Ardea Resources Limited

For personal use only

DEVELOPING

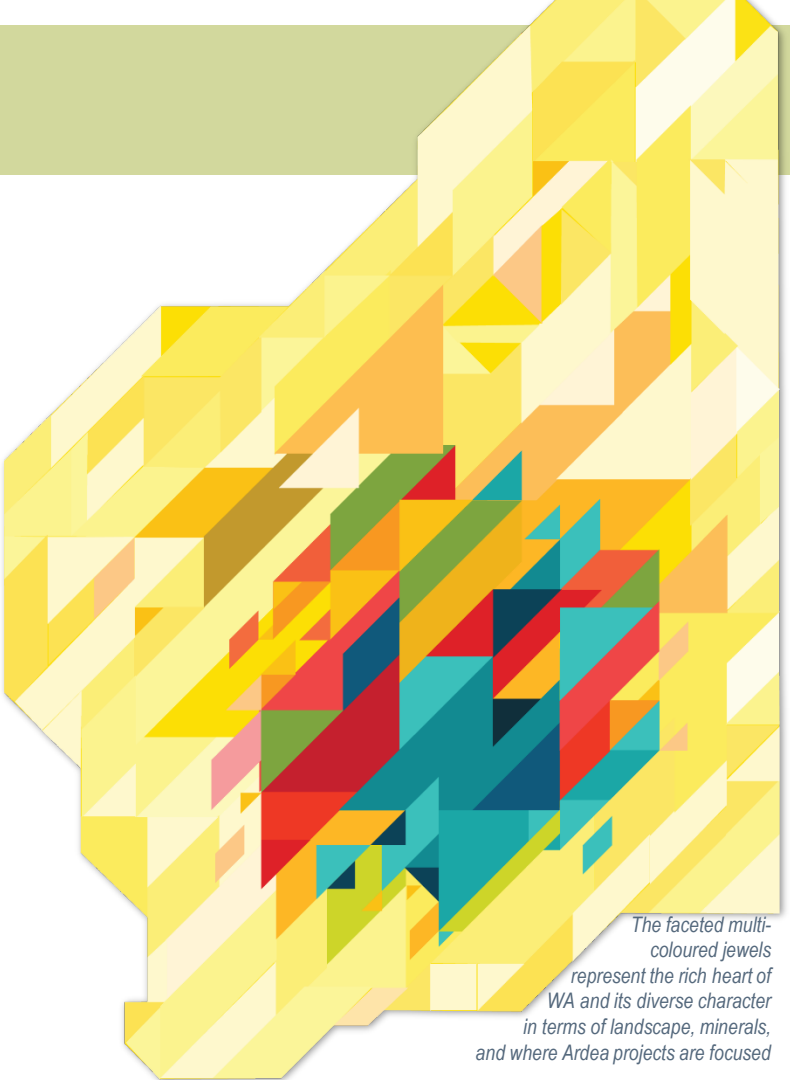
the Kalgoorlie Nickel Project
starting with Goongarrie Nickel-Cobalt

EXPLORING

for Gold and Nickel Sulphides
within the Kalgoorlie Nickel Project

NICKEL SULPHIDE DISCOVERY UPDATE

October 2020



The faceted multi-coloured jewels represent the rich heart of WA and its diverse character in terms of landscape, minerals, and where Ardea projects are focused

Disclaimer

For personal use only

Important notice

This presentation contains general information only and is, or is based upon, information which has been released to ASX or is contained in the Ardea Resources Limited (Ardea or the Company) prospectus dated 9 November 2016 (including supplementary prospectuses dated 18 November 2016 and 6 January 2017), the Goongarrie Nickel Cobalt Project Pre-Feasibility Study (dated 28 March 2018) the Goongarrie Expansion Study (24 July 2018), Goongarrie Pilot Plant trial produces battery grade crystals (31 October 2018), Goongarrie Nickel Cobalt Project Update (8 April 2019), Drilling at Gale identifies large scale gold system (11 April 2019), Ardea Quarterly Operations Report, for the quarter ended 31 March 2019 (30 April 2019), Ardea Quarterly Operations Report, for the quarter ended 30 June 2019 (22 July 2019), Nickel sulphide exploration commences at Perrinvale Project (24 July 2019), Ardea Annual Report 2019 (24 October 2019), Ardea Quarterly Operations Report, for the quarter ended 30 September 2019 (31 October 2019), Ardea Quarterly Operations Report, for the quarter ended 31 December 2019 (17 January 2020) Ardea Quarterly Operations Report, for the quarter ended 31 March 2020 (9 April 2020), Maiden Resource for Big Four Gold Project, WA (14 May 2020), Significant gold exploration results from new target at Goongarrie South (25 June 2020), Follow-up RC drilling commences at the Aphrodite North gold target (10 July 2020), Quarterly Activities Report - June 2020 (23 July 2020, CSIRO research commences on gold behaviour within GNCP (12 August 2020), Significant gold in first RC drilling at Aphrodite North (13 August 2020), Gold Exploration Update (20 August 2020), and Ardea BTZ gold exploration success at Lady Charlotte (24 August 2020), Successful A$3.5M Capital Raising to support Gold Work Programs, SPP to follow (18 September 2020), Nickel Sulphide Targets within the Ardea Tenement Portfolio including KNP (30 September 2020).

This presentation is not an invitation, offer or recommendation (express or implied) to subscribe for, or apply for the purchase of, or to take any other action in respect of securities of any entity described herein and is not a prospectus, product disclosure statement or disclosure document for the purposes of the Corporations Act 2001 (Cth) and has not been lodged with ASIC. None of Ardea Resources Limited (Ardea or the Company) or its representatives are providing or offering investment advice or services by making this presentation.

Neither Ardea nor its representatives make any representation, warranty or guarantee of any kind, express or implied, as to the accuracy, completeness or reasonableness of the information contained herein or any other written or oral communication transmitted or made available to any person receiving this presentation. To the maximum extent permitted by law, Ardea and representatives expressly disclaim any and all liability based on or arising from, in whole or in part, such information, or any errors or omissions.

This presentation contains forward-looking statements regarding the Company's resources, intentions and future business. These statements reflect current information, expectations, intentions and strategies regarding the future, and are subject to certain risks and uncertainties. Should one or more of these risks or uncertainties materialise, or should any of the underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this presentation. Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made. Other than where required by law, the Company is under no obligation to revise any forward looking statement to reflect events or circumstances after the date of this presentation or to reflect the occurrence of unanticipated events.

The Goongarrie Project has completed the Pre-Feasibility Study phase and has commenced programs that are part of the Definitive Feasibility Study. Though reasonable care has been taken to ensure that the facts are accurate and/or that the opinions expressed are fair and reasonable, no reliance can be placed for any purpose whatsoever on the information contained in this document or on its completeness. Actual results and developments of projects and the market development may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors. A key conclusion of the Pre-Feasibility Study and Expansion Study, which is based on forward looking statements, is that the Goongarrie Project is considered to have positive economic potential.

No stock exchange, regulation services provider, securities commission or other regulatory authority has approved or disapproved the information contained in this news release.

Ardea Six Point Summary (focused on nickel)

For personal use only

1. Flagship asset is a 100% interest in the Kalgoorlie Nickel Project (KNP), the premier nickel-cobalt resource in the developed world
2. More than 4,000km^2 of 100% controlled mineral tenements located exclusively in Western Australia which are highly prospective for nickel and gold but historically under-explored
3. Large ground holding in world's best mining district provides opportunities for a range of metals and Critical Minerals, including: Nickel, Cobalt, Scandium, Copper, Platinum Group Elements (PGE), Gold and Rare Earth Elements (REE)
4. Renewed focus on nickel sulphide mineralisation with associated copper and PGE
5. Several outstanding nickel sulphide targets exist with potential for near-term drill testing
6. Modern higher powered and better quality geophysics (EM and IP) provide the tools to re-fresh and expand the nickel sulphide search space

Corporate Snapshot

For personal use only

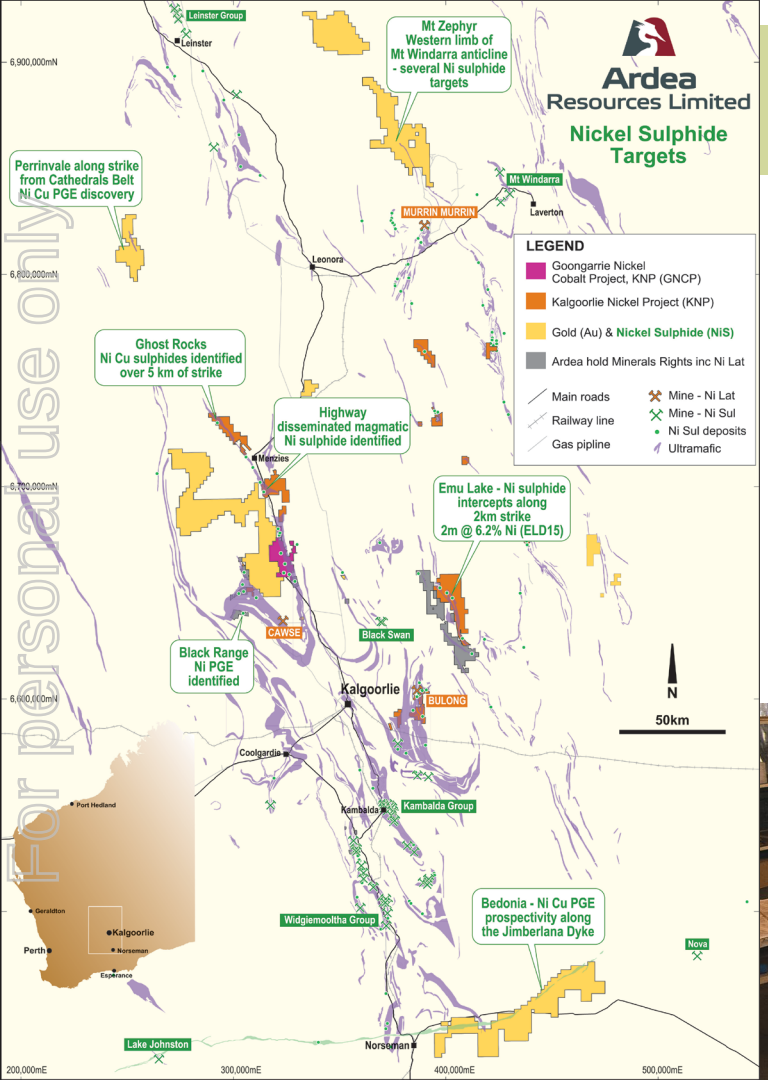
Board and Executive Management Team	
Mathew Longworth *Non-Executive Chair*	33 years experience across exploration, project evaluation/development, operations and corporate management. Invaluable experience on the key Ardea exploration and development projects, being the Bardoc Tectonic Zone gold and Kalgoorlie Nickel Project (KNP) nickel-cobalt.
Andrew Penkethman *Managing Director, Chief Executive Officer*	Resources sector executive with over 25 years experience, including mine management, project evaluation, early stage and near mine exploration, resource development, feasibility study management, permitting, stake holder engagement and mine development. ASX, TSX and AIM market experience.
Ian Buchhorn *Executive Director*	Mineral Economist and Geologist with over 40 years experience, operated as Registered Mine Manager in the Kalgoorlie Goldfields region.
Sam Middlemas *Company Secretary and Chief Financial Officer*	Chartered Accountant (CA) with more than 30 years experience providing financial and corporate secretarial services.
Dr Matt Painter *General Manager – Exploration*	Geologist with over 25 years professional experience including managerial, corporate, and on-ground experience across a broad range of commodities including nickel, cobalt, manganese, copper, gold and zinc-lead-silver.

