS 7214

Reference No: P60304 ATTN: G McDONALD Page: 1

	Au ppb	Au(R1) ppb	As ppm
Detn Limit	1	1	10
379839	4		<10
379840	14		10
379841	10		<10
379842	16	8	20
379843	12		<10
379844	8		<10
379845	10		<10
379846	12		<10

MATHINNA

****

Au, Au(RI),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

710384

MinLab

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ANALYTICAL REPORT

Reference No: P60003

Date: 10 JAN 95

Samples Received: 03 JAN 95
Order Number : K9411A
Project Number : N/A
Samples in Batch: 248

AREA COVERED: MATHINNA, BLACKBOYS RIDGE

SAMPLE TYPE: SUB-SURFACE SOIL, AUGERED SUB-SURFACE SOIL

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Authorised by: A Ferguson
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LTD
MANGANA RD
FINGAL TAS 7214

Reference No: P60003 **ATTN: G McDONALD** Page: 1

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376197	<1			<10

Reference No: P60003 **ATTN: G McDONALD** Page: 2

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376214	<1			<10
376215	4			50
376216	2			<10
376217	<1			<10
376218	8			<10

BLACKBOYS RIDGE

380401	4			190
380401 Rpt	<1			210
380402	2			<10
380403	<1			<10
380404	4			<10
380405	2			<10
380406	2			<10
380407	6			30
380408	22	20	22	250
380409	14			160
380409 Rpt	16			200
380410	12			130
380411	6			170
380412	4			10
380413	8			10
380413 Rpt	6			30
380414	120	24	38	30
380415	24			300
380416	2			110
380417	<1			<10
380418	6			10
380419	6			10
380419 Rpt	4			10
380420	4			30
380421	2			<10

BLACK BOYS RIDGE

Reference No: P60003 **ATTN: G McDONALD** Page: 3

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
380450	<1			80

Reference No: P60003 **ATTN: G McDONALD** Page: 5

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
379930	<1			<10
379930 Rpt	<1			<10
379931	<1			<10
379932	<1			<10
379933	<1			<10
379934	2			10
379935	<1			<10
379936	<1			<10

NIPTHUNA

(AUGER)

Reference No: P60003 **ATTN: G McDONALD** Page: 6

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
					MATHINNA (AUGER)
378187	<1			<10	MATHINNA

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

710391

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 980 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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ANALYTICAL REPORT

Reference No: P60017

Date: 17 JAN 95

Samples Received: 12 JAN 95
Order Number : K9413
Project Number : N/A
Samples in Batch: 84

AREA COVERED : MATTHEWS, BUCKLANDS HILL

SAMPLE TYPE: SUB-SURFACE SOIL
AUGER SUB-SURFACE SOIL

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Authorised by: A Ferguson
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LIMITED
MANGANA RD
FINGAL TAS 7214

Reference No: P60017 **ATTN: G McDONALD** Page: 1

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
380340	14			10	
380341	12			30	
380342	18	236		50	
380342 Rpt	143			30	
380343	14			10	
380344	10			<10	
380345	10			<10	
380346	14			<10	
380347	10			<10	
380348	30			<10	
380349	14			<10	
380350	132	12	12	20	
380351	10			10	
380352	10			<10	BUCKLANDS HILL
380353	10			20	
380354	10			10	
380355	10			20	
380356	10			30	
376330	12			<10	
376331	12			<10	
376336	16			<10	MATHINNA
376337	10	10	10	<10	AUGER)

Reference No: P60017 **ATTN: G McDONALD** Page: 2

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376377	8			<10
376378	12			<10

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

FAXED 4-2-

MinLab

710395

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

18A Denninup Way
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Tel: (090) 21 5664
Fax: (090) 91 2200

Lot 484 Criddle St
MT MAGNET WA 6638
Tel: (099) 634 532
Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P60067

Date: 06 FEB 95

AREA COVERED : MT MAGNET - CHATTANOOGA HILL

SAMPLE TYPE : SUB-SURFACE SOIL

Samples Received: 30 JAN 95
Order Number : K9415A
Project Number : N/A
Samples in Batch: 201

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RESOLUTE RESOURCES LIMITED

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Authorised by: _____
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LIMITED
MANGANA RD
FINGAL TAS 7214

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
376463	6			<10
376464	34			40
376465	56	52	58	20
376466	6			<10
376467	78	64	63	200
376468	4			<10
376469	6			<10
376470	10			<10
376471	2			<10
376472	2			<10
376472 Rpt	2			<10
376473	4			<10
376474	4			<10
376475	2			<10
376475 Rpt	4			<10

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
376476	16			<10	
376477	<1			<10	
376478	<1			<10	
376479	<1			<10	
376480	<1			<10	
376481	14	25		<10	
376482	<1			<10	
376483	2			<10	CHINAMENS HILL
376484	<1			<10	
376485	<1			70	
376486	4			<10	
376487	<1			<10	
376488	14			<10	
376489	10			10	
376490	12			40	
376490 Rpt	10			20	
376491	4			<10	
376492	42	8	9	<10	

Reference No: P60067 **ATTN: G McDONALD**

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
380393	<1			<10
380394	2			<10
380395	67 172	16	12	<10
380396	6			<10
380397	2			<10
380398	2			<10
380399	2			<10
380400	4			<10

Reference No: P60067 **ATTN: G McDONALD** Page: 5

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm	
Detn Limit	1	1	1	10	
380238	2			40	
380239	<1			20	
380240	4			20	
380240 Rpt	4			30	
380241	8			20	ARSENIC
380242	8			<10	
380243	20			10	
380244	52			<10	
380245	32			<10	
380246	80			10	
380247	4			<10	
380248	8			30	
380249	Sample definitely not received				
380250	Sample definitely not received				
380251	Sample definitely not received				

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

710401

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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MT MAGNET WA 6638
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Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P60186

Date: 23 FEB 95

FRACTION COLLECTED : MATRIX

SAMPLE TYPE : AUGERED SUB-SURFACE SOIL

Samples Received: 20 FEB 95
Order Number : K9416A
Project Number : TAS
Samples in Batch: 28

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Authorised by: R Ferguson
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LIMITED
MANGANA RD
FINGAL TAS 7214

710402

Reference No: P60186 **ATTN: G McDONALD** Page: 1

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
379001	192	102	222	90
379014	8			<10
379015	6			10
379016	2			<10
379017	2			<10
379017 Rpt	3 4			<10
379018	2			<10
379019	4			10
380269	76	16	26	<10
380270	20			<10
380290	30			20
380291	40			30
380292	83 178	34	36	50
380297	14			20
380298	14			10

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

710404

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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MT MAGNET WA 6638
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Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P60187

Date: 24 FEB 95

AREA COVERED : MATHINNA

SAMPLE TYPE : AUGERED SUB-SURFACE SOIL

Samples Received: 20 FEB 95
Order Number : K9416B
Project Number : TAS
Samples in Batch: 181

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Authorised by: A.J. Ferguson
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LIMITED
MANGANA RD
FINGAL TAS 7214

710405

Reference No: P60187 ATTN: G McDONALD Page: 1

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
379000	36			80
379002	10			<10
379002 Rpt	8			<10
379003	6			<10
379004	4			<10
379005	4			<10
379006	6			<10
379007	4			<10
379008	4			<10
379009	4			<10
379010	2			<10
379011	4			<10
379012	6			<10
379013	4			<10
379020	6			<10
379021	4			<10

Reference No: P60187 ATTN: G McDONALD

	Au ppb	Au(R1) ppb	Au(R2) ppb	As ppm
Detn Limit	1	1	1	10
380267	346	32		<10
380267 Rpt	40			<10
380268	128			<10
380271	8			<10
380272	12			<10
380273	32			<10
380274	50	68	55	<10
380275	28			<10
380276	10			20
380277	8			<10
380278	8			<10
380279	8			<10
380280	2			10
380281	9			<10
380282	6			<10
380283	11			20
380283 Rpt	14			10
380284	9	4		<10
380285	9			<10
380286	10			<10
380287	12			<10
380288	18	5	23	30
380289	17			40
380293	9			<10
380294	5			<10
380295	9			<10
380296	8			<10
380299	8			<10
380300	986	380	442	110

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

710408

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P61305

Date: 28 JUL 95

Samples Received: 18 JUL 95
Order Number : N/A
Submission Sheet: N/A
Project Number : N/A
Samples in Batch: 22

CHECK ASSAYS FOR SOILS - MANGANA

THIS REPORT HAS BEEN PREPARED FOR

THE RESOLUTE SAMANTHA GROUP

AND SHOULD BE READ IN CONJUNCTION WITH THE FINAL PAGE

Authorised by: R Ferguson
(A.J. Ferguson)

ATTN: G McDONALD
THE RESOLUTE SAMANTHA GROUP
MANGANA RD
FINGAL TAS 7214

710409

Reference No: P61305 ATTN: G McDONALD Page: 1

	Au ppb	As ppm
Detn Limit	1	10
378854	4	<10
378854 Rpt	6	<10
378855	2	<10
378856	2	<10
375952	<1	<10
375953	<1	<10
375954	4	10
378870	2	30
378871	16	90
375968	8	30
375969	10	100

****

Au,
Technique - Fire Assay on a 50 gram charge followed by solvent extraction

As,
Technique - AAS

END OF REPORT

710411

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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Tel: (099) 634 532
Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P61789

Date: 25 OCT 95

Samples Received: 13 OCT 95
Order Number : K9433
Submission Sheet: K9433
Project Number : TAS
Samples in Batch: 13

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THE RESOLUTE SAMANTHA GROUP

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Authorised by: A.J. Ferguson

ATTN: G McDONALD
THE RESOLUTE SAMANTHA GROUP
MANGANA RD
FINGAL TAS 7214

Reference No: P61775 **ATTN: G McDONALD**

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm
Detn Limit	0.01	0.01	0.01	10
381596	0.14			<10
381597	0.35			<10
381598	0.04			<10
381599	0.02			<10
381599 Rpt	0.02			<10
382569	<0.01			<10
382570	<0.01			<10
382571	<0.01			<10
382571 Rpt	<0.01			<10
382572	<0.01			<10
382573	<0.01			<10
382574	0.01			<10
382575	0.03			<10
382575 Rpt	<0.01			<10
382576	0.05			<10
382576 Rpt	0.05			<10
382577	0.21	0.19		380

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge

As,
Technique - AAS

END OF REPORT

Reference No: P61789 **ATTN: G McDONALD** Page: 1

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm
Detn Limit	0.01	0.01	0.01	10
381600	<0.01			<10
381601	0.02			<10
381602	1.39	0.32	0.29	<10
381603	0.01			<10
381604	0.22			200
381605	1.52			4100
381606	0.87			1280
381607	0.34			400
381608	0.88	0.54	0.54	600
381609	0.14			70
381610	0.22			70
381611	0.02			10
381612	0.04			20

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge

As,
Technique - AAS

END OF REPORT

APPENDIX G

Channel Sample Record Sheets and Assay Results

RESOLUTE RESOURCES LIMITED

710417

Project Name: MATHINNA/MANGANA Prospect Name: JUBILEE Tenement No.: 22/92

Sampler: GRANT Sample Type: CHANNEL Sample Submission No.: K9415

Note: New Area - New Page & New Sample Type - New Page Date: JAN 95

Sample No.	Drillhole	Interval		Coordinates N	Coordinates E
379681					
379690					
379700					
1					
2			Channel Samples Jubilee No 2 Adit		
3			" "		
4			" "		
5			" "		
6			" "		
7			" "		
8			" "		
9			" "		
379710			" "		

RESOLUTE RESOURCES LIMITED

710418

Project Name: MATHINNA / MANGANA Prospect Name: JUBILEE Tenement No.: 22/92

Sampler: GRANT Sample Type: CHANNEL. Sample Submission No.: R945

Note: New Area - New Page & New Sample Type - New Page Date: / /

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
379711			Channel Samples - Jubilee No 2 Adit		
2			" "		
3			" "		
4			" "		
5			" "		
6			" "		
7			" "		
8			" "		
9			" "		
379720			" "		
1			" "		
2			" "		
3			" "		
4			" "		
5			" "		
6			" "		
7			" "		
8			" "		
9			" "		
379730			" "		
1			" "		
2			" "		
3			" "		
4			" "		
5			" "		
6			" "		
7			" "		
8			" "		
9			" "		
379740			" "		

710419

RESOLUTE RESOURCES LIMITED

Project Name: MATHINNA/MANGANA Prospect Name: JUBILEE/WEST MIAMI Tenement No.: 22/92

Sampler: Grant Sample Type: CHANNELS Sample Submission No. K945

Note: New Area - New Page & New Sample Type - New Page Date: / /

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
379741			Channel Samples - Jubilee NEZ Adit		
2			" "		
3			" "		
4			" "		
5			" "		
6			" "		
7			" "		
8			" "		
9			" "		
379750			" "		
1			" "		
2			" "		
3			" "		
4			" "		
5			" "		
6			" "		
7			" "		
8			" "		
9			" "		
379760			" "		
1			" "		
2			" "		
3			" "		
4			" - West Miami		
5			" "		
6			" "		
7			" "		
8			" "		
9			" "		
379770			" "		

RESOLUTE RESOURCES LIMITED

710420

Project Name: MATHINNA / MANGANA Prospect Name: Qa WEST MIAMI Tenement No.: 22/92

Sampler: GRANT. Sample Type: CHANNEL Sample Submission No.: K9415

Note: New Area - New Page & New Sample Type - New Page Date: / /

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
379771			Channel Samples - West Miami		
2			" "		
3			" "		
4			" "		
5			" "		
379780					
379790					
379800					

710421

RESOLUTE RESOURCES LIMITED

Project Name: MATHINNA/MANGANA Prospect Name: ~~MATHINNA~~ JUBILEE Tenement No.: 22/92

Sampler: Grant Sample Type: CHANNEL Sample Submission No.: K9409

Note: New Area - New Page & New Sample Type - New Page Date:

Sample I					
379590					
379600					
		G		Rk	Jubilee Channel Samples
8	"			"	
9	"			"	
379610	"			"	
1	"			"	
2	"			"	
3	"			"	
4	"			"	
5	"			"	
6	"			"	
7	"			"	
8	"			"	
9	"			"	
379620	"			"	

710422

RESOLUTE RESOURCES LIMITED

Project Name: MATHINNA/MANGANA Prospect Name: ~~MATHINNA/MANGANA~~ JUBILEE Tenement No.: 2492

Sampler: Geol Sample Type: ~~Rock~~ CHANNEL Sample Submission No: K9409

Note: New Area - New Page & New Sample Type - New Page Date: / /

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
379621	CH/46		JUBILEE CHANNEL SAMPLES		
2	"		"		
3	"		"		
4	"		"		
5	"		"		
6	"		"		
7	"		"		
8	"		"		
9	"		"		
379630	"		"		
1	"		"		
	"		"		

37364

379650

710423

MinLab

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Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P60068

Date: 06 FEB 95

Samples Received: 30 JAN 95
Order Number : K9415B
Project Number : N/A
Samples in Batch: 87

SAMPLE TYPE: ROCKS (CHANNEL SAMPLES)

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Authorised by: _____
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LIMITED
MANGANA RD
FINGAL TAS 7214

