NAGAMBIE RESOURCES

# SEPTEMBER 2018 QUARTERLY REPORT — 30 OCTOBER 2018

## HIGHLIGHTS

- Detailed 3D modelling of the IP chargeability data for the Nagambie Mine area showed that the most intensive, highest-grade, sulphide-gold mineralisation could occur at Nagambie Mine West, between 300m and 1,800m to the west of the 1990s West Pit.
- The detailed modelling led to the Company's new hypothesis that hydrothermal crustal fluids rose up the north-west-striking Wandean Crustal Fault (WCF) to the west of the Nagambie Mine under pressure (around 370 million years ago). The fluids then flowed eastwards of the WCF (and westwards of the WCF) along nearer-surface, east-west-striking thrust faults (see Figure 3).
- NND001, the first diamond drill hole into the eastern edge of Nagambie Mine West, is currently over 750m down hole and is planned to go to 1,100m. Notably, some coarse sandstone units in NND001 are flooded with both hydrothermal quartz and carbonate whereas little carbonate is present in the Nagambie Mine to the east.
- As drilling steps out westwards from NND001 further into Nagambie Mine West, Nagambie Resources' gold model predicts that quartz, carbonates, sulphides and gold could increase to maximums that correlate to optimum pressure and temperature at the time of formation.
- EPA Victoria renewed Nagambie Resources' Environmental Management Plan (EMP) for PASS Management at the Nagambie Mine for 10 years to 2028. Earth Resources Regulation Victoria (ERR) approved a variation to the Work Plan for Mining Licence MIN5412, which runs until 2031.
- Tunnel boring for Melbourne Metro Rail and West Gate Tunnel is now expected to start mid CY2019. The North East Tunnel is expected to commence in CY2020.
- $1.04 million raised from 2018 SPP at 6.2 cents per share. $0.6 million raised at the same time via placements to sophisticated and professional investors, also at 6.2 cents per share. 2.2 million unlisted options with an exercise price of $0.10 each exercised during the quarter, raising $0.22 million for the Company.

## COMMENTARY

Nagambie Resources' Chairman, Mike Trumbull said: *"Shareholders strongly supported the recent SPP and the proposed series of deep diamond drill holes into the exciting Nagambie Mine West sulphide-gold target has commenced.*

*"The drill holes are planned to progressively step out to the west to locate and extend the east-west strike of the various thrust faults. The IP modelling and our fluids-flow hypothesis predict increasing sulphide grades, with accompanying higher gold grades. Maximum grades are predicted to occur at, or within 800m east of, the Wandean Crustal Fault.*

*"It was gratifying to receive EPA's extension of our PASS EMP and ERR's approval of our varied Work Plan for MIN5412 during the quarter."*

***NAGAMBIE RESOURCES***

***Exploration for Fosterville-style, structural-controlled, high grade sulphide-gold underground deposits within 2,000 sq km of Waranga Province tenements is being methodically carried out using geophysical targeting techniques and oriented diamond drilling.***

***Underwater storage of sulphidic excavation material (PASS) in the two legacy gold pits at the Nagambie Mine is an excellent environmental fit with major infrastructure projects for Melbourne such as Metro Rail, West Gate Tunnel and North-East Link.***

***Recycling of the tailings and overburden dumps can produce aggregates for concrete and gravel products respectively.***

***Quarrying and screening of sand deposits at the mine to produce various sand and quartz aggregate products is planned.***

***The first landfill site is planned to take advantage of the 17 Ha of engineered black plastic under the mine tailings pad.***

***SHARES ON ISSUE***
***435,777,802***

***ASX CODE: NAG***

***Nagambie Resources Limited***
*ABN 42 111 587 163*

***Registered, Operations & Head Office***
***533 Zanelli Road***
***Nagambie Vic 3608***
***(PO Box 339)***
***Tel: (03) 5794 1750***

***www.nagambieresources.com.au***
***info@nagambieresources.com.au***

## GOLD EXPLORATION

Gold exploration for Fosterville-style high-grade underground sulphide-gold deposits in the Waranga Province was advanced significantly during the quarter.

### Induced Polarisation (IP) Geophysical Surveys

More detailed examination and three-dimensional (3D) modelling of the IP chargeability data for the Nagambie Mine area were carried out by the IP contractor, Zonge Engineering and Research Organisation, and one of Nagambie Resources' geological consultants, Geoff Turner.

The 3D model developed (see Figures 1 and 2), highlighting the Nagambie Mine West anomaly, was determined to be robust.

The principal qualification with the 3D model is that the significant widening of the IP chargeability aura to the west of the West Pit is not indicative of increasing relative width of the sulphide mineralisation causing the aura, although some increase in width could occur. Rather, the significant increase in the width of the aura at Nagambie Mine West is mostly indicative of the increasing intensity or grade of the sulphide mineralisation giving off the IP chargeability aura.

### Nagambie Resources' Gold Model for the Waranga Province

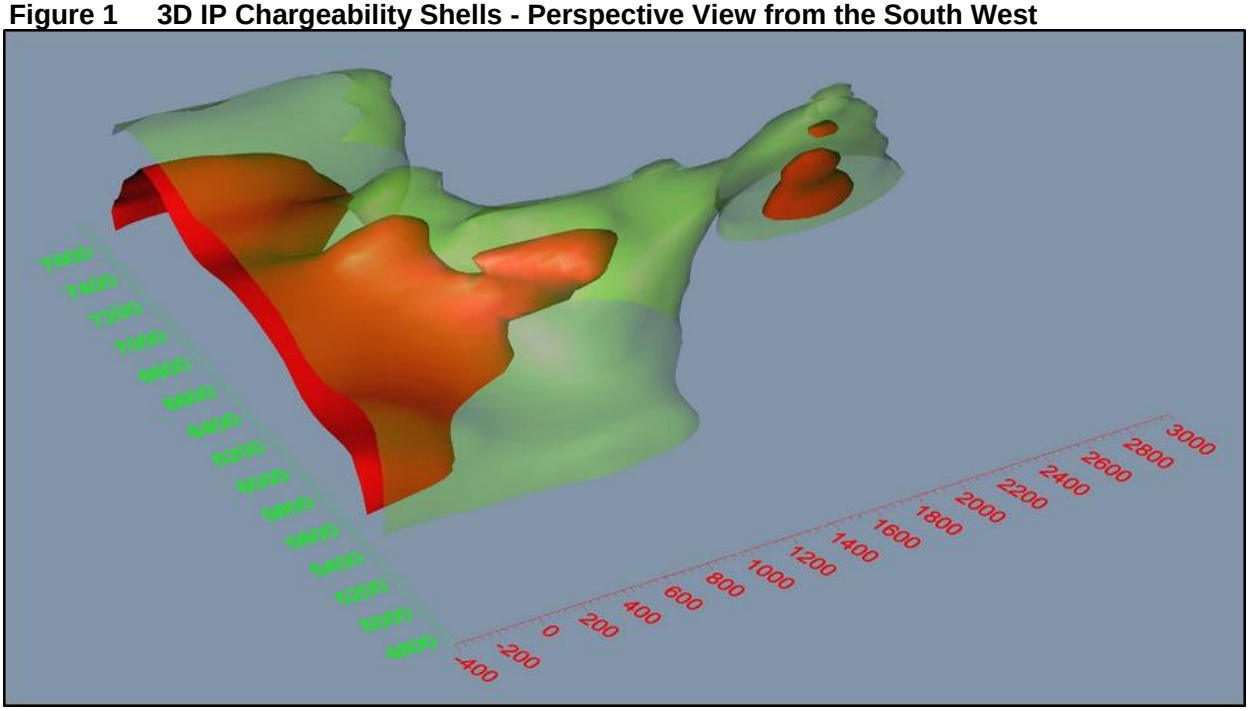
The gold model continues to be enhanced and in summary it currently includes:

- The surface rocks are extensive marine siltstone and sandstone sediments (turbidites) with a total current-day thickness of around 6 km. Significant erosion of these rocks since formation is believed to have occurred as it is considered unlikely that the Strathbogie granites to the south outcropped at the time of formation. The turbidites rarely outcrop in the region, the East Pit at the Nagambie Mine being an exception, being mostly covered by recent Murray Basin unconsolidated clays and sands;
- A regional north-south tectonic compression event caused progressive folding of these originally-horizontal sedimentary rocks, resulting in numerous east-west-striking and near-vertical north-dipping thrust faults. In the immediate footwall (to the south) of these thrust faults, folding and fracturing of the rocks was pronounced;
- Crustal hydrothermal fluids rose up deep crustal faults under pressure around 370 million years ago;
- Where the deep crustal faults, predominantly north-west striking, intersected the nearer-surface east-west-striking thrust faults, the hydrothermal fluids moved both eastwards and westwards along and up the thrust faults under pressure, filling all the available fracture openings in the adjacent sedimentary rocks and occasionally flooding coarse sandstone units. When the temperature and pressure conditions at formation fell to conducive levels, precipitation of quartz, various carbonates (principally calcium carbonate, calcite), pyrite (iron sulphide), arsenopyrite (arsenic-iron sulphide), stibnite (antimony sulphide) and gold from the hydrothermal fluids took place;
- Gold grade correlates well with both % pyrite and % arsenopyrite at the Nagambie Mine and Wandean. The gold grade correlation with % stibnite is generally very poor to date;
- Sulphide-gold mineralisation will occur in folded and fractured siltstone-rich zones, but more intense mineralisation will occur in the brittle sandstone-rich zones; and
- Discrete IP chargeability highs in the Waranga Province will most likely represent anomalous concentrations of hydrothermal pyrite and arsenopyrite within folded and fractured sandstone-rich zones in the immediate footwall (to the south) of the east-west-striking thrust faults.

### Hydrothermal Fluids Flow Hypothesis for the Nagambie Mine

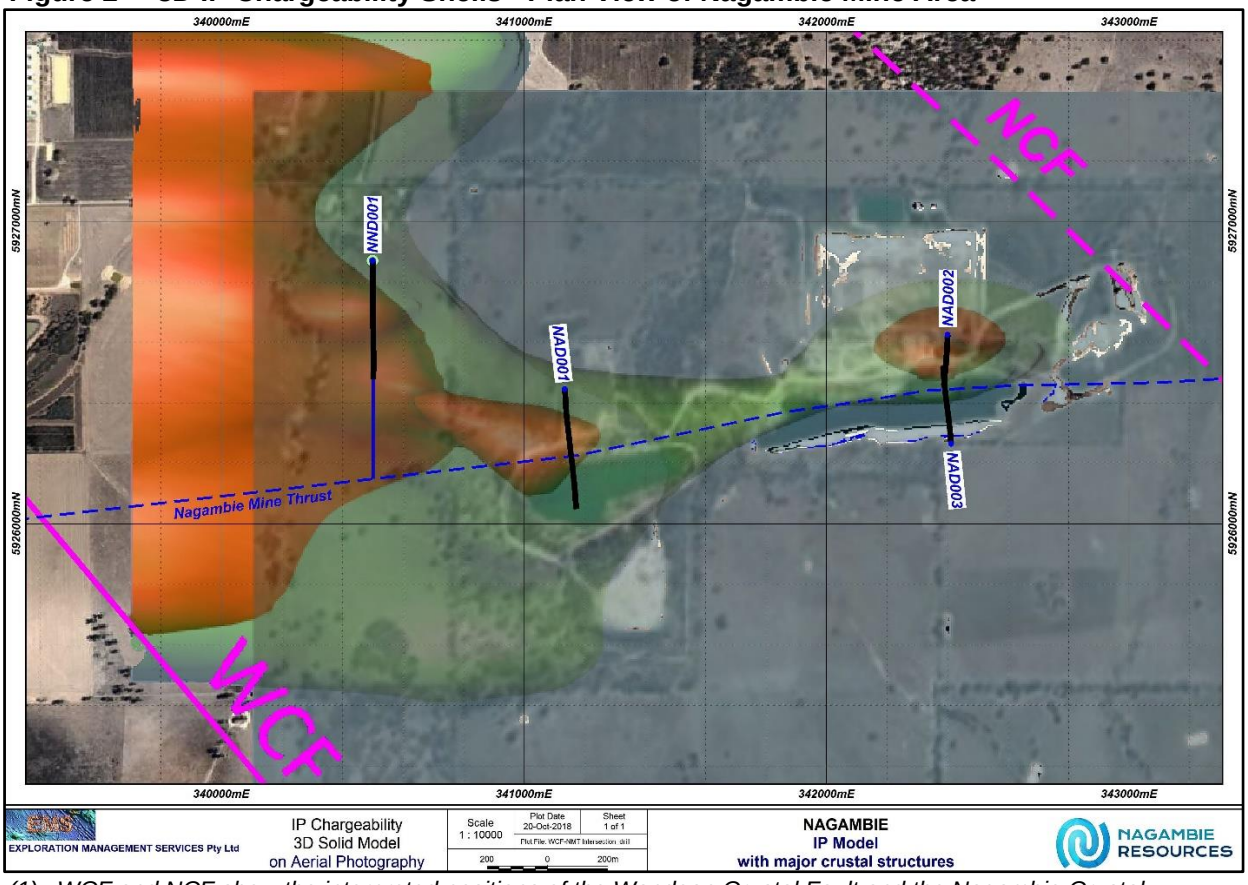
Prior to the detailed 3D interrogation of the 2018 IP geophysical survey data for the Nagambie Mine area, a principal hypothesis had been that the Nagambie Crustal Fault (NCF) had been the pathway for the gold mineralisation at the Nagambie Mine.

**Figure 1 3D IP Chargeability Shells - Perspective View from the South West**




*(1) Outer green shell is IP chargeability 5.0; inner red shell (looks orange through green) is 6.6.*
*(2) Eastings and northings used for the IP survey are in metres.*
*(3) Vertical scale is exaggerated x 3*
*(4) The significant widening of the IP chargeability aura at Nagambie Mine West is not indicative of increasing width of the sulphides causing the aura, rather the increasing intensity or grade of the sulphides to the west.*

**Figure 2 3D IP Chargeability Shells - Plan View of Nagambie Mine Area**




*(1) WCF and NCF show the interpreted positions of the Wandean Crustal Fault and the Nagambie Crustal Fault respectively.*
*(2) The significant widening of the IP chargeability aura at Nagambie Mine West is not indicative of increasing width of the sulphides causing the aura, rather the increasing intensity or grade of the sulphides to the west.*

