## ASX Announcement

June 2022 Quarterly Activities Report



29 July 2022

Artemis Resources Limited ("Artemis" or the "Company") (ASX / AIM:ARV, Frankfurt: ATY, US OTCQB: ARTTF) is pleased to release its Quarterly Activities Report for the guarter ended 30 June 2022 (the "June Quarter").

## **Overview**

The June Quarter saw a significant number of assay results from the Greater Carlow Project returned for holes drilled in the March Quarter. Numerous excellent gold and copper grades were reported, further demonstrating the excellent potential at Greater Carlow. Following the receipt of the final batch of assays it is expected that Artemis will release an updated resource statement for the Greater Carlow Project. Final assays for the Chapman Prospect located ~1km to the south of Carlow are also pending. Artemis is looking forward to finalising its plans for the next phase of exploration at Greater Carlow and will update shareholders accordingly. Work at Paterson Central began in the quarter and is expected to continue for much of the rest of 2022.

## Financial Resources

Artemis is well funded with over A\$11m in financial resources comprising cash of ~A\$6m at the end of the June Quarter and this is supplemented by over A\$5m worth of shares in several listed entities. Some of these shares are free trading and some subject to short-term and longer-term escrow provisions.

# **Paterson Project**

Camp establishment and logistics for the 2022 drill season were put in place during the Quarter and post-period the Paterson diamond drilling programme got underway.

Despite attractive geological observations the results from the first phase of drilling did not indicate the presence of gold in the drill core. Regardless the Company is highly encouraged by the geology which is suggestive of being proximal to a mineralised system. Notably brecciated veins and un-mineralised sulphides were encountered in hole GDRCD007.

In total a further ~3,000m of drilling is expected to be completed at Apollo and Atlas as part of the Phase 1 programme which began in late 2021, to continue to test the wide-spaced geophysical targets at Apollo and Atlas.

Phase 2 of ~4,500m is being scoped to continue to drill at Apollo and Atlas, and also to test The Company's other highly prospective targets of Juno, Voyager, Enterprise and likely continue for much of the remainder of 2022.

# Carlow Castle Au-Cu-Co Project

Assay results have been returning throughout this quarter from the 7,811m drill programme completed in the first quarter of 2022.

An additional 10 holes for 1,836m of RC were completed in the June guarter targeting northern extension of the Crosscut Zone, Chapman and isolated VTEM targets.

## **Crosscut Zones**

Additional areas of interest were identified by structural interpretation and coincident SAM survey, and are known as Crosscut, Crosscut 2 and Crosscut 3, running from west to east respectively.

Diamond hole 22CCRD008 intersected zones of sulphide in vein breccias, from 255.8 - 272.4m. This wide interval has an upper and lower zonation. Assay results from the diamond core returned results of:

- 16.6m @ 2.73% Cu, 1.19g/t Au, 0.049% Co from 255.8m
  - o Including 1.18m @ 15.65% Cu, 5.40g/t Au, 0.090% Co from 256.8m and
  - o Including 3.14m @ 5.90% Cu, 3.30g/t Au, 0.050% Co from 265.9m

RC holes drilled 40m to the south of the diamond hole also intersected sulphides of equal tenor, returning results of:

- 13m @ 2.58% Cu, 0.62g/t Au, 0.057% Co from 130m; Hole ARC387
  - o Including 4m @ 7.59% Cu, 1.81g/t Au, 0.148% Co from 131m
- 15m @ 2.02% Cu, 0.63g/t Au, 0.171% Co from 299m; Hole ARC389
  - o Including 1m @ 6.29% Cu, 1.9g/t Au, 0.200% Co from 300m
  - o Including 1m @ 6.32% Cu, 0.33g/t Au, 0.044%Co from 307m
  - o Including 1m @ 3.40% Cu, 2.08g/t Au, 0.687% Co from 309m

Drilling has now tested Crosscut with extensions to the original mineralisation to the north, with some holes returning values of:

- 8m @ 2.35% Cu, 5.01g/t Au, 0.400% Co from 80m; Hole ARC366
- 8m @ 0.98% Cu, 1.08g/t Au, 0.020% Co from 167m; Hole ARC367

Hole ARC389 may have intersected mineralisation related to Crosscut 2 with a result of:

4m @ 1.02% Cu, 0.76g/t Au, 0.016% Co from 135m; Hole ARC389

No significant results retuned from Crosscut 3.

Further work is being planned to continue building the resource potential at the Crosscut Prospects. The Company believes these areas have significant potential to add shallow, high grade tonnes to the Greater Carlow Project.

#### PATERSON CENTRAL

The next exploration phase of drilling at Paterson has commenced with additional holes planned at both Apollo and Atlas. The focus of the exploration is to test various geophysical targets mostly of magnetic and gravity origins that may indicate breccia, vein and massive sulphides typical of intrusion-related and skarn styles of mineralisation. Location of targets are shown in Figure 1.

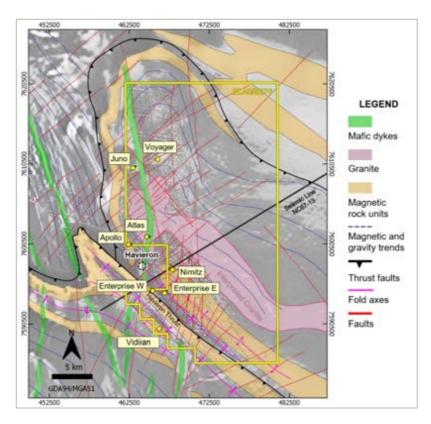


Figure 1: Location of priority targets at Paterson Central.

Encouraged by the presence of altered diorite and alteration mineral assemblage and highsulphide content of selected core zones encountered in GDRCD007 the Company's plans remain unchanged and involve systematic testing of our numerous high-priority targets during the remainder of 2022.

Work continues on non-priority Paterson core, drilled last quarter for selective sampling and interpretation. This target is an extension of a modelled gravity ridge extending down to the Newcrest/Greatland Havieron north target.

A similar trend in the magnetics can be seen in Figure 2.

