
QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 30 SEPTEMBER 2022

HIGHLIGHTS FOR QUARTER

- Assay results from the first phase drilling at Gunnawarra have been followed up by subsequent drilling in this quarter.
- The first phase program comprised a 45-hole drilling program which highlighted shallow robust nickel mineralisation.
- After the quarter Ark drilled 28 holes for 844 metres of Reverse Circulation (RC) drilling in its second round of drilling at its 100% owned Gunnawarra Nickel Cobalt Project, North Queensland.
- Significant intersections of 'the Pod' from the first phase include:
 - 28m at .73% Ni Eq from surface including 5m at 1.8% Ni Eq from 5m, including 2m of Co at .1% from 4m
 - 42m at .76% Ni Eq from 2m including 19m at 1% Ni Eq from 6m
 - 22m at 1% Ni Eq from 4m including 9m at 1.4% Ni Eq from 8m
 - 28m at .7% Ni Eq from surface including 6m at 1.4% Ni Eq from 3m
 - 11m at .84% Ni Eq from 2m including 2m at 1.2% Ni Eq from 5m
 - 14m at 1.12% Ni Eq from 3m including 4m at 1.7% Ni Eq from 8m
- Most intersections are shallow with little to no overburden.
- Deposit remains open in numerous directions.
- High level beneficiation test work on mineralised samples derived from the Ni Co drilling at Gunnawarra were carried out with indicative success.
- Test work to primarily focus on magnetic separation – other options will also be reviewed
- Ark plans to put out a Maiden Mineral Resource Estimate this quarter
- Ark is focused on developing and commercializing a DSO Ni Co product in North Queensland

Queensland-focused exploration and project development company **Ark Mines Limited (ASX: AHK) ('Ark' 'the Company')** is pleased to provide this Quarterly Activities Report for the period ended 30 September 2022 (the 'quarter').