710424

Reference No: P60068 **ATTN: G McDONALD** Page: 1

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm	
Detn Limit	0.01	0.01	0.01	10	
379702	5.19	4.79	4.28	4800	
379703	0.69			950	
379704	0.23			540	
379705	2.23			3450	
379706	1.47			2350	
379707	0.65			930	
379707 Rpt	2.17	0.43		940	
379708	1.74			3550	
379708 Rpt	1.44			3220	
379709	0.37			1050	JUBILEE
379709 Rpt	0.44			1150	
379710	0.23			920	
379711	1.00			1600	CHANNELS.
379712	1.54			990	
379713	0.37			470	
379714	0.59			1500	
379715	2.79	2.41	2.58	5560	
379716	0.55			790	
379717	2.07			5000	
379718	2.29			3650	
379719	0.54			1850	
379720	1.03			3300	MATUNA
379721	1.00			3350	
379722	0.32			1400	
379723	0.77			2850	
379724	1.59			4150	
379724 Rpt	1.62			4250	
379725	0.18			860	
379726	0.64			2850	
379727	2.51			5600	
379728	0.63			1250	
379729	2.24			3450	
379730	2.45			2700	
379731	0.45			1100	
379732	2.66			5450	
379733	2.45			5550	
379734	1.54			2250	
379735	0.96			1700	
379736	3.42	2.16	2.57	4050	
379737	0.22			910	
379738	1.76			3200	
379739	0.94			1850	
379740	0.22			480	
379740 Rpt	0.23			400	
379741	1.30	1.73	1.52	2650	
379742	0.63			1550	
379742 Rpt	0.66			1600	
379743	2.05			4250	
379744	2.65			4050	
379745	3.37			5700	
379746	2.45			3600	
379747	2.87			6300	

710425

Reference No: P60068 **ATTN: G McDONALD** Page: 2

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm	
Detn Limit	0.01	0.01	0.01	10	
379747 Rpt	2.83			6000	
379748	1.54			4800	
379749	0.58			1900	
379750	1.61			4100	
379751	3.41			8900	
379752	0.81	0.92	0.81	2300	
379753	1.29			4550	
379754	1.57			3500	MATHNNI
379754 Rpt	1.73			3600	
379755	1.83			3750	
379756	1.67			4300	JUBILEE
379757	1.68			3950	
379758	2.65			8300	CHANNELS
379758B	3.12	3.49	3.54	7500	
379759	5.37			1.020%	
379759 Rpt	5.49			1.110%	
379760	4.91	4.33	4.41	9600	
379761	1.75			5300	
379762	1.64			1650	
379762B	2.90			7800	
379763	2.42			6000	
379764	0.11			410	
379765	0.58	0.32		60	
379766	0.04			30	
379767	0.03			20	
379768	0.02			50	
379769	0.05			80	
379770	0.11			80	
379771	0.08			50	WEST MIAMI
379772	0.04			140	CHANNELS.
379773	0.08			100	
379774	4.61			120	
379775	0.07			30	

****

% Implies this result reported in %

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge

As,
Technique - AAS

END OF REPORT

710427

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 980 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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ANALYTICAL REPORT

Reference No: P52218

Date: 11 JAN 95

AREA COVERED MATHINNA / MANGANA

SAMPLE TYPE: ROCKS / CHANNELS.

Samples Received: 20 DEC 94
Order Number : K9409
Project Number : N/A
Samples in Batch: 54

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Authorised by: _____
(A.J. Ferguson)

ATTN: G McDONALD
RESOLUTE RESOURCES LIMITED
MANGANA RD
FINGAL TAS 7214

710428

Reference No: P52218 **ATTN: G McDONALD** Page: 1

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm	Ag ppm	Bi ppm	Cu ppm	
Detn Limit	0.01	0.01	0.01	10	0.5	2	5	
379607	0.81			2220	<0.5	<2	40	
379608	0.33			1460	<0.5	<2	35	
379609	1.16			3140	0.5	<2	20	
379609 Rpt	1.05			3270	0.5	<2	20	
379610	4.26	3.57		2490	0.5	<2	25	
379610 Rpt	3.12			2870	0.5	<2	25	
379611	1.38			2530	0.5	<2	30	
379612	2.29			2680	0.5	<2	25	
379613	2.53			6500	<0.5	<2	35	
379614	2.12			5000	<0.5	<2	60	
379615	5.69			8600	0.5	<2	45	MATHINNA -
379616	2.72			4950	0.5	<2	30	(JUBILEE
379617	0.39	0.39		1440	<0.5	<2	15	
379618	1.83			4700	<0.5	<2	30	CHANNEL SAMPLES)
379619	1.54			4960	0.5	<2	30	
379619 Rpt	1.54			4960	0.6	<2	30	
379620	2.05			4150	0.7	<2	55	
379621	0.70			770	0.5	<2	20	
379622	0.05			110	0.5	<2	30	
379622 Rpt	0.06			90	<0.5	<2	25	
379623	11.9	7.65	7.11	8150	0.8	<2	35	
379624	1.34			4550	0.6	<2	15	
379625	1.98			3570	0.8	<2	35	
379626	0.99			4270	0.5	<2	45	
379627	4.74			7450	0.6	<2	25	
379627 Rpt	4.74			7450	0.7	<2	25	
379628	8.10	7.32	7.39	1.095%	1.1	<2	30	
379629	0.28			660	0.5	<2	35	
379630	0.06			120	<0.5	<2	75	
379631	0.35			830	0.9	<2	35	
379632	0.69			1910	1.0	<2	15	

Reference No: P52218 **ATTN: G McDONALD**

	Fe %	Mn ppm	Pb ppm	Sb ppm	W ppm	Zn ppm	
Detn Limit	0.01	5	5	2	2	5	
379607	0.15	490	5	<2	<2	120	
379608	0.10	620	5	<2	<2	130	
379609	<0.01	235	10	<2	<2	30	
379609 Rpt	0.10	235	10	<2	<2	30	
379610	2.70	250	45	<2	<2	80	
379610 Rpt	2.80	250	45	<2	<2	80	
379611	1.95	160	35	<2	<2	75	
379612	2.80	230	30	<2	<2	85	
379613	2.50	315	30	<2	2	95	
379614	3.75	550	30	<2	<2	140	
379615	3.10	340	35	<2	2	15	MATHINNA -
379616	2.35	480	15	<2	<2	75	
379617	0.95	180	5	<2	<2	15	(JUBILEE CHANNEL
379618	2.20	450	10	<2	2	75	
379619	2.20	375	15	<2	<2	60	SAMPLES)
379619 Rpt	2.35	375	15	<2	<2	65	
379620	2.05	355	20	<2	<2	75	
379621	0.70	120	10	<2	<2	10	
379622	2.65	435	25	<2	<2	115	
379622 Rpt	2.50	410	25	<2	<2	110	
379623	1.80	225	40	<2	<2	50	
379624	0.90	125	30	<2	<2	30	
379625	3.00	275	25	<2	<2	75	
379626	2.80	370	15	<2	<2	105	
379627	2.40	155	15	<2	2	60	
379627 Rpt	2.70	175	15	<2	2	70	
379628	2.60	80	30	<2	4	80	
379629	2.50	215	35	<2	<2	80	
379630	2.90	520	15	<2	<2	90	
379631	2.20	215	10	<2	<2	50	
379632	2.40	350	20	<2	<2	45	

****

% Implies this result reported in %

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge

As, Ag, Cu, Fe, Mn, Pb, Sb, Zn,
Technique - AAS

Bi,
Technique - AAS

W,
Technique - Potassium Bi-Sulphate Fusion/Colorimetric

END OF REPORT

APPENDIX H

Percussion Drill Logs (MT 17, MT 22, MT 23 and 23b and MT 25)

710432 Sheet 1 of 8

RESOLUTE RESOURCES LIMITED	Hole No. MT17	Co-ordinates 5404664 mN, 575060 mE (AMG)	R.L. collar 394 m a.s.l
Project MATHINNA	Location JUBILEE	Date 6th - 7th Sept '95 • 20th, 21st - 22nd Sept '95	Drill type RC / Diamond
Logged by G MacDonald	Azimuth 235° (TN)	Incl. -57.5°	

From	To	Fol.	Description	4m composite Sample No.	Sample no.	ASSAY Au	As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (BofOx)	%q
0	1		f. ll											
1	2		f. ll											
2	3	Sg	d gy slt/sh >> d gwish org slt/sh (wod)	→	382501	Au <0.01	As <10		slt/sh				wy	
3	4	Sg	" >> "						"				wy	
4	5	Sg	" > gn sh gy slt/sh (wod)	→					"				wy	
5	6	Sg	"		382502	<0.01	<10		"				wy	
6	7	Sg	" + mn d gwish org (wod) slt/sh			Au	As		"		some ferruginous + mnst slt/sh		wy	
7	8	Sg	" "	→					"		"		wy	
8	9	Sg	" + vmn d gwish org (wod) slt/sh						"		"		wy	
9	10	Sg	" "		382503	0.01	<10		"		"		wy	
10	11	Sg	" "			Au	As		"		"		wy	
11	12	Sg	" " + tc ltgn slt/sh	→					"		"		wy	
12	13	Sg	l gwish org + ll ol gy slt/sh + mn prg alter- tan lt? + tc ll gn slt/sh						"		"		my	
13	14	Sg	d gy slt/sh + vmn l gwish org (wod) slt/sh		382504	Au 0.01	As <10		"	sc/a	"		wy	5
14	15	Sg	" " + tc ll gn slt/sh						"		"		wy	
15	16	Sg	" " "	←					"		"		wy	
16	17	Sg	" " "	↑					"		"		wy	
17	18	Sg	d gnish gy slt/sh + mn gwish org (wod) slt/sh		382505	Au 0.05	Ar 70		"		"		wy	
18	19	Sg	gnish gy slt/sh + 30% "						"	sc/m	"	vmn sin of slt	my	3
19	20	Sg	gnish gy slt/sh + 10% "	←					"	"	"		wy	1
20	21	Sg	" + 10% "	→	382506	0.04	130		"	"	"		my	5
21	22	Sg	" + 5% "			Au	Ar		s	"	"		my	3

RESOLUTE RESOURCES LIMITED

Hole No. MT17

710433

Sheet 2 of 8

From	To	Fol.	Description	Sample No.	ASSAY Sample №	Au	As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (Bof Ox)	%q
22	23	Sy	grish gy slt/sh + 20% d grish (vein) org slt/sh						slt/sh	sm/-	q ferrug	spotting in slt/sh	my	8
23	24	Sy	d grish gy slt/sh + 10% "	↓					"			"	wy	
24	25	Sy	" + 10% d grish org(wood) & lt ol gy slt/sh	→					"			"	wy	
25	26	Sy	" + 10% d grish org(wood) slt/sh	382507 Au 0.01 As 30					"	sm/-		"	wy	1
26	27	Sy	lt ol gy slt/sh						"	"		"	sy	tc
27	28	Sy	d grish org slt/sh + mn pug alter fault?	↓					"	"		"	sy	tc
28	29	Sy	" + "	→					"	"		spotting in slt/sh + cl	sy	3
29	30	Sy	"	382508 Au 0.02 As 60					"	"	q ferrug	" "	sy	5
30	31	Sy	"						"	"		" "	sy	5
31	32	Sy	grish gy slt/sh + 40% lt ol gy slt/sh	↓					"	"		"	my	tc
32	33	Sy	" + 30% "	→					"	"	tc asp in pan q ferrug	" "	my	50
33	34	Sy	" + 50% "	382509 Au 0.02 As 60					"	"		spotting in slt/sh	my	5
34	35	Sy	d grish gy slt/sh + 20% d grish org (wood) slt/sh						"	"		"	wy	tc
35	36	Sy	" + 5% d grish org(wood) slt/sh	↓					"			"	wy	
36	37	Sy	" + 5% "	→					"	sm/-	q ferrug	"	wy	1
37	38	Sy	grish gy slt/sh + 20% "	382510 Au 0.01 As 30					"			"	wy	
38	39	Sy	"						"			"		
39	40	Sy	"	↓					"	sm/-		"		4
40	41	Sy	"	→					"	"	tc asp in pan	"		30
41	42	Sy	"	382511 Au 0.01 As <10					"			"		
42	43	Sy	"						"			"		
43	44	Sy	"	↓					"			"		
44	45	Sy	"	→					"			"		
45	46	Sy	"	382512 Au 0.01 As 40					"	sm/-		"		2
46	47	Sy	"						"	"		"		4

RESOLUTE RESOURCES LIMITED

Hole No. MT17 710434 Sheet 3 of 8

From	To	Fol.	Description	Sample No.	Sample No.	ASSAY Au	ASSAY As	ASSAY Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (Bot Ox)	%q
47	48	Sy	gnish gy slt/sh	↓					slt/sh	sm/n	mn asp in pm.	spotting in slt/sh + cl		60
48	49	Sy	l gnish gy slt/sh	→					"	"		" "		7
49	50	Sy	"		382573	Au <0.01	As 30		"			spotting in slt/sh		
50	51	Sy	gnish gy slt/sh						"			"		
51	52	Sy	lt gnish gy slt/sh	↓					"	m/sn		"		tc
52	53	Sy	"	→					"			"		"
53	54	Sy	"		382574	Au 0.10	As 10		"	sm/n	mnpy, mnasp in pm.	spotting in slt/sh + cl		5
54	55	Sy	"						"	"		" "		40
55	55.5	Sy	gnish gy slt/sh	↓					"	"		" "		3
55.5	56	Sy	lt gnish gy slt/sh	→					"			"		
56	57	Sy	"						"	sm/n		"		3
57	58	Sy	"		382569	Au <0.01	As <10		"	"		"		3
58	59	Sy	"						"			"		
59	60	Sy	gnish gy slt/sh	↓					"					
60	61	Sy	gnish bk slt/sh + 1% d gnish gy slt/sh	→					"					
61	62	Sy	" + 1% "		382570	Au 0.01	As <10		"					
62	63	Sy	" + 1% "						"					
63	64	Sy	" + 2% "	↓					"					1
64	65	Sy	" + 2% "	→					"					
65	66	Sy	" + 2% "		382571	Au <0.01	As <10		"					
66	67	Sy	" + 10% "						"					
67	68	Sy	l gnish gy slt/sh + 10% gnish bk slt/sh	↓					"		tc pg			
68	69	Sy	"	→					"	sm/n				1
69	70	Sy	" + 1% gnish bk slt/sh		382572	Au <0.01	As <10		"	"				3
70	71	Sy	" + 1% "						"					
71	72	Sy	" + 1% "	↓					"					

RESOLUTE RESOURCES LIMITED — Hole No. MT17 — 710435 — Sheet 4 of 8

From	To	Fol.	Description	Sample No.	ASSAY Sample №	Au	As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (BofOx)	%q
72	73	Sy	d grnish gy slt/sh	↑					slt/sl					
73	74	Sy	"	382573 Au <0.01 As <10					"	sm/n				2
74	75	Sy	"						"	"	tc py in q			5
75	76	Sy	"	↓					"	"	"			3
76	77	Sy	"	↑					"	"				3
77	78	Sy	"	382574 Au 0.01 As <10					"					
78	79	Sy	"						"					
79	80	Sy	"	↓					"					
80	81	Sy	"						"					
81	82	Sy	"	382575 Au 0.02 As <10					"	sm/n				1
82	83	Sy	"						"					
83	84	Sy	"	↓					"	sm/n		spotting in slt/sh cting		5
84	85	Sy	"						"	"		" "		10
85	86	Sy	"	382576 Au 0.05 As <10					"			" "		
86	87	Sy	"						"			" "		
87	88	Sy	"	↓					"			" "		
88	89	Sy	"	→ 382577 Au 0.20 As 880					"	m/sn	tc py in q	" "		5
89	90	Sy	"	←					"	m/sn	05% py, mn alp	"		50
90	91	My	DIAMOND CORE BELOW 90m SEE PAGES 6 + 7 FOR MORE DETAILED DESCRIPTIONS d grnish gy slt/sh		381604	0.22	200		slt/sh	sm/n				25
91	92	My	"		381605	1.52	4100		"	"				60
92	93	My	"		381606	0.87	1280		"	"				10
93	94	My	"		381607	0.34	400		"	"				20
94	95	My	"		381608	0.65	600		"	"				10
95	96	My	"		381609	0.14	70		"	"				40
96	97	My	"		381610	0.22	70		"	"				10

