

# OUTSTANDING METALLURGICAL TEST-WORK RESULTS CONTINUE TO DE-RISK MANDILLA

Phase two of the 2022 drilling program is advancing, with AC drilling completed, RC drilling underway and diamond drilling to commence in July

#### HIGHLIGHTS

- Metallurgical testwork continues to demonstrate outstanding gold recoveries at coarse grind sizes up to 212µm, further de-risking Mandilla and providing a capital and operating cost advantage to process Mandilla ore.
- 10,600 metre air-core (AC) drilling program completed during April 2022 focused on in-fill drilling to better delineate the higher-grade palaeochannel mineralisation at Eos.
- Assay results from the AC drilling program are expected to be released during the current Quarter.
- Reverse circulation (RC) drilling program commenced during April 2022, with 6,450 metres completed to date.
- 4,000 metre diamond drilling program scheduled to commence in July.

Astral Resources' Managing Director Marc Ducler said: "The metallurgical results at Mandilla continue to demonstrate extremely high gold recoveries, fast leach kinetics and low reagent consumptions in both the oxide and fresh rock samples. Even more importantly, Mandilla's metallurgical properties have been demonstrated to be insensitive to a coarsening grind size, which will result in lower capital and operating costs for processing. Given the extent of metallurgical testing to date, this significantly de-risks Mandilla.

"In parallel with this test-work program, we are continuing to focus on increasing the quality of the Mandilla deposit from both a grade and scale perspective. Mandilla is the largest undeveloped gold deposit in the region, and we strongly believe that growing this deposit will enable the Company to create a regional development opportunity.

"We are currently waiting on the results of the recently completed 10,600 metre AC drilling program at Eos. These results, coupled with those from the current RC and upcoming diamond drilling program, are expected to drive further Mineral Resources growth at Mandilla."



**Astral Resources NL (ASX: AAR)** (**Astral** or the **Company**) is pleased to report further encouraging results from metallurgical test-work from its 100%-owned Mandilla Gold Project (**Mandilla** or **Project**), located approximately 70km south of Kalgoorlie, Western Australia (Figure 1).



Figure 1 – Mandilla Project location map

Mandilla is a shear hosted gold deposit situated on the western margin of the Emu Rocks Granite in contact with sediments of the Spargoville Group (Figure 2).

Significant NW to WNW-trending structures along the western flank of the project are interpreted from aeromagnetic data to cut through the granitic intrusion and may be important in localising mineralisation at Theia, where a mineralised footprint extending over a strike length of more than 1.5km has previously been identified.

A second sub-parallel structure hosts gold mineralisation at Iris. In this area, a mineralised footprint extending over a strike length of approximately 700 metres has been identified.

At Eos, further to the south-east, a relatively shallow mineralised palaeochannel has also been identified, amongst other underexplored targets.

Mandilla is covered by existing Mining Leases which are not subject to any third-party royalties other than the standard WA Government gold royalty.



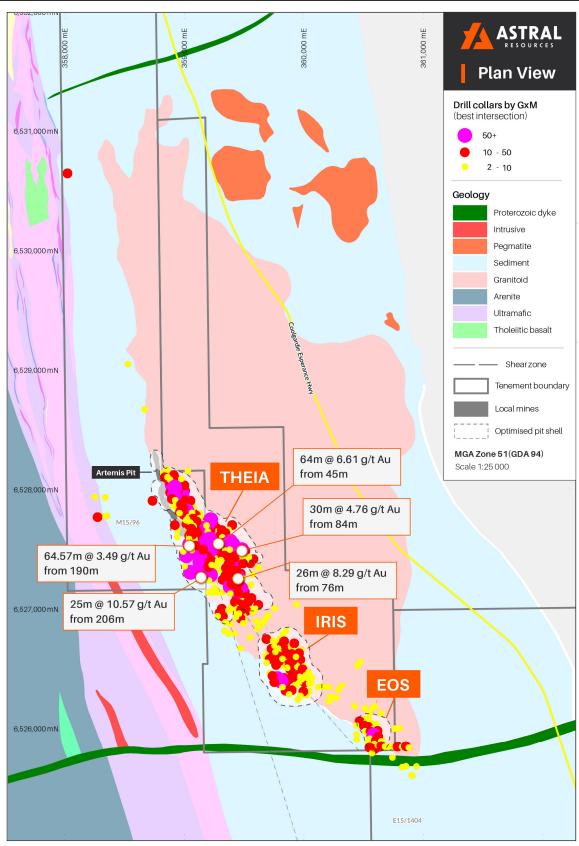


Figure 2 – Mandilla local area geology (including significant recent intercepts)



