

**Exploration Proposal for RL 2/2008
targeting further resources around the
New Golden Gate Mine and Tasmanian Consolidated mines
at Mathinna, northeastern Tasmania**

Grant MacDonald B.Sc (Hons.)

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1.0 Introduction

The following report details (1) the position of further near surface locations with elevated potential for gold deposits amenable to open cut mining, (2) the geological justification for these locations, and (3) a drill programme designed to efficiently test these locations for said deposits.

The report does not make recommendations regarding refining or extending current resources specifically though there is some drilling required/warranted for this purpose also (see MacDonald, 2009).

RL 2/2008 is held by Cala Resources Pty. Ltd., a wholly owned subsidiary of Mathinna Gold Pty. Ltd., to cover the in-situ gold resources around the historical New Golden Gate and contiguous North Golden Gate/Tas. Consols. Mines, as well as a gold resource in the historical tailings which cover a portion of the tenements surface area.

2.0 Mining and Exploration History

The New Golden Gate mine is the second largest gold deposit in Tasmania's northeastern goldfields behind Beaconsfield's Tasmania Reef (pre-mining resource estimated to be 3.836t @ 17.0g/t Au for 2.1 million ounces gold).

The New Golden Gate mine operated from 1881 to 1932 producing 254,000 ounces from 304,000 tons of ore at an average grade of 26.0g/t Au. The smaller, but essentially contiguous, North Golden Gate/Tas. Consols. mine operated from 1890 to 1908 producing 10,000 ounces of gold at an average grade of 14.5g/t.



Figure 1: Typical high grade New Golden Gate ore assaying 20.8g/t Au (MacDonald, 1996)

An interesting but relevant aside is the history of discovery of the New Golden Gate mine.

The original Golden Gate mine was originally worked by an adit with stoping to surface on the (now named) Upper Western Reef.

After a small production of estimated to be around 128 to 145 ounces gold from 350 to 450 tons of ore at an average grade of between 10 and 11g/t Au the mine became dormant for a period of time until 1887 when a prospector named Loane sampled a 1½" wide vein in the floor of the adit close to its portal which assayed over 1 ounce/ton. This vein was the cap of

Loane's Reef which was subsequently mined to a depth of ~250m with the mine renamed the New Golden Gate Mine. Subsequent development at depth intersected the Lower Eastern and Lower Western Reefs with the mine extending to a depth of around 600 metres.

Fortuitously (at the time) the Main Shaft sunk to exploit this reef intersected a parallel reef named the Main Reef which was worked to a similar depth as Loane's Reef. Ironically it was the exploitation of the Main Reef shaft pillar by tributors which led to the mines inspector closing the mine for safety reasons in 1932.

Whilst the old tailings have seen ongoing interest the mines saw little modern exploration for further in-situ reefs, apart from 3 drillholes GG1, GG2 and GG3 drilled in the 1960's by the then Mines Department, until 1989 when Epoch Minerals drilled 11 open hole RAB drillholes for 825m around the New Golden Gate mine's uppermost workings.

Better intersections included 8m (all results downhole) @ 10.7g/t Au and 2m @ 4.7g/t Au in PDH5, 2m @ 4.2g/t Au and 2m @ 3.9g/t Au in PDH6, 2m @ 5.4g/t Au in PDH9 and 2m @ 1.05g/t Au, 2m @ 1.0g/t Au and 2m @ 1.2g/t Au in PDH10,

Unfortunately the open hole method of drilling makes assay results unreliable due to possible contamination of chips from the hole's walls. This has meant that the results of these holes were not considered suitable for inclusion in the estimation of a JORC compliant resource. The results have, however, been considered in the work herein.

The author explored the area for Resolute in 1995/96 but only drilled 1 RC hole (MT024) in the vicinity of the two mines, following up an intersection in GG3 of 3.15m @ 10.5g/t Au.

