

WEBB MINING PTY LTD

**EL 11/2011 Mangana
Annual Report on Exploration Activity
July 2014 to July 2015**

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July 2015**

Abstract

Exploration focused on reconnaissance rock sampling and mapping at

- Richardsons Creek mine assessing the potential for the reef and mullock heap.
- Upper Fern Tree Gully looking for gold in the basal Permian conglomerate.
- Twilight mine looking for the source of a high grade sandstone sample held by Mr Steve Parker.
- Blackboy Ridge looking for the source of arsenic soil anomaly.

as well as compiling existing digital data.

Work done has

- Downgraded the potential for the Richardsons Creek mine reef in the immediate environs of the mine.
- Located detrital gold in the basal Permian polymict conglomerate but may have downgraded the potential for ore grade gold in this sedimentary unit.
- Recognised Mr Parker's sandstone as consolidated battery sand but explained the difference between the grades in the consolidated material and the looser sand in the heap and tiphead.
- Not shed any light on the source of the arsenic soil anomaly on Blackboy Ridge.
- Examination of existing soil geochemical data, in spite of clear flaws, coupled with 3D modelling of old workings, reveals a number of quite significant gold+/-arsenic soil anomalies.

Further work is justified and should consist of

- (1) Infill and (some minor grid extension) soil sampling of broader anomalies.
- (2) Consideration of extensive soil sampling over Specimen Hill
- (3) Surface excavator trenching existing and enhanced soil anomalies with trenching ideally every 20-25m along strike as a maximum in order to adequately test for short strike length high grade shoots.

Table of Contents		page
1.0	Introduction	5
1.1	Location	5
1.2	Tenure	5
1.3	Access	5
1.4	Exploration Philosophy	5
2.0	Geology	7
2.1	Regional Summary	7
2.2	Basal Permian Conglomerates and Sandstones	7
3.0	Exploration Completed July 2014 to July 2015	11
3.1	Introduction	11
3.2	Richardson’s Creek mine mapping and sampling	13
3.3	Permian conglomerate mapping and sampling	15
3.3.1	Introduction	15
3.3.2	Initial sampling	15
3.3.3	Second round sampling	15
3.3.4	Upper Ferntree Gully	15
3.3.5	Fonthill Road and Tower Hill Road	19
3.3.6	Twilight mine mapping and sampling	22
3.4	Other rock samples	23
3.5	Data Compilation	23
4.0	Discussion of Results and conclusions	24
4.1	Richardsons Creek	24
4.2	Permian conglomerate mapping and sampling	24
4.3	Twilight mine mapping and sampling	24
5.0	Environmental	25
6.0	References	26

Figures

1.1	Location of EL 11/2011 “Mangana” in Tasmania’s northeast.	5
2.1	Polymict conglomerate (“facies” 1) showing subrounded and subangular grey siltstone and sandstone (inc. large clast at bottom), subangular vein quartz, subangular feldspar phyrlic andesite (upper right) and rounded quartz pebbles (e.g. centre-right), matrix supported in a matrix of sand to coarse sand grade lithic sandstone. This sample is 10480 and assayed 0.04g/t Au.	7
2.2	Polymict conglomerate (“facies” 1) sample. Clasts predominantly subangular siltstone. This sample assayed 0.23g/t Au.	8
2.3	Polymict conglomerate (“facies” 2) showing angular shattered fragments of feldspar phyrlic andesite with sand to coarse sand grade lithic sandstones. Sample 10479 assayed 0.01g/t Au.	8
2.4	Polymict conglomerate (“facies” 3) showing subangular elongate clasts of siltstone and rounded quartz pebbles. Sample 10514 assayed 0.08g/t Au.	9
2.5	Polymict conglomerate (“facies” 4) showing massive coarse grained lithic sandstone with scattered poorly sorted subangular lithic clasts. Sample 10470 assayed <0.01g/t Au.	10
3.1	EL 11/2011 Work Areas July 2014 to July 2015	11
3.2	Richardson’s Creek mine plan of workings and gold assays	
3.3	upper Ferntree Gully sketch map and sample location	17
3.4	upper Ferntree Gully sketch map and gold assays	18
3.5	Other rock sample locations	20
3.6	Other rock sample gold assays	21

3.7	Twilight mine sketch map and sample locations	22
3.8	Twilight mine sketch map and gold assays	23
Appendices		
A	Rock sample ledger	
B	Assay results – ALS Burnie	

1.0 Introduction

1.1 Location

EL 11/2011 is located in Tasmania's northeastern goldfields. The tenement takes in the northern, western and eastern parts of the Mangana goldfield and the Tower Hill goldfield and extends around Tower Hill itself though Tower Hill is excised.

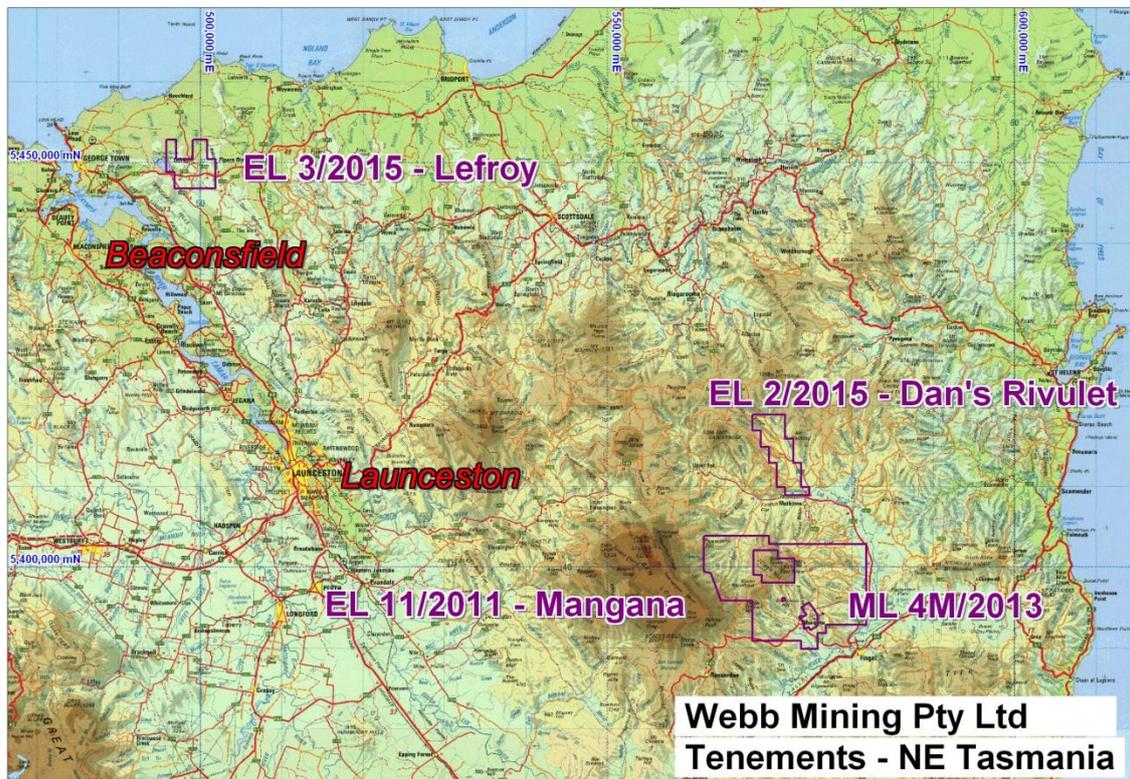


Figure 1.1: Location of EL 11/2011 "Mangana" in Tasmania's northeast.