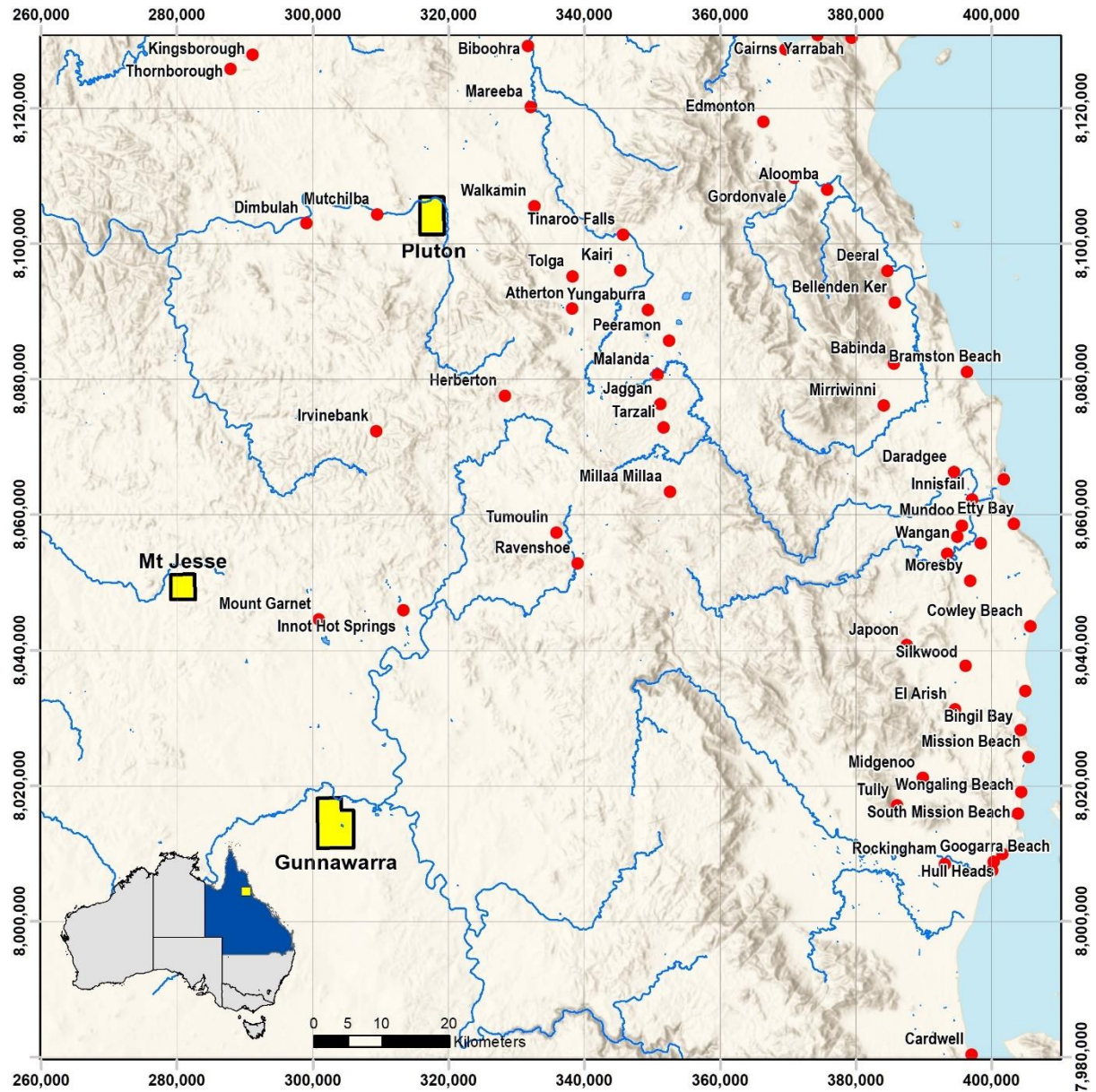


Figure 1 Location of Ark Tenements

DRILLING PHASE 1

These very encouraging results, highlighted above, support AHK's stated objective to expand the scope of a previously identified 2004 JORC historical mineral resource estimate (MRE) at Gunnawarra, and convert it to 2012 JORC status.

The successful 45-hole drill program was carried out in an area known as 'the Pod', where drilling in 2008 by Metallica Minerals Limited (ASX: MLM) reported an Inferred Resource of 280,000 tonnes at 0.73% nickel (Ni) and 0.05% Cobalt (Co). Ark has subsequently drilled the deposit to the North West and the South East with a follow up drill program.

By utilising more modern drilling practices with a larger air rig, Ark anticipates significantly expanding the size of the resource with its maiden drilling program which intersected nickel-cobalt mineralisation at depths of up to 60 metres, around double the depth of the previous drilling program.

The latest assay results give Ark a strong platform to execute on its development strategy at Gunnawarra, which borders the 'Sconi' project operated by Australian Mines (ASX: AUZ) – one of Australia's most advanced cobalt-nickel-scandium projects.

Ark is encouraged by the direction of the mineralisation structure, which runs in a north-west / south-east line through the middle of the drilling area and supports the establishment of a competent mine structure.

Ark has three objectives with Gunnawarra: continue drilling to upgrade and increase the current resource base and identify more mineralized zones; assess off-take opportunities for a potential Direct Shipping Ore (DSO) operation; and progress with the necessary permits for mining.

ASX ADDITIONAL INFORMATION

- a. Exploration and Evaluation Expenditure during the quarter ending 30 September 2022 was \$23,000. There were no substantive Mining Production and Development activities conducted during the quarter and the expenditure was incurred in carrying out further exploration on Ark's Gunnawarra tenement.
- b. During the quarter ended 30 September 2022, the Company paid \$104,000 to related parties representing Directors' fees and Directors' consulting fees for exploration and evaluation services and additional administration activities.