From late 1998 to early 2000 Defiance Mining N.L., in JV with Connemara Gold Pty. Ltd., drilled 68 RC holes for 6264.5 metres and a further 886.4 metres of NQ diamond core tails on 12 RC holes to the north of and around the New Golden Gate/Tas. Consols. (North Golden Gate) mines testing the conceptual model proposed at the time by the author (Colville, 1998).

This drilling successfully intersected high grade reefs which were named Dylans and Sophies (after the geologists children) as well as further defining high grade reef mineralization in the vicinity of the New Golden Gate Shaft which had been intersected in the Epoch percussion holes (Jackson, 1999 & 2000).

Better intersections included (all g/t Au) 2m @ 34.3, 3m @ 9.62, 2m @ 15.2, 1m @ 27.8 and 1.65m @ 10.54g/t Au in Sophies Reef; 4m @ 15.37, 3m @ 23.05, 2m @ 26.8, 2m @ 11.2 and 1.5m @ 10.3g/t Au in Dylans Reef; 1m @ 41.4, 1m @ 30.0 and 1m @ 13.3g/t Au in the "Central" Reef; and 2m @ 25.4 and 3.2m @ 4.52g/t Au in the Upper West Reef.

These intersections form the basis of the resource which RL 2/2008 covers.

In 2004 Cala Resources carried out a small 8 holes for 180m's RC programme just north of the RL boundary but results were inconclusive due to problems with the drilling.

3.0 Geology

The New Golden Gate and North Golden Gate mines lie in the middle of the Mathinna goldfield. The Mathinna goldfield lies on the Mangana-Lyndhurst trend, a north-northwest trending zone which would account for numerically over half of the gold occurrences in Tasmania's northeastern gold province. The Mathinna goldfield's hard rock gold endowment of 280,000 ounces of gold ranks second only to the +2 million ounce Tasmania Reef at Beaconsfield.

The New Golden Gate mine exploited 4 larger (and a number of smaller) steeply plunging shoots over a vertical extent of over 600 metres. These reefs are north-northeast striking and sub-vertical with the oreshoots generally <50m along strike. Smaller amounts of ore were taken from north-northwest striking reefs such as the Upper West and probable tensional structures around the No.6 level known as the Zig-Zag Reef. The North Gate mine was largely based on the northern extension of the Lower West Reef though cross-cuts appear to have intersected reef structures along strike from the Lower East and possibly Main/Loanes reef structures though without any production on these.

The New Golden Gate and North Gate reefs are hosted on the steep eastern limb of a west verging, north-northwest striking fold in a package of dominantly shale and siltstone. Structurally the reefs appear to be hosted in north to north-northeast striking faults which splay off north-northwest striking faults (specifically the steeply west-southwest dipping main and second slides).

Shoots within these north to north-northeast striking structures are short strike length, large vertical extent (steeply south plunging), lensoidal "pipes" within these more laterally extensive faults. The main shoot of high grade and width in the New Golden Gate mine occurred where the Main and Loanes Reefs converged. Here payable (determined to be around 12.5 – 15g/t Au) reef widths ranged up to 33 feet (Finucane, 1935), only matched elsewhere in Tasmania's northeast gold province in a few locations in the Tasmania Reef.

The discovery of further high grade gold mineralization by Defiance was based on pursuing the New Golden Gate structural control to the north of the current workings. It was also influenced by the reporting of gold bearing reef in exploratory crosscuts in the North Golden Gate mine. Hence it is perhaps unsurprising that the structures intersected and defined by Defiance's drilling should show similar orientations and behaviour to those in the New Golden Gate/North Golden Gate mines.

The higher grade resources in Sophies and Dylans Reefs occur as discrete high grade shoots which occur over relatively shorter strike lengths along the hosting Sophies Reef and Dylans Reef Faults. The higher grade resource in the "Central" Reef is more broadly dispersed with significant mineralization intersected over most of the known strike of the structure. There have been very few intersections of the Upper West Reef to determine much about the hosting structures character).

