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EL 9/93, LOILA TIER

ANNUAL REPORT FOR

1993/1994

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24th October 1994

Offices in N.S.W., Victoria, Tasmania and Queensland
ACN 056 204 267

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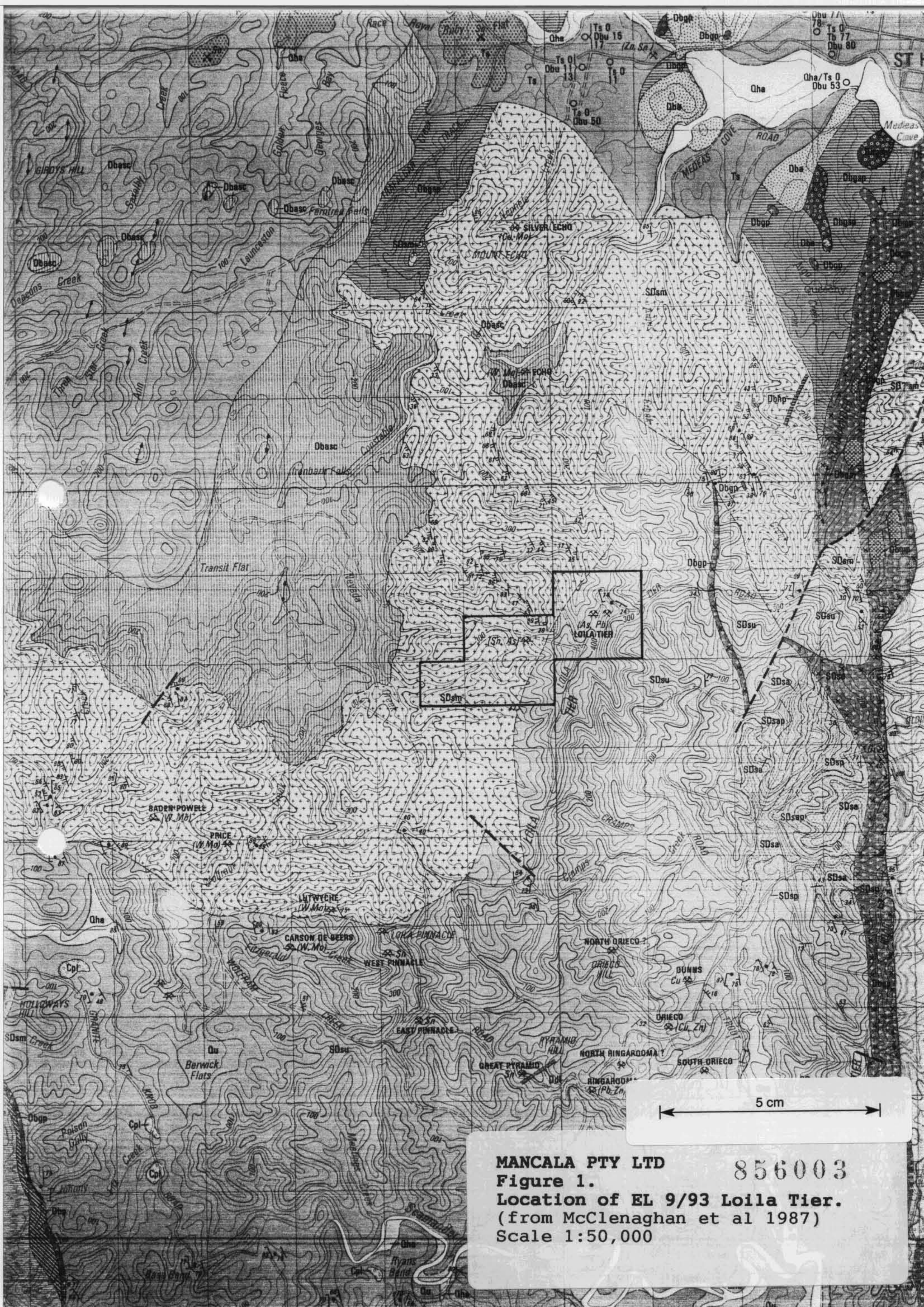

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Figure 1.
Location of EL 9/93 Loila Tier.
(from McClenaghan et al 1987)
Scale 1:50,000

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SUMMARY

EL 9/93, Loila Tier, was taken up by Mancala Pty Ltd for the purpose of investigating the potential for high grade tin mineralisation in a northeasterly trending fault structure within contact metamorphosed Mathinna Beds. Sample grades up to 4% Sn had been reported by Billiton, former holder of an Exploration Licence over the area, EL 12/78, Scamander (Ruxton 1984).

Mancala recognises a need to augment the mill feed of the Anchor Mine from a higher grade ore source. It is hoped such a source can be found in the Loila Tier fault.

Work to date has consisted of rock chip sampling, costeaning and percussion drilling. This confirmed the presence of the structure, manifest as tourmaline and quartz veins in a zone of silicification, though only three grab samples have satisfactorily confirmed the tin mineralisation. One of the percussion holes traversed the structure, with anomalous grades up to tenfold background, as defined by grades of the other drill holes, though the grades were of no consequence in economic terms.

Rehabilitation of the costeans (dug in two existing costeans) and enlarged pits was done early in 1994. This did not include filling in already existing costeans.

Further work has been temporarily suspended while attention is focussed on other projects. It is still believed there is potential for a commercial tin vein in the structure.

1. INTRODUCTION

When Mancala entered into an option agreement with Spectrum Resources Australia in 1993, to purchase the Anchor Tin Mine, near St Helens, Northeast Tasmania, its management recognised that the Anchor resource is low grade. It was thus desirable that a small high grade tin deposit be found, from which ore could be trucked to the Anchor treatment plant to augment the mine's ore. The possibility that such a deposit might exist on Loila Tier was highlighted by Billiton Australia Ltd, joint holders of the former Exploration Licence EL 12/78 (Ruxton 1984, p.173).

Exploration Licence EL 9/93, of two and a quarter square kilometres, was granted to Mancala on the 26th November 1993. It is located about 8 kilometres at 217° as the crow flies from the centre of St Helens (Figure 1). The Licence is easiest reached via Forestry roads leading from a turnoff by the Surfside Motor Inn at Beaumaris, to Cramps Road, then south on Loila Tier Road, whence a turnoff to the north leads to the Forestry Department coup designated Urana 18 (Figure 2). A steep, rudimentary track with grips cut across it goes from a log cable-line platform at 5,417,850N, 599,200E to the site at 5,418,080N, 599,440E, at which is the 'discovery' pit. The site of interest is in the forest on the north side of the coup, from the edge of the coup up to 150m northeast into the trees (Figure 2).

