

## ASX:PKO

30 July 2021

# Quarterly Activities Report 30 June 2021

#### Highlights

- New mineralised vein system identified at Appaloosa and Gypsy with rock chip gold assays up to 12.7g/t Au
- Aircore drilling commenced testing ten targets across seven priority areas supported by Western Australian government EIS co-funded drilling grants.
- Scout RC planning commenced to test a number of areas with favourable geology and rock chip results, as well as drill testing three historical prospects for gold.
- Tenement package increased to 3,335km<sup>2</sup> with two new applications made for exploration licences to cover regional extensions of NE trending structures observed in field mapping
- \$2M raised via two-tranche placement to Sophisticated and Professional Investors
- SPP offer made to shareholders with further \$2M raised following end of quarter

# PROJECTS

# East Kimberley Copper-Gold Project

Peako's exploration focus is its large consolidated ground-holding across seven exploration tenements in the East Kimberley region of Western Australia incorporating a 3,335 km<sup>2</sup> area (Figure 1) comprising two granted tenements (E80/4990 and E80/5182) and five areas under application (E80/5346, E80/5472, E80/5220, E80/5623 and E80/5624).





Proterozoic provinces with past exploration programs broadly characterised by sporadic campaigns over the past 50 years incorporating numerous explorers across multiple commodities and fragmented, non-contiguous tenement holdings. Historical exploration, primarily guided by occurrences of surface gossan and geochemical anomalies, has provided consistent encouragement for the area's economic potential. At the same time, discovery efforts have been consistently hindered by a mix of cover, subcrop, poorly understood regolith, deep weathering and complex stratigraphy/structure, despite highly favourable host rocks, structure and known mineralisation across the area.

#### Geological Setting

The Eastman (E80/4990) and Wirana (E80/5182) tenements host a diverse Paleoproterozoic succession that is widely intruded by multiple granitoid phases and deformed by multiple orogenic episodes. The area represents the western-most window of the Halls Creek Orogen where volcanic successions of the bimodal Koongie Park Formation volcanic belt (c. 1845 Ma) and the Lamboo Ultramafic (LUM) intrusive belt (c. 1850-1835 Ma) are well developed. Recent satellite imagery and rock geochemistry define an array of multistage, poorly constrained granitoid intrusions across the tenements, with compositions that include granite, granodiorite, diorite, monzogranite and granophyre.

The geological diversity within the tenement package has driven the search for a wide range of commodities by present and past explorers. The Koongie Park Formation (KPF) has demonstrated prospectivity for base (Cu-Pb-Zn) and precious (Ag, Au) metals with postulated mineralisation styles varying from VHMS to SVAL-hybrid styles, to epithermal and skarnoid mineralisation associated with widespread carbonate facies in the KPF stratigraphy. In addition, mafic to ultramafic intrusions of the Lamboo Ultramafic complex have demonstrated



40 km

prospectivity for base metal (Ni, Cu) and precious (Au, PGE) metals with potential mineralisation styles varying across magmatic, cumulate to intrusion or orogenic-related gold associated with deep crustal-tapping fertile structures.

Peako's E80/5520 tenement application is located 35km east of Halls Creek (Figure 1) in an area that has undergone minimal historical exploration due to widespread Cenozoic cover sequences. Interpreted geology identifies fertile LUM rock types with known gold, nickel and base metal prospects in exposed areas adjacent to the tenement. A major 500km long NE-SW trending fault system (Springvale-Billabong Fault) is interpreted in central portions of the E80/5520 tenement, and could provide a splayed structural setting prospective for structurally localised gold systems, similar to those observed at Nicholsons gold mine some 20 kms to south (refer Figure 1).

During the quarter Peako made application for two new tenement applications (E80/5623 and E80/5624) to cover the regional extensions of NE trending structures observed in field mapping across the E80/4990 tenement.

#### **Recent Activities**

#### 2021 Field season strategy to evaluate widely identified gold potential

Peako commenced field activities in April 2021 following conclusion of the wet season. Our field season strategy is to evaluate a widely identified but often overlooked latent gold potential recorded in historical exploration data (refer Figure 2). For many past explorers, gold was peripheral to their base metal and PGE exploration focus at a time when many explorers did not analyse soil, rock or drill samples for gold.