Gunnawarra Nickel Laterite Cross Section 8012050 mN

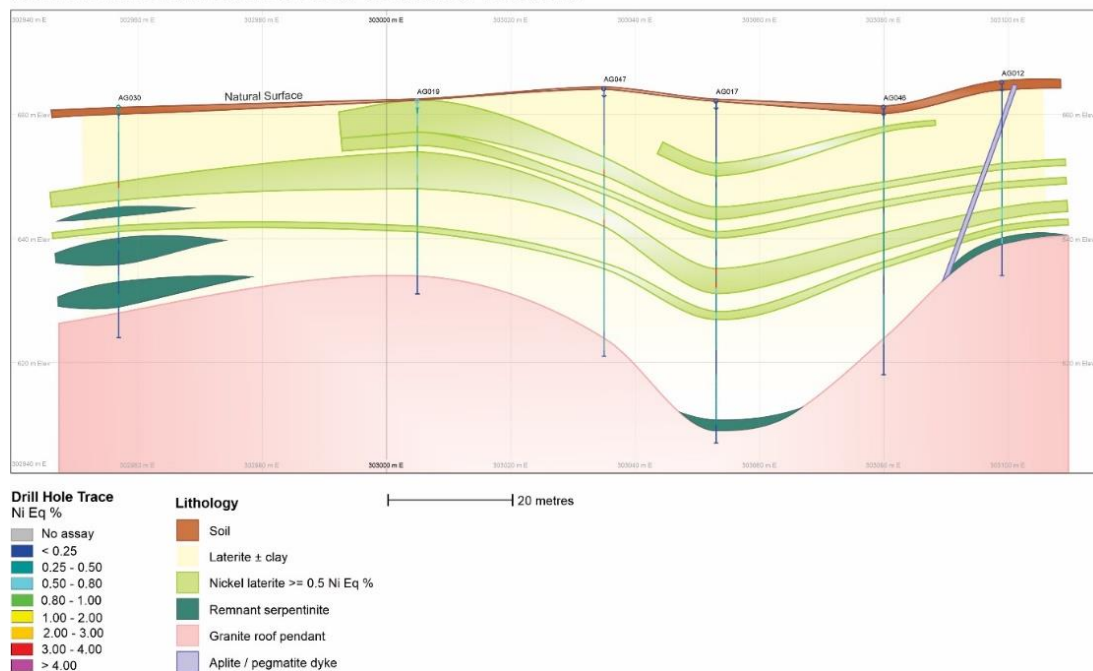


Figure 2 Gunnawarra Nickel Laterite Section 8012050

Gunnawarra Nickel Laterite Cross Section 8012000 mN

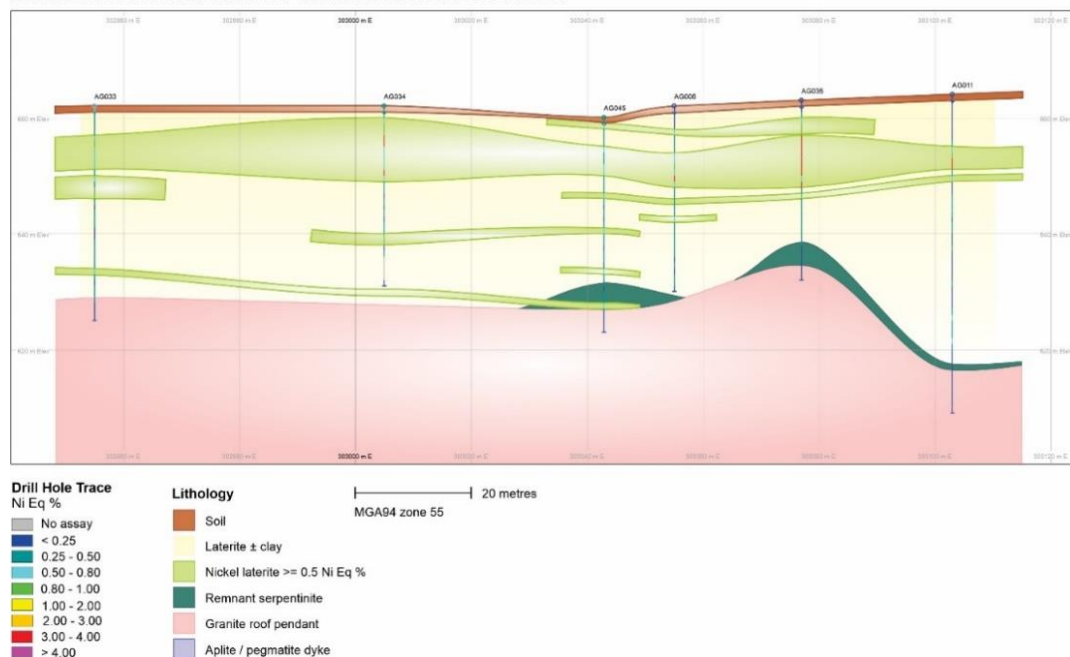


Figure 3 Gunnawarra Nickel Laterite Cross Section 8012000

Gunnawarra Nickel Laterite Cross Section 8012100 mN

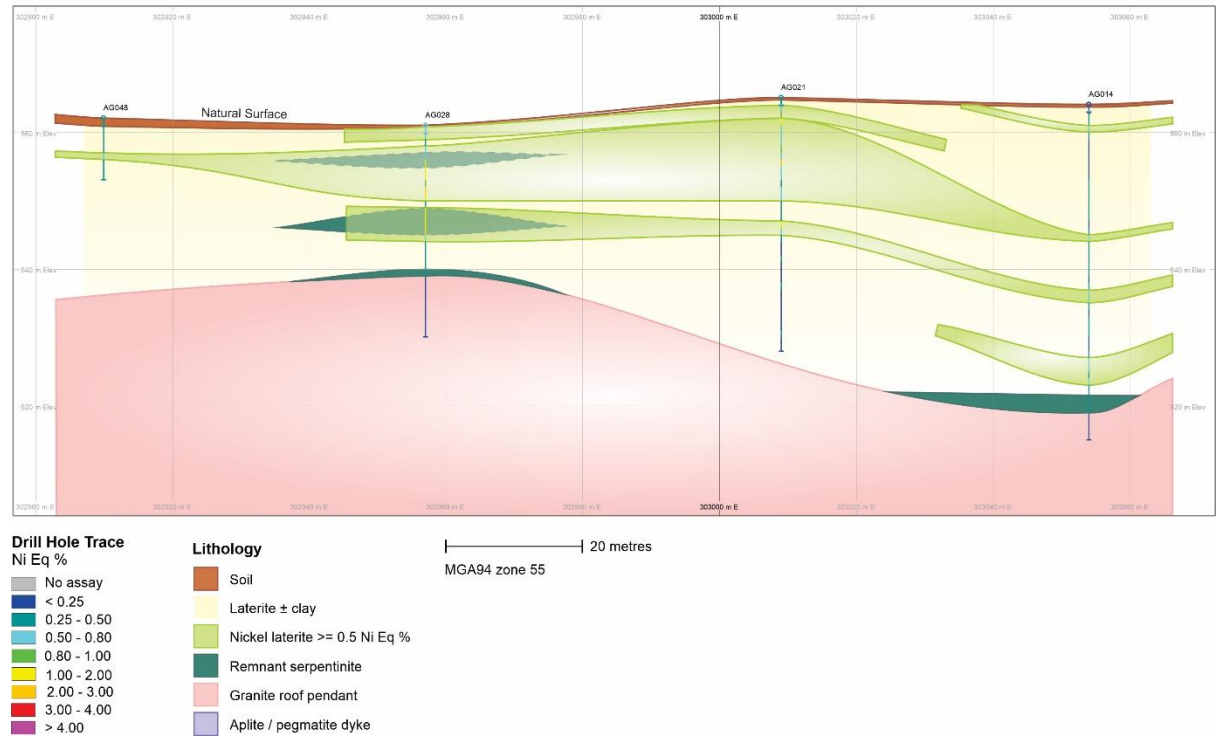


Figure 4 Gunnawarra Nickel Laterite Cross Section 8012100

Gunnawarra Nickel Laterite Long Section 303000 mE

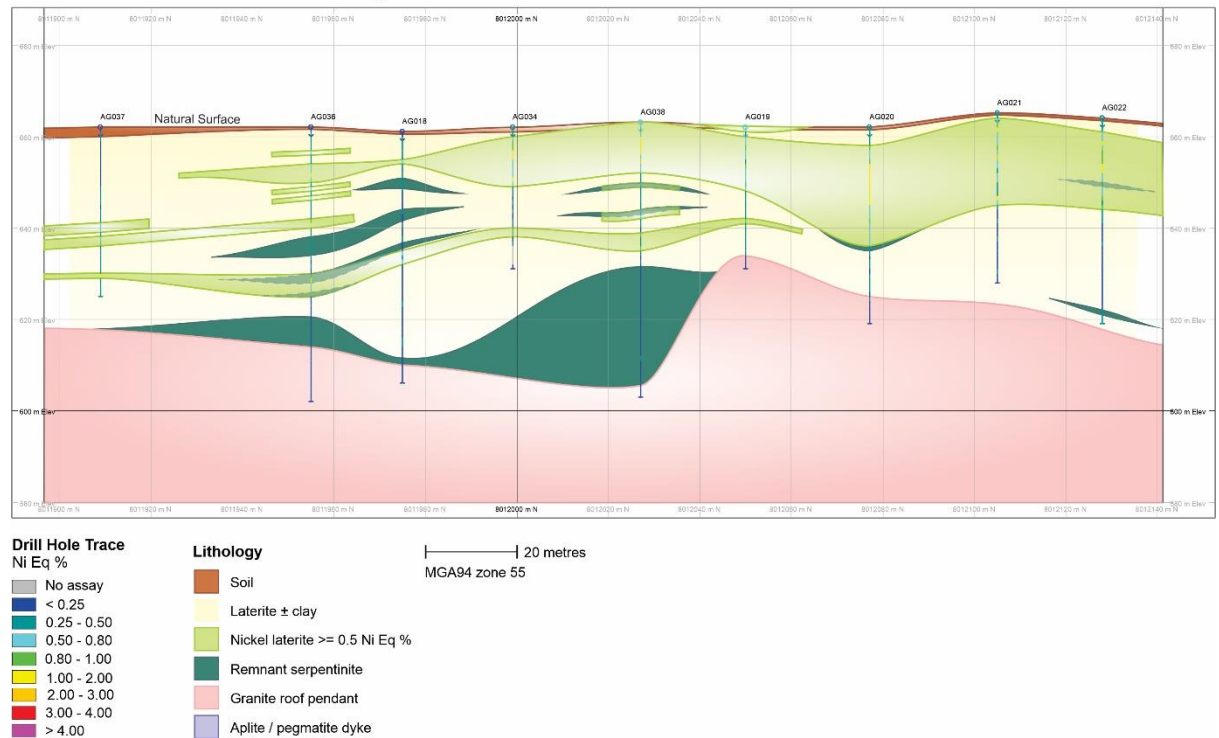


Figure 5 Gunnawarra Nickel Laterite Long Section 303000 mE

Collar	Easting	Northing	Zone	GPS RL	Dip	Azimuth
AG006	303055	8012000	55K	662	90	0
AG007	303054	8012030	55K	662	90	0
AG008	303051	8011951	55K	662	90	0
AG009	303051	8011902	55K	662	90	0
AG010	303100	8011950	55K	663	90	0
AG011	303103	8011996	55K	664	90	0
AG012	303099	8012051	55K	665	90	0
AG013	303099	8012100	55K	664	90	0
AG014	303054	8012100	55K	664	90	0
AG015	303053	8012125	55K	662	90	0
AG016	303050	8012145	55K	662	90	0
AG017	303053	8012052	55K	662	90	0
AG018	303000	8011975	55K	661	90	0
AG019	303005	8012050	55K	662	90	0
AG020	303008	8012077	55K	662	90	0
AG021	303009	8012105	55K	665	90	0
AG022	303006	8012128	55K	664	90	0
AG023	303143	8011954	55K	664	90	0
AG024	303143	8012001	55K	664	90	0
AG025	303145	8012049	55K	665	90	0
AG026	302975	8012155	55K	661	90	0
AG027	302955	8012127	55K	661	90	0
AG028	302957	8012101	55K	661	90	0
AG029	302957	8012073	55K	661	90	0
AG030	302957	8012050	55K	661	90	0
AG031	302959	8012029	55K	659	90	0
AG032	302954	8011950	55K	661	90	0
AG034	303005	8011999	55K	631	90	0
