Gold : Alto Metals Limited (AME)

Advancing Towards Production : An Update based on a June 2018 Visit to AME's Sandstone Project

AME (at 4.6c) with a Mkt Cap of $9m & $0.9m Net Cash

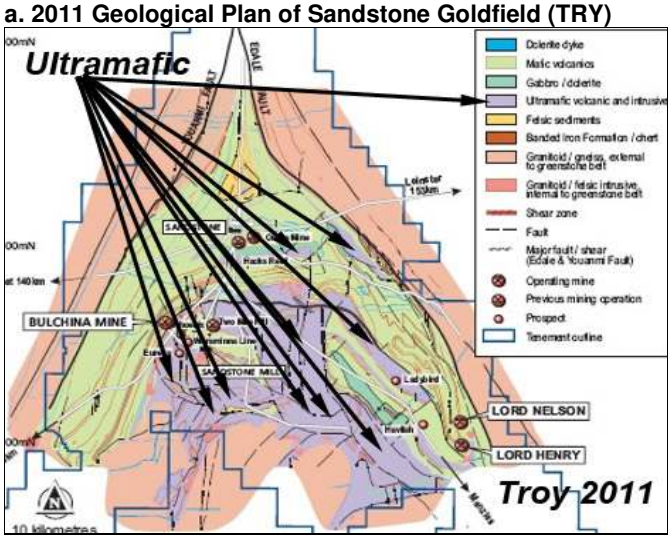
: Rated as a SPEC BUY (Target >10c)

(by Keith Goode:28 July 2018)

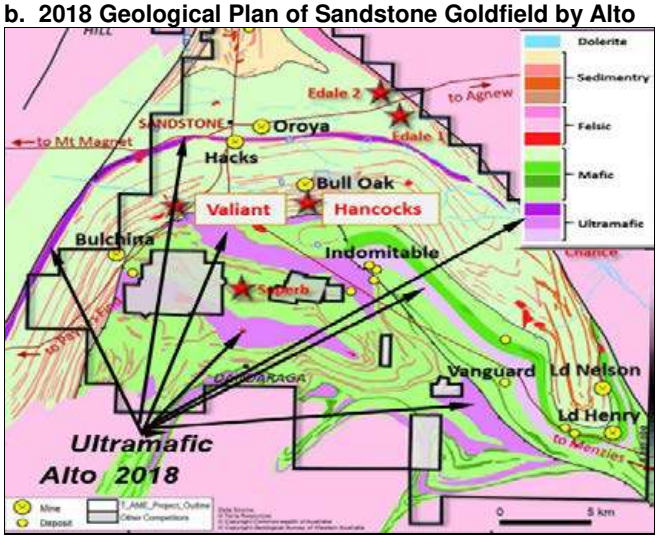
ERA visited Alto Metals Ltd's (AME's) Sandstone Gold Project (that covers most of the ~35km x ~35km Sandstone Goldfield in early June 2018 to review the progress made since our last report dated 25 July 2017. Since that report at 8c the share price rose to ~11c in August 2017 and had been volatile mostly between ~6c & 8.5c since then, with ***some recent selling dropping it through 6c to 4.6c, despite positive achievements.*** The number of shares on issue increased in Oct & Dec 2017 based on a 21.3m in share placements and a 12.2m SPP at 7.5c that resulted in its current level of 185.5m shares on issue (plus 25m vendor perf shares and 6.8m perf rights) for a ~$9m mkt cap at 4.6c. During the year there was a change of Non-Exec Chairman to Terry Streeter, CFO/Co Secretary to Pat Holywell, & Non-Exec Director Stephen Stone resigned. ***Alto Metals is currently rated by ERA as a SPEC BUY with a target of >A$0.10.***

Figure 1. Geological Plan of the Sandstone Goldfield by Troy in 2011 and Alto in 2018.

a. 2011 Geological Plan of Sandstone Goldfield (TRY)



b. 2018 Geological Plan of Sandstone Goldfield by Alto



Similar to a number of other gold companies (eg Gold Road), Alto has taken **~2 years** to take the geology of its mostly wholly owned Sandstone goldfield **back to basics and rebuild it** from Figure 1a to its current state of Figure 1b, with materially less ultramafic, moving forward and making potential discoveries being :

