ARK MINES LTD.

ASX ANNOUNCEMENT

7 May 2025

High Gold Grades from Ark Mines Pluton Project Wet Season Sampling Programme

HIGHLIGHTS

- Ark Mines Ltd conducted a wet season sampling programme on the Pluton Gold Project in North Queensland.
- Rock chips show excellent gold and silver grades and validate historic works:
  - ✓ Maximum of 25 g/t Au, mean 3.4 g/t Au (**Table 1**, **Appendix B Table 2**).
  - ✓ Maximum of 34 g/t Ag, mean 7.1 g/t Ag (**Table 1**, **Appendix B Table 2**).
- Good pathfinder correlations (**Appendix B Table 3**) to advance further exploration.
- Structural relationships with prospective lithologies show potential to extend the target area.

Table 1*: Ark Mines Pluton Project 2025 rock chip assay summary.*

Sample Statistic	Au ppm	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm	Sb ppm	Mo ppm	Hg ppm	Se ppm	Te ppm	Bi ppm	Sn ppm	W ppm	S ppm
Detection	0.01	0.5	1	0.3	0.2	0.2	0.02	0.02	0.001	0.02	0.02	0.01	0.01	0.2	8
Count	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Mean	3.40	7.1	20760	194.7	659.3	40.1	83.84	5.07	0.124	2.97	3.05	309.17	5.48	4.1	1760
Max	24.96	33.7	47738	1107.2	8991.3	178.3	418.19	23.43	0.531	14.97	17.49	1657.52	12.01	14.6	11448
Min	0.30	0.3	82	27.4	10.4	7.7	1.02	1.12	0.020	0.34	0.01	0.92	0.93	0.2	13
Sample SD	4.87	8.9	18380	228.0	1828.9	37.7	98.60	5.18	0.123	3.63	3.87	458.54	3.32	2.9	2678

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Wet season rock chip sampling at Pluton validates historic grade and hits new highs that confirm Ark Mines belief that this Project has potential.

Executive Director Ben Emery said:

"What's not to love about 25 grams per tonne? Even the 3 gram per tonne sample average is very nice. There's a lot of work still to be done at Pluton and we don't want it to distract from Sandy Mitchell and the great story Ark is developing there, but Pluton has potential that we can't ignore and makes a good wet season field option."

Ark Mines Limited (ASX: AHK) is pleased to announce new gold results from its wholly owned Pluton Project in North Queensland (see **Figure 1**) following initial rock chip sampling at the Pluton Prospect during the wet season hiatus of the intensive Sandy Mitchell REE field programme. Gold grades peaked at 24.96 g/t, accompanied by up to 33.7 g/t Ag.

Ark's wholly owned Pluton Project is located on EPM 26883 north of Mt Masterton, 7.6 km east northeast of Mutchilba township on the Mareeba Dimbulah Rd, 26.5 km southwest of Mareebah (**Figure 1**).

In the 2024 to 2025 North Queensland wet season, Ark undertook a preliminary rock chip survey at Pluton prospect on EPM 26883 aiming to validate the 2005 results of then tenement holder Ralph de Lacy, reported by Malachite Resource (McKay 2006) see **Figure 4**. Sampling was focussed on potential gold host lithologies with 30 samples taken from quartz vein, chalcedonic quartz vein and sericitised brecciated quartz healed silt to sandstone Hodgkinson Formation turbidites ± sulphides and jarosite filled relict boxworks.

Assay was by 50g fire assay with ICP-MS finish for Au and 4 acid digest with ICP-OES finish for Ag, As, Bi, Cu, Hg, Mo, Pb, S, Sb, Se, Sn, Te, W, and Zn, to enable study of mineralisation pathfinders. Standards and laboratory duplicates were run at 1 in 20. Field duplicates were omitted as this QC technique isn't viable for uncrushed rock chips. No QAQC anomalies or biases were identified in the data.

Maximum Au was 24.96 g/t, exceeding the maximum 9.94 g/t assayed by de Lacy at Pluton prospect in 2005 (McKay 2006). Ark's mean gold was 3.4 g/t with the minimum of 0.3 g/t and a sample standard deviation of 4.87 which is typically wide (see **Table 1, Appendix B Table 2** and **Figure 3**). Note that barren wall lithologies were not included and the 0.3 ppm Au minima is believed to approach the anomaly cut-off with de Lacy's work showing the background to be around 0.01 to 0.02 ppm Au. Insufficient samples have been taken to statistically determine the true anomaly COG.

Maximum Ag was 33.7 g/t, mean 7.1 g/t and minimum 0.3 g/t with a sample standard deviation of 8.9 (see **Table 1** and **Appendix B Table 2**).

Correlation analysis shows that Au positively correlates with As, Cu, Se, Te, Bi and S, and negatively correlates with Sn, W, Pb and Zn. Ag is largely uncorrelated with Au, positively correlated with Pb, Zn, Hg, Se and S, and negatively correlated with W. These relationships suggest overlapping or telescoped mineralisation styles that may be petrologically distinguishable with further field works (see **Appendix B Table 3**).

The general geology of the prospect is vein and breccia lithologies surrounded by sericitisation within the Devonian Hodgkinson Formation silt to sandstone turbidite host, with local minor rhyolitic porphyry and dacite dyke outcrops. The elevated Hodgkinson Formation outcrop is surrounded by Tertiary to Quaternary alluvium and is intruded to the south west by the Carboniferous Atlanta and Parada Granites, and the Mount Masterson Granodiorite (see **Figure 2**).

Malachite Resources drilled RC at the Pluton prospect in 2005 under a farm in agreement with de Lacy, and intersected a sericitised quartz porphyry not seen in outcrop at variably at 12 to 29m depth (McKay 2006). This is believed to be part of the roof pendant of a subjacent intrusion with a potassium radiometric alteration halo seen in **Figure 5**. Malachite failed to intersect high grade Au, but did intersect 48m at 0.26 g/t.