Capital Structure, as at 5 October 2020	
Shares on Issue	124,747,246
Share Price	$0.46
52 week high / low	$0.80 / $0.17
Cash (as at 30 Sep 2020)	$11.6 million
Market Capitalisation	$57.4 million
Staff performance rights	3,711,000

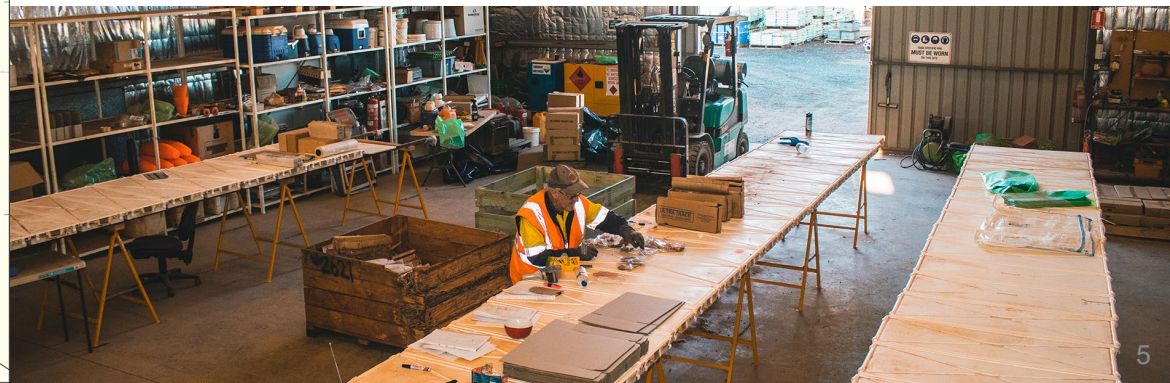
Major Shareholders	
Ian Buchhorn and associates	10.02%
Citicorp Nominees	10.76%
Brian O'Shannassy and associates	7.20%
Top 20 shareholders	50.94%

Ardea has a quality Western Australian project portfolio and the team to make their projects succeed

Regional Location – Nickel Sulphide Projects



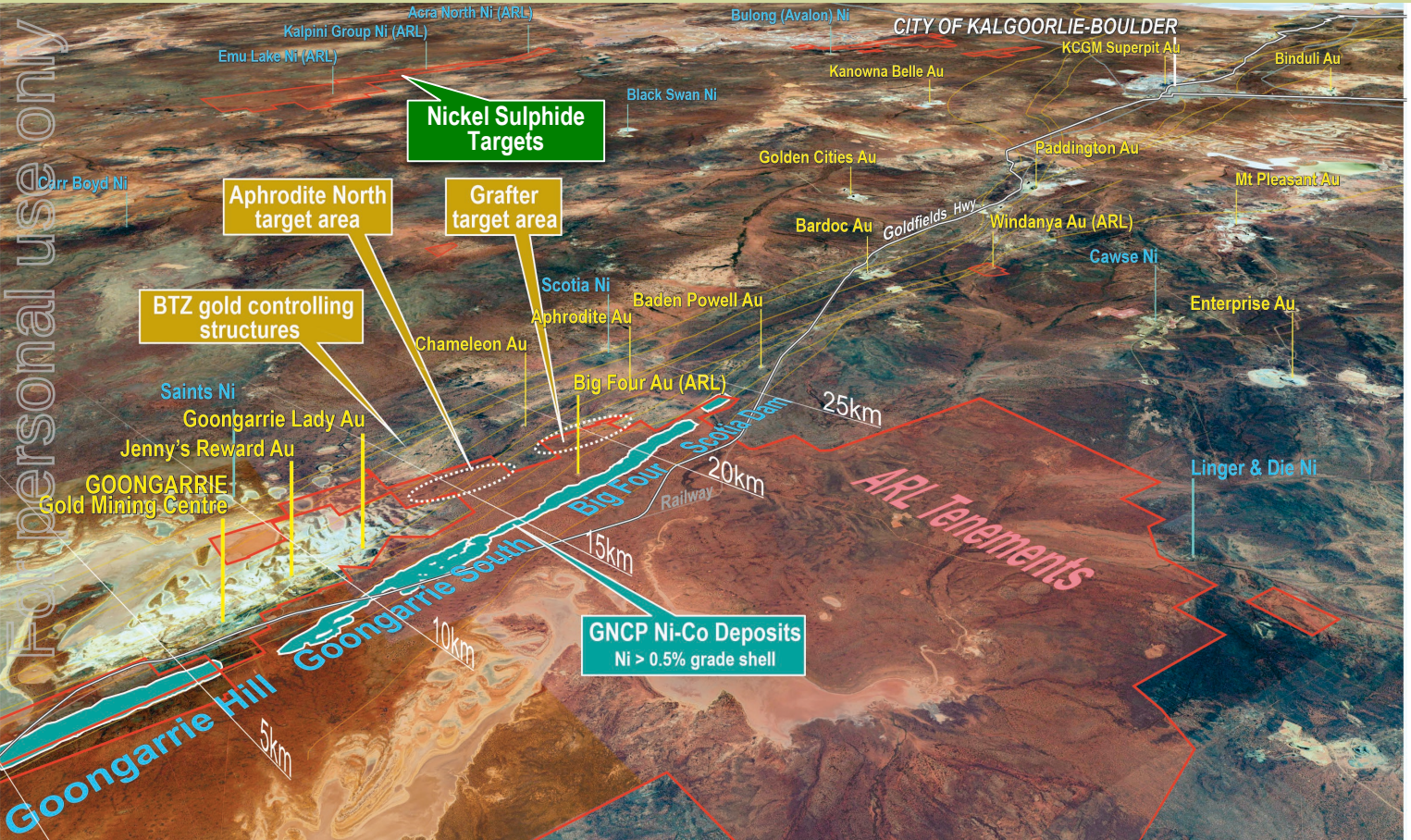
- Ardea's KNP tenure holds extensive nickel laterite resources
- The same ground is **highly prospective for nickel sulphide mineralisation**
- Archaean Eastern Goldfields Province – prolific ultramafic flows hosting numerous nickel sulphide deposits
- Centred around the mining hub of Kalgoorlie-Boulder
- Excellent infrastructure and access – mining culture
- Ardea is well established with field teams based out of our West Kalgoorlie office complex



For personal use only

Kalgoorlie Nickel Project – Ni, Co and Au

(looking southeast – with GNCP in the foreground. Note the scale and location)



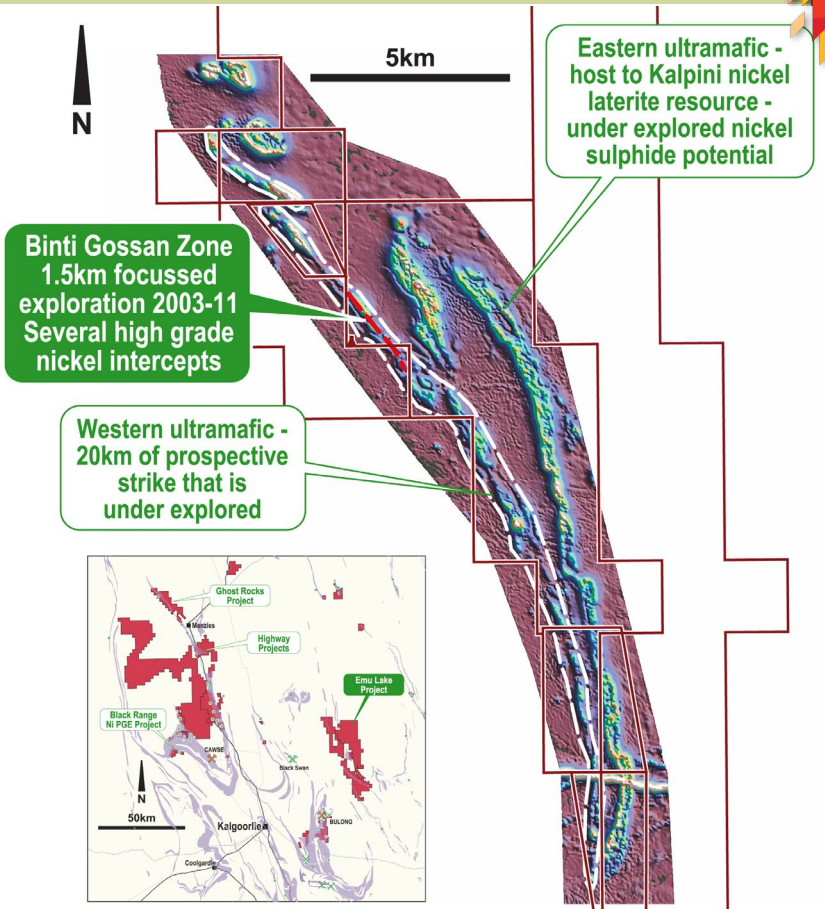
- Ardea KNP tenements shown in red
- 70km N of Kalgoorlie
- Most resources on granted mining leases
- Leverage off existing infrastructure

