

WTD002, WANDEAN CRUSTAL FAULT AND WARANGA MODEL**SUMMARY**

- ❖ Wandean diamond hole WTD002 is planned to commence within two weeks. It is designed to intersect the centre of an IP chargeability anomaly four times stronger than the one intersected under the Nagambie Mine East Pit in 2018 (26 mV/m versus 6.5 mV/m).
- ❖ The strong IP anomaly being targeted occurs only 600m east of the Wandean Crustal Fault. This supports Nagambie Resources' geological model for the Waranga Domain (WaGM). The WaGM is based on mineralising crustal hydrothermal fluids having risen up deep crustal faults under pressure before travelling along intersecting thrust faults and filling adjacent fracture networks.
- ❖ The WTD002 sulphide-gold target is supported by the strong IP anomaly, lies beneath a gold-in-soil anomaly, is coincident with a projected thrust fault, and significant hydrothermal alteration of the sediments was established in WTD001.
- ❖ A ground IP survey is to be carried out, as soon as cropping allows, over the section of the Wandean Crustal Fault to the west of the Nagambie Mine, 7km south east of Wandean. A strong IP sulphide-gold response in this location would be further supportive of the WaGM and highlight the prospectivity of Nagambie Resources' 2,000 sq km of tenements in the Waranga Domain.

WANDEAN DIAMOND HOLE WTD002 (refer Figures 1 and 2)

The follow-up hole to WTD001, WTD002 has been designed to:

- ❖ intersect the highest IP chargeability target at Wandean of 26 mV/m at an ideal, relatively low angle;
- ❖ cross beneath the previous surface oxide-gold drilling at Wandean to test the structures, host rocks and mineralisation under the oxide gold;
- ❖ intersect Wandean Thrust (1) before Wandean Thrust (2), allowing the position of the two thrusts, which were intersected in WTD001, to be fixed; and
- ❖ allow the folding of the various sandstone-rich and siltstone-rich sediments to be logged in detail, with a view to establishing the position of the principal anticline indicated in WTD001.

The low intersection angle is to be achieved with a track-mounted underground diamond drill rig which will collar WTD002 at 35 degrees below horizontal. The mast of the truck-mounted surface diamond drill rig that drilled WTD001 is restricted to around 55 degrees and steeper below horizontal.

The compelling sulphide-gold drill target is 300m north of the 2014 surface oxide-gold discovery. Open to the east and west, the target zone is supported by:

- ✓ strong IP chargeability over the full 500m surveyed by ground IP;
- ✓ an overlying gold-in-soil anomaly;
- ✓ coincident projected thrust fault logged in diamond hole WTD001; and
- ✓ significant Fosterville-style hydrothermal alteration of the sedimentary rocks in WTD001.

NAGAMBIE RESOURCES

Exploration for Fosterville-style, structural-controlled, high grade sulphide-gold underground deposits within 2,000 sq km of Waranga Domain tenements is being methodically carried out using geophysical targeting techniques, diamond drilling and analysis for hydrothermal alteration of the sediments.

Underwater storage of sulphidic excavation material (WASS / 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.