- **Vanguard and Indomitable** Camps – both growing with a number of encouraging intersections and **stacked ore shoots**. It is this growth that has led to both Vanguard and Indomitable being in resource calculation (expected to be reported by the end of December 2018).
- In tandem with the progress at Indomitable, an **ML application has been lodged over the Indomitable Camp** (barring anything materially unforeseen, applications typically take ~6months),
- Hence a **Scoping study has begun** reviewing the ability of the Indomitable Camp to be brought into production (possibly through a third party's operating plant) as an SMP (small mining project), to generate cashflow for exploration. *[Note : such projects have proven very profitable for Southern Gold (over Cannon, possibly ~$15m in JV with Westgold) and Intermin (over Teal possibly ~$8m in a JV)].*
- The identification of a **number of >50ppbAu** anomalous areas using soil sampling, some of which clump together to become **~1km x 1km at possibly >200ppb**, amongst a broader area at **Hancocks,** together with mined laterite areas in the ~3km x 3km Bull Oak vicinity.
- A number of anomalous areas have been identified in the regional soil sampling programme in addition to Hancocks, such as Valiant, Superb and Edale, plus other areas of interest (such as Bulletin or Maninga Marley/Havilah as seen in Fig 2b), with many assay results still to be received.
- Alto has also made material progress in possibly generating an **SMP** over **Oroya** with unmined Au intercepts below & west of the pit, such as **4m at 12.3g/t,** 7m at 6.8g/t & 12m at 3.4g/t.

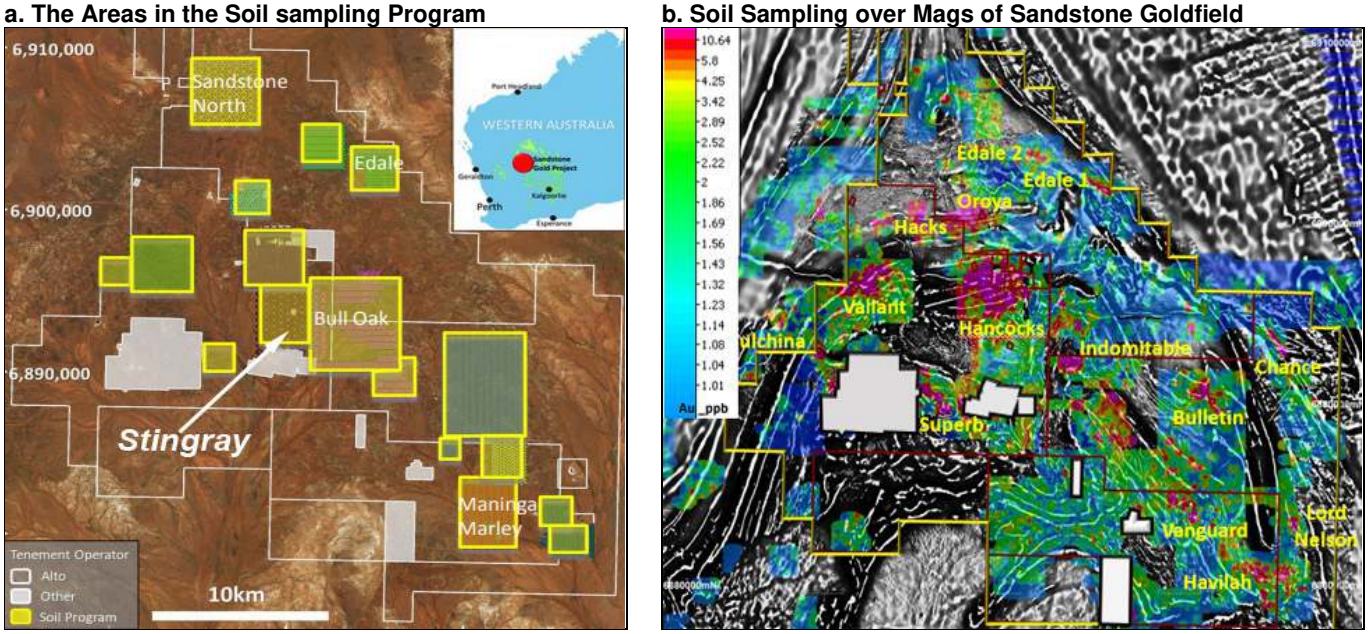
Gold in Soil Anomalies

As part of the back to basics and rebuild process, Alto's Chief Geo (Changshun Jia) produced a ppt study of the discovery by Troy of Bulchina, which showed that despite being secondary laterite covered, soil sampling accurately identified a mineralised anomaly and its underlying strike direction. There are many techniques that can be applied in geology, *the issue is **finding the one** that works for your mineralization.*

And in the Sandstone goldfield, that seems to be the relatively low cost soil anomaly approach. What that involves is contained in the JORC 2012 notes to Alto's 13 June 2018 announcement, modified by ERA:
Soil samples were taken from 20cm to 50cm below surface at the designated grid spots by XM Logistics Pty Ltd (using people on 2 quad bikes at the rate ~A$1500 to $2000/day). The samples were then screened in field (using sieves) to achieve a ~1kg sample of the 0.9mm to 1.6mm fraction, which was bagged, labelled and photographed together with its gps position. The labelled sample bags were then sent in bulker bags to MinAnalytical's labs for mass spectrometry analysis, with the results then entered into excel spreadsheets.

