NAGAMBIE RESOURCES

ASX ANNOUNCEMENT

UPDATE ON SULPHIDE-GOLD TARGET DRILLING PROGRAM

The first four diamond drill holes in the initial sulphide-gold target drilling program have now been completed – NAD001 & NAD002 targeting the Nagambie Mine Induced Polarisation (IP) anomaly, and CAD001 & CAD002 targeting the Cahill IP anomaly.

NAD002, for which assays are pending, was drilled to the south under the East Pit. It intersected a complexly faulted and folded quartz-rich zone with pyrite in a major anticline, in the footwall of the projected Nagambie Mine Thrust and within the IP chargeability high. This first intersection of strong quartz / pyrite within an IP chargeability high confirms that IP geophysical surveying should be a very valuable tool for targeting sulphide-gold-in-sediments mineralisation in the Waranga Province.

NAD002 also clearly shows that the most complex faulting and quartz vein / sulphide development will occur in brittle sandstone-rich zones.

The drilling of NAD003, a follow up hole to NAD002, has commenced. On the same section as NAD002, NAD003 is being drilled to the north under the East Pit to best target the major anticline and potential south-dipping faults within the IP chargeability high. Several south-dipping faults were logged in NAD002. Following the completion of NAD003, the structural controls on mineralisation at the Nagambie Mine should be well understood and will help guide future drilling at the Mine, Racecourse, Nagambie North and elsewhere in the Waranga Province, such as at Wandean.

The Cahill IP anomaly has been eliminated as a sulphide-gold-insediments target and no further drilling will be carried out in the Cahill area. The cause of the strong IP chargeability anomaly between 100m and the 400m vertical depth of the IP survey at Cahill has been assessed to be stratigraphic, pyritic fossil beds within siltstones.

Early conclusions from the drilling program to date include:

- The IP chargeability highs are reflecting only anomalous concentrations of pyrite and other sulphides as no significant carbonaceous shale has been intersected in the drill holes;
- Stratigraphic, syngenetic-pyrite fossil beds in siltstones, such as at Cahill, can result in a distinctive massive IP chargeability high that commences immediately below the level of surface oxidation and continues strongly to the full depth of the IP survey; and
- Discrete IP chargeability highs, such as at the Nagambie Mine, Racecourse and Nagambie North, are likely to be representative of pyrite and other sulphides with quartz in structurally complex fault and fold zones within brittle sandstones.

James Earle Chief Executive Officer

NAGAMBIE RESOURCES

Exploration for Fostervillestyle, 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, North-East Link and East-West Link.

Recycling of the overburden and tailings dumps can produce sand and aggregates for concrete, road base material and road gravel.

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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INITIAL SULPHIDE-GOLD-IN-SEDIMENTS TARGET DRILLING PROGRAM

The first four diamond drill holes in the initial sulphide-gold target drilling program have now been completed – NAD001 under the West Pit and NAD002 under the East Pit, both targeting the Nagambie Mine IP anomaly, and CAD001 & CAD002 targeting the Cahill IP anomaly.

Drilling of NAD003 under the East Pit into the Nagambie Mine IP target has commenced. Program planning currently includes RAD001 into the Racecourse IP target and NND001 into the Nagambie North IP target when ground conditions in the farmers' paddocks improve in Spring.

CAD001 and CAD002

The assessment of CAD001 and CAD002 has been completed following the receipt of assay results.

The marine sediments intersected in CAD001 below the alluvial cover were almost entirely siltstones, with only minor sandstone units encountered across a broad north-dipping limb. Notable quartz veining occurred in the brittle sandstone beds but none within the dominant and ductile siltstones.

The regional Cahill Thrust was anticipated to be intersected by CAD001 at reasonably shallow depth but its position could not be identified in the drilled core.

CAD002 was scissor drilled to the north in the hope that the Cahill IP chargeability anomaly related to a more northern position of the Cahill Thrust, more prevalent sandstone units, folding and faulting. Significant sandstone units were intersected in CAD002, but they occurred towards the end of the hole without any notable structures and only minor quartz vein development.

Little quartz and associated sulphides were intersected in CAD001 and CAD002 and no gold and arsenic assays were returned from the submitted core samples from both drill holes. No significant carbonaceous shale was encountered which could have explained the IP anomaly. The most likely reason for the strong IP chargeability anomaly between 100m and the 400m vertical depth of the IP survey at Cahill has been assessed to be narrow stratigraphic, pyritic fossil beds intersected in CAD001 (see Figure 1). Photo 1 shows an example of the massive pyrite matrix surrounding rock and fossil fragments, including small sections of round crinoid (marine animal) stems. No quartz is present, the whitish material being calcite (calcium carbonate) of the fossil fragments.



