



ABN: 38 120 284 040  
Level 13 256 Adelaide Terrace, PERTH WA 6000  
[www.kangaroometals.com.au](http://www.kangaroometals.com.au)

## KML QUARTERLY REPORT SEPTEMBER 2008: EXPLORATION UPDATE

**Kangaroo Metals Limited** (ASX: KML), a diversified exploration and mining company with projects in North Queensland and Tasmania, would like to inform its shareholders of the current exploration, production, and general operations in North Queensland and Tasmania.

### Antimony Reward, North Queensland:

#### Soil Surveys:

KML has completed a prospect-scale soil survey of 328 samples covering the previously explored area to the west and south of the historic workings. The results received from ALS, Townsville, are depicted above as 20 metre gridded data with 50m search range and IDW2 local estimates applied. The results indicate an anomalous zone trending to the south-west of an area identified by previous explorers, indicating possible extensions or replications of the historically mined zone. Additional soil survey programs will now be planned to seek to close off the south-west trend and explore an additional region to the north of the waterway identified from the preliminary geophysics images collected across the region.

#### Drilling:

KML has completed a diamond core program at Antimony Reward. Following the significant results of the first round of drilling, the second round using reverse circulation was stopped short of the ore zone to enable diamond tails to be used to examine the geological controls of the ore body in more detail. Examination of the core is expected to take several months to complete.



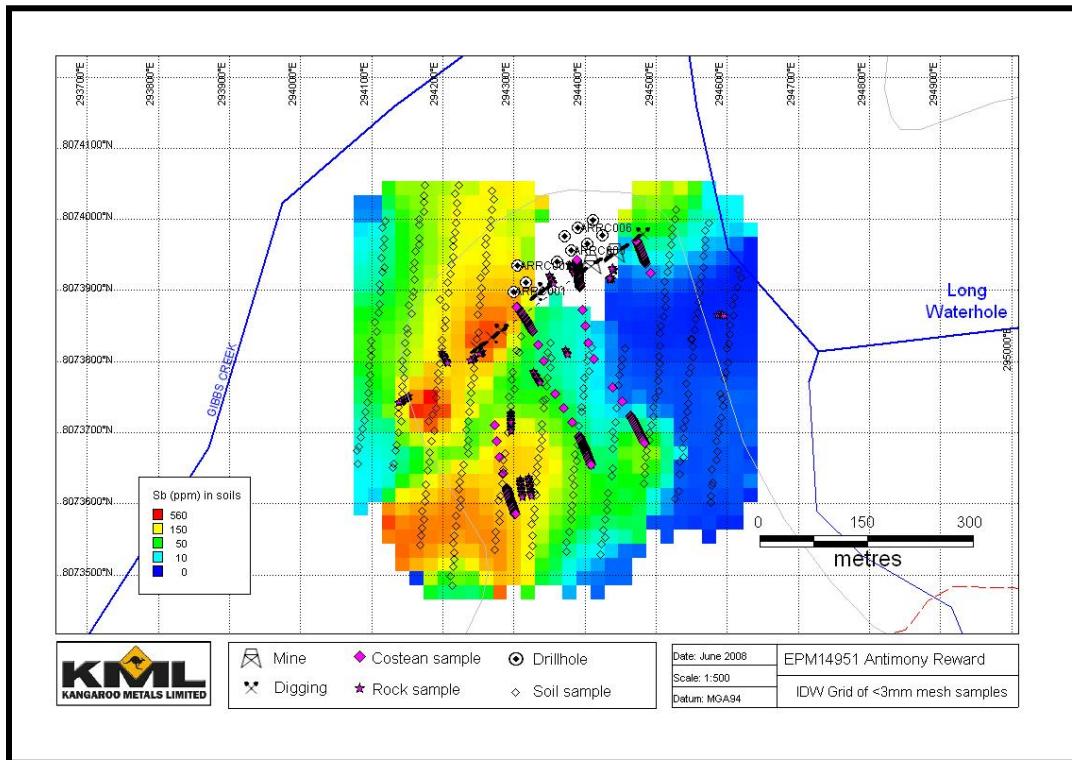


Plate 9 Soil sampling pattern already completed at Antimony Reward

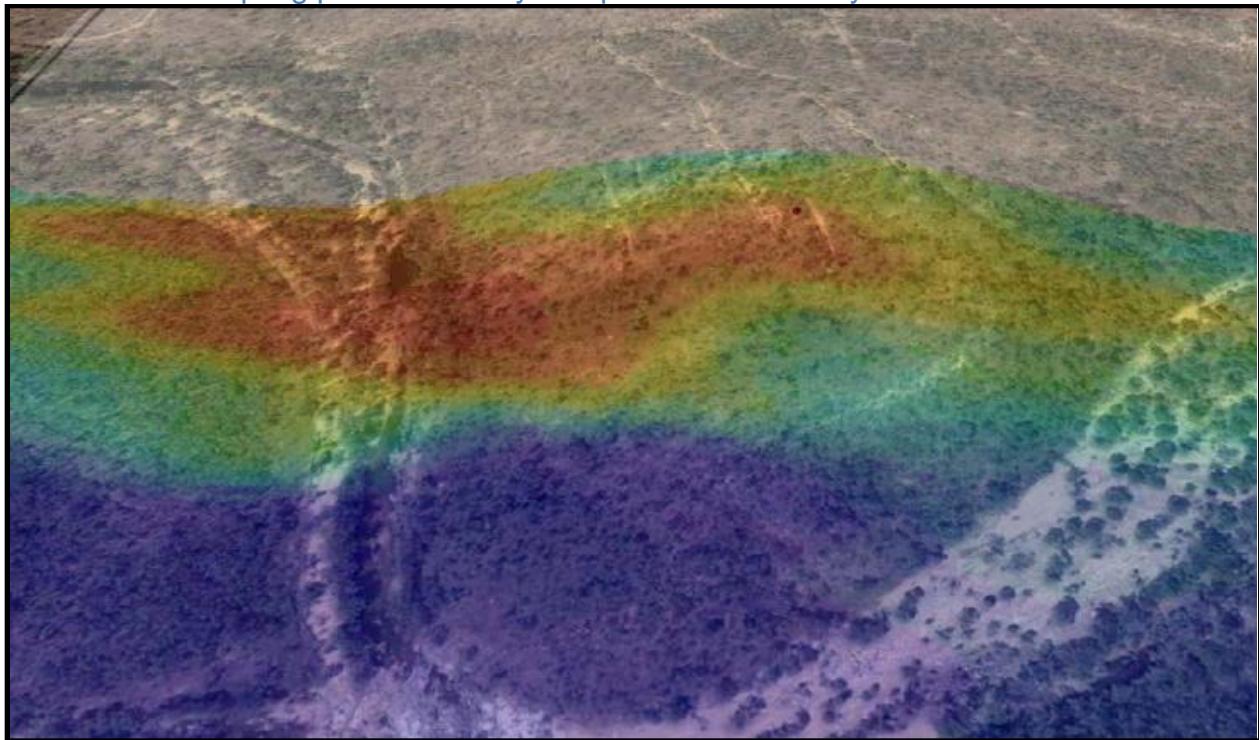


Plate 10 Geophysical data at Antimony Reward. Current drill site marked by red dot.

Soil survey and geophysical data support continuity of the underlying structure beyond the region of current exploration. Additional soil surveys across structures identified proximal to the present ore body are planned.

**Stannary Hills, North Queensland:**

Soils sampling of Stannary West and Stannary North (Plate 10) is now completed with results awaiting analysis. The aim of soil sampling these regions is to test for extensions and parallel structures around the significant producers in the region, which includes Lass O'Gowry, Iona (pictured in Plate 10), Ironclad, Silver Lining and Young Australian, to identify possible extensions to these historic mining sites.

The planned drill program for Stannary Hills remains on hold to allow exploration resources to focus on the current projects in other areas.