For personal use only

Emu Lake Project – Detailed Magnetics

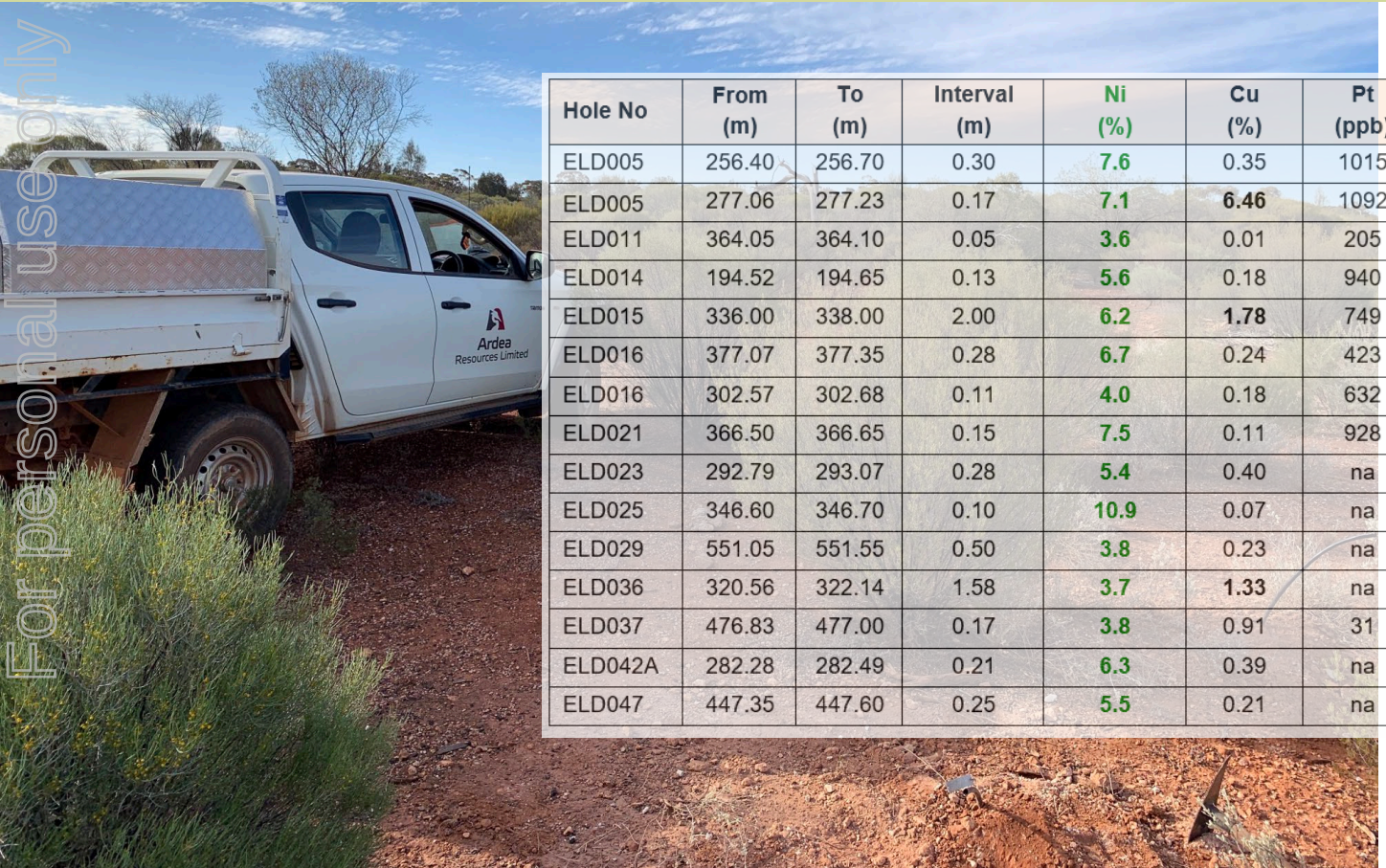
For personal use only

- 30km east of Black Swan nickel mine and processing plant (Poseidon Nickel Ltd)
- Strategic ground holding covering 240km^2
- Magnetic imagery clearly distinguishes the eastern and western ultramafic belts:
  - Eastern belt is host to the Kalpini nickel laterite resource (75Mt @ 0.75% Ni and 0.04% Co[1])
  - Western belt host to nickel sulphide mineralisation - several high grade intercepts during a period of focussed exploration 2003 – 2011 (Image Res, Jubilee, Emu Nickel, Xstrata)
  - But focussed almost exclusively on the Binti Gossan Zone
  - Opportunity to extend exploration coverage north and south from Binti and expand the search space



1 Ardea Annual Report 2019 (24 October 2019) – Detailed Resource

Emu Lake Project – High Grade



Hole No	From (m)	To (m)	Interval (m)	Ni (%)	Cu (%)	Pt (ppb)	Pd (ppb)	Pt+Pd (g/t)
ELD005	256.40	256.70	0.30	**7.6**	0.35	1015	1726	2.7
ELD005	277.06	277.23	0.17	**7.1**	**6.46**	1092	2315	**3.4**
ELD011	364.05	364.10	0.05	**3.6**	0.01	205	745	1.0
ELD014	194.52	194.65	0.13	**5.6**	0.18	940	3230	**4.2**
ELD015	336.00	338.00	2.00	**6.2**	**1.78**	749	1424	2.2
ELD016	377.07	377.35	0.28	**6.7**	0.24	423	226	0.7
ELD016	302.57	302.68	0.11	**4.0**	0.18	632	723	1.4
ELD021	366.50	366.65	0.15	**7.5**	0.11	928	1310	2.2
ELD023	292.79	293.07	0.28	**5.4**	0.40	na	na	na
ELD025	346.60	346.70	0.10	**10.9**	0.07	na	na	**4.2**
ELD029	551.05	551.55	0.50	**3.8**	0.23	na	na	na
ELD036	320.56	322.14	1.58	**3.7**	**1.33**	na	na	na
ELD037	476.83	477.00	0.17	**3.8**	0.91	31	3096	**3.1**
ELD042A	282.28	282.49	0.21	**6.3**	0.39	na	na	na
ELD047	447.35	447.60	0.25	**5.5**	0.21	na	na	na

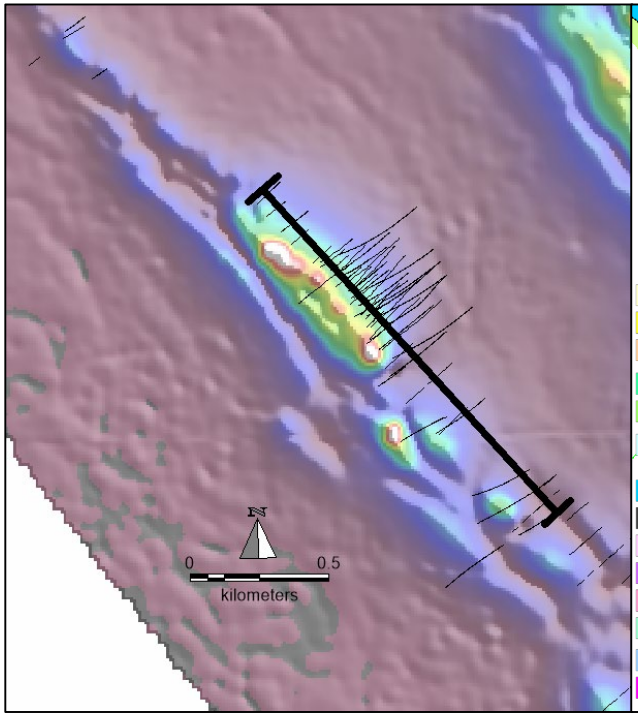
na – not assayed

For personal use only

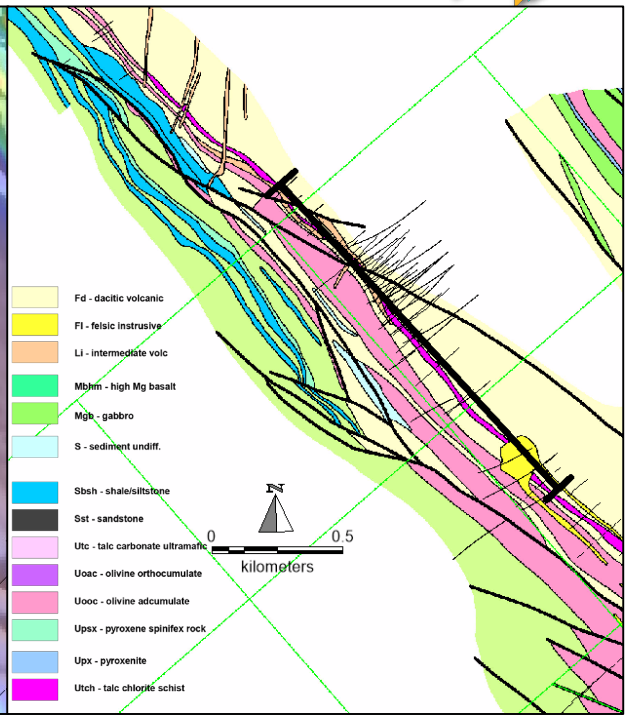
Emu Lake Project – Binti Gossan Zone

For personal use only

- Comprehensive data sets inherited from past exploration:
  - Detailed geology
  - Surface and downhole EM surveys
  - Detailed magnetic surveys
  - Drilling database
- Drilling to date has been focussed on the Binti Gossan zone with little drilling elsewhere
- Detailed geological interpretation shows we are targeting the basal contact of the eastern most flow

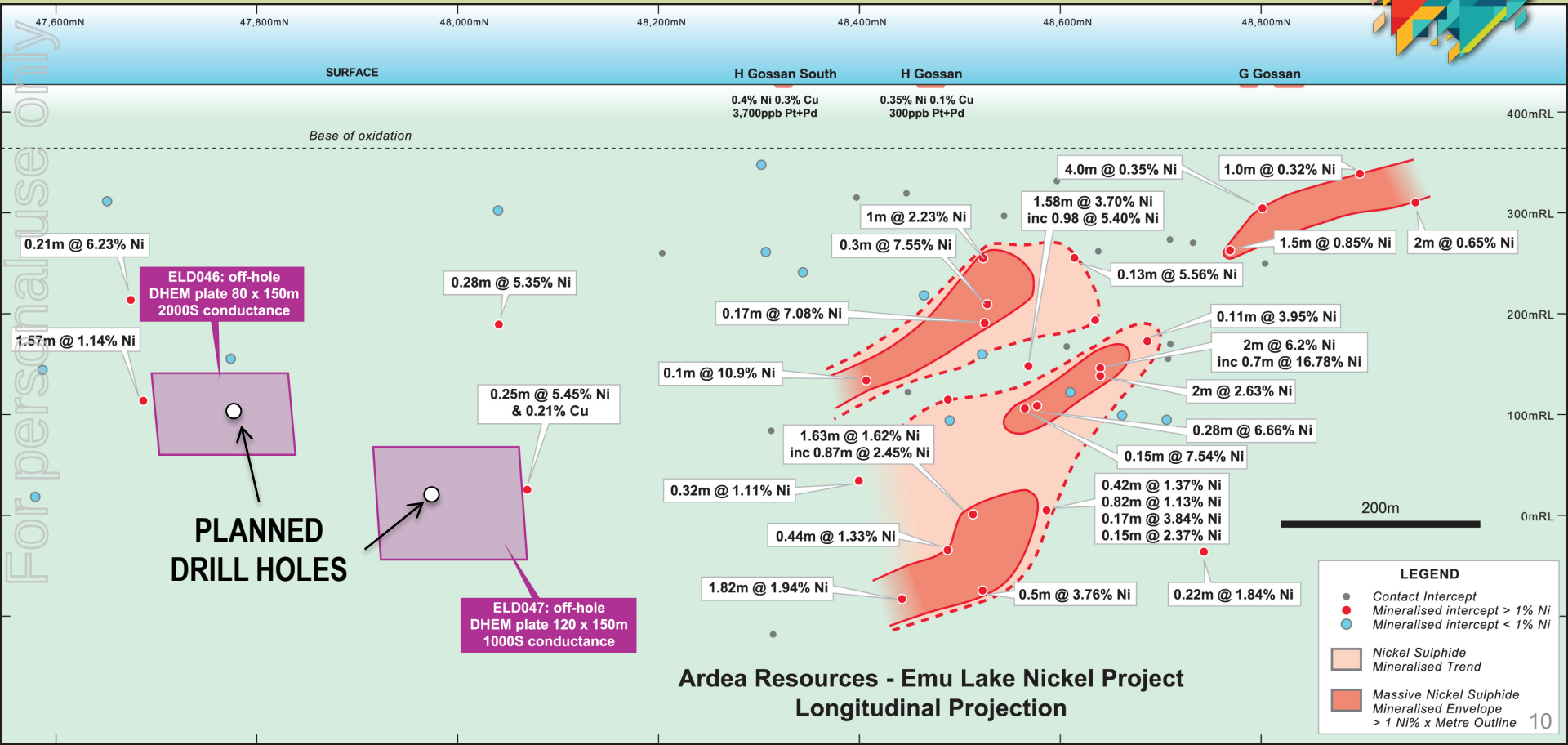


Detailed aeromagnetics (Analytical signal)