An alternative access, for walking only, is via a very steep track off the Loila Tier Road for 650-700m, where are two costeans and a couple of small pits, thence southwesterly down the spur to the site (Figures 1 and 2). The way to the site described above is much the easier to use, and allows four wheel drive access to it in dry weather. Wet weather turns the track to slippery, potentially deep, mud.

The prospect is based on a pair of pits on a northwestly aspect slope (Figure 2). These pits are separated by the base of a fairly large <u>Eucalyptus regnans</u> gum tree. The larger pit is

5 cm

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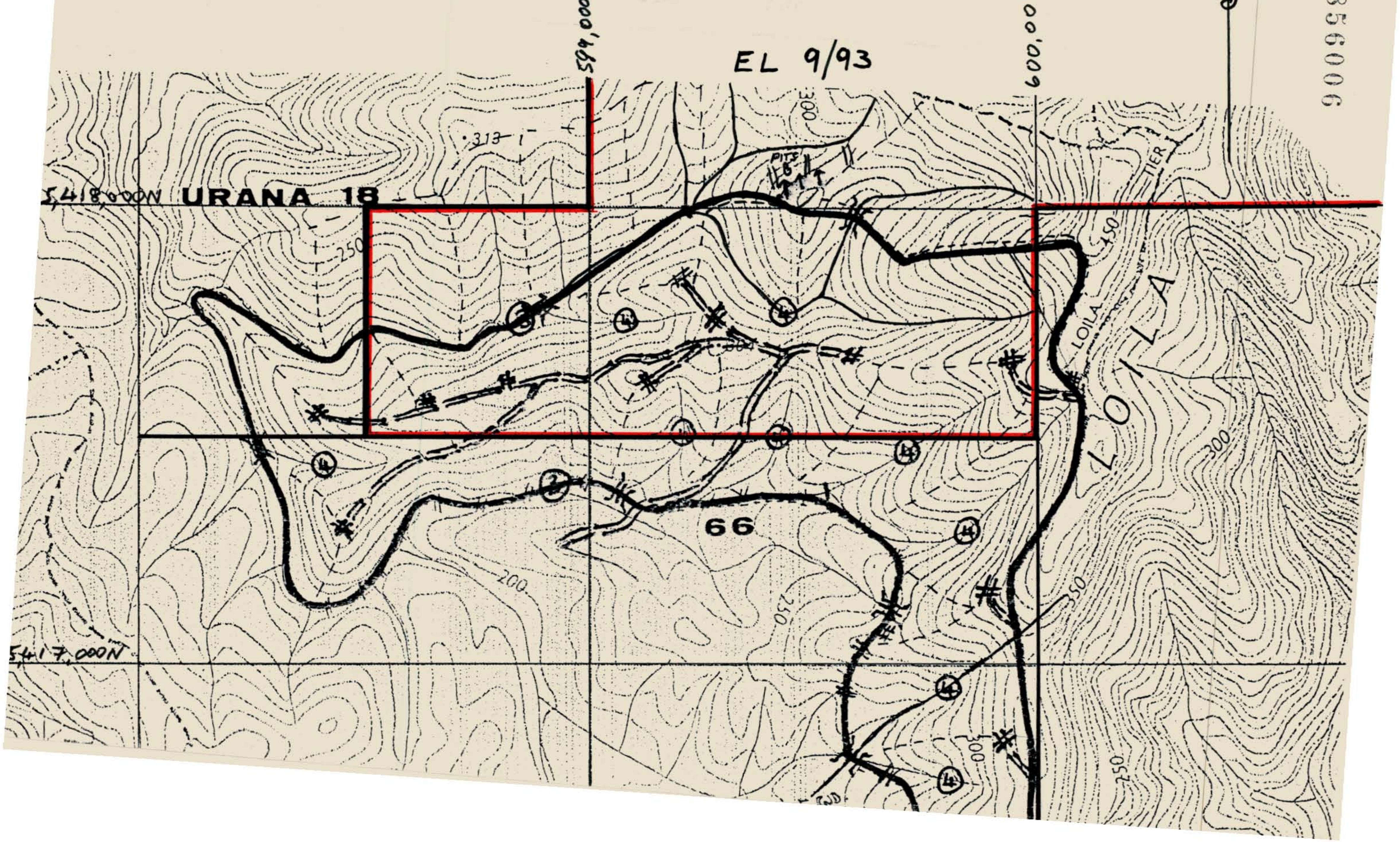
Figure 2.
Loila Tier drilling location:
Urana Coup.
Scale 1:10,000



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Greg Stewart.
Forestry Commission.
P.O. Box 6,
St. Helens 7216,

about 3 x 2.5 metres across and up to 2.5m deep. Three costeans are also on the slope, one southwest of the pits, the other two northeast of it (Figures 2 & 4). These were dug by Consolidated Goldfields in the early 1970s. This particular prospect was designated Loila Tier Prospect at that time and in subsequent descriptions, including by Ruxton (1984) (Figure 3).