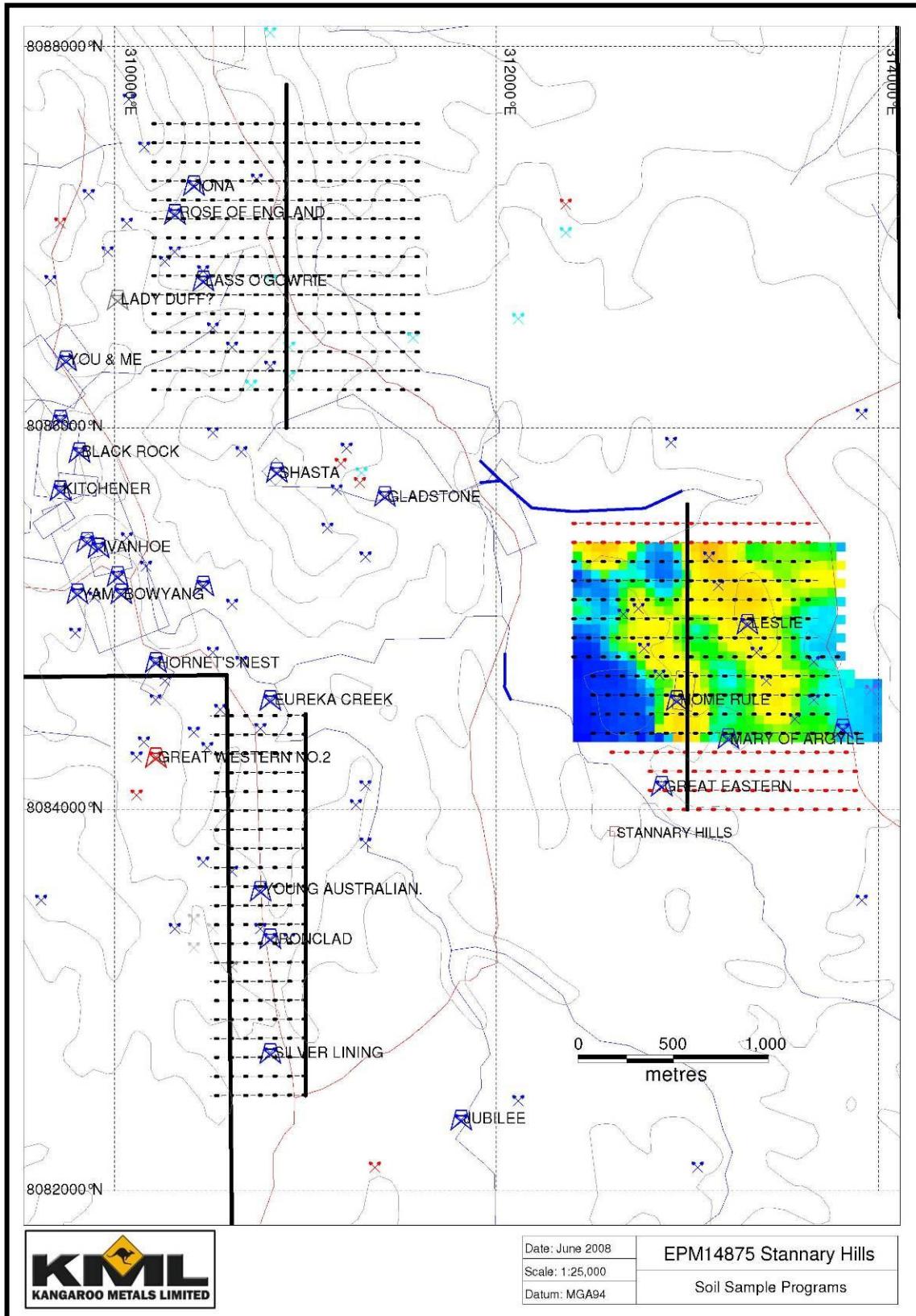


Plate 11 Stannary Hills Soil Sampling program with previous data showing anomalous tin results.

## **Mt Ruby (Silver Valley), North Queensland:**

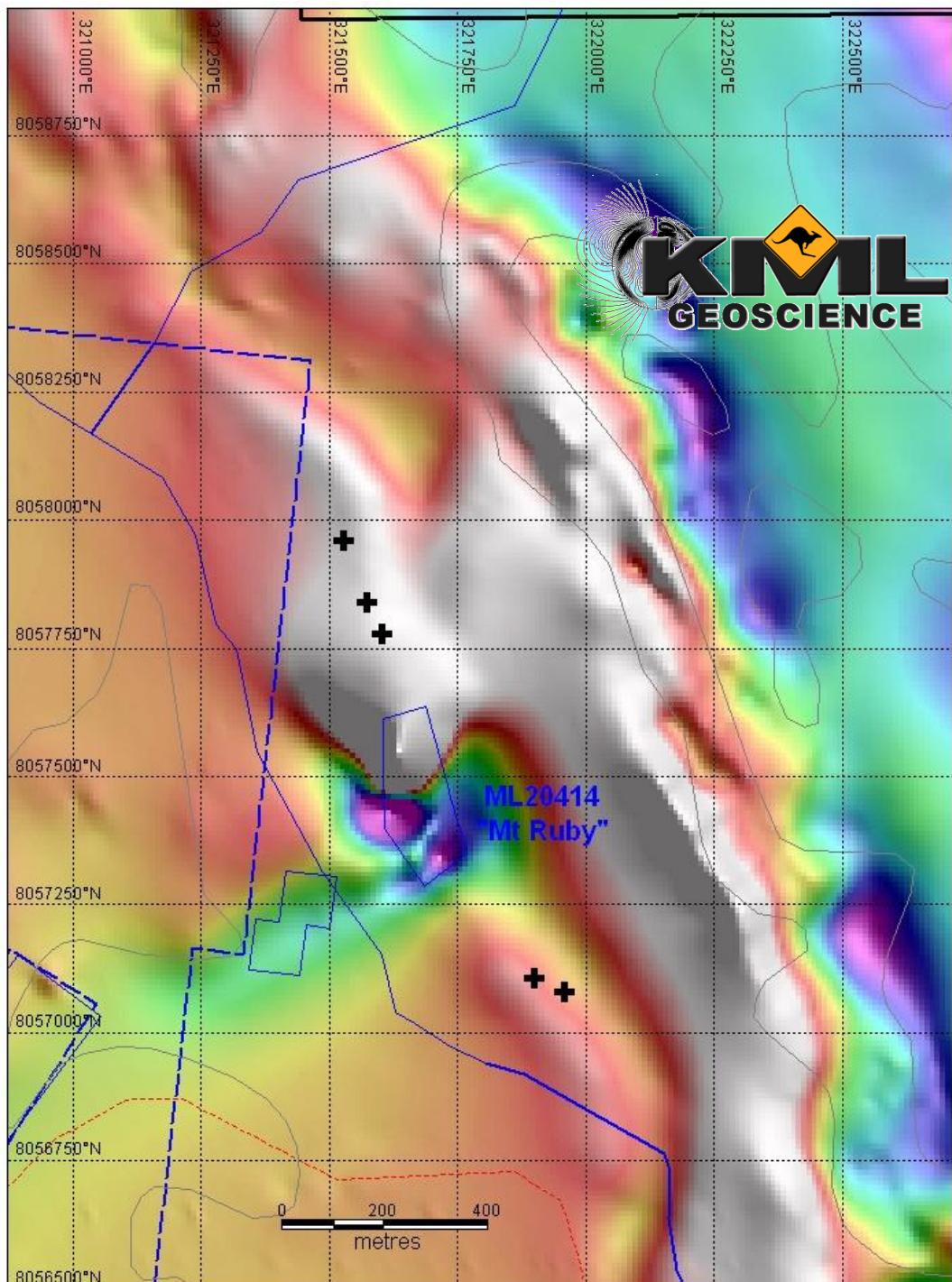


Plate 12 Mt Ruby magnetic profile, with locations of magnetite float marked.

Mt Ruby is one of several magnetite skarns located in close proximity in Silver Valley. However, Mt Ruby represents the only pure magnetite/hematite body of the group, with Windemere containing magnetite-garnet-tin and Mt Ruby West magnetite-garnet. Samples of magnetite float (black crosses on image) were identified overlying the magnetic highs that appear to be extensions of the intense Mt Ruby magnetic signature.

Several samples representative of the regional float from areas up to 400 metres from the base of Mt Ruby were analysed at ALS, Townsville. Results received from these samples showed;

- **MR001 69.2% Fe**
- **MR002 68.1% Fe**
- **MR004 8.13% Cu (22.9% Fe)**

The combination of geophysical and surface samples suggests that the magnetite body centred on Mt Ruby may extend over 1km north and south. Although the width of the body has not been determined along its entire length, magnetite outcrops over a width greater than 80m at Mt Ruby itself. Exploration at Mt Ruby conducted by other parties determined that magnetite extended to depths greater than 60m as drilling did not penetrate the base of iron mineralisation.