RESOLUTE RESOURCES LIMITED

Hole No. MT17 710436 Sheet 5 of 8

From	To	Fol.	Description	Sample No.	ASSAY Sample	Au	As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (BofOx)	%q
97	98	mvg	dk grish gy sltst		381611	0·02	10		sltst	sm				0
98	99	mvg	"		381612	0·04	20		"	"				5
99	100													
100	101													
101	102													
102	103													"
103	104													
104	105													
105	106													
106	107													
107	108													
108	109													
109	110													
110	111													
111	112													
112	113													
113	114													
114	115													
115	116													
116	117													
117	118													
118	119													
119	120													
120	121													
121	122													

RESOLUTE RESOURCES LIMITED

Hole No. 710437 Sheet 6 of 8

From	To	Fol.	Description	Sample No.	ASSAY	Ave.	Lith.	Mineralisation	Alteration	Wth. (BofOx)	%q
90.0	90.3		80% sm/m q as mod/clr sin of d gnish gy slt/sh. 0.0% dsd py f/o A Lwr generation of q vng cuts the core at 10° - 30° ca								
90.3	91.2		d gnish gy slt/sh w 0.5% dsd py f/o. f.on 90.65 to 90.70 is irregular gy brec'd infilling q vng at 30° & rectangular clasts of py @ 90.70 is mn puggy fault @ 91.30 is mn puggy fault								
91.2	91.6		90% q as sin vf d gnish gy slt/sh q is bl gy in part due to 3% asp as fld clasts + bx infilling slt/st is mg sord and vng appears to be generally at 30° ca.								
91.6	92.0		d gnish gy slt/sh w sm/m q vng cut @ ≈ 30° ca and 0.5% py assd generally in the vein or selvedges to the q vng.								
92.0	92.1		mn puggy fault								

RESOLUTE RESOURCES LIMITED Hole No. 710438 Sheet 7 of 8

From	To	Fol.	Description	Sample No.	ASSAY	Ave.	Lith.	Mineralisation	Alteration	Wth. (BofOx)	%q
92.3	93.8		predominantly d grey gy slt/sh w < 5% q as sm/m vn' ccly @ 30°-50° ca. Py is assd w qve vn (20° ca). 05% dsd Py t/o.								
93.8	94.0		q, sm/m & brd w cl infilling								
94.0	97.0		intermittent zones of q vng/sm between slt/sh. q predominantly from 94.30 - 94.55 94.70 - 94.85 95.05 - 95.20 95.50 - 95.75 96.00 - 96.20 96.80 - 97.00 sy fol/mm peggy zones from 94.00 - 94.30 & 96.00 - 96.60 There is mn amounts of py in some of these vn' but no asp. vn' are deformed and contain cl sericite/bx infilling the vn from 96.80 - 97.00 is folded and is sub-parallel to the core-axis.								

RESOLUTE RESOURCES LIMITED

Hole No. 710439

Sheet 8 of 8

From	To	Fol.	Description	Sample No.	ASSAY			Ave.	Lith.		Mineralisation	Alteration	Wth. (BofOx)	%q
97.0	99.0		d gn.sh gy slt/sh w q vng from 98.10 – 98.15 a f.o q - cl vn' @ ≈ 30°-60° ca. mn pygy fault @ 98.00 – 98.05. generally mn dsd py t/o w ≈ 0.5% py from 97.60 to 98.30											

710440 Sheet 1 of 4

RESOLUTE RESOURCES LIMITED	Hole No. MT22	Co-ordinates 5404739mN, 575028mE (AMG)	R.L. collar 391 m.a.s.l.
Project MATHINNA / Location JUBILEE / Date 10th-11th Sept '95	Drill type RC	Logged by G Mac Donald	Azimuth 235° (TN) / Incl. −56°

From	To	Fol.	Description	4 composite Sample No.	ASSAY Sample Id	Au	As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (BofOx)	%q
0	1		fill											
1	2		fill											
2	3	Sy	gy-ish org slt/sh	↑ 382515 Au <0.01 As <10					slt/sh				my	"
3	4	Sy	lt ol gy slt/sh	←					"				my	tc
4	5	Sy	"	↑					"				my	
5	6	Sy	ol gy slt/sh + brn-sh gy slt sh	382516 Au <0.01 As <10					"				my	
6	7	Sy	lt ol gy slt/sh + "						"				my	
7	8	Sy	"	↓					"				my	
8	9	Sy	" + 10% p gwish brn slt/sh + mn prg after fault?	→					"				my	
9	10	Sy	" + 10% p gwish brn slt/sh	382517 Au <0.01 As <10					"				my	
10	11	Sy	" + 1% "						"				wy	
11	12	Sy	" + 2% "	↓					"				wy	
12	13	Sy	" + 1% "	↑					"				wy	
13	14	Sy	gy-ish gy slt/sh + 2% "	382518 Au <0.01 As <10					"				wy	
14	15	Sy	gy-ish org slt/sh + 1% "						"				wvy	
15	16	Sy	lt ol gy slt/sh + 10% "	↓					"				wy	
16	17	Sy	" + 5% "	↑					"				wy	
17	18	Sy	" + 3% "	382519 Au 0.01 As <10					"				wy	
18	19	Sy	" + 5% "						"				wy	
19	20	Sy	gy-ish org slt/sh + 50% d gwish brn slt/sh	↓					"	sm/fg		clay	my	30
20	21	Sy	lt ol gy slt/sh + 5% "	382520→ Au <0.01 As <10					"	"			my	5
21	22	Sy	45°. " + 45% mod lt gy slt/sh + 5%						"	"	q fg		my	7

RESOLUTE RESOURCES LIMITED — Hole No. MT22 — 710441 — Sheet 2 of 4

From	To	Fol.	Description	Sample No.	ASSAY Sample №	Au	As	Ave.	Lith.	Qtz.	Mineralisation	Alteration	Wth. (BofOx)	%q
22	23	sy	80% grish gy slt/sh + 20% d ywish org slt/sh						slt/sh	sm/m		cl in q	my	7
23	24	sy	15% grish gy, 15% d ywish org + 70% d gy slt/sh	↓					"	"			my	15
24	25	sy	75% ywish gy – lt grish gy slt/sh + 25% d ywish org slt/sh	↑					"	"			my	40
25	26	sy	90% lt d gy slt/sh + 10% d ywish org slt/sh	382521 Au 0.05 As <10					"				my	
26	27	sy	15% " + 80% " + 5% lt gy slt/sh						"				my	
27	28	sy	85% lt bnish (ppl) gy slt/sh + 15% d ywish org slt/sh	↓					"	sm/m	tc py in slt	cl in q	wy	3
28	29	sy	60% mod lt gy slt/sh + 40% d ywish org slt/sh	↑					"		"		wy	
29	30	sy	" "	382522 Au 0.01 As <10					"				wy	
30	31	sy	90% d gy (ppl) + 10% grish gy – lt grish gy slt/sh						"				wy	
31	32	sy	70% " 30% "	↓					"				wy	
32	33	sy	40% mod ywish bn slt/sh + 60% mod lt gy slt/sh	→	381567	0.02	<10		"				my	
33	34	sy	50% " + 50% "	382523 Au 0.28 As 290	381568	0.38	<10		"				my	
34	35	sy	95% " + 5% "		381569	0.04	<10		"				my	
35	36	sy	70% " + 30% "	↓	381570	1.36	1140		"	sm/m			my	30
36	37	sy	95% " + 5% "	→	381571	0.08	<10		"	"		spotting	my	4
37	38	sy	5% " + 95% mod gy slt/sh	382524 Au 0.28 As <10	381572	0.02	<10		"			" cling	wy	1
38	39	sy	20% d ywish org slt/sh + 80% mod lt gy slt/sh		381573	4.95	60		"			"	my	1
39	40	sy	60% mod d gy slt/sh + 35% lt grish gy slt/sh + 5% d ywish org slt/sh	↓	381574	0.20	<10		"				wy	1
40	41	sy	60% mod d gy slt/sh + 30% grish gy slt/sh + 10% mod ywish bn slt/sh	↑					"				wy	
41	42	sy	70% d gy slt/sh + 15% grish gy slt/sh + 15% mod ywish bn slt/sh	382525 Au <0.01 As <10					"		tc py n slt	cling	wy	2
42	43	sy	90% d gy slt/sh + 10% mod ywish bn slt/sh						"			"	wy	1
43	44	sy	70% d gy slt/sh + 25% lt grish gy slt/sh + 5% mod ywish bn slt/sh	↓					"		tc py n slt	"		1
44	45	sy	50% mod gy slt/sh + 50% lt grish gy slt/sh	↑					"		"	"		1
45	46	sy	15% " + 85% "	382526 Au <0.01 As <10					"					
46	47	sy	mod d gy slt/sh						"					

RESOLUTE RESOURCES LIMITED Hole No. MT22 710442 Sheet 3 of 4

From	To	Fol.	Description	Sample No.	ASSAY Sample Nº	Au	As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (BofOx)	%q
47	48	sy	mod d gy slt/sh	↓					slt/sh					
48	49	sy	90% mod d gy slt/sh + 5% lt gnish gy slt/sh + 5% d org slt/sh ywish	↑					"					
49	50	sy	95% " + 5% lt gnish gy slt/sh	382527 Au <0.01 As <10					"	sm/v				1
50	51	sy	95% " + 5% d ywish org slt/sh						"					
51	52	sy	95% " + 5% gnish gy slt/sh	↓					"					
52	53	sy	mod d gy slt/sh	↑					"					
53	54	sy	98% mod d gy slt/sh + 1% gnish gy + 1% d org slt/sh ywish	382528 Au <0.01 As <10					"					
54	55	sy	mod d gy slt/sh						"					
55	56	sy	98% mod d gy slt/sh + 2% lt gy slt/sh	↓					"					
56	57	sy	mod d gy slt/sh	↑					"					
57	58	sy	"	382529 Au <0.01 As <10					"		tc dsd py in slt			
58	59	sy	50% mod d gy slt/sh + 50% lt gnish gy slt/sh						"					
59	60	sy	95% " + 2% lt gnish gy + 3% d org slt/sh ywish	↓					"					
60	61	sy	95% " + 5% lt gnish gy slt/sh	↑					"		tc py in slt			
61	62	sy	90% " + 10% "	382530 Au <0.01 As <10					"					
62	63	sy	50% mod gy slt/sh + 50% mod ywish bn slt/sh						"				my	
63	64	sy	98% gnish gy slt/sh + 2% "	↓					"		tc py in slt			
64	65	sy	100% "	↑					"	sm/v	tc py in q	cl in q		15
65	66	sy	95% " + 5% mod ywish bn slt/sh	382531 Au <0.01 As <10					"		tc py in slt	"		
66	67	sy	90% " + 10% "						"	sm/v	"		wy	1
67	68	sy	98% " + 2% "	↓					"					
68	69	sy	100% "	↑					"					
69	70	sy	90% d gnish gy slt/sh + 10% mod ywish bn slt/sh	382532 Au <0.01 As 40					"				wy	
70	71	sy	80% " + 20% "						"	sm/v			wy	1
71	72	sy	60% " + 40% mod d gy slt/sh	↓					"	"	m py in q			2

RESOLUTE RESOURCES LIMITED — Hole No. MT22 — 710443 — Sheet 4 of 4

From	To	Fol.	Description	Sample No.	Sample No	ASSAY Au	ASSAY As	Ave.	Lith.	Q+z	Mineralisation	Alteration	Wth. (BofOx)	%g
72	73	sy	97% d grish gy slt/sh + 3% mod ywish bn slt/sh	↑					slt/sh	sm/—	tc py in slt/sh			2
73	74	sy	90% " + 7% "	382533 Au 0.02 As 30					"		tc py in slt/sh		wy	
74	75	sy	95% " + 5% "						"	sm/—	tc py in q			3
75	76	my	60% lt bnish gy slt/sh + 40% grish gy slt/sh	↓					"	"	0.5% py	cl in q + mn stn		8
76	77	my	15% lt bnish gy + 82% grish gy + 3% ywish gy slt/sh	↑	381580	0.05	40		"	"	mn py in q	" "		15
77	78	my	95% lt grish gy + 5% mod gy slt/sh	382534 Au 0.15 As 315	381581	0.06	40		"	"	mn py in q			.95
78	79	my	grish gy slt/sh		381582	0.08	110		"	"	tc py mn asp in q abundant asp>py in pm			98
79	80	my	"	↓	381583	0.36	810		"	"	0.5% asp + mn py good asp>py in pm in q	stn of slt/sh		50
80	81	my	lt grish gy slt/sh	↑	381584	0.31	1200		"	"	0.5% asp + mn py abundant asp>py in pm in q			80
81	82	my	"	382535 Au 0.21 As 500	381585	0.17	200		"	"	mn asp + py good asp>py in pm	cl in q		60
82	83	sy	80% lt grish gy slt/sh + 20% mod ywish bn slt/sh		381586	0.41	220		"	"	tc py in slt/sh			10
83	84	sy	" "	↓	381587	0.02	10		"	"	tc py in slt/sh	spotting		1
84	85	sy	45% grish gy slt/sh + 45% mod lt gy slt/sh + 10% mod ywish bn slt/sh	↑								"		1
85	86	sy	lt ol gy slt/sh	382536 Au 0.02 As <10								"		
86	87	sy	"									"		
87	88	sy	60% lt ol gy slt/sh + 40% grish gy slt/sh	↓								"		
88	89	sy	70% " + 30% "	↑ 382537 Au 0.02 As <10										
89	90	sy	98% grish gy slt/sh + 2% mod ywish bn slt/sh	↓										tc
90	91													
91	92													
92	93													
93	94													
94	95													
95	96													
96	97													

710444

Sheet 1 of 1

RESOLUTE RESOURCES LIMITED	Hole No. MT 23	Co-ordinates 5404709mN, 575056mE (AMG)	R.L. collar 392 mas.l.
Project MATHINNA / Location JUBILEE / Date 11th Sept '95	Drill type RC	Logged by G MacDonald	Azimuth 235°(TN) / Incl. -56°

From	To	FoL	Description	ASSAY Sample No.	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (BofOx)	%q
0	1		f.11								
1	2		f.11								
2	3		f.11								
3	4	Sy	grish gy slt/sh +lss mod d gy slt/sh (f.11?)			slt/sh				wy	
4	5	Sy	"			"	sm/~			wy	1
5	6	Sy	lt ol gy slt/sh			"				wy	
6	7	Sy	mod d gy slt/sh + lss d ywish org slt/sh			"				wy	
7	8	Sy	"			"				wy	
8	9	Sy	60% mod d gy slt/sh + 30% mod ywish brn slt/sh + 5% lt ol gy slt/sh + 5% org prg			"				my	
9	10	Sy	97% mod d gy slt/sh + 2% mod ywish brn slt/sh + 1% lt ol gy slt/sh			"					
10	11	Sy	75% " + 10% " + 15% lt grish gy slt/sh			"				wy	
11	12	Sy	75% " + 10% " + 15% "			"				wy	
12	13	Sy	75% mod d gy slt/sh + 15% mod ywish brn slt/sh + 10% lt gy slt/sh			"				wy	
13	14	Sy	60% lt grish gy slt/sh + 2% " + 38% "			"		lc py in slt			
14	15	Sy	60% " + 2% "			"		"			
15	16	Sy	70% " + 3% " + 27% lt gy slt/sh.			"		"			
16	17										
17	18										
18	19										
19	20										
20	21										
21	22										

710445

Sheet 1 of 3

RESOLUTE RESOURCES LIMITED	Hole No. MT 23(B)	Co-ordinates 5404708 mN, 575055 mE (AMG)	RL collar 392 masl
Project MATHINNA / Location JUBILEE / Date 12th-13th Sept '95	Drill type RC	Logged by G MacDonald	Azimuth 235° (TN) / Incl. -55.5°