Figure 2. The Areas in the Soil Sampling Program, & Soil Sampling over Mags of Sandstone Goldfield

a. The Areas in the Soil sampling Program **b. Soil Sampling over Mags of Sandstone Goldfield**



Soil sampling had historically been undertaken over various areas of the goldfield by previous companies such as WMC, Herald and Troy, but in a number of cases the program was limited by tenement boundaries as the patchwork quilt of the goldfield was gradually acquired from companies and prospectors by each of those companies. Alto consequently identified gaps in the historic soil sampling "patchwork quilt" and hence the areas to be sampled as shown in Figure 2a.

Alto required ~3000 soil samples to be collected on varying grids (depending on perceived geology and structures) of mainly 100m x 200m, and 200m x 400m in their ~800 sq km goldfield, which was achieved in 30 days (mostly in the month of April 2018) at the rate of 100 ready to be assayed samples per day, and from which the assay data is gradually being received.

The results of this soil sampling programme are shown in Figure 2b for the Sandstone Goldfield, with the ***purple/red colours clearly highlighting the rationale behind Alto's areas of exploration focus.*** The extensive Hancock's / Bull Oak area is suspected of being possibly influenced by run-off from the Bull Oak pit area, however, the size infers that conclusion is too simplistic. Troy discovered Lord Nelson through applying this technique, however, Troy was selective in its soil sampling areas and avoided anywhere where hard rock was near to surface – as it could not pass into their oxide plant without extensive contract crushing.

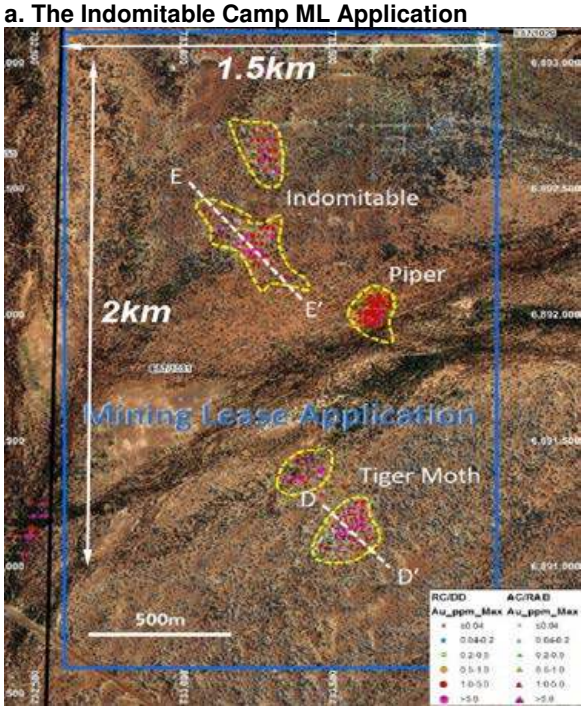
ERA visited the Stingray demag area (shown located in Figure 2a) along with its alluvial workings (possibly up to 10 to 20 yrs ago), however it has not shown up in the soil anomalies, nor has the Herald's EW striking narrow vein Rini open-cut east of Oroya, which has reduced their positions in the order of priority.

Indomitable Camp

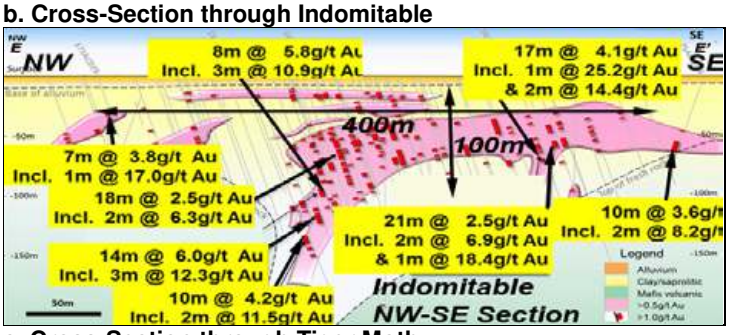
The Indomitable Camp shown located SE of Bull Oak & Hancocks in Figure 1b, consists of the three delineated anomalies of Indomitable, Piper and Tiger Moth, as shown in the area encompassed by the ML Application in Figure 3a. Indomitable was explored by Troy, but despite its **very deep (>100m) oxidised weathering profile,** Troy could not solve the geology, which Alto has unravelled as shown in the cross-section of Figure 3b, with the more conventional cross-section of Tiger Moth shown in Figure 3c. Both cross-sections show that there are near surface supergene mineralised zones.