Detailed geological interpretation

Emu Lake Project – Binti Gossan Zone LS



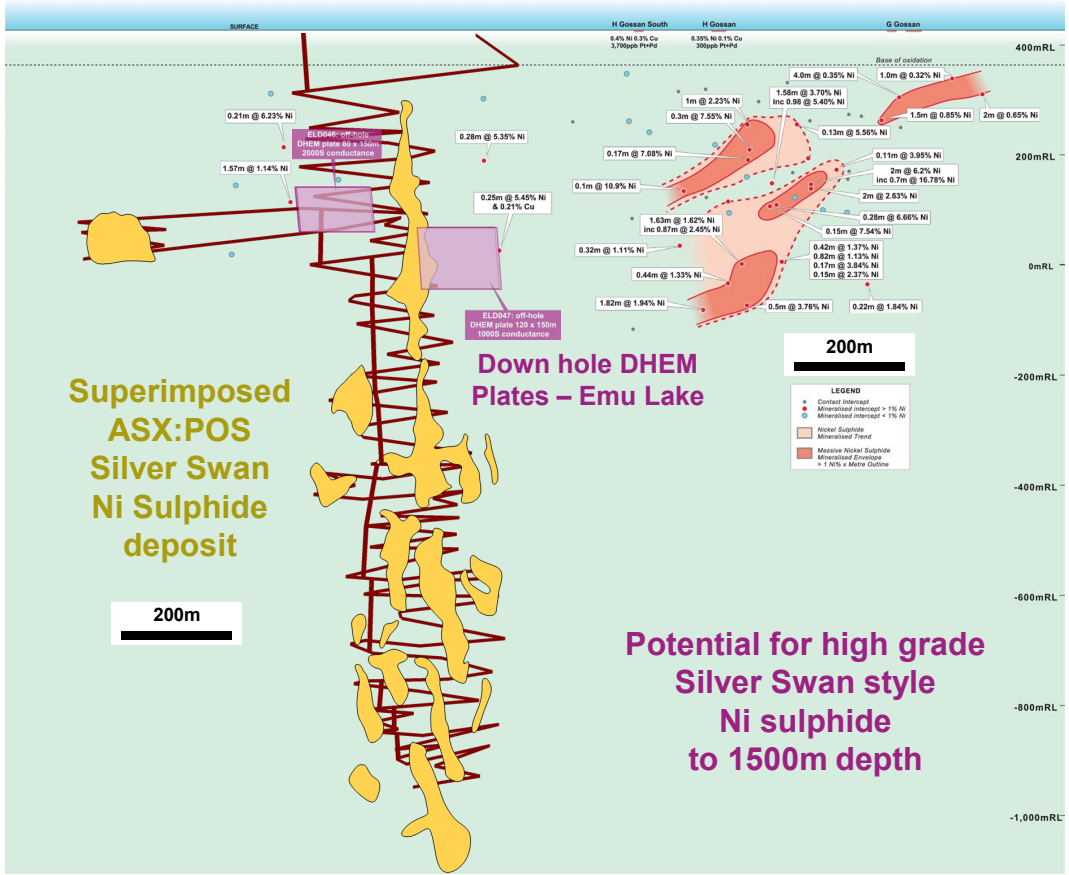
Ardea Resources - Emu Lake Nickel Project
Longitudinal Projection

For personal use only

Emu Lake Project – Binti Gossan Zone Potential

For personal use only

- Review of DHEM data by Newexco has highlighted two off-hole conductors
- ELD047: 120m x 150m plate with 1000S conductance
- ELD046: 150m x 80m plate with 2000S conductance
- Re-survey of historic holes with Atlantis DHEM (if hole open)
- Potential for early drill testing

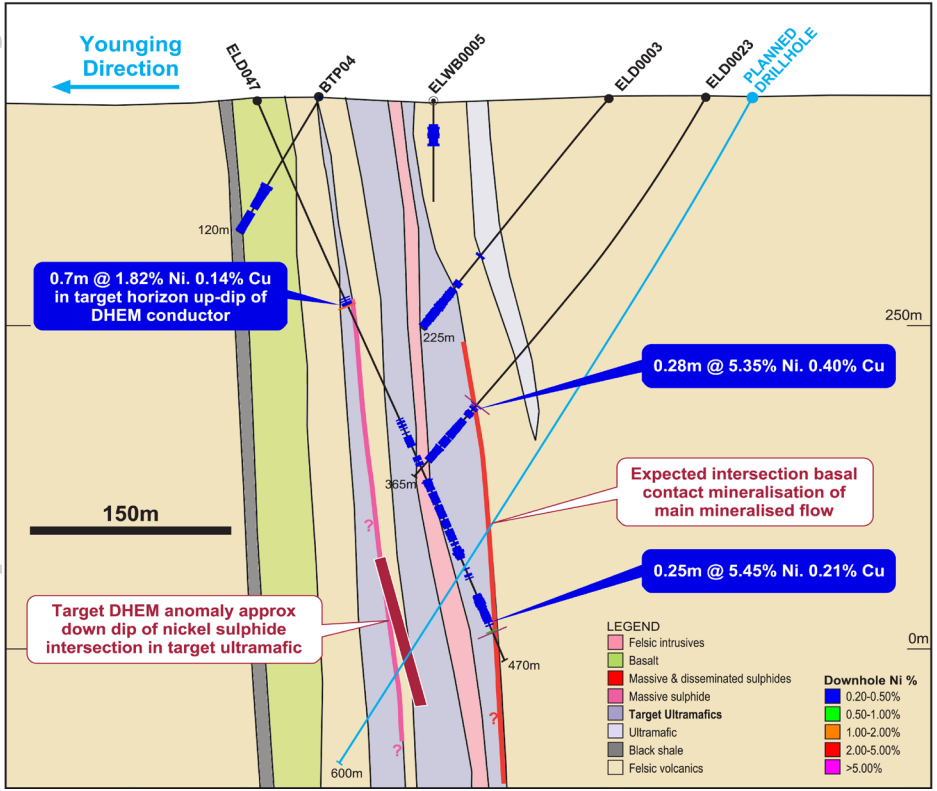


ASX:ARL
Emu Lake
Ni Sulphide

500m
Open

Emu Lake Project – Cross Section

For personal use only

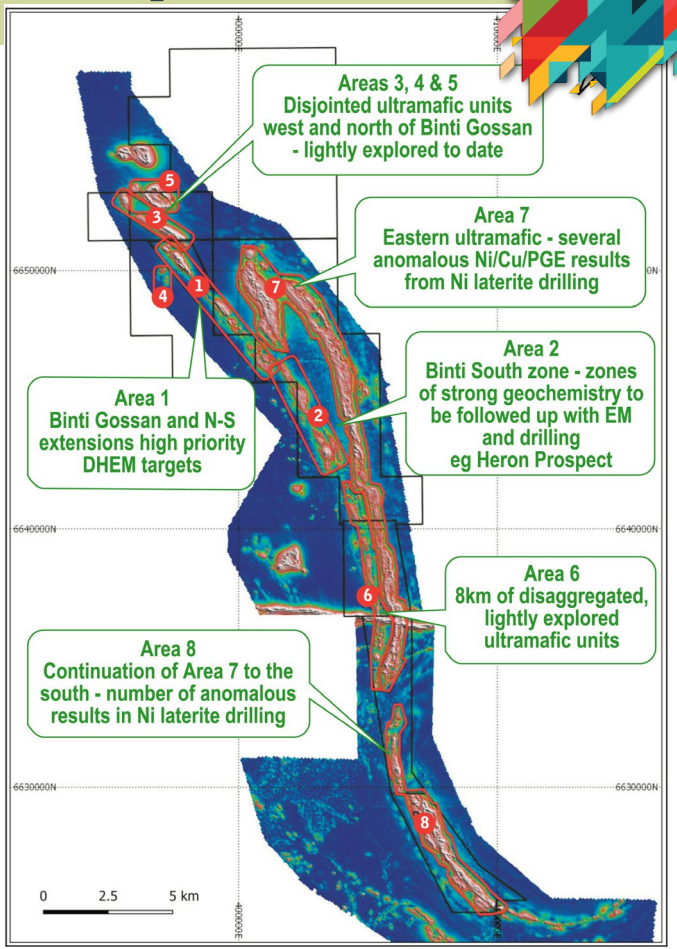


- Cross section showing ELD047 DHEM off-hole conductor – drill target
- Central ultramafic package has two key mineralised contacts – possibly a thrust repetition
- DHEM plate model below ELD047 aligns with western contact which is generally poorly drilled
- Proposed drillhole intersects plate around 500m depth
- Drilling of this target and/or the target associated with ELD046 is proposed.