1.2 Tenure

EL 11/2011 was granted to Webb Mining Pty Ltd on 11th July, 2011.

1.3 Access

Access to the area is by bitumen road via Fingal. Access within the area is generally moderate with steep hills but commonly bush tracks along ridge lines.

1.4 Exploration Philosophy

Webb Mining Pty Ltd holds ML 4M//2013 with the Sailors Gully mill at Mangana. EL 11/2011 surrounds ML 4M/2013 (see figure 1).

Webb Mining Pty Ltd is focused on discovering and mining gold ore for the Sailors Gully mill.

To date mining has focused on underground development in the Argyle and Mangana Gold reefs mines and some surface alluvial testwork.

Webb Mining Pty Ltd has had considerable experience in mining and exploring for high grade gold bearing quartz reefs.

Webb Mining Pty Ltd is aware of the utility of soil sampling with arsenic a strong pathfinder. Webb Mining Pty Ltd is also aware of the commonly short strike length of high grade shoots within these reefs and the need for close spaced surface trenching and drilling.

2.0 Geology

2.1 Regional Summary

The oldest rocks in EL 11/2011 are the folded quartzwacke turbidite sandstones, siltstones and shales of the Siluro-Devonian Panama Group of the Mathinna Supergroup ("Mathinna Beds"). These are moderately tightly folded on north-west striking sub-vertical fold axis with well developed axial planar cleavage. Deformation is attributed to the Middle Devonian Tabberrabberran Orogeny.

These folded basement rocks are unconformably overlain by a sequence of essentially undeformed (other than slight tilting and normal faulting) sediments of the Permo-Triassic Parmeener Supergroup. The sediments vary from glacial-marine at the base through marine to freshwater sediments in the Triassic.

This unconformity surface defines a clear erosional break with the development of plains around the flanks of Tower Hill and along the lobe like ridges which extend from it such as Buckland Hill, Blackboy Ridge, Daylight Spur and Fonthill Farm.

Jurassic dolerite dykes intrude Byatts Razorback in the west of the licence.

2.2 Basal Permian Conglomerates and Sandstones

The lowermost section of the Permo-Triassic sequence was a focus of exploration during the reporting year.

Basal (?) polymict conglomerate

In particular some effort was expended in sampling the lowermost(?) Permian unit of polymict conglomerates (or tillite) and overlying(?) quartz pebble conglomerate, quartzwacke sandstone and conglomeratic sandstone, for gold.

Elsewhere in Tasmania the basal Permian unit is a tillite known variably as the Wynyard Tillite (northwest), Stockers Tillite (central) and Truro Tillites (southeast). Figures 7.4 and 7.14 in Corbett, Quilty and Calver (2014) shows the basal tillite lensing out around Ben Lomond with the northeast a high stand. The presence of tillite around Tower Hill indicates that the Stockers Tillite may extend somewhat further northeast than previously mapped.

The Stockers Tillite and correlates are described as consisting predominantly of debris flow diamictite, dropstones diamictite, glacial outwash conglomerate and sandstone, pebbly mudstone and rhythmite (Corbett *et. al.* 2014).

At the locations sampled around Tower Hill the polymict conglomerate was not seen in outcrop.

The location of float samples 100509 to 10514 and 10459 on the spur to the west of Ferntree Gully between outcropping quartz pebble conglomerate and sandstone upslope and Mathinna Beds downslope suggests that the polymict conglomerate here is the basal unit.

Samples 10473 to 10482 and 10519, 10520, 10522 and 10523 were collected from float on the eastern side of the uppermost part of Ferntree Gully. This position is at a higher elevation than the outcropping quartz pebble conglomerate on the spur to the west of the gully. Whilst only in float the location suggests either that (1) there is another unit of polymict conglomerate higher in the sequence, or (2) there is a fault between the two locations. Whilst it might be a circular argument, the mapped fault on Mineral Resources Tasmania's mapping supports the latter.

The polymict conglomerate may be called a diamictite in that there are two clast populations with a population of larger sized, variably subangular to angular as well as subrounded to rounded clasts in a matrix of sand to coarse sand grade lithic sandstone.

Clasts include grey siliceous siltstone and sandstone and black shale of Mathinna Bed derivation, Precambrian schist and chert, folded in some clasts, sulphidic (in part) vein quartz, granite, and of

some interest from a regional geological perspective, feldspar (plagioclase) phyrlic andesite whose source is unknown.

In the samples collected four “facies” (simple grouping of types as sampled) may be recognized on the basis of clasts compositions with;

1. Polymictic consisting of essentially all clast types
2. Oligomictic consisting almost completely of feldspar phyrlic andesite
3. Oligomictic consisting of siltstone clasts with rounded quartz pebbles
4. Massive poorly sorted polymict conglomeratic sandstone

These “facies” are essentially geographically controlled with samples collected from the east side of Ferntree Gully facies 1 and 2, samples collected on the spur to the west of Ferntree Gully facies 3. Samples collected from the Fonthill and Tower Hill Rd.’s are facies 4 with 1 sample (10466) from Fonthill Rd. facies 1. Gold was shown demonstrably (by pulverizing and washing over the gemini tables) to occur in all facies except 4.



Figure 2.1: Polymict conglomerate (“facies” 1) showing subrounded and subangular grey siltstone and sandstone (inc. large clast at bottom), subangular vein quartz, subangular feldspar phyrlic andesite (upper right) and rounded quartz pebbles (e.g. centre-right), matrix supported in a matrix of sand to coarse sand grade lithic sandstone. This sample is 10480 and assayed 0.04g/t Au.



Figure 2.2: Polymict conglomerate ("facies" 1) sample. Clasts predominantly subangular siltstone. This sample assayed 0.23g/t Au.