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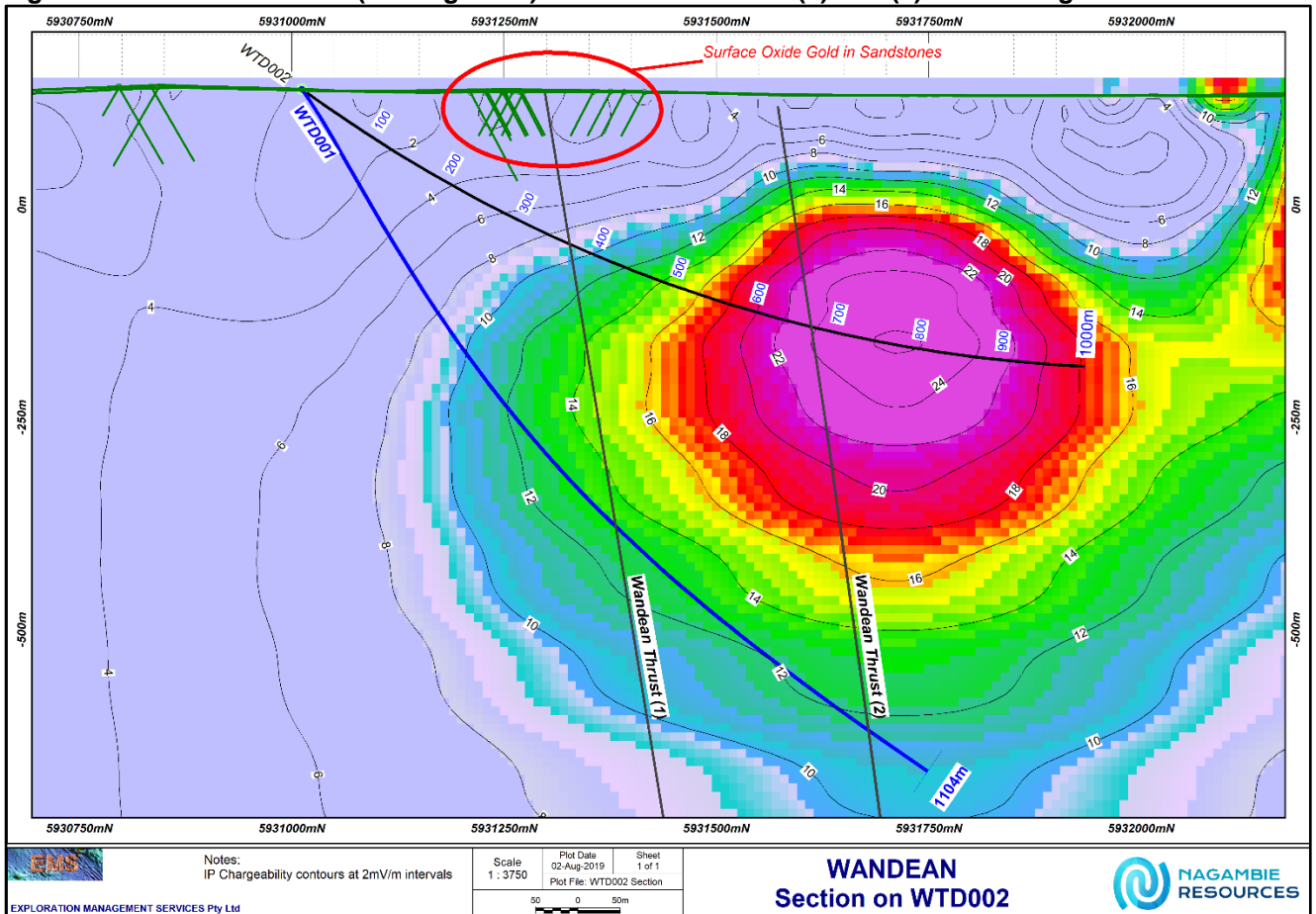
Mike Trumbull (Exec Chairman)

Gary Davison (Director)

Alfonso Grillo (Dir/Company Sec)

James Earle CEO

Figure 1 WTD002 Section (looking West) – Wandean Thrusts (1) and (2) and IP Target of 26 mV/m



STRONG WANDEAN IP CHARGEABILITY ANOMALY (refer Figure 2)

The Induced Polarisation (IP) geophysical survey was carried out on six north-south lines which were 100m apart (as reported to the ASX on 24 July 2019). IP chargeability is a measure of the sulphide response - the higher the chargeability, the greater the likely percentage of disseminated sulphides (such as pyrite and arsenopyrite) being present.

The highest IP chargeability reading on each of the sections (refer Figure 2) 450E, 550E, 650E, 750E, 850E and 950E were (in millivolts per metre or mV/m) 20, 14, 26, 18, 10 and 10 respectively.

These are all strong numbers when compared with the only significant anomaly of 6.5 mV/m under the Nagambie Mine East Pit that was intersected by both NAD002 and NAD003 (refer Figure 3). The disseminated pyrite intersected in both holes (along with quartz) explained the IP chargeability high and provided clear validation of the IP method in the Nagambie region. The moderate gold values intersected (around 1.0 g/t gold) related to the stronger quartz / pyrite intersections, and hence the IP chargeability high.