Figure 3. The Indomitable Camp ML Application, and Cross-Sections through Indomitable and Tiger Moth

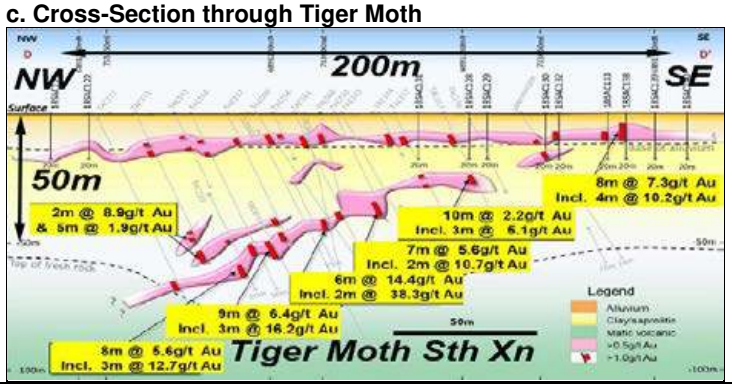
a. The Indomitable Camp ML Application



b. Cross-Section through Indomitable



c. Cross-Section through Tiger Moth



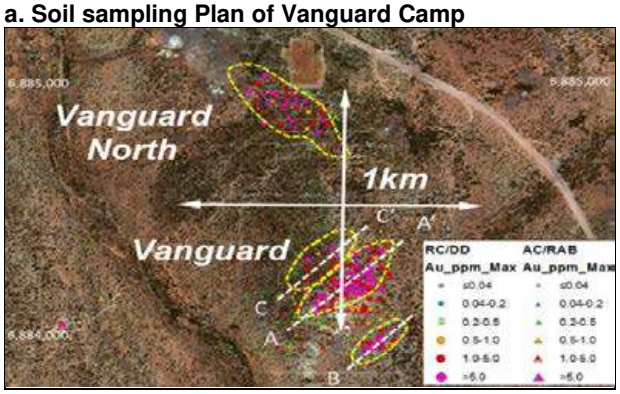
Resource determination has started at Indomitable and Vanguard, with the ML Application preference occurring over Indomitable due to its depth of weathering, and hence expected relatively easy / less costly-to-mine profile (subject of course to geotech). Based on the cross-sections, **Indomitable** could be a **>400m long open-cut with an oxide depth of >100m**, while Tiger Moth could be ~200m long x ~50m or so oxide deep. Drilling is expected to occur to establish whether Tiger Moth North links with Tiger Moth South.

Vanguard Camp

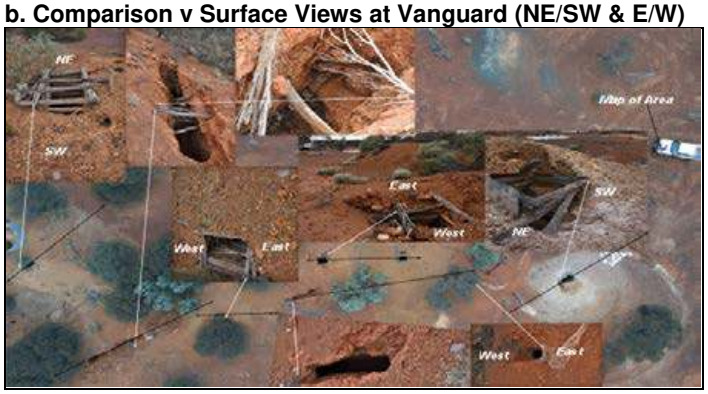
Vanguard is located SE of Indomitable and W of the "Lords" as shown in Figure 1b. It was probably the first significant discovery made by Alto in an overlooked area with a number of EW striking historical workings at Vanguard North as shown in Figures 4a and 4b.

Figure 4. Soil sampling Plan of Vanguard Camp

a. Soil sampling Plan of Vanguard Camp



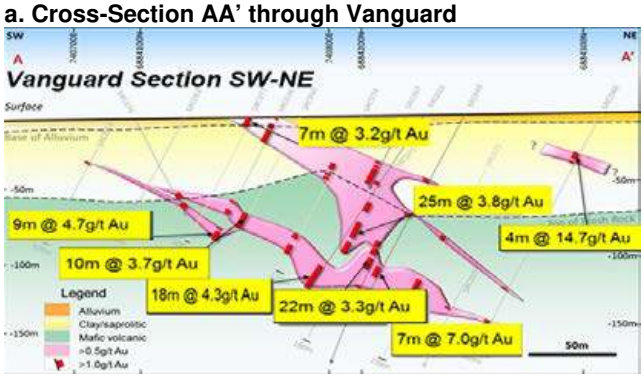
b. Comparison v Surface Views at Vanguard (NE/SW & E/W)