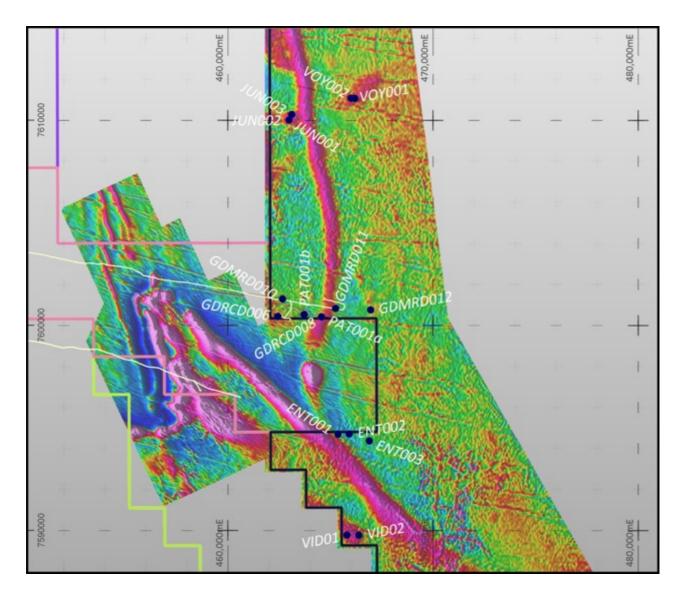


Figure 2: Location of drill collars with respect to tenement outlines and magnetic anomalies

Table 1: List of drill holes for the Paterson program. Note holes are labelled by priority, whereby priority 2 holes may not be drilled based on success of priority 1 holes.

PROPID	EastWGS84	NorthWGS84	RL(m)	Dip	AzimWGS	НТуре	MR (m)	Dia (m)	EOH (m)	Rationale	Priority
GDRCD006	462427	7600442	-307	-60	89.3		0	240	240	Extend hole to test mag high	1
GDRCD008	464560	7600420	267	-75	80	MD	400	550	950	Converging mag and gravity highs	1
PAT001a	464560	7600420	267	-65	275	MD	400	600	1000	Drilling back towards GDRCD007 over mag high	1
PAT001b	463715	7600532	267	-60	90	MD	400	600	1000	Drill testing the sharp vertical gravity edge and mag high to the east	2
GDMRD010	462659	7601294	263	-60	230	MD	400	525	925	Testing a mag and gravity high to the west	1
GDMRD011	465246	7600830	267	-70	270	MD	400	500	900	Drilling to the west testing subtle gravity and mag high, part of the N-S fault	1
GDMRD012	466955	7600760	267	-80	90	MD	400	525	925	Targeting gravity high termination	2
JUN001	462975	7610022	267	-80	90	MD	400	450	850	Targeting mag high anomaly on the edge of the N-S fault	1
JUN002	462975	7610022	267	-60	220	MD	400	600	1000	Testing the gravity high that is offset to the southwest	2
JUN003	463110	7610290	267	-65	90	MD	400	550	950	Targeting mag high anomaly on the edge of the N-S fault further north	2
VOY001	466001	7611082	267	-70	80	MD	400	450	850	Targeting peak of mag high with weak gravity lows	1
VOY002	466182	7611074	267	-65	90	MD	400	450	850	Targeting peak of mag high with weak gravity lows	2
ENT001	465363	7594693	267	-60	260	MD	400	550	950	Targeting an intense mag high with associated gravity	1
ENT002	465913	7594709	267	-60	260	MD	400	600	1000	Targeting an intense mag high with associated gravity	1
ENT003	466892	7594371	267	-60	260	MD	400	450	850	Testing near proximity to mag and gravity high	2
VID01	465799	7589777	267	-75	90	MD	400	450	850	Testing mag peak in gravity trough	2
VID02	466375	7589777	267	-65	90	MD	400	450	850	Testing gravity peak in mag trough	2

## **CARLOW CASTLE PROJECT**

The recent follow up drilling programme that was completed in the June Quarter concentrated on the Crosscut, Chapman and a VTEM target area named Marillion. The programme comprised 10 holes for 1,836m of RC. A total of 3,805 samples, inclusive of QAQC, were collected and sent for analysis.

Discrepancy between the drilling metres and the Number of Samples is due to a dispatch lag period from the previous quarter, as drilling continued into the June Quarter.

Table 2: Drill statistics for June Quarterly

	No of	20( )	Diamond	No of
Location	Holes (m)	RC (m)	(m)	Samples
Crosscut	2	372	0	1907
Chapman	2	372	0	688
Carlow West	5	882	0	976
Marillion	1	210	0	234
Totals	10	1,836	0	3,805

#### **Crosscut Zone**

During the June quarter, a total of 2 holes for 372m was competed. A total of 2,594 samples were received from ALS Chemex laboratories. Drill hole collar locations are shown in Figure 3. Note that only holes ARC403 and ARC404 were drilled during the quarter, as shown in Figure 3.

The aim of this programme was to continue to test and follow trends of mineralisation and test the structural model.

The Crosscut Zone (XCZ) is defined by a parallel NW structure, hosting en echelon dilation zones that host mineralisation. The recent drilling in this area has indicated that these dilational features are striking north-south and have steep dips, usually to the east. Drilling had intersected significant sulphide zones at interpreted pierce point target zones at Crosscut, which is an encouraging result with respect to the interpretation of the targets.

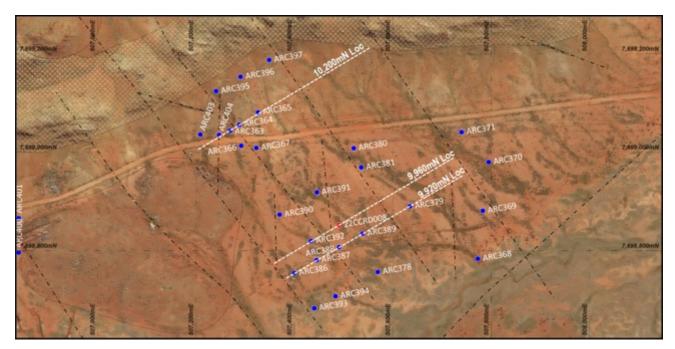


Figure 3: Location of drill holes at Crosscut and section lines. Note that only holes ARC403 and ARC404 were completed during the quarter period. Other holes are referenced in section figures.

#### **Diamond Hole 22CCRD008**

A diamond hole was drilled in response to the high-grade intersection in ARC344 which returned 22m @ 2.23g/t Au, 1.39% Cu, 0.457% Co from 247m. Results for this hole returned during the June quarter and the hole in section 9,960mE is shown in Figure 4.

Mineralisation style encountered in hole 22CCRD008 is quartz-carbonate infill breccias and veining with sporadic agglomerations of sulphides and massive sulphide infills. The visible sulphides include chalcopyrite, pyrrhotite and pyrite. These are shown in Figures 5 and 6.