**Figure 2** Historical gold assays including rock, soil and drillhole on E80/4990 (Eastman) that demonstrate the latent gold potential of the area.





Potential gold prospectivity on the Eastman E80/4990 tenement is widely validated by the known gold signature that is particularly pronounced at the Landrigan and Eastman prospects and across the Ultramafic sequence in the east of the tenement. Examples include Peako's 2019 RC drilling results such as PLRC004 with 6m at 1.16g/t Au and 27.27g/t Ag and PLRC001 with 7m at 1.1g/t Au and 7.51g/t Ag. Petrology results from 2019 RC samples at Landrigan also define at least some of the gold to occur as free grains hosted by deformed quartz veins.

#### New Vein System Discoveries

Two new vein systems were discovered early in the field season during ground truthing reconnaissance work following-up on a gold surface sample recorded in the historical data. Located in the northeast of the E80/4990 Eastman tenement, Peako has named these vein systems Appaloosa and Gypsy.

Rock chip assay results confirm the systems to be mineralised with assays up to 12.7g/t Au at Appaloosa and 1.2g/t Au at Gypsy.

An additional new vein system has been identified south of the Appaloosa area Peako has named "Shire" (refer Figure 3) which is also confirmed as mineralised by assays from rock chip samples.



Figure 3 New Mineralised Vein System Discoveries



#### Appaloosa Mapping

A campaign of detailed mapping at 1:2,500 scale was completed at Appaloosa (Figure 4) in conjunction with 1:10,000 scale interpretation of the easternmost parts of the E80/4990 tenement. The resulting maps define a structurally complex mafic-ultramafic host rock sequence with multistage intrusions as a broad host rock framework for potential mineralisation.



Figure 4 Geological map of the Appaloosa area and location of quartz-carbonate and gossanous veins that contain Au grades from 0.39 to 12.7 g/t Au

At Appaloosa, outcropping mineralised gossanous quartz veins were mapped over an approximate 400m strike. Importantly, Peako's recent rock chip results not only confirm the presence of high grade gold veins but also demonstrate the occurrence of multiple to stacked outcropping mineralised gossanous veins. Rock chip results from Appaloosa currently define the veins as outcropping over a 200m strike, with veins having gold grades that vary from 0.39g/t Au up to 12.7g/t Au. Assay results from gossanous veins in the northeast of Appaloosa are still pending.



The outcropping mineralised veins at Appaloosa occur as narrow (up to 20cm) discontinuous veins within propylitic epidote altered massive gabbro. The veins can be continuous in strike over 15m, but are mostly poorly exposed. Mineralised veins typically strike north to northeast strike with an east to southeast dip between 45° to 70°. Mineralised Fe-oxide veins have grey quartz intermixed with goethitic boxwork likely after the pyrite, arsenopyrite and galena. Examples of the mineralised Appaloosa veins are shown in Figure 5

Mineralised veins are hosted in propylitic altered gabbro proximal to NE-trending chloritic shear zones. The current geological configuration, together with assay results, potentially indicate a NE-trending mineralised corridor of some 200-400m. Scout RC drill testing of this area is planned for August 2021.



**Figure 5** Examples of outcropping gossanous quartz veins at Appaloosa grades sampled by P2100242 with a grade of 1.3 g/t Au (left) and P2100243 with a grade of 2.73 g/t Au (right).

#### Aircore Geochemistry Program

Peako commenced an aircore geochemistry program on the E80/4990 Eastman tenement during the quarter which was completed in July 2021. A total of 473 aircore holes have now been completed, testing ten targets across seven priority areas (refer Figure 7). Aircore meterage totaled 3,014m, which was lower than anticipated due to shallow cover and more extensive subcrop than previously recognised.



Figure 6 Aircore drilling at Eastman East target



Peako's aircore program was designed to test for geochemical anomalies in 10 targets across 7 separate areas that were defined from an array of prospective geological features including anomalous base metal and gold geochemistry (soil, rock, drilling), geophysics (VTEM, magnetics), prospective structure, as well as encouraging satellite imagery spectral indicators. Mineralisation styles tested by aircore geochemistry vary between the target areas from structural to intrusion-related gold-copper targets to extensions of ultramafic rocks below cover sequences with potential for Cu-Ni-PGE mineralisation. In addition, a number of areas tested by our 2021 aircore program were designed to confirm and/or extend target areas where historical soil geochemistry programs had previously identified base metal anomalism but where previous explorers did not analyse for gold.