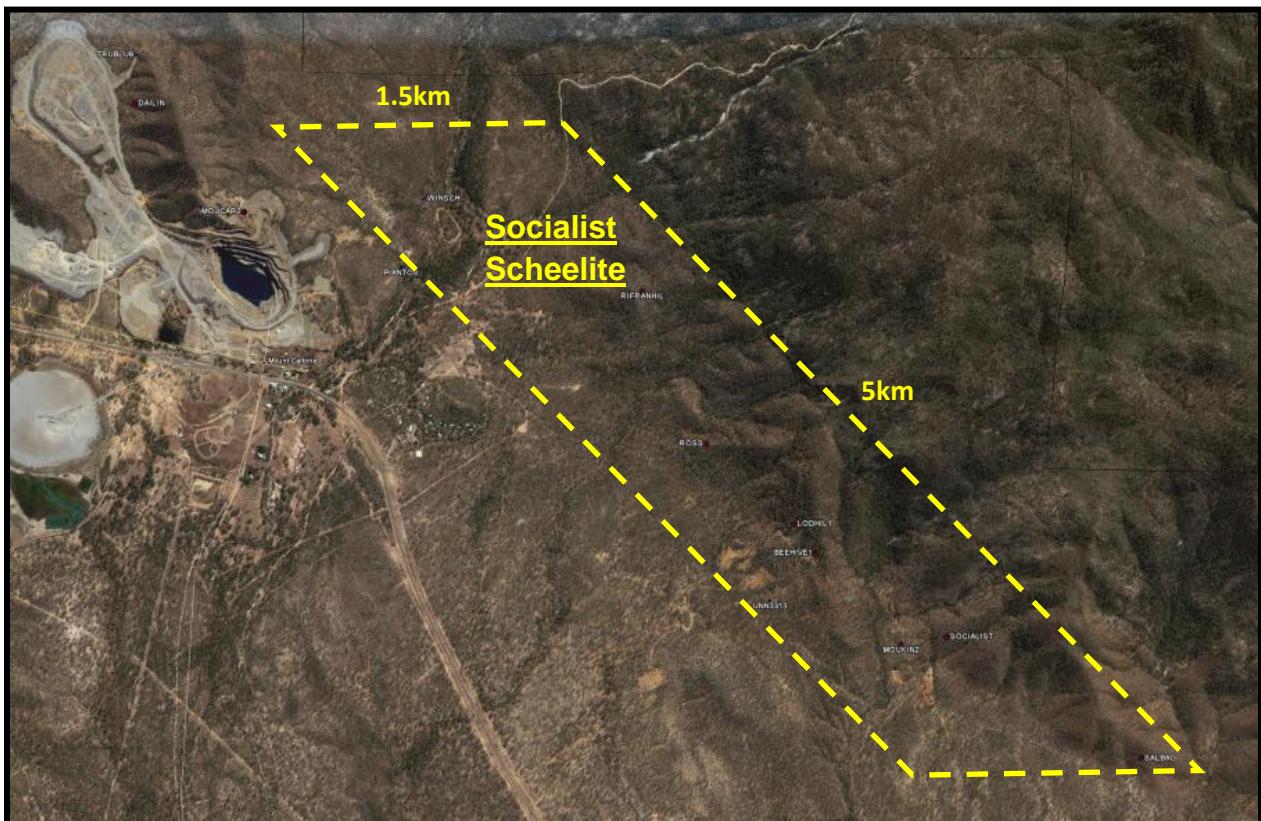
Additional magnetic anomalies also identified in the geophysical survey have yet to be fully rationalised and further field investigations are planned. Diamond drilling of the extensions to Mt Ruby within the anomaly on KML tenement EPM14880 are planned to determine the full dimensions of magnetite mineralisation.

### **Captain Mine (Silver Valley), North Queensland:**

The planned drill program for the historic Captain Mine in Silver Valley remains on hold to allow exploration resources to focus on the current projects in other areas.

### **Mt Holmes-Mt Carbine Project, North Queensland:**

KML has completed a field soil survey at Socialist Scheelite and the region surrounding Mt Carbine. Geophysical mapping was also undertaken extending south-east of Carbine, to identify the likely carriers of tungsten in the form of scheelite (region shown in yellow).



**Plate 13** Socialist Scheelite zone encompassing shales containing scheelite. Mt Carbine, a historic tungsten mine, is shown in the upper left.

A ground survey of the alluvial tin ground along Little Plum Tree Creek and Skull's Lagoon was also undertaken to identify key areas and extent of previous workings along the alluvial plain.

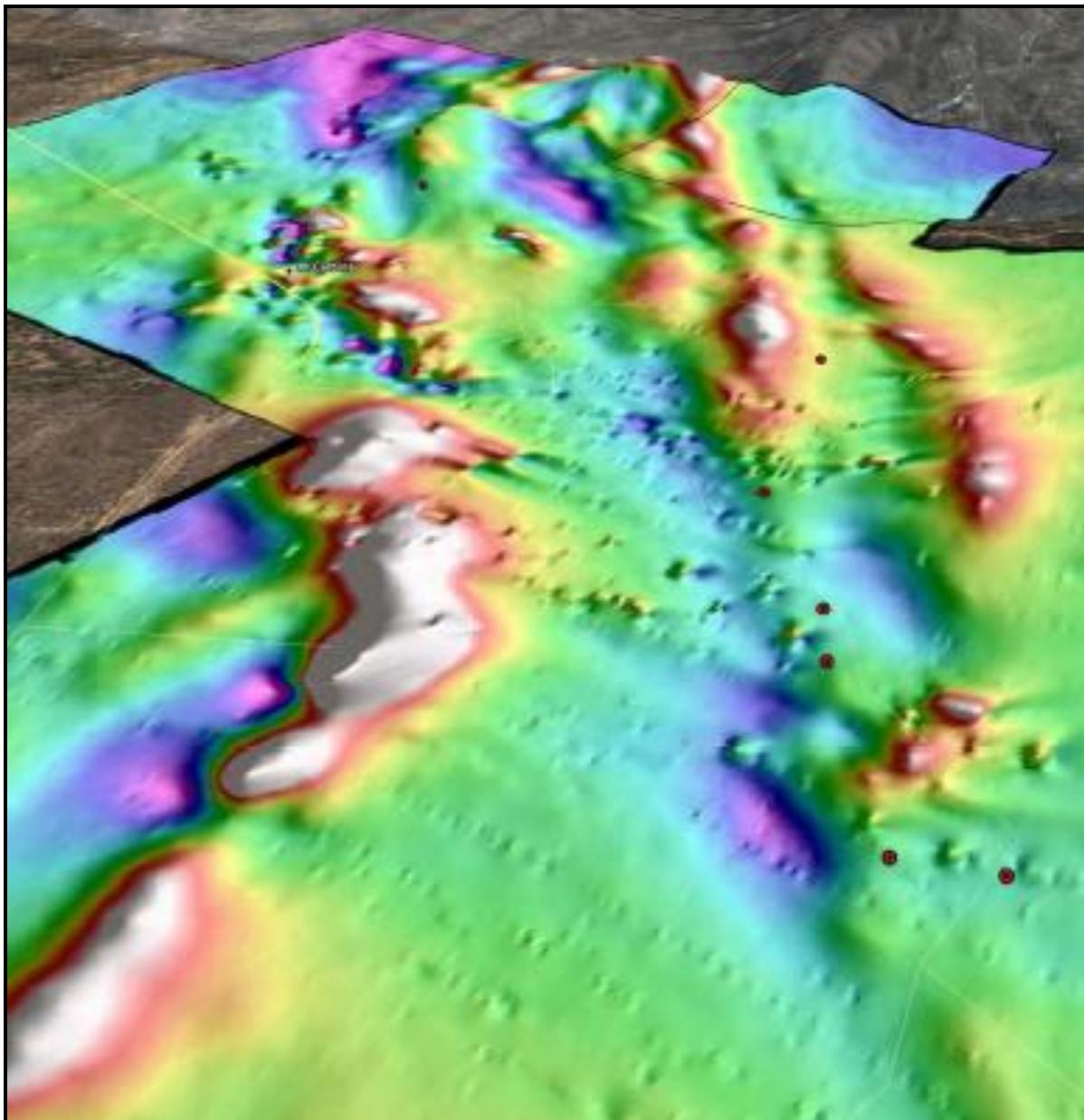
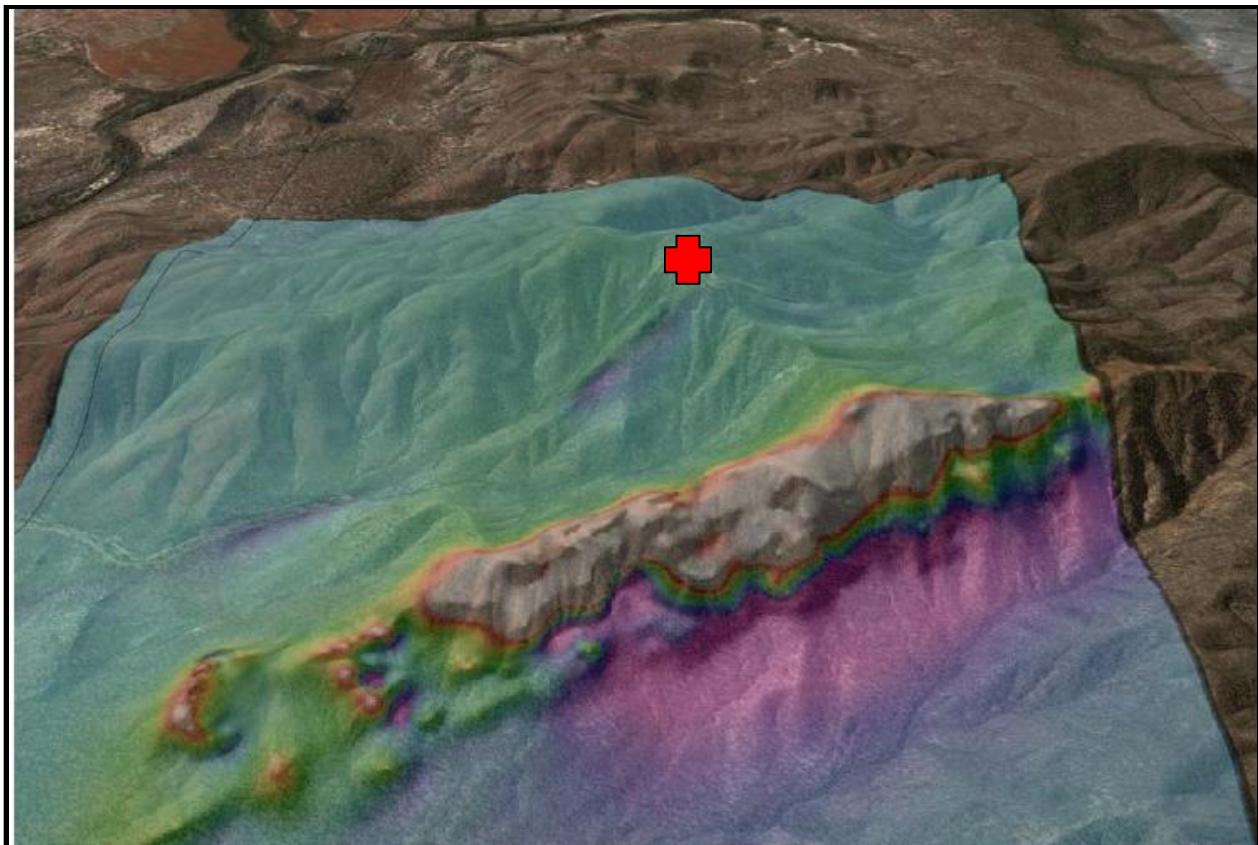


Plate 14 Socialist Scheelite zone with aeromagnetic data applied. Red dots show the location of historic scheelite mines. Mt Carbine, is shown upper left.