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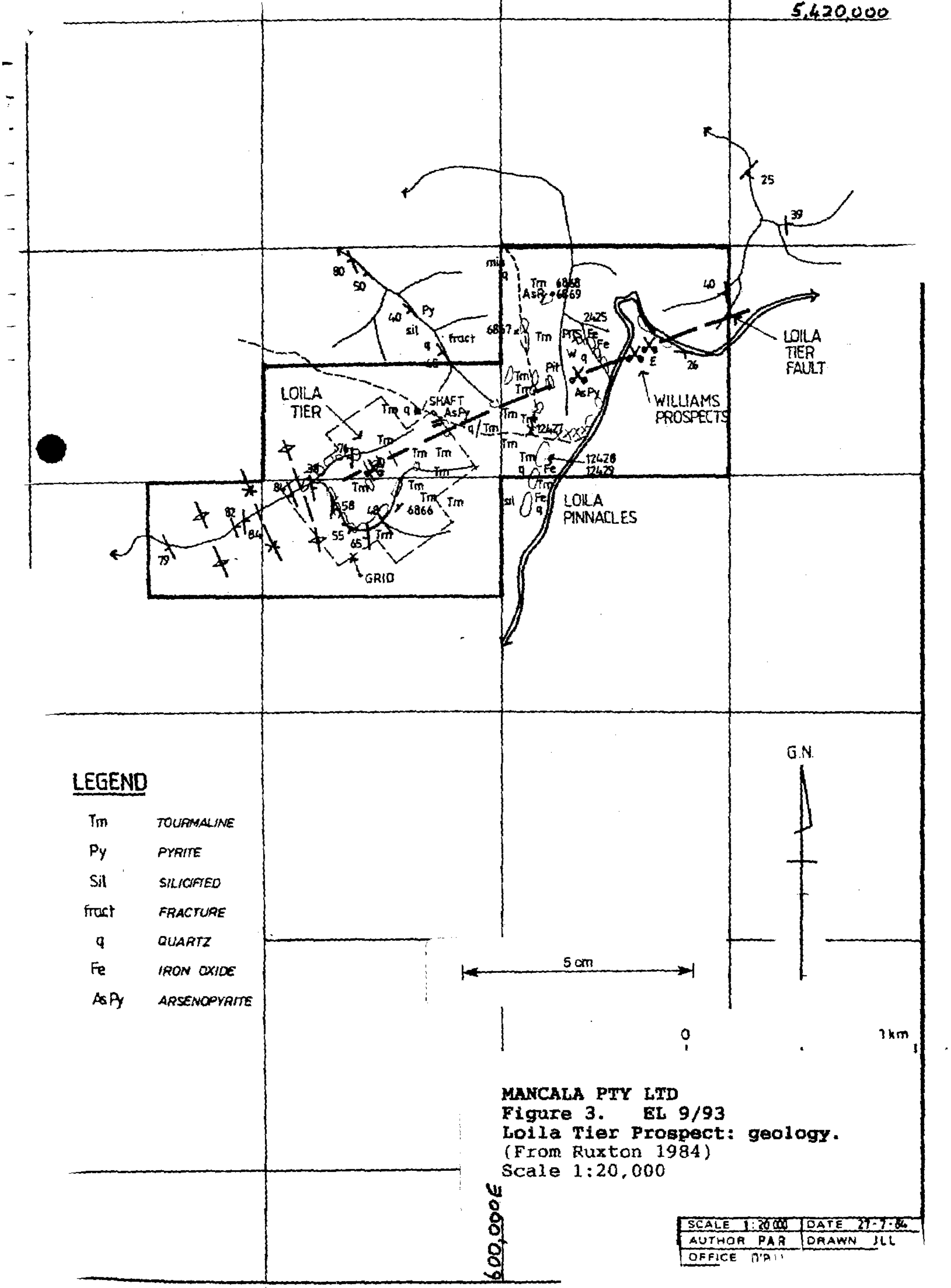

LEGEND

Tm	TOURMALINE
Py	PYRITE
Sil	SILICIFIED
fract	FRACTURE
q	QUARTZ
Fe	IRON OXIDE
AsPy	ARSENOPYRITE

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Figure 3. EL 9/93
Loila Tier Prospect: geology.
(From Ruxton 1984)
Scale 1:20,000

SCALE 1:20 000	DATE 27-7-84
AUTHOR PAR	DRAWN JLL
OFFICE	

2. PREVIOUS WORK

Loila Tier Prospect was most recently covered by the former Scamander Exploration Licence, EL 12/78, which was held by joint venture partners Billiton Australia (Shell Metals) and BHP. Prior to that it had been held by Consolidated Goldfields, who dug a total of six costeans along the Loila Tier Fault, along which are several small pits, including three on the east and west sides of the Loila Tier Road, known as Williams Prospects (Figure 3)(Ruxton 1984).

A few pegs on the Loila Tier Prospect indicated the area had been gridded by Billiton (Figure 3).

A sketch map of the Loila Tier Fault and its associated structures is shown in Figure 3, which is from Ruxton 1984.

Several reports were provided to the Department of Mines by both BHP and Shell. Those reports pertaining to the Loila Tier prospect have the following Department Library numbers:

82 - 1735 Anon.
82 - 1735A Anon.
84 - 2218 Ruxton, P.A.(1984).
85 - 2434 Whitaker, A. (1985).
86 - 2588 Whitaker, A. (1985a and 1986, Final Report).

Ruxton considered the Loila Tier Prospect had good potential for greisen-type tin mineralisation at the top of the granite that is presumed to lie beneath the contact metamorphosed Mathinna Beds. He suggested the veining and tin mineralisation at Loila Tier Prospect is indication of the proximity of the top of the granite, where it has stoped somewhat up the Loila Tier Fault, as he sketched in Figure 4 (Ruxton 1984).

172

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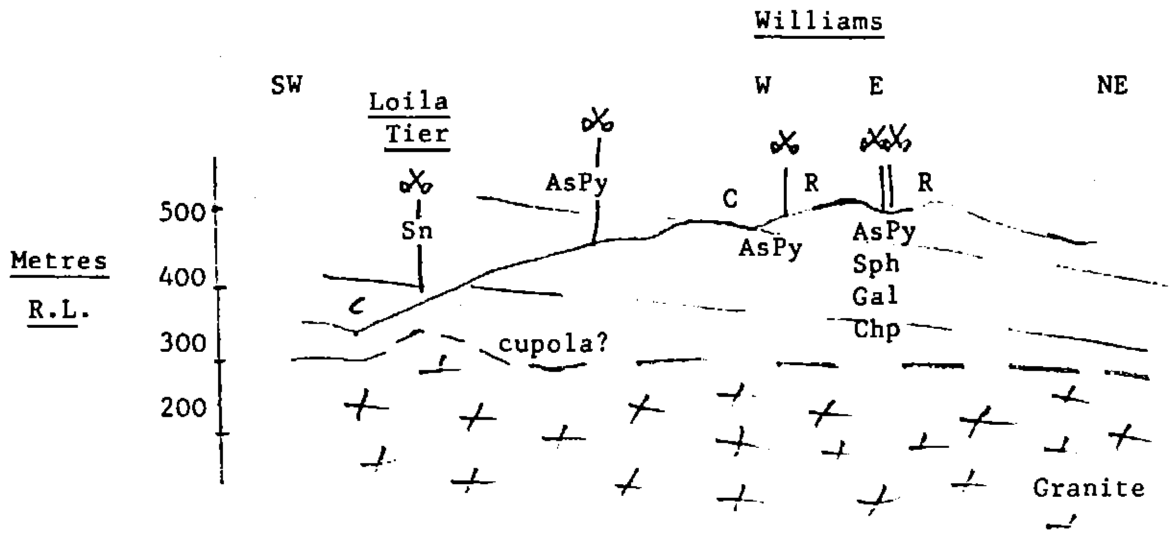

Figure 4. Conceptual long section of the Loila Tier Fault (from Ruxton 1984).

