# ASX/MEDIA RELEASE



### LOCH LILLY DRILLING RESULTS

### Argent at a glance

ASX-listed Company focused on the expansion and development of its significant existing base and precious metal projects and to leverage its expertise to pursue value accretive acquisitions of other significant projects identified by the Company.

### Facts

ASX Codes:	ARD, ARDO <sup>1</sup>
Share price (1 November 2017):	\$0.030
Option price (1 November 2017):	\$0.005
Shares on issue:	421.4 M
Market capitalisation	\$12.6 M

<sup>1</sup> \$0.10 exercise price, 27 June 2019 expiry.

### **Directors and Officers**

Stephen Gemell Non-Executive Chairman

David Busch Chief Executive Officer

Peter Nightingale Non-Executive Director

Peter Michael Non-Executive Director

Vinod Manikandan Company Secretary

### Contact details

PRINCIPAL AND REGISTERED OFFICE

Level 2, 66 Hunter Street Sydney NSW 2000 T: +61 2 9300 3390 F: +61 2 9475 5346 E: admin@argentminerals.com.au

## Highlights:

- Both diamond holes intersected a series of porphyritic intrusives and alteration, with assays yielding positive copper-gold porphyry geochemical suite results, and Netley yielding elevated copper.
- \$141,966 rebate received for 75% of the direct per-metre drilling costs from the NSW Government – as awarded to the Loch Lilly project following the merit-based assessment by an independent panel of experts.
- Argent to earn 51% interest immediately on satisfaction of its reporting obligations under the NSW Government Cooperative Drilling grant.
- Right to earn up to 90% interest in the 1,447 km<sup>2</sup> Loch Lilly project, which hosts mineralisation potential analogous to the Mount Read Volcanics of Western Tasmania.
- Samples dispatched for petrographic study, whole-rock characterisation studies and pyrite laser-ablation studies.

Argent Minerals Limited (ASX: ARD, Argent, or the Company) is pleased to report the results of the Loch Lilly project maiden drilling programme.

#### **DRILLING RESULTS**

#### About the Netley target and the design of hole ALN001

Netley is one of four target areas defined in the Loch Lilly - Kars Belt JV area by the collaborative effort between Anglo American Exploration (Australia) Pty Ltd (AngloAmerican) and Dr. Anthony Crawford during 2014/15 before AngloAmerican exited the project as part of a global restructuring initiative. Argent designed the diamond hole ALN001 designed to test the coincident geophysical anomalies illustrated in Figure 1 and 2:







Fig 1b – Illustrating the underlying 2D residual gravity plot, and the vertical residual gravity 'slice' produced by the inversion modeling.





Figure 2a – Netley drillhole ALN001 design targeting the discrete magnetic high, a two dimensional version of the magnetic response (plan view). The plot area is indicated by the 'Target detail' square at the Netley location in Figure 6.



The Netley target was defined through 3D modelling performed by AngloAmerican on a dataset comprising a 400 station ground gravity survey, a magnetic survey, and historical drill core. Inversion modelling was conducted on available geophysical data to improve the resolution and depth expression of the magnetic response.

The modelling revealed near-coincident magnetic high and gravity low anomalies reminiscent of the scale and detail of the Northparkes mineralised finger porphyries rising from a basal monzodiorite pluton, and that historic drilling failed to intersect the magnetic source body.

At a 70° dip toward the northwest (315° azimuth), drillhole ALN001 was designed to intersect the discrete magnetic high feature illustrated in Figures 1a and 2a. This hole design also complements the test of the magnetics feature performed by drilling across the end of the gravity high ridge in the gravity low area (Figure 2b).

#### About the Netley hole ALN001 drilling results

Diamond hole ALN001 was drilled to 483.6 metres, intersecting a series of porphyritic intrusives (monzonites and diorites), strong propylitic to skarnoid alteration with lesser zones of potassic alteration (for further explanation refer to Figure 9 in Appendix 2), abundant pyrite and sparse, localised chalcopyrite (copper). More than 50% of the ALN001 drillcore was submitted for assay based on visual observations.