Structural information suggests that the mineralisation does strike N-S locally, with vein sets typically dipping steeply to near vertically east.

Long-section through the Crosscut zone seems to indicate that the plunge of mineralisation is moderate to steep to the south.

Best intersection in the diamond core was 16.6m @ 2.73% Cu, 1.19g/t Au, 0.049% Co from 255.8m. Table of results are noted below:

Table 3:Significant intersections for diamond hole 22CCRD008

Significant Intersection 0.3g/t Cu cutoff 2m internal dilution							
HoleID		From (m)	To (m)	DHWidth	Cu (%)	Au (g/t)	Co (%)
22CCRD008		233.06	236.78	3.72	0.32	0.07	0.032
		255.8	272.4	16.60	2.73	1.19	0.049
	Incl	256.84	258.02	1.18	15.65	5.40	0.090
	Incl	265.92	269.06	3.14	6.38	3.61	0.059
		285.79	288.88	3.09	0.58	0.29	0.030
		305.69	307.89	2.20	0.43	0.16	0.031
		309.42	315.43	6.01	0.68	0.63	0.176

Mineralisation style encountered in hole 22CCRD008 is quartz-carbonate breccias and veining with sporadic agglomerations of sulphides and massive sulphide infills. This includes visible sulphides comprising of chalcopyrite, pyrrhotite and pyrite.

Geometry of the mineralised lodes are shown in Figure 4 with core photos of the mineralisation shown in Figure 5 and 6.

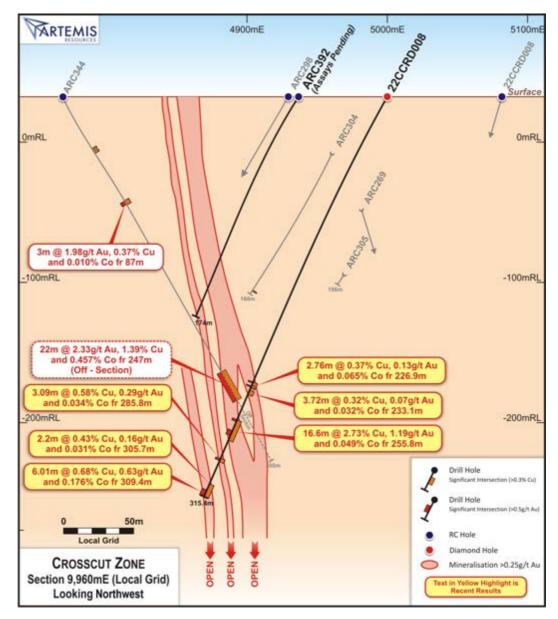


Figure 4: Section 9,960mE showing significant intersections for hole 22CCRD008. High grade intersections for ARC344 included for comparisons. Hole ARC392 drilled updip from the massive sulphide occurrence is pending assay results.



Figure 5: Part of the upper zone of the broader 16.6m showing the massive sulphide interval with brecciated upper contact which returned a result of 1.18m @ 15.65% Cu, 5.40g/t Au, 0.090% Co from 256.84m.



Figure 6: 22CCRD008 (263-273.5m) lower interval of significant vein hosted sulphide forming part of the broader 16.6m interval with a significant grade of 3.14m @ 6.38% Cu, 3.61% Cu, 0.059% Co from 265.92m

Mineralisation continues until the end of the hole, as shown in Figure 7. The hole was not continued as the driller had run out of rods.



Figure 7: 22CCRD008 mineralisation occurrence at EOH 315.3m.

Two additional holes, ARC387 and ARC389 drilled on section 9,920mN Loc (40m to the south) had intersected mineralisation near the proposed pierce points. These holes are shown in Figure 8, with the mineralisation style shown in Figure 9.

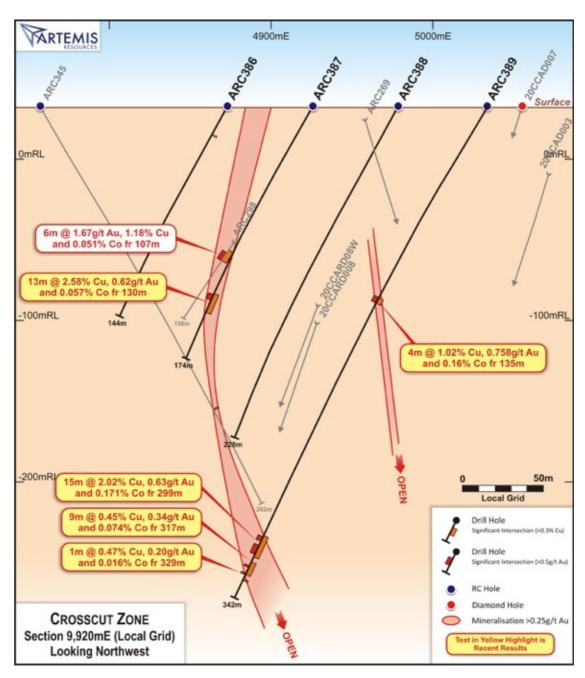


Figure 8: Section 9920mE looking Northwest showing additional holes that had intersected mineralisation 40m to the south of section 9960mE. This shows the continuation of what is the massive sulphide interval to the south through the sections. The intersection of 4m @ 1.02% Cu, 0.76g/t Au, 0.016% Co from 135m occurs in the Crosscut 2 zone.



Figure 9: Sulphides in quartz vein breccia at 310m in hole ARC389 showing similarities to the vein breccia in hole 22CCRD008

## **Testing the Northern Extension of Crosscut**

Six holes to the north (ARC 363 to 365 and ARC395 to 397) were drilled in the previous quarter based on extending the mineralisation to the north from the high-grade intersections encountered in hole ARC366 and ARC367 which returned grades of 8m @ 2.35% Cu, 5.01g/t Au, 0.400% Co from 80m and 8m @ 0.98% Cu, 0.96g/t Au, 0.020% Co from 167m, respectively as shown in Figure 13, with Figure 14 showing a cross section.

Holes ARC363, 364 and 365 encountered massive basalts and returned no significant results.

Logging of holes ARC395, 396 and 367 showed that the NE holes encountered a major fault zone and intersected pelites and black shales. Hole ARC395 showed presence of sulphides associated with fuchsite (Figure 10) with silicification and sericite alteration, (Figure 11).