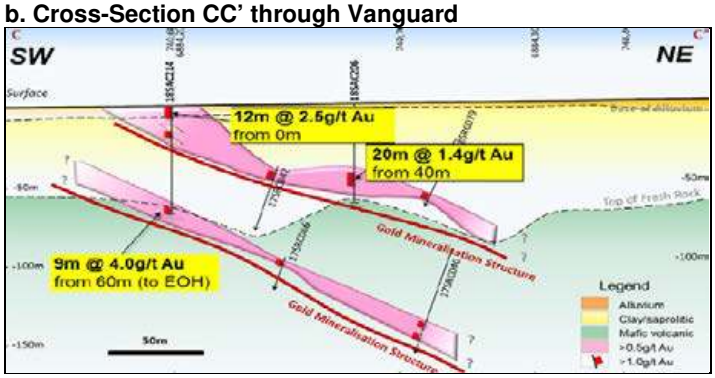
In the past year, Alto extended its area of focus to the original Vanguard area further south (sometimes confusingly called Vanguard East in some of the old Troy documentation). Alto has established a stacked lode system as shown in Figures 5a and 5b. A **resource is expected to be reported by December 2018**.

Figure 5. Cross-Section AA' and CC' through Vanguard

a. Cross-Section AA' through Vanguard



b. Cross-Section CC' through Vanguard



Hancocks Prospect (South of the Bull Oak pit)

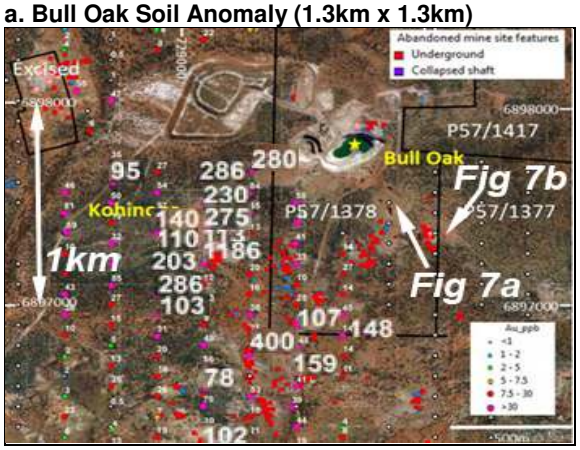
Although Alto reported more assays in the Hancocks area increasing its size, the 13 June 2018 announcement had more of the finer detail of a ~1.3km x 1.3km anomaly at Hancocks, which lies S of Bull Oak as shown in Fig 6a. The significance of the anomaly is that there are a number of values >200ppbAu, with a peak value of 1186ppbAu, as shown in the Table below :

Au assay	<=30ppb	31-50ppb	51-100ppb	101-300ppb	>300ppb
Samples	135	22	20	17	3

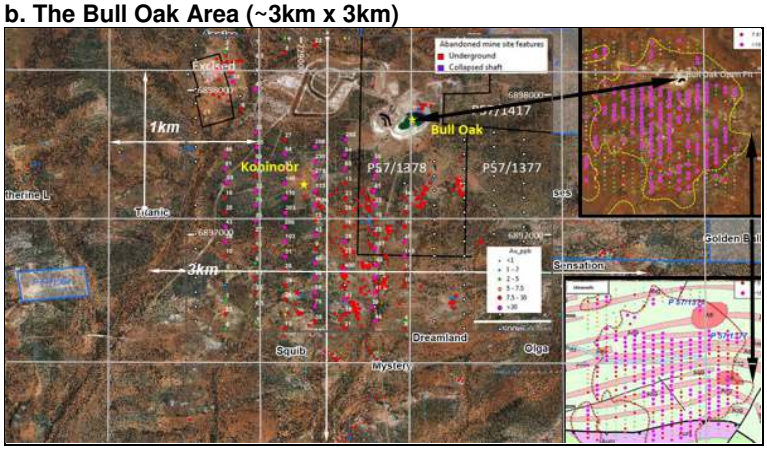
What that means is that there could be a mine at Bull Oak because the general "rule of thumb" **is that ~300pbbAu over an area usually = a mine**, of which there have been a number of examples, for example the original **Plutonic mine** discovery was ~300ppb & that resulted in the listed **Plutonic Gold Company**.

Figure 6. Views of Some of the Mined Laterite Pits around Bull Oak : Kohinoor (WSW) & Immediately SE

a. Bull Oak Soil Anomaly (1.3km x 1.3km)



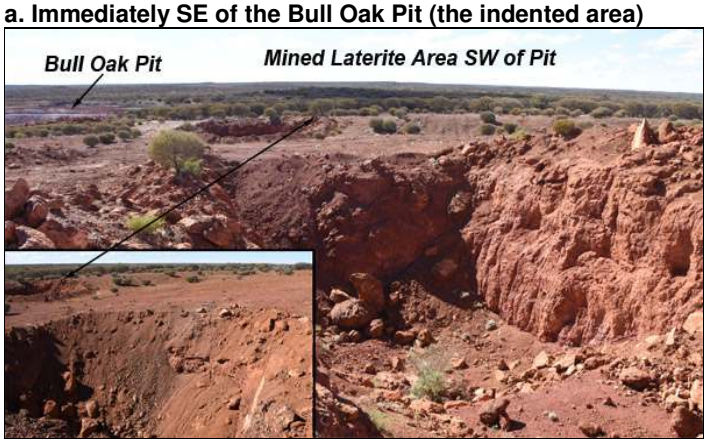
b. The Bull Oak Area (~3km x 3km)