3. WORK 1993/1994

3.1 Reconnaissance and rock chip sampling

The pit whence came the reported 3.95% Sn sample (ibid) was difficult to find, particularly from the Loila Tier Road at the top of the ridge. The locality marked by the track on the St Helens Geology 1:50,000 Sheet, Figure 1 (McClenaghan at al 1987) with bracketed Sn and As is on the Loila Tier Fault and is in quartz with associated tourmaline, but despite appearances, it failed to assay appreciable tin (samples 72510 to 72514 in the summary of sample results). Coarse recrystallised arsenopyrite was very evident at this locality, which had two costeans beside a small digging; also at others along the track and by the Loila Tier Road at Williams Prospects (Figure 3).

The pits with Billiton's tin-rich sample was found about 350m down the ridge from the first excavations, along the Loila Tier Fault, on the northwest facing slope of the ridge (Figure 3). Three long costeans are in the vicinity of two pits close together. Rubble from these pits was found to include strongly silicified and brecciated quartzitic rock containing tourmaline veins, which evidently came from the northwestern corner of the larger of the two pits. Two samples of this material were taken, numbers 72532 and 72533. One with about 5% cassiterite assayed 3.26% Sn, the other assayed 0.70% Sn (see Table 2: Summary of Sample Results). The Billiton sample was reasonably repeated, confirming the correct locality was found.

At this locality, despite the three costeans (which were old), the direction of the Loila Tier Fault was not evident on the ground in the vicinity.

3.2 Costeaning

Parts of the two costeans originally dug by Consolidated

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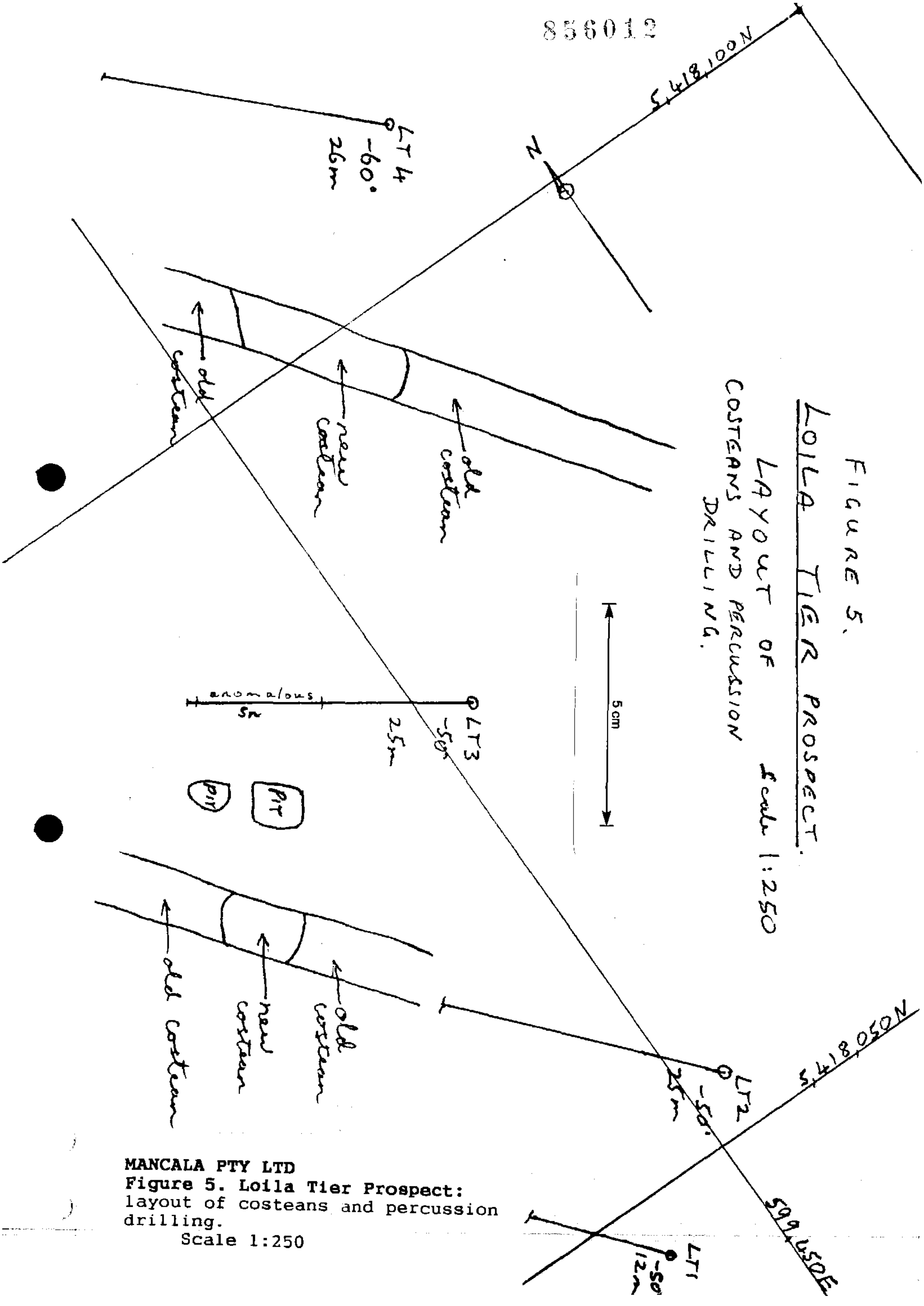

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Figure 5. Loila Tier Prospect:
layout of costeans and percussion drilling.
Scale 1:250

Goldfields that flanked the 'discovery' pit were excavated further in a line (Figures 5) in an attempt to expose more of the Loila Tier Fault.

The 'discovery' pit was dug out some more to try to further expose the mineralisation. This was frustrated somewhat by the presence of a large, live tree standing where it was desirable to dig.

3.3 Percussion drilling

Three percussion holes of about 25m depth were planned t o test the fault. It transpired that four holes were drilled, as the first attempt resulted in jammed rods when the hole was at 12 metres. See Figure 5 for the locations of the drill holes and Table 1 for a summary of the holes.

Table 1: Locations and attitudes of percussion drill holes.