All aircore drill holes were sampled below transported cover in 1m, 2m or 4m composites and samples have been submitted to Intertek Genalysis in Perth for gold and multi-element analysis. Aircore assay results are anticipated progressively over the coming months due to slow laboratory turnaround times. Geochemical results from aircore are aimed to define anomalous gold, base metal and/or PGE targets that, once integrated with completed field mapping, will define robust targets for subsequent RC drill testing. Testing of any aircore geochemistry-geological targets is likely to be incorporated into next year's field season, given laboratory turnaround and impending wet season onset by late September/October.





#### 'Scout' RC drill program

Planning commenced during the quarter for a 'scout' RC drill program in August 2021 to test a number of new and historical targets for gold. The scout RC program will use our contract driller with their track-mounted Hydropower Scout Mark II rig to expedite our early-stage scout drill testing of a number of 'hard rock' targets. Targets have been developed from the combination of recent geological mapping, rock assay results and our library of historical drill and geochemistry data where available.



Targets and drillholes are currently being finalised with the objective of drilling short (60-80m) RC holes for a total of 1000-1200 metres across five targets (Figure 8). Planned areas for drill testing include the Appaloosa and Gypsy vein systems as well as the historical Eastman, Landrigan and Louisa targets where potential for gold-bearing vein systems is as yet untested.



Figure 8 Potential Scout RC locations

#### EIS Funding

Peako's 2021 aircore and RC drilling activities are supported by two Western Australian Government Exploration Incentive Scheme ("EIS") co-funded drilling grants totaling \$320,000. The Round 21 EIS grant is for an amount of \$150,000 for 50% of direct drilling costs incurred prior to 30 June 2021. The Round 22 grant is for a further \$150,000 amount for 50% of direct drilling costs incurred prior to 31 December 2021, as well as up to \$20,000 towards mobilisation costs.





#### Exploration Pipeline – Wirana E80/5182

The Wirana (E80/5182) tenement incorporates an area of 421.9 km2 contiguous to Peako's Eastman (E80/4990) tenement (Figure 1). Regional geology and recently completed Worldview-3 imagery over the tenement confirm the area to contain prospective host rock sequences including LUM, Marboo Formation and numerous granitoid intrusions of undefined affiliation. The tenement has a widespread suite of historical base and precious metal prospects (Figure 9). The complete area has only undergone precursory work by historical explorers.

First pass field logistics and reconnaissance was completed over the Wirana tenement during the quarter to finalise the details and logistics for a mapping program planned for later in the field season. The review has established the presence of reasonable vehicular access to the eastern and northern parts of the tenement and has also upgraded the existing track to the central southern parts of the tenement including the historical BHP Gossan 15 prospect. A phase of reconnaissance ground checking mapping and rock chip sampling is planned for August-September.



Figure 9 Wirana E80/5182 tenement area and key historical prospects





## Paterson Province, Western Australia

Peako's Broadhurst (Sunday Creek) Project tenement is located in the Rudall River area of the Paterson province of Western Australia (Figure 8). Peako also has three long standing applications for exploration licences located close to its Broadhurst Project tenement. Historical geological mapping indicates bedrock geology of the project area is largely carbonaceous shales and siltstones of the Broadhurst Formation, and lesser quartz sandstone and siltstone of the underlying Coolbro Sandstone Formation.



Figure 10 The Sunday Creek - Broadhurst tenement area in the Paterson Province, Western Australia.

The Broadhurst tenement is under-explored and hosts an array of encouraging features that indicate the potential of the area for Nifty (Cu) or Maroochydore (Cu-Co) style mineralisation. Historic exploration has been minimal and fragmented, comprising a 'revolving door' of explorers, divided in commodity focus between Base Metals or Uranium. Only very limited, precursory drilling has been completed on the tenement (a total of 6 holes for 1,243m) all testing for Uranium, with base metal mineralisation targets in the Broadhurst Formation remaining untested.