The diorite-gabbro dykes in the lower portion of the hole yielded assay ranges typically up to 0.01 g/t Au, 0.11% Cu, 92 ppm Zn, 136 ppm Pb, 174 ppm As, and 65 ppm Mo.

Of particular interest are the broad consistent low-level assays of the following interval:

#### 73.3 m @ 0.03% Cu from 355.7 m

incl. 0.6 m @ 0.11% Cu from 393.8 m.



Figure 3 – Photo of Netley ALN001 drillcore from 392.8 to 393.0 and 393.6 to 393.8 metres with intersected copper (chalcopyrite) highlighted within the following observed context: *Contact breccia zone between feldspar-biotite-sericite-actinolite-epidote-pyrite-chalcopyrite (Skarn) altered sandstone with pyroxene-amphibole-feldspar phyric gabbro.* 

The target magnetic and gravity anomalies illustrated in Figures 1 and 2 cannot be fully explained by the intersected geology and magnetic susceptibility readings observed in the drill hole.

The anomalous copper, together with elevated zinc to 282 ppm and molybdenum to 297 ppm could suggest that the hole intersected an outer halo of a mineralised porphyry copper system.

Further investigation is warranted in order to determine the source of the gravity and magnetic anomalies and the source of the increased base metal concentrations.

For further details refer to Appendix 2.

#### About the Eaglehawk target and the hole ALE001 design

Figures 4a, b and c illustrate the planned collar positioning and direction of drillhole ALE001 in relation to the three coincident geophysical anomalies identified within the same geographical area (the area is also indicated by the violet 'Target detail' rectangle at the Eaglehawk location in Figure 6).



Figure 4a – Eaglehawk drillhole ALE001 design in relation to chargeability high, over MIP percentage frequency effect (PFE) background (plan view).

Fig 4b Drillhole ALE001 design in relation to alteration and magnetic high ridge, over magnetics reduced to pole (RTP) background (plan view). Fig 4c Drillhole ALE001 design in relation to residual gravity high, over 0.5 km spacing residual gravity background (plan view).

At a dip of 70° in the 290° azimuth direction, diamond hole ALE001 was designed primarily to test the most compelling magnetic induced polarisation (MIP) chargeability high anomaly (Figure 4a) that is also coincident with both a magnetic high ridge (Figure 4b) and a residual gravity high (Figure 4c).

Hole ALE001 was designed to test the interpretation of the denser, more magnetic features of known basalt and andesite units and a possible interaction with a fertile porphyry intrusion that would be responsible for skarn mineralisation intersected by historical drillhole NBH004.

#### About the Eaglehawk hole ALE001 results

Designed for 500 metres, diamond hole ALE001 was drilled to 550.5 metres. The hole intersected a series of porphyritic intrusives, ranging from quartz monzonite, granodiorite and diorite in the upper section of the drillcore, to quartz monzonite, diorite and syenite in the deeper section of the drillcore.

Each of the porphyritic intrusives exhibits weak domainal propylitic alteration, and the quartz diorite intrusive from 423.4 to 536.6 metres exhibits contact skarn alteration pervading up to 15 metres into the host turbidite units.



Figure 5 - ALE001 Eaglehawk from 420.0 to 420.3 metres and 420.9 to 421.2 metres – siliciclastic mudstone with strong pervasive garnet-epidote-chlorite-barite (Skarn) alteration.

The monzonite-diorite intrusives yielded assay ranges typically up to 0.04 g/t Au, 195 ppm Cu, 158 ppm Zn, 10 ppm Pb, 6 ppm As, and 3 ppm Mo.

The granodiorite-syenite dykes typically yielded assay ranges up to 0.01 g/t Au, 24 ppm Cu, 92 ppm Zn, 15 ppm Pb, 0.4 ppm As, and 2 ppm Mo.

The skarn alteration in the contact zone between the diorite and siliciclastic turbidites yielded assay ranges up to 0.04 g/t Au, 341 ppm Cu, 84 ppm Zn, 11 ppm Pb, 8 ppm As and 2 ppm Mo.