Hole No.	Depth m	Coords	Azimuth	Dip
LT1	12	5,418,047N, 599,444E	320	-50
LT2	25	5,418,053N, 599,452E	318	-50
LT3	25	5,418,078N, 599,453E	305	-50
LT4	26	5,418,108N, 599,468E	314	-60
Total	**88**			

3.4 Rehabilitation

The re-dug costeans and pits were infilled in February 1994 by the same excavator that dug them. The anti-erosion grips were also re-formed on that same excursion.

4. RESULTS

The rocks of the area have been mapped as lying within the contact aureole adjacent to a granodiorite part of the granitic complex that is the Blue Tier Batholith (McClenaghan et al 1992a), which makes the rocks psammites and pelites (McClenaghan 1992). This is diagrammatically shown in Figure 4.

4.1 Rock chip sampling

The reader is referred to Table 2 for the results of the rock chip sampling.

The samples taken on the first visit to the prospect area looked interesting in having quite spectacular recrystallised euhedral arsenopyrite in quartz with smaller dark brown euhedral crystals presumed (wrongly)to be cassiterite. This is why we looked no further on that occasion along the line of quartz outcrops that signified the Loila Tier Fault. The results of samples 72510 to 72514 ranging from 0.01% to 0.09% Sn dispelled the impression the dark brown crystals were cassiterite.

A second visit with a copy of Ruxton's sketch (Figure 3) in hand, and much more walking, led to finding the 'discovery' pit with a pile of stone beside it, some of which was strongly silicified, brecciated, quartzitic sandstone with tourmaline veins through it, containing some different and more lustrous brown euhedral crystals up to 1.5mm, which this time were correctly identified as cassiterite (samples 72532 and 72533, Table 2), and practically repeating Ruxton's sample result of 3.95% Sn (Ruxton 1984) with one result of 3.26% Sn. Some fine pyrite and arsenopyrite are associated with the tourmaline veins and joint faces, though it was emphasised in the 1983 write-up on the prospect (Ruxton 1984) there was no sulphide found in association with the cassiterite in this pit.

4.2 Costeans

Sketches of the costeans are in Figures 6 and 7, with their relative positions shown in Figure 5. Essentially the costeans uncovered hornfelsed Mathinna Beds siltstone weathered to cream and tan, well jointed and shot through with small quartz veins, generally trending NNE, and occasional quartz-tourmaline veins trending SE. There are marked differences in the two costeans.

The northeastern costean (Figure 5) is cut diagonally by a continuous, though narrow (10cm) vertical quartz-tourmaline vein (Figure 6) of the type found in the 'discovery' pit, but striking southeasterly, at an oblique angle to the Loila Tier Fault. Assays of samples of this vein returned 0.1% Sn (Table 2).

The southwestern costean (Figure 7) is typified by a brecciated and sheared zone on the northeast wall with irregular gossanous limonitic bands dipping 60 to 70° to the east, which makes their strike roughly 120° to the Loila Tier Fault. The up to 10cm quartz veins in this costean strike 030°, at about 30° to the fault. Some of these quartz veins are grey coloured, which is reminiscent of the gold-bearing quartz veins of the Alberton Field. Samples of the gossanous material assayed 0.3 and 0.1% Sn.

The 'discovery' pit was excavated a little to expose fresh rock for the purpose of mapping, as shown in Figure 8. Notable in this exposure is the massive silicified siltstone/sandstone, appearing like quartzite, with quartz and tourmaline veins in the northwestern third of the northeastern wall. It is presumed the material containing the crystals of cassiterite in the pile of stone excavated in the past from the pit came from this quadrant of the pit, because of the similarity of the pile of stone with the in-situ rock. The brecciated zone in the right hand corner of the SW wall and the grey quartz veins next to this zone are presumed to be associated with the silicified zone on the NE wall, and both are associated with the Loila Tier Fault.

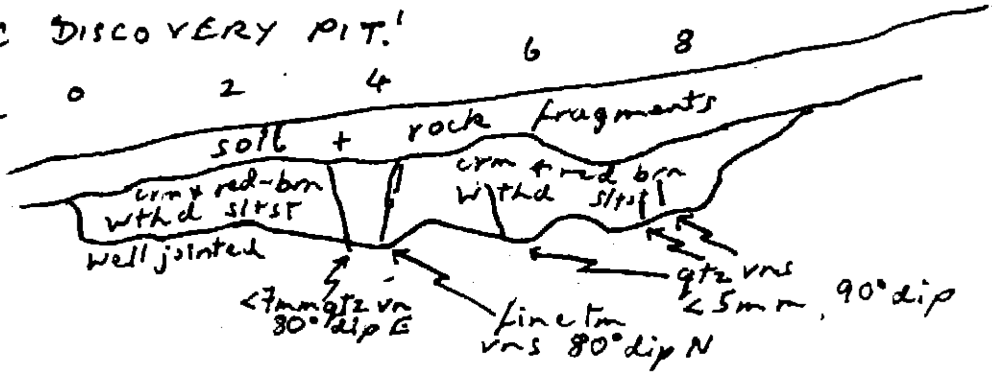
LOILA TIER COSTEANS

17·3·94

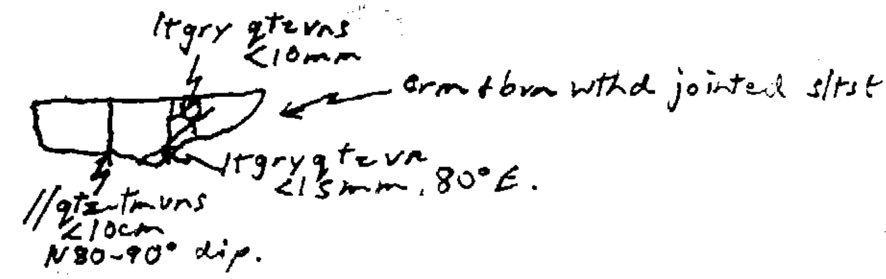
Scale: 1:100

1. N.E. of 'DISCOVERY PIT.'

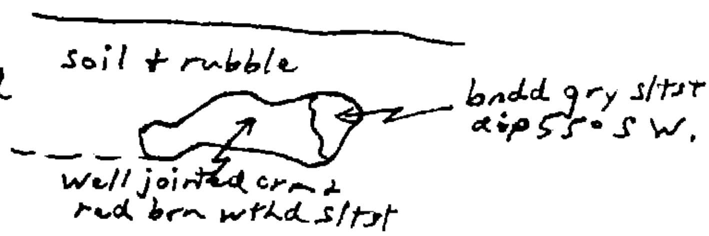
N.E. Wall



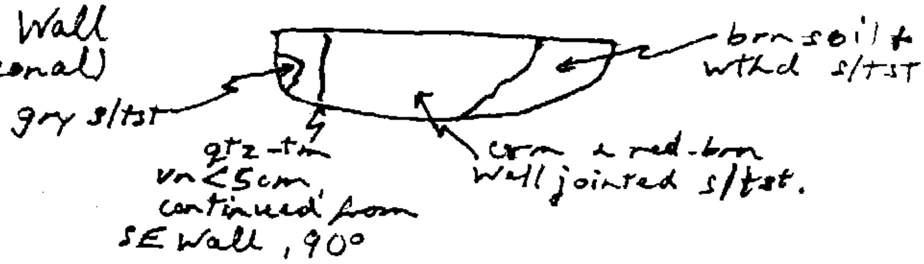
S.E. Wall



S.W. Wall



N.W. Wall (diagonal)