### **METALLURGICAL TESTWORK**

Metallurgical samples were collected from diamond drill hole MDRCD512. This hole was drilled as an HQ diamond drill-hole for metallurgical test purposes to a down-hole depth of 351.71 metres. The primary purpose of the hole was to provide sufficient metallurgical sample to conduct metallurgical test work to:

- confirm crushing and grinding properties;
- confirm gold recovery sensitivity to grind size; and
- determine reagent consumptions from leaching test-work conducted with saline water recovered from the immediate area.

The results of MDRCD512 were released on 22 February 2022 and included best gold intercepts of:

- 15.05 metres at 1.46g/t Au from 127.1 metres; and
- 45.74 metres at 0.94g/t Au from 149 metres.

Figure 3 below sets out the location of MDRCD512 in plan view. In examining the core, several instances of coarse visible gold were observed (refer to images below).

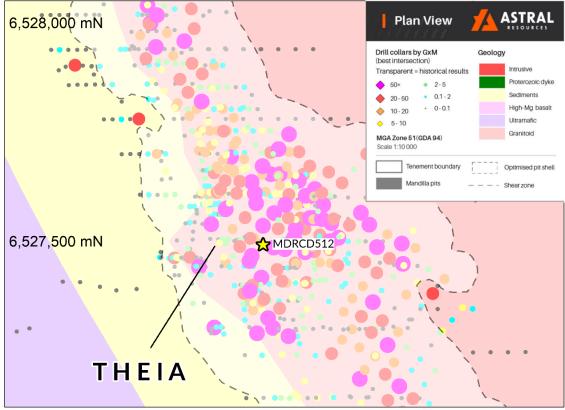


Figure 3 – Mandilla local area geology showing location of MDRCD512









Image 2 – Visible gold in MDRCD512 at 326m

The results of the Phase 1 testing were announced on 28 January 2021. Metallurgical composites from MDRCD151, MDRCD228 and MDRCD236 were created and subjected to a standard suite of metallurgical tests.

The Phase 1 testing, which was conducted in Perth tap water, demonstrated very high gold recoveries, fast leach kinetics and low reagent consumptions. They also demonstrated an insensitivity to grind size when coarsening from  $75\mu m$  to  $106\mu m$ .

The results from phase 1 are summarised in Table 1 below<sup>1</sup>.

Table 1 – Phase 1 Metallurgical Testwork

PHASE 1	PHASE 1 - MANDILLA GOLD PROJECT TESTWORK PROGRAM - GRAVITY / DIRECT CYANIDE LEACH TESTWORK SUMMARY									,	
Comm ID	Grind Size			rade (g/t)	Au Extraction (%)		Tail Au	Reagents (kg/t)			
Comp ID	P80(μm)	Assay	Calc.	% of Assay Grade	Grav	4-hr	8-hr	48-hr	Grade (g/t)	NaCN	Lime
OXIDE	75	0.68	0.92	135%	68.8	96.9	96.9	98.4	0.02	0.32	0.32
OXIDE	106	0.68	0.96	141%	71.1	96.3	97.0	98.4	0.02	0.21	0.21
OXIDE	106	0.68	1.35	199%	73.7	95.4	96.5	98.2	0.03	0.25	0.22
FRESH	75	0.58	1.24	214%	92.6	98.6	99.2	99.2	0.01	0.29	0.24
FRESH	106	0.58	0.49	84%	71.4	93.0	94.4	95.9	0.02	0.29	0.23
FRESH	106	0.58	0.92	159%	79.2	94.6	95.4	97.8	0.02	0.25	0.18
FR VAR 1	106	1.40	0.95	68%	81.6	96.6	96.6	97.4	0.03	0.29	0.29
FR VAR 2	75	0.23	0.49	213%	80.7	94.6	95.8	95.8	0.03	0.25	0.14
FR VAR 2	106	0.23	0.92	400%	66.3	94.5	95.5	97.3	0.02	0.23	0.23