A program of field mapping, reconnaissance and rock chip and soil sampling was planned across the tenement during the quarter. The result of Native Title consultation was only received late in the quarter, accordingly the program has subsequently been re-designed and re-submitted for Native Title consideration.



# CORPORATE

During the quarter Peako announced a two-tranche placement to sophisticated and professional investors to raise \$2 million at an issue price of \$0.035 a share together with a one (1) for (2) unlisted option with a strike price of \$0.055 and an expiry date of 30 June 2022 (**Placement**).

The Placement comprised:

- 42,857,143 first tranche shares which were issued during the quarter;
- 21,428,571 first tranche unlisted options exerciseable at \$0.055 on or before 30 June 2022 expected to be issued in July 2021 following approval from shareholders
- 14,285,714 second tranche shares expected to be granted in July 2021 following approval from shareholders; and
- 7,142,857 second tranche unlisted options exerciseable at \$0.055 on or before 30 June 2022 expected to be issued in July 2021 following approval from shareholders

Peako also announced a Share Purchase Plan (**SPP**) whereby eligible existing shareholders were offered the right to participate on the same terms as the Placement. The SPP concluded following the end of the quarter and was strongly supported by Shareholders with the Company receiving applications for 59,527,066 shares together with 29,763,522 unlisted options raising a further \$2,074,000.



11

# REFERENCES

The information in this report that relates to Exploration Results was previously reported in ASX announcements listed below. The Company is not aware of any new information or data that materially affects the information included in each relevant market announcement.

Further details can be found in the following Peako ASX announcements.

21 July 2021	East Kimberley Exploration Update		
25 May 2021	East Kimberley Drilling Program Commences		
5 May 2021	Reconnaissance Field Work Discovers Extensive Base and		
	Precious Metal-rich Quartz Vein Systems		
21 April 2021	Investor Presentation		
13 November 2020	East Kimberley Exploration Update		
20 August 2020	East Kimberley Exploration Update		
30 April 2020	Quarterly Activities Report		
30 January 2020	Further Sampling Confirms Cu-Au-Ag Drill Results at Landrigan		
28 November 2019	East Kimberley Drilling Results Extend Known Copper-Gold		
	Mineralisation		
30 September 2019	Extension of East Kimberley Copper-Gold RC Drilling Program		
23 September 2019	RC Drilling Commences at East Kimberley Copper-Gold Project		
23 May 2019	Drilling Grant Awarded		
28 November 2018	Projects Update		
31 October 2018	Quarterly Activities Report		
15 August 2018	IP Geophysical Survey to Commence Shortly at Eastman		

### **Competent Person Declaration**

The information in this report that relates to Exploration Results is based on information compiled or reviewed by Ms Carolyn Higgins who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Ms Higgins is consultant to Peako Limited and 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. Ms Higgins consents to the inclusion in this report of the matters based on information provided by her and in the form and context in which it appears.

# GLOSSARY

KPF Koongie Park FormationLUM Lamboo UltramaficSVAL Stratabound Volcanic-Associated Limestone-skarnVTEM Versatile Time Domain Electromagnetic

in

Rae Clark, Director 30 July 2021





# Additional Information Required by Listing Rules 5.3.3 and 5.4.3

Tenement	Peako interest	Tenement status
Western Australia (East Kimberley Region)		
E80/4990	100%	Granted
E80/5182	100%	Granted
E80/5346	100%	Application
E80/5472	100%	Application
E80/5520	100%	Application
E80/5623	100%	Application
E80/5624	100%	Application
Western Australia (Paterson Province)		
E 45/3278	100%	Granted
E 45/3345	100%	Application
E 45/3477	100%	Application
E 45/3292	100%	Application

Tenements held/applied for at the end of the quarter and their location

#### Tenements acquired during the quarter and their location

Tenement	Peako interest	Tenement status
Western Australia (Eas	st Kimberley Region)	
E80/5623	100%	Application
E80/5624	100%	Application

#### Tenements disposed of during the quarter and their location

Nil.

# Beneficial percentage interests held in farm-in or farm-out agreements at the end of the Quarter:

Nil.

# Payments to related parties during the quarter included in Appendix 5B – Quarterly Cash Flow Report

Payments were made to directors and their associates during the quarter totalling approximately \$130,000. Payments were for contracted services including consulting fees, office costs and administrative support.

١