Figure 12 shows a close up of the alteration and related mineralisation from hole ARC396. Assays for these holes are pending.



Figure 10: Interval of sulphide and fuchsite(?) in Hole ARC395. Assay results are pending for hole.



Figure 11: Sulphide occurrence in Hole ARC395. Assay results are pending for this hole



Figure 12: ARC396 [107-108m] 1% pyrite and pyrrhotite in silicified sericite matrix. Assay results are still pending for this hole.

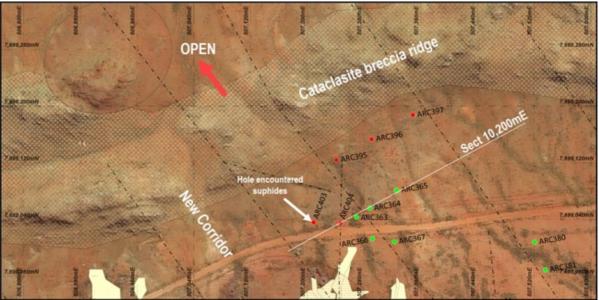


Figure 13: Showing the location of the holes to test the mineralisation to the north. ARC403 encountered sulphides but assays are pending. Interpretation of the magnetics have identified similar NW structures to the west and NW along strike. North of the cataclasite ridge is considered prospective for mineralisation.

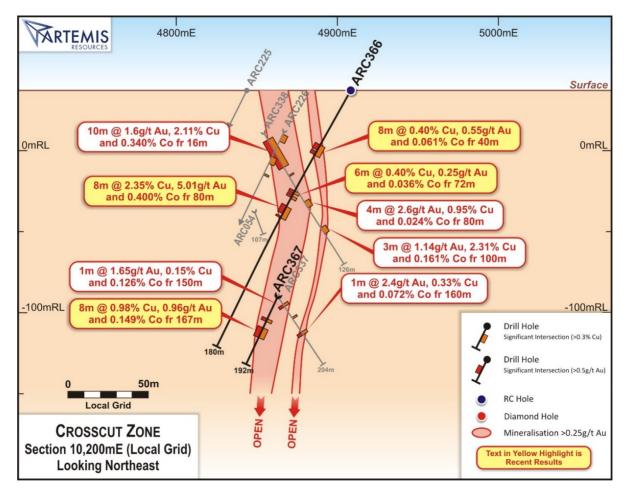


Figure 14: Section through 10,200mE Local Grid showing high-grade intersections for ARC366 and ARC376. Refer to Figure 3 for section location.

An additional hole ARC403 had intersected sulphides (Figure 15) consistent with those in the high-grade zones to the south, meaning that the mineralised envelops had 'stepped' over to the west, in true en echelon form. Interpretation is on-going.



Figure 15: Sulphide occurrence in ARC403 comprising pyrite and pyrrhotite.

Not only is it common for mineralised structures to anastomose downdip, they also tend to stagger or step sideways within the confined margins of the NW zones.

It appears that the Crosscut Zone is copper-rich, with zones of higher-grade Au.

Additional drilling required to extend the Crosscut Zone to the north. Planning is in progress to determine the interaction with the East Zone. There is now growing confidence in the interpretation, however there are still issues with drill targeting. It is now believed that the mineralisation in Crosscut plunges moderate to steeply to the southeast, towards Carlow East Main Zone.

## Additional holes drilled to test SAM Survey

A series of holes were drilled to the east of Crosscut to test additional structures identified from magnetic interpretation and SAM survey anomalies.

No significant results were reported from holes ARC379, 380 and 381. These holes can be located in Figure 3.

No significant results were reported from holes ARC368 to ARC371. It is noted that ARC370 and ARC371 had intersected unusually high magnetite occurring as very fine layers. It has been noted as a komatiite, however Ni values are unusually consistent through this unit at an average of around 0.14% Ni, with Cr showing a zonation, with high values of around 0.125%

Ni and Cr shows a distinct segregation to the NE and indicates the presence of ultramafics in the system, however not economically mineralised.

SAM was successful in identifying highly magnetic and conductive units to the east of Crosscut.

### **Carlow West**

Five holes were drilled in the western zone, as shown in Figure 16 to test the high-grade shoots geometry and assays for these holes are pending.

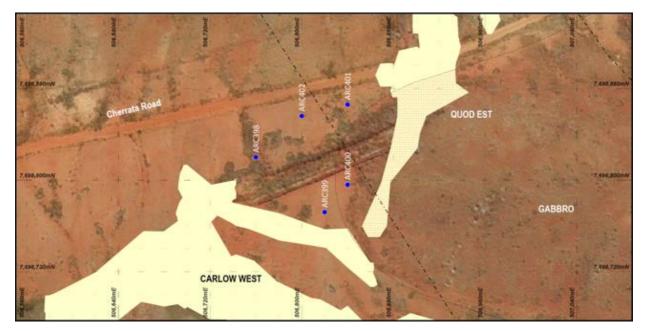


Figure 16: Location of Carlow West drill holes. Note trend of a NW structure in the vicinity of ARC401. Yellow solids are Carlow mineralised polygons.

All holes except ARC400 hit significant sulphide mineralisation with Figures 17, 18 and 19 showing the part of the mineralised intervals for the series of holes.



Figure 17: Sulphide mineralisation in Hole ARC398 from 99 to 103m



Figure 18: Mineralisation occurrence in ARC401 showing some 'massive' style of sulphides



Figure 19: Additional mineralisation in hole ARC401 from 159 -160m

It is possible that hole ARC401 has intersected mineralisation obliquely that is related to the NW structure as interpreted from magnetics.

Once assays results are received, additional work will to be generate further drill targets to test this new NW structure.