Malachite concluded that mineralisation was wholly related to the brecciation of the Hodgkinson sandstone, however, Ark's results which continue outside the breccia suggest that there may also be structural controls on mineralisation that expand the target, and that there is potential for multigenerational overlap of different mineralisation styles that may yield to further investigation.

References

McKay, B.S., 2006, *EPM 14648 – Pluton Project (Queensland) first annual and final report for the period ending 1 May 2006* [CR 42792], Malachite Resources NL: Sydney.

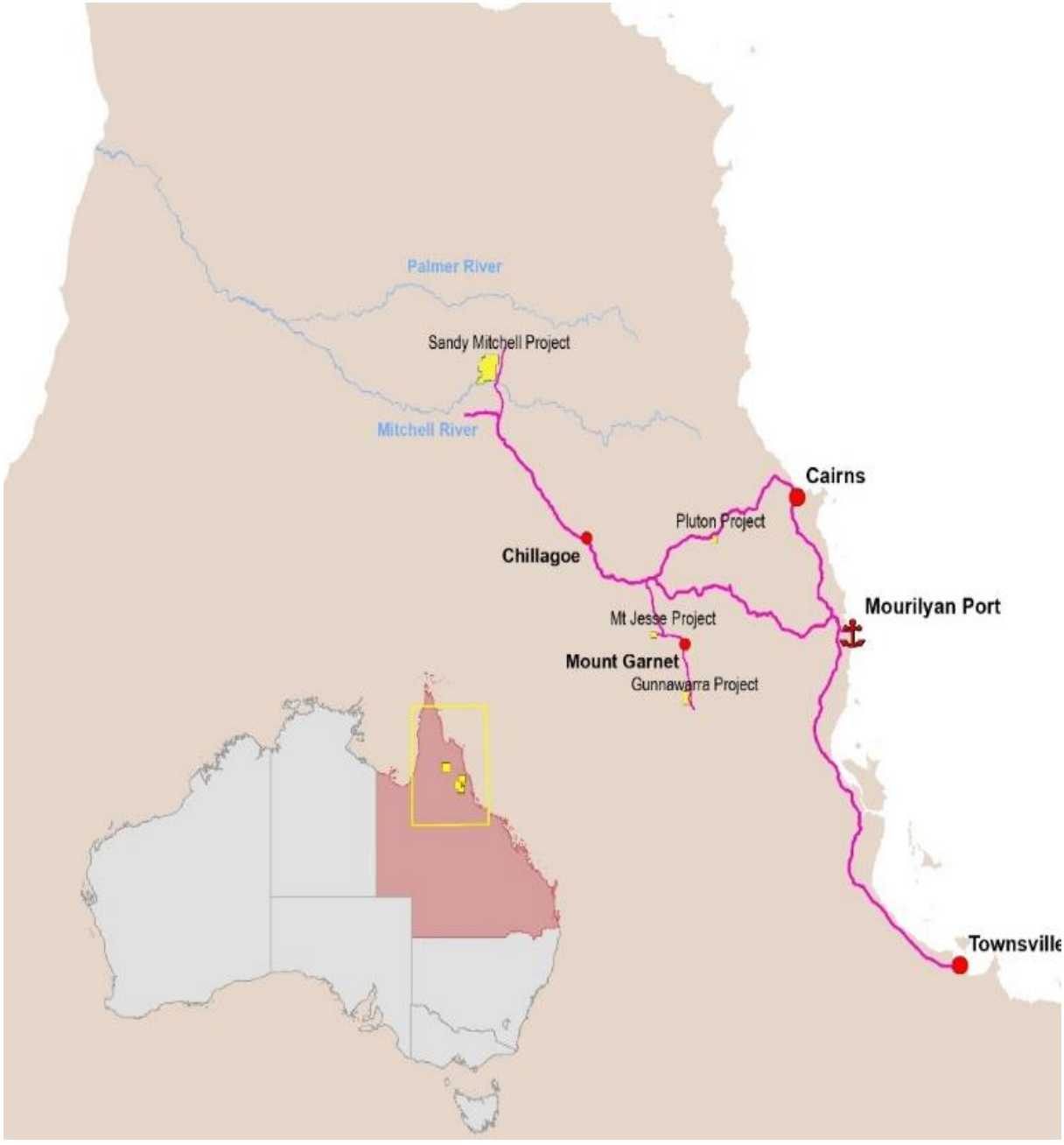

Figure 1: *Pluton Gold Project location.*

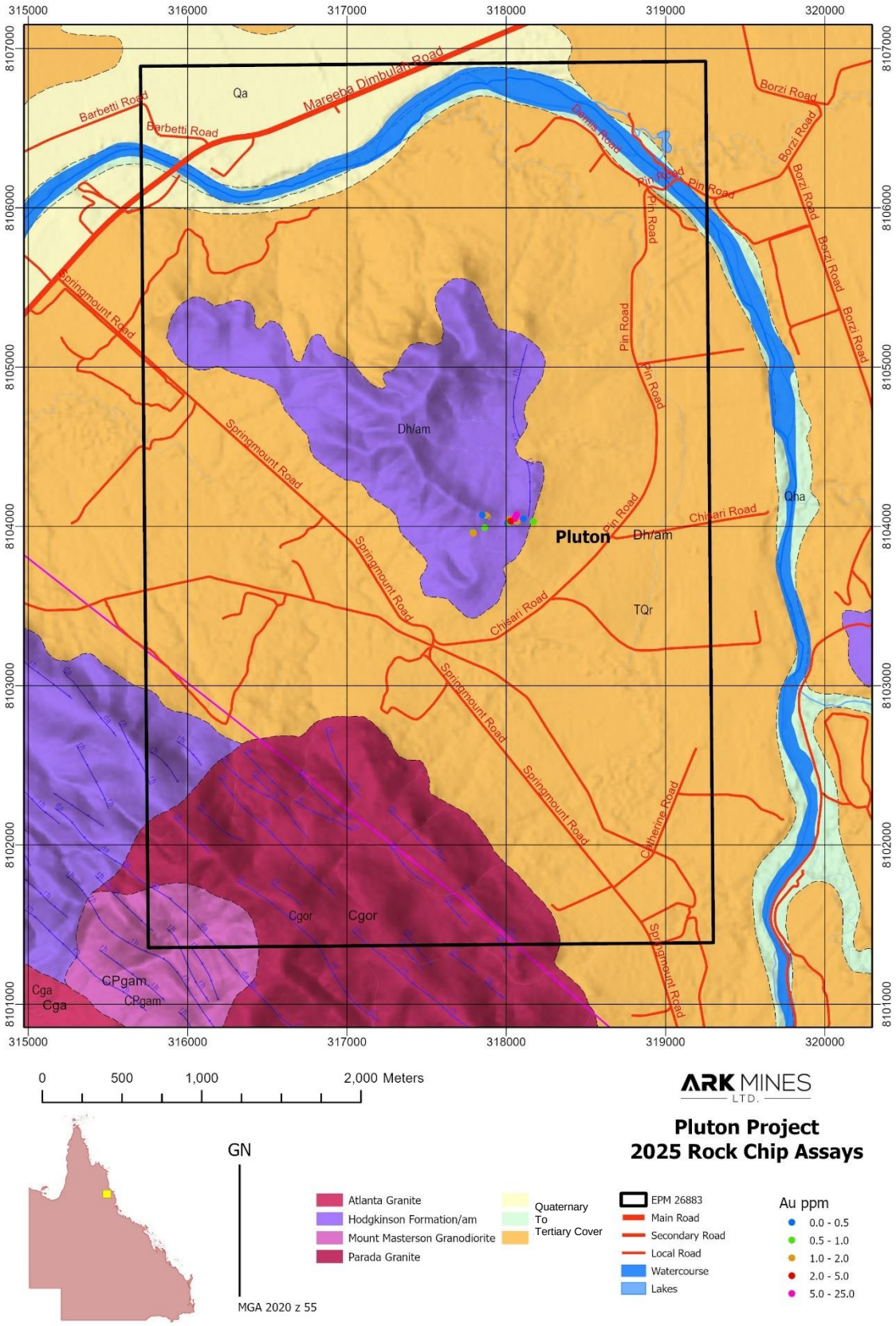