Geophysics data over Mt Holmes (marked by red cross, below) has shown an underlying structure on the western slopes of Mt Holmes and a significant structure on the parallel ridge which warrants further investigation.



**Plate 15 Mt Holmes geophysics showing underlying structure on western slope and on parallel ridge.**

#### **Mt Borium, North Queensland:**

KML has undertaken a field survey of Mt Borium (below, left) and completed geophysics across the region to identify underlying structures with the potential to host significant copper-gold mineralisation.

Aeromagnetic and radiometric data has been analysed and further targets will be selected shortly for examination.

## **Operations and Acquisition Targets.**

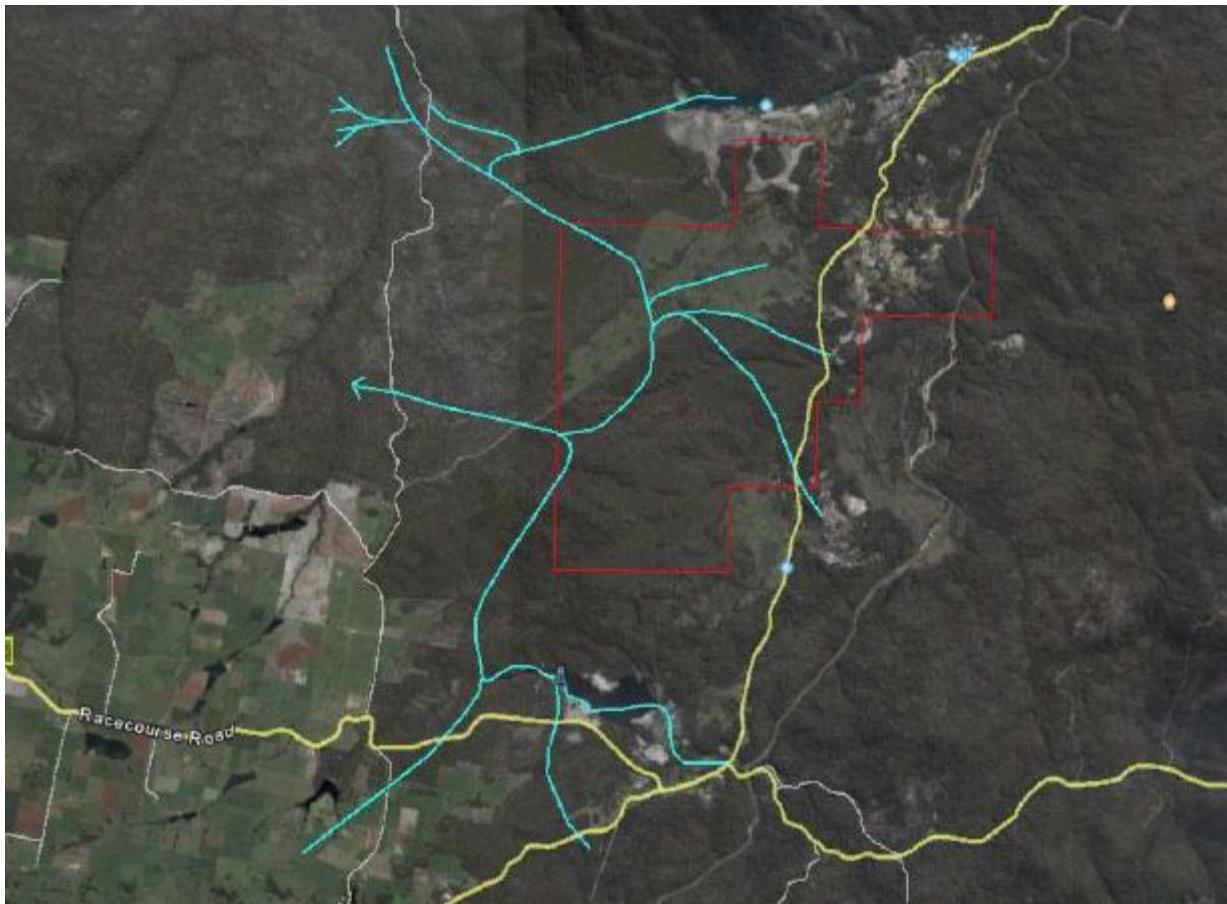
### **South Mount Cameron Exploration and Riverside Alluvial Tin Mine**

Kangaroo Metals Limited (KML) has conducted exploration of tin-bearing gravels in the vicinity of South Mount Cameron in Northeast Tasmania on exploration licenses EL21/2002, EL22/2002, and EL27/2001 during September 2008. Activities were also carried out on the Riverside Mining Area on mining leases 14M/1998 and 7M/2001 from January 2008 until September 2008.

#### **Methods**

KML exploration was primarily in the form of pits/costeans dug using a 20t excavator to maximum depths of 5-6m and targets the sites of previous drill results to assess result quality. The intent of these operations is to define an inferred resource under JORC. From each pit between one and five 20-litre samples were removed for analysis. The heavy minerals in each sample will be concentrated using a rotor sluice (Knudsen Bowl) then these concentrates will be sent for analysis. Immediate analysis of heavy mineral concentration was also undertaken through the employment of panning methods. Pits were located on a 100x100m grid, increased in density (50x50m) where tin has higher concentration levels, but did not exceed a density of 25x25m.

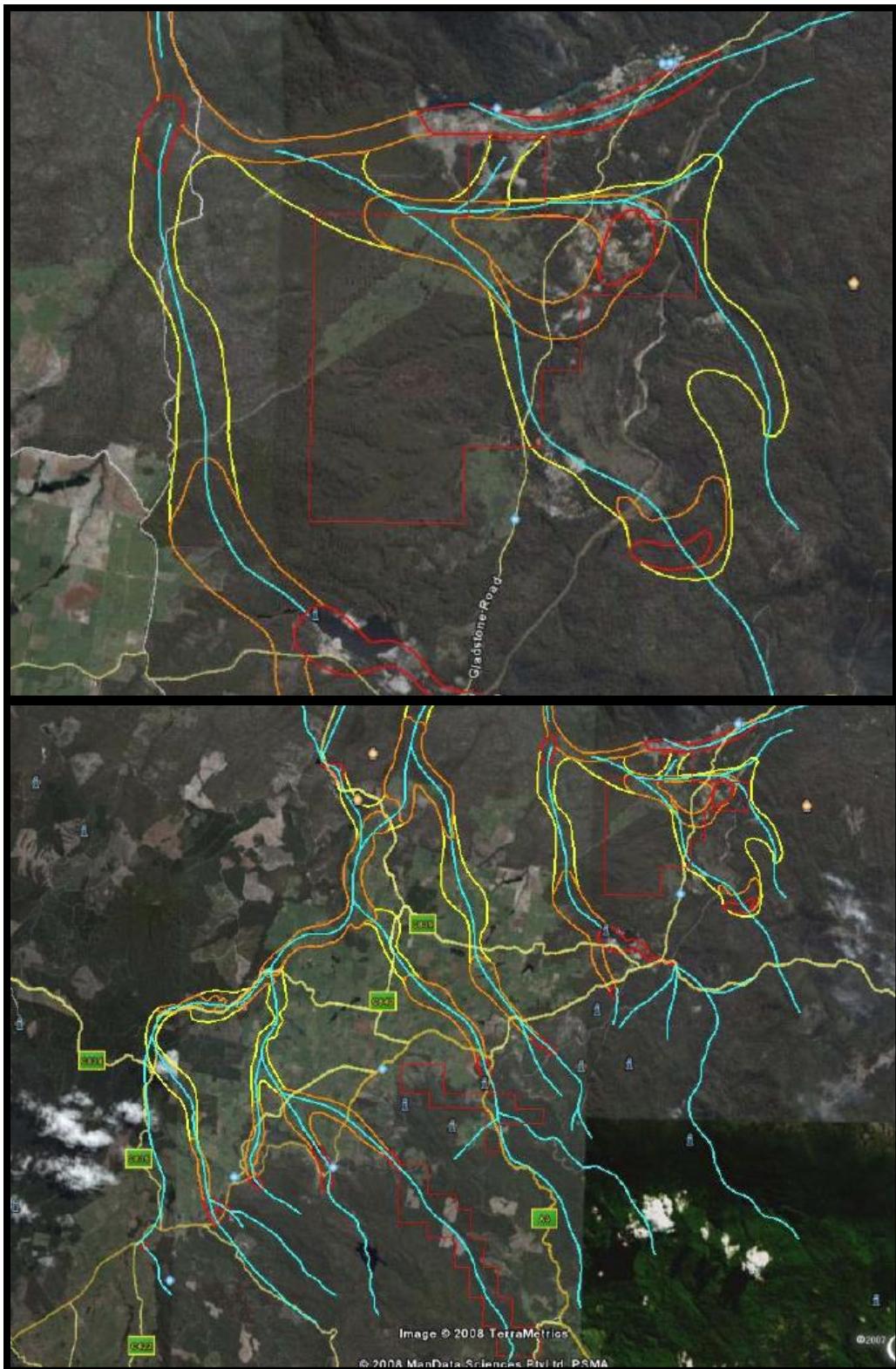
Previous geological reports have highlighted the significance of the paleochannels within the South Mount Cameron region and their direct relationship to the locations of all significant leads identified in the region so far. Mapping of basement RL across the region has assisted in identifying the location of paleochannels within the Ringarooma basin and allowed modelling of historic flows. Paleochannels, highlighted in light blue in the image below, show significant correlation to the current outflow locations.