PIT PLAN

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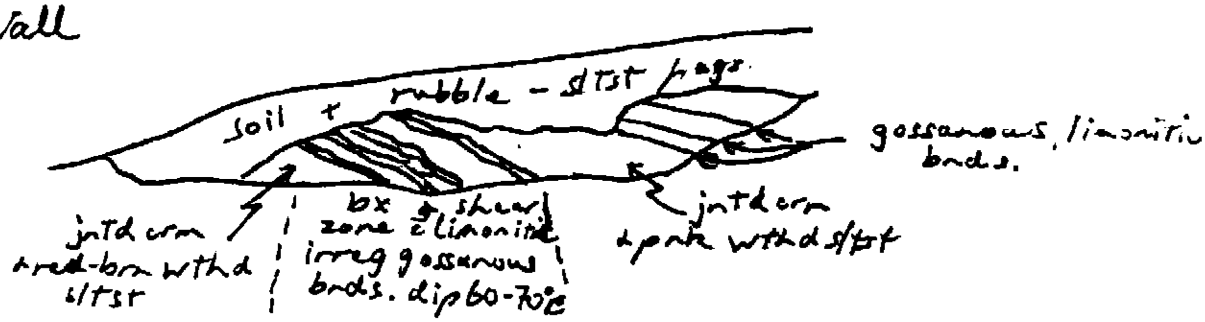
Figure 6. Loila Tier costeans:
sketches of NE costean.
Scale 1:100

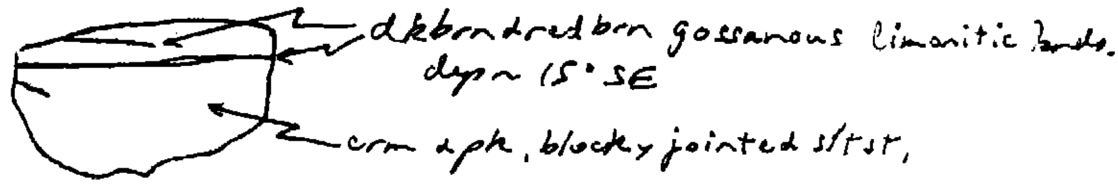
2. S.W. of 'DISCOVERY PIT'.

0 2 4 6 8 m

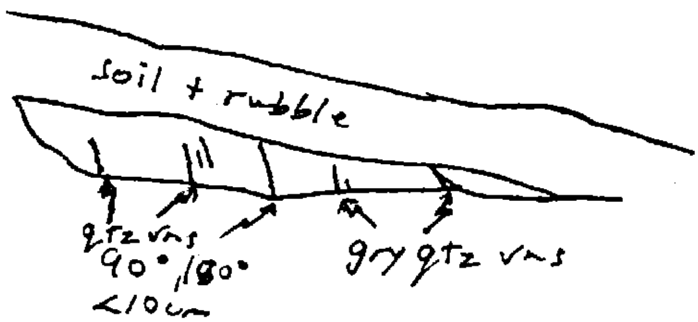
N.E. Wall



S.E. Wall (sloped NW)

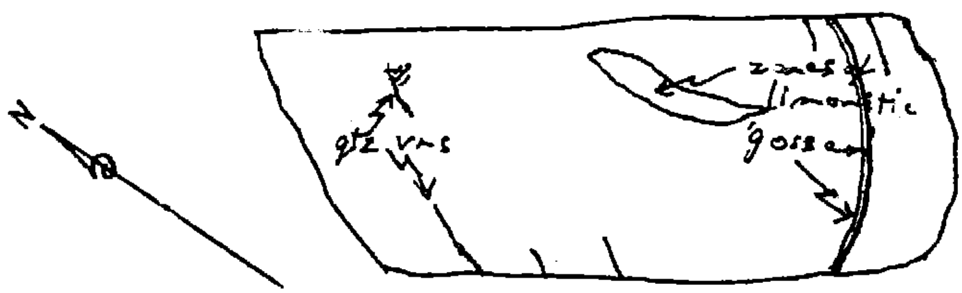


S.W. Wall



N.W. Wall is rubble

PIT PLAN



scale: 1:100

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Figure 7. Loila Tier costeans: sketches of SW costean. Scale 1:100