Figure 2: *Pluton Project geology showing 2025 rock chips coloured by Au grade.*

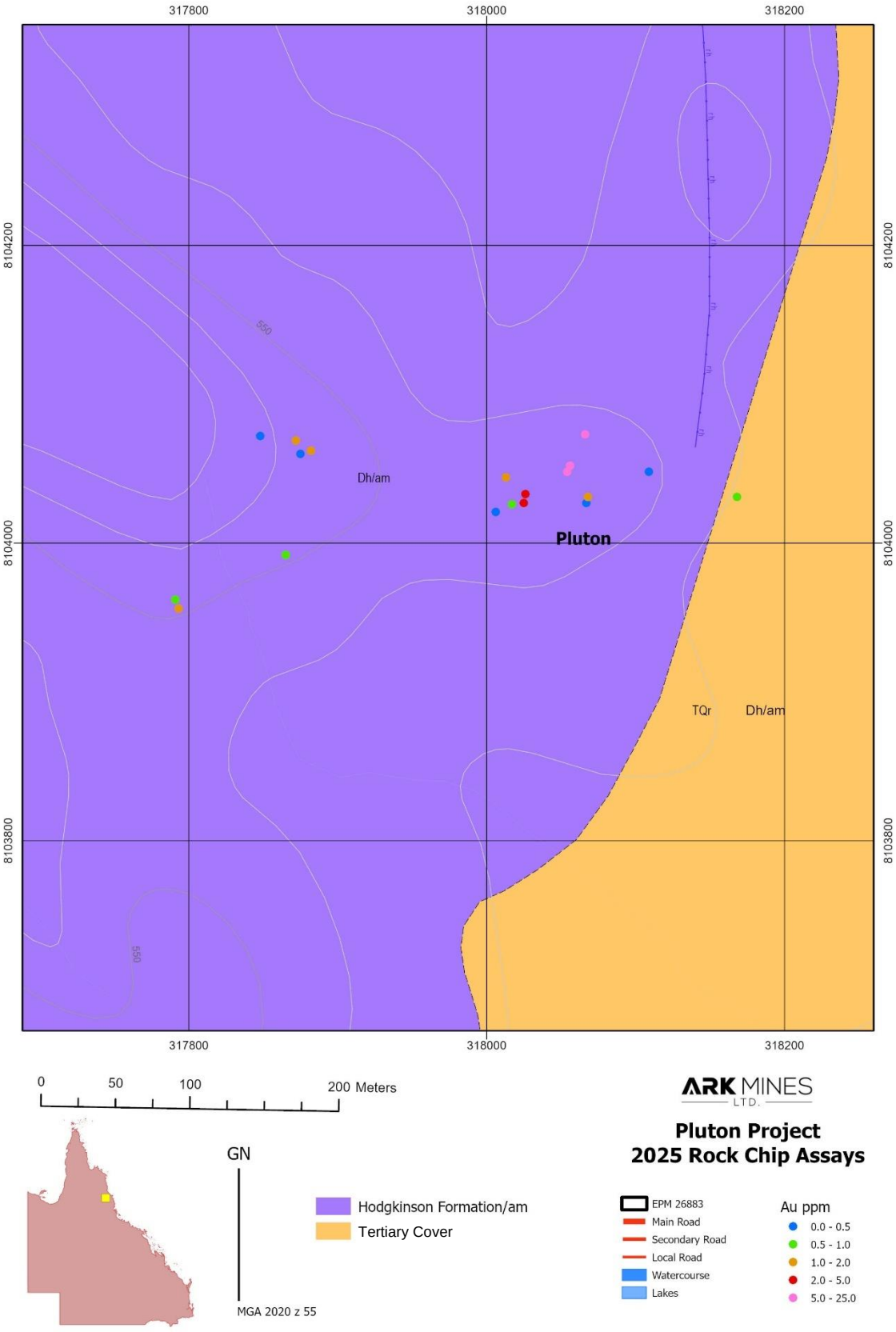

Figure 3: *Close view of 2025 Pluton rock chips coloured by Au grade.*

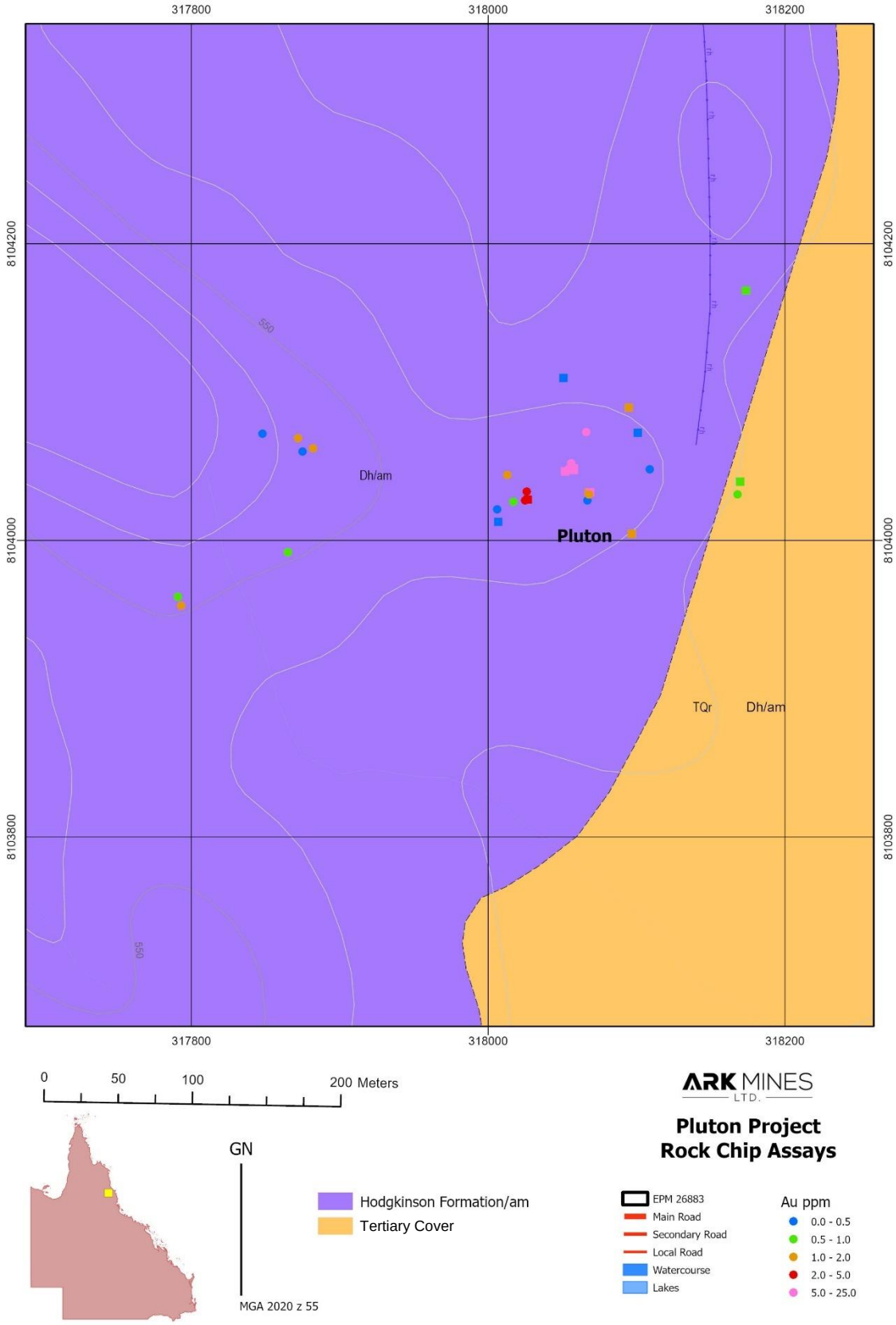

Figure 4: *Close view of Pluton 2025 rock chips (round) and 2005 rock chips (square) coloured by Au grade.*

