



ASX & Media Release

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ASX Symbol

ARL

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Issued Capital

Shares
67,000,747

Unlisted options
12,310,022

Loyalty options
26,436,923

Cobalt at Black Range exceeds expectations; associated with scandium and platinum group metals

Extensive and continuous cobalt-nickel mineralisation underlies and is closely associated with newly-discovered scandium and accessory platinum and palladium.

- Extensive blanket of strong cobalt and nickel mineralisation intercepted at Black Range.
- Scandium discovered at Black Range as a significant surface enrichment, with accessory platinum and palladium being widely distributed. Together, these metals form a continuous sheet of mineralisation commonly from surface.
- Cobalt-nickel intercepts include:
 - ABR0006, **10 m at 0.12 % Co** and 0.74 % Ni from 16.0 m
 - ABR0008, **16 m at 0.16 % Co** and 0.74 % Ni from 60.0 m
 - ABR0009, **10 m at 0.12 % Co** and 0.81 % Ni from 34.0 m
 - ABR0013, **10 m at 0.21 % Co** and 0.75 % Ni from 4.0 m
 - ABR0014, **8 m at 0.20 % Co** and 0.87 % Ni from 2.0 m
- Other metals contained in the laterite show potential for added credits during open pit cobalt and nickel mining.
 - Scandium (45 – 170 g/t)
 - Platinum and palladium (0.5 – 1.29 g/t)
 - Chromium (0.5 – 2.95 %)
 - Ability to provide payable credits, notably scandium, will be determined during the KNP Cobalt Zone Pre-Feasibility Study
- Upgraded resource to be modelled incorporating new data.

The Black Range RC drilling program

Ardea Resources Limited (ASX: ARL, "Ardea" or "the Company") is pleased to announce that drill results have been received for the recent Reverse Circulation (RC) drilling program at Black Range. Exceptional results confirm high-grade cobalt and nickel mineralisation, and highlight potentially significant occurrences of scandium, with accessory platinum-palladium and chromium mineralisation.

A series of 27 RC drill holes was drilled in March and April 2017. The program totalled 1,996 m with 1007 new assays recorded (not including standards, blanks etc.). The program was designed to progress the Black Range project on several fronts:

1. To augment and confirm historic cobalt and nickel results and further define their distributions.
2. To upgrade the resource classification (if appropriate) through increased drillhole density.
3. To determine whether scandium is present and, if so, define its distribution within the laterite profile.
4. To confirm and expand upon historically poorly-defined platinum and palladium mineralisation.

The drill program has been a success.

- **High-grade and extensive cobalt and nickel mineralisation** was intercepted in numerous holes.
- **Scandium mineralisation was discovered** with similar though more extensive distributions than the platinoid metals. Much of the scandium mineralisation is exposed at surface in association with significant chromium.
- **Platinum and palladium (PGMs) are widely distributed** as a coherent blanket of shallow mineralisation that is exposed at surface in many places and would be mined in any event to access the cobalt-nickel mineralisation. There is commonly high copper anomalism associated with the PGMs, suggesting a nickel-copper primary source.

Work has commenced on upgrading the resource at Black Range.