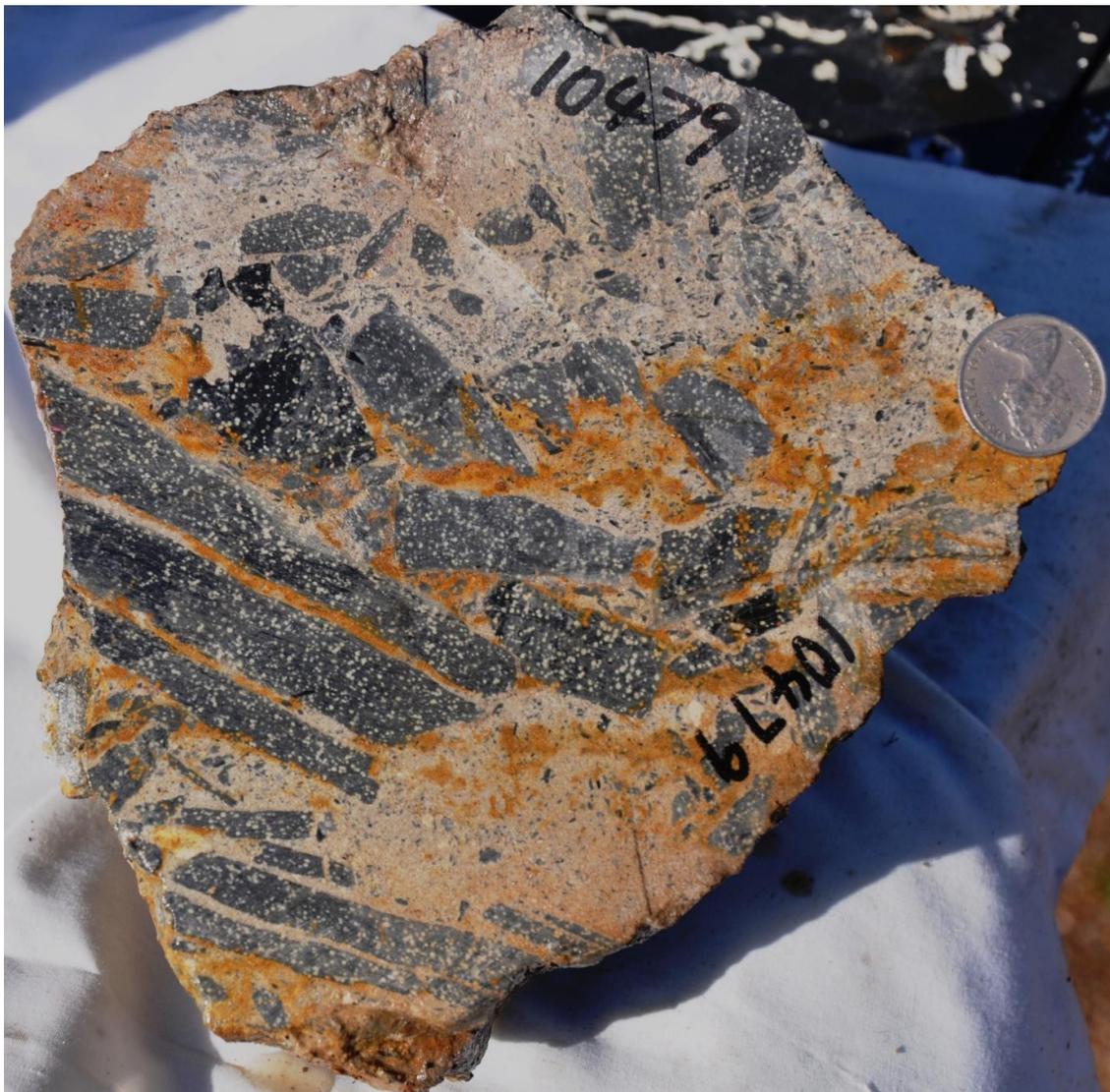


Figure 2.3: Polymict conglomerate ("facies" 2) showing angular shatterd fragments of feldspar phyric andesite with sand to coarse sand grade lithic sandstones. Sample 10479 assayed 0.01g/t Au.

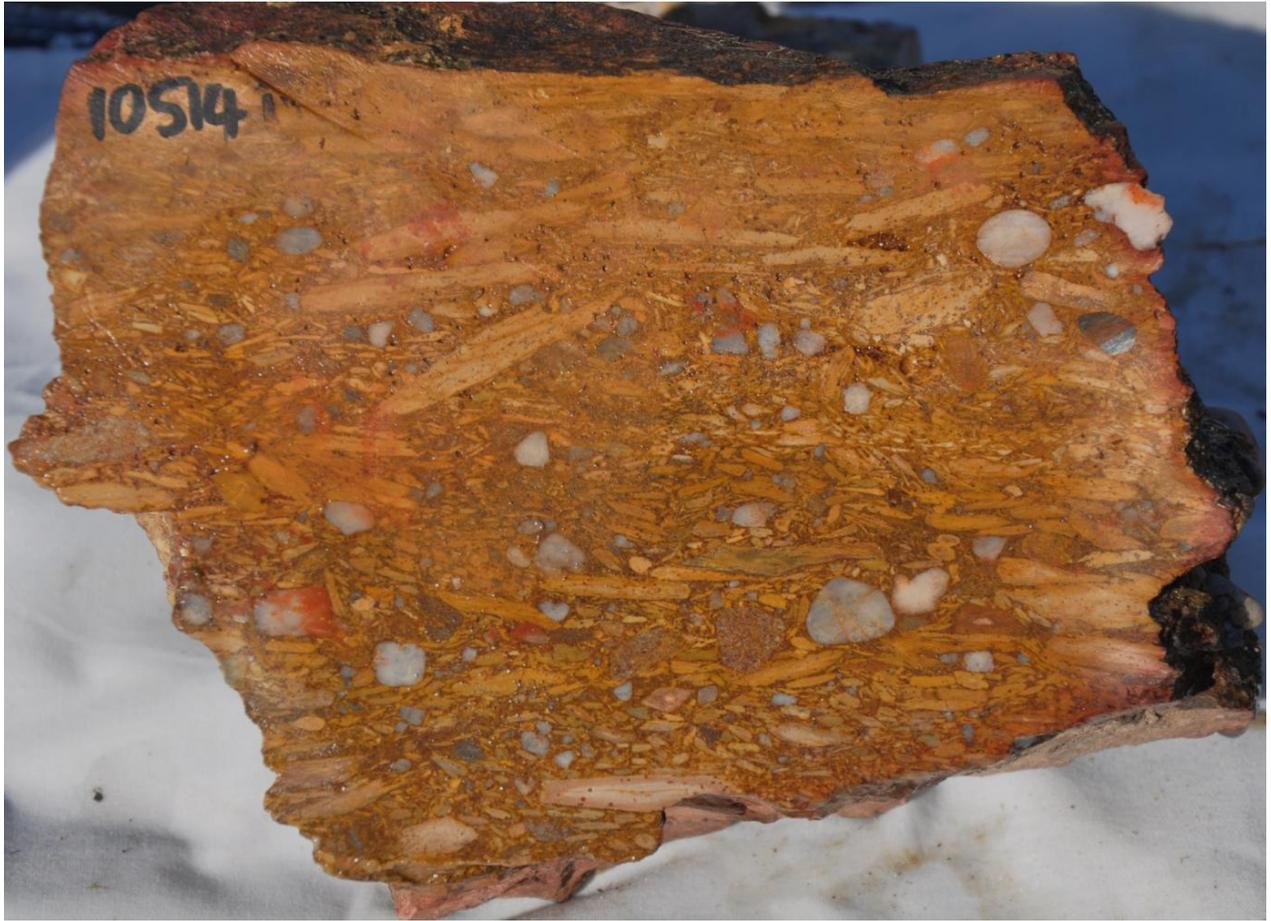


Figure 2.4: Polymict conglomerate (“facies” 3) showing subangular elongate clasts of siltstone and rounded quartz pebbles. Sample 10514 assayed 0.08g/t Au.