The geology of the deposits pre discovery of Sophies, Dylans and the Upper West Reefs is illustrated in figure 2.

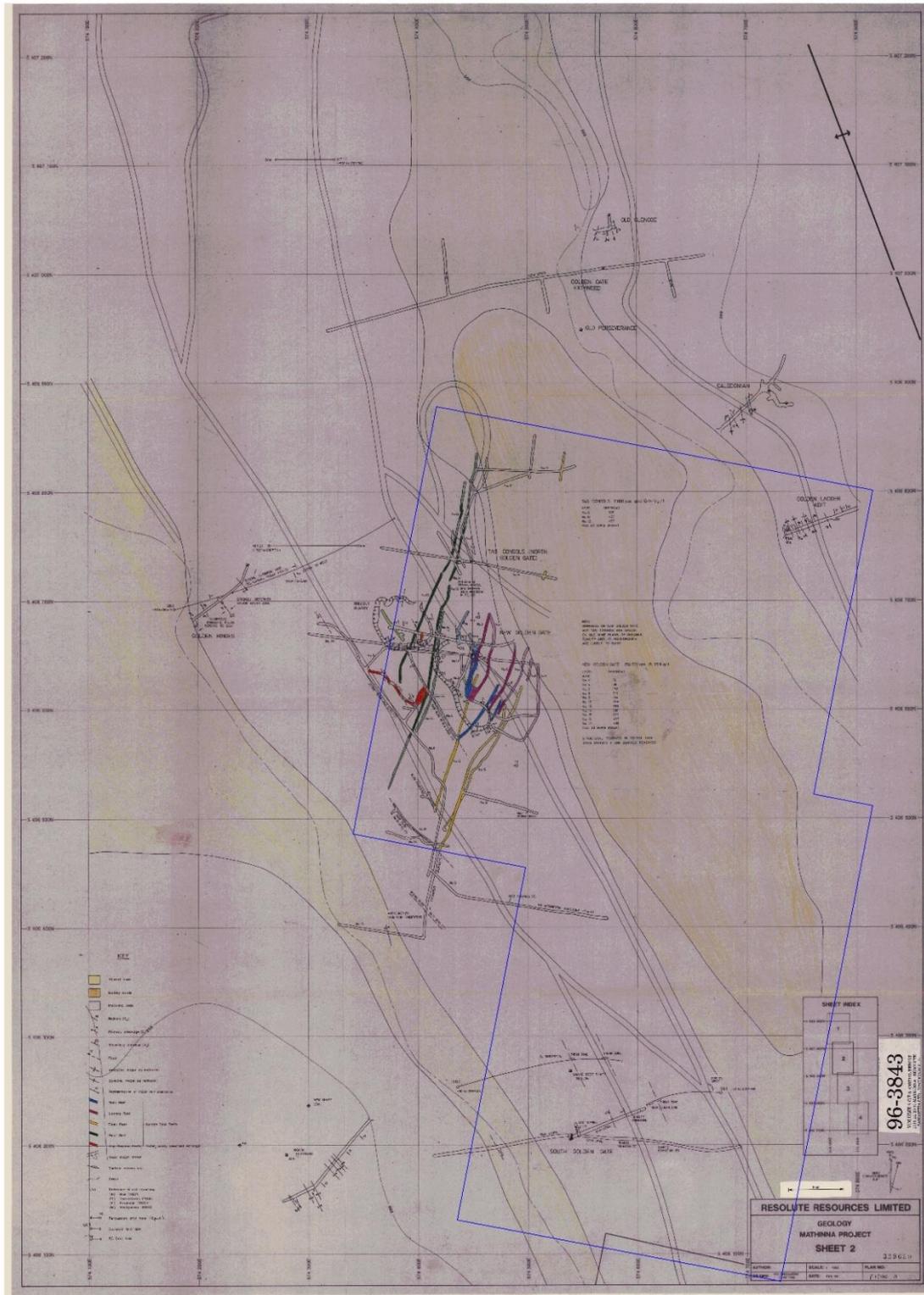


Figure 2: Plan view of the workings of the New Golden Gate and Tas. Consols. (North Golden Gate) mines (note only selected levels with relatively more exploratory development shown), and adjacent workings (after MacDonald, 1996) pre the discovery of Dylans and Sophies reefs. Current RL 2/2008 is shown in blue outline. Reefs are Loanes (blue), Main (purple), Lower East (yellow), Lower West (green) and Zig-Zag reef (red). Map datum is AGD66.