Cobalt and nickel results from Black Range

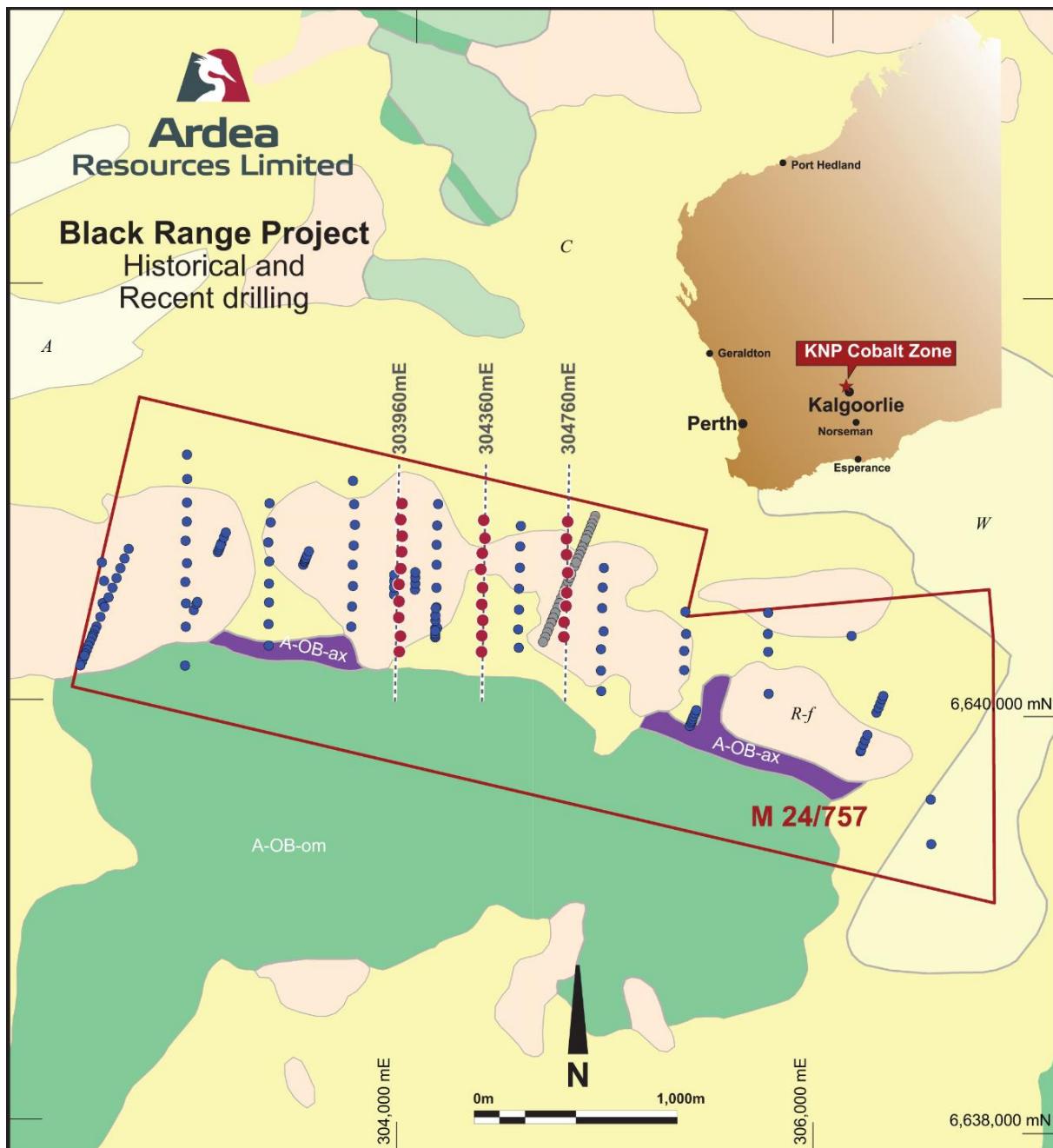
Cobalt and nickel mineralisation dominates at Black Range where they will drive any future mining operations. Numerous cobalt-mineralised intervals were detected. Highlights include:

- ABR0003, 8 m at 0.17 % cobalt and 0.69 % nickel from 8.0 m¹
- ABR0006, 10 m at 0.12 % cobalt and 0.74 % nickel from 16.0 m
- ABR0008, **16 m at 0.16 % cobalt** and 0.60 % nickel from 60.0 m
- ABR0009, 10 m at 0.12 % cobalt and 0.81 % nickel from 34.0 m
- ABR0013, **10 m at 0.21 % cobalt** and 0.75 % nickel from 4.0 m
- ABR0014, 8 m at 0.20 % cobalt and 0.87 % nickel from 2.0 m
- ABR0022, **10 m at 0.27 % cobalt** and 0.91 % nickel from 14.0 m

A full listing of all calculated intercepts is shown in Appendix 1.

¹ All newly defined intercepts at Black Range were calculated using the following parameters:

• 0.10 % cobalt minimum cutoff • 2 m minimum intercept • 4 m internal waste



 Ardea non gold-silver right tenure (incl Ni, Co, Pt, Pd, Sc)

- Historic drilling
- Historic drilling, no Cobalt assays
- 2017 ARL drilling

 A-bb; Basalt; locally porphyritic; incl dolerite-textured zones and feldspar-hornblende or chlorite schist; metamorphosed

 A-OB-ax; Ora Banda Intrusion: ultramafic rocks incl bronzitite and norite; metamorphosed

 A-OB-om; Ora Banda Intrusion: gabbro-norite; metamorphosed

 A-od; Dolerite; minor basalt or gabbro components; metamorphosed

 A; Clay, silt, sand, and gravel in channels and floodplains

 C; Colluvium derived from different rock types; includes gravel, sand and silt

 R-f; Ferruginous duricrust, massive to rubbly; includes iron-cemented reworked products

 W; Clay, silt and sand in extensive fans; local ferruginous gravel

Figure 1 – Map of the outcrop geology of the Black Range project. New drill collars are shown in red. Ultramafic rocks are shown in purple and largely underlie the laterite (R-f) where most drill holes are collared.

High-grade cobalt mineralisation

Exceptional high-grade mineralisation is concentrated in several locations, often over thick intervals. A summary of some of the highest-grade zones is shown in Table 1 below.

Table 1 – Examples of high-grade intervals from Black Range. Each assay represents 2 metres downhole thickness. Note that data shown is an excerpt of each drill hole only. Full assay results for Co, Ni, Pt, Pd, and Cr, are listed in Appendix 2. Assay results in excess of 0.20 % Co and 1.00 % Ni are bolded.