Alteration in the area is generally weak and localised. The skarnoid alteration seen at the upper contact of a porphyritic diorite intrusive from 414.4 metres is strong in intensity and may be a localised feature to the intrusive.

Whilst the residual gravity high anomaly in the area may be explained by the concentration of volcanic intrusives, pyrite levels were insufficient to adequately explain the MIP chargeability anomaly, to generate the conductivity reading of the magnitude observed.

The drillcore petrophysical response was also insufficient to explain the magnetic high anomaly in the area.

Elevated zinc to 158 ppm could potentially indicate a distal position to mineralisation.

Given the elevated copper and gold in the context of the observed intrusives and alteration, further investigation is required to adequately test the MIP chargeability and magnetic high features.

For further details please refer to Appendix 2.

#### 75% CASH REBATE RECEIVED FOR THE DIRECT DRILLING COSTS

On 1 November 2017 the Company received bank advice that \$141,966 has been transferred to Argent's account by the NSW Government Department of Environment and Planning.

The payment is settlement of the Company's claim for 75% of the direct per-metre drilling costs for the Loch Lilly project under the NSW Cooperative Drilling funding deed.

The Loch Lilly project drilling grant was awarded on the basis of merit in a highly competitive environment where applications were assessed by an independent expert panel for demonstrated prospectivity, sound financial planning and a proven technical base.

As a testament to the quality of Argent's asset portfolio and its financial management, each of Argent's top three projects at Kempfield, West Wyalong and Loch Lilly have been awarded NSW Government Cooperative Drilling grants on the same basis and process.

#### ARGENT 51% INTEREST IN 1,447 KM<sup>2</sup> MOUNT READ VOLCANICS EQUIVALENT BELT

Under the Loch Lilly Joint Venture Agreement, Argent will have earned a 51% interest in the project on satisfaction of its reporting obligations under the NSW Cooperative Drilling funding deed.

At that point, which will be announced to the ASX, Argent will own a controlling interest in the 1,447 km<sup>2</sup> tenement area of the Loch Lilly – Kars Belt for minimal initial outlay, and the continuing right to earn up to a 90% interest through further exploration.

The Loch Lilly - Kars Belt, located in western NSW approximately 80 kilometres south of Broken Hill, hosts a polymetallic volcanic-hosted massive sulphide VHMS, copper-gold porphyry and nickel sulphide mineralisation potential analogous to the Mount Read Volcanics of Western Tasmania.

## ASX/MEDIA RELEASE





Figure 6 – Plan view illustrating the locations of the collars for drillholes ALE001 and ALN001 over a total magnetic intensity (TMI) background, with the Loch Lilly - Kars Belt project tenements in the foreground and the key identified targets highlighted with yellow ellipses. For target detail refer to Figures 1, 2 and 4.

#### **NEXT STEPS**

Samples have been collected and dispatched for qualitative studies to be completed, for maximum extraction of information from the collected drillcore samples.

Petrographic samples were obtained for key lithologies and alteration types in order to quantify the various compositions present in drillcore.

Samples were collected and dispatched for complete characterisation assay and studies to be employed in ongoing pathfinder element suite work and compositional analysis for characterisation of the volcanic suites.

Pyrite Laser Ablation ICP-MS work has been initiated on selected Netley samples to identify the pyrite growth phases at Netley and the associated element suites associated with each phase of growth.

The combination of all of these studies will allow Argent to readily identify further potential for the Loch Lilly Project and guide the exploration strategy.

For further information please contact:

David Busch Chief Executive Officer Argent Minerals Limited

M: 0415 613 800

E: david.busch@argentminerals.com.au

### APPENDIX 2 – FURTHER DETAILS FOR ALNO01 AND ALE001

#### **ABOUT DRILLHOLE ALN001 - NETLEY**

#### Intersected geology and assays

Diamond hole ALN001 was collared in thick sand and clay which continued to 87 metres depth and then penetrated weathered shale and a massive andesitic sequence to 251.6 metres. A variable meta-sediment continues to the end of hole at 483.6 metres, which is intruded by a series of monzonites and diorites.