Emu Lake Project – Priority Follow-Up Areas

For personal use only

- Recent review of all available data by Newexco has prioritised eight areas for follow-up exploration
- Highest priority area is below Binti Gossans and then along strike on western ultramafic
- Eastern ultramafic (nickel laterite resource area) has highlighted several areas of anomalous geochemistry and is even less explored than the western ultramafic
- Numerous targets (not shown) throughout the area
- Ardea controls 20km of this prospective and under explored zone

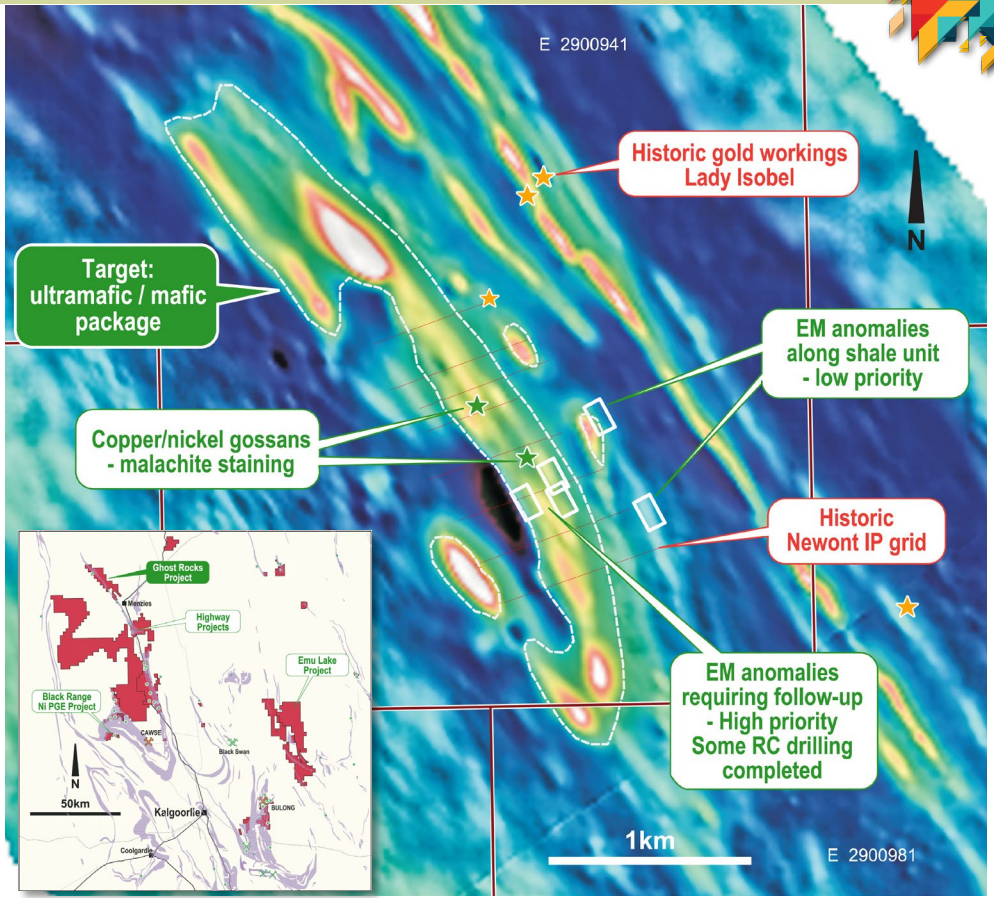


Emu Lake – Newexco study 2020. Magnetic image with priority ranked areas for follow-up (RHS)

Ghost Rocks Project – Nickel/Copper Project

For personal use only

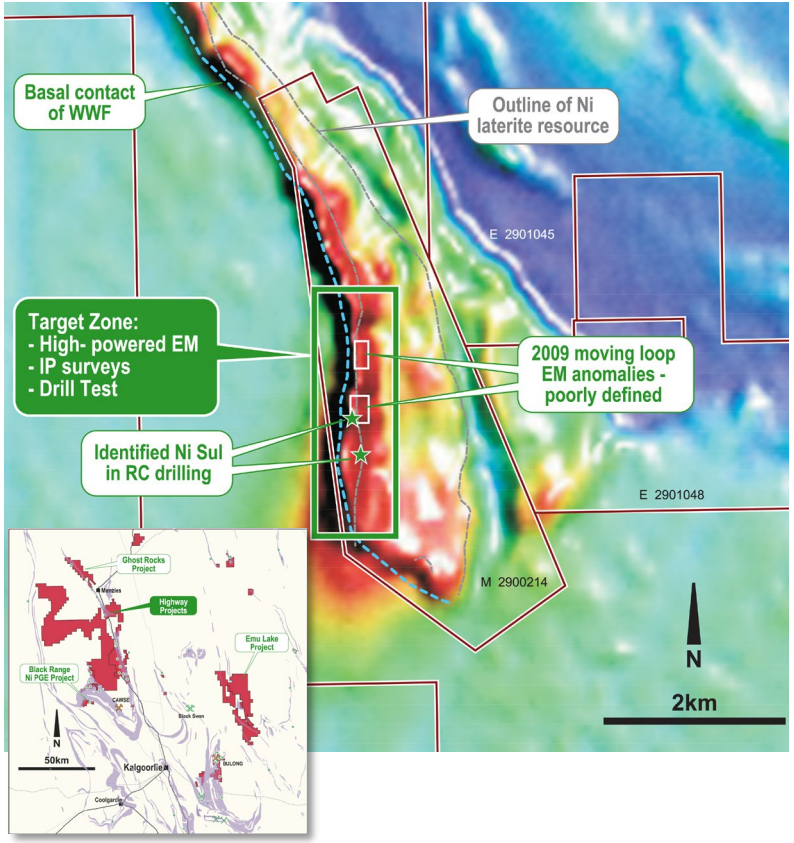
- 140km north of Kalgoorlie
- Package of Archaean mafic and ultramafic rocks within a broader suite of mafic and metasedimentary greenstone units
- Several copper and copper/nickel gossans identified and mapped in the early 1970s
  - Shallow drilling returned 3.3m at 2.14% Cu to end of hole
  - Deeper drilling intersected broad zones of disseminated pyrite, pyrrhotite and chalcopyrite but no massive sulphide zones
- Work by Heron in 2007/08 identified a number of EM conductors, however drilling was inconclusive and the conductors have not been explained
- Follow-up with IP to map disseminated sulphides at depth

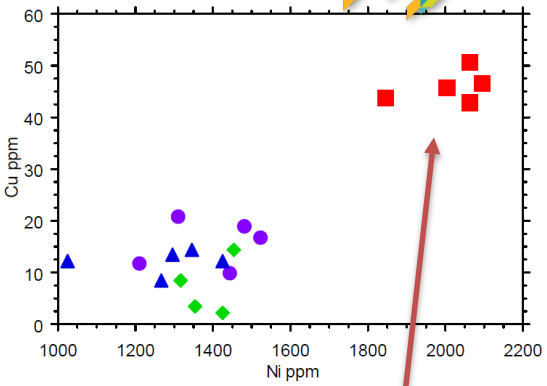


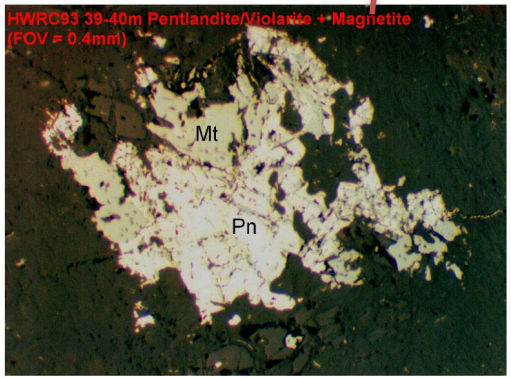
Highway Project

For personal use only

- 110km north of Kalgoorlie
- Magmatic nickel sulphides identified in RC drilling near basal contact of thickened portion of the Walter Williams Formation
- Pentlandite and other Ni sulphides forming on grain boundaries with magmatic lithogeochemistry
- 2009 surface EM survey produced inconclusive anomalies
- Follow-up with:
  - Modern high powered EM
  - IP survey to map the disseminated sulphides
  - Drill test anomalies



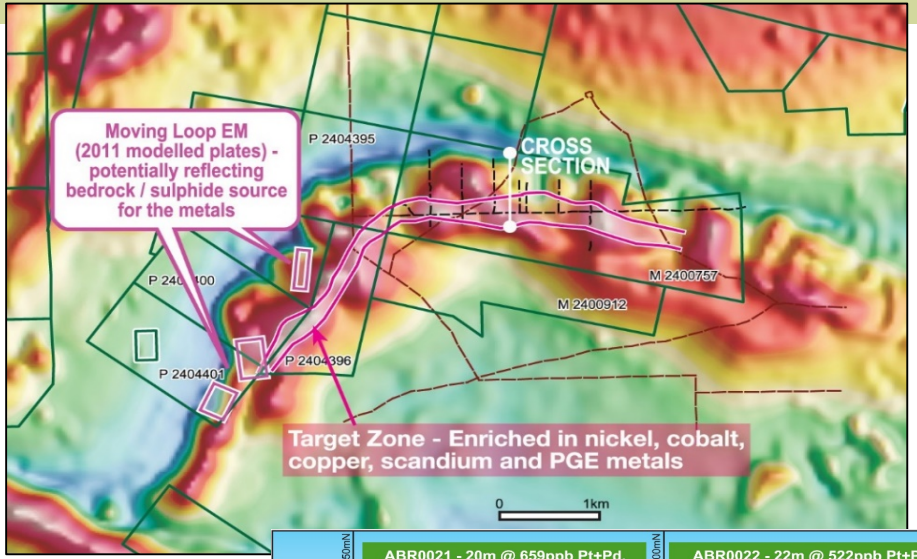


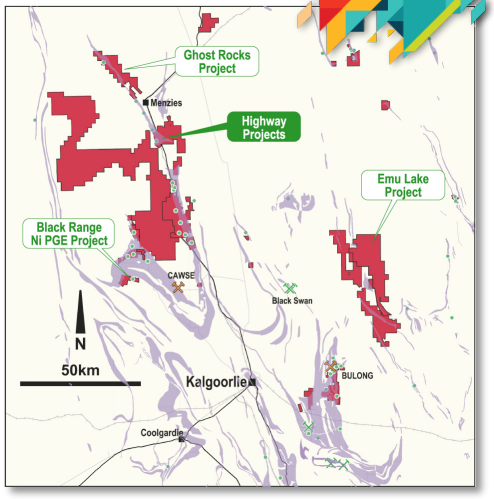


Magmatic nickel sulphides identified in Highway RC drill chips by Dr Martin Gole (2004)

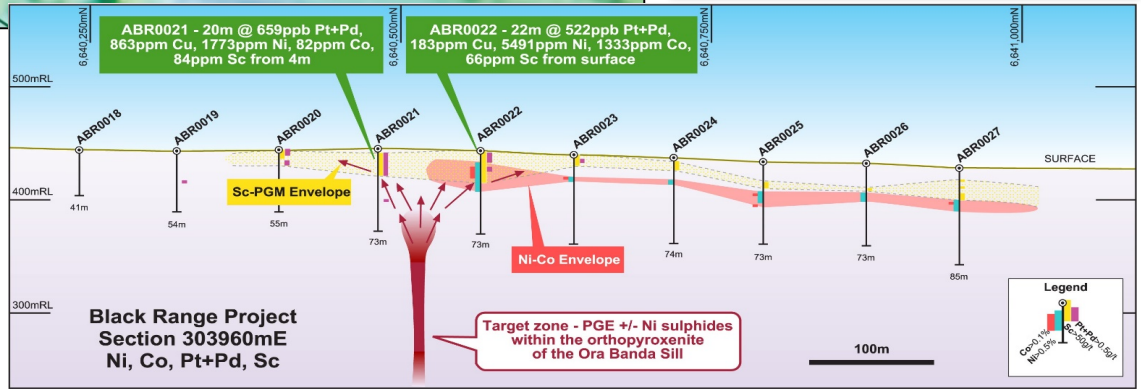
Black Range Project

- 65km north-west of Kalgoorlie
- Ora Banda Sill: differentiated mafic – ultramafic layered intrusion
- Elevated Ni, Cu and PGE identified in the laterite profile
- 2001 MLEM survey identified a number of anomalies that warrant follow-up
- Strong Cu and PGE anomalism (see cross section) can be used as a geochemical vector to sulphide source at depth





Black Range tenements on aeromagnetic image with modelled EM anomaly plates (above) and drilling cross-section showing anomalous Cu/PGE results (right).