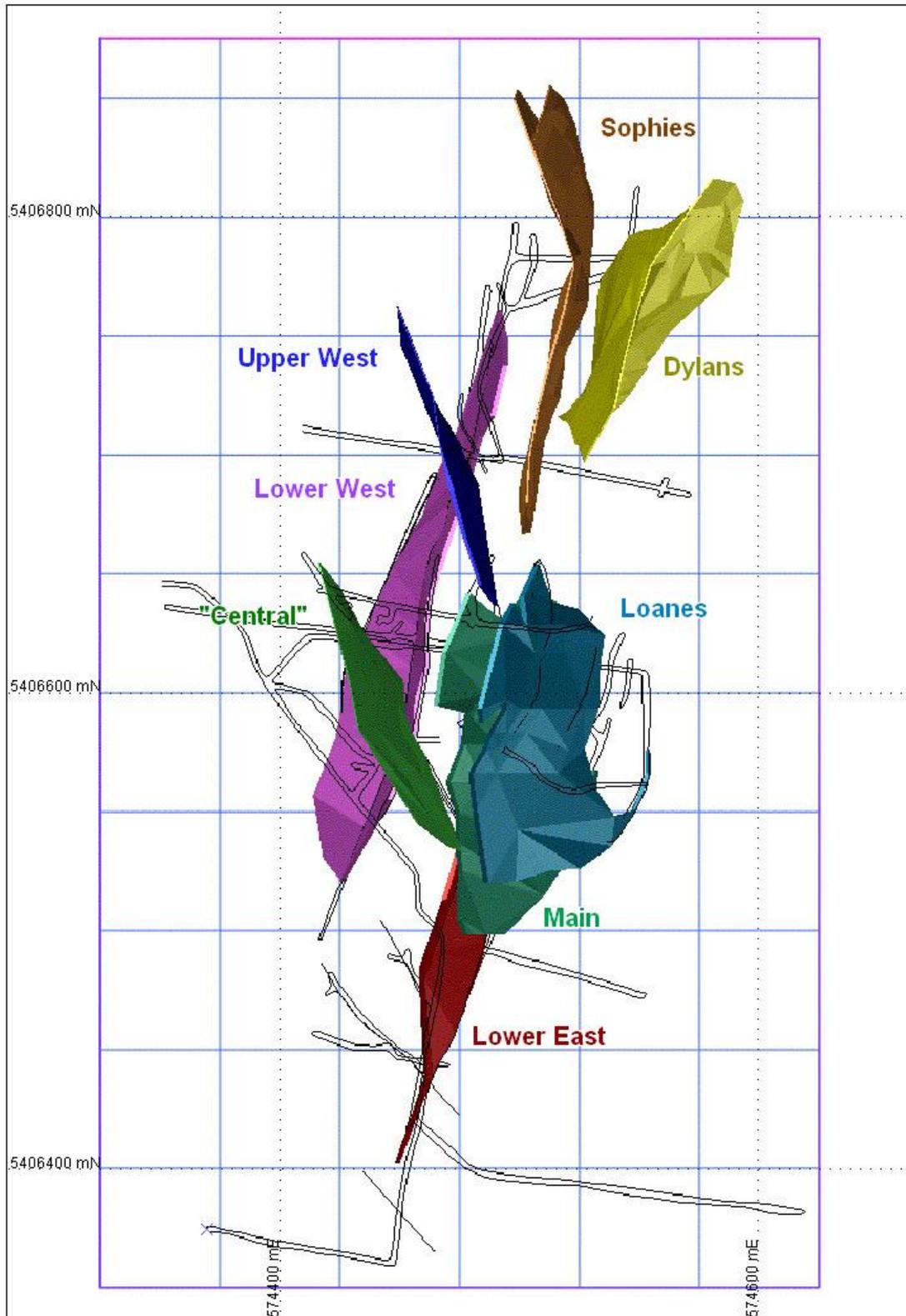


Figure 3: Plan view of all reefs mined and unmined (Zig-Zag Reef not shown in this figure).

4.0 Potential

4.1 Introduction

The Mathinna Goldfield, and RL 2/2008 in particular has excellent and proven potential for high grade gold reefs which extend to depths of at least 600m.

Both Sophies and Dylans Reefs, which must outcrop or nearly so beneath the tailings, and thus are ready for open cut mining, have excellent untested potential below the 120m depth to which they have been drilled.

This exploration programme does not seek to address this depth potential as a programme to do so has already been designed Travis Murphy.

However, there is still excellent potential to add to the near surface resources which would be readily exploitable.

Figure 4 (see below);

- Summarises the near surface potential and proposed drill traverses.
- Shows the expected positions if all known reefs were projected up their average dip to surface. The Main, Loanes, Lower East and Lower West Reefs all essentially project to the same position which has been mined already.
- The pink dashed line outlines the extent of drilling to date (and areal extent of old mine levels - not shown) to 50m below the surface. Drill traces extending beyond this dashed line are deeper than 50m.
- Coloured bars on drillhole traces are gold grades, but note that anomalous results at collar, particularly in the more eastern holes, are almost certainly due to contamination by surface tailings.
- The red hatched area defines the most prospective areas for near surface (i.e. <50m depth) readily exploitable resources. The area has been subdivided into zones, i.e. Northwest, Central North, Southeast and Southern. These are discussed in turn below. (It must be said that whilst these hatched areas are the higher priority, surface exploitable areas, the rest of the tenement is still prospective for high grade reefs using the analogy of Dylans and Sophies Reefs positions.)