The lower portion of the hole is characterised by an increase in brecciation and skarn metasomatism surrounding thin gabbroic dyke swarms. The lower sequence displays strong propylitic to skarnoid alteration with lesser zones of potassic alteration, abundant pyrite and sparse, localised chalcopyrite.

The monzonite-diorite intrusives typically show assay ranges up to 0.04 g/t Au, 127 ppm Cu, 282 ppm Zn, 200 ppm Pb, 75 ppm As and 13 ppm Mo. The diorite-gabbro dykes typically show assay ranges up to 0.01 g/t Au, 0.11% Cu, 92 ppm Zn, 136 ppm Pb, 174 ppm As, and 65 ppm Mo.

The hole also intersected molybdenum levels up to 300 ppm.

Of particular interest is the broad consistent low-level assays in the reported interval:

#### 73.3m @ 0.03%Cu from 355.7m

#### incl. 0.6m @ 0.11%Cu from 393.8m.

The intersected geology and significant assays for ALN001 are illustrated in the Figure 4 cross-section together with the dominant types of alteration observed.



Figure 7 – Cross-section of ALN001 intersected lithology and mineralisation (Cu shown), view toward 225<sup>0</sup> T (approximately southwest).

#### **ABOUT DRILLHOLE ALE001 - EAGLEHAWK**

#### Intersected geology and interpreted location of mineralised porphyry

Diamond hole ALE001 was collared in thick sand and clay which continued to 130.4m depth. The majority of the drillhole consisted of siliciclastic turbidite sequences with a series of porphyritic intrusives ranging from quartz monzonite, granodiorite and diorite in the upper section of the drillhole, to quartz monzonite, diorite and syenite in the lower section of the drillhole. Each of the porphyritic intrusives has weak domainal propylitic alteration and the quartz diorite intrusive from 423.4 m to 536.6 m has contact skarn alteration pervading up to 15 m into the host turbidite units.

The monzonite-diorite intrusives typically yielded assay ranges up to 0.04 g/t Au, 195 ppm Cu, 158 ppm Zn, 10 ppm Pb, 6ppm As and 3ppm Mo.

The granodiorite-syenite dykes typically yielded assay ranges up to 0.01 g/t Au, 24 ppm Cu, 92 ppm Zn, 15 ppm Pb, 0.4 ppm As, and 2 ppm Mo.

The skarn alteration in the contact zone between the diorite and siliciclastic turbidites yielded assay ranges up to 0.04 g/t Au, 341 ppm Cu, 84 ppm Zn, 11 ppm Pb, 8 ppm As and 2 ppm Mo.

Elevated zinc levels up to 158 ppm were also noted.



Figure 8 – Drillhole ALE001 cross-section of intersected lithology and mineralisation (Cu shown), view toward 200<sup>0</sup> T (approximately south-southwest).

## ASX/MEDIA RELEASE

#### Alteration zoning explanation

Propylitic alteration zoning in porphyry ore systems are an observable indication of hydrothermal activity which typically surround an inner potassic and potentially mineralised alteration zone.



Source: Berger, B.R., Ayuso, R.A., Wynn, J.C., and Seal, R.R., 2008, Preliminary model of porphyry copper deposits - U.S. Geological Survey Open-File Report 2008–1321, 55 p.

Figure 9 - Cross section of a porphyry deposit illustrating idealised alteration zoning (after Lowell and Gilbert, 1970).

## **APPENDIX 1 – SIGNIFICANT INTERSECTIONS**

The following table summarises the significant intersections for holes ALN001 and ALE001 above the indicated cut-off grades.