<sup>&</sup>lt;sup>1</sup> - Refer to ASX Announcements dated 28 January 2021



The Phase 2 testing involved increased grind sizes of  $125\mu m$ ,  $150\mu m$  and  $212\mu m$ . The results demonstrate the unique metallurgical properties of the Mandilla ore, with outstanding gold recoveries and exceptionally fast leach kinetics still being obtained at  $212\mu m$ , as set out in the table below.

Additionally, the Phase 2 testing was completed using saline water from a local bore field. The results continue to demonstrate low cyanide consumption and moderate lime consumption which is expected for saline water from the Goldfields.

Table 2 – Phase 2 Metallurgical Testwork – MDRCD512

PHASE 2	PHASE 2 - MANDILLA GOLD PROJECT TESTWORK PROGRAM - GRAVITY / DIRECT CYANIDE LEACH TESTWORK SUMMARY									,	
a 15	Grind Size		ead Au G	rade (g/t)		Au Extra	ection (9	6)	Tail Au	Reag (kg	
Comp ID	P80(μm)	Assay	Calc.	% of Assay Grade	Grav	4-hr	8-hr	24-hr	Grade (g/t)	NaCN	Lime
OXIDE	125	0.39	0.52	132%	47.7	97.1	97.1	98.5	0.01	0.35	4.29
OXIDE	150	0.39	0.75	191%	60.8	96.0	96.9	98.7	0.02	0.35	4.20
OXIDE	212	0.39	1.23	314%	61.8	96.5	97.1	98.8	0.02	0.35	4.14
FRESH	125	0.63	8.53	1354%	93.2	98.6	98.9	99.5	0.06	0.21	2.71
FRESH	150	0.63	1.10	175%	87.1	96.4	97.1	97.7	0.03	0.30	2.68
FRESH	212	0.63	0.70	110%	72.5	91.9	91.9	94.9	0.04	0.31	2.66

Bond abrasion index, Bond ball mill index and Bond Rod mill index determinations were also carried out on numerous composites of oxide and fresh samples. The results are summarised below:

Table 3 – Phase 2 Comminution Testwork – MDRCD512

PHASE 2	PHASE 2 MANDILLA GOLD PROJECT TESTWORK PROGRAM - COMMINUTION TESTWORK SUMMARY						
Comp ID	Material Type	Bond Ai	BBWi (kWhr/t)	RBWi (kWhr/t)			
COMP 1	OXIDE	0.4174	11.9	17.3			
COMP 2	FRESH	0.4618	14.6	21.1			
COMP 3	FRESH	0.5176	12.1	18.0			
COMP 4	FRESH	0.5129	12.5	20.6			

The comminution results indicate the material to be abrasive although well suited to conventional crushing and grinding circuit configuration.

Importantly, the outstanding gold recoveries being achieved at a coarse grind size of  $212\mu m$  will provide for lower capital and operating costs for Mandilla ore.

#### **EXPLORATION UPDATE**

As previously outlined, the Company has continued to focus its efforts on both exploration and Mineral Resource definition drilling at Mandilla. The details of drilling completed to date and future drilling are detailed below.

#### Air-Core Drilling Program (completed)

An AC drilling program was commenced during April 2022 at Eos testing for extensions to the recently discovered deposit as well as in-fill drilling to better delineate the higher-grade palaeochannel mineralisation.



The initial contract of 10,000 metres was completed in early May (after completing 10,600m) and the AC rig has since been demobilised. The rig is expected to return to site late in the September Quarter to complete the in-fill program.

Figure 4 details the drilling completed and drilling yet to be completed at Eos.

Samples from the AC drilling program have been submitted to the laboratory, with assay results expected to be available for release in the current quarter.



Image 3 – Air core drill rig on a regional exploration line.

## Reverse Circulation (RC) Drilling Program (in-progress)

The current RC drilling program commenced during late April 2022, with 6,450 metres of drilling completed up to the date of this announcement. Drilling to date has tested for down-dip and along strike extensions of the basalt/sediment target west of Theia.

