ASX Announcement



June Quarterly Report 31 July 2020

Highlights

Carlow Castle Au-Cu-Co Project

- Depth extensions to the Carlow Castle gold-copper-cobalt mineralisation in the West Pilbara include:
 - o 43m @ 1.1 g/t Au, 1.13% Cu, 0.12% Co from 86m, ARC 221
 - including 5m @ 4.17 g/t Au, 2.63% Cu, 0.51% Co from 90m;
 - 3m @ 4.0 g/t Au, 0.36% Cu, 0.19% Co from 201m, ARC216;
 - o 4m @ 2.21 g/t Au, 0.98% Cu, 0.06% Co from 163m, ARC217;
 - o 7m @ 2.89 g/t Au, 0.34% Cu, 0.04% Co from 142m, ARC219;
 - o **3m @ 4.31 g/t Au**, 0.47% Cu, 0.21% Co from 188m, ARC219.
- Carlow Castle western extension drilling of sub-audio magnetic (SAM) targets 1-4 intersected mineralisation at SAM target 4:
 - o 2m @ 1.75 g/t Au, 0.3% Cu, 0.08% Co from 15m, ARC208.
- DHEM successfully acquired mineralisation signature for Carlow Castle.
- A full review of all geology and geophysics is planned before more drilling is undertaken to further grow the mineralised footprint.

Carlow West, Au Project

- Drilling commenced at Carlow West Gold Project, with RC drilling of 11 holes on a single 400m north-south traverse coincident with a series of rock chip assays that ranged between 0.05 - 9.89g/t Au (ASX release 5 November 2018).
- Assays submitted to ALS Global in Perth and expected soon.
- Post quarter end further RC drilling completed at a Carlow West, and over the greater Carlow Castle area. Initial results due soon.



Patersons Central, Au-Cu Project

- Detailed geophysics and structural interpretation commenced including geophysical data reprocessing by industry experts Resource Potentials. Detailed plans for 6-8 hole maiden drill programme across numerous targets on the Paterson Central licence near completion and will be released to the market soon.
- Post-period pre-drilling aerial surveying and mapping and detailed preparation for ground works underway with ground crews to be dispatched as soon as planning phase complete.
- Post-period drill contract signed with DDH1 for Paterson Central with drilling forecast to commence in August.
- Geochemical orientation samples for both MMI and Ionic LeachTM have been received from the respective assay laboratories. Ionic LeachTM has been selected as the preferred assay technique.
- 457 samples were taken to the north of Havieron before the geochemistry program was interrupted by wet weather, and these samples are now being processed at ALS Global using Ionic Leach[™] assaying technique.
- Further geochemistry to be considered once the 457 samples have been assayed and the results interrogated. Geochemistry has been used successfully at Havieron and regionally and helped identify the area being drilled by Newcrest and Greatland Gold.

Munni Munni PGE Project

- 12 hole, 1,928m RC drilling program completed at Munni Munni, with assay data from ALS Global pending.
- The program was designed to:
 - Extend primary reef mineralisation and test historical assay grades from diamond drilling using RC drilling.
 - Test for the presence of a second reef below the primary PGE reef.
 - Generate data that may contribute to a JORC 2012 Mineral Resource Estimate in the future.
- High resolution air-photography to provide detailed images for future project planning purposes.
- Detailed survey of the holes drilled in this program will be completed plus re-survey of approximately 10% (20 holes) of historical holes to validate hole data assisting in JORC 2012 Mineral Resource Estimate.
- Proposed transaction announced to ASX on 28 April 2020 ("Empire Transaction") is still in progress.



Corporate

 Post-period Capital raise of \$5.6m completed in July with the Company issuing 79,992,856 shares at 7 cents each.

Artemis Resources Limited ("Artemis" or "the Company") (ASX:ARV, Frankfurt: ATY, US OTCQB: ARTTF) is pleased to provide an update on activities for the quarter ended 30 June 2020.

CARLOW CASTLE GOLD COPPER COBALT PROJECT

The Carlow Castle gold and copper project is located in the West Pilbara region of Western Australia, ~45 km by road east of the city of Karratha (**Figure 6**). Access is via the Northwest Coastal Highway and then by the unsealed Cheratta public road, which passes through the Project area. Carlow Castle is on the granted exploration license E47/1797 and is ~35 km from Artemis' 100% owned Radio Hill Processing Plant.