#### Significant intersections table

BHID	From (m)	To (m)	Length (m) <sup>2</sup>	Au (g/t)	Cu (%)	Mo (ppm)	Cut-off <sup>3</sup>	Hole Width <sup>4</sup>
ALN001	268.5	269.6	1.1	0	20	1	Au > 0.1ppm	NQ2
ALN001	286.2	287.0	0.8	0.02	122	4	Au > 0.1ppm	NQ2
ALN001	290.9	292.0	1.1	0	25	1	Au > 0.1ppm	NQ2
ALN001	301.0	302.0	1.0	0.02	111	1	Au > 0.1ppm	NQ2
ALN001	305.0	306.0	1.0	0	117	2	Au > 0.1ppm	NQ2
ALN001	471.8	472.8	1.0	<0.01	15	157	Mo > 100ppm	NQ2
ALN001	472.8	473.8	1.0	<0.01	13	297	Mo > 100ppm	NQ2
ALN001	393.8	394.4	0.6	<0.01	1100	2	Cu > 0.1%	NQ2
ALE001	414.4	415.4	1.0	0	11	<1	Au > 0.1ppm	NQ2
ALE001	415.4	416.4	1.0	0.02	11	1	Au > 0.1ppm	NQ2
ALE001	417.4	418.4	1.0	0	10	1	Au > 0.1ppm	NQ2
ALE001	418.4	419.4	1.0	0.02	12	<1	Au > 0.1ppm	NQ2
ALE001	422.4	423.4	1.0	0	16	2	Au > 0.1ppm	NQ2
ALE001	437.0	438.0	1.0	0.02	30	<1	Au > 0.1ppm	NQ2

BHID	Easting (m MGA)	Northing (m MGA)	Elevation (m RL)	Azimuth	Dip
ALN001	544311	6400593	115.2	305	-70
ALE001	565496	6419999	120	290	-70

1. Geodetic Datum Australia (GDA94), projection Map Grid of Australia (MGA), Zone 54, Australia Height Datum (AHD)

2. Mineralisation orientation and true width is yet to be determined

3. Cut-off grades for inclusion in this table as significant intersections

4. NQ was sampled as half core

Table 1 - Significant Intersections.

## APPENDIX 2 - JORC 2012 EDITION TABLE 1

### APPROVED LOCH LILLY DRILLING PROGRAMME

The following information follows the requirements of JORC 2012 Table 1 Sections 1, 2 and as applicable for ASX Report related to the Loch Lilly drilling programme.

#### Section 1 - Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	Drillholes were sampled based on observed mineralisation or intensity of alteration. Two holes were drilled. PCD collared PQ ¼ core, HQ ½ and NQ ½ core were used for sample submittal. Samples were generally constrained to >0.6 m or <1.4 m interval lengths with an average sample length of 1 m. A minimal amount of samples were taken with interval lengths <0.6 m due to rock condition or stratigraphic constraints.
Drilling techniques	Diamond drilling utilised PQ collars, HQ drilling to Base of Oxidation (BOO) and NQ to depth. The drill string was configured with a triple tube 3 m barrel and wireline/overshot setup.
Drill sample recovery	Recovery is recorded by the geologist or field geotechnician. PCD was utilised at the collar due to the thick cover sequence, recovery was minimal. Triple tube is permanently being employed to maintain core integrity
Logging	Geological logging was conducted to a high standard via graphic and digital logging noting lithology, mineralisation, alteration and structure with associated degrees of intensity. Logging was undertaken using both qualitative and quantitative methods accompanied with wet and dry core photography, and sampling for type section lithogeochemistry. Core was oriented when recovered and logged in full.
Sub-sampling techniques and sample separation	Drillholes were sampled on observed mineralisation or intensity of alteration. PQ ¼ core, HQ ½ core and NQ ½ core was used for sample submittal. Samples were constrained to >0.6 m or <1.4 m interval lengths with an average sample length of 1 m. A minimal amount of samples were taken with interval lengths <0.6 m due to rock condition or stratigraphic constraints. Assay and preparation will be carried out by ALS Global Orange and ALS Global Brisbane. 2-3 kg samples were crushed using a jaw crusher, riffle split, and pulverized to produce a 250 g sample for various analytical methods.
Quality of assay data and laboratory tests	Samples were digested with a 4-acid total digest (hydrochloric, perchloric, nitric and hydrofluoric acids). Samples were assayed using ICP-AES for: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, Ga, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, Zn, Zr. Any samples over detection limit were re-assayed using 4-acid digest with ICP-AES finish. Au was quantified using a 30g charge with fire assay and AAS finish. Any over-limit samples were assayed via dilution.
Verification of sampling and assaying	Argent and ALS Global employ independent QAQC assay checks. Argent employs coarse crush, fine crush and pulp duplicates, blanks and 2 types of CRM's inserted at a ratio of 1:10. All drillhole information is stored graphically and digitally in excel format. Assay results span low-level, high-level and ore-grade amounts, which have been reported in a homogenised format.
Location of data points	All data used in this Report are in:         Datum:       Geodetic Datum of Australia 94 (GDA94)         Projection:       Map Grid of Australia (MGA)         Zone:       Zone 54         Collar positions were recorded by handheld GPS. Topographic control was gained using government DTM data with handheld GPS check.