Photo 1 Example of Pyritic Fossil Beds Intersected in CAD001

The pyrite in the fossil beds is syngenetic pyrite (formed within the enclosing sedimentary beds) and not related to hydrothermal crustal fluids containing pyrite, arsenopyrite, stibnite, quartz and gold. The Cahill IP chargeability anomaly, unlike the other three IP anomalies in the Nagambie Mine area, begins immediately below the surface oxidation zone and continues down to the full depth of the IP survey, consistent with the stratigraphic formation of the fossil beds.



The Cahill IP anomaly has been eliminated as a sulphide-gold-in-sediments target and no further drilling will be carried out in the Cahill area. The Racecourse target to the north of Cahill by comparison is a strong discrete IP anomaly which underlies a gold soil anomaly and a basement aircore intersection of 1.1 g/t gold in sandstone.

In future IP surveys in the Waranga Province, any sulphide anomaly that has the characteristics of the Cahill anomaly will be assumed to represent stratigraphic, syngenetic pyrite. If confirmation is required, a north-south line of shallow aircore holes through the alluvial cover would determine if the basement sediments were predominantly siltstones and, therefore, unlikely to host hydrothermal sulphide-gold mineralisation.

The JORC (2012 Edition) Table 1 Checklist for the CAD001 and CAD002 drill holes is attached at the end of this update.

NAD002

A preliminary assessment of NAD002 has been completed, based on the visual logging of the drill core, and is summarised in Figure 2. A more detailed assessment will be carried out when assays are available.

NAD002 was collared to the north of the East Pit and drilled directly south at 70 degrees below horizontal, attempting to intersect the steeply-north-dipping Nagambie Mine Thrust within the IP chargeability high on that section.

A complex structural zone was intersected by NAD002 approximately where the Nagambie Thrust projects, based on the mapping of the thrust fault in the East Pit in the 1990s.

Strong quartz development, including stockwork veining and brecciation, with pyrite was intersected in the immediate footwall (to the south) of the projected Mine Thrust, within a major anticline and the IP chargeability high (purple-coloured zone). The IP high clearly appears to be related to the significant intervals of anomalous pyrite intersected. This first intersection of strong quartz and pyrite within an IP high

confirms that IP surveying within the Waranga Province should be a very valuable tool for targeting sulphidegold-in-sediments mineralisation.



Figure 2	NAD002 Section showing Significant Quartz and P	vrite within the IP Charg	eability High
<u> </u>			

The strong quartz and pyrite occurred within several lower-angle, south-dipping faults.

The stratigraphy becomes increasingly sandstone-dominant down the hole in NAD002. In the first 230m, approximately 31% of the core is siltstone. From 230m to 330m downhole, the zone of most interest, only approximately 3% of the core is siltstone. Previous NRP drill holes (such as those shown in Figure 2, drilled in 2006) were not drilled deep enough to test this succession from siltstone-rich to sandstone-rich stratigraphy. The sandstone-rich units will have more pronounced brittle faulting and vein development close to major regional folds and faults, as indicated in NAD002.

NAD003

The drilling of NAD003 (planned drill trace shown as a dashed blue line in Figure 2) has commenced. Collared near to the southern wall of the East Pit on approximately the same easting as NAD002, NAD003 is being drilled to the north at 50 degrees below horizontal (see Photo 2). The aim is to drill down the major anticline logged in NAD002, seeking mineralised hinge zones in brittle sandstone units in the vicinity of the projected Nagambie Mine Thrust and within the IP chargeability high.

Following the completion of NAD003, the structural controls on mineralisation at the Nagambie Mine should be well understood and will help guide future drilling for underground sulphide-gold mineralisation at the Nagambie Mine, Racecourse, Nagambie North and elsewhere in the Waranga Province, such as at Wandean.

Hole ID	Easting	Northing	RL	Depth	Azimuth	Azimuth Declination	
	(m MGA94)	(m MGA94)	(m AHD)	(m)	(grid)		
CAD001	340560	5927770	129	483	192	-53	EL5511
CAD002	340570	5927695	128.8	718.3	343	-53	EL5511
NAD002	342400	5926626	138	481.7	180	-70	MIN5412
NAD003	342412	5926265	142.1	In Progress	355	-50	MIN5412

Table 1Drill Hole Locations

Photo 2 Drone Shot of Rig Drilling NAD003 to the North under the East Pit



Early Conclusions from the Sulphide-Gold-in-Sediments Target Drilling Program to Date

Early conclusions from the diamond drilling to date, the first ever deep drilling carried out in the Waranga Province, include:

- The IP chargeability highs are reflecting only anomalous concentrations of pyrite and other sulphides as no significant carbonaceous shale has been intersected in the drill holes. Elsewhere in Victoria, the presence of carbonaceous shale means that IP is not as conclusive;
- Stratigraphic, syngenetic-pyrite fossil beds in siltstones, such as at Cahill, can result in a distinctive
 massive IP chargeability high that commences immediately below the level of surface oxidation and
 continues strongly to the full depth of the IP survey; and
- Discrete IP chargeability highs, such as at the Nagambie Mine, Racecourse and Nagambie North, are likely to be representative of pyrite and other sulphides associated with quartz stockworking and brecciation in brittle sandstone units subjected to major folding and thrust faulting.