The current Carlow Castle Mineral Resource covers a strike length of 1.2 km, and was successfully identified using SAM exploration in early 2018. In conjunction with geochemical anomalies, SAM targeting drove the Carlow Castle drilling program in 2018 that increased the maiden resource by 71% in February 2019, and subsequent SAM survey which has identified 21 new targets to the west of the current resource.

Recent structural mapping and evaluation of historical diamond core and trenching through the top of the resource area, led to a significant increase in the confidence levels of the project, and culminated in the new inferred Mineral Resource estimate (MRE) announced on 20 November 2019, that increased metal content by 60% for gold, 25% for copper and 15% for cobalt. The inferred MRE is **now 418koz Au, 48kt**

Cu and 7kt Co within 8Mt @ 0.51% Cu, 1.6 g/t Au and 0.08% Co¹. The structural mapping programs and MRE have been carried out by independent Mining Industry Consultants, CSA Global.

During March 2020, 31 RC drill holes were completed for 3,716 metres (**Figure 1**), with the assay results released to the ASX on 6 May 2020. The RC drill program had three aims:

- 1. Continue to define limits of mineralisation at depth and down dip and add ounces to further resource updates;
- 2. Capture DHEM signatures of mineralisation for use in future resource and extensional and regional drill planning; and
- 3. Commence systematic exploration of 21 undrilled SAM targets to the west and south of the Carlow Castle resource area.

Pleasingly in terms of the first objective, RC drilling below the resource (**Figures 1 & 2**) returned excellent grades and widths. It also extended mineralisation at depth and continued to show it remained open down dip to the east and to the south. Importantly, despite the already large (~1.2km) strike of the current resource

¹ See ASX Announcement 20 November 2019. The Company is not aware of any new information or data that materially affects the information included in this market announcement and, in the case of estimates of mineral resources, that all material assumptions and technical parameters underpinning the estimates in this market announcement continue to apply and have not materially changed.



area (**Figure 3**), drilling remains truncated to the east-southeast while the Company awaits the necessary heritage approvals before it can extend the scope of its exploration activity.

Secondly, a first-ever downhole electromagnetic (DHEM) programme at Carlow Castle was successful and revealed an identifiable signature of the higher-grade sulphide mineralisation. This will be used to efficiently target our future drilling to increase the resource area. The final hole of the programme (ARC 222) had to be abandoned at a depth of 45m because of the failure of a booster compressor and thus an important eastern extensional DHEM loop could not be run. The Company intends to opportunistically complete this loop as soon as practicable.

The final objective began with the first phase of systematic drilling of SAM targets, starting with 1-4 (**Figure 3**). This was designed to explore completely untested and open-strike geological extensions to the west of and adjacent to the current resource area. Several fence lines of shallow holes were completed over a strike of ~1km. Much of this area was deeply weathered but did not return widespread significant gold values.



Figure 1: Carlow Castle drill hole location plan of April RC programme and interpreted open directions (yellow) of mineralisation following completion of programme





Figure 2: Carlow Castle composite long section, showing additional RC drilling that has increased mineralisation down dip at the eastern end of the resource (open indications in purple), and pit optimisation (in black) looking north, above which Mineral Resources were reported to the ASX on 20 November 2019.

Drilling intersected gold mineralisation in ARC208 (SAM target 4) and will be followed up. With further SAM targets 5-21 yet to be tested, an extensive programme of aircore drilling is being reviewed and will form part of work programmes over the Greater Carlow Castle area.

The next phase of the Carlow Castle resource area growth drilling will commence as soon as a full review is completed, which incorporates drilling from the Greater Carlow area, which includes new areas such as Carlow West and SingSix (**Figure 6**).





Figure 3: Carlow Castle geology, SAM survey results with 21 anomalies and drilling and resource area to date, which indicates mineralisation is open to the west and east. The planned RC drill programme will target anomalies 1-4, immediately to the west of the current resource. Anomalies 1-4 are over a strike of ~1km.

CARLOW WEST GOLD PROJECT (Part of the Greater Carlow Area)

RC drilling at Carlow West (12km west of Carlow Castle and 25km south-east of Karratha, **Figure 6**) was completed with an 11 hole, 550m drill traverse through a section of the prospect that retuned rock chip assays of 1 to **9.89 g/t Au** as reported to the ASX on 5 November 2018. An RC drilling rig post quarter end started drilling the remainder of the 1.8km strike extent of the Carlow West target (see **Figure 4**).