Figure 2.5: Polymict conglomerate (“facies” 4) showing massive coarse grained lithic sandstone with scattered poorly sorted subangular lithic clasts. Sample 10470 assayed <math><0.01\text{g/t Au}</math>.

Quartz pebble conglomerates and quartzwacke sandstones

The other distinctive conglomerate consists of rounded well sorted quartz pebbles commonly matrix supported (in a matrix of quartzwacke sandstone) in well sorted beds of 50-200mm in thickness separated by massive beds of predominantly well sorted quartzwacke sandstones and lesser conglomeratic sandstone. These sediments are interpreted as some form of glacial outwash deposit.

Fine detrital gold was found in the samples of quartz pebble conglomerate which was crushed, pulverised and panned along in the initial sampling.

3.0 Exploration Completed July 2014 to July 2015

3.1 Introduction

Work on EL 11/2011 in the reporting year has consisted of;

- Mapping and sampling Richardson's Creek mine.
- Permian conglomerate sampling at
 - Upper Ferntree Gully,
 - Fonthill Road, Tower Hill Road, and
 - Twilight millsite, Tower Hill goldfield.
- Limited reconnaissance rock sampling on Blackboy Ridge in area of anomalous arsenic in soils.
- Data compilation and planning.

Work on EL 11/2011 was carried out in conjunction with work on the enclosed ML 4M/2013. Lower than expected production stalled exploration proposed for the 2014/15 year but this is not expected to be an inhibiting factor in the coming year.

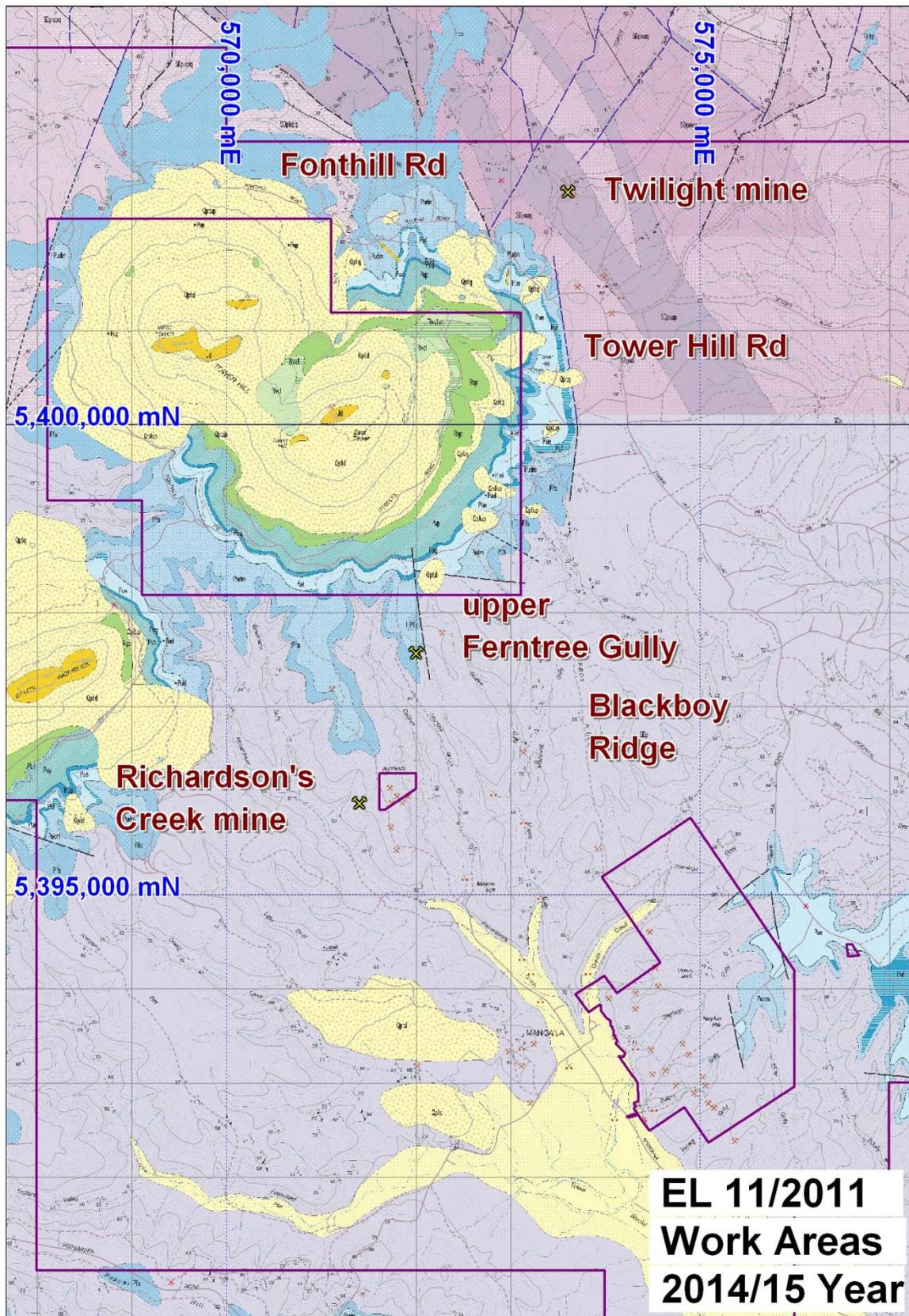


Figure 3.1: EL 11/2011 Work Areas July 2014 to July 2015

3.2 Richardson's Creek mine mapping and sampling

The name "Richardson's Creek mine" is somewhat misleading as the mine lies only partly down the western side of Buckland Hill, well above the valley floor of Richardson's Creek.

A single visit was made by the author and Mr. Steve Parker, a Mangana local who as a local heard first-hand stories from the prospectors who found and prospected this mine.

The mine consists of an adit driven easterly into the hill for ~15m with cross-cuts 10-15m north and south, an inclined shaft to surface and a number of surface trenches. Whilst some thin quartz veins are intersected in the walls of the adit the development is essentially all on a single quartz reef which strikes north-northeasterly, dipping ~-60° to the west-northwest and conformably with the host sandstones, themselves noticeably silicified and extensively brecciated.