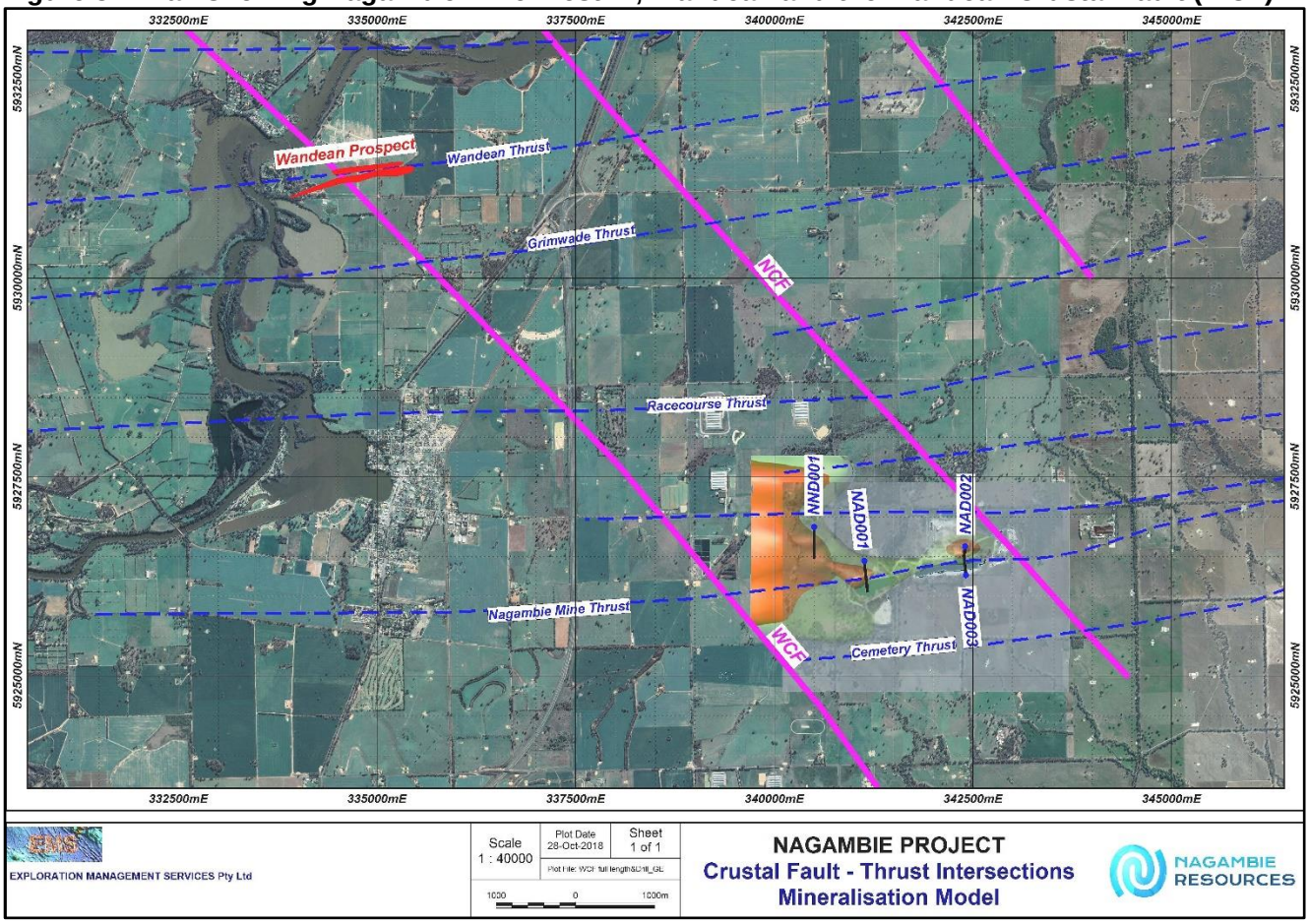
The NCF and the Wandean Crustal Fault (WCF) are both north-west-striking crustal faults mapped by Nagambie Resources from publicly available gravity data (see Figure 3). The NCF is around 500m to the east of the East Pit at the Nagambie Mine and the WCF is around 1,800m to the west of the West Pit at the Nagambie Mine. The two pits and the unmined ground between them cover around 1,700m. The two crustal faults are around 4,000m apart in an east-west direction.

The WCF is indicated to be only around 400m west of the western limit of the Nagambie Mine IP Survey where the WCF and the Nagambie Mine Thrust intersect. The new replacement hypothesis for the hydrothermal fluids is that the fluids rose up the WCF (not the NCF) under pressure and then flowed eastwards (not westwards) and upwards along the Nagambie Thrust Fault and other adjacent east-west-striking thrust faults, resulting in the indicated sulphides at Nagambie North and finally the mineralisation at the Nagambie Mine. The width of the IP chargeability high, mostly representing the intensity of the indicated sulphide-gold mineralisation, decreases significantly to the east, implying that the greatest precipitation of mineralisation out of the hydrothermal fluids occurred closer to the WCF, where the temperature and pressure dropped to optimal levels.

Under the new fluids-flow hypothesis, the gold mineralisation at the East Pit is the only place where the hydrothermal fluids reached the current day surface (at Hill 158) and represents the most-eastern, least-sulphidic, lowest-grade gold mineralisation.

The WCF, under Nagambie Resources' regional gold model, also is the indicated pathway for the hydrothermal fluids that resulted in the gold mineralisation at Wandean, 9 km north west of the Nagambie Mine, that the Company discovered in 2014 (see Figure 3). The gold grades intersected in the reverse cycle percussion (RC) drill holes at Wandean were statistically higher than the gold grades recorded at the Nagambie Mine, which, under the new hypothesis, reflect the Wandean mineralisation being closer to the WCF than the Nagambie Mine mineralisation. Under the gold model, the mineralised fluids are also predicted to have flowed to the west of the WCF (as at Wandean), so Nagambie Mine West could extend westwards beyond the WCF (see Figure 3).

**Figure 3 Plan showing Nagambie Mine West IP, Wandean and the Wandean Crustal Fault (WCF)**



**Initial Target Diamond Drilling Program**

Drilling commenced in April 2018 and is ongoing. To date, six diamond holes have been completed: NAD001, NAD002 and NAD003 targeting the Nagambie Mine IP chargeability anomaly; CAD001 and CAD002 targeting the Cahill anomaly; and RAD001 targeting the Racecourse anomaly. NND001, the first diamond hole targeting the Nagambie North sulphide-gold target within Nagambie Mine West, is nearing completion. Drill traces for NAD001, NAD002, NAD003 and NND001 are shown in Figure 2.

What has been determined to date includes:

- Based on the intersections for NAD001, NAD002 and NAD003, the Nagambie Mine IP anomaly appears to have accurately delineated the quartz-sulphide-gold hydrothermal mineralisation under the West and East Pits to 400m depth below surface. Significantly-higher-grade mineralisation is now considered to exist to the west of the West Pit, including at the Nagambie North IP target, in an area now called Nagambie Mine West. This new area, based on the detailed 3D computer modelling of the IP survey data, has an east-west strike length of approximately 1.5 km, commencing 0.3 km west of the West Pit;
- The Cahill IP anomaly has been eliminated as a sulphide-gold target. Some massive pyrite was intersected in the drilling (explaining the strong anomaly) but it was stratigraphic syngenetic pyrite associated with marine-animal fossil beds, not hydrothermal pyrite;
- The Racecourse IP anomaly has been downgraded as a high-grade sulphide-gold target. As expected, the Racecourse Thrust Fault was intersected in RAD001, under a previous 1.1 g/t gold intersection in a shallow percussion hole. However, the sediments adjacent to the major thrust fault were siltstone-rich, not sandstone-rich, and no significant quartz / pyrite / gold was intersected. Further drilling at Racecourse will be justified in due course to locate sandstone-rich beds adjacent to thrust faults, but diamond drilling at Nagambie Mine West is clearly higher priority; and
- NND001, the first deep diamond drill hole into the eastern edge of the Nagambie Mine West sulphide-gold target, is planned to go to 1,100m down hole. Notably, coarse sandstones intersected in NND001 to date are flooded with both hydrothermal quartz and carbonate whereas little carbonate is present in the Nagambie Mine mineralisation to the east. As drilling steps out westwards from NND001 further into Nagambie Mine West, the Company's gold model predicts that the concentrations of all the precipitates, including gold, could increase to maximums that correlate to optimum pressure and temperature at the time of formation.