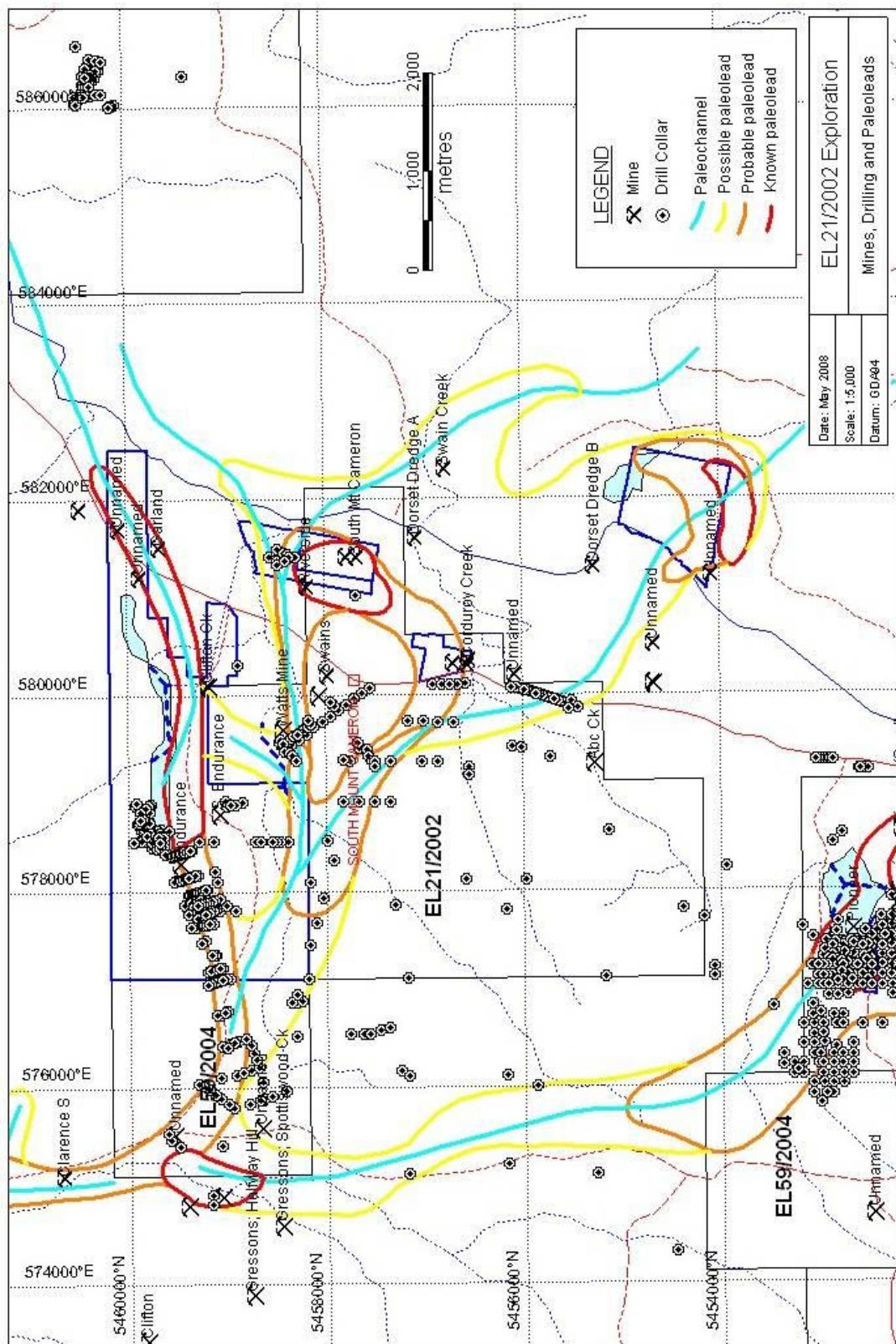


The existence of a downwarp and marine inundation, RL of the current “ferricrete” layers across multiple locations versus basement RL, and placement of the lead locations currently known allow predictive modelling of the regions with the highest probability of cassiterite mineralisation. These have been mapped in the image below showing leads in red, areas of possible extension in orange and those areas worthy of further investigation or of likely sub-economic grades in yellow.

The MapInfo reference image shows the correlation of the paleochannel locations with existing mines, leads and drill collars, supporting this model as most likely to identify regions of high likelihood for mineralisation.

KML has focused the majority of exploration within these areas of interest, and current acquisitions and applications are in place to secure tenure to this ground.





## **Reference Site Resource**

The area tested and evaluated covered some 25 ha [from Line 10 to Line 30] of which 10.6 hectares has been identified as prospective. This area was tested by 4 costeans at 100m intervals and 15 pits at 100m intervals and 50m centres.

As outlined, many factors combined to complicate the evaluation programme, the main problems being the 3 historical mining phases and the contained water within the deep wash. Despite those setbacks, it is possible to apply an ore resource to the tested area and to those prospective areas within the lease area that remain to be tested.

### **Volume Estimation**

Areas and volumes of the tested zone have been calculated on the basis of both the survey map and the Robinson mapping, and takes into account the extent of the underlying and outcropping granite within that zone.

- Area Tested: 10.6 ha = 106,000 m<sup>2</sup>
- Wash Depth Range: 2.7m to 7.0m
- Average Depth Wash: 5.0m
- Estimated Volume of Wash in Tested Area = 530,000 cubic metres

### **Grade Estimation**

Grade estimation is primarily based on the costean and benched pits results from the plant throughput. Correlation with the adjacent pits has been used, particularly to verify basement and wash trends, and where there are obvious anomalies in the recovered cassiterite. The estimated grade also takes into account historical data.

Costean	Treated m <sup>3</sup>	Kg Recovered	Grade g/cubic m	Comments
14	409	92.3	225.7	
14B	116	53.7	463.0	Pipeline to Lease margin
18	316.6	163.8	517.4	
22B	112	40.75	363.8	
22C	10	8.25	825.0	Includes Bird's Eye Wash
26B	196	64.0	326.5	Maiden Ground and Amdex Tails
26C	79	42.0	531.6	
<b>Total</b>	<b>1238.6</b>	<b>464.8</b>		

The weighted average grade from the above costeans is 341.87 g/m<sup>3</sup>.

The author believes that this grade misrepresents the value of the property.

From the mapping, sampling and evaluation programme, the result from Costean 14 is anomalous and skewed downwards. It was also observed during processing that while beginning economically, grades dramatically lowered over some 45 metres of the costean and then improved to the west. Mapping of the costean in relation to the adjacent pits revealed that the majority of the costean was dug over a granite high, which has been seen, both in this programme and historically, to give low grades. The grades are seen to increase in pits both to the north and south of the costean.

For those reasons, it is considered best to exclude the values recovered from Costean 14.