5 cm

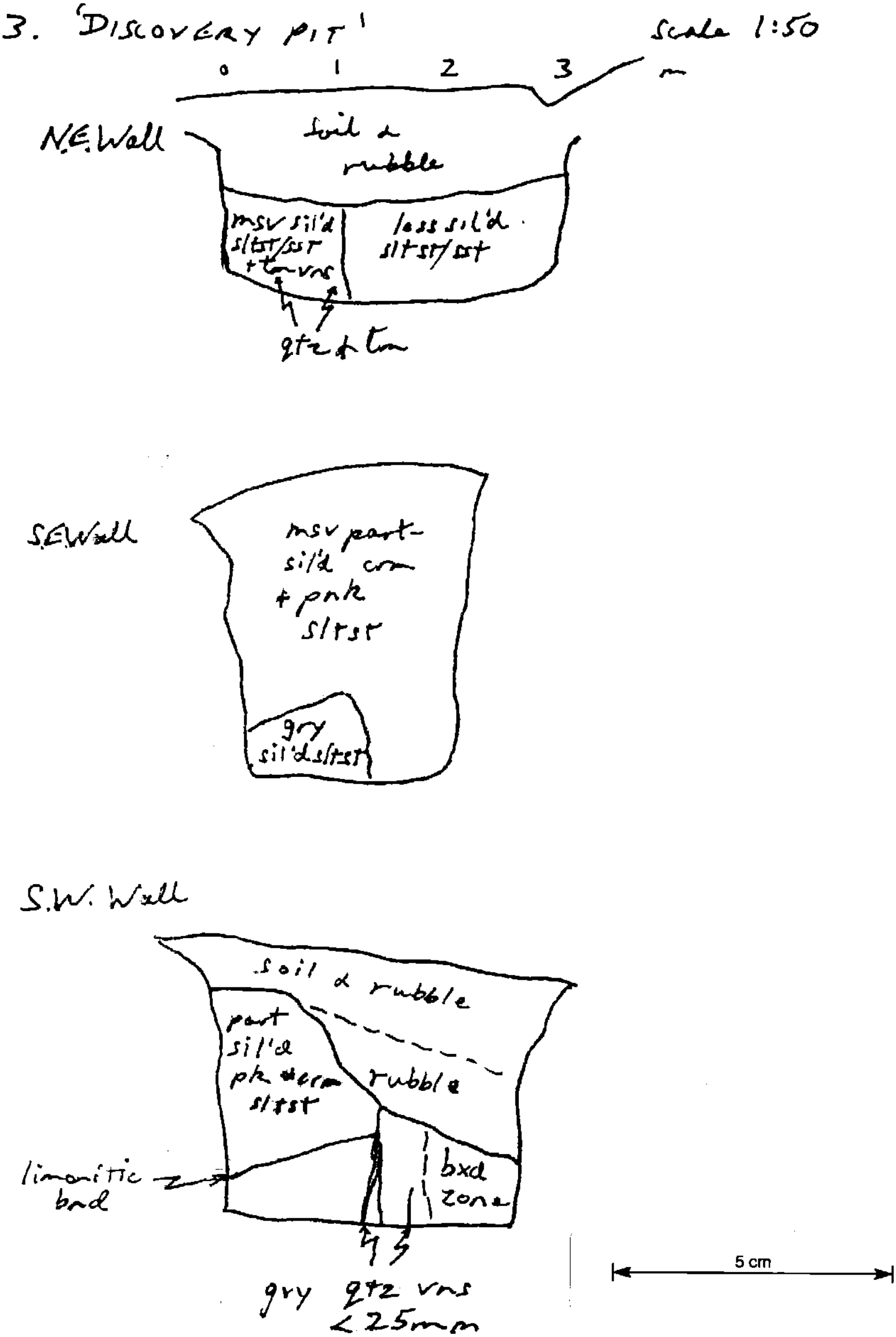

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Figure 8. Loila Tier:
sketches of 'discovery' pit.
Scale 1:50

TABLE 2: **LOILA TIER: SUMMARY OF SAMPLE RESULTS, 1993/1994.**

SAMPLE NUMBER	DATE	LOCATION	AMG COORDS	COMMENT	% Sn	% Cu	% W	%Fe
				Rock chip samples:				
72510	25-Aug-93	Loila Tier	5,418,290N, 599,700E	Quartz with recryst. arsenopyrite. Floater.	0.010	-	-	-
72511	25-Aug-93	Loila Tier	5,418,288N, 599,700E	Pit: quartz with recryst. arsenopyrite.	0.070	-	-	-
72512	25-Aug-93	Loila Tier	5,418,287N, 599,700E	Pit: quartz with recryst. arsenopyrite.	0.090	-	-	-
72513	25-Aug-93	Loila Tier	5,418,285N, 599,701E	Pit: quartz with recrystallised arsenopyrite.	0.020	-	-	-
72514	25-Aug-93	Loila Tier	5,418,283N, 599,702E	Pit: quartz with recrystallised arsenopyrite.	0.010	-	-	-
72532	10-Sep-93	Loila Tier	5,418,080N, 599,440E	Pits S.W. end. Strongly sil'd with tm vns.	0.700	-	-	-
72533	10-Sep-93	Loila Tier	5,418,080N, 599,440E	Pits S.W. end Sil'd, tm vns, 5% cassiterite.	3.260	-	-	-
				Percussion drilling:				
72924	20-Dec-93	Loila Tier LT1	5,418,047N, 599,444E	10-11m: grey siltstone.	0.016	0.007	0.001	4.03
72925	20-Dec-93	Loila Tier LT1	5,418,047N, 599,444E	11-12m: grey & red-brown siltstone.	0.007	0.008	0.001	4.84
72926	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	0-10m split: grey & red brown siltst.	0.002	0.006	0.002	2.85
72927	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	0-10m grabs: grey & red brown siltst.	0.001	0.007	0.001	3.83
72928	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	10-11m: red-brown siltstone.	0.009	0.005	0.001	2.50
72929	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	11-12m: yellow siltstone.	0.001	0.004	0.001	2.23
72930	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	12-13m: yellow siltstone.	0.001	0.004	0.001	2.21
72931	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	13-14m: yellow siltstone.	0.001	0.056	0.001	2.50
72932	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	14-15m: yellow siltstone.	0.001	0.006	0.001	3.21
72933	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	15-16m: yellow siltstone.	0.002	0.009	0.001	3.58
72934	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	16-17m: red-brown siltstone.	0.001	0.009	0.001	3.26
72935	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	17-18m: red-brown siltstone.	0.001	0.005	0.001	2.61
72936	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	18-19m: red-brown siltstone.	0.002	0.006	0.001	3.15
72937	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	19-20m: red-brown siltstone.	0.001	0.007	0.001	2.55
72938	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	20-21m: red-brown siltstone.	0.001	0.008	0.001	2.64
72939	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	21-22m: red-brown siltstone.	0.001	0.010	0.001	3.07
72940	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	22-23m: red-brown siltstone.	0.001	0.012	0.001	3.68
72941	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	23-24m: red-brown siltstone.	0.002	0.007	0.001	3.56
72942	21-Dec-93	Loila Tier LT2	5,418,053N, 599,452E	24-25m: red-brown siltstone.	0.001	0.007	0.001	3.79
72943	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	0-10m: red-brown & pink siltst.	0.004	0.006	0.001	4.55
72944	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	10-11m: buff siltstone.	0.002	0.008	0.001	3.36
72945	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	11-12m: tan siltstone.	0.007	0.012	0.001	3.06
72946	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	12-13m: tan siltstone.	0.005	0.018	0.001	2.93
72947	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	13-14m: tan siltstone.	0.039	0.022	0.001	3.33
72948	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	14-15m: tan siltstone.	0.040	0.020	0.001	3.35
72949	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	15-16m: tan siltstone.	0.036	0.016	0.001	3.45
72950	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	16-17m: tan siltstone.	0.025	0.011	0.001	3.08
72951	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	17-18m: tan siltstone.	0.013	0.010	0.001	2.74
72952	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	18-19m: tan siltstone.	0.017	0.009	0.001	2.87
72953	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	19-20m: tan siltstone.	0.023	0.010	0.001	3.02
72954	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	20-21m: tan siltstone+ quartz.	0.023	0.012	0.001	3.53
72955	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	21-22m: tan siltstone+ quartz.	0.025	0.012	0.001	3.82
72956	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	22-23m: tan siltstone+ quartz.	0.022	0.010	0.001	3.57
72957	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	23-24m: tan & buff siltstone.	0.020	0.011	0.001	3.60
72958	21-Dec-93	Loila Tier LT3	5,418,078N, 599,453E	24-25m: tan & buff siltstone.	0.004	0.010	0.001	3.31
72959	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	0-10m: tan, grey & buff siltstone.	0.003	0.009	0.001	3.96
72960	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	10-11m: tan siltstone.	0.004	0.010	0.001	4.15
72961	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	11-12m: buff siltstone.	0.027	0.008	0.001	3.01
72962	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	12-13m: buff siltstone.	0.003	0.008	0.002	3.35
72963	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	13-14m: dark buff siltstone.	0.004	0.010	0.001	3.92
72964	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	14-15m: buff siltstone.	0.004	0.014	0.001	4.23
72965	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	15-16m: tan siltstone.	0.005	0.013	0.002	6.14
72966	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	16-17m: tan siltstone.	0.006	0.007	0.001	4.03
72967	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	17-18m: tan & green-grey siltstone.	0.003	0.005	0.001	3.06
72968	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	18-19m: green-grey siltstone.	0.001	0.003	0.001	2.53
72969	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	19-20m: green-grey siltstone.	0.001	0.004	0.001	3.00
72970	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	20-21m: buff siltstone.	0.002	0.006	0.001	2.46
72971	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	21-22m: buff siltstone.	0.001	0.007	0.001	2.71
72972	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	22-23m: damp green-grey siltstone.	0.002	0.010	0.001	3.06
72973	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	23-24m: damp green-grey siltstone.	0.003	0.010	0.001	2.96
72974	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	24-25m: damp grey siltstone.	0.003	0.010	0.001	3.35
72975	21-Dec-93	Loila Tier LT4	5,418,108N, 599,467E	25-26m: damp grey siltstone.	0.002	0.009	0.001	3.43
				Costeans & pit samples:				
73259	25-Mar-94	Loila Tier	5,418,075N, 599,437E	West costean: gossanous vein.	0.300	-	-	-
73260	25-Mar-94	Loila Tier	5,418,075N, 599,437E	West costean: gossanous vein.	0.100	-	-	-
73261	25-Mar-94	Loila Tier	5,418,097N, 599,461E	East costean: quartz and tourmaline vng.	0.100	-	-	-
73262	25-Mar-94	Loila Tier	5,418,104N, 599,454E	East costean: quartz and tourmaline vng.	0.100	-	-	-
73263	25-Mar-94	Loila Tier	5,418,080N, 599,440E	Original pit: quartz and tm vng, NE wall.	1.000	-	-	-