Table 4: Significant assay results for the Crosscut Zone for drill holes received to date

ARC366  ARC369	40 72 83 83 85 119 125 149 161	48 78 91 <i>84</i> 86 121 126	8 6 8 1 1 2	Incl Incl	0.40 0.40 2.35 4.03 9.02	0.55 0.25 <b>5.01</b> 9.04	0.061 0.036 <b>0.400</b> <i>0.377</i>
	83 83 85 119 125 149 161	91 84 86 121 126	8 1 1		2.35 4.03	5.01 9.04	0.400
	83 85 119 125 149 161	84 86 121 126	1 1		4.03	9.04	
	85 119 125 149 161	86 121 126	1				0.377
	119 125 149 161	121 126		Incl	9.02		0.377
	125 149 161	126	2			11.25	1.26
ARC369	149 161				0.31	0.08	0.008
ARC369	161	450	1		0.35	0.06	0.011
ARC369		150	1		0.48	0.31	0.060
ARC369		164	3		0.56	0.12	0.047
ARC369	167	175	8		0.98	0.96	0.149
	227	228	1		1.64	0.02	0.004
ARC381	259	260	1		1.00	3.41	0.082
ARC386	19	20	1		0.30	0.01	0.023
	89	90	1		0.70	0.26	0.005
ARC387	130	143	13		2.58	0.62	0.057
	131	135	4	Incl	7.59	1.81	0.148
ARC389	135	139	4		1.02	0.76	0.016
	299	314	15		2.02	0.63	0.171
	300	301	1	Incl	6.29	1.9	0.2
	307	308	1	Incl	6.32	0.33	0.044
	309	310	1	Incl	3.4	2.08	0.687
HoleID	From (m)	To (m)	DHWidth		Cu (%)	Au (g/t)	Co (%)
	317	326	9		0.45	0.34	0.074
	329	330	1		0.47	0.20	0.016
ARC390	48	50	2		0.52	0.39	0.049
	76	77	1		0.88	2.91	0.029
	98	99	1		0.33	0.07	0.008
	104	110	6		0.85	0.26	0.027
	107	108	1	Incl	3.47	0.69	0.037
	150	152	2		0.31	0.04	0.015
ARC391	143	147	4		1.11	0.39	0.099
ARC392	130	141	11		0.99	0.75	0.037

## **Thorpe Prospect**

No recent work completed on this prospect.

## **Mineral Resource Estimate (MRE) UPDATES**

Work continues apace on the resource update iteration for the Carlow Project

#### **Paterson Access Works**

#### E45 / 5276 - Paterson

#### Juno/ Voyager:

34km of track from Minyari track area to E45/5276 was previously a two wheel track, however it is now overgrown. Various work streams are underway to ensure it is in a usable state when the drill rig moves to test these high- priority targets, (Figure 25).

#### **Enterprise:**

Newcrest Mining Limited (ASX:NCM) ("Newcrest Mining") have assisted organising access for Artemis to be able to get to Enterprise. This will involve moving through their mining lease (Figure 25).

## Atlas/ Apollo:

Durock Drilling are currently drilling in the Atlas/Apollo area. An update on progress will be provided to shareholders as and when material information comes to hand, (Figure 25).

#### Viidian:

It is envisaged that there will be an access track from Punmu Rd to the prospect of Viidian (south of Enterprise). The area at Viidian will be a larger rectangle to accommodate a minimum of two drill holes, (Figure 25).

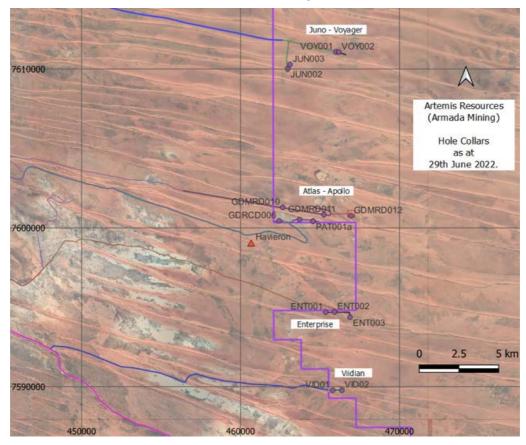


Figure 25: Current collars at Paterson showing Northern Track (blue) and proposed Viidian track (also blue) from Punmu Rd. (pink)

### E47/1797- Carlow North

Heritage survey request submitted 23 May 2022 with a budget estimate received 2 June 2022.

An outline for the survey is shown in Figure 26.

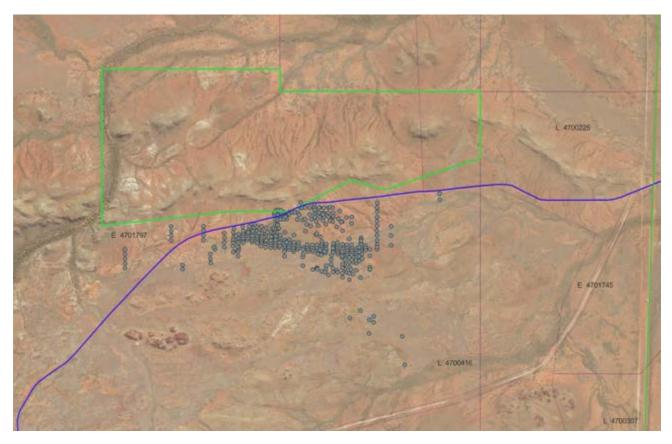


Figure 26: showing Carlow North survey area (green) and hole collars at Carlow Castle area.

### E47/1746, E47/3719 – Osborne JV Prospect (GreenTech Metals Limited earn in to 51%)

A Heritage survey request submitted in February 2022, with the Heritage report being received in late May 2022.

Having received the final report for the recent heritage clearance survey, GreenTech announced on 30 June 2022 that it had commenced the first of up to three reverse circulation (RC) drill holes designed to test the shallowest portion of the Osborne nickel sulphide target.

Drilling commenced using Egan Drilling and Field crew by Newexco.

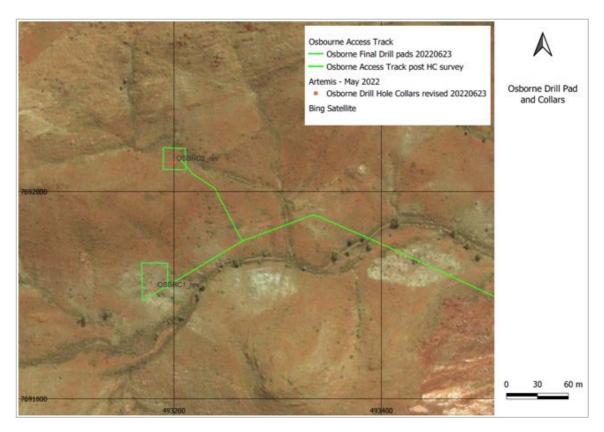


Figure 27: showing Osborne revised drill pads and hole collar location

## M47/161 - Radio Hill ("RH")

Proposal to re-evaluate the plant and feasibility on re-processing the RH tailings.

As part of an on-going expenditure commitment, planning of two holes to test a soil anomaly.