- Red lines are recommended drill traverses. These drill traverses are ideal and should be drilled in stages with ongoing evaluation, particularly structural and geochemical refining prioritization.
- Thicker red lines, one in each zone, are the priority one traverses for each zone.

Drill traverses should be drilled as a fence of -60 degrees HQ diamond holes with the collar of the next hole vertically above the end of the previous hole. Holes need only be drilled to depths of 80m each. Holes should be drilled due west except in the Northwest Zone where there is an argument that two holes be drilled easterly and continued to depth to satisfy two of Travis Murphys proposed deeper drillholes. Core orientation should be conducted as a norm

4.2 Central North Zone

The demonstrably most favourable structural setting, i.e. north-northeast striking reef structures near where they verge with the Main Slide (mine usage) Fault, and to a lesser degree the 2nd Slide, has only been drilled on one section, i.e. 6745mN (note: drilling grid is AMG based i.e. 6745mN is 5406745mN AMG), to the north of section 6665mN, a distance of

80m's. This zone is highly prospective with the potential for extensions to the east dipping "Central" Reef as well as new reefs branching off the Main and/or 2nd slides.

Two traverses are proposed here on sections 6685mN (160m) and 6705mN (190m). It is recommended that section 6705mN be drilled first, and ideally extended into EL 14/2013 to the 2nd slide position. Evaluation of results should follow before drilling section 6685mN.

4.3 Northwest Zone

North of 6745mN to the RL boundary at 6865mN, i.e. 120m's, the tenement boundary moves away from the ideal structural position, however, the north-northwest striking Upper Western Reef, itself open ended and needing further drilling, may itself have north-northeast structures branching off it, i.e. repeating the pattern.

The whole northwestern corner of the RL between the pink dashed line and RL boundary is highly prospective for near surface, high grade gold mineralization.