The reef varies in true thickness up to 0.55m but is generally in the range 0.25m to 0.35m. It pinches at the end of the northern cross-cut, and is offset by an east-northeast fault.

Both sub-vertical and sub-vertical slickenlines are seen in one location on the reef hangingwall but with only a suggestion of vertical overprinting horizontal though not definitive.

Samples 10423 to 10430 were taken as vertical channels across the strike of the reef at regular intervals along its strike exposure in the cross-cuts.

Sample 10431 was a representative grab sample of the mullock at the mouth of the adit.

Samples were analysed by ALS Burnie for gold only. Reef sample results ranged from <0.01 to 2.4g/t Au with a mean of 0.64g/t Au.

The single mullock heap sample assayed 2.52g/t Au.

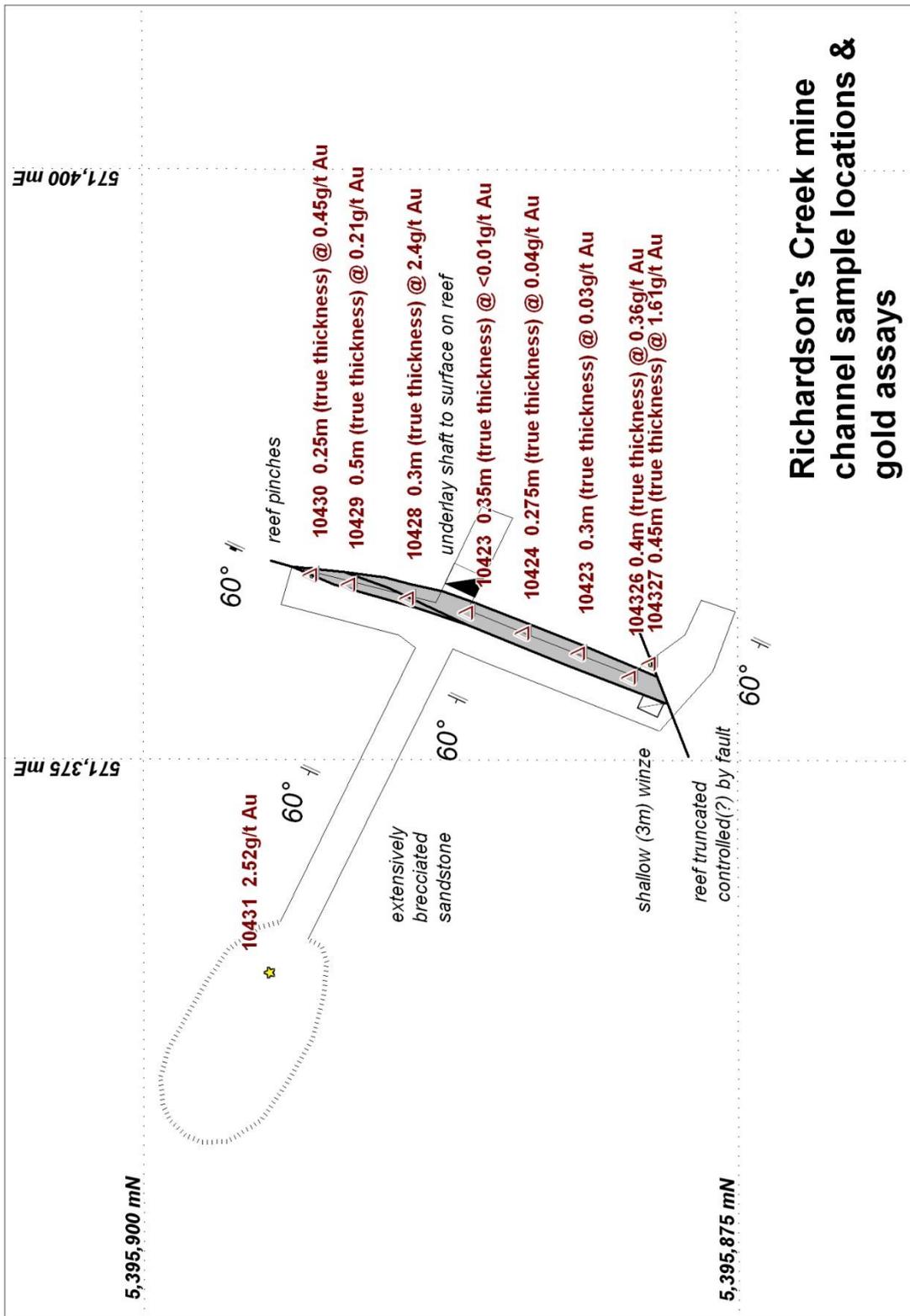


Figure 3.2: Richardson's Creek mine plan of workings and gold assays

3.3 Permian conglomerate mapping and sampling

3.3.1 Introduction

Previous reporting details the belief that at least some of the 10,000 – 15,000 ounces of alluvial gold won from Majors Gully came from the basal Permian conglomerate unit which unconformably overlies Mathinna Beds upstream from Major's Gully.

"It is probable that much of the alluvial gold which has come into Mangana from the north was not shed from the Alpine and Majors Hill reefs, for these reefs are not cut by the main ravines. The local opinion is that the Permo-Carboniferous conglomerate or cement is responsible for a good deal of it. Gold has been found both in the cementing sand of this conglomerate and in quartz contained therein, and the iron oxide with which much of the alluvial gold coming from the northern part of the field is coated confirms the idea that gold is derived from the ferruginous cement. This is the view held locally, and much can be adduced in its support" (Twelvetrees, 1907).

The transmission of similar reporting orally from Mr Steve Parker also supported this belief with the song "... Major's Gully, the blood red stone" which describes the correspondence between good gold and a very red almost ochreous hematitic wash in Major's Gully.

The author submitted three samples for analysis in 1995 for Resolute with a maximum of 0.27g/t Au. (MacDonald, 1996).

3.3.2 Initial sampling

Sampling initially involved a short field visit to the headwaters of Ferntree Gully (near to the Tower Hill Freehold mine) and the collection of some samples of Permian polymict conglomerate float as well as Permian quartz pebble conglomerate. Samples of polymict conglomerate were also collected from Fonthill Road on the northern slopes of Tower Hill and Mr. Steve Parker submitted a sample of (initially apparently Permian on the basis of its undeformed nature) sandstone he had collected from the old Twilight millsite on the Tower Hill goldfield.

These samples were crushed, pulverized and put over gemini tables to generate a gravity concentrate then panned to liberate the free gold. Some effort was made between samples to ensure minimal contamination with a quartz blank material collected from Ordovician conglomerate run between the samples.

No effort was made to separate the clasts and matrix to better pinpoint the location of the gold.