The weighted average grade (excluding Costean 14) is **449.0 g/m<sup>3</sup> of 70% SnO<sub>2</sub>**

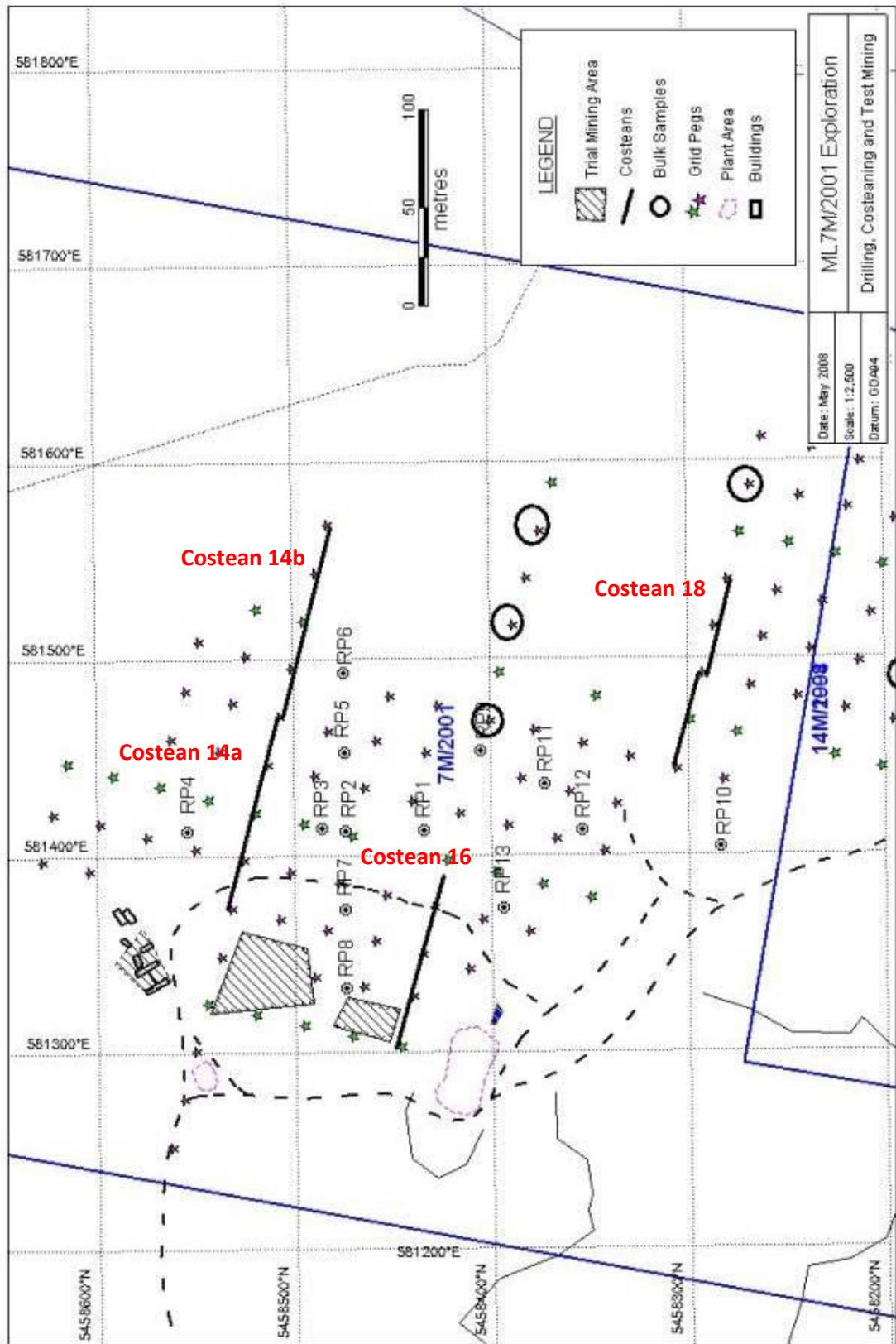
This estimated grade sits better with both observed and historical data available, and is the one used for this evaluation.

## **Drilling to Bulk Sampling Comparison**

KML has undertaken bulk sample testing at the reference site as a means of direct comparison of the existing drill grades at Riverside and the true values recoverable from the site. Personal Communications with expert drillers with experience on alluvial sites has highlighted the possible inadequacies of the past techniques used on site. Sampling of the site at Riverside has shown an average grade of 449g/m<sup>3</sup> (range: 225-825g/m<sup>3</sup>). Previous percussion drill results across the area showed significant variance from actual grades.

Based on this data, KML considers that the grades stated by the contractor and used in the past records may be significantly understated to actual.

Drill Hole	Drill Grade g/m3	Costean	Treated m <sup>3</sup>	Kg Recovered	Costean Grade g/m3	Variance to Drill Grade
RP4	100	14	409	92.3	225.7	+225%
RP3	257	14B	116	53.7	463.0	+180%
RP7	202	18	316.6	163.8	517.4	+256%
RP8	68	Test Pit	1628	870	534.2	+785%



## **Exploration Completed**

### **EL21/2002 Results to Date**

Kangaroo Metals initiated exploration of this area testing Amdex tailings at 50m centres to determine grade variation, depth to basement/total volume, and underlying geology (virgin or worked).

Results from full face sampling to depth has shown a range of 0.1m to >6.5m of tails with preliminary grades of 200g to 250g/m<sup>3</sup> giving a total volume of tailings available for reworking of 120,000m<sup>3</sup>.

Initial exploration of the now defunct Gunn's Quarry area immediately to the south of the Amdex tails identified a large area of unworked alluvium and a series of tailings areas. Preliminary grades determined on the tailings were again 200g to 250g/m<sup>3</sup> but with a total volume of tails available for reworking limited to 50,000m<sup>3</sup>. The unworked alluvial terrace above the tailings area was pitted to depths in excess of 6.5m, with no basement identified. The preliminary grades on these full face samples varied from 500g to >1500g/m<sup>3</sup>, with a total volume within the tested area of >45,000m<sup>3</sup>. Additional areas outside the defined testing area were noted.

Full 20L samples from each pit have collected and QA/QC samples taken from every 6-10 pit samples. These will be processed next week for confirmatory grades using a trommel and jig plant specifically designed for small bulk samples. Resultant heavy fines will be sent to ALS, Townsville for analysis.

### **EL27/2001 Results to Date**

Kangaroo Metals initiated exploration of this area testing central Main Creek by applying fences of bank, active channel, and bank perpendicular to creek flow at 100-150m centres to determine grade variation across the distinct alluvial channels, banks and terraces identified.

Cross-sectional examination of the central Main Creek area revealed more significant banks and terraces than first surveyed. The areas sampled (cross-section and image below) show alluvium extending as wide as 150-200m with terraces exceeding 6m in height, banks ranging from 0.5m to 1.5m in height, and an active channel averaging 4m wide and of unknown depth.

Results from panning samples of the bank and active channel have shown preliminary grades of 500g to 800g/m<sup>3</sup> on the banks and 800g to >1000g/m<sup>3</sup> in the active channel. Kangaroo Metals noted through field survey that a significant volume of wash, likely to exceed 1,000,000m<sup>3</sup> exists along the creek itself; however, due to the nature of the local environment and the need for all activities to be in or around the environs of the active creek bed itself. Full impact studies would need to be carried out to determine the viability of extracting this inventory.

Kangaroo Metals initiated exploration of the upper Main Creek tailings area (Mutual Road) by investigating the open fossicking holes, and the existing bulk sample pit located on the flats. Samples were tested from six locations across the flats and panned for grades. Preliminary grades show results averaging in excess of 1000g/m<sup>3</sup>. Volume estimated based on the area tested show a 150m x 400m deforested plain purported to be 2-3m deep. This would suggest an available rework volume of 180,000m<sup>3</sup>.

An additional area varying between 70m and 270m in width and 360m in length was not sampled in this round of testing but is comparable in makeup and represent another potential 185,000m<sup>3</sup> and may double the available inventory at this site.

## **EL22/2002 Results to Date**

Kangaroo Metals initiated exploration of this area by field survey and pan sampling of the previously “Drag Line” mine site on the lease. Two samples were collected and panned from the upper terrace and bank on either side of the Ringarooma River bend.

The available alluvium at this site is approximately 220,000m<sup>3</sup> with grades reported to be in the range of 200-400g/m<sup>3</sup>. Additional analysis of bulk samples will be needed to confirm grades and volume.