Here three drill traverses are recommended on sections 6785mN (400m), 6825mN (420m) and 6865mN (460m).

Section 6785mN should be drilled first and ideally extended into EL 14/2013 as shown with evaluation before stepping north to sections 6825mN and 6865mN.

4.4 South East Zone

This area, immediately southeast of the known historical reefs, has potential for repetitions of north-northeast striking reef structures branching off the Main Slide or branching off north-northwest oriented faults parallel to the Main Slide of which the Upper West Reef (dark blue line) structure may be such an example.

Whilst deeper (i.e. >50m deep) development in the New Golden Gate mine has explored this country at depth, reported barren reef structures here may become gold bearing up-dip. The light green dashed Lower Far East structure is an example of this. It has been projected vertically as no information is immediately at hand (though may be found in old newspaper reports of the time) so its position is rubbery and should be seen more indicative of the potential.

Further drilling is also recommended to extend the "Central" Reef resource to the south-southeast, where the single fence of RC drillholes may have tested a more poorly mineralized part of the structure, specifically targeting the intersection with the Main (and Second Slides). Extending section 6545mN westwards should achieve this task.

Traverses are recommended on sections 6545mN (320m), 6585mN (220m) and 6625mN (110m) with 6545mN drilled first.

4.5 Southern Zone

The ideal structural position i.e. north-northeast reef structures verging with north-northwest fault/reef structures continues untested south from 6485mN to Mines Department drillholes GG1 and GG2 on section 6245mN/6285mN and the South Golden Gate shaft and extensive cross-cutting at 120m depth on section 6205mN, a distance of 200/240m and 280m respectively.

Numerous faults and/or barren (see note below) reefs intersected in the drill holes and cross-cuts attest to the continuation of the regional Main Slide shear zone this far south.

Whilst assaying of GG1 and GG2 has not given any significant grades apart from “trace” (this needs further investigation) GG2’s log has a type written comment that a piece of visible gold was removed from core before assaying!

Three drill traverses are proposed initially for this zone though prioritization of drilling in this area would benefit significantly from a close spaced soil sampling programme detailed below and whose results would determine which of the three (or indeed other) traverses are drilled. At this point traverses are proposed on sections 6325mN (320m), 6385mN (320m) and 6445mN (320m). Without soil sampling I would recommend drilling the middle of the three.

4.6 Soil sampling

To improve targeting in this southern section it is recommended that a detailed soil sampling programme carried out.

The Mathinna area was blanket soil sampled by Resolute in the mid 1990’s (MacDonald, 1996 & Jackson, 1999) with successful delineation of coherent Au and/or As anomalies. The grid was very sparse at 100m x 50m and only a few samples were collected within RL 2/2008. Figure 5 shows the current soil samples positions and Au with a proposed 25m x 20m grid overlayed for a total of 280 samples. Samples should be assayed for Au, As, Cu, Pb and Zn at least and it is expected that As and perhaps Pb may be the best pathfinder elements with Au generally less mobile in the soil environment.

The eastern margin of the northern part is not well constrained and lines will need adjusting in the field depending on the extent of alluvium.