From	To	Fol.	Description	4m composite Sample No.	ASSAY Sample No.	Au	As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (BofOx)	%q
0	1		f:ll											
1	2		f:ll											
2	3		f:ll											1
3	4	Sy	grish gy slt/sh + 5% mod ywish bn slt/sh						slt/sh				wy	
4	5	Sy	30% lt-ol gy slt/sh + 50% med d gy slt/sh + 20% mod ywish bn slt/sh						"				wy	
5	6	Sy	med d gy slt/sh	↑					"					
6	7	Sy	50% med d gy slt/sh + 30% lt grish gy slt/sh + 20% mod ywish bn slt/sh	382538 Au <0.01 As <10					"				wy	
7	8	Sy	99% med d gy slt/sh + 1% mod ywish bn slt/sh	←					"					
8	9	Sy	98% " + 2% "	→					"					
9	10	Sy	85% " + 13% " + 2% cmg pug	382539 Au <0.01 As <10					"				wy	
10	11	Sy	45% " + 5% " + 50% lt grish gy slt/sh						"				wy	
11	12	Sy	90% " + 5% " + 5% brish gy slt/sh	↓					"				wy	
12	13	Sy	70% med d gy, 15% lt grish gy, 3% pinkish gy, 12% lt gy + 1% brish gy slt/sh	↑					"				wy	
13	14	Sy	90% lt-ol gy slt/sh + 5% mod ywish bn slt/sh + 5% mod d gy slt/sh	382540 Au 0.02 As <10					"					
14	15	Sy	95% " + 4% " + 1% pinkish gy slt/sh						"					
15	16	Sy	95% " + 5% "	↓					"					
16	17	Sy	98% " + 4% + 1% pinkish gy slt/sh	↑					"					
17	18	Sy	96% " + 2% " + 2% pug	382541 Au <0.01 As <10					"					1
18	19	Sy	97% med lt gy slt/sh + 3% mod ywish bn slt/sh						"					
19	20	Sy	99% " + 1% "	↓					"		lt gy in slt			
20	21	Sy	90% med gy slt/sh + 10% grish gy slt/sh	→					"		"			
21	22	Sy	50% " + 50% "	382542 Au <0.01 As <10					"		"			

RESOLUTE RESOURCES LIMITED Hole No. MT 23(B) 710446 Sheet 2 of 3

From	To	Fol.	Description	Sample No.	ASSAY Sample№	Au	As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (Bof Ox)	%q
22	23	Sy	50% mod gy slt/sh + 49% grish gy slt/sh + 1% mod grish bn slt/sh								tc py in slt			
23	24	Sy	50% " + 49% " + 1% "	↓							"			
24	25	Sy	50% " + 49% " + 1% "	↑							"	spotting		
25	26	Sy	95% grish gy slt/sh + 5% mod grish bn slt/sh	382543 Au <0.01 As <10							"	"		
26	27	Sy	95% " + 5% "							sa/m		"		15
27	28	Sy	95% " + 5% "	↓						"		"	wy	10
28	29	Sy	98% " + 2% "	↑	381600	<0.01	<10			"			wy	3
29	30	Sy	99% " + 1% "	382544 Au 0.21 As <10	381601	0.02	<10			"				2
30	31	Sy	99% " + 1% "		381602	0.67	<10			"				3
31	32	Sy	98% " + 2% "	↓	381603	0.01	<10			"				5
32	33	Sy	97% " + 3% "	↑						"	asp • py in ld q			1
33	34	Sy	93% " + 7% "	382545 Au 0.03 As 30						"	tc asp in q			7
34	35	Sy	80% lt of gy slt/sh + 20% "										my	
35	36	Sy	95% " + 5% "	↓								spotting	wy	
36	37	Sy	99% " + 1% "	↑								"	wy	
37	38	Sy	80% " + 20% grish gy slt/sh	382546 Au <0.01 As <10						sa/r		"	wy	1
38	39	Sy	50% " + 50% grish gy slt/sh									"	wy	
39	40	Sy	90% " + 10% "	↓									wy	
40	41	Sy	80% mod bn slt/sh + 20% "	→									my	
41	42	Sy	40% mod grish bn slt/sh + 60% "	382547 Au 0.09 As 400						sa/r		"	my	2
42	43	Sy	30% " + 70% "	←						"		"	my	30
43	44	Sy	50% " + 50% "	NOT	SAMPLED					"			my	2
44	45		cavity - old workings											
45	46		cavity - old workings											
46	47		cavity - old workings											
			mullock from old workings ? 70% grish gy slt/sh + 30% mod grish bn slt/sh	NOT	SAMPLED									

RESOLUTE RESOURCES LIMITED — Hole No. MT 23(b) — 710447 — Sheet 3 of 3

From	To	Fol.	Description	Sample No.	Sample No.	ASSAY Au	ASSAY As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (BofOx)	%q
47	48	sy	70% gn:sh gy slt/sh + 30% mod yw:sh bn slt/sh	↑	381575	1.39	5000			sm/n			my	30
48	49	sy	80% " + 20% "		381576	2.39	1760			"	0.5% py in slt/sh	spotty cling	my	20
49	50	sy	70% " + 30% "	382548 Au 2.06 As 4320	381577	0.57	5370			"	mn py in slt/sh	" "	my	30
50	51	sy	80% " + 20% "		381578	1.97	3880			"		"	my	50
51	52	sy	50% " + 50% "	↓	381579	0.7%	2040			"		"	my	30
52	53	sy	97% d gn:sh gy slt/sh + 3 mod yw:sh bn slt/sh	↑								spotting		"
53	54	sy	97% " 3% "	382549 Au 0.01 As 120								"		
54	55	sy	98% " 2% "									"		
55	56	sy	99% " 1% "	↓								"		
56	57	sy	99% " 1% "	↑ 382550 Au 0.01 As 60						sm/n				1
57	58	sy	99% " 1% "	↓										
58	59	)	rods stuck at 58m.											
59	60													
60	61													
61	62													
62	63													
63	64													
64	65													
65	66													
66	67													
67	68													
68	69													
69	70													
70	71													
71	72													

710448 Sheet 1 of 4

RESOLUTE RESOURCES LIMITED	Hole No. MT 25	Co-ordinates 5404776 mN, 575012 mE (AMG)	RL collar 381 mas l
Project MATHINNA / Location JUBILEE / Date 14th-15th Sept '95	Drill type RC	Logged by G MacDonald.	Azimuth 235° (TN). / Incl. -56.5°

From	To	Fol.	Description	4m composite Sample No.	ASSAY Sample No.	Au	As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (BofOx)	%q
0	1		f.ll											
1	2		f.ll											
2	3		f.ll											
3	4		f.ll											
4	5	sy	50% lt grnish gy slt/sh + 50% mod ywish bn slt/sh	↑					slt/sh				my	2
5	6	sy	60% lt grnish gy slt/sh + 40% d ywish org slt/sh	382561 Au 0.02 As <10					"				my	
6	7	sy	mod ywish bn slt/sh						"				my	
7	8	sy	"	↓					"				my	5
8	9	sy	"	↑					"				my	7
9	10	sy	80% " + 20% mod d gy slt/sh	382552 Au 0.01 As <10					"				my	
10	11	sy	80% " + 20% "						"				my	
11	12	sy	100% "	↓					"				my	1
12	13	sy	96% lt ol gy slt/sh + 4% mod ywish bn slt/sh	↑	381588	0.01	<10		"				wy	
13	14	sy	96% " + 4% " + cm py	382553 Au 0.40 As 130	381589	<0.01	<10		"				wy	
14	15	sy	d ywish org slt/sh		381590	1.25	40		"				my	50
15	16	sy	50% mod ywish bn slt/sh + 50% lt grnish gy slt/sh	↓	381591	0.85	400		"				my	10
16	17	sy	" "	↑	381592	4.24	465		"				my	70
17	18	sy	" "	382554 Au 1.05 As 210	381593	1.97	540		"				my	70
18	19	sy	30% " + 70% grnish gy slt/sh		381594	0.35	10		"				wy	
19	20	sy	20% " + 80% "	↓	381595	2.77	<10		"				wy	3
20	21	sy	85% " + 15% mod lt gy slt/sh	↑ 382555 Au 0.10 As <10	381596	0.14	<10		"		tc py in s/h		my	
21	22	sy	98% " + 2% "		381597	0.35	<10		"				my	

RESOLUTE RESOURCES LIMITED

Hole No. MT25 710449 Sheet 2 of 4

From	To	Fol.	Description	Sample No.	ASSAY Sample №	Au	As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (Bol Ox)	%q
22	23	sy	30% mod lt gy slt/sh + 70% mod yish bn slt/sh		381598	0.04	<10		slt/sh				wy	
23	24	sy	40% mod d gy slt/sh + 60% "	↓	381599	0.02	<10		"				wy	
24	25	sy	70% mod gy slt/sh + 30% "	↑					"		tc py in q-slk	spotting	wy	2
25	26	sy	80% " + 20% "	382556 Au 0.03 As 10					"		tc py in slt	"	wy	
26	27	sy	60% " 20% mod yish bn slt/sh + 20% gy slt/sh lt grish						"		"	"	wy	
27	28	sy	80% mod gy slt/sh + 20% mod yish bn slt/sh	↓					"		"	"	wy	
28	29	sy	90% " + 10% "	↑					"		"	"	wy	
29	30	sy	85% d gy slt/sh + 15% "	382557 Au <0.01 As <10					"			"	wy	
30	31	sy	90% " + 10% "						"			"	wy	tc
31	32	sy	95% " + 5% "	↓					"			"	wy	
32	33	sy	5% " + 55% grish gy slt/sh + 40% bn slt/sh mod yish	↑					"	sa/m	tc py in q-slk	"	my	1
33	34	sy	50% mod lt gy slt/sh + 20% " + 30% "	382558 Au 0.01 As <10					"	"	"	"	wy	2
34	35	sy	60% " + 30% " + 10% "						"		tc py in slt	"		
35	36	sy	50% " + 50% mod d gy slt/sh	↓					"			"		
36	37	sy	95% mod d gy slt/sh + 3% grish gy slt/sh + 2% mod yish slt/sh	↑					"		tc py in slt	"		
37	38	sy	95% " + 3% " + 2% "	382559 Au <0.01 As <10					"	sa/m				5
38	39	sy	95% " + 5% grish gy slt/sh						"					
39	40	sy	60% " + 40% "	↓					"	sa/m				15
40	41	sy	60% " + 40% "	↑					"	"				2
41	42	sy	70% " + 30% "	382560 Au <0.01 As 10					"	m/sa		spotting		1
42	43	sy	70% " + 30% "						"	"	tc py in slt	"		5
43	44	my	30% " + 70% "	↓					"	sa/m	"	"		3
44	45	my	70% d gy slt/sh + 30% "	↑					"		"			
45	46	sy	d gy slt/sh	382561 Au 0.05 As 1190					"	sa/m				3
46	47	sy	mod d gy slt/sh						"					3

RESOLUTE RESOURCES LIMITED Hole No. MT25 710450 Sheet 3 of 4

From	To	Fol.	Description	Sample No.	ASSAY Sample №	Au	As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (BofOx)	%q
47	48	sy	94% mod d gy slt/sh + 3% mod grish bn slt/sh + 3% lt grish gy slt/sh	↓					slt/sh	sm-l	mn py, tc asp in q	mod sil of slt/sh		40
48	49	sy	90% lt grish gy slt/sh + 10% mod grish bn slt/sh	↑					"	"	0.5% py, mn asp in q	"	wy	30
49	50	sy	85% lt grish gy slt/sh + 10% mod grish bn slt/sh + 5% mod d gy slt/sh	382562 Au 0.04 As 90					"	"	ab py, good asp in py	"		90
50	51	sy	lt grish gy slt/sh						"	"	"	"		40
51	52	sy	grish gy slt/sh	↓					"	"	"	"		15
52	53	sy	95% d grish gy slt/sh + 5% mod grish bn slt/sh	↑					"	"	tc py in q	mn sil of slt/sh		10
53	54	sy	d grish gy slt/sh	382563 Au 0.0 As 90					"	"	"			2
54	55	sy	"						"					
55	56	sy	"	↓					"					
56	57	sy	"	↑					"					1
57	58	sy	"	382564 Au 0.01 As 70					"		tc py in slt			
58	59	sy	"						"		"			1
59	60	sy	"	↓					"	sm-l	"	mn sil of slt/sh		3
60	61	sy	"	↑					"	"	"	"		5
61	62	sy	"	382565 Au 0.01 As 40					"					
62	63	sy	"						"	sm-l	tc py			2
63	64	sy	"	↓					"	"				1
64	65	sy	"	↑							tc py			
65	66	sy	"	382566 Au 0.02 As 50						sm-l				1
66	67	sy	"						"					1
67	68	sy	50% d grish gy slt/sh + 50% mod d gy slt/sh	↓					"		mn py in slt			3
68	69	sy	80% " + 20% "	↑					"		"			3
69	70	sy	60% " + 40% "	382567 Au 0.01 As 30					"		"			2
70	71	sy	50% " + 50% "								tc py in slt			
71	72	sy	60% " + 40% "	↓							mn py in slt			

RESOLUTE RESOURCES LIMITED

Hole No. MT25 710451 Sheet 4 of 4

From	To	Fol.	Description	Sample No.	ASSAY Sample No.	Au	As	Ave.	Lith.	Qtz	Mineralisation	Alteration	Wth. (BofOx)	%q
72	73	sg	98% d gg slt/sh + 2% d gnish gg slt/sh	↑					slt/sh					
73	74	sg	98% " + 2% "	382568 Au ≥0.01 As ≤10					"		1c py in slt			
74	75	sg	98% " + 2% "	↓					"					
75	76													
76	77													
77	78													
78	79													
79	80													
80	81													
81	82													
82	83													
83	84													
84	85													
85	86													
86	87													
87	88													
88	89													
89	90													
90	91													
91	92													
92	93													
93	94													
94	95													
95	96													
96	97													

APPENDIX I

Percussion Drilling Sample Record Sheets and Assay Results

RESOLUTE SAMANTHA GROUP

710453

Project Name: MATHINNA Prospect Name: JUBILEE Tenement No.: 22/42

Sampler: GRANT. Sample Type: RC Sample Submission No.: K09428 K09429

Note: New Area - New Page & New Sample Type - New Page Date: / /

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
s 382501	MT17	2 - 4			
2		4 - 8			
3		8' 12			
4		12 -16			
5		16- 20			
6		20-24			
7		24-28			
8		28-32			
9		32-36			
s 382510		36-40			
1		40-44			
2		44-48			
3		48-52			
4		52-55 5	K09428		
5	MT22	2-4	K09429		
6		4-8			
7		8-12			
8		12-16			
9		16-20			
s 382520		20-24			
1		24-28			
2		28-32			
3		32-36			
4		36-40			
5		40-44			
6		44-48			
7		48-52			
8		52-56			
9		56-60			
s 382530		60-64			

RESOLUTE SAMANTHA GROUP

710454

Project Name: MATHINNA Prospect Name: JUBILEE Tenement No.: 22/42

Sampler: GRANT Sample Type: RC Sample Submission No.: K09429 K09430

Note: New Area - New Page & New Sample Type - New Page Date: / /

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
s 382531	MT22	64-68			
2		68-72			
3		72-76			
4		76-80			
5		80-84			
6		84-88	↑		
7		88-90	K09429		
8	MT23(B)	5-8	K09430		
9		8-12	↓		
s 382540		12-16			
1		16-20			
2		20-24			
3		24-28			
4		28-32			
5		32-36			
6		36-40			
7		40-43			
8		47-52			
9		52-56			
s 382550		56-58			
1	MT25	4-8			
2		8-12			
3		12-16			
4		16-20			
5		20-24			
6		24-28			
7		28-32			
8		32-36			
9		36-40			
s 382560		40-44			