Three polymict conglomerate samples, one quartz pebble conglomerate sample and Mr. Parker's Twilight minesite sandstone were assessed in this way - grades were not quantified. **Visible gold was recognized in all samples.**

The sandstone from the Twilight mine site was particularly rich.

In the conglomerates the gold is generally <0.5mm and is reasonably consistently sized.

3.3.3 Second round sampling

An attempt at more systematic sampling commenced with further sampling of conglomerates, both polymict conglomerate tillite(?) type and pebbly types, as well as Permian sandstones. Samples were collected from upper Ferntree Gully, Fonthill Road and the Twilight minesite again.

3.3.4 Upper Ferntree Gully

At upper Ferntree Gully a single long traverse was made from the east side of the gully near the Tower Hill Freehold mine, westerly around the head of the gully then down the spur between Ferntree Gully and Calders Gully Road.

The basal polymict conglomerate was not seen in outcrop.

Samples of this polymict conglomerate unit were collected from float along the bush tracks around the head of Ferntree Gully and across to the Tower Hill Freehold mine. A few relatively rare samples were also collected at the end of the traverse westerly along the spur.

Quartz pebble conglomerate and interbedded sandstone by contrast outcrops/sub-crops extensively on the spur as large blocks.

Samples of in-situ quartz pebble conglomerate and interbedded sandstone were collected as vertical channel samples where possible.

Samples were classified as;

- Vein quartz
- Quartz pebble conglomerates
- Quartz wacke sandstones
- Polymict conglomerate with siltstone, schist, andesite, granite and vein quartz
- Oligomictic conglomerate dominantly feldspar phyric andesite
- Oligomictic conglomerate with siltstone and lesser quartz pebbles.
- Massive conglomeratic greywacke sandstone

(plotted on relevant sample location figures as coloured symbols).

Gold was detected in a number of samples from both sides of the gully.

Polymict conglomerate

Best grades of 0.55 and 0.23g/t Au come from polymict conglomerate containing vein quartz from the east side of the gully. 10 of the other 12 samples contained detectable gold.

Visible arsenopyrite and pyrite in a number of samples with some correspondence to presence of vein quartz.

At the southern end of the western spur 6 of the 9 samples of polymict conglomerate contain detectable gold with best grades of 0.08 and 0.07g/t Au.

Quartz pebble conglomerate/sandstone

No quartz pebble conglomerate or quartzwacke sandstone assayed detectable gold, in spite of visible gold being seen in the sample panned from the first sampling round.