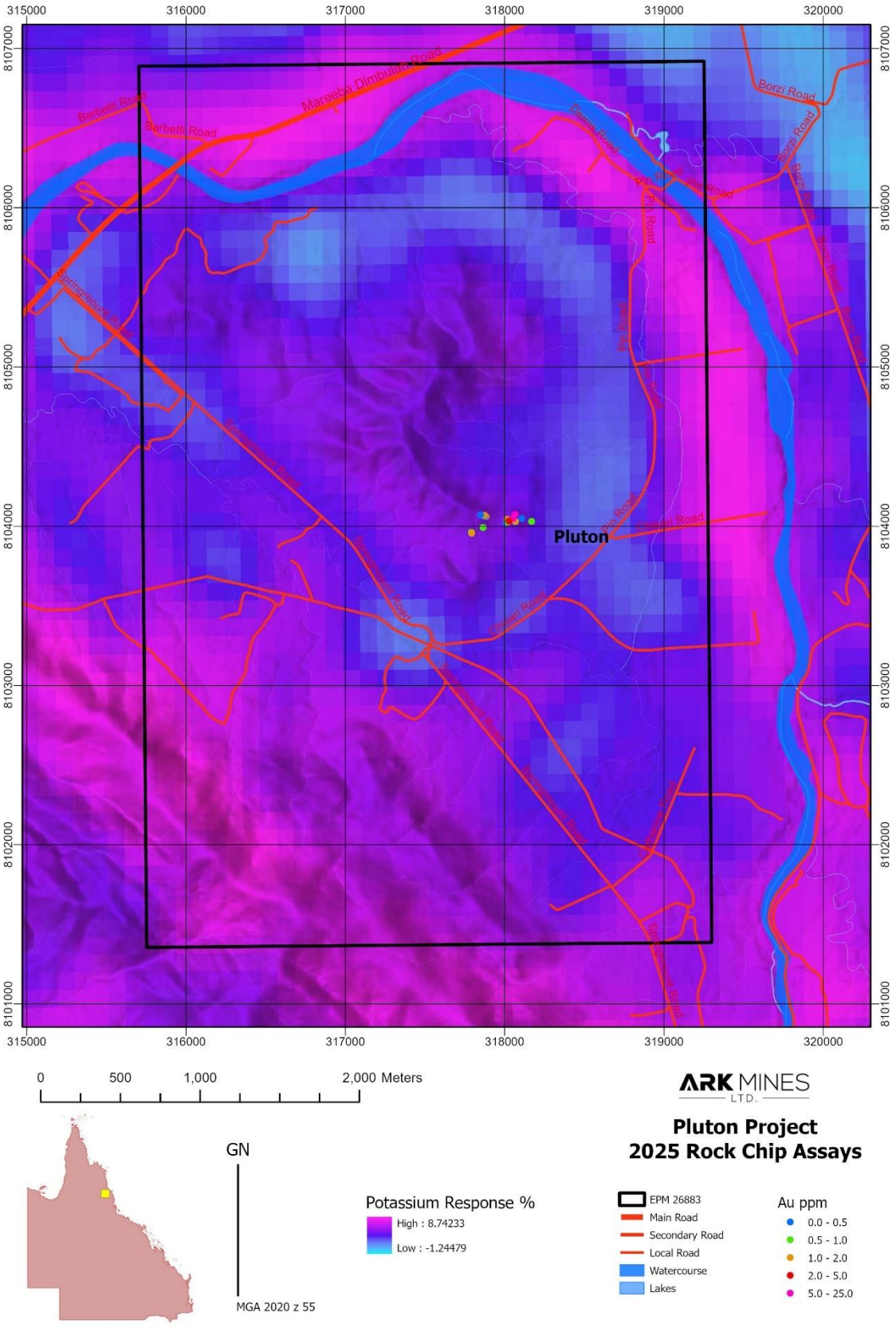

Figure 5*: Pluton Project against potassium radiometrics with 2025 rock chips coloured by gold grade.*

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AUTHORITY FOR RELEASE

This announcement has been approved for release to the ASX by the Board of Ark Mines Ltd.

Roger Jackson
Executive Chairman
07 May 2025

FURTHER INFORMATION

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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 four quality projects that are prospective for copper, iron ore, nickel-cobalt porphyry gold and rare earth elements.

Sandy Mitchell Rare Earth and heavy Mineral Project

- Ark has recently Acquired the 147km2 EPM 28013 'Sandy Mitchell' – an advanced Rare Earths Project in North Queensland with additional 138km2 of sub blocks under application
- Project contains all critical Light Rare Earths as well as Heavy Rare Earths including dysprosium (Dy), terbium (Tb), holmium (Ho), erbium (Er), thulium (Tm) ytterbium (Yb), yttrium (Y) and excluding only Lutetium
- Up to 25% of the TREO is Nd and Pr (magnet metals)
- Rare Earths at 'Sandy Mitchell' are amenable to panning a concentrate; Planned low-cost, fast start up, straightforward beneficiation by gravity processing

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.

COMPETENT PERSONS STATEMENT

The Information in this report that relates to exploration results, mineral resources or ore reserves is based on information compiled by Mr Roger Jackson, who is a Fellow of the Australian Institute of Mining and Metallurgy and a Fellow of the Australasian Institute of Geoscientists. Mr Jackson is a shareholder and director of the Company. Mr Jackson has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the `Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves '(the JORC Code). Mr Jackson consents to the inclusion of this information in the form and context in which it appears in this report. Mr Jackson confirms information in this market announcement is an accurate representation of the available data for the exploration areas being acquired.

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 Ark Mines 'control.

Actual results and developments will almost certainly differ materially from those expressed or implied. Ark Mines 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, Ark Mines 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.

Appendix A: JORC Code, 2012 Edition – Table 1

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.*	Ark Mines February 2025 Pluton programme sampling techniques: • Samples are non-random rock chips selected from potentially mineralised lithologies. • Samples were 3 to 4 kg which has been shown by crushed laboratory repeats to be adequately representative for preliminary works. • Samples were not split or field duplicated as this does not yield representative duplication of bulk rock chips in inhomogeneous and potentially coarse gold mineralisation • Material minerals are gold and silver but all assayed elements which includes pathfinders and potential contaminants are reported in Appendix B
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).*	Ark Mines February 2025 Pluton programme sampling: • All samples are rock chips • No drilling has been conducted by Ark Mines at Pluton.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and*	Ark Mines February 2025 Pluton programme sampling: • All samples are rock chips • No drilling has been conducted by Ark Mines at

Criteria	JORC Code explanation	Commentary
	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.*	Pluton. • Where possible, fine material generated when chipping was included with the sample. • No relationship between recovery and grade has been noted in QAQC of rock chip samples.
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.*	Ark Mines February 2025 Pluton programme sampling: • Rock chip lithologies were logged by the sampler upon collection and representative type photography was carried out in the field.
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.*	Ark Mines February 2025 Pluton programme sampling techniques: • All samples are rock chips • Samples were not split or field duplicated as this does not yield representative duplication of bulk rock chips in inhomogeneous and potentially coarse gold mineralisation • Samples were 3 to 4 kg which has been shown by crushed laboratory repeats to be adequately representative for preliminary works. • Good repeatability in crushed lab duplicates indicates that sample size was appropriate to grainsize in this preliminary stage of works which precedes petrographic grainsize determination.
Quality of assay data	• *The nature, quality and appropriateness of the assaying and laboratory*	Ark Mines February 2025 Pluton programme sampling: • Rock chip samples were sent to North Australian