#### **Exploration Expenditure**

The Company spent ~\$1.7 million on exploration in the quarter, principally on heritage and preparation costs for Paterson Central drilling (\$0.3m) and drilling and assay costs for Carlow Castle (\$0.8m), and \$0.6 on other projects.

#### **CORPORATE**

#### **Appointment of Director**

On 4 July 2022 the Company appointed Vivienne Powe as a Director of the Company. Vivienne is a metallurgical engineer and highly experienced senior executive with a strong track record of creating shareholder value in top tier, global mining and oil & gas companies.

Vivienne is currently Chief Executive Officer, Investments for Perenti Group (ASX: PRN). Prior to joining Perenti, she has served in senior executive and leadership roles in private and listed organisations which have included Global Advanced Metals and BHP as well as having worked at Iluka Resources, Woodside Energy and Renison Goldfields Consolidated.

Vivienne holds a Bachelor of Engineering degree (Metallurgical Engineering, with Distinction) from the Royal Melbourne Institute of Technology, a Graduate Diploma in Applied Finance & Investment from FINSIA and a Master of Business Administration (Technology Management) from Deakin University.

#### **EIS Funding**

A total of \$132,000 was received from the Department of Mines, Industry Regulation and Safety (DMIRS) as part of the Exploration Incentive Scheme (EIS) Western Australia Government funding grant.

#### Sale of Investments

The Company sold ~26 million shares in Thor Mining Limited during the guarter realising

#### Other

The Company paid directors salaries and superannuation for the quarter in the amount of \$146,000.

#### **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 has been approved for release by the Board.

#### COMPETENT PERSONS STATEMENT WEST PILBARA:

The information in this report that relates to Exploration Results complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Mr. Steve Boda, who is a Member of the Australasian Institute of Geoscientists (AIG). Mr Boda is an employee of Artemis Resources Limited. Mr Boda has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Boda consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Table 5: Table showing the collar locations and hole attributes for Carlow program

HoleID	Туре	Easting GDA94	Northing GDA94	RL (m)	Dip	Azim	EOH (m)
ARC398	RC	506760	7698820	37.2	-60.4	179.3	162
ARC399	RC	506820	7698772	36.1	-59.4	180.8	192
ARC400	RC	506840	7698796	36.5	-59.4	180.3	162
ARC401	RC	506840	7698866	38.6	-58.6	179.2	180
ARC402	RC	506800	7698856	38.8	-57.7	180.1	186
ARC403	RC	507209	7699036	39.9	-56.4	243.0	150
ARC404	RC	507247	7699035	38.4	-58.2	241.3	222
ARC405	RC	507927	7697805	31.0	-59.9	129.2	162
ARC406	RC	508500	7698468	30.7	-64.1	212.4	210
ARC407	RC	508651	7697769	29.7	-69.4	210.1	210

## Tenement List - All tenements are located in Western Australia.

Project	Tenement	Status	Company
Carlow Castle	E47/1797	Live	KML No 2 Pty Ltd
	M47/161	Live	Fox Radio Hill Pty Ltd
Radio Hill	M47/337	Live	Fox Radio Hill Pty Ltd
	L47/93	Live	Fox Radio Hill Pty Ltd
Telfer	E45/5276	Live	Armada Mining Pty Ltd
Osborne Ni	E45/3719*1	Live	Karratha – ARV JV
Sing Well	P47/1622	Live	KML No 2 Pty Ltd
Sing Well	P47/1112	Live	KML No 2 Pty Ltd

## JORC Code, 2012 Edition – Table 1

## **SECTION 1 SAMPLING TECHNIQUES AND DATA**

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

Criteria		Commentary
criteria campling echniques	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	Reverse circulation drilling was used to obtain both 2m composite and one metre samples, using a 5 ¼" face sampling hammer.  Samples were collected on a 2m composite basis to a prescribed depth predetermined by previous drilling, wireframing and assay data. Once the predetermined depth is achieved, the sampling reverts to one metre sample through the ore zone to EOH.  After composite sample results received, all samples that return a value of >0.1g/t Au will result in the resplitting of the one metre bulk bags at site using a 75:25 jones riffle splitter. These one metre samples are then submitted for analysis.  All samples are pulverized to produce a 50g charge for fire assay.  Drilling sampling techniques employed at the Artemis core facility include saw cut HQ (63mm) drill core samples.  Both RC and HQ wireline core is currently being used to drill out the geological sequences and identify zones of mineralisation that may or may not be used in any Mineral Resource estimations, mining studies or metallurgical testwork.  Duplicate samples were collected at the rig from a static cone splitter, with the primary and duplicate bag both simultaneously collected from separate chutes.
Drilling echniques	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).	For RC, the cyclone was cleared between rod changes to minimise contamination.  Reverse Circulation drilling completed by Topdrill.  Drilling was completed using a truck mounted T685 Schramm rig mounted on 8x8 trucks  This can produce 1000psi/2700CFM with an axillary booster which is capable of achieving dry samples at depths of around 300m.
	, , , , , , ,	Diamond was drilled by a truck mounted Sandvik DE880.
Orill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Recoveries are recorded on logging sheets along with encounters with water and whether the samples are dry, moist or wet.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Drilling recoveries for Reverse Circulation drilling were >80% with some exceptions that maybe caused by loss of return through faults or encounters with water.
	Whether a relationship exists between	>90% of samples returned dry.
	sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Statistical analysis shows that no bias of grade exists due to recoveries
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate	RC samples were collected from the static cone splitter as two samples, one bulk sample and one primary (analytical) sample.