Image 4 below shows a quartz/pyrite vein in an RC rock chip. The shear associated with the basalt/ sediment target has successfully been intersected on numerous instances throughout this RC program.

Following completion of the planned drill program at the target west of Theia, the drill rig will be relocated to test for extensions to the high-grade mineralisation that appears associated with the sediment/intrusive contact at Iris.

RC drilling will also test for primary fresh rock mineralisation associated with Eos and a newly discovered gold anomalism, which was identified from drilling completed in 2021, to the south-east.





Image 4 – Quartz/pyrite vein in RC rock chips from drilling target west of Theia



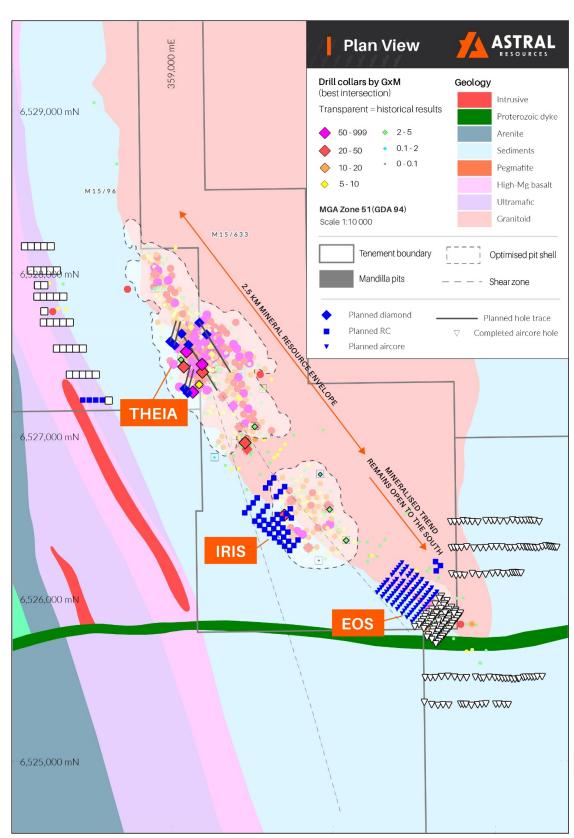


Figure 4 - Drill collar locations for current and future work program on Mandilla local area geology



# **FUTURE WORK PROGRAM**

Diamond Drilling Program (due to commence Q3 2022)

A diamond drill rig is due to commence drilling early in the September Quarter. The diamond drilling will focus on a close-spaced diamond drill program (20m x 20m over an 80m x 80m area) in order to better understand the lateral continuity of high-grade shoot controls within Theia. Several diamond drill-holes will also target the high-grade opportunity that has been identified from previous drilling on the western margin of Theia.

The program will also focus on Theia and Iris to better determine the plunge and dip of the cross-cutting structures that may be important in localising the high-grade zones of mineralisation.

The Company is confident that the results of both the previous and planned drilling, the subject of this announcement, will result in further growth in the JORC 2012 Mineral Resource estimate (**MRE**) at Mandilla, which is currently 24Mt at 1.0 g/t Au for 784koz.

This announcement has been approved for release by the Managing Director.

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#### **Compliance Statement**

The information in this announcement that relates to Estimation and Reporting of Mineral Resources is based on information compiled by Mr Michael Job, who is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM). Mr Job is an independent consultant employed by Cube Consulting. Mr Job has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Job consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The information in this announcement that relates to exploration targets and exploration results is based on information compiled by Ms Julie Reid, who is a full-time employee of Astral Resources NL. Ms Reid is a Competent Person and a Member of The Australasian Institute of Mining and Metallurgy. Ms Reid has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Ms Reid consents to the inclusion in this announcement of the material based on this information, in the form and context in which it appears.