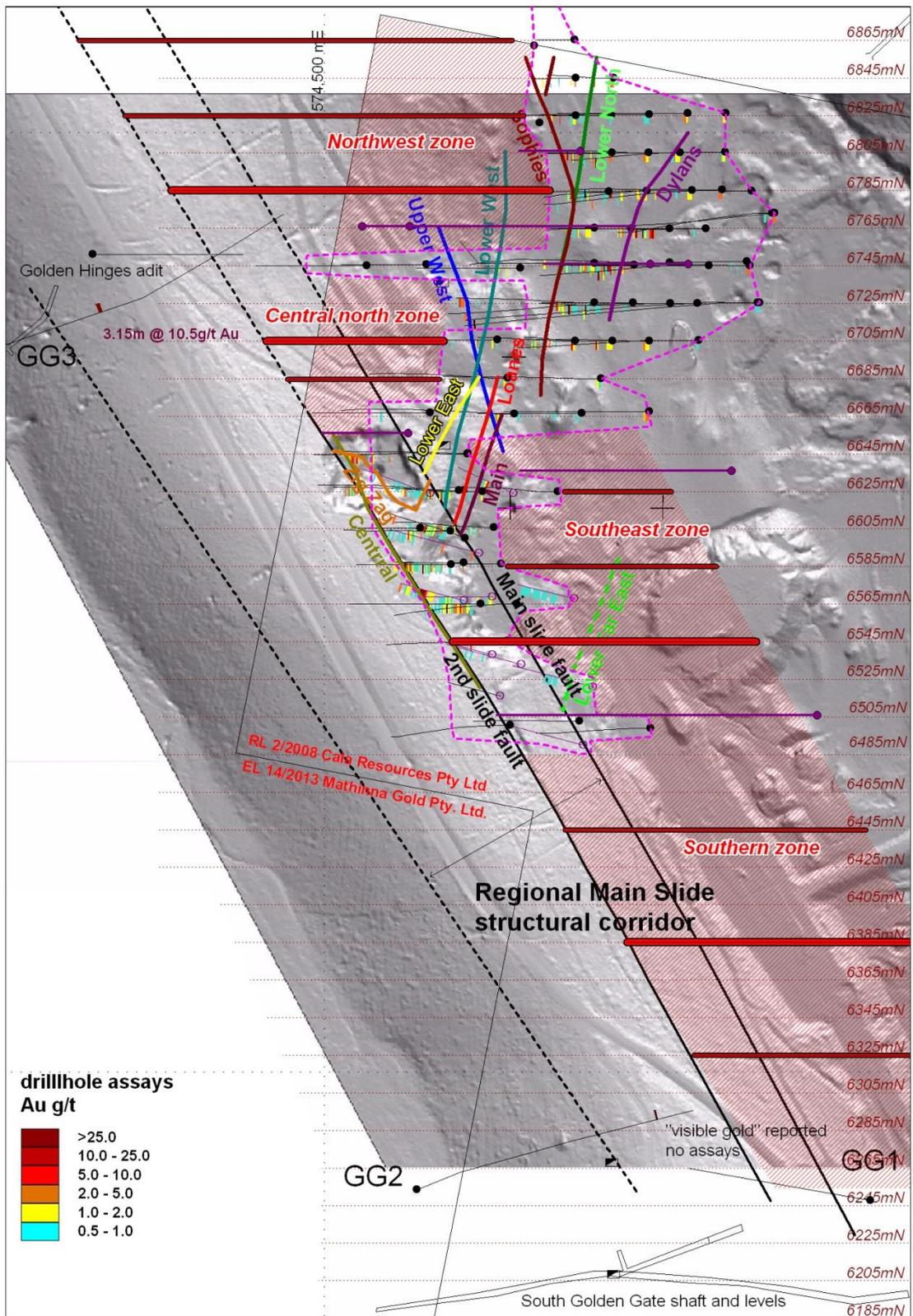


Figure 4: Principal target zones in red hatch with ideal proposed drill traverse as red lines and priority one traverses in thicker red lines.