The JORC (2012 Edition) Table 1 Checklist for NAD002, NAD003 and RAD001 is attached at the end of this report.

**Diamond Drill Holes NAD002 & NAD003**

Figure 4 is a section showing the logged % quartz and % pyrite for both NAD002 and NAD003. The significant pyrite intersected in both holes explains the IP chargeability high on that section. This clear validation of the IP method adds credence to the much more intense IP anomaly at Nagambie Mine West.

Figure 5 is the same section but showing the moderate gold values intersected in both holes. Importantly, the majority of the gold values relate to the stronger quartz / pyrite intersections, and hence the IP chargeability high.

**Diamond Drill Holes NND001 and NND002(p)**

Figure 6 is a section showing the hole trace and logged % quartz for NND001 to date and the IP chargeability contours. As above, significant carbonate is being seen along with quartz for the first time in the drilling program in NND001, which fits with Nagambie Resources' new hydrothermal-fluids-flow hypothesis. The two zones of strong silica alteration, both in the immediate footwall (to the south) of logged faults, potentially explain the two "bumps" in the IP contours and provide further validation of the IP survey.

Figure 7 shows the planned hole trace for the next hole, NND002(p) and the IP chargeability contours for the section, which is 200m west of the NND001 section. The intensity of the IP chargeability increases significantly to the west over the 200m distance, going from a maximum of 7.0 mV/V to 8.0 mV/V.