Criteria	JORC Code explanation	Commentary
and laboratory tests	*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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	Laboratories (NAL) for total digest assay: • Samples were kiln dried then crushed. • Sample was then pulverization in an LM-5 to 94% passing 75 µm with assay aliquot selected by laboratory splitter. • Au was assayed by 50g fire assay with ICP-MS finish. • Ag, As, Bi, Cu, Hg, Mo, Pb, S, Sb, Se, Sn, Te, W, Zn were assayed by 4 acid digest with ICP-OES. • Lab duplicates were taken at 1:20 by 50:50 riffle split of the assay aliquot. • Standards were assayed at 1:20 • Detection limits are reported in Table 1. • QAQC implemented is believed sufficient to establish accuracy and precision.
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.*	Ark Mines February 2025 Pluton programme sampling: • Significant intersections have not been determined or reported with this preliminary sampling programme. • Field data was entered into MS excel then verified against hard copy data, followed by import into ArcGIS Pro for validation against historic work • Assay data was directly imported from the NAL LIMS report. • Primary data is stored as hard copy, electronic tables in CSV format, ArcGIS Pro database and Datamine format. • No drilling was conducted and thus no twinning was carried out, but spatially proximate rock chips were collected (within 1m) at approximate 1:3.
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.*	Ark Mines February 2025 Pluton programme sampling: • An initial collar survey by hand held GPS was conducted as a failsafe, with expected accuracy of ±5000mm in x and y, and ±50000mm in z. • All survey data is recorded in MGA 2020 zone 55. • Topographic control is non-critical for this preliminary work and the government 10m contour derived from drainage controlled NASA SRTM.
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*	Ark Mines February 2025 Pluton programme sampling: • Data spacing is controlled by outcrop occurrence and lithology field identification and though not random, is not meaningful with respect to grade continuity and is not of suitable type for incorporation into resource estimation. • No sample compositing has been applied.

Criteria	JORC Code explanation	Commentary
	procedure(s) and classifications applied. • *Whether sample compositing has been applied.*	
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	Ark Mines February 2025 Pluton programme sampling: • The sample type and density is not suitable for determining mineralisation orientation and orientation field measurements have not yet been collected. • Sample was selected from potentially mineralised lithologies only, in order to asses grade potential, and this type of niche sampling is by nature, biased towards mineralisation and does not convey or imply interval or orientation data.
Sample security	• *The measures taken to ensure sample security.*	Ark Mines February 2025 Pluton programme sampling: • Samples were collected after logging and transported at the end of each day to the company locked storage in Chillagoe. • Samples were boxed in closed crates, wrapped in plastic for shipping by courier to the laboratory in Pine Creek, NT.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	Ark Mines February 2025 Pluton programme sampling: • Limited data from this rock chip programme only affords limited auditing. • Audit of sampling techniques and data available to date was carried out by geological consultants, Empirical Earth Science. • EES noted that the small QAQC data set was of good quality without significant bias, and that minerals of interest showed good repeatability. • EES noted that the data spatially validated well in grade with historic rock ship samples from 2005.

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.*	• EPM 26883 Mount Pluton is 100% owned by Mt Pluton Base Pty Ltd which is a wholly owned subsidiary of Ark Mines Limited and was purchased in November of 2022. • This tenement was formally EPM 14648. • 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	• *Acknowledgment and appraisal of exploration by other parties.*	A number of companies and individuals have explored the area for gold and base metals and for heavy minerals. The below summary is from CR 42792 by Malachite and CR 022576 by CRA Exploration: • AtoP 3982 was granted to CRA Exploration in March 1985 and discovered the Bontaba, Strezziers and Pluton prospects and conducted an IP survey and gravel wash sampling targeting chromite and diamonds. • Balmoral Resources NL farmed in to AtoP 3982 in 1987 to explore the Hodgkinson Fmtn for gold, carrying out stream sediment samples for #80 BLEG, then withdrew from the JV later in 1987. • Australian Gold Resources Limited entered a JV on the tenement in 1987 as the operator and identified several Au anomalies from stream sediment BCL associated with chalcedonic Qz veining and QZ sulphide breccia coupled with mapping and IP. Prospects identified were Bontaba, Bontaba East, Strezziers, Bontaba North (not in EPM 26883) and Pluton (not then named). After drilling 11 percussion holes focussed on the Bontaba prospects AGRL withdrew from the JV in October 1990, and CRAE subsequently relinquished the tenement in February 1991. • EPM 14648 was granted to Ralph de Lacy in 2005 and rock chip assays indicated Au prospectivity. • Malachite Resources NL farmed in under a JV after June 2005 then surrendered the tenement after weak Au grades in drilling, in May 2006.

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The central tenement is an exposure of Devonian Hodgkinson Formation silt to sand grade turbidite, minor conglomerate and interbedded with mudstone. • The central Hodgkinson Fmtn outcrop is ringed by late Tertiary to Quaternary colluvium with some residual sediment, overlying the Hodgkinson Fmtn. • The north west to north central tenement is covered with Quaternary alluvial clay, sand and gravel deposited by the Walsh River with crosses the tenement. This also overlays the Hodgkinson Fmtn. • On the southwest of the tenement elevated Late Carboniferous Parada Granite outcrops (a leucocratic biotite granite) and in the extreme southwest corner the Late Carboniferous Mount Masterson Granodiorite is exposed (equigranular grey hornblende granodiorite). Both of these intrude the Hodgkinson Fmtn which shows a small outcrop again in the southwest, immediately northwest of the granitoids. • The Atlanta granite outcrops west of the Masterson, off tenement. • CRAE new in the mid 80s that the Hodgkinson Fmtn was prospective for gold and work by AGRL on the CRAE tenement identified gold associated with coarse quartz ± sulphide veins, chalcedonic quartz veins, and breccias ± quartz and sulphide, all associated with sericite alteration. • Drilling by Malachite Resources demonstrate the central Hodgkinson Fmtn outcrop is underlain by a sericitised quartz porphyry granitoid with no outcrop. • CRAE identified that the gold mineralisation style was IRG and Ark's work to date shows that this is supported by the geochemical correlations, but that there is an additional signature of hydrothermal alteration from the subjacent pluton.

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*
		• Ark Mines 2025 rock chip sampling data is tabulated in Appendix B
		• Ark has not carried out drilling at Pluton at this time and rock chip data precludes information types that are specific to drilling such as down hole length, intercept depth, dip and azimuth.