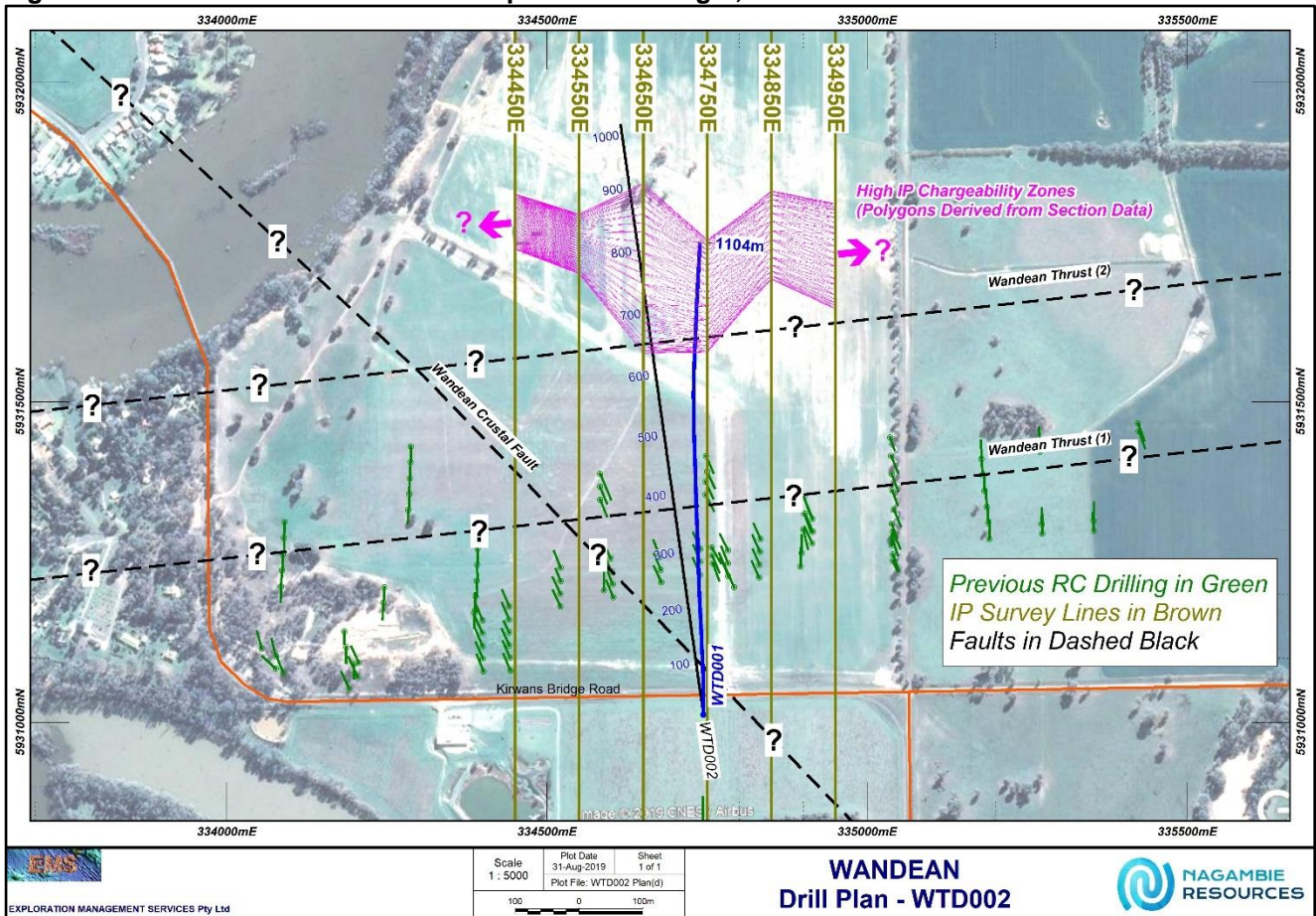
The Wandean sulphide-gold target has been delineated by the IP survey over 500m east-west, approximately 400m to 900m east of the Wandean Crustal Fault. It is likely to extend for a similar distance to the oxide-gold mineralisation which is known to continue for at least a total of 1,400m, 600m to the west of the Wandean Crustal Fault and 800m to the east of the Wandean Crustal Fault.

WANDEAN CRUSTAL FAULT (refer Figure 3)

The Wandean Crustal Fault is considered to be the conduit for the hydrothermal fluids that resulted in the gold mineralisation at both Wandean and the Nagambie Mine.

A ground IP survey is to be carried out, as soon as cropping allows, over the section of the Wandean Crustal Fault to the west of the Nagambie Mine, 7km south east of Wandean (refer Figure 3). If this IP survey is successful, additional surveys would be planned to cover the intersections of the Wandean Crustal Fault with the other mapped thrusts such as the Grimwade and Racecourse Thrust Faults.