The information in this announcement that relates to metallurgical test work for the Mandilla Gold Project is based on, and fairly represents, information and supporting documentation compiled by Mr Marc Ducler, who is a full-time employee of Astral Resources NL. Mr Ducler is a Competent Person and a Member of The Australasian Institute of Mining and Metallurgy. The information that relates to processing and metallurgy is based on work conducted by ALS Metallurgy Pty Ltd (ALS Metallurgy) on diamond drilling samples collected under the direction of Mr Ducler and fairly represents the information compiled by him from the completed ALS Metallurgy testwork. Mr Ducler has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Ducler consents to the inclusion in this announcement of the material based on this information, in the form and context in which it appears.

#### **Previously Reported Results**

There is information in this announcement relating to exploration results which were previously announced on 28 January 2021 and 22 February 2022. Other than as disclosed in those announcements, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements.



# Appendix 1 – JORC 2012 Table 5

Out 1	Section 1 – Sampling Techniqu	
Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	The project has been sampled using industry standard drilling techniques including diamond drilling (DD), and reverse circulation (RC) drilling and air-core (AC) drilling.  The sampling described in this release has been carried out on the last 2021 Diamond drilling.  The DD core is orientated, logged geologically and marked up for assay at a maximum sample interval of 1.2 metre constrained by geological or alteration boundaries. The drill core is cut in half by a diamond saw with one half then halved again to provide quarter core. The quarter HQ or NQ2 core samples were submitted for assay analysis. All samples were assayed by MinAnalytical with company standards blanks and duplicates inserted at 25 metre intervals. The hole was cut on site with the company Corewise saw.  Historical - The historic data has been gathered by a number of owners since the 1980s. There is a lack of detailed information available pertaining to the equipment used, sample techniques, sample sizes, sample preparation and assaying methods used to generate these data sets. Down hole surveying of the drilling where documented has been undertaken using Eastman single shot cameras (in some of the historic drilling) and magnetic multi-shot tools and gyroscopic instrumentation. All Reverse Circulation (RC) drill samples were laid out in 1 metre increments and a representative 500 – 700 gram spear sample was collected from each pile and composited into a single sample every 4 metres. Average weight 2.5 – 3 kg sample. All Aircore samples were laid out in 1 metre increments and a representative 500 – 700 gram spear sample was collected from each pile and composited into a single sample every 4 metres. Average weight 2.5 – 3 kg sample. 1m samples were then collected from those composites assaying above 0.2g/t Au.
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	DD Drilling was cored using HQ and NQ2 diamond bits.  Diamond core drilling with rockrolling and HQ through weathered zone then NQ2 from top of fresh rock,
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	Poor recoveries are recorded in the relevant sample sheet.
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	DD drilling collects uncontaminated fresh core samples which are cleaned at the drill site to remove drilling fluids and cuttings to present clean core for logging and sampling  All chips and drill core were geologically logged by company geologists, using the current company logging scheme. AC samples were logged for colour, weathering, grain size, lithology, alteration veining and mineralisation where possible  The majority of holes (80%+) within the mineralised intervals have lithology information which has provided sufficient detail to enable reliable interpretation of wireframe.