**Figure 4 NAD002 & NAD003 – Discrete IP Chargeability High explained by Pyrite% (with Quartz%)**

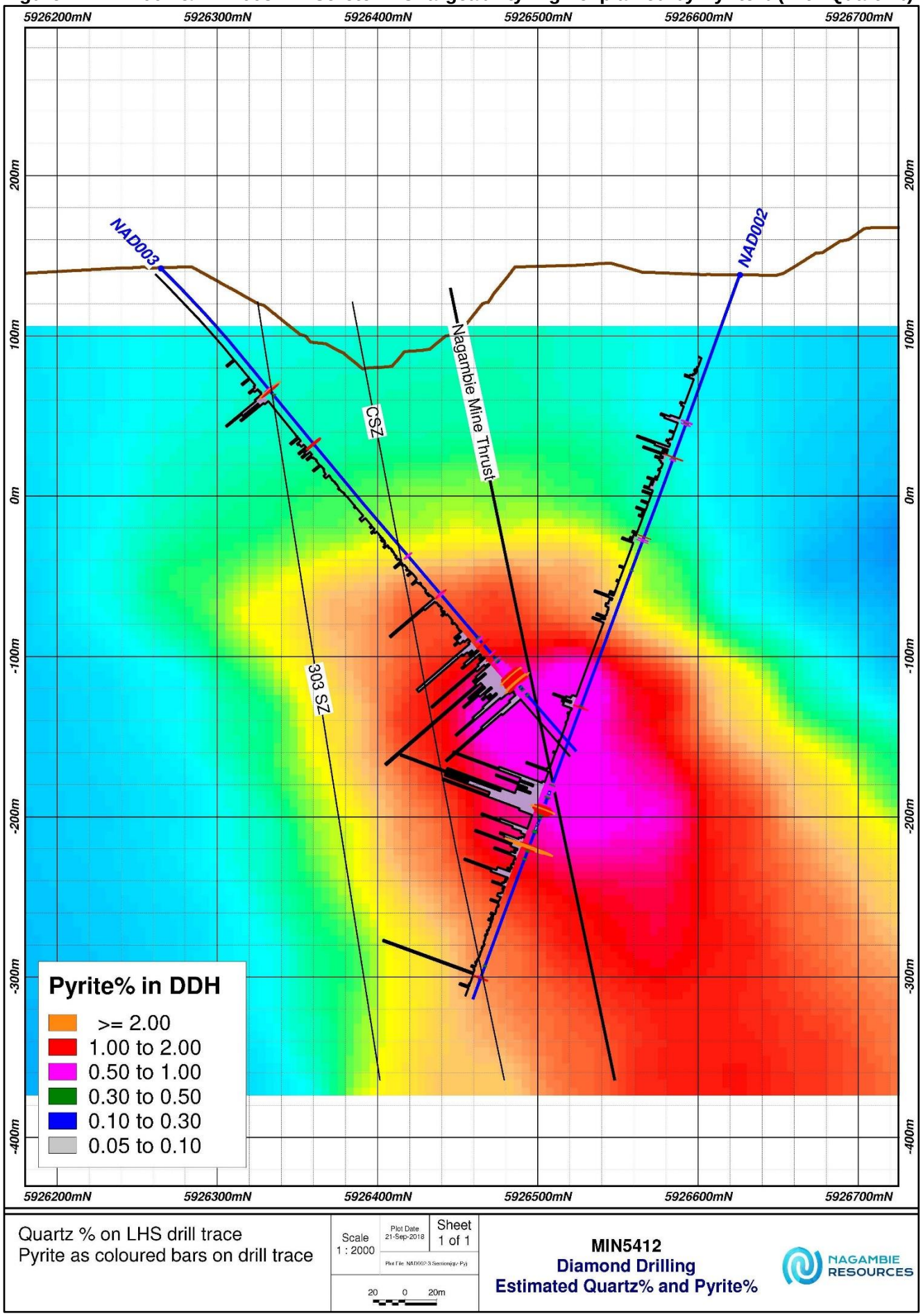


**Figure 5 NAD002 & NAD003 – Gold mostly related to Quartz / Pyrite & Nagambie Mine Thrust**

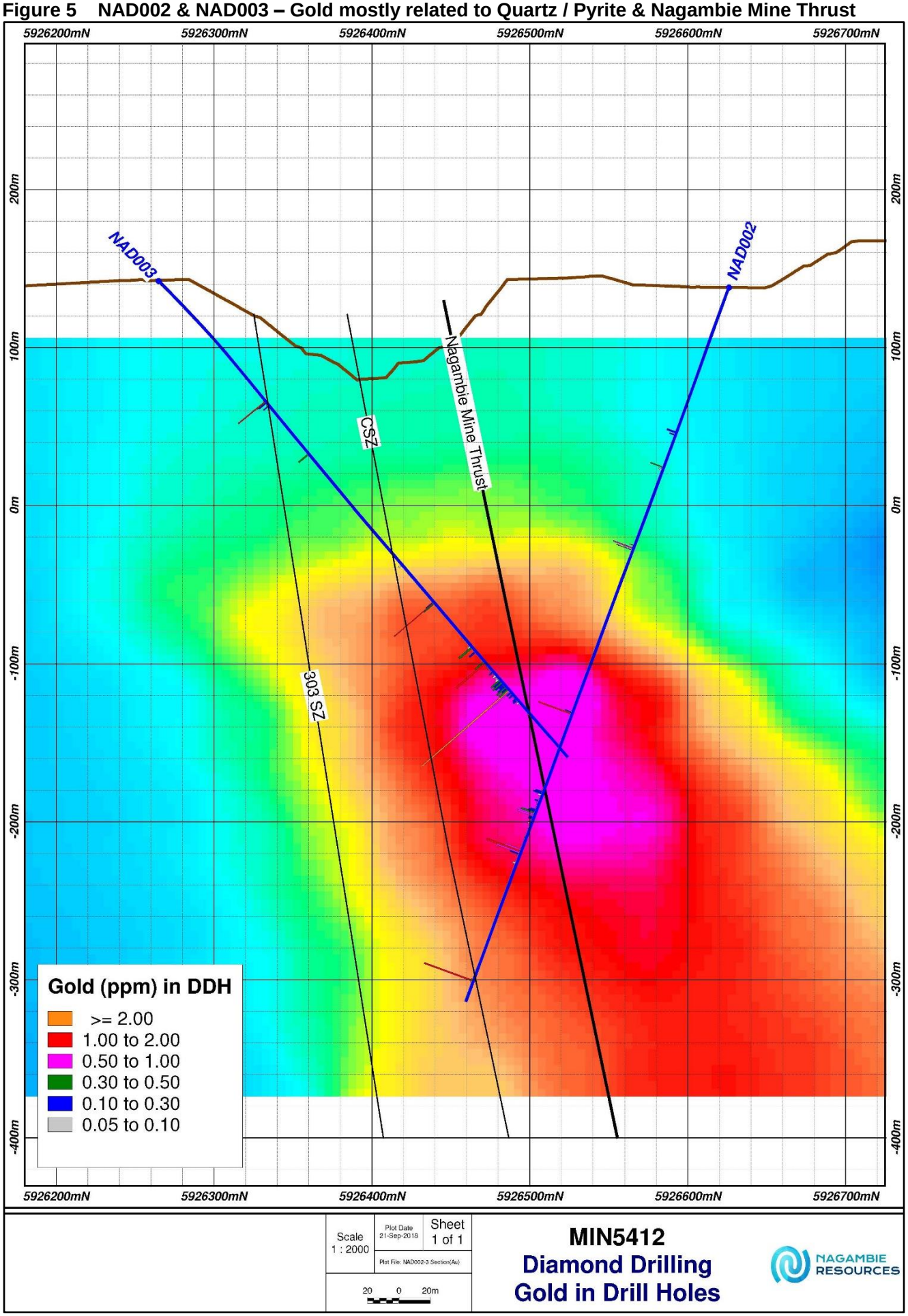


**Figure 6 NND001 - IP Chargeability Contours and Logged % Quartz**

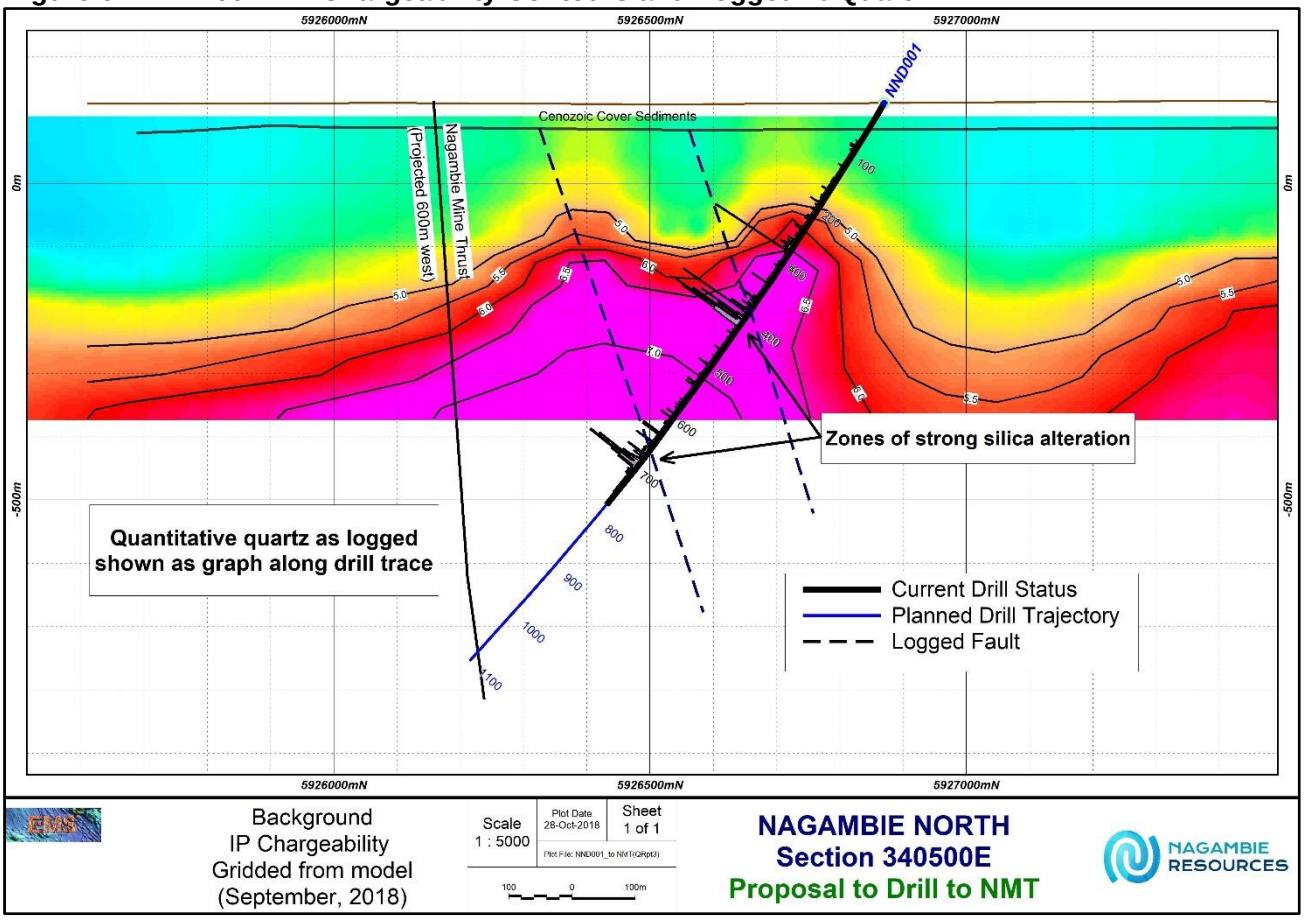
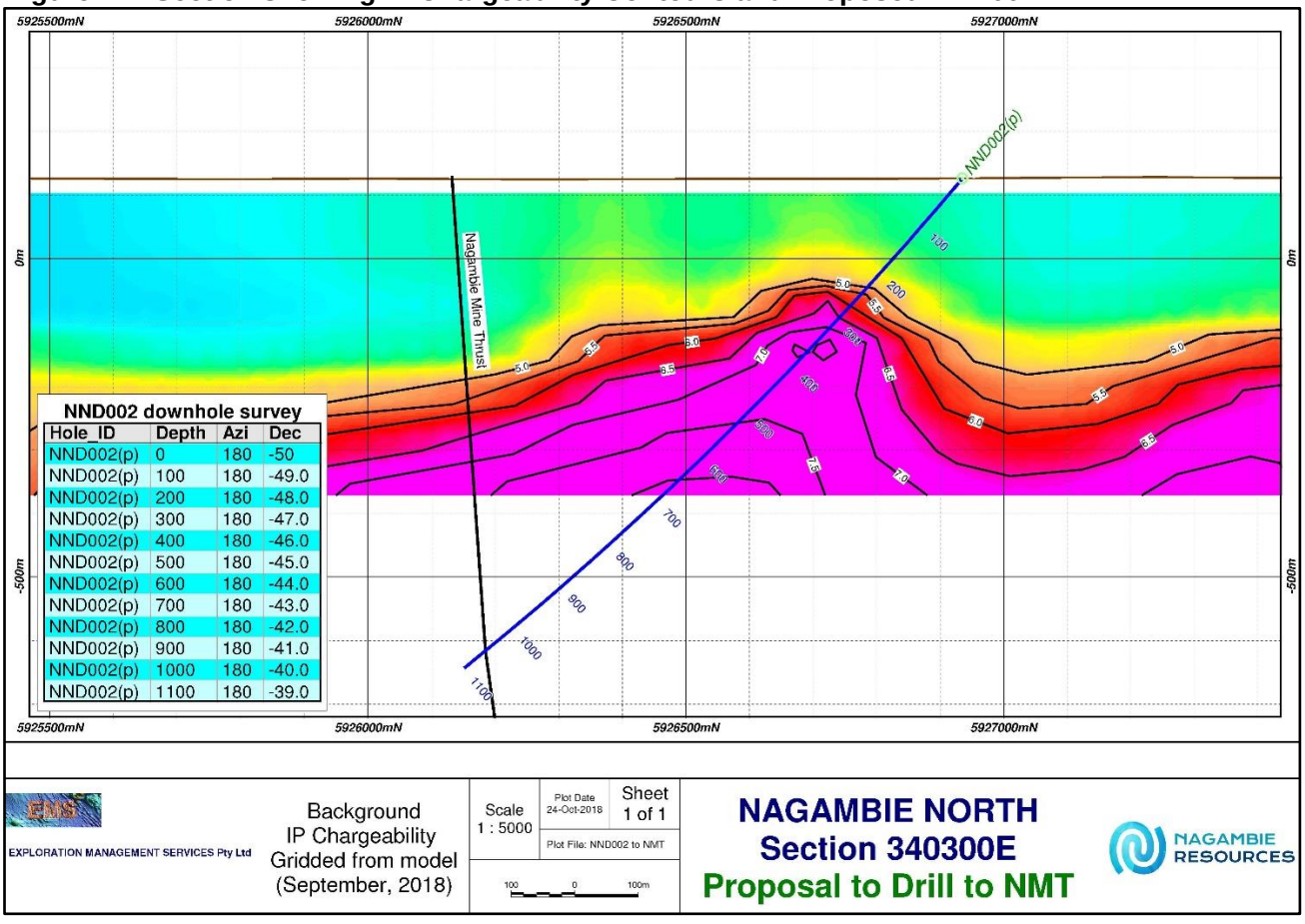