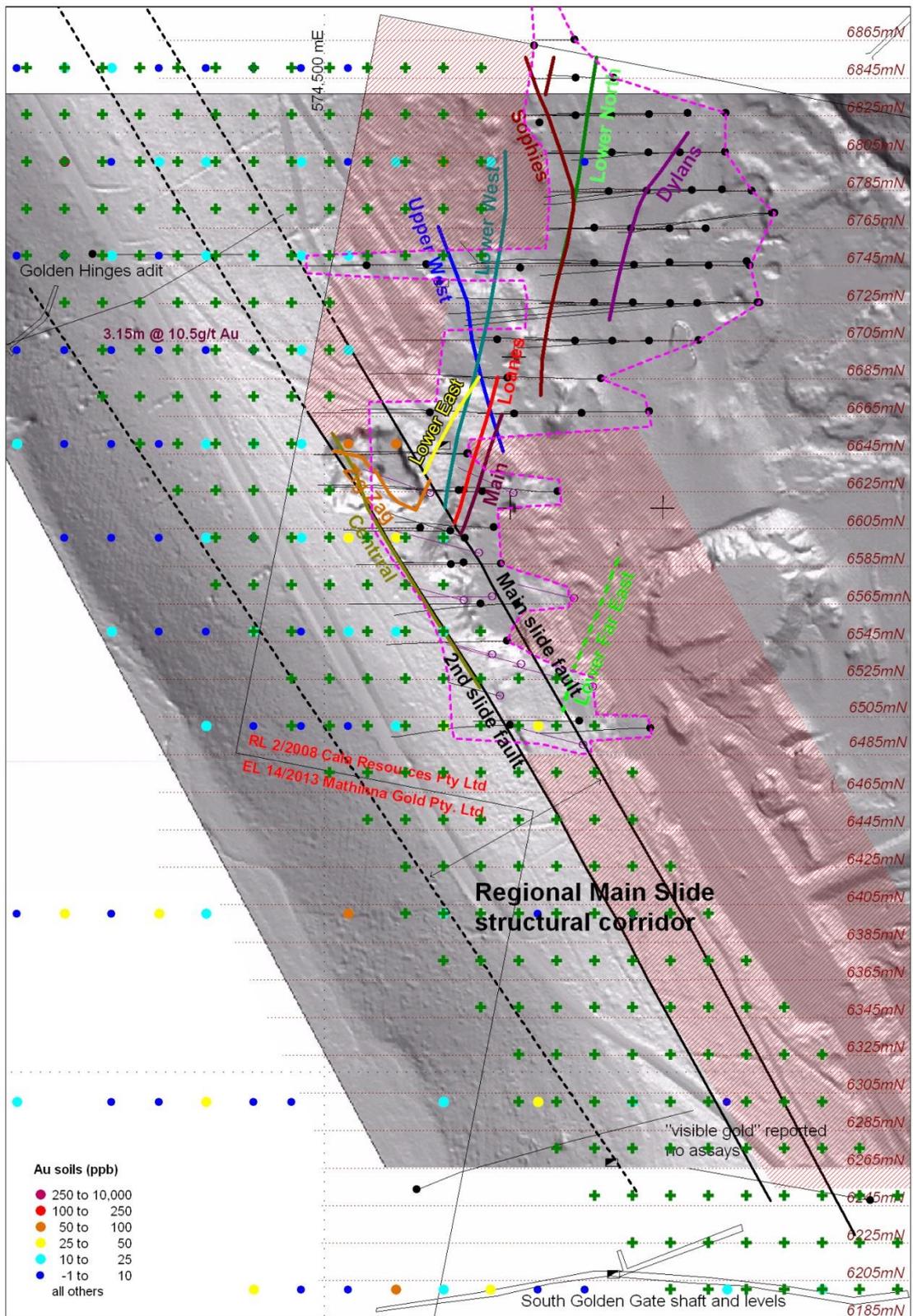


Figure 5: Gold in soils with proposed new sampling locations as green crosses.

4.7 Conclusion

The amount of drilling (3240m) recommended is quite extensive and still doesn't cover all of the prospective country. Prioritisation within each zone is given in each relevant section, however, as noted evaluation of results should follow completion of each drill traverse. For this reason, unless results are immediately encouraging drilling the priority one traverses from each section would see a total of 1230m, a more reasonable initial test.

It is recommended that the priority sections from each zone are drilled in the order Central North, Northwest, Southern and then Southeast.

At a cost of ~\$150/m the 1230m programme would cost around \$184,500.

The soil sampling is estimated to cost <\$50/sample in this current climate, i.e. ~\$14,000.