Data spacing	Drilling									
and	The closes	st available o	drill holes fo	r each proj	ect area incl	ude the foll	owing:			
distribution	Hole ID	Prospect	Grid	Easting	Northing	EOH (m)	RL (m)	Dip 0 <sup>0</sup>	Az 0º	
	EHK2	Netley	MGA94_54	543521.85	6398568.7	197.5	116	-60	328	
	NBH007	Netley	MGA94_54	544296.85	6401568.7	155.85	115	-90	0	
	NBH009	Kudgee	MGA94_54	546851.82	6382491.7	267.2	99	-90	0	
	NBH010	Kudgee	MGA94_54	542577.8	6378397.7	166.8	105	-90	0	
	Hole ID	Prospect	Grid	Easting	Northing	EOH (m)	RL (m)	Dip 0º	Az 0 <sup>0</sup>	
	EHK1	Eaglehaw k	MGA94_54	556761	6411898	129.5	116	-60	328	
	EHK3	Eaglehaw k	MGA94_54	565271	6419578	306	116	-60	328	
	NBH004	Eaglehaw k	MGA94_54	564737	6420401	195.3	114	-90	0	
	NBH005	Eaglehaw k	MGA94_54	563996	6418950	186.8	114	-90	0	
	Magnetics	<u>&gt;</u>	1		1					
	Prospec	ct	Survey		Line Spa	acing	Survey Ht	Yea	ar	
	Eagleha	hawk P633			100m / 200m*		150 1		1995	
	Netley		P744		150m		90 1999		99	
	Gravity The gravity surveys consisted of 500m station spacing for 450 stations at Eaglehawk, and 160 stations at Netley: The surveys were conducted by Atlas Geophysics using a Scintrex CG-5 digital automated gravity meter with an instrument error of better than 0.005 mGal. Multiple dual-frequency Leica GS14 DGPS were utilised to allow for real-time-kinematic (RTK) or post processed (PPK) centimetre level accuracy 3D positions. A GPS/GNSS and gravity control station was established in the survey area and the data tied to the Australian Fundamental Gravity Network (AFGN). This allowed for all field gravity observations to be tied to the AAGD07 gravity datum and for the data to be merged with the existing regional gravity dataset. <u>Magnetic-Induced Polarisation</u> GAP Geophysics conducted the survey on NE-SW profiles. A line spacing of 450 m was adopted for the survey and readings were collected every 100m along the profile. An inductive loop current source of 800m x 400m was used with loops sequentially placed on the southeast lines. Several instruments were used for the survey including: 2 SQUID sensors; 2 SmarTEM receivers; 800 m x 400 m inductive loop source with 30 gauge wire; GAP HPTX-70 High powered trailer mounted transmitter.									
Orientation of data in relation to geological structure	Samples were taken with consideration of stratigraphy and alteration, samples do not straddle geological boundaries. The immediate local geological sequence and foliation is inclined at approximately 70 degrees to the east at Eaglehawk and 70 degrees to the south at Netley and has returned extended true widths. Drillholes were targeted to intersect geology on mildly oblique sections to increase intercept potential.									
Sample security	Chain of delivery to	custody inv ALS Global	olves graph Orange by	nic and dig Argent sta	gital sign-off ff, and recei	sheets or pt by ALS (	nsite, sample tr Global Orange.	ansfer pro	tocols onsite,	

Audits or	A walk through inspection of ALS Global Orange facilities was conducted by the Argent Exploration Manager and deemed to be satisfactory.
reviews	A review of assay method was conducted by the Argent Exploration Manager and was allocated to a total digest (4-acid).