Figure 4: Carlow West rock chip results and planned Aircore drilling. Central high grade rock chip line over 200 metres will be RC drilled. Results previously released to the ASX on 5 November 2018 (and the project was referred to as Patersons Hut).



PATERSON CENTRAL GOLD COPPER PROSPECT

The Paterson Central project covers 605 km² and is located approximately 40km east of Newcrest Mining's multi-million-ounce Telfer Gold-Copper mine and is contiguous to the Havieron gold and copper discovery ("Havieron") by Greatland Gold Plc (**Figure 5**).

Based on magnetic and gravity survey results, Artemis has identified thirteen (13) targets within the Patersons Central project (E45/5276). These targets will vary in priority as more exploration information comes to hand.

Reprocessing of the Moodoo NC87-13, a 1987 Seismic line (ASX Announcement 12 December 2019) which coincidently covers the Company's wholly owned Paterson Central project, has shown folding and complexity in the basement which has been supported by drilling information released in Newcrest's public reports.

A Geochemistry program has been designed to cover seven (7) of the thirteen (13) targets identified to date. The seven (7) targets surround the Havieron discovery. As a first stage, orientation geochemistry samples were taken for MMI and Ionic Leach[™] assaying techniques. The results have been received and interpreted, with Ionic Leach[™] selected as the preferred method. 457 samples were taken at Paterson Central, to the north of Havieron, before significant state-wide wet weather halted the geochemical sampling program. The techniques being employed require very dry sample conditions as they are looking for very low concentrations of metal ions to be present through 400m of cover. Before continuing with the sampling program, the results of the 457 samples will be assessed.

Given the substantial progress being made using the primary vectoring tool, geophysics, the Company foresees no significant delays to the proposed inaugural drill campaign at Paterson Central and remains on track to complete its final drill design in the coming weeks. Drilling is anticipated to start in August, subject to local conditions.

A full review of targets is underway and a release will be made once these are finalised, with an update on target names.





Figure 5: Artemis Resources' Paterson Central tenement E45/5276 (formerly called Armada) that surrounds the Havieron Discovery on 3 sides. 3 Targets (Kzinti, Bandi and Bolian) are immediately north. Ranking of targets will change as more exploration information comes to hand. The proposed Geochemistry program target areas are highlighted on the right-hand side.







Munni Munni PGE Project

The Munni Munni Reverse Circulation (RC) drilling programme of 12 drill holes for 1,928 metres has been completed, with drill holes spread through the entire upper portion of the mineralisation, to a maximum depth of 200 metres. Samples are being processed at ALS Global with results pending.

Summary of Exploration Expenditure

A summary of exploration expenditure incurred in the quarter is outlined below:

	\$000's		
Carlow Castle West Drilling Programme	594		
Paterson Central Geochemistry Programme	50		
Munni Munni Drilling Programme	320		
Tenement rents and support costs	156		
	1,120		



CORPORATE

Health and Safety

The Company will comply with all State guidelines to ensure the health and safety of its workforce, contractors, and the community in which it operates.

There is currently no significant impact on operations as a result of COVID-19.

Capital Raise

The Company raised \$5.6m (before costs) with the placement of 79,992,856 shares at 7 cents each with International and Australian institutions and sophisticated investors on 24 July 2020.

Together with 1,640,000 shares in Novo Corporation (value at 30 June 2020 approximately \$7m), the company is well funded to execute on its planned exploration strategy.

Related party payments

Payments to related parties and their associates during the quarter of \$227,000 comprise director and nonexecutive director salaries, fees and superannuation.

DIVESTMENT AND MONETISATION OF OTHER ASSETS

Artemis' management team and advisers have also been working on a number of strategies with a view to extracting the maximum value from the Company's valuable non-core assets which it has acquired over the last several years.

Artemis has received a number of incomplete proposals in relation to certain non-core assets and it will be pursuing these proposals vigorously to deliver value to all shareholders.

Projects which are currently under review by the company include:

- Mt Clement Gold (Post period sold to Norther Star Resources for \$344,000 + 1% NSR)
- Whundo Copper mine (near Radio hill processing facility)
- Ruth Well Nickel and copper project
- Munni Munni –platinum/palladium (PGE) deposit (Subject to proposed Empire transaction)

Further details regarding the above projects will be announced to the market once definitive agreements have been finalised.