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 subsampling 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.	The logging is qualitative in nature, describing oxidation state, grain size, an assignment of lithology code and stratigraphy code by geological interval.  NQ Diamond core was halved and the right side sampled.  Historical - The RC drill samples were laid out in one metre intervals. Spear samples were taken and composited for analysis as described above. Representative samples from each 1m interval were collected and retained as described above. No documentation of the sampling of RC chips is available for the Historical Exploration drilling  Standard Western Australian sampling techniques applied. There has been no statistical work carried out at this stage.  MinAnalytical assay standards, blanks and checks were inserted at regular intervals. Standards, company blanks and duplicates were inserted at 25 metre intervals.  RC: 1 metre RC samples are split on the rig using a cone-splitter, mounted directly under the cyclone. Samples are collected to 2.5 to 4kg which is optimised for photon assay.  Sample sizes are appropriate to the grain size of the material being sampled.  Unable to comment on the appropriateness of sample sizes to grain size on historical data as no petrographic studies have been undertaken. Sample sizes are considered appropriate to give an indication of mineralisation given the particle size and the preference to keep the sample weight below a targeted 4kg mass which is the optimal weight to ensure representivity for photon assay. There has been no statistical work carried out at this stage.
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 times, calibrations factors applied and their derivation, etc.  Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Photon Assay technique at MinAnalytical Laboratory Services, Kalgoorlie. Samples submitted for analysis via Photon assay technique were dried, crushed to nominal 85% passing 2mm, linear split and a nominal 500g sub sample taken (method code PAP3512R)  The 500g sample is assayed for gold by PhotonAssay (method code PAAU2) along with quality control samples including certified reference materials, blanks and sample duplicates.  The MinAnalytical PhotonAssay Analysis Technique: - Developed by CSIRO and the Chrysos Corporation, This Photon Assay technique is a fast and chemical free alternative to the traditional fire assay process and utilizes high energy x-rays. The process is non-destructive on and utilises a significantly larger sample than the conventional 50g fire assay. MinAnalytical has thoroughly tested and validated the PhotonAssay process with results benchmarked against conventional fire assay.  The National Association of Testing Authorities (NATA), Australia's national accreditation body for laboratories, has issued Min Analytical with accreditation for the technique in compliance with TSO/TEC 17025:2018-Testing.  Certified Reference Material from Geostats Pty Ltd submitted at 75 metre intervals approximately. Blanks and duplicates also submitted at 75m intervals giving a 1:25 sample ratio.  Referee sampling has not yet been carried out.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	Geology Manager or Senior Geologist verified hole position on site.  Standard data entry used on site, backed up in South Perth WA.



	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	No adjustments have been carried out. However, work is ongoing as samples can be assayed to extinction via the PhotonAssay Analysis Technique
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	Drill holes have been picked up by Leica RTK GPS. Minecomp were contracted to pick up all latest drilling DD collars.  Grid: GDA94 Datum UTM Zone 51
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.	Diamond drilling is at 40 - 40m spacing at Theia with wider spacing at Iris.
Orientation of data in relation to geological structure	<ul> <li>Whether sample compositing has been applied.</li> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	All DD drill holes have been drilled normal to the interpreted strike. Most of the current holes drilled on a 040 azimuth, with a few still at 220 azimuth as dip had been interpreted as steep.
Sample security	The measures taken to ensure sample security.	All samples taken daily to AAR yard in Kambalda West, then transported to the Laboratory in batches of up to 10 submissions
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits have been carried out at this stage.



Section 2 - Reporting of Exploration Results - Mandill
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Criteria  Mineral tenement and	JORC Code Explanation     Type, reference name/number, location and	Tenement	Status	Commentary Location	Interest Held (%)
land tenure status	ownership including agreements or material	E 15/1404	Granted	Western Australia	100
	issues with third parties such as joint	M 15/96	Granted	Western Australia	Gold Rights 100
	ventures, partnerships, overriding royalties, native title interests, historical sites,	*			
	wilderness or national park and	M 15/633	Granted	Western Australia	Gold Rights 100
	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.	Department No royalties	of Mines, Ind other than the	ustry Regulation and S e WA government 2.5	% gold royalty.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	completed ir (WMC). In extested late of diamond dril within a shundertaken 1990-91- 20 magnetic sundertaken 1994-95 – extrending CS contact and mineralisatic During 1995 drilled 500m granite felsic 1996-97 - A but proved to returned 5m 1997-1998-drilling was	n the area bet early 1988 a si 1988 early 1988 as in 1988 early 1989 early 2018 early 20	ween 1988-1999 by W gnificant soil anomaly 189 with a series of 4 ineralisation was inter- ng shear zone. 19- al mapping and 3 diam and 26 AC were drill oil anomaly. 1991-9 rogramme to investiga examediments, Shallow ped, which coincides w C traverses 400m apare e Mandilla soil anom- ntact. rogram to the east of the guest of the test of the general soil anom- ntact.	and air core drilling were Vestern Mining Corporation was delineated, which was percussion traverses and sected in thin quartz veins 89-90- limited exploration nond holes completed. ed to follow up a ground 4 - no gold exploration te gold dispersion. A WNW offset the Mandilla granite atchy supergene (20-25m) ith the gold soil anomaly art and 920m in length were nally targeting the sheared the anomaly was completed over in the area. WID3215 tion intersected in previous ntersections were returned 5m.
Geology	Deposit type, geological setting and style of mineralisation.	of Kalgoorlie (Error! Refe Mining Leas Exploration   Regional G Mandilla is le is situated Kalgoorlie T Yilgarn Bloc Mandilla is eastern Zule trending ma Spargoville T (the Coolgar forming a D shearing. Fla the Karramie the western volcanoclast be traced ac locations, gr system and	e, and about 29 erence source source source source source source sees M15/633 (Lease E15/14 eology ocated within in the Coolgerrain within the Coolgerrain within the Located betweeka Shear. In Jornal Contain anking the Spandie Shear) and flank of the Etic sedimentare cross the regiceranite stockwold provide stru	okm south-west of Kane not found.). The de AAR gold rights), M19 04 (wholly-owned by AAR gold rights), M19 04 (wholly-owned by AAR gold rights), M19 04 (wholly-owned by AAR gold rights), on the Wiluna-Norseman of the William of	Lefroy Map Sheet 3235. It he western margin of the Greenstone Belt, Archaean manalling Shear, and the is related to north-south a "Spargoville Trend". The affic to ultramafic lithologies tocks (the Black Flag Group) by intense D2 faulting and east, a D2 Shear (possibly andilla mineralisation along hich has intruded the felsic Flag Group. This shear can effections present. At these ifficant heterogeneity in the neralisation. The Mandilla