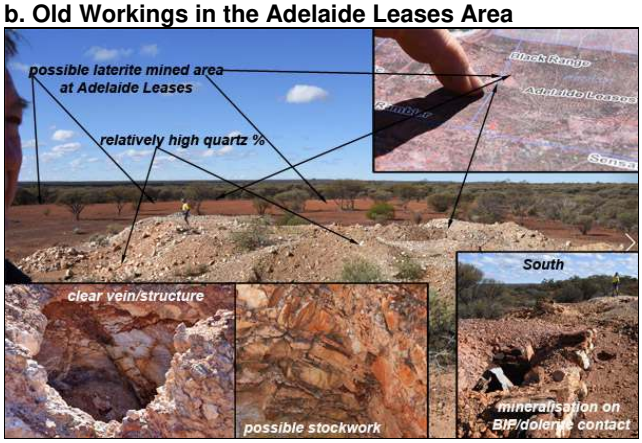
However, the Hancocks/Bull Oak area is in fact quite large as shown in Figure 6b, being over a 3km x 3km area *(the names in Figure 6b are the names of the original mines)*,and has grown larger as shown inset in Figure 6b. Visiting the area showed that Herald had stripped areas of oxide laterite for treatment, and stopped when hard rock was encountered as shown in Figure 7a.

Figure 7. Immediately SE of Bull Oak, and Old Workings in the Adelaide Leases Area

a. Immediately SE of the Bull Oak Pit (the indented area)



b. Old Workings in the Adelaide Leases Area



There are extensive old workings throughout the Hancocks/Bull Oak area, such as Adelaide Leases (west of an area apparently mined for its laterite to feed into the plant) as shown in Figure 7b, and in the area south of Kohinoor. The area south of Kohinoor appears to have the main mafic suite rock-types such as basalt, dolerite, differentiated dolerite and gabbro, plus laminated quartz veins - some of which pass through the dolerite and show alteration adjacent (and due) to the vein passing through the dolerite.

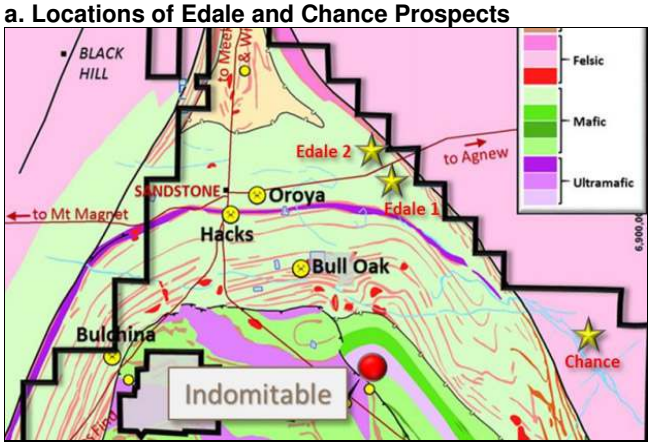
Other Anomalies Examined

Alto has been reporting some of the soil sampling anomalous areas as the assays have come through including Edale and Superb (Alto are applying WW1 Warship naming hence Superb after Vanguard), although the Edale (Derbyshire ?) fault was pre-Alto. The Superb anomaly is located on the E edge of MDI's ground, while Edale is a major structural fault/feature between the bell-shaped greenstone package of the Sandstone goldfield and its Eastern edge against the granite as shown in Figure 8a. And Valiant is SSW of Sandstone.

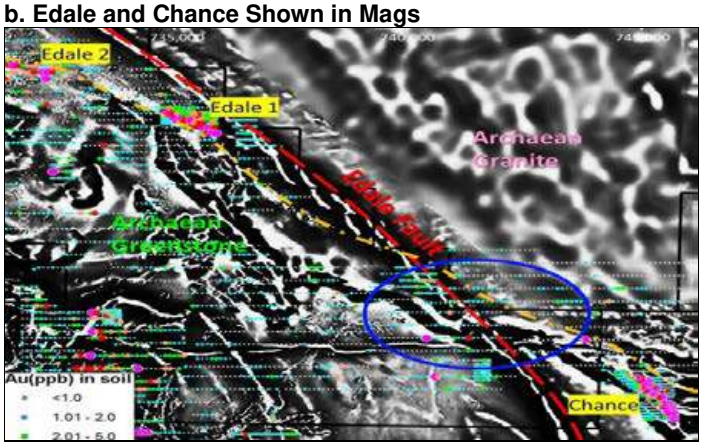
In its JQ2018 report, Alto stated that all three of these prospects require further follow-up, although some are expected to have to wait depending on Alto's financial capability and prospect pipe-line priority.