AG035	303077	8011998	55K	630	90	0
AG036	303001	8011955	55K	630	90	0
AG037	302998	8011909	55K	630	90	0
AG038	303008	8012027	55K	630	90	0
AG039	302905	8011995	55K	628	90	0
AG040	302898	8011937	55K	628	90	0
AG041	302888	8011903	55K	621	90	0
AG042	302880	8011866	55K	622	90	0
AG043	302926	8011957	55K	645	90	0
AG044	302976	8011947	55K	655	90	0
AG045	303043	8011991	55K	620	90	0
AG046	303080	8012050	55K	635	90	0
AG047	303021	8012047	55K	645	90	0
AG048	302910	8012102	55K	649	90	0
AG049	303099	8011898	55K	607	90	0
AG050	303102	8011971	55K	621	90	0

**Table 1 Drill Hole
Collar Locations for
phase 1 drilling**

Table 2 Drill Hole Locations for Phase 2 drilling at Gunnawarra

Collar	Easting	Northing	Zone	Est GPS RL	DEPTH	DIP	AZI
AG-090	303005	8012243	55	662	35	90	0
AG-089	302973	8012250	55	661	43	90	0
AG -087	302907	8012257	55	659	43	90	0
AG-084	302874	8012253	55	658	55	90	0
AG-086	302847	8012252	55	658	43	90	0
AG-085	302818	8012248	55	657	25	90	0
AG-083	302831	8012199	55	658	19	90	0
AG-081	302891	8012195	55	659	19	90	0
AG-077	302948	8012205	55	660	19	90	0
AG-076	302998	8012156	55	669	31	90	0
AG-073	302952	8012146	55	668	37	90	0
AG-074	302926	8012146	55	662	7	90	0
AG-075	302910	8012124	55	665	11	90	0
AG-072	302930	8012126	55	658	23	90	0
AG-071	302921	8012102	55	664	25	90	0
AG-070	302925	8012050	55	657	59	90	0
AG-069	302895	8012050	55	657	29	90	0
AG-068	302875	8012047	55	660	19	90	0
AG-067	302944	8011905	55	656	10	90	0
AG-066	303000	8011866	55	670	19	90	0
AG-065	303168	8011956	55	671	19	90	0
AG-064	303217	8011950	55	669	9	90	0
AG-063	303119	8011885	55	662	52	90	0
AG-062	303137	8011885	55	662	37	90	0