**Figure 7 Section showing IP Chargeability Contours and Proposed NND002**



### Gold Tenements and Changes

Nagambie Resources group tenements as at 30 September 2018 are listed in detail in Appendix 1 (plan and table). There were no tenement changes during the quarter.

## PASS MANAGEMENT PROJECT

PASS stands for **P**otential **A**cid **S**ulphate **S**oil (or silt or rock). PASS only becomes a problem when it is excavated from below the water table and exposed to the air (that is, removed from its anaerobic state).

Underwater storage is the best environmental solution for PASS as it prevents the oxidation of the sulphides in the material. The water in the Nagambie Mine open pits is naturally saline and alkaline, making it ideal for PASS management.

The major Melbourne infrastructure projects that will be of particular interest to Nagambie Resources for PASS management will be Metro Rail and West Gate Tunnel, both starting mid CY2019, and North East Link, starting in CY2020. Other possible near-term projects include Airport Rail and East West Link (which is recommended by both Infrastructure Australia and Infrastructure Victoria).

### PASS Management Milestones

All the key construction and permitting milestones to commence PASS Management at the Nagambie Mine are in place:

- Civil works for the West Pit completed, including new haulroads;
- State-of-the-art truck weighbridge constructed and commissioned;
- EPA Victoria has extended Nagambie Resources' Environmental Management Plan (EMP) for PASS Management until 2028;
- The mining licence for the Nagambie Mine, MIN 5412, has been renewed by Earth Resources Victoria (ERR) for 13 years to 2031; and
- A variation to the Work Plan for MIN 5412 has been approved by ERR. The work plan includes the rehabilitation of the water-filled West Pit by backfilling with PASS material.

## QUARRYING

Sales receipts for the quarter of $177,000 reflected the seasonal downturn over the winter months.

### Quarry Products

The approved variation to the Work Plan for MIN 5412 also allows for the continued rehabilitation of the historic mine site by:

- The production of road base and gravel products from the Overburden Dumps;
- The production of concrete aggregates from the tailings on the Heap Leach Pad; and
- The sale of the tailings "as is" subject to EPA Victoria conditions.

Three sizes of concrete aggregates are planned – 7mm, 10mm and 14mm – rather than the combined 7mm to 14mm product which had been previously produced by a contractor at the Nagambie Mine but which is not favoured by concrete product manufacturers.

## PROPOSED SAND MINING

The Company is currently preparing an application to the relevant authorities for the mining of the quartz sand and aggregates deposits that exist to the west of the 1990s West Pit on the Company's freehold land.

Some of the shallow sand could be sold "as is" as "brickies" sand while the balance of the sand could be sold as concrete quartz sand (after screening) which is in high demand in Victoria. The quartz aggregates could be washed and screened and sold as concrete quartz aggregates and high-value white quartz landscaping pebbles.

## DOD UETF CONSTRUCTION

Construction of the underwater explosives testing facility (UETF) at the eastern beach of the East Pit at the Nagambie Mine by the Australian Department of Defence (DOD) is nearing completion.

Lease fees for the site payable by DOD to Nagambie Resources under the initial 20-year agreement commenced in October 2014 at $150,000 per annum, payable quarterly, increasing by the Melbourne CPI figures (currently $161,190 per annum).

## CORPORATE

### Cash

At 30 September 2018, total cash held by the group was $901,000 plus $920,000 remained undrawn under the two-year Unsecured Loan Facility.

A total of $566,000 was raised during the quarter from the issue of shares. $220,000 related to the exercising of 2.2 million options at 10.0 cents each. $301,000 related to the early take up of 2018 SPP (Shareholder Share Purchase Plan) shares at 6.2 cents each. $45,000 related to the early subscription for placement shares at 6.2 cents each by a sophisticated and professional investor.

The 2018 SPP raised a total of $1,042,500, of which $741,500 was taken up by shareholders after the end of the quarter. A total of $600,000 was raised at the same time via placements to sophisticated and professional investors, also at 6.2 cents per share, of which $555,000 was subscribed after the end of the quarter. A total of $1,296,500 was therefore raised after the end of the quarter.

### Unlisted Options Issued to Directors, Consultants and Employees

As above, 2.2 million unlisted options with an exercise price of $0.10 each were exercised during the quarter, raising $220,000 for the Company. The remaining options, their expiry dates and the exercise funds that could be paid to Nagambie Resources are as follows:

| Exercise Date | Number | Exercise Price | Exercise Funds |
|---|---|---|---|
| 3 December 2018 | 4,750,000 | $0.10 | $475,000.00 |
| 28 November 2019 | 10,100,000 | $0.10 | $1,010,000.00 |
| 16 November 2020 | 3,300,000 | $0.10 | $330,000.00 |
| 16 November 2020 | 8,000,000 | $0.10 | $800,000.00 |
| 4 July 2021 | 2,000,000 | $0.255 | $510,000.00 |
| 30 November 2021 | 12,500,000 | $0.25 | $3,125,000.00 |
| 24 November 2022 | 13,750,000 | $0.10 | $1,375,000.00 |
| 20 December 2022 | 1,000,000 | $0.141 | $141,000.00 |
| 22 August 2023 | 4,500,000 | $0.126 | $567,000.00 |
| | **59,900,000** | | **$8,333,000.00** |