## Exploration Sample Table

### September October 2008 Sampling Program

Sample	Site	Location	Easting	Northing	Type	Volume	Total depth	Pan Grade	Grade	Notes
26951	Main Creek	Mid Creek	571882	5442680	Surface	1 litre	150mm	800g/LCM	N/A	Bank
26952	Main Creek	Mid Creek	571893	5442697	Surface	1 litre	150mm	1.2kg/LCM	N/A	Channel
26953	Main Creek	Mid Creek	571906	5442715	Surface	1 litre	150mm	800g/LCM	N/A	Bank
26954	Main Creek	Mid Creek	571946	5442631	Surface	1 litre	150mm	800g/LCM	N/A	Bank
26955	Main Creek	Mid Creek	571958	5442647	Surface	1 litre	150mm	1.0kg/LCM	N/A	Channel
26956	Main Creek	Mid Creek	571972	5442665	Surface	1 litre	150mm	800g/LCM	N/A	Bank
26957	Main Creek	Tailings	573972	5439128	Surface	1 litre	150mm	1.4kg/LCM	N/A	VDM Pit
26958	Main Creek	Tailings	573943	5439139	Surface	1 litre	150mm	1.2kg/LCM	N/A	VDM Pit
26959	Main Creek	Tailings	573916	5439152	Surface	1 litre	150mm	1.0kg/LCM	N/A	Fossicking Pit
26960	Main Creek	Tailings	573932	5439181	Surface	1 litre	150mm	1.0kg/LCM	N/A	Fossicking Pit
26961	Moorina	Tailings	570987	5447824	Surface	1 litre	150mm	400g/LCM	N/A	Bank
26962	Moorina	Tailings	571083	5447845	Surface	1 litre	150mm	400g/LCM	N/A	Terrace
26501	Amdex Tails	Tailings	580552	5457650	Pit	20 litre	2.9m	400g/LCM	TBA	xxx
26502	Amdex Tails	Tailings	580548	5457598	Pit	20 litre	2.4m	400g/LCM	TBA	xxx
26503	Amdex Tails	Tailings	580597	5457606	Pit	20 litre	1.1m	Not Tested	TBA	xxx
26504	Amdex Tails	Tailings	580645	5457601	Pit	20 litre	0.6m	Not Tested	TBA	xxx
26505	Amdex Tails	Tailings	580697	5457551	Pit	20 litre	0.2m	Not Tested	TBA	xxx
26506	Amdex Tails	Tailings	580645	5457549	Pit	20 litre	3.5m	400g/LCM	TBA	xxx
26507	Amdex Tails	Tailings	580645	5457549	Pit	20 litre	3.5m	400g/LCM	TBA	26506 duplicate
26508	Amdex Tails	Tailings	580602	5457550	Pit	20 litre	5.3m	400g/LCM	TBA	top half
26509	Amdex Tails	Tailings	580602	5457550	Pit	20 litre	5.3m	400g/LCM	TBA	bottom half
26510	Amdex Tails	Tailings	580550	5457546	Pit	20 litre	3.7m	200g/LCM	TBA	xxx
26511	Amdex Tails	Tailings	580500	5457500	Pit	20 litre	3.3m	200g/LCM	TBA	xxx
26512	Amdex Tails	Tailings	580550	5457500	Pit	20 litre	4.9m	200g/LCM	TBA	top half
26513	Amdex Tails	Tailings	580550	5457500	Pit	20 litre	4.9m	200g/LCM	TBA	bottom half
26514	Amdex Tails	Tailings	580600	5457500	Pit	20 litre	4.5m	400g/LCM	TBA	top half
26515	Amdex Tails	Tailings	580600	5457500	Pit	20 litre	4.5m	400g/LCM	TBA	bottom half
26516	Amdex Tails	Tailings	580650	5457500	Pit	20 litre	1.9m	400g/LCM	TBA	xxx
26517	Amdex Tails	Tailings	580650	5457500	Pit	20 litre	1.9m	400g/LCM	TBA	26516 duplicate
26518	Amdex Tails	Tailings	580700	5457455	Pit	20 litre	0.5m	Not Tested	TBA	xxx
26519	Amdex Tails	Tailings	580655	5457450	Pit	20 litre	2.9m	200g/LCM	TBA	xxx
26520	Amdex Tails	Tailings	580600	5457450	Pit	20 litre	6.0m	200g/LCM	TBA	26521 duplicate
26521	Amdex Tails	Tailings	580600	5457450	Pit	20 litre	6.0m	200g/LCM	TBA	xxx
26522	Amdex Tails	Tailings	580550	5457450	Pit	20 litre	5.5m	400g/LCM	TBA	xxx
26523	Amdex Tails	Tailings	580500	5457450	Pit	20 litre	4.3m	200g/LCM	TBA	xxx
26524	Amdex Tails	Tailings	580450	5457450	Pit	20 litre	1.5m	Not Tested	TBA	xxx
26525	Amdex Tails	Tailings	580500	5457400	Pit	20 litre	2.2m	200g/LCM	TBA	xxx
26526	Amdex Tails	Tailings	580500	5457400	Pit	20 litre	2.2m	200g/LCM	TBA	26525 duplicate
26527	Amdex Tails	Tailings	580550	5457400	Pit	20 litre	2.9m	200g/LCM	TBA	xxx
26528	Amdex Tails	Tailings	580600	5457400	Pit	20 litre	3.2m	400g/LCM	TBA	xxx
26529	Amdex Tails	Tailings	580650	5457400	Pit	20 litre	4.0m	400g/LCM	TBA	xxx
26530	Amdex Tails	Tailings	580700	5457400	Pit	20 litre	0.8m	Not Tested	TBA	xxx
26531	Amdex Tails	Tailings	580700	5457350	Pit	20 litre	1.1m	Not Tested	TBA	xxx
26532	Amdex Tails	Tailings	580650	5457350	Pit	20 litre	4.0m	200g/LCM	TBA	bottom half
26533	Amdex Tails	Tailings	580650	5457350	Pit	20 litre	4.0m	200g/LCM	TBA	top half
26534	Amdex Tails	Tailings	580600	5457350	Pit	20 litre	3.0m	200g/LCM	TBA	xxx
26535	Amdex Tails	Tailings	580650	5457300	Pit	20 litre	2.7m	400g/LCM	TBA	xxx
26536	Amdex Tails	Tailings	580700	5457300	Pit	20 litre	1.0m	Not Tested	TBA	xxx
26537	Amdex Tails	Tailings	580754	5457346	Pit	20 litre	0.0m	Not Tested	TBA	xxx
26538	Gunn's Quarry	Maiden	580500	5457000	Pit	20 litre	>7.0m	200g/LCM	TBA	top 4.0m
26539	Gunn's Quarry	Maiden	580500	5457000	Pit	20 litre	>7.0m	200g/LCM	TBA	bottom 3.0m
26540	Gunn's Quarry	Maiden	580450	5457000	Pit	20 litre	>7.0m	200g/LCM	TBA	top 4.3m
26541	Gunn's Quarry	Maiden	580450	5457000	Pit	20 litre	>7.0m	200g/LCM	TBA	bottom 2.7m
26542	Gunn's Quarry	Maiden	580400	5457000	Pit	20 litre	6.5m	200g/LCM	TBA	xxx
26543	Gunn's Quarry	Maiden	580400	5457000	Pit	20 litre	6.5m	200g/LCM	TBA	26542 duplicate
26544	Gunn's Quarry	Maiden	580350	5457000	Pit	20 litre	6.8m	400g/LCM	TBA	top 3.4m
26545	Gunn's Quarry	Maiden	580350	5457000	Pit	20 litre	6.8m	400g/LCM	TBA	bottom 3.4m
26546	Gunn's Quarry	Maiden	580300	5457000	Pit	20 litre	6.0m	600g/LCM	TBA	xxx
26547	Gunn's Quarry	Maiden	580350	5456950	Pit	20 litre	>7.0m	600g/LCM	TBA	4.2m overburden
26548	Gunn's Quarry	Maiden	580350	5456950	Pit	20 litre	>7.0m	600g/LCM	TBA	4.2m overburden
26549	Gunn's Quarry	Maiden	580300	5456950	Pit	20 litre	>7.0m	600g/LCM	TBA	6.2m overburden
26550	Gunn's Quarry	Maiden	580300	5456950	Pit	20 litre	>7.0m	200g/LCM	TBA	6.4m overburden
26551	Gunn's Quarry	Maiden	580300	5456900	Pit	20 litre	>7.0m	600g/LCM	TBA	5.4m overburden
26552	Gunn's Quarry	Maiden	580250	5456900	Pit	20 litre	>7.0m	200g/LCM	TBA	6.6m overburden
26553	Gunn's Quarry	Maiden	580250	5456850	Pit	20 litre	>7.0m	600g/LCM	TBA	5.3m overburden

## **Conclusions**

Kangaroo Metals Limited (KML) will need to conduct additional bulk sampling exploration of tin-bearing gravels in the vicinity of South Mount Cameron, ABC Creek, Corduroy Creek, Main Creek and the Drag Line region of the Moorina lease to further define the available inventory.

Analysis of the 20L samples collected through pitting operations will be used to define a JORC compliant inferred and indicated resource on these sites.

KML believes that continuing exploration of the tenements is warranted due to the identification of additional sites during this round of exploration which have the potential for further quantities of tin.

## **Production:**

KML commenced full production at the Riverside Alluvial Tin Mine with modifications and mine planning completed at the site. Extraction operations continued with over 8000m<sup>3</sup> of stockpiled alluvium held on the ROM at any one time. Samples of concentrate have been forwarded for confirmatory testing and showed concentrate grades averaging >66%. Total production during this period equated to 5 tonnes of concentrate.

Production rates were impacted significantly by weather, equipment shortages, theft and staff issues onsite. The viability of winter operations on this site have been brought into question and a re-evaluation of the asset is needed to determine the overall operational strategy and commercial viability.



## **California Creek Alluvial Tin Mine**

The California Creek alluvial mining operation is centrally placed on KML's current California (EPM14877) and California West (EPM14357) tenements. KML have completed a due diligence sample program in order to assess the potential of California Creek to host significant volumes of alluvial tin. The deposit is covered by 15 mining lease held by Bookall Mining (Figure 1). As part of a sales agreement, KML targeted 3,000t of cassiterite (tin –  $\text{SnO}_2$ ) concentrate in order to proceed with the purchase of the mining leases and plant. Alluvial tin was freely panned by KML from surface diggings at multiple sites along the creek during an initial survey of the leases.