AG -061	302984	8011992	55	671	36	90	0
AG-060	303051	8011976	55	661	40	90	0
AG-059	303097	8012017	55	668	49	90	0
AG-058	303139	8011981	55	665	31	90	0

BENEFICIATION

Following the success of the drilling program at Gunnawarra the Company engaged Tony King to undertake rudimentary beneficiation test work on its mineralised Ni Co laterite material. From this, and due to the successful upgrade, the company will undertake a more robust and commercial test program.

The primary focus of the test work being magnetic separation. Additional options will also be reviewed and examined to further improve extractions processes of the Gunnawarra laterite material.

Given Laterites have a significant Iron content there is potential to upgrade Ni grades through a magnetic separation process. The ability to upgrade is highly dependent on how separate the Ni is from the magnetic iron.

SUBSEQUENT EVENTS

- Ark completed an 844 metres Reverse Circulation (RC) drilling program as a second round of drilling at its 100% owned Gunnawarra Nickel Cobalt Project, North Queensland.
- 28 holes drilled at an average depth of 30 metres with deepest hole drilled to 59 metres.
- Lateritic material encountered to the West and to the southeast of the previous drilled mineralisation.
- Samples have been submitted for assaying with results expected within two weeks.
- Ark will apply these results, along with the first phase drilling results, to report the maiden Mineral Resource Estimate for the Gunnawarra project.

Note;

- No work was undertaken this quarter on Mt Jesse or Pluton. Work is planned for these projects later in this year's season.