Criteria	JORC Code explanation	Commentary
	○ *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.* • *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.*	Ark Mines February 2025 Pluton programme sampling: • No high or Low-grade top/bottom-cut have been applied. • No data aggregation has been applied. • No metal equivalents have been used. • Table 1 uses basic summary statistics on the raw data supplied in Appendix B Table 2, including unweighted simple assay averages, minimum and maximum assay values, and sample standard deviation as a means to summarise the data characteristics of the assays in Table 2. • Appendix B Table 3 shows a matrix of correlation coefficients calculated on total element sets against each other, that characterises the correlation relationship between elements. This provides insight to geochemical relationships between elements and appropriate mineralisation models that may be applicable, but though derived from assay grades, these numbers are not grades and not normally recognised as data aggregation. • The background grade is discussed in the text of the release as an approximation in advance of sufficient statistical data to derive an analytical background, and similarly the gold anomalism cutt-off is discussed in the same non-statistical terms, but not cuts are applied to the Appendix B Table 2 assay data.
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*	Ark Mines February 2025 Pluton programme sampling: • The rock chip sampling have no relationship to mineralisation width and do not represent mineralisation geometry. • No drilling has been carried out by Ark at this time.

Criteria	JORC Code explanation	Commentary
	width not known').	
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.*	Ark Mines February 2025 Pluton programme sampling: • Diagrams as appropriate accompany the announcement
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.*	Ark Mines February 2025 Pluton programme sampling: • Appendix A, contains the full gold host lithology rock chip data set.
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 data material to this report that has been collected to date has been reported textually, graphically or both.
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.*	• Ark plans further niche rock chip sampling on the central Hodgkinson Fmtn outcrop as well as the smaller Hodgkinson and granitoid outcrops to the southwest. • Ark is also planning a preliminary soil orientation survey in the Tertiary to Quaternary colluvium, adjacent to the Hodgkinson Fmtn at the Pluton prospect, preparatory to further gridded soil sampling as recommended by AGRL in 1990, to identify covered targets. This approach has not yet been tested by subsequent workers.

Appendix B: Pluton Rock Chip Assay Return and Correlation Matrix

Table 2: *Pluton Project 2025 rock chip sample assay returns*

SID	TYPE	East MGA2020 m	North MGA2020 m	Elev m	Au ppm	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm	Sb ppm	Mo ppm	Hg ppm	Se ppm	Te ppm	Bi ppm	Sn ppm	W ppm	S ppm
EXP527004	rock chip	318109	8104048	524	0.32	0.3	10570	82.6	233.1	62.2	354.71	2.30	0.099	0.61	0.43	2.93	8.90	9.3	184
EXP527012	rock chip	318066	8104073	547	7.68	3.7	28162	92.7	253.3	71.0	71.90	2.45	0.020	1.45	1.72	395.80	3.00	1.8	716
EXP527014	rock chip	318013	8104044	549	1.18	1.9	2662	134.7	58.1	82.3	72.10	4.03	0.033	0.90	1.02	5.09	2.84	2.9	406
EXP527018	rock chip	318067	8104027	548	0.30	3.9	5883	39.4	5165.1	73.6	418.19	4.57	0.036	1.48	0.24	7.45	9.50	2.9	1182
EXP527019	rock chip	318168	8104031	557	0.90	5.7	19691	84.6	199.8	28.0	37.64	1.43	0.029	0.77	0.15	16.67	7.00	2.2	861
EXP527020	rock chip	318068	8104031	557	4.08	33.7	34571	181.7	133.0	32.9	144.31	2.48	0.531	1.68	1.31	50.78	4.70	1.8	1285
EXP527021	rock chip	318068	8104031	557	1.39	15.7	26704	173.6	147.6	23.0	45.95	1.24	0.040	1.10	0.63	20.18	4.82	1.9	1017
EXP527024	rock chip	318056	8104052	548	3.51	4.8	45414	157.7	28.5	7.7	67.25	2.37	0.178	9.48	3.33	546.70	2.28	2.6	7952
EXP527025	rock chip	318056	8104052	548	6.26	14.9	47419	465.0	187.9	20.6	86.55	4.51	0.251	10.35	6.01	1062.50	4.32	2.6	6680
EXP527026	rock chip	318056	8104052	548	4.96	11.1	47738	530.7	119.9	16.4	67.15	2.13	0.287	9.48	3.83	687.97	3.02	2.8	11448
EXP527027	rock chip	318054	8104048	548	8.99	25.5	46455	370.5	815.6	49.8	130.19	2.96	0.233	2.79	4.33	1365.16	3.83	2.8	992
EXP527031	rock chip	318025	8104027	549	3.79	8.4	38270	97.4	294.9	27.1	47.53	3.25	0.052	2.56	2.65	313.09	5.52	3.3	1116
EXP527032	rock chip	318025	8104027	549	3.51	9.0	39062	97.3	396.8	15.8	46.41	4.51	0.054	2.20	4.07	452.41	7.78	5.5	1338
EXP527037	rock chip	318006	8104021	550	0.50	0.3	1731	27.4	164.0	33.1	55.09	2.43	0.026	0.99	0.40	4.39	8.39	3.1	157
EXP527040	rock chip	318017	8104026	550	0.63	8.3	45440	119.8	8991.3	178.3	64.97	6.06	0.419	1.16	4.85	102.42	8.51	1.9	3610
EXP527041	rock chip	318017	8104026	550	0.99	4.0	82	70.5	88.6	137.6	3.62	23.43	0.065	1.38	0.34	1.65	12.01	2.9	508
EXP527042	rock chip	318026	8104033	549	24.96	12.0	47021	454.4	833.9	45.5	1.02	2.63	0.030	0.34	0.13	0.92	0.93	1.4	596
EXP527043	rock chip	318026	8104033	549	2.46	2.8	36040	226.0	444.0	33.3	25.71	14.92	0.220	2.26	6.04	654.72	9.53	7.6	252
EXP527045	rock chip	318026	8104033	549	9.75	29.8	28361	485.1	390.5	28.4	93.97	5.85	0.157	7.63	17.49	1657.52	4.18	3.3	2300
EXP527061	rock chip	317865	8103992	574	0.87	2.3	500	35.7	50.4	10.2	48.06	4.50	0.032	1.32	0.14	3.67	0.93	0.2	1076
EXP527066	rock chip	317882	8104062	584	1.09	0.7	5053	122.6	28.7	22.5	4.96	1.76	0.065	1.70	4.30	34.39	1.41	5.0	40
EXP527067	rock chip	317882	8104062	584	1.18	0.6	4126	87.1	36.4	14.9	6.96	1.48	0.055	0.96	4.14	28.78	1.47	3.0	25
EXP527068	rock chip	317875	8104060	586	0.37	0.3	481	109.2	11.2	25.3	23.64	4.89	0.071	0.68	1.91	21.86	7.48	7.0	13
EXP527069	rock chip	317872	8104069	590	1.01	0.3	2922	64.5	20.0	20.6	7.34	1.12	0.127	1.10	2.80	66.24	3.02	14.6	47
EXP527070	rock chip	317848	8104072	596	0.32	0.3	606	30.8	11.6	14.5	74.79	2.54	0.064	0.86	0.16	1.40	3.17	5.9	550
EXP527071	rock chip	317848	8104072	596	0.32	0.3	515	29.3	10.4	15.1	76.58	6.90	0.093	1.48	0.01	1.09	3.25	5.7	631
EXP527079	rock chip	317791	8103962	531	0.58	0.6	2591	48.0	38.6	27.1	70.12	2.88	0.053	0.84	0.53	5.66	11.47	5.4	823
EXP527080	rock chip	317793	8103956	532	1.51	0.7	4179	39.5	36.6	39.2	281.13	13.73	0.059	1.61	0.22	7.94	8.69	3.9	1214
EXP527083	rock chip	318056	8104052	548	5.21	7.6	27362	1107.2	76.7	11.9	59.46	2.71	0.168	14.97	5.87	841.54	2.29	3.3	5410
EXP527084	rock chip	318026	8104033	549	3.42	2.9	23203	274.9	512.0	34.2	27.75	16.02	0.187	5.03	12.41	914.31	10.09	7.4	381