710455

RESOLUTE SAMANTHA GROUP

Project Name: ~~JUBILEE~~ MATHINNA Prospect Name: JUBILEE Tenement No.: 22/92

Sampler: GRANT Sample Type: RC Sample Submission No.: K09430 K09432

Note: New Area - New Page & New Sample Type - New Page Date: / /

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
s 382561	MT25	44-48			
2		48-52			
3		52-56			
4		56-60			
5		60-64			
6		64-68			
7		68-72			
8		72-~~76~~	K09430		
9	MT17	55.5-60	K09432		
s 382570		60-64			
1		64-68			
2		68-72			
3		72-76			
4		76-80			
5		80-84			
6		84-88			
7		88-90			
8					
9					
s 382580					
1					
2					
3					
4					
5					
6					
7					
8					
9					
s 382590					

710456

RESOLUTE SAMANTHA GROUP

Project Name: MATHINNA Prospect Name: ~~TOWNSHIP / CHURCH HILL~~ JUBILEE Tenement No.: ~~EL 17/91~~ EL 22/92 K9432

Sampler: GARY Sample Type: R.C. (SPLIT) Sample Submission No.: ~~K9431~~

Note: New Area - New Page & New Sample Type - New Page Date: 29 / 9 /95

Sample No			
38154			
3815			
s 381560			
1			
2			
3			
4			
5			
6			
7	MT 22	32-33	
8	"	33-34	
9	"	34-35	
s 381570	"	35-36	

RESOLUTE SAMANTHA GROUP

710457

Project Name: MATHINNA Prospect Name: JUBILEE Tenement No.: 22/92

Sampler: GARY Sample Type: RC. SPLIT, Sample Submission No.: K9432 K9433

Note: New Area - New Page & New Sample Type - New Page Date: 1/10/95

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
s 381571	MT 22	36-37			
2	"	37-38			
3	"	38-39			
4	"	39-40			
5	MT 23B	47-48			
6	"	48-49			
7	"	49-50			
8	"	50-51			
9	"	51-52			
s 381580	MT 22	76-77			
1	"	77-78			
2	"	78-79			
3	"	79-80			
4	"	80-81			
5	"	81-82			
6	"	82-83			
7	"	83-84			
8	MT 25	12-13			
9	"	13-14			
s 381590	"	14-15			
1	"	15-16			
2	"	16-17			
3	"	17-18			
4	"	18-19			
5	"	19-20			
6	"	20-21			
7	"	21-22			
8	"	22-23			
9	"	23-24	↓ K9432		
s 381600	MT 23B	28-29	↑ K9433		

710458

RESOLUTE SAMANTHA GROUP

Project Name: MATHINNA. Prospect Name: JUBILEE Tenement No.: 22/92

Sampler: GRANT Sample Type: RC SPLIT + CORE Sample Submission No.: K9433

Note: New Area - New Page & New Sample Type - New Page Date: 2 / 10 / 95

Sample No.	Drillhole	Interval	Description	Coordinates N	Coordinates E
s 381601	MT238	29-30	RC ↑		
2	"	30-31	"		
3	"	31-32	"		
4	MT17	90-91	CORE K9433		
5	"	91-92	"		
6	"	92-93	"		
7		93-94	"		
8		94-95	"		
9		95-96	"		
s 381610		96-97	"		
		97-98	"		
		98-99			

s 3816

s 3816

710459

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

18A Denninup Way
MALAGA WA 6062
Tel: (09) 249 5277
Fax: (09) 249 5323

257A Forrest Street
KALGOORLIE WA 6430
Tel: (090) 21 5664
Fax: (090) 91 2200

Lot 484 Criddle St
MT MAGNET WA 6638
Tel: (099) 634 532
Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P61663

Date: 21 SEP 95

Samples Received: 14 SEP 95
Order Number : K9428
Submission Sheet: K9428
Project Number : N/A
Samples in Batch: 119

THIS REPORT HAS BEEN PREPARED FOR

THE RESOLUTE SAMANTHA GROUP

AND SHOULD BE READ IN CONJUNCTION WITH THE FINAL PAGE

Authorised by: A.J. Ferguson

ATTN: G McDONALD
THE RESOLUTE SAMANTHA GROUP
MANGANA RD
FINGAL TAS 7214

Reference No: P61663 **ATTN: G McDONALD**

	Au ppm	Au(R1) ppm	As ppm
Detn Limit	0.01	0.01	10
382501	<0.01		<10
382502	<0.01		<10
382503	0.01		<10
382504	0.01		<10
382505	0.05	0.04	70
382506	0.04		130
382507	0.01		30
382508	0.02		60
382509	0.02		60
382510	0.01		30
382511	0.01		<10
382512	0.01		40
382513	<0.01		30
382514	0.10	0.10	10

****

Au, Au(R1),
Technique - Fire Assay on a 50 gram charge

As,
Technique - AAS

END OF REPORT

710462

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 980 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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MALAGA WA 6062
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Tel: (090) 21 5664
Fax: (090) 91 2200

Lot 484 Criddle St
MT MAGNET WA 6638
Tel: (099) 634 532
Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P61690

Date: 25 SEP 95

Samples Received: 19 SEP 95
Order Number : KO9429
Submission Sheet: KO9429
Project Number : TAS
Samples in Batch: 72

THIS REPORT HAS BEEN PREPARED FOR

THE RESOLUTE SAMANTHA GROUP

AND SHOULD BE READ IN CONJUNCTION WITH THE FINAL PAGE

Authorised by: A.J. Ferguson

ATTN: G McDONALD
THE RESOLUTE SAMANTHA GROUP
MANGANA RD
FINGAL TAS 7214

Reference No: P61690 **ATTN: G McDONALD** Page: 1

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm
Detn Limit	0.01	0.01	0.01	10
382515	0.01			<10
382515 Rpt	<0.01			<10
382516	<0.01			<10
382517	<0.01			<10
382518	<0.01			<10
382519	0.01			<10
382520	<0.01			<10
382521	0.05			<10
382522	0.01			<10
382523	0.29	0.27		290
382524	0.23	0.32		<10
382525	<0.01			<10
382526	<0.01			<10
382527	<0.01			<10
382528	<0.01			<10
382529	<0.01			<10
382530	<0.01			<10
382530 Rpt	<0.01			<10
382531	<0.01			<10
382532	<0.01			40
382533	0.02			30
382534	0.14			320
382534 Rpt	0.15			310
382535	0.20	0.22		500
382536	0.02			<10
382537	0.01			<10
382537 Rpt	0.03			<10

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge

As,
Technique - AAS

END OF REPORT

710465

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

18A Denninup Way
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Tel: (090) 21 5664
Fax: (090) 91 2200

Lot 484 Criddle St
MT MAGNET WA 6638
Tel: (099) 634 532
Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P61707

Date: 30 SEP 95

Samples Received: 25 SEP 95
Order Number : K9430
Submission Sheet: K9430
Project Number : TAS
Samples in Batch: 85

THIS REPORT HAS BEEN PREPARED FOR

THE RESOLUTE SAMANTHA GROUP

AND SHOULD BE READ IN CONJUNCTION WITH THE FINAL PAGE

Authorised by: A Ferguson
A.J. Ferguson

ATTN: G McDONALD
THE RESOLUTE SAMANTHA GROUP
MANGANA RD
FINGAL TAS 7214

Reference No: P61707 **ATTN: G McDONALD** Page: 2

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm
Detn Limit	0.01	0.01	0.01	10
382538	<0.01			<10
382539	<0.01			<10
382540	0.02			<10
382541	<0.01			<10
382541 Rpt	<0.01			<10
382542	<0.01			<10
382543	<0.01			<10
382543 Rpt	<0.01			<10
382544	0.21	0.20		<10
382545	0.03			30
382546	<0.01			<10
382547	0.09			400
382548	2.22			4140
382548 Rpt	1.88			4500
382549	0.02			120
382550	0.01			60
382551	0.02			<10
382552	0.01			<10
382553	0.34	0.44	0.43	130
382554	0.74	1.33	1.09	210
382555	0.10			<10
382556	0.03			<10
382556 Rpt	0.03			20
382557	<0.01			<10
382558	0.01			<10
382559	<0.01			<10
382559 Rpt	<0.01			<10
382560	<0.01			10
382561	0.05			190
382562	0.04			90
382563	0.01			90
382564	0.01			70
382565	0.01			40
382566	0.02			50
382567	0.01			30
382568	<0.01			<10

****

Au, Au(R1), Au(R2),
Technique - Fire Assay on a 50 gram charge

As,
Technique - AAS

END OF REPORT

MinLab

MINCULTURE LABORATORIES PTY LTD ACN 008 960 174 TRUSTEE FOR THE MINLAB UNIT TRUST TRADING AS MINLAB

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Fax: (090) 91 2200

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MT MAGNET WA 6638
Tel: (099) 634 532
Fax: (099) 634 531

ANALYTICAL REPORT

Reference No: P61775

Date: 17 OCT 95

Samples Received: 10 OCT 95
Order Number : K9432
Submission Sheet: K9432
Project Number : TAS
Samples in Batch: 150

THIS REPORT HAS BEEN PREPARED FOR

THE RESOLUTE SAMANTHA GROUP

AND SHOULD BE READ IN CONJUNCTION WITH THE FINAL PAGE

Authorised by: A.J. Ferguson

ATTN: G McDONALD
THE RESOLUTE SAMANTHA GROUP
MANGANA RD
FINGAL TAS 7214

Reference No: P61775 **ATTN: G McDONALD**

	Au ppm	Au(R1) ppm	Au(R2) ppm	As ppm
Detn Limit	0.01	0.01	0.01	10
381567	0.02			<10
381567 Rpt	0.01			<10
381568	0.38			<10
381569	0.04			<10
381570	1.30	1.47	1.30	1140
381571	0.08			<10
381572	0.02			<10
381573	4.28	5.46	5.11	60
381574	0.23			<10
381574 Rpt	0.17			<10
381575	1.39			5000
381576	2.39			1760
381577	0.53	0.63	0.56	5370
381578	1.97			3880
381579	0.76			2040
381580	0.05			40
381581	0.06			40
381582	0.07			100
381582 Rpt	0.08			120
381583	0.36			810
381584	0.31			1200
381585	0.17			200
381586	0.41			220
381587	0.02			10
381588	0.01			<10
381589	<0.01			<10
381590	1.25			40
381591	0.85			400
381592	3.93	2.11		450
381592 Rpt	6.69			460
381593	1.97			540
381594	0.35			10
381595	2.72	2.53	3.06	<10

710470

OPEN FILE

MICROFILMED
FICHE No. 013961-73

RESOLUTE SAMANTHA LIMITED

ANNUAL REPORT
1995

VOLUME 3/3

EL 22/92
"TOWER HILL"

96-3862
ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

Grant MacDonald
March 1996
GM611:jh

572 000 573 000 574 000 575 000 576 000 577 000

147°55'

5411 000
5410 000
5409 000
5408 000
5407 000
5406 000
41° 30'
5405 000
5404 000
5403 000

NEW GOLDEN GREY

SURVEY SPECIFICATIONS

Contractor	:	Geo Instruments
Aircraft	:	Helicopter
Instrumentation	:	
Survey Date	:	1990
Sample Interval	:	
Flight Line Spacing	:	200 metres
Flight Line Direction	:	090–270 degrees
Tie Line Spacing	:	400 metres
Mean Terrain Clearance	:	74 metres

PROCESSING DETAILS

The magnetic data have been corrected for regional gradient by subtraction of IGRF and decorrugated before contouring.

Processing : Southern Geoscience
Supervision : J. Ashley

PLOT SPECIFICATIONS

First Level Contours	:	.1 nT
Second Level Contours	:	.5 nT
Third level Contours	:	2 nT
Fourth Level Contours	:	10 nT
Grid Cell Size	:	12.5mN x 12.5mE

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RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

N

200 0 200 400 600

AUSTRALIAN MAP GRID
AGD84 SPHEROID
SOUTHERN HEMISPHERE

5 cm

SOUTHERN GEOSCIENCE CONSULTANTS

RESOLUTE / SAMANTHA GROUP

NORTH EAST TASMANIA

MATHINNA REGION HELIMAG SURVEY

CONTOURS OF MAGNETIC INTENSITY

SCALE: 1:10,000	J. ASHLEY
DATE: 08-05-1995	FIGURE: 16

710471

5 411 000N
5 410 000N
5 409 000N
5 408 000N
5 407 000N
5 406 000N
5 405 000N
5 404 000N
5 403 000N
572 000E
573 000E
574 000E
575000E
576 000E
577 000E

GOLDEN HORSESHOE
OLD RIVER CHANNEL
CITY OF MELBOURNE
VOLUNTEER
VOLUNTEER CONSOLIDATED
OLD BOYS
CHESTER AND MURRAY
CITY OF HOBART
GOLDEN STAIRS
ENTERPRISE
GOLDEN GATE EXTENDED
CALEDONIAN
NORTH GOLDEN GATE
GOLDEN LADDER
NEW GOLDEN GATE
GOLDEN HINGES
ZONE
VICTORIAN GOLDEN GATE
NORTH ELDORADO
SOUTH GOLDEN GATE
MAIN SLIDE
NEW ELDORADO
OF
MINERS DREAM
SOUTH MINERS DREAM
GLADSTONE
NUMEROUS
TIGHT
JUBILEE
MOUNTAINEER
FOLDS
1734-G
359-G

KEY

- Alluvial Cover
- Mathinna Beds - Ordovician to Early Devonian(?) quartzwacke turbidite sequence of interbedded sandstone, siltstone and mudstone
- 52 Bedding
- 88 Cleavage (S_1)
- 76 Cleavage (S_2)
- Wrench Fault (reactivated reverse fault? in case of main slide)
- Reverse Fault - teeth on upper plate
- Shear zone (interpreted)
- Major Syncline
- Major Anticline
- Old Workings - adit, shaft, undetailed
- Diamond drill hole

AMG
N
TN
MN
GRID CONVERGENCE 0.6°
14.7°

RESOLUTE RESOURCES LIMITED

MATHINNA PROJECT
GEOLOGY
MATHINNA AREA

AUTHOR:	SCALE: 1 : 10 000	PLAN NO:
DRAWN: CO-ORDINATED DRAFTING	DATE: FEB '95	FIGURE 17

5 cm

96-3862

ANNUAL REPORT 1995 TOWER HILL EL 2292
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574 700E | 574 800E | 574 900E | 575 000E | 575 100E | 575 200E | 575 300E | 575 400E

5 405 000N | 5 404 900N | 5 404 800N | 5 404 700N | 5 404 600N | 5 404 500N | 5 404 400N | 5 404 300N | 5 404 200N | 5 404 100N | 5 404 000N | 5 403 900N

TELEGRAPH ADIT

CITY P.A.

