Firing on All Cylinders: An Update based on a May 2018 Visit to IRC's Teal & Goongarrie Projects

IRC (at 16.5c) with a Mkt Cap of $43m & ~$8m Net Cash: Rated as a SPEC BUY (Target >25c)

ERA visited a number of Intermin Resources Ltd’s (IRC’s) Kalgoorlie to Goongarrie Projects in May 2018, particularly Teal (and Jacques-Peyes), Goongarrie Lady, Anthill, Blister Dam (and its flaky visible gold), Baden Powell & Olympia as shown in Figure 1a. We glanced at the location of Crane, which reported those spectacular intercepts of 28m @ 3.3g/t (from 56m incl 4m @ 15.1g/t), and 20m @ 4.6g/t (incl 8m @ 8.4g/t).

Intermin has a target route to become a ~100kozpa gold producer with a >5 year mine-life, by using the stepping stones of small mining projects (SMPs) to self-finance its exploration, and has displayed its capability to achieve that with its very successful oxide mining of Teal realising ~3.5koz higher gold production at 21.84koz, mostly from ~13% higher ore tonnes mined and 5% higher recoveries of 93.6%, which increased the expected revenue of $29.3m by 24% or $7.2m to $36.5m. The actual profit (>=$8m?) is expected to be finalised in SQ 2018, with its operational JV partner claiming alternative cost variations.

Intermin is currently rated by ERA as a SPEC BUY at 17c, with a target of >A$0.25.

The key points from the visit and recent announcements are:

- The SMP over Teal has been extremely successful, with a larger resource mined, better recoveries and higher profits than expected, and has increased IRC’s confidence in advancing the next 3 prospects in the pipeline (Goongarrie Lady, Jacques-Peyes, and Anthill) through to mining, treatment and profitability.

- Apart from Goongarrie Lady, the proposed production pipeline order of the projects/prospects is not “set in stone” and could change, especially if one prospect infers potentially better return characteristics, as illustrated by the Crane discovery joining the mix.

- The results from the feasibility study on Goongarrie Lady were reported on 28 June 2018, with an expected free cashflow return of $5 to $7m over 7 months, possibly pre-strip mining in MQ 2019.

- The Crane discovery in the Binduli tenements resulted from Evolution ending its JV farm-in and handing control back to Intermin who were then able to drill/explore where they wanted to, with IRC’s first target (Crake) being on strike of Janet Ivy (where Zijin is mining & paying a 50c/t royalty).

- There are a number of projects making steady progress such as Blister Dam and Baden Powell/Olympia, and the tenement package is increasing with Ida and Lakewood in Figure 1a.

- In addition to the JVs mostly involving other companies farming-in, as shown in “blue” in Figure 1b, Intermin has its Richmond Vanadium JV in QLD, which has also been making steady progress.
Corporate Summary
In the past year, since our last update report of 19 June 2017 at 9.6c, Intermin exceeded ERAs >14c target by rising to a peak of 25.5c on 22 March 2018, before dropping back, and has since been trading sideways at ~16c to 18c. Since ERAs June 2017 report, ~14.8m options @ 7.5c were exercised and issued before they expired at the end of June 2017, which with other options exercised has resulted in the current 227.2m fpo shares in issue. There are 36.1m options and performance rights of which 35.6m are almost all in-the-money, with the main block of options (associated with a placement in Sept 2016) being 24.6m at 17c (raising ~$4.2m) by the end of August 2018. During the year an Exec Director (Lorry Hughes) resigned to take up a position in another company and Grant Haywood became COO (from General Manager Mining).

Teal Gold Camp Area (100% IRC)
Having mined stages 1 and 2 of the Teal pit as shown in Figure 2a, the Teal area has evolved into a gold camp consisting of a number of prospects as shown in Figure 2b. The final reconciliation as been reported showing total revenue was 24% higher than expected at $36.5m from a combination of slightly higher volume, better recoveries (through the Lakewood plant) for ~19% higher ozs at 21.84koz recovered. There is some delay over the final profit (possibly >$8m) [due to the contractor partner claiming higher costs], however, Teal has been shown to be highly successful for Intermin.