4.3 Percussion drilling

Results of the percussion drill holes are summarised in Table 2.

The rig used, a quarry blast hole machine, was strictly limited in its depth capacity to about 25m, which was unfortunate, because three of the four holes really needed to go further than that to locate and test the fault, that being the intent of the exercise.

In the first hole, LT1, the rods jammed at 12m, through inexperience of the operator with both the rig and the ground.

Hole LT3 showed tin grades consistently higher than those of the other holes, in the interval 13-24m. The grades over this intersection were hardly spectacular in mining terms but they were significantly anomalous in exploration terms to indicate the hole had traversed the fault, or at least a zone of elevated tin values.

This means of testing for tin is probably highly inaccurate and can only be considered one of indicating its presence qualitatively rather than quantitatively.

5. INTERPRETATION OF RESULTS

The attempt to expose the Loila Tier Fault in the re-dig of the costeans evidently failed, since neither of the deepened costeans exposed what could be interpreted as the fault. Nor could signs of the fault be seen in the old costeans. However, in hindsight it is considered most likely the fault cuts diagonally to the two newly dug parts of the costeans, which both missed it, as the original costeans apparently also did. This fits with the 060° strike of the fault, as shown in Figure 3, though, as noted above, there is no other indication of the fault observable on the ground in the vicinity of the pits and costeans.

If the fault is not actually exposed in the 'discovery' pit, there are adequate signs of its proximity in the silicification and brecciation. The presence of tourmaline veins and spotting of the black shales suggests proximity of granite. A further inference of this situation is the likelihood of a greisen, by inference tin-rich, stoped into the fault not very far below the cassiterite mineralisation seen in the pit.

Percussion hole LT3 probably traversed the fault, for the 13-24m interval is definitely anomalous in tin, and patchily so in copper, against the grades of these elements in the other drill holes (Table 2). It also indicated the fault is practically vertical.

Pyrite is evidently ubiquitous throughout the Mathinna Beds and the fault zone, as seen in the iron grades, and as indicated by the gossanous material in the southwestern costean.

There seems to be no significant presence of tungsten in the fault zone at this locality, though it has been observed in the fault at Williams Prospects (Ruxton 1984).

Tourmaline is evidently common in the vicinity (ibid & Figure 3). This might indicate offshoot structures of the fault.

6. CONCLUSION

In the opinion of the writer, the Loila Tier Fault is still prospective for a small high grade tin deposit, because it could be indicating an intruded greisen not far down the fault. Whether this might be an open cut proposition is dependent on the depth of the greisen, if indeed it is there as surmised, or of economic grade vein-contained tin. With sufficient grade and continuity, it is conceivable either possibility might come up with underground mining potential.

At this stage there is not enough information to support either notion.

It appears the fault is seven metres wide and vertical, or close to it at this point, judging by the width of the anomalous zone in hole LT3.

7. RECOMMENDATION

The tin bearing potential of the Loila Tier Fault at this locality should be tested with at least one diamond drill hole to intersect it at 25m depth or more. This would require a forty to forty five metre hole, -60° at 150°, collared 12m from the nearer edge of the 7 metre wide fault zone. This would provide a better fix on the nature and further prospectivity of the fault.

It would also be the first diamond drill hole into the Loila Tier Fault.

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