- **Safety and Environment for the Quarter**

1	Reportable Incidents	Nil
2	Medical Treatments	Nil
3	LTIs	Nil
4	Environmental incidents	Nil
5	Landholder Issues	Nil

Tenements

Permit	Transferee Holder	Project	Area km2
EPM 26464	Mt Jesse Pty Ltd	Mt Jesse	4
EPM 26560	Gunnawarra Pty Ltd	Gunnawarra	11
EPM 26883	Mt Pluton Base Pty Ltd	Mt Pluton	6

There was no change in the ownership of mining tenements during the quarter.

This announcement has been approved by the Board of Ark Mines Limited.

Further Information:

Roger Jackson
Executive Director
+61 400 408 550

Ben Emery
Executive Director
+61 409 138 138

About Ark Mines Limited

Ark Mines is an ASX listed Australian mineral exploration company focused on developing its 100% owned projects located in the prolific Mt Garnet and Greenvale mineral fields of Northern Queensland. The Company's exploration portfolio consists of three high quality projects covering 65km² of tenure that are prospective for copper, iron ore, nickel-cobalt and porphyry gold:

Mt Jesse Copper-Iron project

- Project covers a tenure area of 12.4km² located ~25km west of Mt Garnet
- Centered on a copper rich magnetite skarn associated with porphyry style mineralization
- Three exposed historic iron formations
- Potential for near term production via toll treat and potential to direct ship

Gunnawarra Nickel-Cobalt project

- Comprised of 11 sub-blocks covering 36km²
- Borders Australian Mines Limited Sconi project - the most advanced Cobalt-Nickel-Scandium project in Australia
- Potential synergies with local processing facilities with export DSO Nickel/Cobalt partnership options

Pluton Porphyry Gold project

- Located ~90km SW of Cairns near Mareeba, QLD covering 18km²
- Prospective for gold and associated base metals (Ag, Cu, Mo)
- Porphyry outcrop discovered during initial field inspection coincides with regional scale geophysical interpretation.

To learn more, please visit: www.arkmines.com

Stay up to date with the latest news by connecting with AHK on LinkedIn and [Twitter](#).

Competent Persons Statement

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr. Roger Jackson, a Director and Shareholder of the Company, who is a 25+ year Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM) and a Member of Australian Institute of Company Directors. Mr. Jackson has sufficient experience which is relevant to the style of mineralisation and type of deposits 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. Jackson consents to the inclusion of the data contained in relevant resource reports used for this announcement as well as the matters, form and context in which the relevant data appears.

Forward Looking Statements and Important Notice

This report contains forecasts, projections and forward-looking information. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions it can give no assurance that these will be achieved. Expectations and estimates and projections and information provided by the Company are not a guarantee of future performance and involve unknown risks and uncertainties, many of which are out of Vertex Minerals' control.

Actual results and developments will almost certainly differ materially from those expressed or implied. Vertex Minerals has not audited or investigated the accuracy or completeness of the information, statements and opinions contained in this announcement. To the maximum extent permitted by applicable laws, Vertex Minerals makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and takes no responsibility and assumes no liability for the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission from, any information, statement or opinion contained in this report and without prejudice, to the generality of the foregoing, the achievement or accuracy of any forecasts, projections or other forward looking information contained or referred to in this report.

Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.

On behalf of the Directors



Roger Jackson
Managing Director
31 October 2022

APPENDICES A TABLE 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 844 1m 5.5inch face hammer RC drill chip sample was split by rig- mounted cyclone riffle splitter yielding 2kg to 3kg aliquots Drill holes were fully sampled. Some 1m samples had poor recovery (refer to Appendices 2) Sample was reduced by jaw crush, pulverised and sub sampled to yield a 50g charge for fire assay and pulp for four acid digest
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> 1m drill chips samples were obtained by RC using 5.5 inch face hammer (28 collars, Total 844m.) Large air pack with air booster
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Recoveries were monitored visually in field and received sample weights recorded at NAL Recoveries were maximised using an auxiliary and booster compressor delivering sample through a cyclone directly to a levelled rig mounted rifle splitter. Some wet sample was encountered (riffle splitter bypassed) but all instances were logged. No bias related to water is noted QAQC analysis is not yet complete but as yet no correlation is evident between recovery and grade.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have 	<ul style="list-style-type: none"> Qualitative geological logging was carried out on all holes with Ark Mines geological logging

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.*

protocols at the time were followed to ensure consistency in drill logs between the geological staff.

- Chips were logged for weathering, lithologies (primary and proto), mineralogy, colour and grainsize for each 1m interval. Chip trays (with chips) were photographed and retained for correlation with grade data.
- Of 844m drilled, 844m have been logged in metre intervals.
- The main logged materials were Hm (hematite rich soil), Lat (ferruginous laterite), Lsi (ferruginous laterite with silica boxwork), Sapr (saprolite), and Serp (serpentinite – fresh).
- The full sample lengths were logged.