Table 3: *Pluton Project assay correlation matrix.*

Correlation	Au ppm	Pd ppm	Pt ppm	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm	Sb ppm	Mo ppm	Hg ppm	Se ppm	Te ppm	Bi ppm	Sn ppm	W ppm	S ppm
Au ppm	1.00	-0.23	-0.14	0.03	0.64	0.57	-0.11	-0.14	0.00	0.00	0.02	0.31	0.40	0.51	-0.27	-0.14	0.27
Pd ppm	-0.23	1.00	0.84	-0.28	-0.25	-0.12	-0.25	-0.18	-0.03	-0.20	-0.26	-0.15	-0.19	-0.24	-0.06	0.28	-0.15
Pt ppm	-0.14	0.84	1.00	-0.26	-0.26	-0.16	-0.24	-0.26	-0.04	-0.31	-0.28	-0.29	-0.20	-0.24	-0.10	0.24	-0.29
Ag ppm	0.03	-0.28	-0.26	1.00	0.08	-0.05	0.91	0.75	0.14	0.06	0.80	0.22	0.01	0.15	0.06	-0.32	0.23
As ppm	0.64	-0.25	-0.26	0.08	1.00	0.53	0.04	-0.13	0.02	0.01	0.19	0.48	0.54	0.64	-0.20	-0.18	0.64
Cu ppm	0.57	-0.12	-0.16	-0.05	0.53	1.00	-0.18	-0.15	-0.03	-0.02	0.06	0.76	0.56	0.66	-0.32	0.08	0.52
Pb ppm	-0.11	-0.25	-0.24	0.91	0.04	-0.18	1.00	0.77	0.11	0.07	0.74	0.10	-0.07	-0.01	0.16	-0.30	0.21
Zn ppm	-0.14	-0.18	-0.26	0.75	-0.13	-0.15	0.77	1.00	-0.03	0.19	0.57	0.10	-0.15	-0.07	0.06	-0.20	0.11
Sb ppm	0.00	-0.03	-0.04	0.14	0.02	-0.03	0.11	-0.03	1.00	-0.05	0.14	0.01	-0.01	0.04	-0.08	-0.11	0.06
Mo ppm	0.00	-0.20	-0.31	0.06	0.01	-0.02	0.07	0.19	-0.05	1.00	0.09	0.20	0.15	0.11	0.19	-0.02	0.03
Hg ppm	0.02	-0.26	-0.28	0.80	0.19	0.06	0.74	0.57	0.14	0.09	1.00	0.27	0.10	0.20	0.03	-0.14	0.31
Se ppm	0.31	-0.15	-0.29	0.22	0.48	0.76	0.10	0.10	0.01	0.20	0.27	1.00	0.55	0.70	-0.22	-0.13	0.76
Te ppm	0.40	-0.19	-0.20	0.01	0.54	0.56	-0.07	-0.15	-0.01	0.15	0.10	0.55	1.00	0.84	-0.16	0.05	0.35
Bi ppm	0.51	-0.24	-0.24	0.15	0.64	0.66	-0.01	-0.07	0.04	0.11	0.20	0.70	0.84	1.00	-0.18	-0.07	0.50
Sn ppm	-0.27	-0.06	-0.10	0.06	-0.20	-0.32	0.16	0.06	-0.08	0.19	0.03	-0.22	-0.16	-0.18	1.00	-0.08	-0.13
W ppm	-0.14	0.28	0.24	-0.32	-0.18	0.08	-0.30	-0.20	-0.11	-0.02	-0.14	-0.13	0.05	-0.07	-0.08	1.00	-0.21
S ppm	0.27	-0.15	-0.29	0.23	0.64	0.52	0.21	0.11	0.06	0.03	0.31	0.76	0.35	0.50	-0.13	-0.21	1.00