MT 25 (-58.5° to 235°TN)

MT 22 (-54° to 235°TN)

No.4 ADIT

FLAT REEF

REEF OCCUPIES FAULT ALONG ANTICLINAL HINGE

MT 23B (MT 23) (-55.5° to 235°TN)

No.3 ADIT

OPEN STOPES

MT 17 (-40° to 235°TN)

No.2 ADIT

DERBY REEF

No.1 ADIT

OPEN STOPES

EASTERN REEF

JUBILEE

QLD. DERBY SHAFT

MAIN SHAFT

ADIT LEVEL

WINZE

WINZE

WINZE

WINZE 10m

79m Level

DERBY REEF

WINZE OF DERBY

Zone of strong cleavage

Zone of strong cleavage and tight anticlines and synclines

GEOPHOTO DATA FROM COSTEAN (Turner, 1972)

MOUNTAINEER MINE

No.3 ADIT

No.2 ADIT

No.1 ADIT

GEOPHOTO DATA FROM COSTEAN (Turner, 1972)

E.L. 44/94

KEY

- Alluvial cover
- Mathinna beds
- Bedding (S_0)
- Primary cleavage (S_1)
- Secondary cleavage (S_2)
- Fault
- Anticline major as indicated
- Syncline major as indicated
- Minor anticlinal fold
- Minor synclinal fold
- Shear
- Representative or major vein orientation
- Flat Reef
- Derby Reef
- Lyons Reef
- Unnamed Reef
- Jubilee Reefs
- Road, major : minor
- Contours, metres a.s.l.
- Creek

SHEET INDEX

1 | 2 | 3 | 4

5 cm

AMG N TN MN

GRID CONVERGENCE 0.6°

14.7°

RESOLUTE RESOURCES LIMITED

GEOLOGY
MATHINNA PROJECT
SHEET 4

710473

AUTHOR:	SCALE: 1 : 1000	PLAN NO:
DRAWN: CO-ORDINATED DRAFTING	DATE: FEB '95	FIGURE 18

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772 A

GEOLOGICAL SKETCH MAP OF MANGANA GOLDFIELD

LEGEND

SEDIMENTARY

RECENT ..... ALLUVIUM .....

TERTIARY ..... SANDS, CLAYS, GRAVELS .....

PERMO-CARBONIFEROUS ... MUDSTONE CONGLOMERATES .....

CAMBRO-ORDOVICIAN ..... SLATES & SANDSTONES .....

IGNEOUS

UPPER MESOZOIC ..... DOLERITE (DIABASE) .....

SCALE

10 0 10 20 30 40 50 CHAINS

TOWER HILL
GOLDEN GULLY
FERN TREE CREEK
GOLDEN GULLY
GALDERS GULLY
MAJORS GULLY
ALPINE
BUCKLAND
RICHARDSONS CREEK
CARDINAL
OLD BATTERY SITE
RICHARDSONS CREEK
LITTLE DEVIL CREEK
SHEEPSKIN CREEK
SPECIMEN HILL
MANGANA
OTWAYS CREEK
OTWAYS CREEK
TO STORY CREEK
TOWER RIVULET
TO TOWER HILL
DOWNING CREEK
GRANTS CREEK
OLD BATTERY SITE
FINGAL
FINGAL GULLY
HARRISON CREEK
PINCHER
UNION JACK
SHARKEY CREEK
UNDERLAY
GOLDEN ENTRANCE
ARGYLE
MANGANA
SOUTH GOLDEN ENTRANCE
SAILORS GULLY
OLD BATTERY SITE
TO FINGAL

CHARACTERISTICS

CONTOURS

GEOLOGICAL BOUNDARIES

STRIKE & DIP OF STRATA

METALLED ROADS

UNMETALLED ROADS

QUARTZ REEFS

ACTING GOVERNMENT GE
1936

96-3862
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RESOLUTE SAMANTHA MACDONALD G
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710474
5 cm

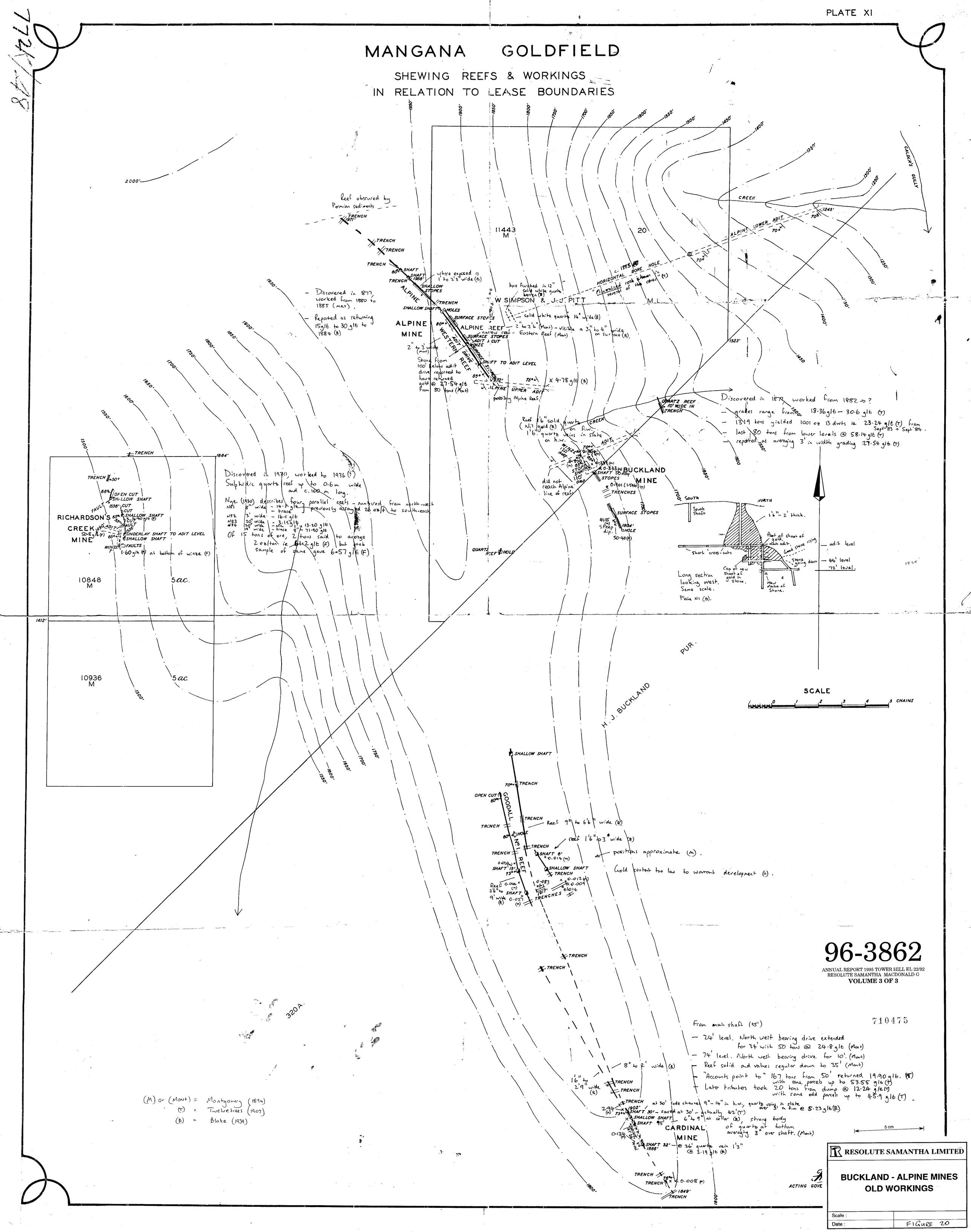
RESOLUTE SAMANTHA LIMITED

MANGANA PROSPECT
OLD WORKINGS

Scale :	
Date :	FIGURE 19

MANGANA GOLDFIELD

SHEWING REEFS & WORKINGS IN RELATION TO LEASE BOUNDARIES



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ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

710475

ACTING GOVE

RESOLUTE SAMANTHA LIMITED

BUCKLAND - ALPINE MINES OLD WORKINGS

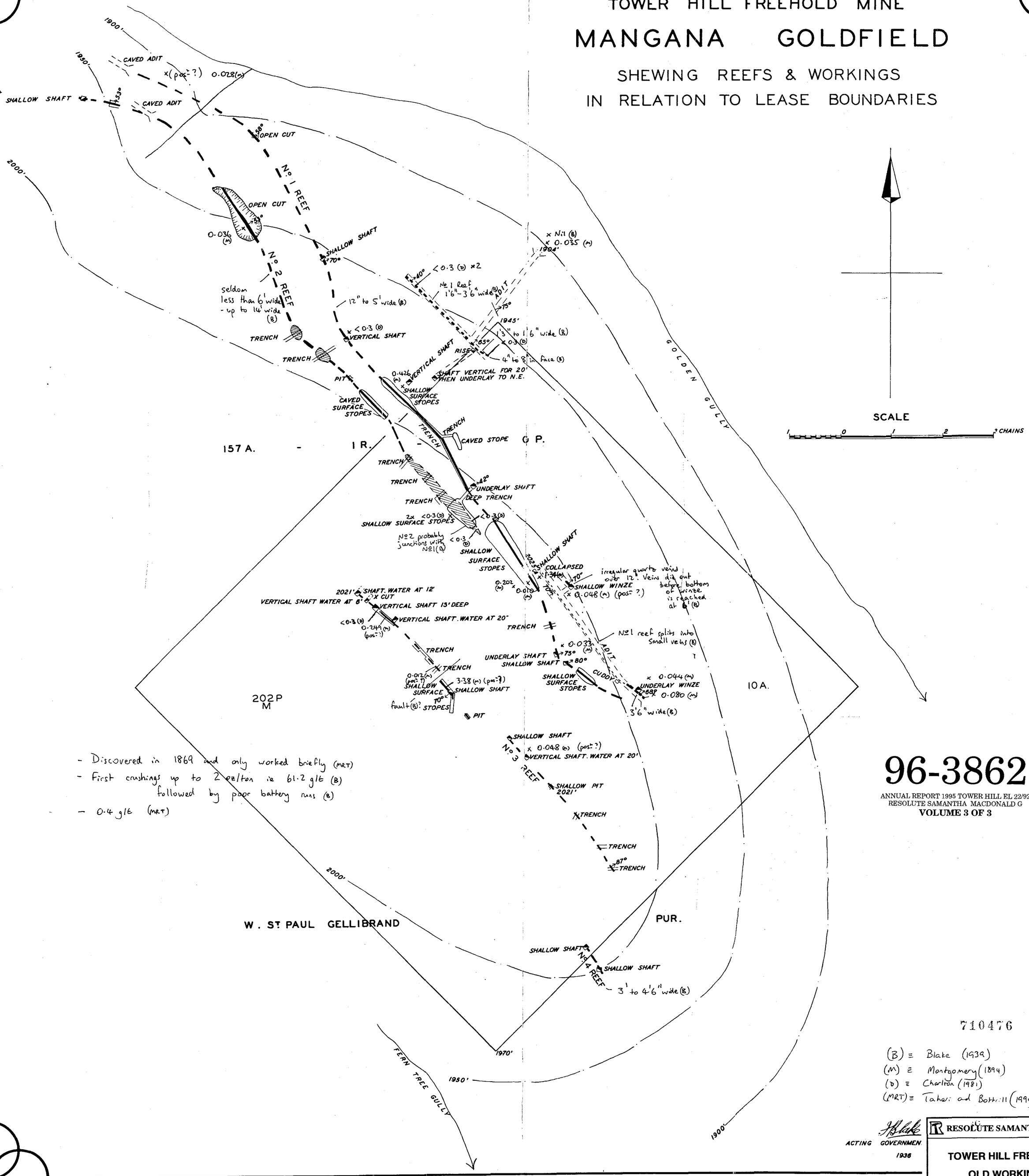
Scale :	
Date :	FIGURE 20

PLATE X

TOWER HILL FREEHOLD MINE

MANGANA GOLDFIELD

SHEWING REEFS & WORKINGS IN RELATION TO LEASE BOUNDARIES



- Discovered in 1869 and only worked briefly (MRT)
- First crushings up to 2 oz/ton ie 61.2 g/t (B) followed by poor battery runs (B)
- 0.4 g/t (MRT)

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(B) ≡ Blake (1939)
(M) ≡ Montgomery (1894)
(D) ≡ Charlton (1981)
(MRT) ≡ Tahere and Bottrill (1994)

ACTING GOVERNMENT GEOLOGIST
1936

RESOLUTE SAMANTHA LIMITED

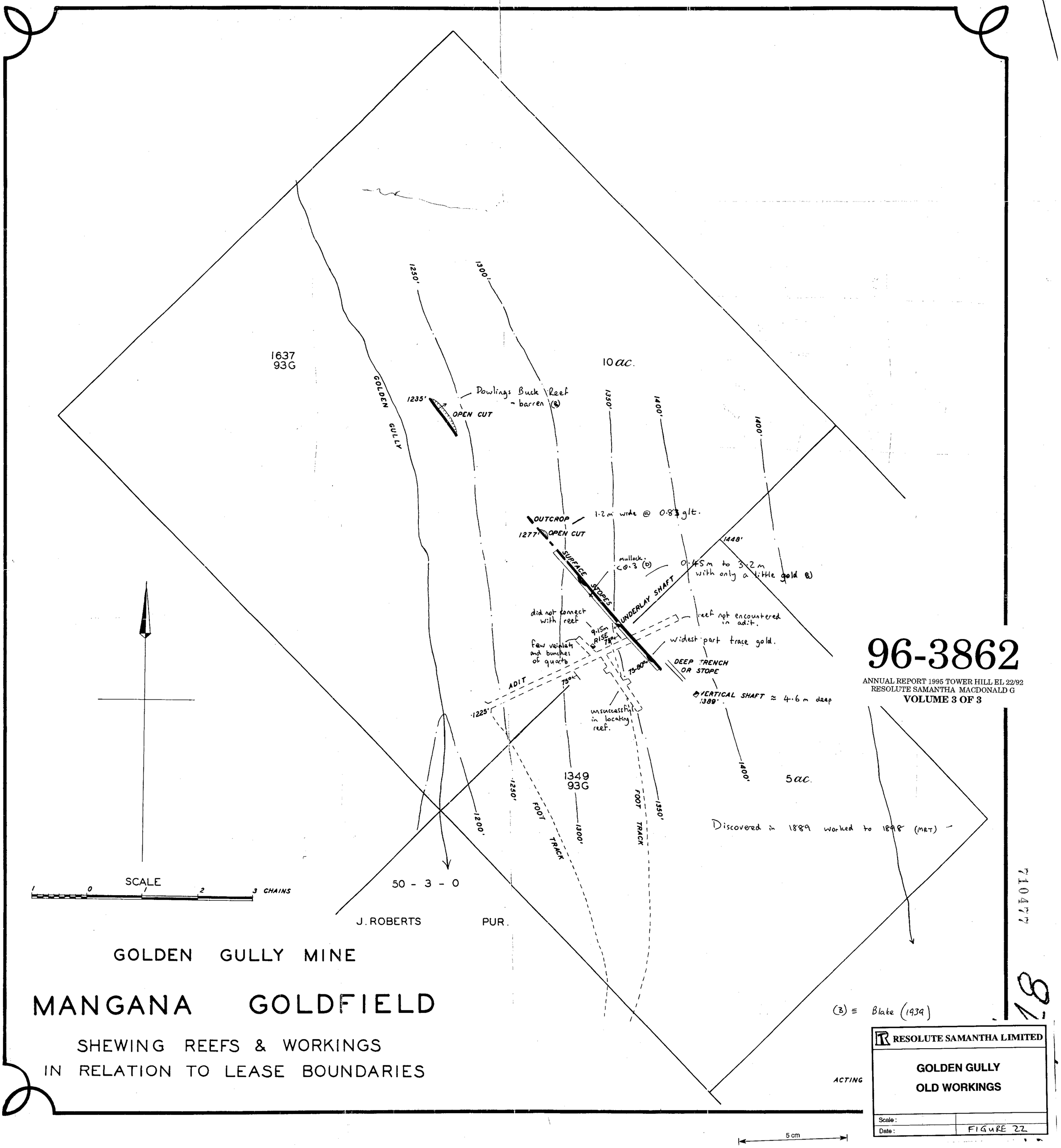
TOWER HILL FREEHOLD OLD WORKINGS

Scale :	
Date :	FIGURE 21

5 cm

Same as

PLATE IX



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RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

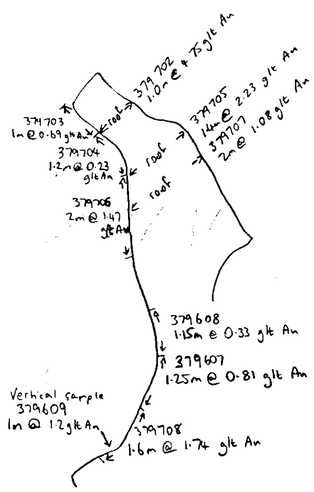
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GOLDEN GULLY
OLD WORKINGS

Scale :	
Date :	FIGURE 22

210477

18



Channel sample location / results for

ROOF IN Nº2 CONNECTS WITH FLOOR OF WINZE IN Nº 3.