The drill rig on the NE corner of Teal in May 2018 as shown in Figures 2a and 2b was establishing possible mineral extensions NW of the pit that could enhance a possible Stage 3 cut-back. Some Teal ore specimens are shown inset in Figure 2a, and did not look inspiring (ERA view) even if they do have SG (weight) and grade >2g/t or >5g/t, and Teal’s grade averaged ~3.2g/t.

Figure 2. View of Teal, Open-cut Looking SE, and Geological Plan of Teal Gold Camp
a. View of Teal Open-cut Looking SE
b. Geological Plan of Teal Gold Camp

Figure 2b of an old Delta Gold structural plan shows the rationale behind the drilling locations in the Teal camp area, with the mineralisation appearing to follow designated rock units. There is an obvious target being the intersection of the Teal and Peyes mineralisation, which was scheduled for exploration.

The RC rock chips at Jacques infer that its host rock mineralisation appears to be different to Teal (ERA view: more altered quartz/gravelly), and it is not in the standard demag zone containing Teal and Peyes as shown in Figure 3a. However, it is still apparently like Teal at depth, being refractory in sulphide and would hence probably require treatment at Newmont’s KCGM Gidgi Roaster or possibly at Northern Star (NST)’s Kanowna Belle as the expected grade of the refractory ore at Teal was >3.5g/t.

Figure 3. Mag Plans of Teal Area, and Cross-Section through Jacques
a. Mag Plans of Teal Area
b. Cross-Section through Jacques
There are some impressive grade intercepts in some of the drillholes as shown in Figure 3b, with the regional depth of oxidation typically ~70m. Other exploration targets have included the area around where the Teal ROM pad was located, Yolande and Wills Find ~200m further east from Peyes.

**Figure 4. Views of the Jacques Area, and Gm-m Main Lode Long Section Distribution thru Jacques-Yolande**

a. Views of the Jacques Area  
b. Gm-m Main Lode Long-section through Jacques-Yolande

The strike length at Jacques was ~100m longer than Teal, being ~500m as shown in Figure 4a, and like Teal and Peyes has a supergene zone. In the June 2018 announcement, Jacques linked with Yolande, increasing the strike to ~800m. The **Jacques-Peyes ore resource** was expected to be reported in SQ2018, with diamond drilling scheduled to occur in DQ2018.

**Goongarrie Lady Project (100% IRC)**

As reported in late June 2018, Intermin has completed its feasibility study on Goongarrie Lady which is located ~40km S of Menzies or ~80km N of Kalgoorlie, and is mostly the pit area excised from the Goongarrie JV with Eastern Goldfields (EGS). The feasibility plan is very similar to that of the scoping study shown in Fig 5a, and estimates that **135kt @ 2.9g/t** could be mined with a ~94% recovery for **almost 12koz** which is the estimated proven and probable reserve out of a reported resource of ~311kt @ 2.4g/t for 24koz.

**Figure 5. IRC’s Goongarrie Prospect Area, & Scoping Plan & 3d Schematic Block Model of Goongarrie Lady**

a. Scoping Plan and 3d Schematic Model of Goongarrie Lady  
b. 3d Schematic Block Model of Goongarrie Lady

It can be seen that the project potentially has the **capability to achieve more in tonnage and koz** based on the reported model shown in Figure 5b and some of the high grade intercepts below the current pit as shown in Figure 6a. Additionally there appears to be extensions on strike both south (reported such as 2m @ 17.7g/t from 47m) and north into the waste dump, and possibly further to the east as shown in Figure 6b.

**Figure 6. Drillhole Intercepts Below Current Goongarrie Lady Pit Floor, & Plan & Views of Goongarrie Lady**

a. Drillhole Intercepts Below the Current Pit Floor  
b. Plan and Views of Goongarrie Lady
Intermin expected to complete its required approval process by the end of DQ2018 and hence possibly start the 3-month pre-strip in MQ2019, followed by ~3 to 4 months of mining and subsequent treatment through one of the nearby plants. Mine establishment capex has been estimated at $5.7m (including $2.6m of pre-strip), all financed from internal cashflow (30 June cash was reported at $8.5m, plus $1m in investments), for an expected $5m to $7m in free cashflow, although gold production may be higher than ~12oz.