For personal use only

Bedonia – Targets for Ni-Cu-PGE, Au, Energy

For personal use only

Nickel-Copper, PGE

- Mordicus Prospect – thickening of Jimberlana Dyke with anomalous Ni (to 2352ppm) and PGE (to 586ppm Pd) in rock chips. Airborne EM anomaly (2011)
- Scooter Prospect - strong Ni/Cu soil anomalies with surface EM anomalies associated with magnetic highs - DHEM on 2014
- Mt Norcott mafic-ultramafic complex PGE and Cu *(Newmont, WMC 1969)*

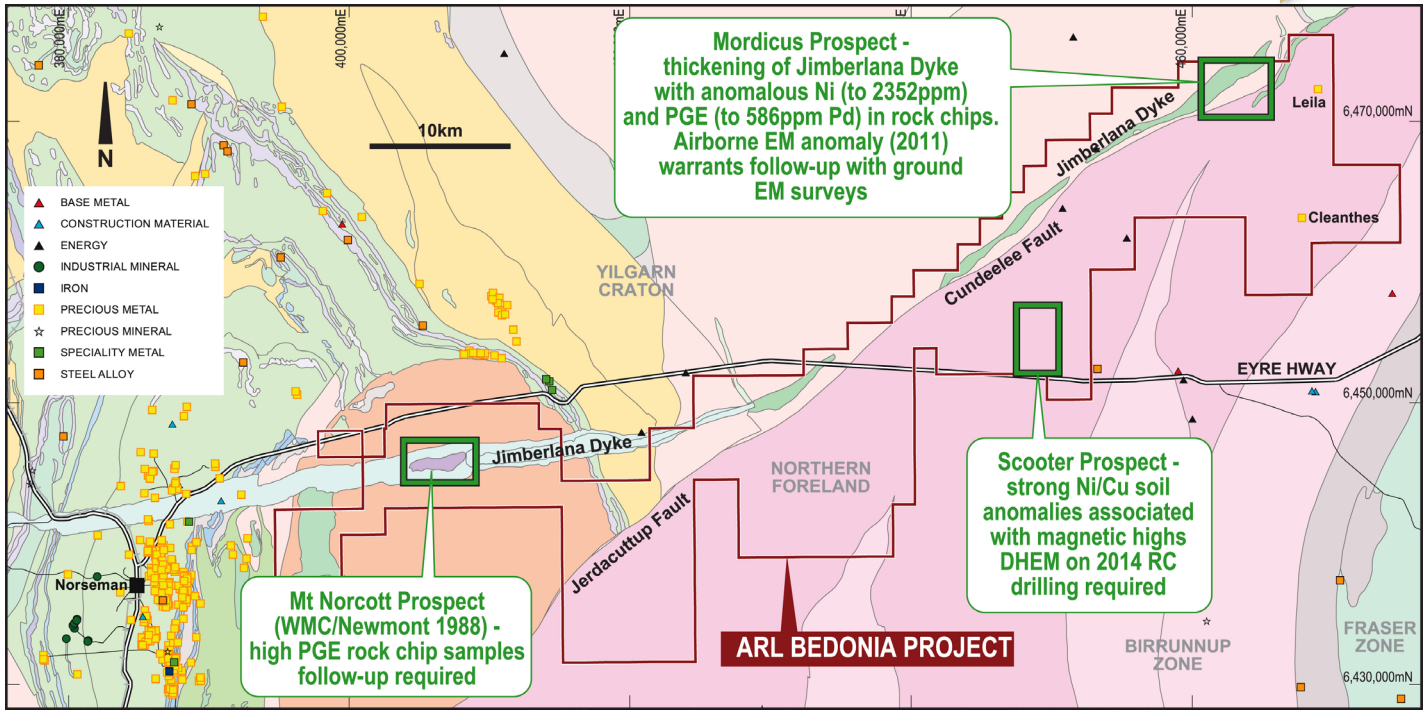
Gold

- Tropicana style domain along Jerdacuttup-Cundeelee Fault
- Several Au anomalies present in soils and shallow drilling

Energy

- Heartbreak lignite prospects

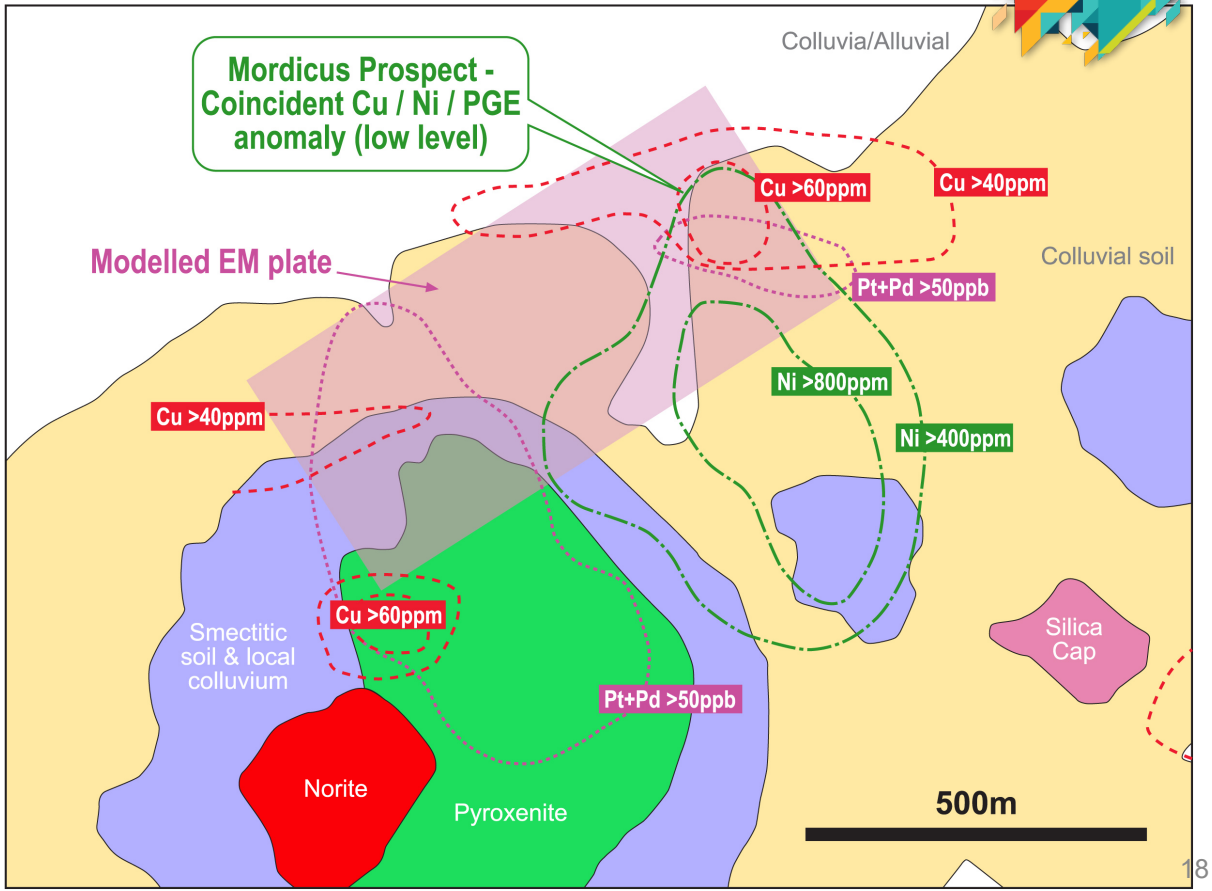
Ardea Resources tenement holding (maroon) detailing mineral prospects and 1:100,000 basement geology interpretation



Follow-up ground EM surveys and Drill testing

Bedonia Project – Mordicus Prospect

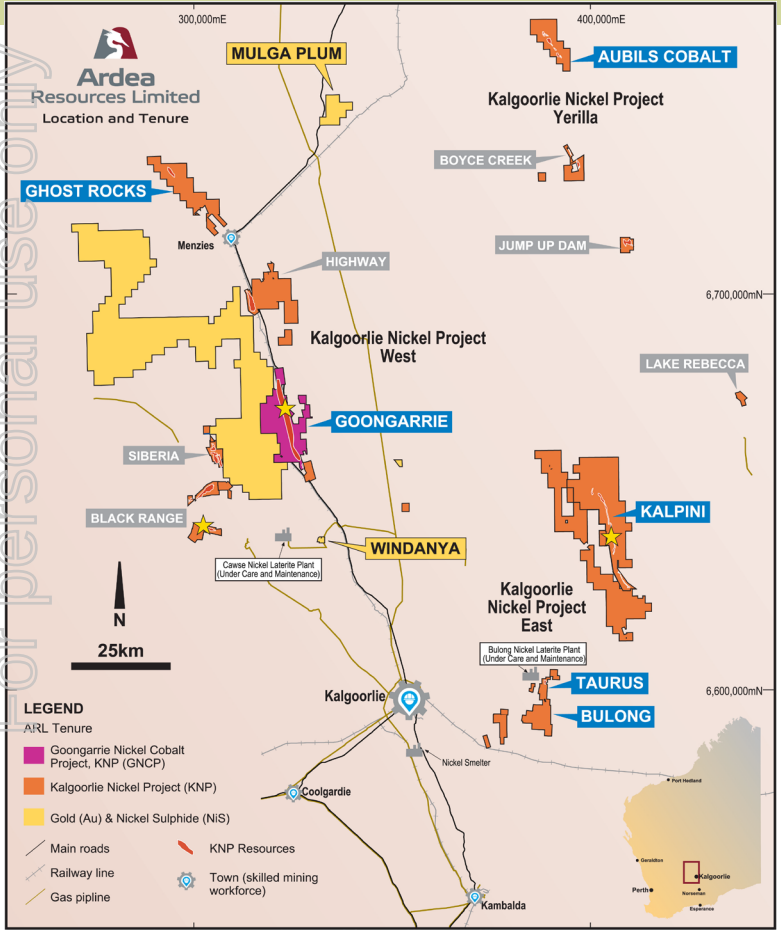
- Thickening of the Jimberlana dyke with differentiation to units of norite and pyroxenite within the dolerite
- Reconnaissance surface rock chip samples returned up to 586ppb Pd, 115ppb Pt and 2352ppm Ni
- Airborne EM (AEM) (Spectrum) anomaly from 2011
  - Tested for massive sulphides Disseminated and reef-type mineralisation not tested
  - Warrants follow-up with a high powered surface EM (and IP) survey
- Other anomalous zones along the dyke also warrant follow-up