Criteria Commentary Mineral Resource estimation, mining The bulk samples are one metre splits. studies and metallurgical studies. These bags are then placed in neat rows of 50 bags each Whether logging is qualitative or clear of the rig for safety reasons. quantitative in nature. Core (or costean, A field technician mixes the bag by hand before taking a channel, etc) photography. sample using a sieve and sieves the sample to remove The total length and percentage of the relevant intersections logged. The sieved sample is then transferred to a wet sieve in a bucket of water, and the sample is sieved further until rock fragments are clearly visible. These rock fragments are then logged by the site geologist, taking note of colour, grainsize, rock type, alteration if any, mineralisation if any, veining if any, structural information if notable and any other relevant information. This information is then written down on pre-printed logging sheets, using codes to describe the attributes of the geology. A representative sample is transferred to pre-labelled chip trays into the corresponding depth from where the sample was drilled from. The remainder of the sample from the sieve is then transferred into a core tray that has been marked up by depths at metre intervals. An identification sheet noting the hole number and fromto depths that correspond to each tray is then written up and placed above the tray and a photograph is taken of the chips. The hole is logged in its entirety, hence 100% The geological data would be suitable for inclusion in a Mineral Resource Estimation (MRE) **Sub-sampling** If core, whether cut or sawn and whether RC samples were collected on the drill rig using a cone techniques and quarter, half or all core taken. splitter. If any mineralised samples were collected wet sample these were noted in the drill logs and database. If non-core, whether riffled, tube sampled, preparation rotary split, etc and whether sampled wet The RC drilling rig is equipped with a rig-mounted cyclone and static cone splitter, which provided one bulk sample of or dry. approximately 20-30 kilograms, and a sub-sample of For all sample types, the nature, quality approximately 2-4 kilograms for every metre drilled. and appropriateness of the sample preparation technique. Field QC procedures involve the use of Certified Reference Materials (CRM's) as assay standards, along with Quality control procedures adopted for all duplicates and blank samples. The insertion rate of these sub-sampling stages to maximise was approximately 1:20. representivity of samples. For RC drilling, field duplicates were taken on a routine Measures taken to ensure that the basis at approximately 1:20 ratio using the same sampling sampling is representative of the in-situ techniques (i.e. cone splitter) and inserted into the sample material collected, including for instance results for field duplicate/second-half sampling. Primary and duplicates results have been compared. The sample sizes are appropriate, representative and are Whether sample sizes are appropriate to the grain size of the material being considered more than adequate to ensure that there are sampled. no particle size effects relating to the grain size of the mineralisation. Quality of assay The nature, quality and appropriateness No assays released in this report. data and of the assaying and laboratory procedures laboratory tests used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the

Criteria		Commentary
	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.	
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.  The use of twinned holes.	Sampling was undertaken by field assistants supervised by experienced geologists from Artemis Resources. Significant intercepts were checked by senior personnel who confirmed them as prospective for gold mineralisation.
	entry procedures, data verification, data storage (physical and electronic) protocols.	No twin holes using RC was completed in this program.
		Electronic data capture on excel spreadsheets which are then uploaded as .csv files and routinely sent to certified database management provider.
	Discuss any dajustiment to assay data.	Routine QC checks performed by Artemis senior personnel and by database management consultant.
		PDF laboratory certificates are stored on the server and are checked by the Exploration Manager.
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.	A Garmin GPSMap62 hand-held GPS was used to define the location of the initial drill hole collars. Standard practice is for the GPS to be left at the site of the collar for a period of 5 minutes to obtain a steady reading. Collar locations are considered to be accurate to within 5m.
	Specification of the grid system used.  Quality and adequacy of topographic control.	A high-quality downhole north-seeking multi-shot or continuous survey gyro-camera was used to determine the dip and azimuth of the hole at 30m intervals down the hole
	control.	The topographic surface was calculated from the onsite mine survey pickups and subsequently verified by RTK GNSS collar surveys.
		Zone 50 (GDA 94).
		Surface collar coordinates are surveyed via RTK GNSS with 1cm accuracy by a professional surveying contractor.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	In certain areas, current drill hole spacing is variable and dependent on specific geological, and geochemical targets.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity	A nominal 40x20m drill spacing is considered adequate to establish the degree of geological and grade continuity appropriate for JORC (2012) classifications applied.
	appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	No sample compositing to date has been used for drilling completed by Artemis. All results reported are the result of 1 metre downhole sample intervals.
	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.	Drill holes were designed to be perpendicular to the strike of known mineralisation. Due to the structural and geological complexity of the area, mineralisation of unknown orientation can be intersected.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this	

Criteria		Commentary
	should be assessed and reported if material.	
Sample security	The measures taken to ensure sample security.	The chain of custody is managed by the supervising geologist who places calico sample bags in polyweave sacks. Up to 10 calico sample bags are placed in each sack. Each sack is clearly labelled with:
		Artemis Resources Ltd
		Address of laboratory
		Sample range
		Samples were delivered by Artemis personnel to the transport company in Karratha and shrink wrapped onto pallets.
		The transport company then delivers the samples directly to the laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Data is validated upon up-loading into the master database. Any validation issues identified are investigated prior to reporting of results.

## **SECTION 2 REPORTING OF EXPLORATION RESULTS**

(Criteria listed in the preceding section also apply to this section.)

Criteria		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.	Drilling by Artemis was carried out on E47/1797 – 100% owned by Artemis Resources Ltd. This tenement forms a part of a broader tenement package that comprises the West Pilbara Project.  This tenement is in good standing.
	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.	
Exploration done	Acknowledgment and appraisal of	Paterson Project
by other parties	exploration by other parties.	Majority of the exploration for gold was completed by Newcrest and its predecessor Newmont, within the area encompassing E45/2418, 45 km to the east of Telfer gold mine known locally as Anketell, commenced in 1986 and progressed in three main phases to 1996.
		1986-1989: Originally part of Newmont's Canning tenement group, surface geochemical sampling (mainly BLEG) and RAB and RC drilling were undertaken in the Anketell area following the recognition of a suite of distinctive and intriguing aeromagnetic anomalies. Results from this work were not encouraging and the tenements were surrendered.
		1991-1992: New tenement coverage was obtained by Newcrest following detailed interpretation of the aeromagnetics and recognition that the earlier work had not, in fact, tested the magnetic anomalies because of thick Phanerozoic cover. Diamond drilling was used to test several of the anomalies, with mineralization of potential economic significance being intersected in two holes at the Havieron Prospect. Unfortunately, the Proterozoic-hosted

Criteria Commentary

> mineralization is concealed beneath +400m of post-mineral cover, and no further work was done in this period.

> 1995: The project was again revived, with a program of diamond drill testing of additional magnetic targets in the northern parts of the Anketell area without success, and at the Havieron Prospect with only minor success.

> 1997: No exploration was undertaken on M45/605. The tenement was included in a package of Telfer tenements on offer for farm-out.

> 1998-2001: The Havieron tenement M45/605 was included as part of the Normandy/Newcrest Crofton JV. No further field work was undertaken during this time and Normandy withdrew from the JV on 10" January, 2001. The Mining Lease was subsequently surrendered by Newcrest Mining Limited on the 19" March, 2001.

> 2003: The area was reapplied for by Newcrest Mining Limited on the 43" May, 2002 and subsequently granted by DOIR on May 8, 2003 as the Terringa Project (E45/2418) with an area of 19,600ha (196km'). The tenement has subsequently been renamed Havieron to reflect the location of the original AMAG anomaly.