The area under consideration for purchase by KML is some 26km in length and varies in width from 50 to 100+m, though the mining leases are limited to 100m in width. California Creek is an active depositional-erosional alluvial system in Far North Queensland 20km northwest of the township of Mount Garnet. Alluvial deposits within the system include channels, flood terraces, banks and islands. The alluvial material ranges in size from silt to large stones and a variety of alluvial "washes" have been identified based on size relationships and include sandy loam, gravel, cobble and large stone washes.

KML's sample program covered the full length of the mining leases (26km) by digging a series of pits across the creek at regular intervals of nominally 1km (Figure 1) referred to as "sites". From each pit a single sample of 20L (equal to 1/50 of cubic metre) volume was taken using a hoe pick and shovel. In all, 148 pit samples were taken from 40 sites with spacing not >50m. Pits were dug to basement below tin-bearing alluvium however in 57 pits the basement was either not reached or could not be clearly identified. In some instances (5 pits) 2 samples were taken due to increased thickness of alluvial material, and in some cases (58 of 148 pits) samples had to be taken from a loose pile excavated from the pit due to difficult access where the pit was filled with water or where the pit was considered unsafe for entry. The samples were reduced to a heavy mineral concentrate using a centrifugal rotor sluice (Knudsen Bowl) then manually panned to remove excess sand. The concentrates were then submitted for analysis to provide accurate mass and tin content.

For each pit, the depth of alluvial wash to basement was recorded as well as the width (m) of the feature that was sampled (bank, terrace, island, or channel). These measurements were used to weight the grade of each pit sample, which is derived from the analytical mass of the heavy mineral concentrate, in order to arrive at an average weighted concentrate grade for each of the 40 sites. An average depth for each site was also calculated by weighting the individual pit depths with the widths of the alluvial features that the pits are situated in. The total length of mining leases covering alluvial



deposits is 26,295m and the mining leases are 100m in width, centred on the creek.

<b>Average grade of concentrate (sites)</b>	<b>1,001g/m<sup>3</sup> (Range: 273 to 2008)</b>
<b>Average weighted depth (sites)</b>	<b>1.91m (Range: 0.45 to 4.50)</b>
<b>Average width of alluvial deposits (sites)</b>	<b>83m (Range: 50 to 100m)</b>

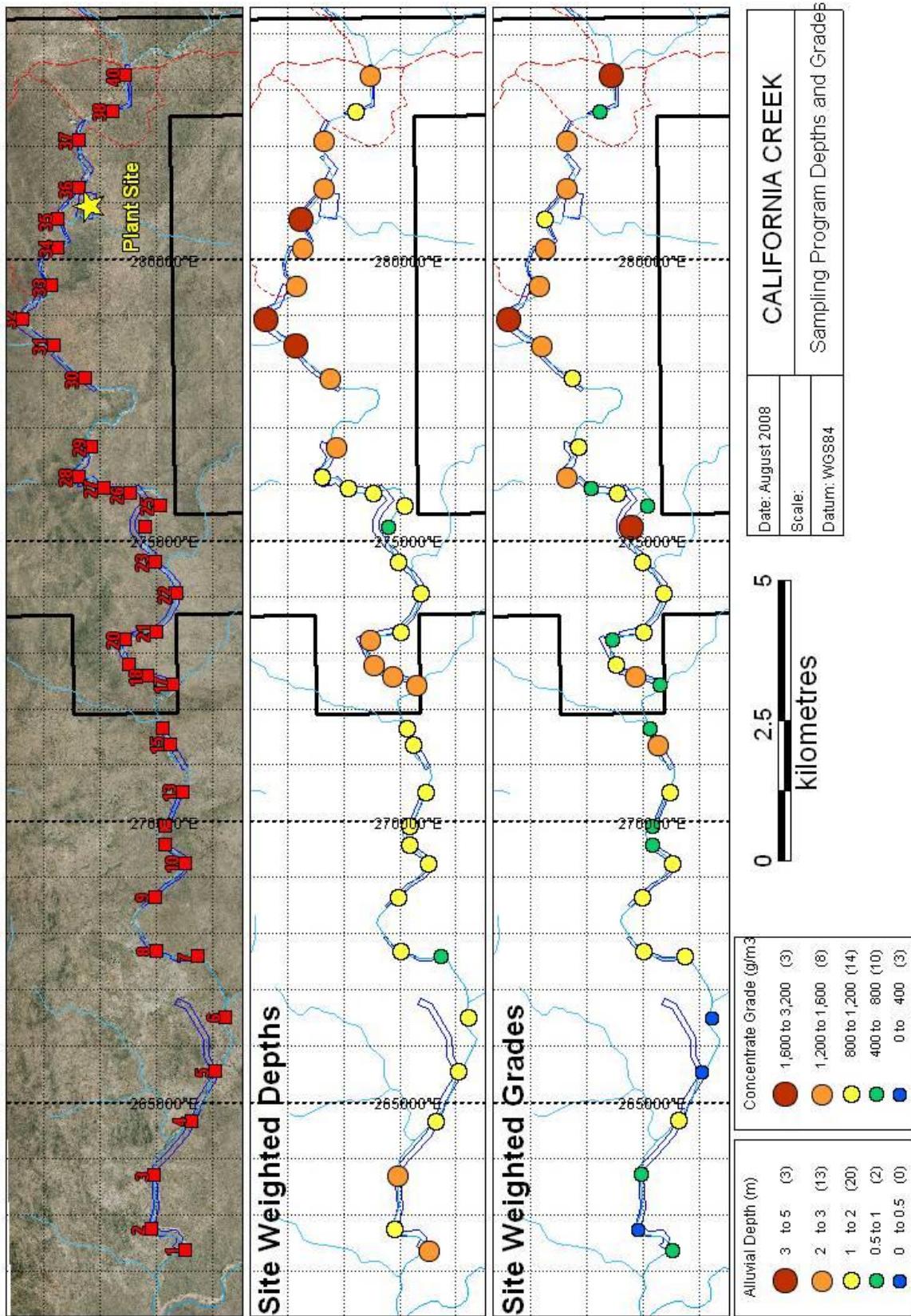
From this data KML believes that there is potential for an exploration target of **3,000-6,000t of cassiterite (SnO<sub>2</sub>)** from some **3-6 million cubic metres of alluvial material**. Overburden across the leases is essentially non-existent with tin bearing alluvium at surface.

While this target is conceptual in nature and does not imply that a mineral resource has been or will be defined, the results from this sample program have provided KML with enough confidence to go through with the planned purchase of the leases.

## **Conclusions**

Final analyses of the concentrate samples for tin metal (Sn%) content showed an unexpected distribution of heavy minerals showing an average of 13% SnO<sub>2</sub> content versus the expected 85-95% SnO<sub>2</sub> observed by previous explorers from parallel creek systems.

Based on the results, the agreement to acquire this project was terminated.



**Figure 1** Weighted concentrate grade and depth for each sample site along California Creek

ZONE	site ID	east_wgs84	north_wgs84	depth (m)	grade (g/m3)
D	1	262363	8056495	2.38	769.58
D	2	262750	8057100	1.67	273.23
D	3	263719	8057053	2.54	517.05
D	4	264677	8056368	1.89	901.65
D	5	265565	8055964	1.66	309.75
D	6	266522	8055779	1.06	310.43
D	7	267594	8056272	0.64	1056.78
D	8	267685	8056990	1.09	922.28
C	9	268660	8057033	1.36	1005.63
C	10	269262	8056494	1.21	1007.62
C	11	269593	8056835	1.24	565.06
C	12	269923	8056845	1.76	514.31
C	13	270528	8056534	1.56	961.07
C	15	271361	8056767	1.58	1240.98
C	16	271653	8056880	1.15	574.77
C	17	272432	8056713	2.26	701.86
C	18	272580	8057152	2.22	1519.05
C	19	272801	8057487	2.28	1171.67
B	20	273246	8057547	2.04	436.43
B	21	273378	8057000	1.68	989.26
B	22	274067	8056643	1.16	963.35
B	23	274625	8057029	1.04	1087.35
B	24	275237	8057208	0.94	1636.75
B	25	275622	8056925	1.57	546.30
B	26	275844	8057472	1.24	977.52
B	27	275934	8057932	1.96	455.58
B	28	276122	8058386	1.99	1503.18
B	29	276661	8058150	2.26	1096.84
A	30	277890	8058263	2.19	930.72
A	31	278476	8058835	3.41	1507.99
A	32	278944	8059378	4.50	2008.31
A	33	279532	8058863	2.23	1365.46
A	34	280213	8058752	2.09	1422.95
A	35	280710	8058750	3.00	1078.82
A	36	281276	8058378	2.68	1543.35
A	37	282120	8058372	2.75	1446.94
A	38	282624	8057782	1.53	732.48
A	40	283269	8057552	2.75	1990.12

**KML Geoscience:**

Geophysics flights through *KML* Geoscience have now been completed across Stannary Hills, Antimony Reward, Mt Borium, Carbonate Creek, West Wolfram, Claret Creek (California), Silver Valley, Mt Holmes, Mt Carbine and Socialist Scheelite.

Data analysis across these areas is now complete with additional exploration planning underway.

**-ENDS-**

**Mark O'Keeffe**  
**Chairman**

*This report is based on and accurately reflects information compiled by Dr Brian New, PhD, who is a fulltime employee of the Company. Dr New has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australiasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Brian New consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