About Artemis Resources

Artemis Resources (ASX: ARV; FRA: ATY; US: ARTTF) is a Perth-based exploration and development company, led by an experienced team that has a singular focus on delivering shareholder value from its Pilbara gold projects – the Greater Carlow Gold Project in the West Pilbara and the Paterson Central exploration project in the East Pilbara.

For more information, please visit www.artemisresources.com.au

This Report was approved for release by the Board.



All tenements are in Western Australia

Project	Tenement	Status	Company	Project	Tenement	Status	Company		
Purdy's Reward				Sing Well	P47/1622	Live	KML No 2 Pty Ltd		
	L47/782	Pending	KML No 2 Pty Ltd		P47/1112	Live	KML No 2 Pty Ltd		
Carlow Castle	E47/1797	Live	KML No 2 Pty Ltd		P47/1126	Live	KML No 2 Pty Ltd		
	L4//1/9/	Live	RIVIE NO 2 F ty Etu		P47/1925	Live	KML No 2 Pty Ltd		
Ruth Well	P47/1929	Live	KML No 2 Pty Ltd	Nichol River	E47/2716	Live	KML No 2 Pty Ltd		
	E47/3719	Live	KML No 2 Pty Ltd		M47/1527	Live	KML No 2 Pty Ltd		
	E47/34871	Live	Elysian Resources Pty Ltd		E47/3373	Live	KML No 2 Pty Ltd		
	E47/33411	Live	Hard Rock Resources Pty Ltd	Balmoral	E47/3707	Live	KML No 2 Pty Ltd		
47 Datab	E47/33611	Live	Elysian Resources Pty Ltd		E47/3708	Live	KML No 2 Pty Ltd		
47 Patch					E47/3709	Live	KML No 2 Pty Ltd		
	E47/35641	Live	Elysian Resources Pty Ltd	Greater Munni Munni	E47/3545	Pending	KML No 2 Pty Ltd		
	E47/33401	Live	Hard Rock Resources Pty Ltd		E47/3546	Live	KML No 2 Pty Ltd		
	E47/33901	Live	Hard Rock Resources Pty Ltd		E47/3547	Live	KML No 2 Pty Ltd		
Elvaion / Hand Deals	P47/18321	Live	Hard Rock Resources Pty Ltd		E47/3612	Live	KML No 2 Pty Ltd		
Elysian / Hard Rock	P47/1881 ¹	Live	Hard Rock Resources Pty Ltd		E47/3160	Live	KML No 2 Pty Ltd		
	E47/35341	Live	Jindalee Resources Pty Ltd		E47/3322 ⁵	Live	Karratha Metals Pty Ltd		
	E47/35351	Pending	Jindalee Resources Pty Ltd		M47/123⁵	Live	Platina Resources Ltd		
	P47/18331	Pending	Jindalee Resources Pty Ltd	Munni Munni	M47/124⁵	Live	Platina Resources Ltd		
	L47/820	Pending	KML No 2 Pty Ltd		M47/125⁵	Live	Platina Resources Ltd		
Whundo	L47/163	Live	Fox Radio Hill Pty Ltd		M47/126⁵	Live	Platina Resources Ltd		
	M47/7	Live	Fox Radio Hill Pty Ltd	Mt Clement	M08/1916	Live	Artemis Resources Ltd		
	M47/9	Live	Fox Radio Hill Pty Ltd		M08/1926	Live	Artemis Resources Ltd		
	M47/161	Live	Fox Radio Hill Pty Ltd		M08/1936	Live	Artemis Resources Ltd		
Radio Hill	M47/337	Live	Fox Radio Hill Pty Ltd						
	L47/93	Live	Fox Radio Hill Pty Ltd						
Weerianna	M47/223 ²	Live	Western Metals Pty Ltd	¹ – 70% Artemis – Karratha Gold Joint Venture					
Silica Hills	M47/177 ¹	Live	Western Metals Pty Ltd	² – 80% Artemis					
	M47/2881	Live	Western Metals Pty Ltd	³ – 70% Artemis					
	M47/93⁴	Live	Shear Zone Mining Pty Ltd	⁴ – 34% Artemis					
	M47/2324	Live	Shear Zone Mining Pty Ltd	⁵ – 70% Artemis – Joint Venture with Platina Resources					
	L47/781	Pending	KML No 2 Pty Ltd	⁶ – 80% Artemis - Joint Venture with Northern Star Resources ⁶					
	E47/1746	Live	KML No 2 Pty Ltd						
Telfer	E45/5276	Live	Armada Mining Pty Ltd						