Figure 2 WTD002 Plan – Wandean Sulphide-Gold Target, Thrust Faults and Wandean Crustal Fault



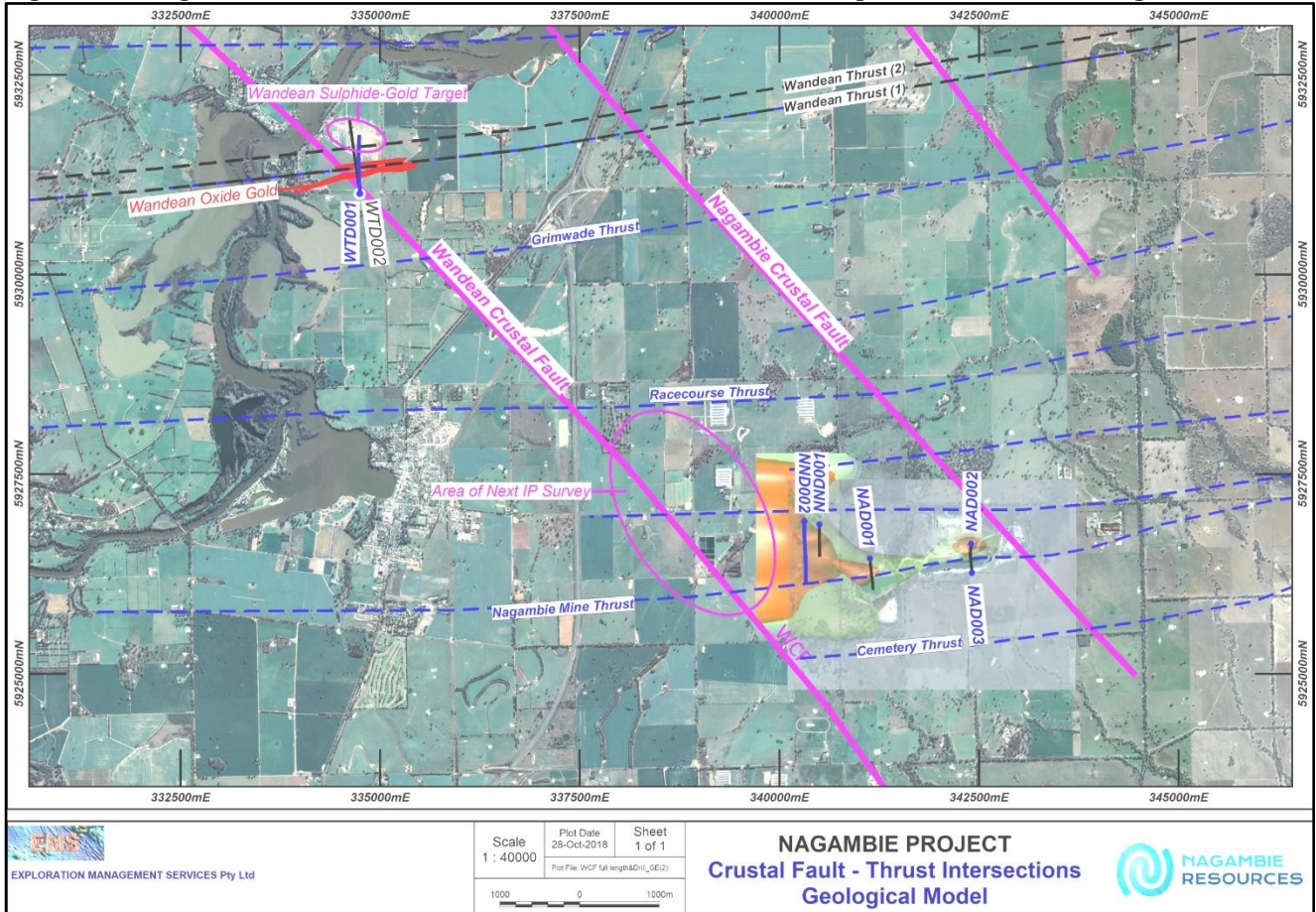
WARANGA DOMAIN GEOLOGICAL MODEL (WaGM)

The highest IP chargeability reading of 26 mV/m at Wandean occurs only 600m east of the Wandean Crustal Fault. This supports Nagambie Resources’ WaGM which in summary currently includes:

- ❖ The host rocks are extensive marine siltstone and sandstone sediments (turbidites) with a total current-day thickness of at least 6 km. Significant erosion of the turbidites since formation has occurred to expose the Strathbogie granites to the south. 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;
- ❖ Regional northeast-southwest compression followed by later north-south compression (refer Figure 4) caused progressive folding of these originally-horizontal sedimentary rocks, resulting in numerous east-west-striking and near-vertical north-dipping thrust faults. Adjacent to these thrust faults, folding and fracturing of the rocks was pronounced;
- ❖ Crustal hydrothermal fluids rose up deep crustal faults, predominantly north-west striking, under pressure around 370 million years ago;
- ❖ Where the deep crustal faults 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, pyrite (iron sulphide), arsenopyrite (arsenic-iron sulphide), stibnite (antimony sulphide) and gold from the hydrothermal fluids took place. Maximum precipitation of gold could occur immediately adjacent to the crustal faults or various distances east or west of the crustal faults, wherever the temperature and pressure conditions were optimum for precipitation;
- ❖ 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 more brittle and more fractured sandstone-rich zones; and
- ❖ Discrete IP chargeability highs in the Waranga Domain will most likely represent anomalous concentrations of disseminated hydrothermal pyrite and arsenopyrite within folded and fractured sandstone-rich zones adjacent to the east-west-striking thrust faults.

Figure 3 Nagambie Area – Wandean Crustal Fault, Wandean & Nagambie Mine West Targets



KEY WARANGA DOMAIN STRUCTURES (refer Figure 4)

The gravity structures shown in Figure 4 represent deep crustal faults, predominately north-west striking.

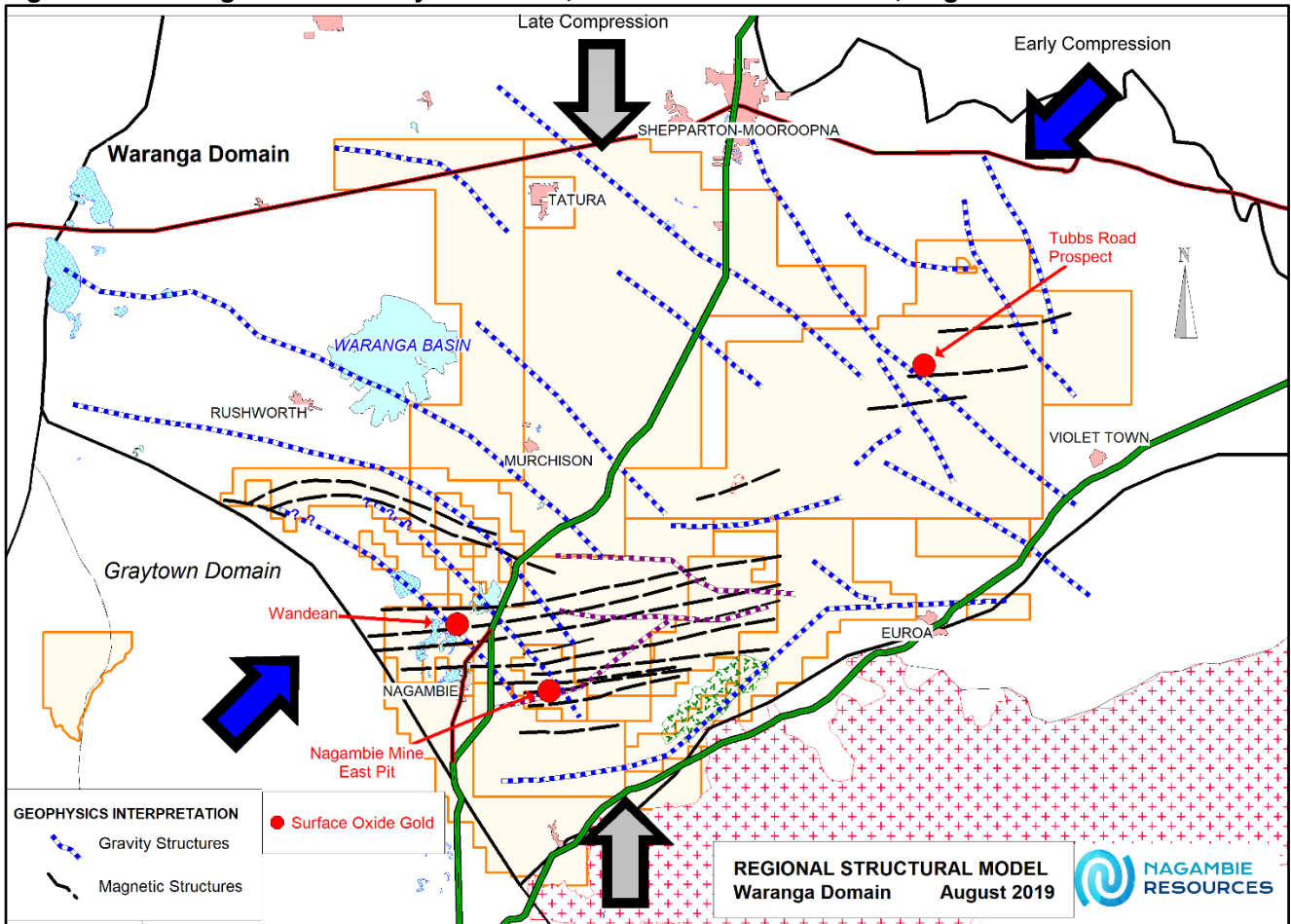
The magnetic structures represent the principal nearer-surface thrust faults, predominantly east-west striking. Each principal thrust fault will usually have one or more secondary, adjacent thrust faults. The principal thrust faults shown in the Wandean – Nagambie Mine area were determined from aeromagnetic surveys. Several of these have been confirmed by mapping in road cuttings, as have the ones outside of that area. Nagambie Resources plans to ultimately conduct aeromagnetic surveys over all its Waranga Domain tenements and expects that the density of thrust faults in the Wandean – Nagambie Mine area will be replicated elsewhere in its 2,000 sq km of tenements.