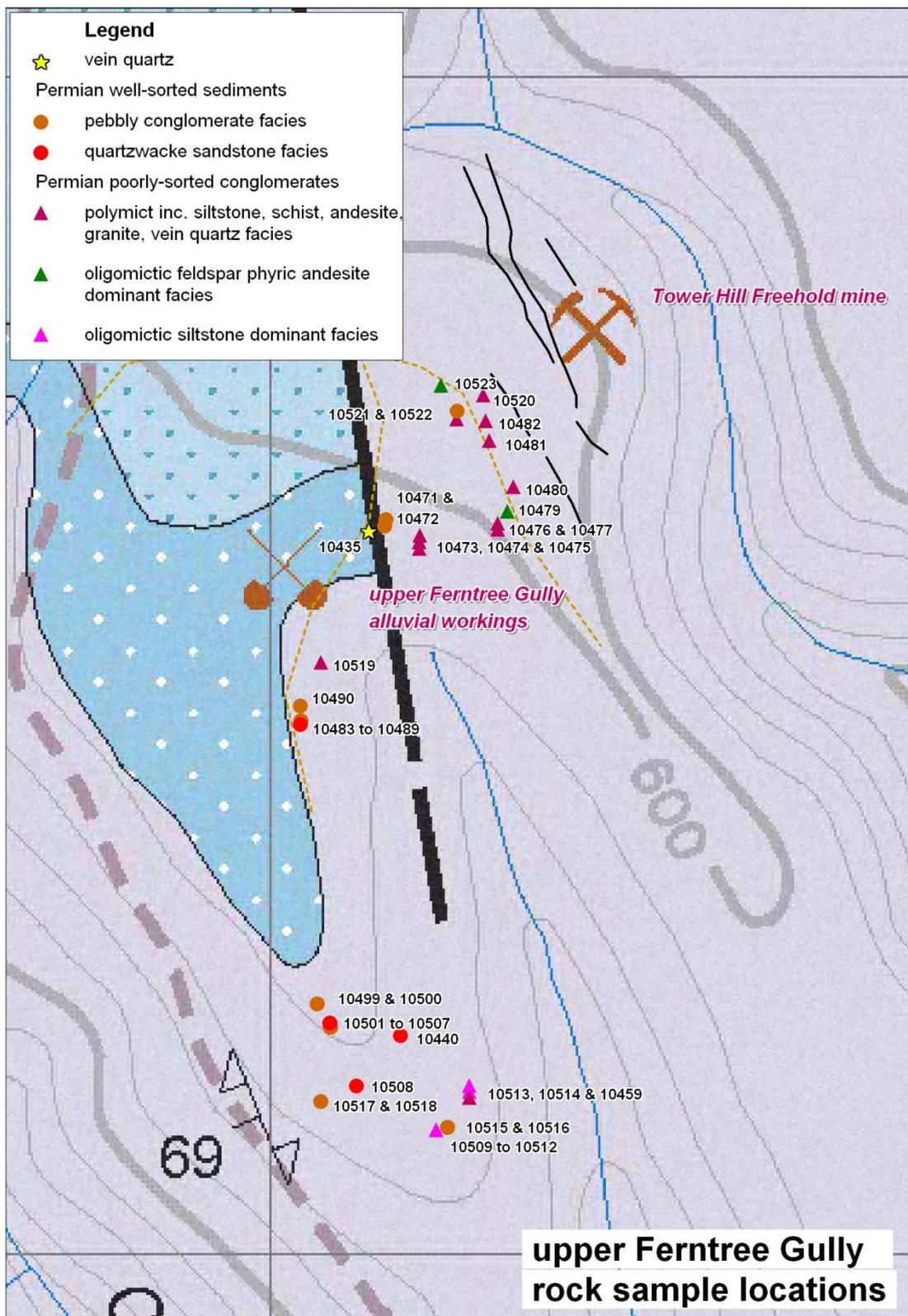


Figure 3.3: upper Ferntree Gully sketch map and sample location

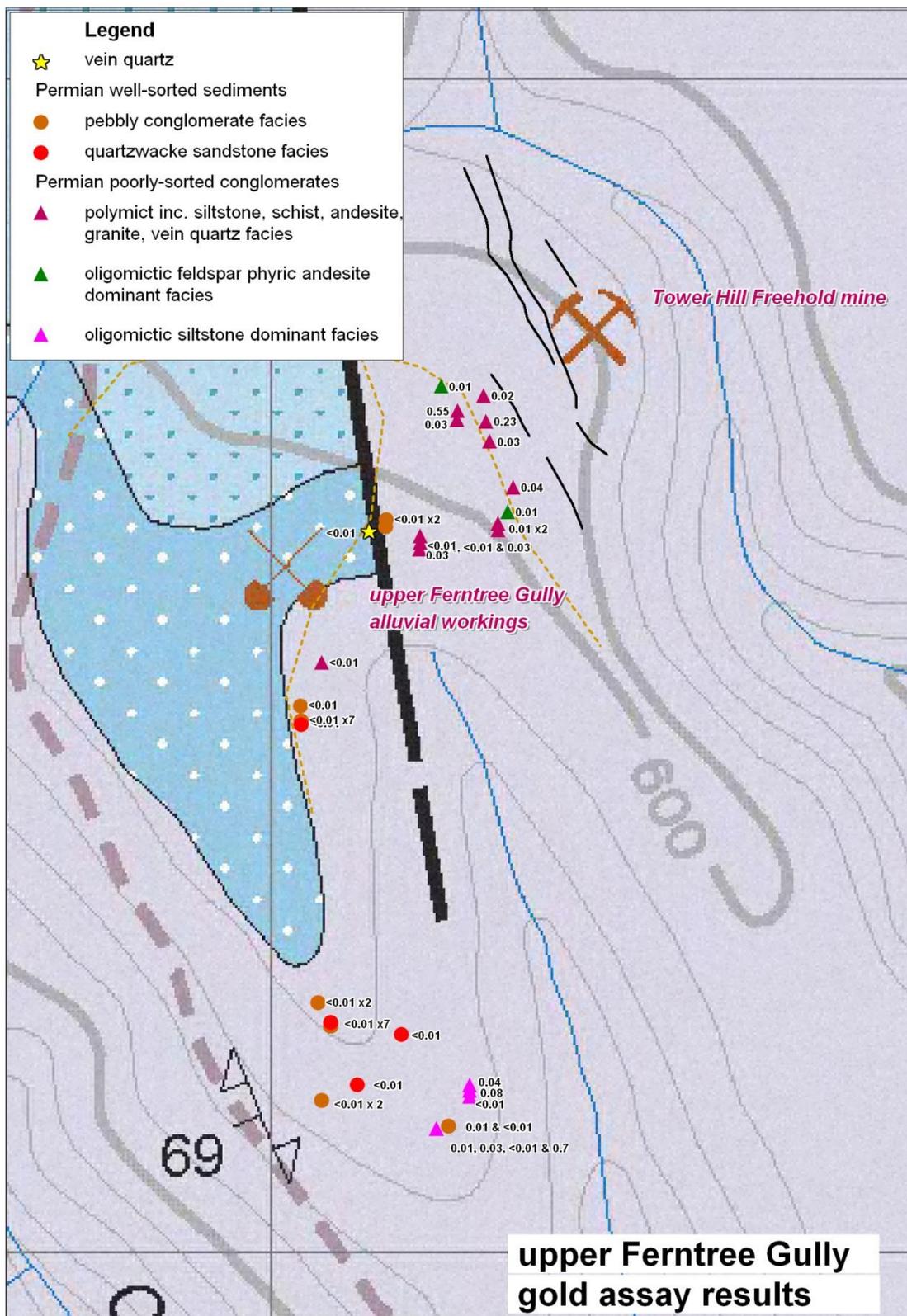


Figure 3.4: upper Ferntree Gully sketch map and gold assays

3.3.5 Fonthill Road and Tower Hill Road

Samples of conglomeratic sandstone and conglomerate were collected from two locations along the Fonthill and Tower Hill Roads 4 to 5 km's north of Ferntree Gully.

These samples are characterized by being more poorly sorted conglomeratic sandstones with scattered 5-10mm sub-angular fragments in massive coarse angular sand grade conglomerate.

Samples 10462 to 10467, 10468A and 10468B were collected from the bank above the Fonthill Rd. at 571,965mE 5,402,155mN (+/-10m) (MGA94). **Sample 10466 assayed 0.06g/t Au** with all other samples assaying <0.01g/t Au. Clasts in sample 10466 include vein quartz with sulphides.

Samples 10469 and 10470 were collected on Tower Hill Rd. at 573,365mE 5,401,405mN. Both assayed <0.02g/t Au.

3.3.6 Twilight mine mapping and sampling

In light of the high gold content for the sample of sandstone supplied by Mr. Steve Parker, a day was spent reconnaissance mapping and rock sampling around the old millsite.

The Twilight mine and millsite lies in an area of natural dry sclerophyll bushland just south of the Tower Hill road.

The mine site consists of a collapsed shaft and mullock heap. The millsite consists of a small reedy dam with an area of battery sands on its southern side extending as two tiphead lobes into the gully below the dam wall.

Some samples (10532 to 10534, 10536, 10537 and 10539) of the battery sand were collected from scattered locations in order to determine an average grade for the material. These samples assayed 0.67, 1.16, 1.25, 0.26 and 0.39g/t Au respectively.

In one location near the upstream edge of the area of batter sands, where a recent track crosses, float of a consolidated yet somewhat friable sandstone with black manganese staining and a light apple to lemony green colour but with impregnated fern stems occurs. It is this location where it appears the original Steve Parker sandstone sample had come. Some more of this material was collected as samples 10529 to 10531 and 10538. Samples assayed 35.7, 21.0, 0.03 and 1.35g/t Au respectively.

The green colouration is scorodite after arsenopyrite and the rock is consolidated battery sand but the reason for its relatively high grade and more consolidated nature is still unclear.

The bedrock to the millsite area, on the southern side of the dam, is Mathinna Beds. The basal Permian contact is well upstream from the Twilight as further evidenced by slate on the mullock heap. However, in a small hollow in reeds on the southern side of the dam are blocks of clearly Permian sandstone which must have been transported in for a reason unknown. Samples (10524 to 10528) were collected from here. All assayed <0.01g/t Au.