#### Section 2 - Reporting of Exploration Results

Criteria	Commentary						
Mineral tenement and land tenure status	<ul> <li>The Loch Lilly Project comprises four NSW exploration licences EL8516, EL8199, EL8200 and EL8515. Whilst the titles to EL8515 and EL8516 are held by Loch Lilly Pty Ltd (a wholly owned subsidiary of Argent Minerals Limited), and EL8199/EL8200 by San Antonio Exploration Pty Ltd, all four exploration licences are the subject of a joint venture between Loch Lilly Pty Ltd and San Antonio Exploration Pty Ltd (JVA).</li> <li>Under the terms of the JVA, Loch Lilly has an initial interest of 0% in the project, with the right to earn up to a 90% interest. Loch Lilly Pty Ltd will earn a 51% interest by completing the drilling programme set out in this ASX announcement.</li> <li>EL8199 and EL8200 were each granted a four year term to 5 November 2017, and both EL8515 and EL8515 and EL8516 and EL8516 and the project.</li> </ul>						
		,					
Exploration by other parties	Several exploration compan outlined in Table 1.2.1.	ies have explo	red Loch Lilly intermittently for more than 40 years, of which	1 are			
	Earlier exploration was perfor	med to the inc	lustry standard of the time.				
	Table 1.2.1 – Exploration His	story					
	Company	Period	Exploration activities				
	Argent Minerals Limited	2016-current	Data review and geological and geophysical review				
	Anglo American Exploration (Australia) Pty Ltd	2013-2014	Geochemical and geophysical review, re-logging and sampling of historic core				
	Vincent Resources Pty Ltd	2010-2014	Aeromagnetic survey, rock chip sampling, geophysical review				
	Iluka Resources Limited	2009-2012	Ground magnetics, drilling				
	Standard Mines Pty Ltd/ Altius Mining Limited	2008-2012	Geological and geophysical review, airborne magnetic and radiometric survey, drilling				
	Inco Australia Limited Partnership	2008-2010	Data review, geological and geophysical review				
	Platsearch NL/ Newcrest Mining Ltd	1998-2003	Ground magnetics, drilling				
	Pasminco Australia Limited	1995-1996	Aerial photography survey, ground electromagnetic survey ground magnetic survey, and drilling				
	CRA Exploration Pty Limited	1984	Ground magnetics, gravity surveys, IP surveys, and Schlumberger vertical electrical sounding				
	Broken Hill Proprietary Company Limited	1982	Aeromagnetic survey, ground magnetic survey, drilling and downhole geophysics				
	North Broken Hill Limited	1980-1982	Geological mapping, rock/auger chip and stream sediment sampling				
	Mines Administration Pty. Limited	1970-1971	Groundwater survey, airborne radiometric survey, drilling and downhole geophysics				
Geology	The Loch Lilly – Kars Belt (LL southwestern NSW.	.KB) is an Early	/ to Middle Cambrian volcanic belt within the Delamerian Oroge	ny in			