Figure 8. Locations of Edale and Chance Prospects in Geology and Mags

a. Locations of Edale and Chance Prospects



b. Edale and Chance Shown in Mags



ERA visited the Edale 1 prospect in June 2018 shown in Figure 8a, with Chance appearing to lie in the granite east of the Edale fault. However, in the mags shown in Figure 8b, the greenstones appear to pass east across the structural fault's position and through Chance, raising questions over the original geological interpretation. There are apparently old workings at Chance, but ERA has not yet visited them.

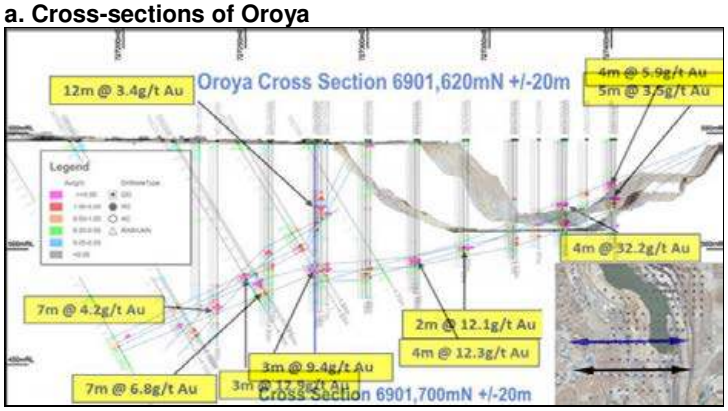
At Edale 1, there were rock chips on the ground (from ~3 drillholes on 020W), some clearly quartz but also some possibly sedimentary or kaolin. There were some tags dated May 2011, although there were no obvious signs (from outcrop, surface rock etc), saying "drill here". So why was it drilled ? – the most logical answer is that it was drilled by Troy as they were closing and walking away from Sandstone, because that is when geos often RC drill where they have always wanted to – ***and often make discoveries in closure.***

Oroya

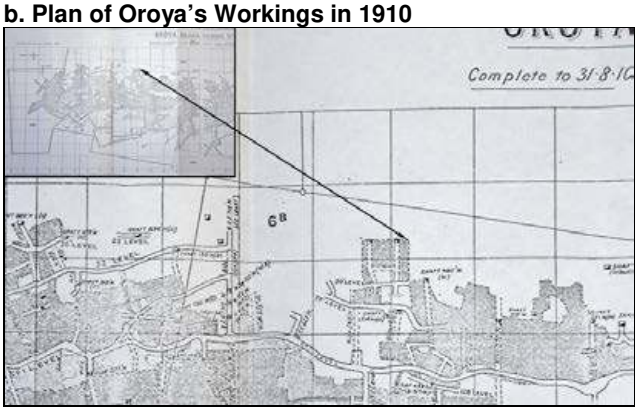
Alto are **currently digitizing a 3d model of Oroya** based on the original WMC data before Herald mined the Oroya open-cut, compiling cross-sections and historical plans, from the first Oroya GM company (the first 4 years including development data were photocopied and are in the local museum at Sandstone – the coloured originals have been mislaid). Alto released two of its interpreted cross-sections on 13 June 2018, which have been overlain onto each other in Figure 9a, while Figure 9b shows some of the plan detail.

Figure 9 Cross-Sections of Oroya, and Plan of Oroya's Workings in 1910

a. Cross-sections of Oroya



b. Plan of Oroya's Workings in 1910



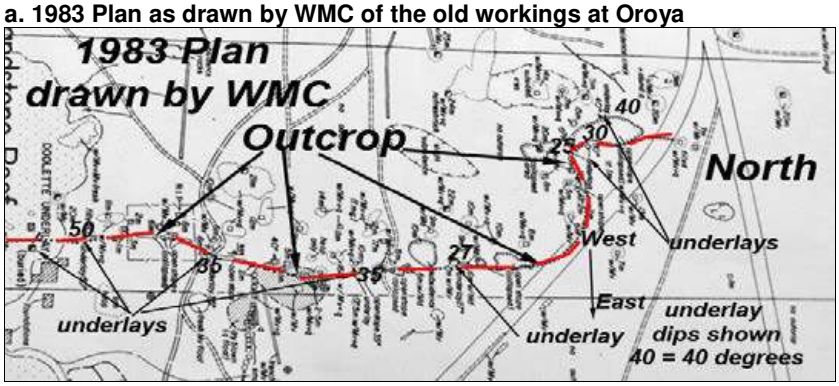
The sections in Figure 9a infer a steeper dipping reef that becomes shallow dipping or joins the shallow dipping reef. Although there appear to be lengths of low grade in the drill core, whether any pass through historical stopes or old workings is not known. The Oroya quartz reef has historically been described as dipping initially from its mostly N/S striking outcrop at ~45ºW, before flattening to ~25ºW. The sections do clearly show that there ***appears to be reasonable grades of gold mineralization below and west of the current open-cut.***