STATEMENT AS TO COMPETENCY

The Exploration Results in this report have been compiled by Dr Rod Boucher, who 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. In these regards, Rod Boucher qualifies as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Rod Boucher is a consultant for Nagambie Resources Limited and consents 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.

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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. All material is collected in commercially available diamond core trays. Diamond core is cleaned and marked metre-by-metre. 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. 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. No intervals were less than 0.20 m or greater than 1.2 m. The diamond drill samples were submitted to Australian Laboratory Services (ALS) in Adelaide, South Australia for sample preparation. Sample preparation involved 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).	 CAD001 & CAD002 were drilled using a track mounted Sandvik 710DE drill rig. The cover was rotary-mud drilled and cased HWT. The holes were HQ cored to the end of hole (EOH) The holes was surveyed with a single shot camera, nominally every 30 m where practicable. Core is orientated using Boart Longyear's TruCore core orientation system and validated by geological observations and stereonet plots.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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 was logged and recorded in the database. The driller is under instruction to monitor recovery and rectify core loss through adjusting drill rig operation. No strong relationship between core recovery and grade is evident. 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 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. Logging of samples includes but is not limited to lithology, mineralogy, alteration, veining, weathering and structure. Drill core structural measurements are logged prior to cutting/sampling. Bedding, vein, joint and fault orientations are measured. 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. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. 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. Company core cutting and sampling procedures were followed to ensure sampling consistency. 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. No second half sampling has been conducted. The sample sizes are considered to be appropriate for the type of mineralisation in this area.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading 	 The sample preparation and analytical procedures are considered appropriate for the style of mineralisation. ALS provide details of their routine quality controls. 1 in 15 samples are duplicate assayed for quality control and quality assurance testing. One standard sample is inserted per approximately 20 samples

Criteria	JORC Code explanation	Commentary
	 times, calibrations factors applied and their derivation, etc. 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. 	 dispatched for assay. 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. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 All assay and drillhole data are imported and stored in a database. Significant intersections are verified by the logging geologist and the Consulting Geologist. No twinned holes have been drilled. 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. 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. Specification of the grid system used. Quality and adequacy of topographic control. 	 All drill hole location coordinates are measured using handheld GPS. Collar surveying was performed by the consulting geologist personnel. This is considered appropriate at this stage of exploration. All drill holes were downhole surveyed. Down hole surveys were conducted by the drilling contractor every 30 m down hole. Drilling orientation is established prior to collaring with clinometer and compass. The grid/projection system used is GDA MGA 94 Z55. 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. 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. Whether sample compositing has been applied. 	 No previous holes have been drilled in the vicinity of CAD001 and CAD002. Sample intervals were based on mineralisation and lithology but in general were 1 m.
Orientation of data in relation to	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to 	 There is insufficient drilling data to determine if any bias can be detected in the data.

Criteria	JORC Code explanation	Commentary			
geological structure	have introduced a sampling bias, this should be assessed and reported if material.				
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. 			
		 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. 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. 	 The drill holes were collared within Exploration Licence 5511, 100% owned by Nagambie Resources The holes were drilled in open paddocks to the northwest of the Nagambie Mine with written consent of the landowner.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Open pit mining at Nagambie was conducted in the 1990s. The current drilling is in new targets identified by an IP survey conducted early this year (refer ASX:NAG 22/3/18).
Geology	• Deposit type, geological setting and style of mineralisation.	 The host rocks at Nagambie are marine sandstones and shales. Previous mining shows gold is associated with quartz veining and faulting in anticlinal folds. The mineralisation style at Nagambie is Orogenic Gold and gold mineralisation is disseminated within pyrite, arsenopyrite and stibnite
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following	No material drill hole information has been excluded.

Criteria	JORC Code explanation	Comment	ary						
	information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea 	Hole ID CAD001	Easting 340560	Northing 5927770	RL 129	Depth 483	Azimuth 192	Dip 53	
	level in metres) of the drill hole collar	CAD002	340570	5927695	128.8	718.3	343	53	
	 down hole length and interception depth hole length. 								
	 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. 								
Data aggregation methods	 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. 	• N/A							
	• 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.								
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 								
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	 Minera There i domair 	lisation wi s insufficions.	dths are b ent drilling	ased on data to	down hole determine	e lengths. continuity	of mine	ralised
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 t	o 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 sign	iificant gol	ld values h	nave bee	en reported	•		

Criteria	JORC Code explanation	Commentary
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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Future drilling will be testing the remainder of the IP anomalies, together with follow-up drilling based on interpretation of results