Mordicus prospect – geology with surface geochemistry and AEM modelled plate

For personal use only

The Kalgoorlie Nickel Project



For personal use only

- **Kalgoorlie Nickel Project** (KNP) has a **globally significant nickel and cobalt resource**
  - Resource: **773Mt at 0.7% Ni and 0.05% Co***
  - **5.5 Million tonnes** contained Nickel
  - **405,000 tonnes** contained Cobalt
- The **Goongarrie Nickel Cobalt Project (GNCP)** is the western part of broader KNP:
  - Resource: **216Mt at 0.71% Ni and 0.06% Co***
  - **1.5 Million tonnes** contained Nickel
  - **130,700 tonnes** contained Cobalt
- GNCP enables **tailored product** for future development to Strategic Partner's exact requirements:
  - **Nickel and Cobalt Sulphate**
  - **Mixed Sulphide Precipitate and/or**
  - **Nickel and Cobalt Hydroxide**

Piloting studies have confirmed specification Ni & Co sulphate

1. * See Appendix for resource breakdown.
2. Per Goongarrie Expansion Study ASX release, 24 July 2018. All the material assumptions underpinning the forecast financial information derived from a production target, in the initial public report referred to in rule 5.17 continue to apply and have not materially changed.

Investment Highlights

For personal use only

KNP offers unrivalled nickel and cobalt scale optionality, in-ground **5.5Mt of nickel and 405kt of cobalt**

Globally significant nickel-cobalt resource in an **infrastructure-rich and stable jurisdiction,** provides ability to increase production from multiple processing hubs for the rapidly expanding Critical Minerals/LIB sector

Strategic Partner process current, **100% off-take is available,** with Company leveraged to increasing nickel and cobalt demand

Highly prospective landholding in the **Eastern Goldfields** of **Western Australia**

WA based Team with track record of exploration, development and production success running active exploration programs for **nickel sulphides and gold** with a **pipeline of quality targets**

Upcoming news flow to include **ongoing nickel sulphide exploration** at Emu Lake, **gold exploration** at Aphrodite North, Lady Charlotte and other targets, **metallurgical testwork** results from Big Four Gold, **GNCP, Highway and KNP resource updates**

Thank you

For further information please visit:

www.ardearesources.com.au

or contact:

Andrew Penkethman
Managing Director & CEO
P: +61 8 6244 5136 E: ardea@ardearesources.com.au

For personal use only

Ardea Resources Limited

For personal use only

DEVELOPING

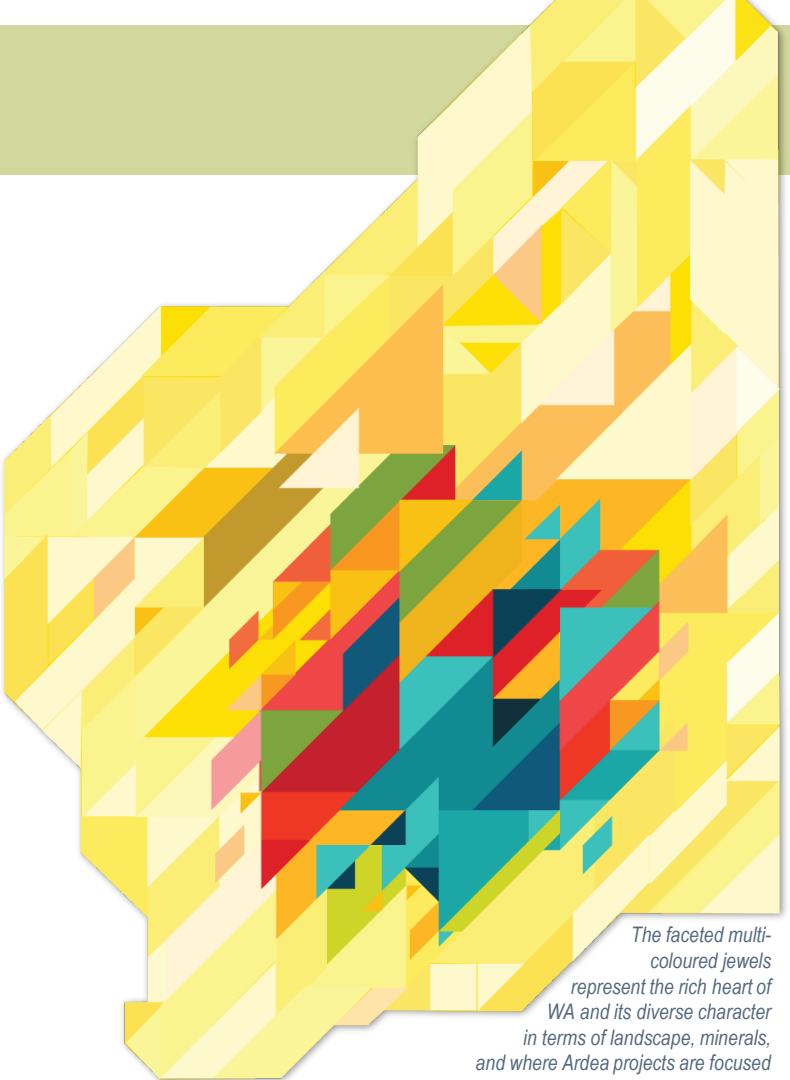
the Kalgoorlie Nickel Project
starting with Goongarrie Nickel-Cobalt

EXPLORING

for Gold and Nickel Sulphides
within the Kalgoorlie Nickel Project

For further information regarding Ardea, please visit www.ardearesources.com.au

APPENDICES

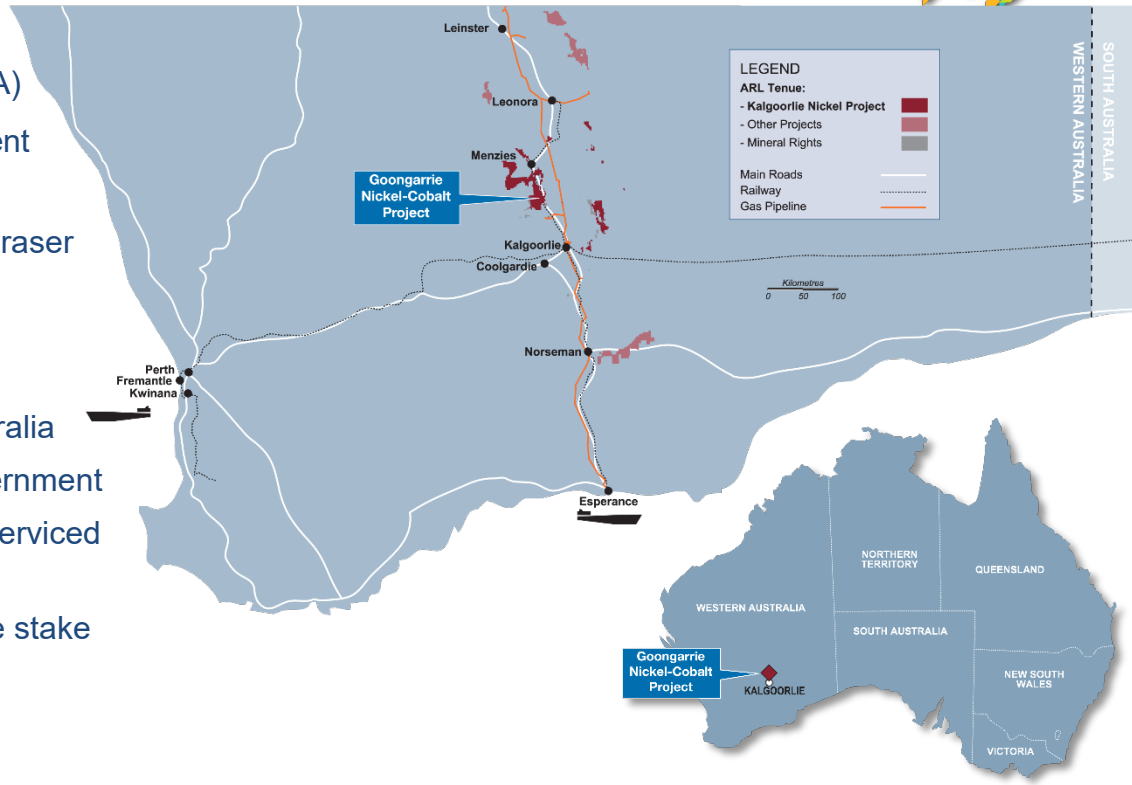


The faceted multi-coloured jewels represent the rich heart of WA and its diverse character in terms of landscape, minerals, and where Ardea projects are focused

Optimum Location and Jurisdiction

For personal use only

- All Ardea Projects located in Western Australia (WA)
- WA is the premier global destination for development of minerals operations
- WA is the top ranking operating jurisdiction in the Fraser Institute's Annual Survey of Mining Companies - Investment Attractiveness Index*
- City of Kalgoorlie-Boulder is the prime resource development and operating destination within Australia
  - Very strong mining support from Local Government
  - Multitude of world-class mining operations serviced from the City
  - Ardea maintains a local presence and active stake holder engagement



*The Fraser Institute is a Canadian Think Tank ranked in the top 15 World Wide - www.fraserinstitute.org/sites/default/files/annual-survey-of-mining-companies-2019.pdf

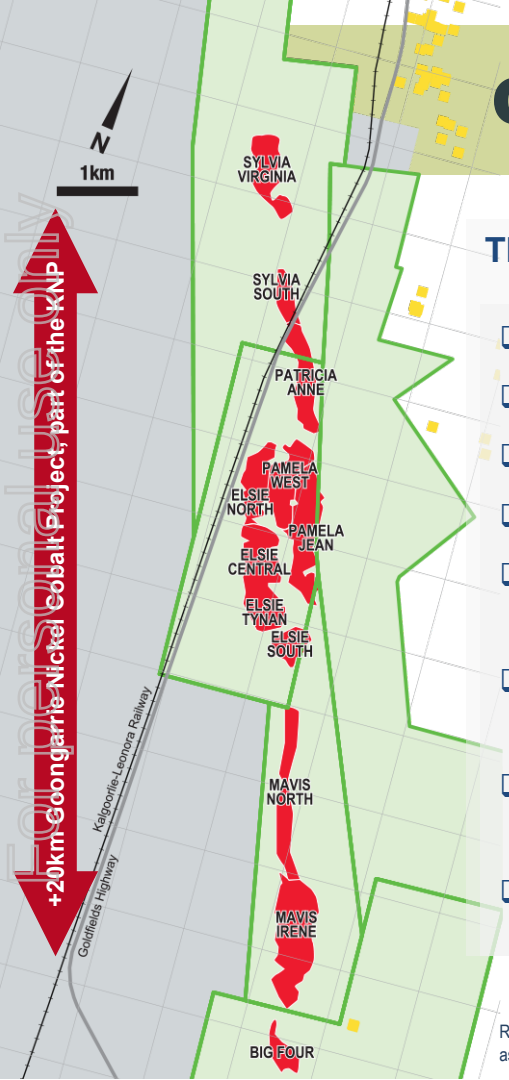
KNP - Optimum Resource Scale and Location

For personal use only

Aerial image of Ardea's GNCP showing from left to right, rail, road and power infrastructure within the project.
* See Appendix for resource breakdown.