Anthill Project (100% IRC)
The next most advanced project in the pipeline appears to be the Anthill Project, located adjacent to the Zuleika Shear and aptly named, because in plan it (ERA view) resembles a circular ant-hill as shown in Figure 7a with a central core and fanning out east nearer to surface, although the grade distribution appears to be wider spread as shown in Figure 7b. It can be seen in Figure 7a that it has mystified previous company holders with a number of different drill directions, before IRC noticed a pattern, coincident with a revised mag interpretation, and made intersections such as 25m @ 3.5g/t, 30m @ 3g/t & 21m @ 1.9g/t.

Figure 7. Drillhole and Mag Plans of Anthill, and Cross-section through Anthill
a. Drillhole and Mag Plans of Anthill
b. Cross-Section through Anthill

Visually as seen in Figure 8a, there is nothing to really identify its location, and IRC were stepping out to delineate its lateral extent especially on its perceived east and west boundaries. Reference was made in the quarterly (JQ2018) to possibly going underground later, which is due to sections like that in Figure 8b.

Figure 8. Views of Anthill, and Drillhole Detail at Anthill
a. Views of Anthill
b. Drillhole Detail at Anthill

Figure 8b shows that although Anthill appears in Figure 8a to have been well-explored, most of the drillholes were either in the wrong direction (eastwards) or vertical or too shallow. There are other targets near Anthill to be explored such as Fire Ant, now that the main prospect has been largely delineated and the mag correlation achieved, as shown in Figure 9a.

Figure 9. Other Targets near Anthill, and the Blister Dam Prospects
a. Other Targets Near Anthill
b. Blister Dam Prospects
Blister Dam Project (100% IRC)
Further NW on strike from Anthill is the Blister Dam Project area as shown in Figure 1a, straddling across the Zuleika and Kunanalling Shear zones as shown in Figure 9b, with a mag plan overlaying the eastern end. Follow-up drilling was expected at Seven Seas targeting an IP anomaly, and although “smoke” (ie low grade was seen at Atlantic, just SE of that was where a prospector found visible gold in sediments as shown in Figure 10a, on an EW structure stemming from the old Carnage gold-mine centre (further east).

Figure 10. Flaky Visible Gold at Blister Dam, and the NW/SE Striking Argosy old Workings

Further drilling of this EW structure was understandably planned, plus more work in the Argos area (near the historic old Argosy workings shown in Figure 10b).

Binduli Project Area – Crake (100% IRC)
However, entering the mix of prospects is the Crake discovery NW on strike from Janet Ivy at Bunduli. Intermin receives a 50c/t royalty from mining of the Janet Ivy open-cut area by Zijin through their plant at Paddington - which may not sound like much, but could amount to ~$0.8m pa from 2018, due to Zijin mining at the rate of ~400kt/qtr (with ~5mt remaining in indicated resources and another ~5mt of inferred resources when last reported in 2014).

The Binduli JV reverted back to Intermin after Evolution drilled some targets that failed to meet EVN’s requirements before the end of the agreement, enabling IRC to now drill wherever it wants to.

Figure 11. IRC’s Binduli Project Prospects, and Crake Prospect Drilling Results

Intermin identified a number of targets (Crake, Coot, Darter, Honey Eater and Horans) as shown in Figure 11a, of which the first was Crake (on strike from Janet Ivy), with a number of encouraging intersections such as 28m @ 3.3g/t (from 56m incl 4m @ 15.1g/t), and 20m @ 4.6g/t (incl 8m @ 8.4g/t), as shown in Figure 11b and spread over an area ~400m x 400m. The Crake mineralization has been described as similar to Janet Ivy where the gold mineralization is hosted in a structurally controlled feldspar porphyry as shown in Figure 12a, compared to being in volcaniclastics and felsics like some nearby pits. Janet Ivy lies ~1.5km further south with a ~1km long x 200m wide pit (using Sentinel) as shown in the 2016-18 plans of Fig 12b.