Code	Lithology
LAT	Laterite
Sch	Schist
Si Sch	Siliceous Schist
Gr Sch	Graphitic Schist
Mi Sch	Mica Schist
Qz Mi Sch	Quartz Mica Schist
Si Mi Sch	Silicious Mica Schist
Chl Sch	Chlorite Schist
Slt	Siltstone
Si Slt	Siliceous Siltstone
Mi Slt	Micaceous Siltstone
Gr Slt	Graphitic Siltstone
Si Mi Slt	Siliceous Micaceous Siltstone
Si Gr Slt	Siliceous Graphitic Siltstone
Fe Slt	Ferruginous Siltstone
Mg	Magnesite
Qzt	Quartzite
Mi Qzt	Micaceous Quartzite
Gr Qzt	Graphitic Quartzite
Mt	Magnetite
Qz Br	Quartz Breccia
Fe Br	Ferruginous Breccia
Br	Breccia
VQZ	Vein Quartz
Myl	Shear Mylonite
Gr Myl	Shear graphitic mylonite
FG	Fault Gouge
Gr FG	Graphitic fault gouge
Peg	Pegmatite
Gnt	Granite
mGnt	Microgranite
Apl	Aplite

	Serp	Serpentonite
	Cly	Clay
	Snd	Sand
	Soil	Soil
	Grv	Gravel
	Fill	Fill
	Sapr	Saprolite
	Shr	Shear
	Flt	Fault
	N/S	No Sample
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	
	<ul style="list-style-type: none"> Chip samples were taken by metre, recovered dry and split by riffle splitter to yield 2kg to 3kg aliquots. Duplicates samples from all metre intervals were taken with field duplicates sent for assay at 1 in 25. RC drill samples referred to in this report were 2 to 3kg chip samples crushed / pulverized using standard lab protocols. Field duplicates from RC samples were taken at a rate of approximately 1 to 2 samples per drill hole. Field duplicates were taken at the rig by spear sampling selected retained B samples Quality assurance of the sampling was carried out by submitting quality control samples including a duplicate sample collected at the rig The Competent Person is satisfied that the sampling system is up to industry standard. 	
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>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.</i> 	
	<ul style="list-style-type: none"> Drill samples were sent to NAL laboratories in Pine Creek. Received sample weights were recorded by NAL for the original and duplicate samples. Sample prep procedure was to sort samples as per the sample logs provided by ARK onto drying trolleys. Samples were dried at 120C for eight hours, cooled and weighed so that a "Dry Weight" was reported. Samples were then Roll crushed two a nominal 1.6 mm and 250 gram split as the assay sample taken using a Jones Riffle Splitter. The split sub-sample was pulverised to a nominal 75Um in a Labtecncis LM2 pulveriser. Assay procedure as follows: A 300 mg sample aliquot was weighed on an analytical balance and digested in HCl/HNO3/HClO4/HF acids in a Teflon vessel to fumes of perchloric acid, the digest was cooled and leached in conc HCl and then diluted to volume with demineralised water, mixed and the elements assayed using ICP-OES. Each rack of fifty assays contains one blank, four standards[CRM's] and five duplicate [control] samples, the repeat rate is 1 in 8 samples. NAL used GEOSTATS CRM's as their 	

	<p>reference standards, CRM's used are GBM 302-5, GBM 903-5, GBM908-10 and GBM311-6.</p> <ul style="list-style-type: none"> • All techniques used are considered total. • Field duplicates were assayed at approximately 1 in 25 frequency.
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> <ul style="list-style-type: none"> • All intercepts have been verified by Company CP. No independent CP has verified the significant intersections • No twinning analysis has been undertaken. There are historic proximal holes that may be accessed at a later time. • Primary data (geological logging + sample intervals) entered directly onto spreadsheet at the rig with cross verification of hardcopy sample ledger using Ark Mines protocols. • No adjustment to assay data applied
Location of data points	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> <ul style="list-style-type: none"> • All collar coordinates will be surveyed by licensed surveyors Twine Surveys using RTKdGPS with accuracy in x and y of 20mm, and in z of 20cm. • No Down hole surveys were undertaken due to the shallow holes and the vertical orientation of the drill holes • Survey results will be reported in MGA2020 zone 55 and in MGA94 zone 55 for compatibility with historic project data. • The collar locations in this report are hand-held GPS surveyed • The GPS locations are considered to be an approximate location of the actual collar coordinates. • Topographic control outside the planned high accuracy RTK collar survey is by hydrologically enforced SRTM.
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> <ul style="list-style-type: none"> • Drill spacing was set to approximately 50 m x 50 m in Indicated areas. Drill spacing within centre of the drilling area was reduced to 25m by 25m. • Samples were not composited at the sampling stage. • These factors plus historic holes with incomplete sampling result in some data gaps that require infill. • Variography to determine appropriateness of grade continuity for resource estimation has not yet been carried out. • No resource or reserve is reported.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to</i> <ul style="list-style-type: none"> • Drill holes were drilled vertically which is considered to minimize any potential sampling bias with the laterite host lithology. Some late-stage faulting may be present, but any offset of laterite and / or mineralisation cannot be predicted at the Mineral Resource drill-out level.