Unfortunately most of the old workings of Oroya were removed as the Oroya pit was mined, whereas the old Hacks area was covered in re-worked tailings dams. *(Note : Alto made an announcement on 24 May 2018, that it was considering heap leaching the old tailings, due to regional speculation from observations that drilling of the battery tailings dams was occurring. Heap-leach could be a solution should open-cut mining of Hacks be considered as the tailings would have to be moved, but no met work has been undertaken, yet alone possible costing).*

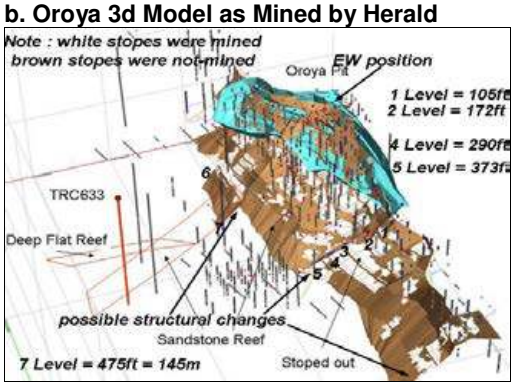
However, WMC also compiled a plan in 1983 of the old workings of Oroya as shown in Figure 10a, showing the underlay shafts along the then outcropping Oroya quartz reef, with varying angles of dip from 25ºW to 50ºW, along with an east-west displacement in its northern end. Figure 10b shows the model included in Troy's IGR, the brown stope areas were not mined because the grade was below the pay-limit of possibly ~15g/t to 20g/t - ***now economic.*** It is possible that lower grade ore exists in the mined stopes too.

Figure 10. 1983 Plan as drawn by WMC of the old workings at Oroya, & Oroya 3d Model as Mined by Herald

a. 1983 Plan as drawn by WMC of the old workings at Oroya



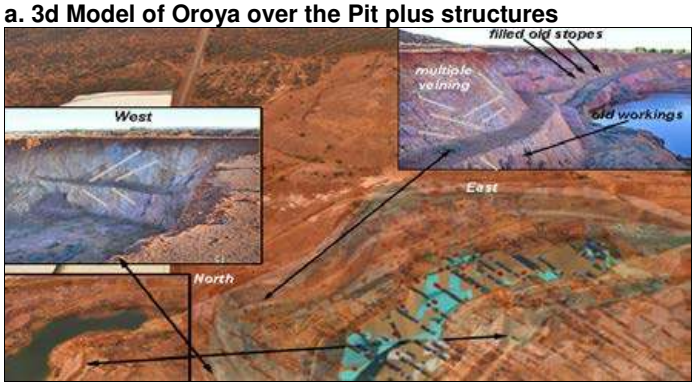
b. Oroya 3d Model as Mined by Herald



The 3d model of Oroya is shown overlain on the original Herald pit, in Figure 11a, along with a view of the Oroya pit in 2017 in Figure 11b.

Figure 11. 3d Model of Oroya over the Pit plus structures, and A View looking North of the Oroya Pit in 2017

a. 3d Model of Oroya over the Pit plus structures



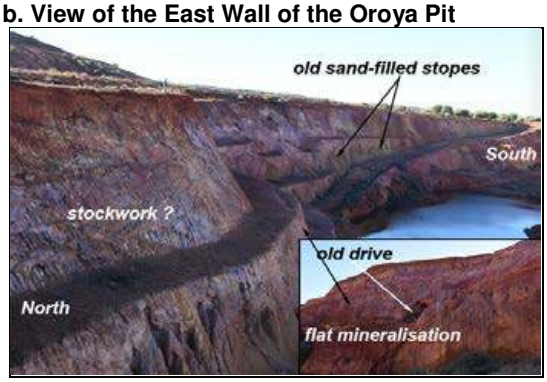
b. A View looking North of the Oroya Pit in 2017

The drone image of the Oroya pit compiled in 2018 clearly infers East-west mineralisation on the basis of the strike of at least one inset 3 compartment shaft also shown in Figure 12a.

Figure 12. Drone Plan of Oroya with possible E/W Striking Mineralisation, and View of Oroya Pit's East Wall

a. Drone Plan of Oroya with possible E/W striking Mineralisation

b. View of the East Wall of the Oroya Pit



Financial Considerations

With reported cash ~$0.9m and requirements of scoping study and exploration, some of Alto's recent share price weakness could be due to the anticipation of some form of capital raising.

Exploration Upside

Alto expects to have an ***ongoing stream of announcements*** due to assays from soil sampling and aircore, plus the progress of its scoping study and MLA over Indomitable, with resources on Indomitable and Vanguard expected to be reported by the end of December 2018.