What adds to the flavour of the Crake discovery is that despite its proximity to Kalgoorlie, it is not refractory in sulphide (unlike Teal), it is adjacent NW to Janet Ivy with a bypassing haul road directly to Zijn’s Paddington plant. Further assay results from Crake were expected during July and August with reporting on 10 July only based on ~half of the 5000m drill programme. With higher grades apparently associated with increased concentrations of pyrite ie up to 3% by volume, the higher grade may be delineated through searching for EM plates. Given the proximity of the boundary between Crake and Janet Ivy as shown in Figures 11b and 12b, the Janet Ivy mineralization may link through to Crake.
While the new large tenement increases at Lakewood and Ida shown coloured yellow in Figure 1a could hold potential, they are currently under application, so the next most promising area that ERA has visited could possibly be Baden Powell, SE of Goongarrie Lady as shown in Figure 1a.

**Baden Powell Project Area (100% IRC)**

ERA did visit the Baden Powell area and included it in on page 7 of our June 2017 report, where we focused mostly on the historical open-cut and its clear NW/SE structure also shown in the south wall of Figure 13a. The thin veins in the western wall apparently only have low grade mineralization, however, they do illustrate the shallow north plunge to the mineralization.

**Figure 13. Baden Powell Historic Open-cut, and Historical Mined Area ~2km North of Baden Powell**

a. Baden Powell Historic Open-cut  
b. Historical Mined Area ~2km North of Baden Powell

However, this time (May 2018) ERA reviewed the old workings ~1.5km to 2km NW of Baden Powell as shown in Figure 13b. The shafts of the old workings were mostly striking NW/SE with the occasional NE/SW cross-structure, and the few historic drillholes in the vicinity appear to have missed the mineralization.

**Figure 14. Drilling at the 100% IRC Olympia Prospect, and (90% Saracen) Otto Bore Prospect**

a. Drilling at the Olympia Prospect  
b. Drilling at (90% Saracen) Otto Bore Prospect

Further east of Baden Powell is the Olympia Prospect shown in Figure 14a, which lies SE on strike from the Aphrodite (not held by IRC) refractory ore deposit area. Some exploration has occurred and more has been planned to try and delineate Olympia.

**Other Gold Projects/Prospect JVs**

In addition to the Janet Ivy royalty, another JV being farmed in by Saracen (SAR) appears to be potentially showing promise too, namely at Otto Bore (~9km north of Saracen’s Thunderbox plant) as shown in Figure 14b (in the 1 May 2018 release), with a number of encouraging intersections.
Lehmans JV - Otto Bore (IRC 10%)
As reported by Saracen in its JQ2018 release “At Otto Bore (9km north of the Thunderbox mill), drill results included 20m @ 8.5g/t, 17m @ 9.6g/t, 13m @ 9.0g/t, 13m @ 6.6g/t and 7m @ 12.1g/t (amenable to open pit mining, within 100m of surface)”. Saracen has apparently already started a feasibility study on an open-pit at Otto Bore, with infill and deeper drilling (to ~100m or materially deeper as inferred in Figure 14b) planned for SQ2018. Also shown in Figure 14b, are possibly three higher grade ore shoots plunging south, and possibly some higher grade shoots also cross-plunging north.

Otto Bore is included in the 20km long package of tenements called the Lehmans JV in which Intermin has a 10% free carried right to a DTM (decision to mine) and a 3% production royalty over ML 36/177.

Menzies Goldfield and Goongarrie JV (IRC reducing potentially to 35%)
 Initially the Menzies Goldfield appeared to have the potential to be a significant contributor to Intermin (as per ERA’s first report on Intermin in September 2016 [pages 6 to 15 inclusive of the report]) in the form of the Menzies Goldfield and Goongarrie JV with Eastern Goldfields (EGS), but EGS have been slow to farm-in and spend exploration $. Admittedly EGS made the original $1.5m entry down-payment equity interest in Intermin, and were then required to spend $2m within the first 2 years ie by July 2019 to earn 25%, followed by another $2m by July 2021 for another 25% (ie 50% holding), and then a further 15% on $1.5m including a BFS within a year by July 2022, for a plant to be installed in the Mt Ida / Menzies region.