Nº3 ADIT

APPROXIMATELY 8m ABOVE Nº 2 ADIT LEVEL

WINZE?

WINZE

WINZE

Nº2 ADIT

379630 0.8m @ 0.06 g/t Au

379632 1.2m @ 0.69 g/t Au.

379631 0.9m @ 0.35 g/t Au

379629 2.2m @ 0.28 g/t Au

LOOKING NORTH EAST

LOOKING SOUTH WEST

VEIN 90-155 CUT BY FAULT

F 75-051 NARROW WITH HIGH GRADE VEIN CONCORDANT

HORIZONTAL VEIN

So 55-247 CONCORDANT WITH VEIN

So 68-040 WITH ARGILLEOUS VEIN CONCORDANT

A.M.G. NORTH

All channel sample results shown as:- m's @ g/t Au. Channel samples were taken along wall unless stated otherwise.

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RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

710478

5 cm

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JUBILEE No 2 AND No 3 ADITS

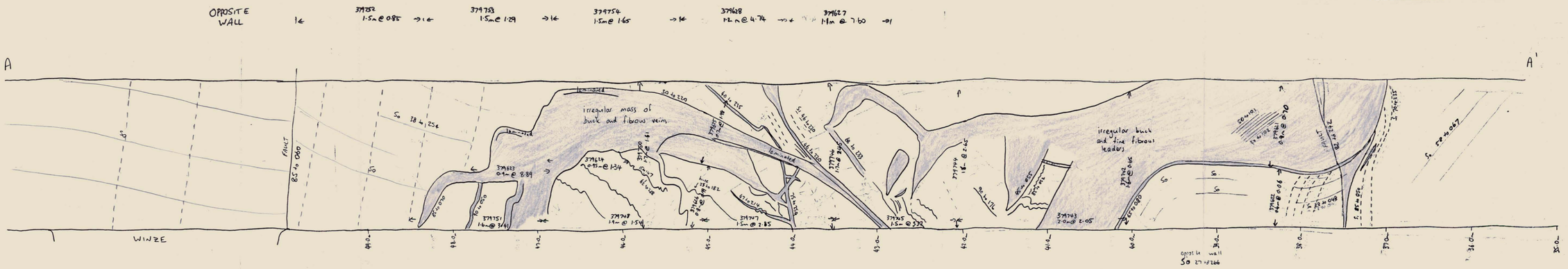
STRUCTURES AND LOCATIONS OF SECTIONS AND CHANNEL SAMPLES

Scale : 1:100
Date :

FIGURE 23

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RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3



710479

5 cm

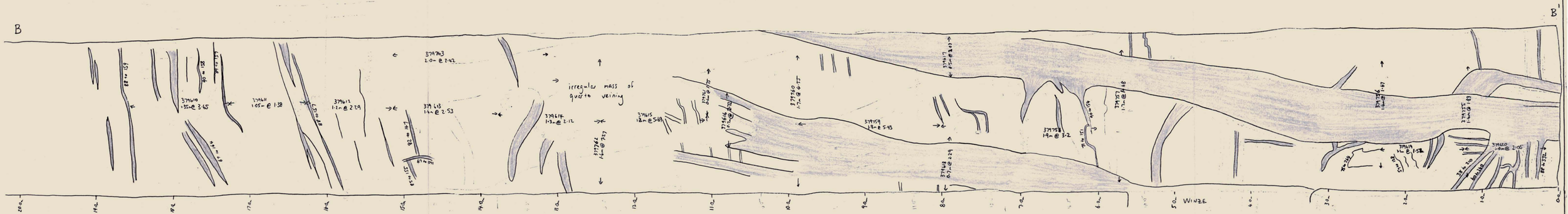
All channel sample results shown as :-
m's @ g/t Au

RESOLUTE SAMANTHA LIMITED

JUBILEE No2 ADIT
SECTION AA'
STRUCTURES AND CHANNEL SAMPLE LOCATIONS

Scale : 1: 25
Date :
FIGURE 24

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ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3



710480

5 cm

All channel sample results shown as:-
m's @ g/t Au

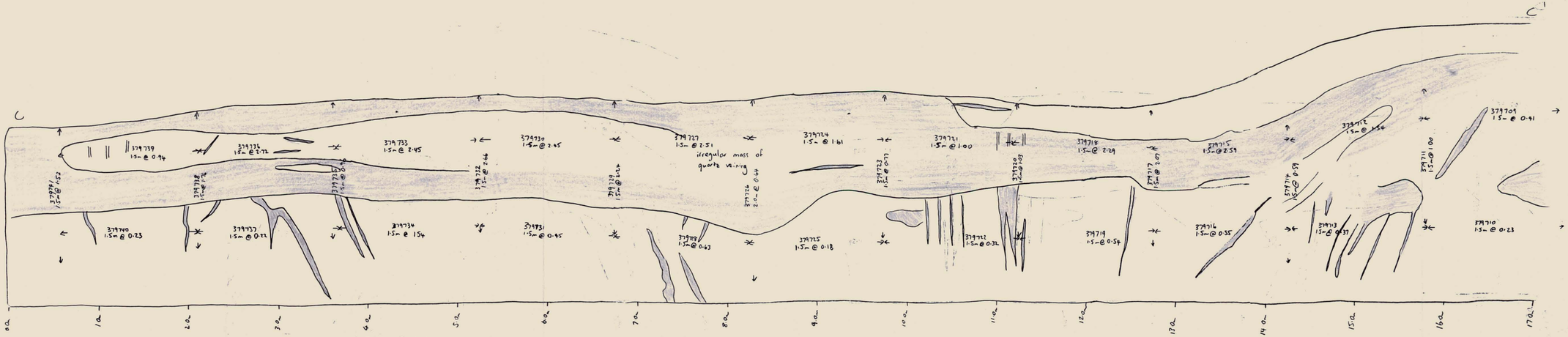
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JUBILEE No2 ADIT
SECTION BB'

STRUCTURES AND CHANNEL SAMPLE LOCATIONS

Scale: 1: 25
Date:

FIGURE 25



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VOLUME 3 OF 3

Averages:

1.5m @ 1.86g
∴ 16.5m @ 1.86g

1.5m @ 1.26
∴ 16.5m @ 0.48

710481

5 cm

All channel sample results shown as:-
m's @ g/t Au.

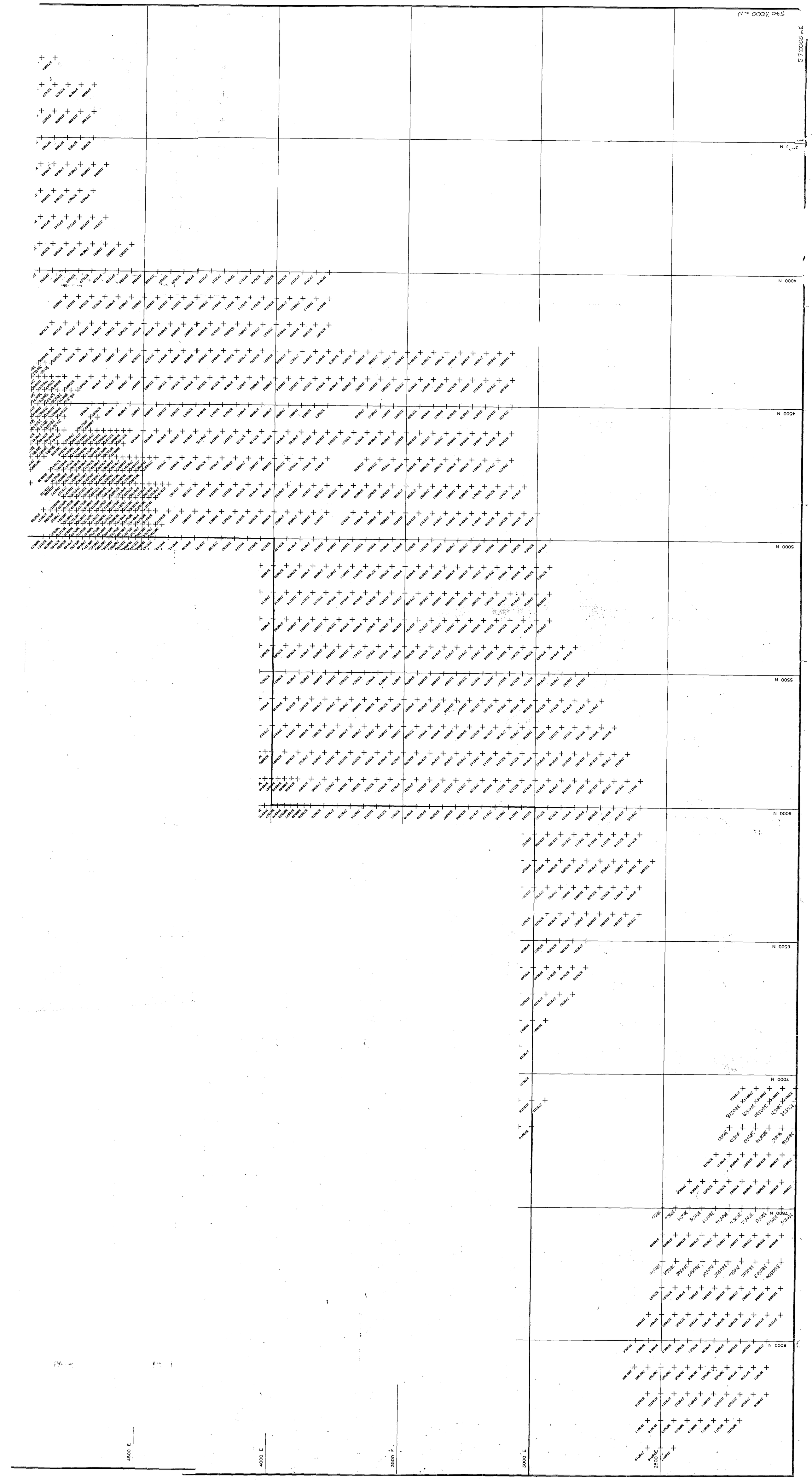
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JUBILEE No2 ADIT
SECTION CC'

STRUCTURES AND CHANNEL SAMPLE LOCATIONS

Scale: 1: 25
Date:

FIGURE 26


572000 mE
5720 3000 mN
4000 N
4500 N
5000 N
5500 N
6000 N
6500 N
7000 N
7500 N
8000 N
4500 E
4000 E
3500 E
3000 E
2500 E

3500 E

4000 E

4500 E

5000 E

5500 E

6000 E

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RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

710482

5 cm

metres
0 50 100 150 200 250 300 350

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RESOLUTE SAMANTHA LTD

MATHINNA GRID
SHALLOW B-HORIZON SOIL SAMPLE LOCATIONS

DRAWN :	SCALE , 1 : 5000	FIGURE 27.
DATE : 21 NOV 1995	CHECKED :	

LEGEND

DRILLHOLE NOTATIONS

Au (ppb)
As (ppm)

Location mark not shaded by value
Values shaded individually.

metres
0 50 100 150 200 250

MINEMAP MINE PLANNING SC

5400 N

5000 N

4500 N

5000 N

5500 N

6000 N

6500 N

7000 N

7500 N

8000 N

5500 E

5000 E

4500 E

4000 E

3500 E

3000 E

2500 E

3500 E

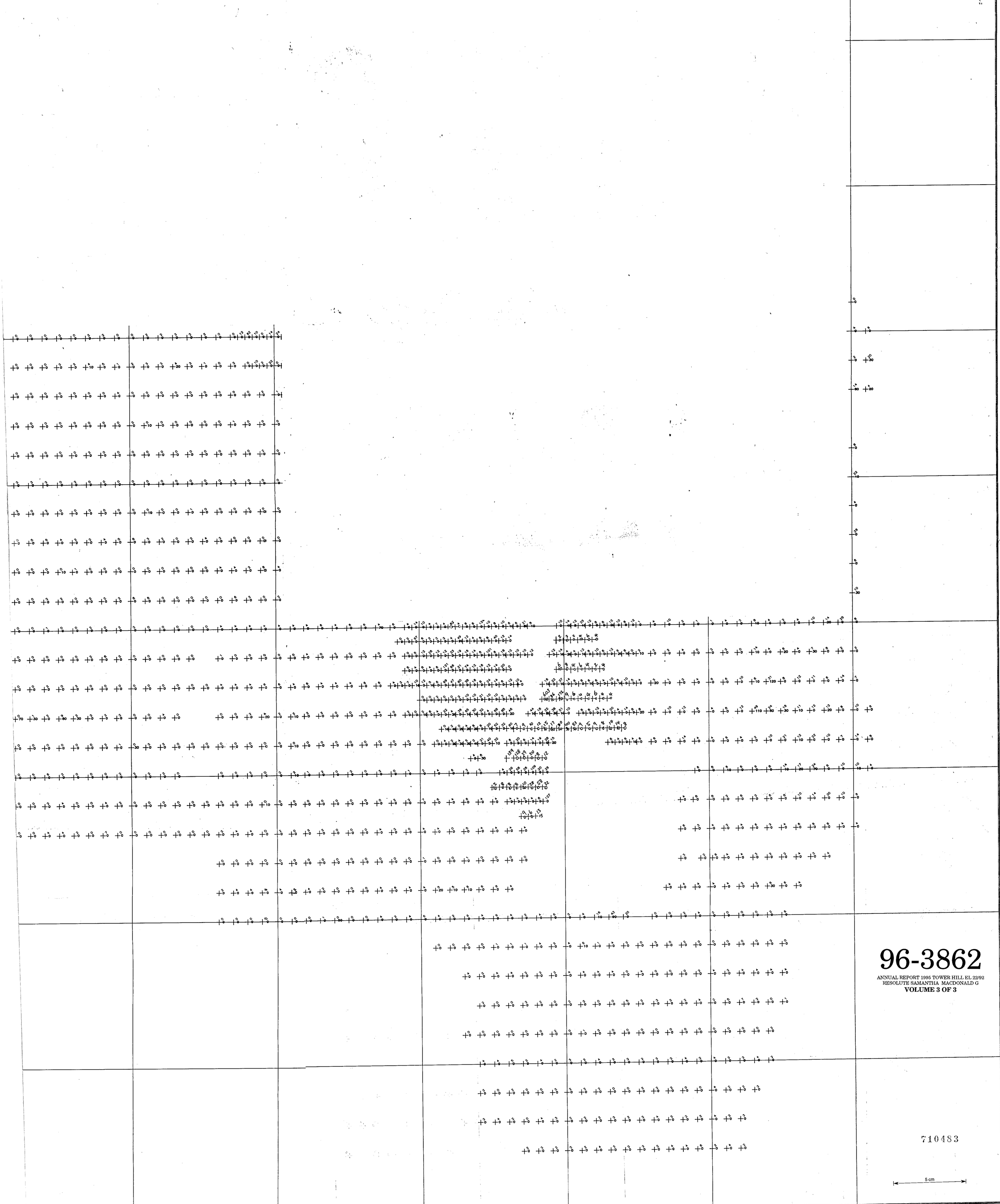
4000 E

4500 E

5000 E

5500 E

6000 E



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ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

710483

5 cm

LEGEND
DRILLHOLE NOTATIONS

Au (ppb)
As (ppm)

Location mark not shaded by value
Values shaded individually.

metres
0 50 100 150 200 250 300 350

MINEMAP MINE PLANNING SOFTWARE

RESOLUTE SAMANTHA LTD

MATHINNA GRID

SHALLOW B-HORIZON SOIL SAMPLE RESULTS - Au and As.