- Assumption is a world-leading LIB investor will require a minimum annual output of 40,000tpa nickel metal in product
- With 5.5Mt contained nickel*, easily accommodated within the KNP, starting with the GNCP
  - >100 year potential supply of resource within KNP
  - Other undeveloped Australian nickel laterite projects unable to supply even 20 years at 40ktpa
- KNP well suited for NMC 811 LIB (Ni:Co = 8:1)
  - GNCP resource* grade 0.71% Ni and 0.06% Co (Ni:Co = 11.8:1)
  - Resource updates based on high grade mine strategy (>1% nickel) in progress and to include maiden scandium and rare earth component, in addition to nickel-cobalt

Goongarrie Nickel Cobalt Project



The GNCP is part of the largest Nickel Cobalt Resource in the developed world^

- Potential multi-decade producer of high-quality nickel and cobalt products
- 1.0Mtpa base case PFS – low CAPEX start-up with robust project economics*
- 2.25Mtpa Expansion Study – compelling project economics*
- Low technical risk project to provide nickel and cobalt for the growing battery market
- DFS programs underway - Feasibility work has extended into project expansion study **"WINNER"**, **W**ater, **I**n-pit **N**eutraliser and **N**ickel **E**nhanced **R**eserve.
- This initiative leverages off Ardea's extensive and flexible reserve and resource base within the KNP, additional to its flagship GNCP which is focused on premium goethite ore type
- Strategic partner process current through KPMG – Ardea won't be rushed, Company has specific funding requirements to ensure the best outcome for Shareholders
- Ardea can provide **secure, ethical, long-term supply of battery grade nickel and cobalt**

Refer to ASX releases: ^Ardea Resources Annual Report 2017. *Goongarrie Nickel Cobalt Project, PFS study, 28 March 2018 & Goongarrie Expansion Study, 24 July 2018. All the material assumptions underpinning the forecast financial information derived from a production target, in the initial public report referred to in rule 5.17 continue to apply and have not materially changed.

A High Quality Nickel and Cobalt Project

For personal use only

Outstanding results delivered from PFS* and Expansion Studies completed in 2018:

	1.0Mtpa	1.5Mtpa	2.25Mtpa
Status	PFS	PFS	**ES**
No. Trains	1	1	**1**
Pre Tax NPV_8	US$ 1.13 billion	US$ 1.52 billion	**US$ 2.4 billion**
Pre Tax IRR	29 %	29 %	**31%**
CAPEX	US$ 472 million	US$ 588 million	**US$918 million**
C1 cash cost	US$ 0.42 / lb	US$ 0.45 / lb	**US$ (0.34) / lb**
Payback	5.3 years	5.6 years	**5.1 years**
Cobalt sulphate	5,500tpa	6,900tpa	**10,000tpa**
Nickel sulphate	41,500tpa	55,300tpa	**81,000tpa**

- ✓ PFS of 1Mtpa and 1.5Mtpa base case over a 25-year mine life completed
- ✓ Expansion study of 2.25Mtpa with a 25-year mine life completed
- ✓ 94.5% nickel and 95.5% cobalt recovery – life of mine
- ✓ Pre-cobalt credit C1 costs in line with current worldwide operators
- ✓ Pressure Acid Leach (PAL) 5th generation plant is a proven design, successfully operated in other laterite projects globally
- ✓ 2.25Mtpa case based on only 26% of Goongarrie Resource

The information shown on this slide has been previously released on the ASX platform by Ardea in ASX releases, *Goongarrie Nickel Cobalt Project, PFS study, 28 March 2018 & +Goongarrie Expansion Study, 24 July 2018. All the material assumptions underpinning the forecast financial information derived from a production target, in the initial public report referred to in rule 5.17 continue to apply and have not materially changed.

KNP Resource Breakdown

For personal use only

KNP nickel-cobalt JORC Code (2012) Mineral Resource

Resource category	Size (Mt)	Nickel (%)	Cobalt (%)	Contained metal Ni (t)	Co (t)
Measured	9.6	1.02	0.10	98,800	9,700
Indicated	232.9	0.75	0.06	1,759,700	141,200
Inferred	530.5	0.68	0.05	3,600,000	254,400
TOTAL	**773.0**	**0.70**	**0.05**	**5,458,400**	**405,400**

Note: 0.5% nickel cutoff grade used to report resources. Note figures are rounded to reflect degree of certainty and may not tally. The information shown on this slide has been previously released on the ASX platform by Ardea in ASX release, Ardea Annual Report 2019, 24 October 2019.

In accordance with the Australian Securities Exchange Limited Listing Rules Appendix 5A:

The information in this report that relates to Mineral Resources for the Highway, Goongarrie Hill, Goongarrie South, Big Four, Aubils and Boyce Creek Prospects is based on information originally compiled in-house and validated by Steve Jones in 2013. Steve Jones is a member of the Australasian Institute of Mining and Metallurgy. Steve Jones is a full time employee of Heron Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity that 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'. Steve Jones consents to the inclusion in this report of the matters based on his information in the form and context that it appears. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.

The information in this report that relates to Mineral Resources for the Siberia North, Bulong East, Siberia, Black Range, Taurus and Jump Up Dam Prospects is based on information compiled by Snowden Mining Industry Consultants by members of the Australian Institute of Mining and Metallurgy. Snowden Mining Industry Consultants had sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity. All resources were internally audited by Snowden and signed off by a person of sufficient experience 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'. Steve Jones has validated the original resource estimates during 2013. Steve Jones consents to the inclusion in this report of the matters based on his information in the form and context that it appears. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.

Goongarrie Nickel Cobalt Project Resources

For personal use only

Summary of total mineral resource from the Goongarrie Nickel Cobalt Project area, comprising resources at Goongarrie Hill, Goongarrie South, Big Four and Scotia Dam (ASX release 14 March 2018).

Camp	Domains	Cut-off %	Resource category	Size (Mt)	Nickel (%)	Cobalt (%)	Contained metal Ni (t)	Co (t)
Goongarrie Hill	Ni & Co	≥ 0.5% Ni or > 0.08% Co	Inferred	52.5	0.65	0.04	340,400	21,600
			Subtotal	*52.5*	*0.65*	*0.04*	*340,400*	*21,600*
Goongarrie South	Ni & Co	≥ 0.5%Ni or > 0.08% Co	Measured	10.3	0.98	0.10	101,200	10,200
			Indicated	56.2	0.72	0.07	407,000	37,200
			Inferred	32.2	0.69	0.06	221,200	20,300
			Subtotal	*98.7*	*0.74*	*0.07*	*729,300*	*67,700*
Big Four	Ni & Co	≥ 0.5%Ni or > 0.08% Co	Indicated	45.5	0.71	0.06	320,700	28,200
			Inferred	9.9	0.63	0.06	61,900	6,100
			Subtotal	*55.4*	*0.69*	*0.06*	*382,700*	*34,300*
Scotia Dam	Ni & Co	≥ 0.5% Ni or > 0.08% Co	Indicated	3.3	0.81	0.09	26,900	3,000
			Inferred	5.7	0.76	0.07	43,300	4,100
			Subtotal	*9.0*	*0.78*	*0.08*	*70,200*	*7,100*
Total	All	≥ 0.5% Ni or > 0.08% Co	Measured	10.3	0.98	0.10	101,200	10,200
			Indicated	105.0	0.72	0.07	754,600	68,400
			Inferred	100.3	0.67	0.05	666,900	52,100
Goongarrie Resource Global			**TOTAL**	**215.6**	**0.71**	**0.06**	**1,522,700**	**130,700**

Note: All nickel and cobalt domains are included and are encapsulated by an envelope defined by nickel grades equal to or greater than 0.5%.
Note figures are rounded to reflect degree of certainty and may not tally.

Reserves Defined for Goongarrie Nickel Cobalt Project*

For personal use only

Goongarrie Nickel Cobalt Project, Ore Reserves based on 25 year mine life at 1.5 Mtpa.

Deposits	Class	Size (Mt)	Nickel (%)	Cobalt (%)
Goongarrie South	Proven	8.95	0.96%	0.10%
	Probable	17.26	0.79%	0.09%
	Total	*26.22*	*0.85%*	*0.10%*
Big Four	Proven	—	—	—
	Probable	13.92	0.77%	0.09%
	Total	*13.92*	*0.77%*	*0.09%*
TOTAL	**Proven**	**8.95**	**0.96%**	**0.10%**
	Probable	**31.18**	**0.78%**	**0.09%**
	Total	***40.13***	***0.82%***	***0.09%***

Using a nickel equivalent cut of >0.81%, which used inputs of A$18,900/t nickel and A$120,750/t cobalt. (US$15,120/t Ni and US$96,600/t Co, 0.8 exchange rate). Nickel equivalent (Nieq %) =

$$Ni\ grade + \frac{Co\ grade \times Co\ price}{Ni\ price}$$

Prices used are US$15,120/t for nickel and US$96,600/t for cobalt. No assumption about recovery is included here. Recoveries are addressed elsewhere throughout the mining schedule and financial model.

*The information shown on this slide has been previously released on the ASX platform by Ardea in ASX release, Goongarrie Nickel Cobalt Project, PFS study, 28 March 2018. The information in this report that relates to Ore Reserves for the Goongarrie South and Big deposits of the Goongarrie Nickel Cobalt Project is based on information compiled by Mr Steve Lampron who is a Member of the Australasian Institute of Mining and Metallurgy and who has provided expert guidance on mine planning and Ore Reserve estimation. Mr Lampron is a director of Auralia Mining Consulting and has sufficient experience 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 Lampron consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.