Figure 15. Plan of the IRC/EGS JV at Menzies, and Cross-Section through Lady Irene

EGS gave an update of progress in the JV in an announcement on 14 June 2018, in which they focused on the prospects of Lady Irene and Yunndaga as shown in Figure 15a. At Lady Irene a number of historical intercepts were shown such as 4m @ 12.6g/t, 14m @ 26.7g/t, 4m @ 13.8g/t and 2m @37.6g/t in the two main ore shoots identified. EGS’ drillholes as shown in B & W were drilled to test the down-dip extensions of these 2 main shoots. Gold mineralisation at Lady Irene has been mostly on the FW of the quartz infill in the shear zone structure between a mafic (basalt) HW and ultramafic FW.

Figure 16. Plan of Yunndaga, and Schematic Cross-section through Yunndaga

The Yunndaga prospect, as shown in long section in Figure 16b, consists of a number of quartz lodes that plunge southwards between felsic volcanoclastics and shale to the west, and a mafic amphibolite sequence to the east. Assay results were awaited from the drillholes shown in Figure 16b. (More detail on the Menzies goldfield is contained in ERAs 2016 report on Intermin : http://www.eagleres.com.au/images/pdfs/reports/2016/irc19sep16.pdf)

Other Metals Projects/Prospect JVs
Amongst the other JVs shown in blue in Figure 1b is that with Mithril (MTH) over the ~145sq km Nanadie Well Project area ~100km south of Meekatharra, in which MTH is spending $2m by December 2019 to earn a 60% interest, followed by another $2m by December 2021 to earn a further 15% for a 75% interest in the JV. Nanadie appears to be a low grade ~0.4%Cu resource (~36Mt JORC 2004 when last compiled by IRC), while the nearby Stark mineralization is regarded as prospective for Cu-Ni, and other minerals.
Richmond Vanadium JV (IRC reducing to 25%)

And then IRC has its Richmond Vanadium JV in Queensland with AXF Resources, which is located on the Flinders Highway and Great Northern railway ~250km east of Mt Isa and ~500km west of Townsville as shown in Figure 17a. The JV arrangement with AXF involved expenditure of $1m to earn a 25% interest, $430k investment in IRC at 12c with the 1-for-2 option exercisable at 17c on 31 August 2018, and then $5m over a 3-year period for a further 50% interest.

Vanadium was historically mostly used to strengthen steel, whereas more recently it has gained acceptability for use as one of the new “battery” minerals or in solar panels, both of which have commercially acceptable products, which has elevated the vanadium price.

There are two horizons or facies of “oil shale” at the Richmond JV – an upper higher grade (~0.4%V2O5) vanadium horizon in which the oil has been leached into an oxidized reddish coloured clay as shown in Figure 17b, and a lower vanadium grade (~0.3%V2O5) oil-rich horizon in fresh rock on which an agreement has been made regarding the possible oil treatment, with IRC retaining the rights to the vanadium, molybdenum, nickel and other minerals.

Figure 17. Location of Richmond Vanadium and Lilyvale Oxide Resource, and Cross-Section & View

Most vanadium orebodies appear to be in oil shale with relatively difficult metallurgy or titanomagnetite also with costly metallurgical issues, whereas the Richmond oxide appears to be capable of having a significantly simpler process route. Bulk samples were taken from some of the old gravel pits in 2017 and sent for metallurgical testwork at B(eijing)GRIMM and H(unan)RINM (world renowned research institutes in China) which had pre-cons results in initial tests of a 78.4% recovery in 38.5% of the mass & grading 1.1%V2O5.

Financial Considerations

Intermin reported in its JQ2018 quarterly that it had ~$8.5m in cash and bullion as at 30 June 2018, plus ~$1m in ASX listed companies, and was currently receiving ~$0.2m/qtr from the Janet Ivy royalty. Exercise of the options by 31 August 2018, could add another $4.2m, making IRC well-funded for its requirements.

Exploration Upside

With such an active exploration portfolio, Intermin should have a steady flow of information results’ progress, while at the same time taking its projects/prospects through to fruition as SMPs. One of the key areas of focus would have to be the progress of Crake given its proximity to Janet Ivy and what comes out of those newly acquired areas of Lakewood and Ida, plus the other target areas at Binduli.

Board

MD : Jon Price
Non-Exec Chair : Peter Bilbe
Non-Exec Director : Peter Hunt
Mkt Cap AS43m (at 16.5c)
Cash (30 Jun 18) ~$8.5m

Management

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