The number of crustal fault – thrust fault intersections in the 2,000 sq km of tenements is expected to be a very large number. Mineralised intersections will be only a proportion of the total intersections, but still a large number. However, the chances of the mineralised intersections outcropping at the current-day surface is extremely low given that the great majority of the tenements are covered by Murray Basin sediments varying in thickness from a few metres to over 100 metres. Additionally, the mineralised intersections will predominately only occur in brittle sandstone-rich rocks which alternate irregularly with more-ductile, less-fractured siltstone-rich rocks.

For the above reasons, there are, unsurprisingly, only three currently known surface oxide-gold occurrences in Nagambie Resources’ tenements, as shown in Figure 4. All three fit the Company’s crustal fault – thrust fault intersection model.

The Nagambie Mine East Pit was mined between 1989 and 1992. Wandean was a virgin gold discovery by Nagambie Resources in 2014. Tubbs Road would have been worked in the late 1800s but has never been drilled or tested geophysically.

Figure 4 Waranga Domain – Key Structures, Surface Gold at Wandean, Nagambie Mine & Tubbs Rd



KEY EXPLORATION METHODS CURRENTLY USED BY NAGAMBIE RESOURCES

Nagambie Resources has developed a suite of exploration methods and techniques to systematically and methodically explore, at minimal cost, the Waranga Domain for Fosterville-style sulphide-gold mineralisation. That suite currently includes:

- ❖ The crustal fault – thrust fault intersection model (WaGM);
- ❖ Aeromagnetic surveying of new focus areas to locate the principal east-west-striking thrust faults and their intersection with gravity-mapped deep crustal faults;
- ❖ Geological mapping of new focus areas to locate any outcropping turbidites and mineralisation, and confirm any thrust faults if possible in road cuttings;
- ❖ Gold-arsenic-antimony soil sampling to test for Fosterville-style mineralisation up to 70m below surface;
- ❖ Ground IP surveys to locate anomalous sulphide-gold targets in unoxidised turbidites up to 400m below surface;
- ❖ Oriented diamond core drilling and detailed systematic logging of the core to establish rock type, mineralisation, bedding angles, folding, and structures, particularly thrust faults;
- ❖ Radial-Down-The-Hole (Radial-DTH) IP on selected deep diamond holes to locate more specific sulphide-gold targets for follow-up drilling; and
- ❖ Litho-geochemically analysing the sediments in selected diamond drill holes, at least every 50m down hole, to test for Fosterville-style hydrothermal alteration.



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 and is a Member of the Australian Institute of Mining and Metallurgy. Geoff Turner is a Fellow of the Australian Institute of Geoscientists. Both Rod Boucher and Geoff Turner have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which they are undertaking, to qualify as Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". 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.