DRAWN :	SCALE 1 : 5000
DATE : 21 NOV 1995	CHECKED :

FIGURE 28

2500 E

3000 E

3500 E

4000 E

4500 E

5000 E

10500 N

10000 N

9500 N

9000 N

EL 22/92

EL 17/91

BASELINE

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ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

710484

5 cm

S 72000 mE

5408500 mN

metres
0 50 100 150 200 250 300 350

MINEMAP MINE PLANNING SOFTWARE

RESOLUTE SAMANTHA LTD

CHINAMENS HILL PROSPECT
SOIL SAMPLE LOCATIONS

DRAWN :	SCALE 1 : 5000	FIGURE 29
DATE : 23 NOV 1995	CHECKED :	

2500 E

3000 E

3500 E

4000 E

4500 E

5000 E

10500 N

EL 22/92

10000 N

9500 N

EL 17/91

9000 N

S 72000mE

5408500mN

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RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

710485

5 cm

LEGEND
DRILLHOLE NOTATIONS

Au (ppb)
As (ppm)

Location mark not shaded by value
Values shaded individually.

metres
0 50 100 150 200 250 300 350

MINEMAP MINE PLANNING SOFTWARE

RESOLUTE SAMANTHA LTD

CHINAMENS HILL PROSPECT

SOIL SAMPLE RESULTS - Au AND As

DRAWN :	SCALE 1 : 5000	FIGURE 30
DATE : 21 NOV 1995	CHECKED :	

7500E
8000 E
8500E
9000 E
9500 E
10000 E
10500 E

12500 N
12000 N
11500 N
11000 N
10500 N
10000 N
9500 N
9000 N
8500 N
8000 N
7500 N

BASE LINE

AMG 53 96000mN

1479 p/m.

BASELINE.

EL 17/91

BASELINE

EL 22/92

AMG 53 73000mE

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ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

710486

5 cm

metres
0 50 100 150 200 250 300 350

MINEMAP MINE PLANNING SOFTWARE

RESOLUTE SAMANTHA LTD

MANGANA PROSPECT
SOIL SAMPLE LOCATIONS

DRAWN :
DATE : 22 NOV 1995
SCALE 1 : 5000
CHECKED :

FIGURE 31.

7500 E
8000 E
8500 E
9000 E
9500 E
10000 E
10500 E

12500 N
12000 N
11500 N
11000 N
10500 N
10000 N
9500 N
9000 N
8500 N
8000 N
7500 N

EL 22/92

AMG 53 96000mN

E.L. 17/91

AMG 53 73000mE

EL 22/92

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ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

710487

5 cm

LEGEND
DRILLHOLE NOTATIONS

Au (ppb)
As (ppm)

Location mark not shaded by value
Values shaded individually.

metres
0 50 100 150 200 250 350

MINEMAP MINE PLANNING SOFTWARE

RESOLUTE SAMANTHA LTD

MANGANA PROSPECT

SOIL SAMPLE RESULTS - Au AND As

DRAWN :
SCALE 1 : 5000
DATE : 26 NOV '96
CHECKED

FIGURE 32

2500 E
3000 E
3500 E
4000 E
4500 E
5000 E
5500 E
6000 E

8000 N
7500 N
7000 N
6500 N
6000 N
5500 N
5000 N
4500 N
4000 N
3500 N

572000mE
5403000mN

710488

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RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

Au (ppb) contours

5 cm

LEGEND
DRILLHOLE NOTATIONS
+10 (ppb)
Location mark not shaded by value
Values shaded individually.

metres
0 50 100 150 200 250 300 350
MINEMAP MINE PLANNING SOFTWARE

RESOLUTE SAMANTHA LTD
MATHINNA GRID
SHALLOW B-HORIZON SOIL SAMPLE RESULTS - Au and As.
DRAWN :
SCALE 1 : 5000
DATE : 21 NOV 1995
CHECKED :
FIGURE 33.

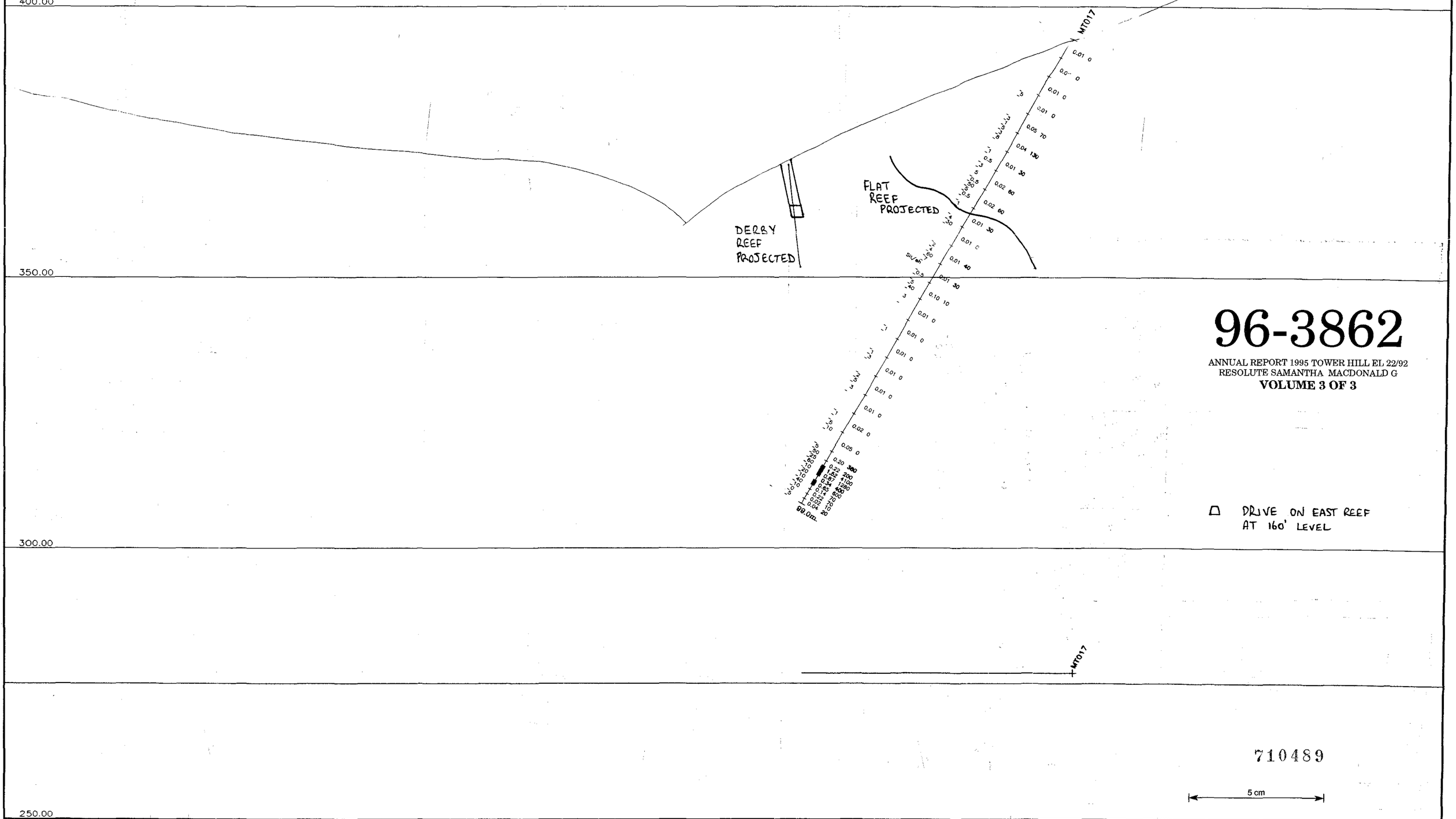
4950 E. | 4600 N. | 5000 E. | 4650 N. | 5050 E. | 5100 E.

400.00

350.00

300.00

250.00



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RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

710489

5 cm

COLOUR KEY

Column, AUPLOT Shaded by AUPLOT	AS Shaded by AS
< 0.30	< 20
– 0.50	– 50
– 1.00	– 100
– 5.00	– 500
– 1000.00	– 10000

LEGEND

Qualities: AUPLOT AS

Shaded by: AUPLOT AS

Qualities shaded individually
D-hole column shaded by: AUPLOT

metres
5.0 10 15 20 25 30 35

MINEMAP MINE PLANNING SOFTWARE

RESOLUTE SAMANTHA LTD

TASMANIA – JUBILEE PROSPECT

DRILLHOLE SECTION 4550-4700N 4900-5115E

DRAWN : RS	SCALE 1 : 500	MT017 FIGURE 34
DATE : 12 FEB 1996	CHECKED :	

4950 E.

4650 N.

5000 E.

4700 N.

5050 E.

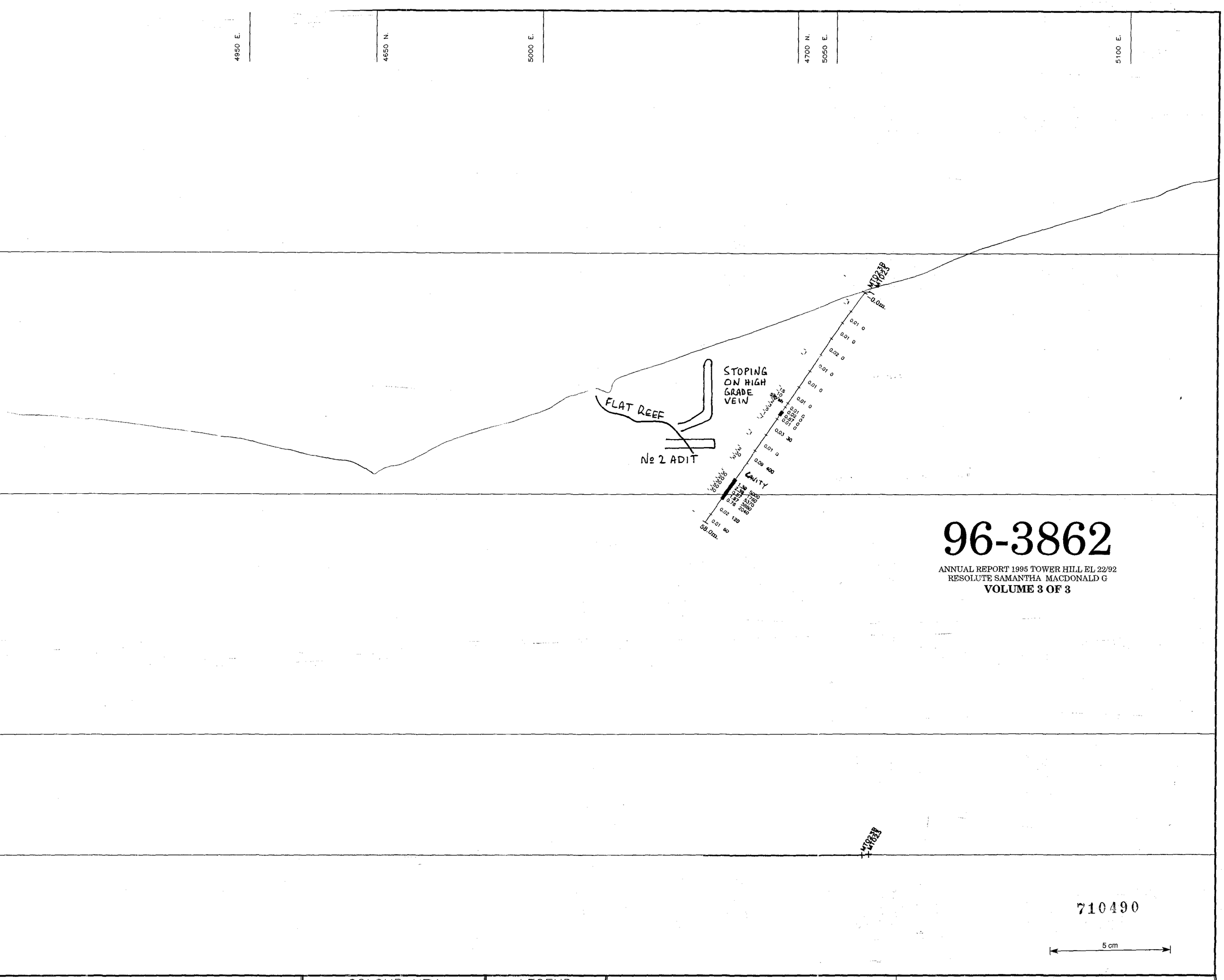
5100 E.

400.00

350.00

300.00

250.00



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ANNUAL REPORT 1995 TOWER HILL EL 22/92
RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

COLOUR KEY

Column, AUPLOT Shaded by AUPLOT	AS Shaded by AS
< 0.30	< 20
- 0.50	- 50
- 1.00	- 100
- 5.00	- 500
- 1000.00	- 10000

LEGEND

Qualities: AUPLOT AS

Shaded by: AUPLOT AS

Qualities shaded individually
D-hole column shaded by: AUPLOT

metres
5.0 10 15 20 25 30 35

MINEMAP MINE PLANNING SOFTWARE

RESOLUTE SAMANTHA LTD

TASMANIA - JUBILEE PROSPECT

DRILLHOLE SECTION 4600-4750N 4900-5115E

DRAWN : RS	SCALE 1 : 500	MT023 FIGURE 35
DATE : 12 FEB 1996	CHECKED :	

4950 E.

4700 N.

5000 E.

4750 N.

5050 E.

5100 E.

400.00

350.00

300.00

250.00

MT022

FLAT REEF

MT022

90.0m.

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RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

710491

5 cm

COLOUR KEY

Column, AUPLOT Shaded by AUPLOT		AS Shaded by AS	
	< 0.30		< 20
	- 0.50		- 50
	- 1.00		- 100
	- 5.00		- 500
	- 1000.00		- 10000

LEGEND

Qualities: AUPLOT AS

Shaded by: AUPLOT AS

Qualities shaded individually
D-hole column shaded by: AUPLOT

metres

5.0 10 15 20 25 30 35

MINEMAP MINE PLANNING SOFTWARE

RESOLUTE SAMANTHA LTD

TASMANIA – JUBILEE PROSPECT

DRILLHOLE SECTION 4650-4800N 4900-5115E

DRAWN : RS	SCALE 1 : 500	MT022 FIGURE 36
DATE : 12 FEB 1996	CHECKED :	

4950 E.
4750 N.
5000 E.
4800 N.
5050 E.
5100 E.

400.00

350.00

300.00

250.00

MT025

0.02 0
0.01 0
0.03 0
0.01 0
0.01 0
0.01 0
0.01 10
0.05 190
0.04 90
0.01 90
0.01 70
0.01 40
0.02 50
0.01 30
0.01 0
75.0m.

MT025

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RESOLUTE SAMANTHA MACDONALD G
VOLUME 3 OF 3

710492

5 cm

COLOUR KEY

Column, AUPLOT Shaded by AUPLOT		AS Shaded by AS	
	< 0.30		< 20
	– 0.50		– 50
	– 1.00		– 100
	– 5.00		– 500
	– 1000.00		– 10000

LEGEND

Qualities: AUPLOT AS
Shaded by: AUPLOT AS

Qualities shaded individually
D-hole column shaded by: AUPLOT

metres
5.0 10 15 20 25 30 35

MINEMAP MINE PLANNING SOFTWARE

RESOLUTE SAMANTHA LTD

TASMANIA – JUBILEE PROSPECT

DRILLHOLE SECTION 4700–4850N 4900–5115E

DRAWN : RS	SCALE 1 : 500	MT025 FIGURE 37
DATE : 12 FEB 1996	CHECKED :	