> 2004: Exploration conducted on E45/2418 comprised the drilling of one (1) diamond drillhole (HACO301) for a total of 717.9m - 102m of RC and 615.9m of core. A maximum intercept of 1m @ 180 ppb from 503m dhd was recorded.

> 2005: Nine core samples from HAC0301 were submitted to Mason Geoscience Pty Ltd for thin section petrological analysis.

> 2006: An aeromagnetic survey was conducted across the entire tenement.

2007: No exploration conducted on surrendered ground.

2008: A 4 hole air core program was carried out to test a aeromagnetic anomaly.

2013 - 2015, Potash exploration by Reward Minerals concluded that the area was not prospective for potash occurrences.

2014 - Ming Gold explored on E45/3598. Work included reinterpretation of the geophysical data (magnetics, gravity and EM) along with core inspection at Havieron. Due to significant depth of cover the Proterozoic basement was not reached for several targets and in other cases it is interpreted that the drilling potentially missed the anomalies.

2018 - Tenement E45/5276 acquired by Armada Mining, subsidiary of Artemis Resources. Armada completed low detection soil sampling (MMI and Ionic leach). Three deep diamond holes were drilled in the Nimitz Prospect only 2.5km to the east of Havieron area for a total of 3,012m. Drilling programs are on-going.

#### **Carlow Project**

The most significant work to have been completed historically in the Carlow Castle area was completed by Open Pit Mining Limited between 1985 and 1987, and subsequently Legend Mining NL between 1995 and 2008.

Work completed by Open Pit consisted of geological mapping, geophysical surveying (IP), and RC drilling and sampling.

Criteria Commentary

> Work completed by Legend Mining Ltd consisted of geological mapping and further RC drilling.

> Legend also completed an airborne AEM survey over the project area, with follow up ground-based FLTEM surveying. Re-processing of this data was completed by Artemis.

> Compilation and assessment of historic drilling and mapping data completed by both Open Pit and Legend has indicated that this data is compares well with data collected to date by Artemis. Validation and compilation of historic data is ongoing.

> All exploration and analysis techniques conducted by both Open Pit and Legend are considered to have been appropriate for the style of deposit.

Geology

Deposit type, geological setting and style of mineralisation.

#### **Paterson Project**

This program has yet to define the type and style of mineralisation that is being targeted.

However, based on other styles of mineralisation located nearby, as in the Havieron Deposit, the types of mineralisation likely to be discovered include IOCG, porphyry-style mineralisation, breccia hosted Au-Cu and skarns.

Geological setting of the area includes thick units of Permian fluvioglacials which form the major component of the Phanerozoic cover sequence. Lithologies consist of tillite, sandstone and siltstone. The cover thickness increases to the east. The sandstone units are usually medium to coarsegrained, with lesser finer grained intervals and usually grey in colour. The coarser grained sandstones are occasionally brown or light brown in colour. Most of the sequence appears to be fairly flat lying. The siltstone units are light or dark grey in colour. Clasts in the tillite have been derived from a large range of rock types including calcareous sediments, sandstone and siltstone, as well as crystalline rocks such as granite and gneiss. Most of these rock fragments appear to have been derived originally from the Proterozoic, (Stewart, M.A., 2008 Annual Technical Report, Newcrest).

Occurrences of pyrite in these layers are not significant for gold and is interpreted to be diagenetic.

Drilling that was undertaken by Newcrest indicate the development of higher grade metamorphic units and granite in the north of the project area and lower grade metamorphics in the south, including the Havieron prospect The marble and quartzite at Havieron are believed to be related to the Puntapunta Formation and Wilkie Quartzite Formations, both of which are linked to the Yeneena Group. Down-hole dip measurements at the Havieron prospect suggest a northnorthwest to east-west strike to the local bedding which is in contrast to the regional west-northwest strike. The variety of dip direction in the area implies a structural complexity that is not yet fully understood, however, is consistent with the prospect representing a geological anomaly accounting for the localised mineralisation. Sulphide mineralisation at Havieron includes pyrite ± chalcopyrite occurring as breccia-fill, and occasionally, strata-bound pyrrhotite, all of which appear to be linked to gold and bismuth mineralisation, (Stewart, M.A., 2008 Annual Technical Report, Newcrest).

Criteria		Commentary
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  easting and northing of the drill hole collar  elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar  dip and azimuth of the hole  down hole length and interception depth hole length.  If the exclusion of this information is justified on the basis that the information is not Material and this	Carlow Project  The Carlow Castle Co-Cu-Au prospect includes a number of mineralised shear zones, located on the northern margin of the Andover Intrusive Complex. Mineralisation is exposed in numerous workings at surface along quartz-rich shear zones. Both oxide and sulphide mineralisation are evident at surface associated with these shear zones.  Sulphide mineralisation appears to consist of Chalcopyrite, chalcocite, cobaltite, pyrrhotite and pyrite  Drill hole information is contained within this release.
Data aggregation methods	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.  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	All intervals reported are composed of 1 metre down hole intervals for Reverse Circulation drilling.  Aggregated intercepts do include reported lengths of highergrade internal intercepts.  No upper or lower cut-off grades have been used in reporting results.
Relationship between mineralisation widths and intercept lengths	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.  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	The mineralisation in the Carlow Castle Western Zone strikes generally E-W and dips to the north at approximately -75 to -80 degrees. The drill orientation was 180 -60 dip. Drilling is believed to be generally perpendicular to strike. Given the angle of the drill holes and the interpreted dip of the host rocks and mineralisation, reported intercepts approximate true
	known, its nature should be reported.  If it is not known and only the down hole lengths are reported, there should be a	width.  True thicknesses are calculated from interpretation deriving from orientation of high-grade intervals, orientation of the

Criteria		Commentary
	clear statement to this effect (eg 'down hole length, true width not known').	main mineralised trend and its dip. This is an estimation only and can change according to additional information.
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.	Appropriate plans are shown in the text.
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.	This release reports the results of five RC holes. The significant results tabulated in the release are reported at a base grade of >0.5 g/t Au or >0.5% Cu. Internal dilution of up to 2 m may be included in an intersection.
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.	Targeting for the RC drilling completed by Artemis was based on compilation of historic exploration data, and the surface expression of the targeted mineralised shear zones and associated historic workings.
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.	Further work (RC and diamond drilling) is justified to locate extensions to mineralisation both at depth and along strike.