	The LLKB is located on the southeast margin of the Palaeoproterozoic Broken Hill Block and the Curnamona Craton. The LLKB is linked in the northeast with the Koonenberry Volcanic Belt and with the Stavely Volcanic Belt in the southwest.								
	Mineralisat sulphide ar	ion potential nd sedimenta	in the LLK ary copper.	(B area ran	ges from Se	edex PB-Zn	-Ag, VHMS and	porphyry C	su-Au, to Ni
Drill hole	Hole ID	Prospect	Grid	Easting	Northing	EOH (m)	RL (m)	Dip 0º	Az 0 <sup>0</sup>
Information	ALE001	Eaglehaw k	MGA94_54	565496	6419999	550.5	120	-70	290
	ALN001	Netley	MGA94_54	544311	6400593	483.6	115.2	-70	305
	Hole ID	Prospect	Grid	Easting	Northing	EOH (m)	RL (m)	Dip 0º	Az 0 <sup>0</sup>
	EHK2	Netley	MGA94_54	543521.85	6398568.7	197.5	116	-60	328
	NBH007	Netley	MGA94_54	544296.85	6401568.7	155.85	115	-90	0
	NBH009	Kudgee	MGA94_54	546851.82	6382491.7	267.2	99	-90	0
	NBH010	Kudgee	MGA94_54	542577.8	6378397.7	166.8	105	-90	0
	Hole ID	Prospect	Grid	Easting	Northing	EOH (m)	RL (m)	Dip 0º A	\z 0 <sup>0</sup>
	EHK1	Eaglehaw k	MGA94_54	556761	6411898	129.5	116	-60	328
	EHK3	Eaglehaw k	MGA94_54	565271	6419578	306	116	-60	328
	NBH004	Eaglehaw k	MGA94_54	564737	6420401	195.3	114	-90	0
	NBH005	Eaglehaw k	MGA94_54	563996	6418950	186.8	114	-90	0
Data aggregation methods Relationship between	Data aggregation methods has been included in the Significant Assay table (Appendix 1). Hard cutoffs have been employed with the cutoff included in the table, no internal dilution below this cutoff has occurred.         Unknown at this point, nothing to report.						cutoffs have ed.		
mineralisation widths and intercept lengths	ation d								
Diagrams	Figures are	e accompanie	ed by a des	cription on e	each occasic	n			
Balanced reporting	All available exploration data relevant to this report has been provided.								
Other	<u>Magnetic</u>	<u>s</u>							
exploration data	Prospe	ect	Survey		Line Spa	cing	Survey Ht	Year	
	Eagleha	awk	P633		100m / 2	200m*	150	1995	
	Netley		P744		150m		90	1999	
	There is r <u>Gravity</u>	no other avail	able informa	ation to date	<u>.</u>				
	A gravity Netley:	surveys cor	nsisted of 5	00 m static	n spacing f	or 450 stati	ons at Eaglehav	vk, and 160	stations at
	The surveys were conducted by Atlas Geophysics using a Scintrex CG-5 digital automated gravity meter with an instrument error of better than 0.005 mGal. Multiple dual-frequency Leica GS14 GPS were utilised to								

## ASX/MEDIA RELEASE

	allow for real-time-kinematic (RTK) or post processed (PPK) centimetre level accuracy 3D positions.
	A GPS/GNSS and gravity control station was established in the survey area and the data tied to the Australian Fundamental Gravity Network (AFGN). This allowed for all field gravity observations to be tied to the AAGD07 gravity datum and for the data to be merged with the existing regional gravity dataset.
	Magnetic-Induced Polarisation
	GAP Geophysics conducted the survey on NE-SW profiles. A line spacing of 450m was adopted for the survey and readings were collected every 100m along the profile. An inductive loop current source of 800m x 400m was used with loops sequentially placed on the southeast lines.
	Several instruments were used for the survey including: 2 SQUID sensors; 2 SmarTEM receivers; 800m x 400m inductive loop source with 30 gauge wire; GAP HPTX-70 High powered trailer mounted transmitter
	3D Geophysical Modelling
	An unconstrained gravity (terrain corrected Bouguer data) and magnetic (publicly available GA aeromagnetic data) data inversion model using VPMG software.
Further work	Potential extensional drilling is required to determine characterise any mineralisation. Infilling geophysical survey work is required to determine the potential of surrounding geophysical anomalies yet to be drill tested.

#### **COMPETENT PERSON STATEMENTS**

#### **Previously Released Information**

This ASX announcement contains information extracted from the following reports which are available for viewing on the Company's website <u>http://www.argentminerals.com.au</u> :

- 20 February 2017 Argent secures strategic stake in Mt. Read equivalent belt<sup>1</sup>
- 12 July 2017 Argent commences Loch Lilly drilling programme<sup>1</sup>

Competent Person:

1. Clifton Todd McGilvray

The Company confirms it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

#### **Exploration Results**

The information in this report that relates to Exploration Results is based on information compiled by Mr. Clifton Todd McGilvray who is a member of the Australasian Institute of Mining and Metallurgy, an employee of Argent, and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr. McGilvray consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.