	<i>have introduced a sampling bias, this should be assessed and reported if material.</i>	<ul style="list-style-type: none"> Any sampling bias resultant from the orientation of drilling and possible structural offsets of mineralisation is considered to be minimal.
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Drill samples were under the care and supervision of Ark Mines staff at all times until transportation by local couriers to the analytical laboratories in Pine Creek. Ark Mines have continued the secure holdings of chip trays and duplicates.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> Independent audit of RC data is currently underway.

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	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> EPM 26560 Gunnawarra is 100% owned by Ark Mines Limited. There are no third party agreements No known issues impeding on the security of the tenure of Ark Mines ability to operate in the area exist.
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> The area was first drilled by Norninco and then Metallica
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<p>Geology specific to site consists of these pre-Cambrian Halls Reward metamorphic rocks overlain by the Sandalwood Serpentinite (Proterozoic injections) and intruded by the Gunnawarra Bump Granite (pale pinkish, medium-grained porphyritic biotite monzogranite) in the late Carboniferous to early Permian. These rocks are buried by the Pleistocene vesicular to massive olivine "Depression" Basalt forming the northern and western margins of the area peripheral to Bell Creek and are largely obscured by late tertiary to Quaternary lateritic soils and alluvium.</p> <p>The Sandalwood Serpentinite forms four outcrops of low topographical highs within EPM 26560, and trends north-west, south of Bell Creek. These are superficially separated by alluvium and/or lateritic clays. At Greys</p>

Criteria	JORC Code explanation	Commentary
		<p>Creek in EPMA 26599, narrow serpentinite belts are associated with the Greys Creek Ultramafic Complex.</p> <p>Deep chemical weathering during the Cainozoic caused the formation of a laterite profile which, where developed over the ultramafic units, contain enhanced nickel and cobalt values. Nickel enrichment >1% is concentrated both in layers in a ferruginous pisolithic laterite found in depressions adjacent to the Serpentinite outcrop and in the underlying weathered Serpentinite.</p> <p>The duricrust varies in depth up to 5m thick. Magnesite is commonly present in the lower parts of the duricrust.</p> <p>The duricrust is underlain either by hard, barren silicified Serpentinite or locally deeply weathered Serpentinite, the latter probably developed along fracture zones.</p>
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to Table
Data aggregation methods	<ul style="list-style-type: none"> 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. 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 	<ul style="list-style-type: none"> NA

Criteria	JORC Code explanation	Commentary
	<p><i>should be shown in detail.</i></p> <ul style="list-style-type: none"> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> Whilst the laterite mineralisation is generally considered to be horizontal. The thickness and depth will vary. This deposit tends to have deep gullies of laterite.
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> There are no sections for this announcement Sections are under construction.
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> All results are reported
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> All data material to this report that has been collected to date has been reported textually, graphically or both. Absent material data including bulk density, metallurgical results, water table height and geotechnical characteristics is absent from the historical data record recovered so far, and current data is still undergoing analysis. These data are not relevant to the current pre-resource drill data release.

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Ark Mines Ltd

ABN

31 123 668 717

Quarter ended ("current quarter")

30 September 2022

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(23)	(23)
	(b) development		
	(c) production		
	(d) staff costs		
	(e) administration and corporate costs	(170)	(170)
1.3	Dividends received (see note 3)		
1.4	Interest received		
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Government grants and tax incentives		
1.8	Other (Net GST)	115	115
1.9	Net cash from / (used in) operating activities	(78)	(78)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment		
	(d) exploration & evaluation		
	(e) investments		
	(f) other non-current assets		

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment		
	(d) investments		
	(e) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other		
2.6	Net cash from / (used in) investing activities	-	-

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)		
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options		
3.4	Transaction costs related to issues of equity securities or convertible debt securities		
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other		
3.10	Net cash from / (used in) financing activities	-	-

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,899	2,899
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(78)	(78)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
4.5	Effect of movement in exchange rates on cash held		
4.6	Cash and cash equivalents at end of period	2,821	2,821

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	2,821	2,899
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	2,821	2,899

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(104)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i>		

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7. Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1 Loan facilities		
7.2 Credit standby arrangements		
7.3 Other (please specify)		
7.4 Total financing facilities	-	-
7.5 Unused financing facilities available at quarter end		-
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(78)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(78)
8.4 Cash and cash equivalents at quarter end (item 4.6)	2,821
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	2,821
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	36.2
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
NA	
8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
NA	
8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
NA	
<i>Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.</i>	

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

31 October 2022

Date:

Ian B. Mitchell

Company Secretary

Authorised by:
 (Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.