 $<sup>^{2}</sup>$  D2 – Propagation of major crustal NNW thrust faults.

<sup>&</sup>lt;sup>3</sup> D1 – Crustal shortening.



		Local Geology and Mineralisation  Mandilla is located along the SE margin of M15/96 extending into the western edge of M15/633. It comprises an east and west zone, both of which are dominated by supergene mineralisation between 20 and 50 m depth below surface. Only the east zone shows any significant evidence of primary mineralisation, generally within coarse granular felsic rocks likely to be part of the granite outcropping to the east. Minor primary mineralisation occurs in sediments.  The nature of gold mineralisation at Mandilla is complex, occurring along the western margin of a porphyritic granitoid that has intruded volcanoclastic sedimentary rocks. Gold mineralisation appears as a series of narrow, high grade quartz veins with relatively common visible gold, with grades over the width of the vein of up to several hundreds of grams per tonne. Surrounding these veins are lower grade alteration haloes. These haloes can, in places, coalesce to form quite thick zones of lower grade mineralisation. The mineralisation manifests itself as large zones of lower grade from ~0.5 – 1.5g/t Au with occasional higher grades of +5g/t Au over 1 or 2 metres.  In addition to the granite-hosted mineralisation, a paleochannel is situated above the granite/sediment contact that contains significant gold mineralisation. An 800 m section of the paleochannel was mined by AAR in 2006 and 2007, with production totalling 20,573 ounces.
Drill hole Information	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:     easting and northing of the drill hole collar     elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar     dip and azimuth of the hole     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.	This Information has been summarised in Table 1 and 2 of this ASX announcement.
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal</li> </ul>	No data aggregation methods have been used.  A 100ppb Au lower cut off has been used to calculate grades for AC drilling A 0.3g/t Au lower cut off has been used to calculate grades for RC drilling, with maximum internal dilution of 5m.  A cutoff grade of >0.5g*m has been applied for reporting purposes in the tables of results.  This has not been applied.
Relationship between mineralisation widths and intercept lengths	<ul> <li>equivalent values should be clearly stated.</li> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	The overall mineralisation trend strikes to the north-west at about 325°, with a sub-vertical dip. However, extensive structural logging from diamond core drilling of the quartz veins within the mineralised zones shows that the majority dip gently (10° to 30°) towards SSE to S (160° to 180°). The majority of drilling is conducted at an 040 azimuth and 60° dip to intersect the mineralisation at an optimum angle.  No assumptions about true width or orientation of mineralisation can be made from the current AC programme



Diagrams	<ul> <li>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.</li> </ul>	Applied
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.	Balanced reporting has been applied.
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.	No other substantive exploration data.
Further work	The nature and scale of planned further work (e.g. 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.	Follow up Aircore, Reverse Circulation & Diamond Drilling is planned.  No reporting of commercially sensitive information at this stage.