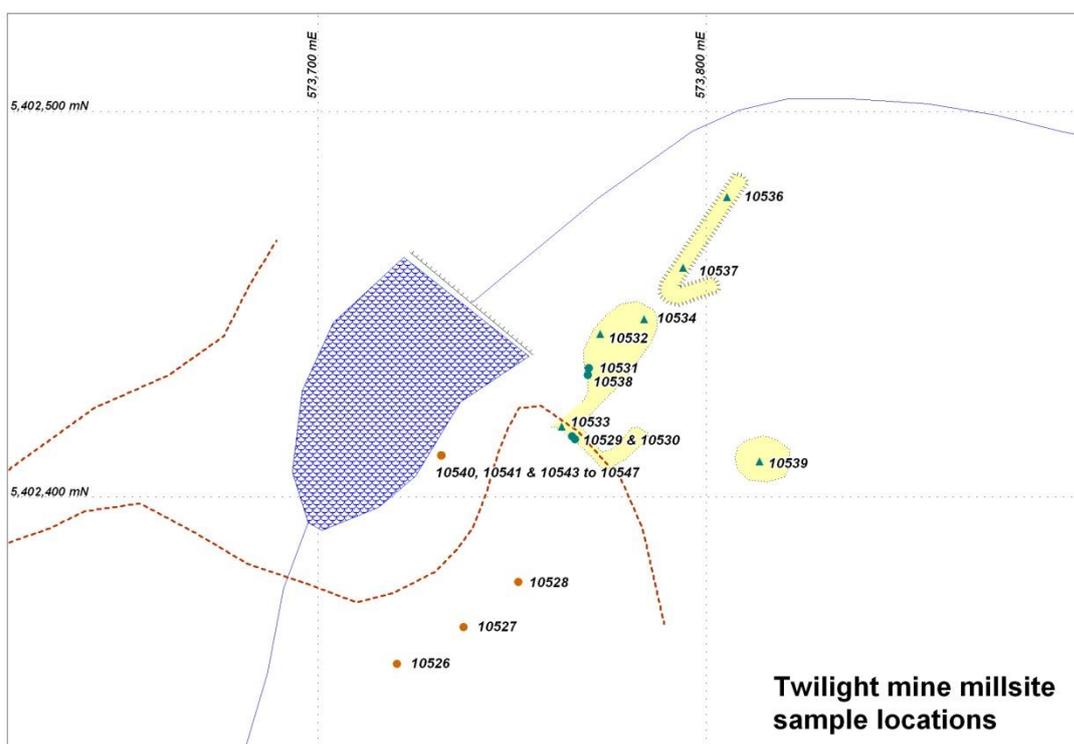


Figure 3.7: Twilight mine sketch map and sample locations

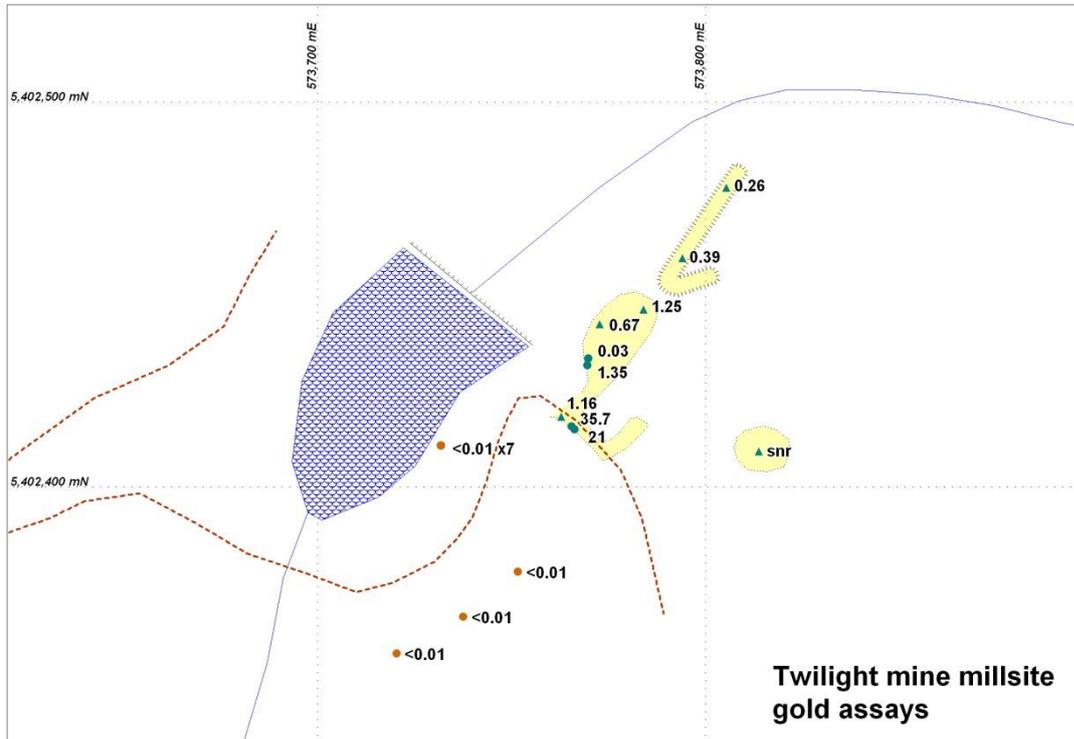


Figure 3.8: Twilight mine sketch map and gold assays

3.4 Other rock samples

Samples of ferruginous quartz and in a few instances grey smokey quartz float were collected from upper Ferntree Gully (10435 <0.01g/t Au) and Blackboy Ridge at the head of gully with major arsenic soil anomalies (10420 to 10422) assayed <0.01 and 0.01g/t Au.

3.5 Data Compilation

Existing digital data was compiled. This data includes old mine plans, reports and soil geochemical data.

4.0 Discussion of Results and conclusions

4.1 Richardsons Creek

Field investigation of the Richardsons Creek mine reveals the reef to be a -65° west-northwest dipping reef of 0.25-0.35m true thickness. The grades returned do not justify any further work at this point in time though anomalous arsenic in soils trending away from the mine to the north-northeast may be reflecting this structure.

4.2 Permian conglomerate mapping and sampling

Sampling of Permian polymict conglomerate around the headwaters of Ferntree Creek clearly supports the historical belief that gold was shed from this basal conglomerate unit.

Both methods of assaying (i.e. gravity on site and fire assay at ALS) did not differentiate between the source of the gold in the polymict conglomerates but the even size distribution supports the matrix being a major source though gold is also clearly potentially present in clasts of commonly sulphidic vein quartz.

However, the (arguably) limited sampling and assaying has appeared to have lowered the immediate potential for the gold bearing polymict conglomerate to contain ore grades.

Limited sampling has shown that gold exists in the basal polymict conglomerate unit as far north as Fonthill Rd 4.5km's away but at sub-economic grades.

It is difficult to conceive of a micor-environment in a glacial system where there is sufficient winnowing and concentrating of heavy grains to generate economic alluvial gold grades. Gold in the matrix appears to be a product of the grinding up of reef and wallrock together and in such a case will never achieve ore grades.

4.3 Twilight mine mapping and sampling

Sampling of Mr Parkers consolidated battery sands gave grades to 31.7g/t Au. Whilst the reason for these elevated grades is unclear the rock is not a Permian sandstone. There is a clear contrast between the grades in the consolidated material and the unconsolidated sand in the heap and tiphead.

5.0 Environmental

Other than the very small scale rock sampling, predominantly of float, no work impacted on the environment.

6.0 References

Corbett *et. al.* (2014). Geological Evolution of Tasmania. GSA.

MacDonald, G. (1996). EL 18/91 "Mangana". Annual Report to Mineral Resources Tasmania for Resolute Samantha Limited. unpub.

Appendix A – Rock sample ledger

Appendix B – assay results, ALS Burnie