James Earle
Chief Executive Officer

***STATEMENT AS TO COMPETENCY***

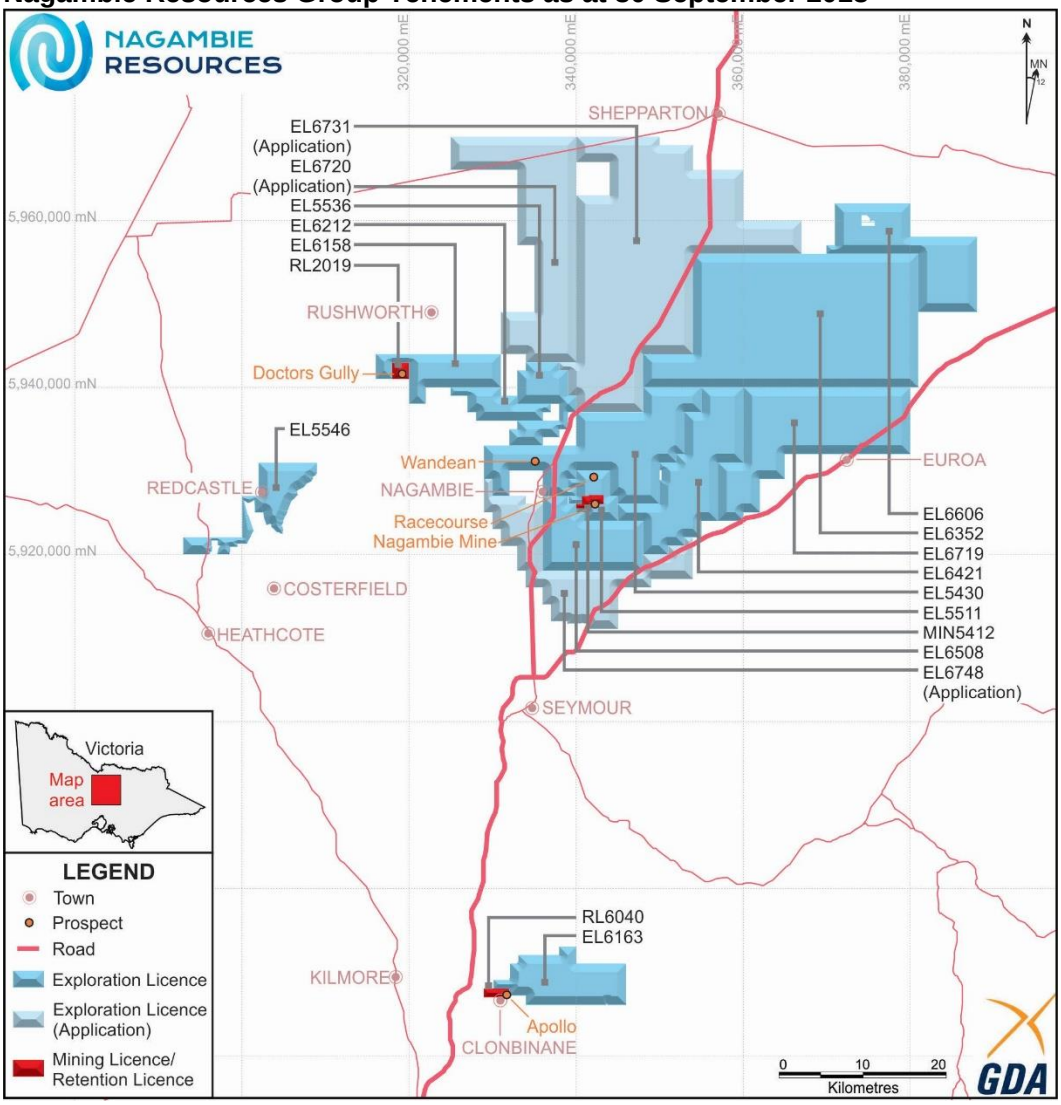
*The Exploration Results in this report have been compiled by Dr Rod Boucher and Mr Geoff Turner. Rod Boucher has a PhD in Geology, is a Member and RPGeo of the Australian Institute of Geoscientists, is a Member of the Australian Institute of Mining and Metallurgy, has more than ten years in the estimation, assessment, and evaluation of mineral resources and ore reserves, and has more than 20 years in exploration for the relevant style of mineralisation that is being reported. Geoff Turner is a Fellow of the Australian Institute of Geoscientists, has more than ten years in the estimation, assessment, and evaluation of mineral resources and ore reserves, and has more than 20 years in exploration for the relevant style of mineralisation that is being reported. In these regards, both Rod Boucher and Geoff Turner qualify as Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" and both consent to the inclusion in this report of these matters based on the information in the form and context in which it appears.*

***FORWARD-LOOKING STATEMENTS***

*This report contains "forward-looking statements" within the meaning of securities laws of applicable jurisdictions. Forward-looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "target", "intend", "plan", "estimate", "anticipate", "believe", "continue", "objectives", "outlook", "guidance" or other similar words, and include statements regarding certain plans, strategies and objectives of management and expected financial performance. These forward-looking statements involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Nagambie Mining and any of its officers, employees, agents or associates. Actual results, performance or achievements may vary materially from any projections and forward-looking statements and the assumptions on which those statements are based. Exploration potential is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Readers are cautioned not to place undue reliance on forward- looking statements and Nagambie Resources assumes no obligation to update such information.*

## APPENDIX 1

### Nagambie Resources Group Tenements as at 30 September 2018




### Nagambie Resources Group Tenements as at 30 September 2018

| Tenement Number | Tenement Name | sq km |
|---|---|---|
| MIN 5412 | **Nagambie Mining Licence** | 3.6 |
| EL 5430 | **Bunganail Exploration Licence** | 181.0 |
| EL 5511 | **Nagambie Exploration Licence** | 27.0 |
| EL 5536 | **Wandean North Exploration Licence** | 48.0 |
| EL 6212 | **Reedy Lake North Exploration Licence** | 30.0 |
| EL 6158 | **Rushworth Exploration Licence** | 56.0 |
| RL 2019 | **Doctors Gully Retention Licence** | 4.0 |
| EL 6352 | **Miepoll Exploration Licence** | 455.0 |
| EL 6421 | **Pranjip Exploration Licence** | 139.0 |
| EL 6508 | **Tabilk Exploration Licence** | 84.0 |
| EL 6606 | **Gowangardie Exploration Licence** | 120.0 |
| EL 6719 | **Euroa Exploration Licence** | 204.0 |
| ELA 6720 | **Tatura Exploration Licence Application** | 214.0 |
| ELA 6731 | **Arcadia Exploration Licence Application** | 493.0 |
| ELA 6748 | **Waranga Exploration Licence Application** | 136.0 |
| | **Subtotal Waranga Province** | **2,194.6** |
| EL 6163 | **Clonbinane South Exploration Licence** | 79.0 |
| RL 6040 | **Clonbinane Retention Licence** | 3.0 |
| EL 5546 | **Redcastle Exploration Licence** | 69.0 |
| | **Total** | **2,345.6** |

# JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Sampling techniques* | • *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.* | • All sampling and logging has been supervised and conducted by Dr Rodney Boucher, Linex Pty Ltd, Consulting Geologist to Nagambie Resources and by geological and field staff at the Nagambie Resources mine site.<br>• All material is collected in commercially available diamond core trays.<br>• Diamond core is cleaned and marked metre-by-metre.<br>• The geologist determines which parts of the drill hole are to be sampled using criteria such as presence of quartz and mineral occurrence. Sample intervals are based on lithology and veining but in general were 1m.<br>• The samples are cut with a core saw, with half collected for laboratory submission, the remaining half transferred back to the core tray for storage.<br>• No intervals were less than 0.30 m or greater than 1.3 m.<br>• The diamond drill samples were submitted to Australian Laboratory Services (ALS) in Adelaide, South Australia for sample preparation. Sample preparation involved sample crushing to 6 mm, pulverise and then screened to 75 micron and split off 25 g. Samples were then sent to ALS in Perth for analysis. Au analysis is conducted with an aqua regia extraction and ICPMS finish (ALS code Au-TL43). As, Ag, Sb, Cu, Pb, Zn and S analysis is conducted with an aqua regia digestion and ICPAES analysis (ALS code ME-ICP41). |
| *Drilling techniques* | • *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).* | • NAD002, NAD003 and RAD001 were drilled using a track mounted Sandvik 710DE drill rig. The cover was rotary-mud drilled to 37.5 m, 61.5 m and 110 m respectively and cased HWT. NAD002 and NAD003 holes were HQ cored to end of hole. Final hole depth was 481.7 m for NAD002 and 395 m for NAD003. RAD001 was HQ cored to 241.5 m followed by NQ2 core to end of hole at 406.7 m.<br>• The holes were surveyed with a single shot camera, nominally every 30 m where practicable. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | • Core is orientated using Boart Longyear's TruCore core orientation system and validated by geological observations and stereonet plots. |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | • Core recoveries were measured by the senior field assistant for each drill run comparing length of core recovered versus drill depth. Core recovery for each hole was logged and recorded in the database.<br>• The driller is under instruction to monitor recovery and rectify core loss through adjusting drill rig operation.<br>• No strong relationship between core recovery and grade is evident.<br>• Drilling has occurred on day shift only. |
| *Logging* | • *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • All core is geologically logged at 10 centimetre intervals to a standard that follows industry common practice and is suitable for future use in interpretation and resource estimation.<br>• Logging of samples includes but is not limited to lithology, mineralogy, alteration, veining, weathering and structure.<br>• Drill core structural measurements are logged prior to cutting/sampling. Bedding, vein, joint and fault orientations are measured.<br>• All core is photographed wet and dry. |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • Half core is sampled using a core saw. The right half of the core (viewed down hole) is submitted for assay.<br>• Company core cutting, and sampling procedures were followed to ensure sampling consistency.<br>• 1 m of non-mineralised material from either side of significant mineralised zones was submitted with the samples to the laboratory as part of the quality control process.<br>• No second half sampling has been conducted.<br>• The sample sizes are considered to be appropriate for the type of mineralisation in this area. |
| *Quality of assay data* | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* | • The sample preparation and analytical procedures are considered appropriate for the style of mineralisation.<br>• ALS provide details of their routine quality controls. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *and laboratory tests* | • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.* | • 1 in 15 samples are duplicate assayed for quality control and quality assurance testing.<br>• One standard sample is inserted per approximately 20 samples dispatched for assay.<br>• Laboratory standards and blanks are inserted for quality control and quality assurance testing. |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • All assay and drillhole data are imported and stored in a database.<br>• Significant intersections are verified by the logging geologist and the Consulting Geologist.<br>• No twinned holes have been drilled.<br>• Primary data for drill holes was compiled onto paper-based logging templates and was then transferred into a database and validated by a geologist. Back up digital copies of all paper log sheets are also kept.<br>• No adjustments have been made to any assay data contained in this report. |
| *Location of data points* | • *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • All drill hole location coordinates are measured using handheld GPS.<br>• Collar surveying was performed by the consulting geologist personnel. This is considered appropriate at this stage of exploration.<br>• All drill holes were downhole surveyed. Down hole surveys were conducted by the drilling contractor every 30m down hole.<br>• Drilling orientation is established prior to collaring with clinometer and compass.<br>• The grid/projection system used is GDA MGA 94 Z55.<br>• The RL was recorded for each drill hole from the GPS and verified using publicly available satellite and aerial imagery. |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>• *Whether sample compositing has been applied.* | • NAD003 is approximately 360 m south of NAD002 (Refer location map).<br>• Sample intervals were based on lithology but in general were 1 m. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Orientation of data in relation to geological structure* | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | • NAD002 was designed to drill approximately perpendicular to the trend of the IP anomaly and to the known faults and anticline in the mined pit to the south.<br>• NAD003 was designed to cross NAD002 from the south side of the pit and to drill through the centre of the IP anomaly.<br>• RAD001 was designed to drill approximately perpendicular to the trend of the anticline and to the IP anomaly.<br>• There is insufficient drilling data to determine if any bias can be detected in the data. |
| *Sample security* | • *The measures taken to ensure sample security.* | • All core drilled has been processed and cut at a secure shed on the Nagambie mine site and dispatched to the laboratory by a national courier.<br>• Sample number receipt information from the laboratory is cross-referenced and rationalised against sample number dispatch information. |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • No processes or data used in developing the release of exploration results have been subject to audit or review by non-company personnel or contractors so as to reduce timelines for reporting. |

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Mineral tenement and land tenure status* | • *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*<br>• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | • NAD002 and NAD003 is drilled on the site of the Nagambie open cut at Nagambie, Victoria.<br>• NAD002 and NAD003 is located on MIN5412 and is 100% owned by Nagambie Resources Ltd.<br>• NAD002 and NAD003 is located in open paddocks on the Nagambie mine site.<br>• RAD001 is located on EL5511 and is 100% owned by Nagambie Resources Ltd. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • Open pit mining at Nagambie was conducted in the 1990's. Previous drilling under the pits was conducted by Panaegis Gold Mines Ltd in 2006 and 2007. The current drilling is in to new targets identified by an IP survey conducted early this year (refer ASX:NAG 22/3/18). NAD002, |

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>NAD003 and RAD001 are part of a drilling program to test these anomalies.<br>• No drilling in the area covered by the Racecourse Prospect has occurred previously.</td></tr>
<tr><td>Geology</td><td>• Deposit type, geological setting and style of mineralisation.</td><td>• The host rocks at Nagambie are marine sandstones and shales. Previous mining shows gold is associated with quartz veining and faulting in anticlinal folds.<br>• The mineralisation style at Nagambie is Orogenic Gold and gold mineralisation is disseminated within pyrite, arsenopyrite and stibnite.</td></tr>
<tr><td>Drill hole Information</td><td>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:<br>○ easting and northing of the drill hole collar<br>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar<br>○ dip and azimuth of the hole<br>○ down hole length and interception depth<br>○ hole length.<br>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</td><td>• No material drill hole information has been excluded.<br><table><tr><th>Hole ID</th><th>Easting</th><th>Northing</th><th>RL</th><th>Depth</th><th>Azimuth</th><th>Dip</th></tr><tr><td>NAD002</td><td>342400</td><td>5926626</td><td>138</td><td>481.7</td><td>180</td><td>-70</td></tr><tr><td>NAD003</td><td>342412</td><td>5926265</td><td>142.1</td><td>395</td><td>354.7</td><td>-45</td></tr><tr><td>RAD001</td><td>341450</td><td>5929025</td><td>130.8</td><td>406.7</td><td>180</td><td>-48</td></tr></table>Map Datum MGA94, Zone 55, AHD</td></tr>
<tr><td>Data aggregation methods</td><td>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.<br>• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.<br>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</td><td>• Weighted averages of results through each intersection are reported.<br>• No cut-off grades are applied.<br>• Only intersections greater than 1.0 ppm gold are reported in detail. Other assayed intersections are reported graphically.</td></tr>
<tr><td>Relationship between</td><td>• These relationships are particularly important in the reporting of Exploration Results.</td><td>• Mineralisation widths are based on down hole lengths.<br>• There is insufficient drilling data to determine continuity of mineralised</td></tr>
</table>

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *mineralisation widths and intercept lengths* | • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').* | domains. |
| *Diagrams* | • *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.* | • Refer to figures. |
| *Balanced reporting* | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | • All gold values have been reported. |
| *Other substantive exploration data* | • *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | • All relevant data is presented in the text, tables and diagrams. |
| *Further work* | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Further drilling will be testing the remainder of the IP anomalies, together with follow-up drilling based on interpretation of results. |