Hole	Easting (mE)	Northing (mN)	Azimuth (°)	Dip (°)	From (m)	To (m)	Thickness (m)	Cobalt (%)	Nickel (%)
ABR0008, 58 – 78 metres									
ABR0008	304763	6640878	000	-90	58.00	60.00	2.00	0.059	0.38
					60.00	62.00	2.00	0.263	0.60
					62.00	64.00	2.00	0.229	0.59
					64.00	66.00	2.00	0.201	0.63
					66.00	68.00	2.00	0.056	0.39
					68.00	70.00	2.00	0.081	0.50
					70.00	72.00	2.00	0.174	0.67
					72.00	74.00	2.00	0.168	0.67
					74.00	76.00	2.00	0.134	0.76
					76.00	78.00	2.00	0.061	0.66
ABR0013, Surface – 14 metres									
ABR0013	304359	6640554	000	-90	0.00	2.00	2.00	0.029	0.25
					2.00	4.00	2.00	0.072	0.59
					4.00	6.00	2.00	0.250	0.96
					6.00	8.00	2.00	0.284	0.82
					8.00	10.00	2.00	0.178	0.73
					10.00	12.00	2.00	0.208	0.76
					12.00	14.00	2.00	0.108	0.49
ABR0014, Surface – 12 metres									
ABR0014	304357	6640475	000	-90	0.00	2.00	2.00	0.040	0.17
					2.00	4.00	2.00	0.222	0.83
					4.00	6.00	2.00	0.286	0.96
					6.00	8.00	2.00	0.204	0.84
					8.00	10.00	2.00	0.102	0.86
					10.00	12.00	2.00	0.083	0.71
ABR0022, 14 – 24 metres									
ABR0022	303958	6640564	000	-90	14.00	16.00	2.00	0.117	0.60
					16.00	18.00	2.00	0.369	0.82
					18.00	20.00	2.00	0.308	1.12
					20.00	22.00	2.00	0.386	1.14
					22.00	24.00	2.00	0.144	0.86

These examples show that the highest-grade cobalt mineralisation is encased within a lower-grade cobalt shell, and is usually associated with high-grade nickel mineralisation. They also show that cobalt and nickel mineralisation is continuous over broad thicknesses and, in holes ABR0013 and ABR0014, is present in the immediate subsurface.

High cobalt cutoff values illustrate deposit quality

Most lateritic cobalt deposits in Australia use cutoff values of 0.05 % to 0.08 % cobalt to model intercepts and in resource calculations. Cutoff values define the level below which data is disregarded, and is commonly defined on economic grounds. That Black Range shows continuity at a significantly higher cutoff

value of 0.10% cobalt underscores the high quality of the deposit. Throughout the KNP Cobalt Zone, a 0.10% cutoff is being used to define intercepts and resource models. Using this cutoff at Black Range, cobalt mineralisation is continuous over the 600 x 800 m area of the recent drill program, and extends more than 2.5 km throughout the Black Range area.

Additional metals at Black Range

Within the near-surface laterite profile, assay results show that cobalt and nickel mineralisation is associated with additional metals at Black Range including **scandium, platinum and palladium, and chromium**.

If they were to be considered as stand-alone deposits, the abundances of scandium, PGMs and chromium would probably be problematic. However, these metals, in particular scandium, could contribute as supplementary payable commodities to the economics of a large, bulk-tonnage cobalt-nickel open pit operation.

At Black Range, scandium, platinum, and palladium are almost always situated above the cobalt-nickel mineralisation (e.g. Figure 2). Chromium is both above and directly associated with the cobalt and nickel. Any cobalt and nickel focussed mining operation will require excavation of the scandium-platinoid envelope and of the chromium bearing material in any event. As such, it makes sense to investigate any means to monetise these additional metals at Black Range. This will be incorporated into future feasibility studies of the deposit.

Scandium mineralisation

Scandium is present throughout the project area as a near-surface sheet that is up to 32 m thick within the laterite. Values within this sub-horizontal blanket vary from 50 to 170 g/t scandium². In many cases, the scandium mineralisation is exposed at surface.

Scandium intercepts at Black Range include:

- ABR0001, **18 m at 97.8 g/t scandium** from surface
- ABR0004, 18 m at 70 g/t scandium from surface
- ABR0008, 26 m at 47.7 g/t scandium from 52.0 m
- ABR0015, **32 m at 83.1 g/t scandium** from surface
- ABR0021, 20 m at 84 g/t scandium from 4.0 m
- ABR0022, **28 m at 64.3 g/t scandium** from surface

With scandium metal presently worth US\$15,000 per kg³ (equivalent to US\$15 million per tonne, or US\$15 per gram) and scandium trioxide some US\$1,500 to 6,000 per kg, there is the potential for substantial cost benefit to any cobalt-nickel mining operation at Black Range, even with only moderate recoveries. As such, low head grades can add significantly to the economics of a project. For example, CleanTeQ's Syerston project⁴ reports an operating head grade of 53 g/t scandium. Black Range contains abundant mineralisation exceeding these grades.

² Scandium was assayed using the XRF technique. The concentrations present at Black Range are toward the lower limit of detectability of the technique for scandium. Whilst scandium passed all QAQC checks, it should be noted that results are likely to be less accurate than those of other metals.

³ Source: <http://mineralprices.com/>

⁴ CleanTeQ Holdings Limited, 5 October 2016, "Syerston Nickel and Cobalt Pre-Feasibility Study Completed", p. 14.

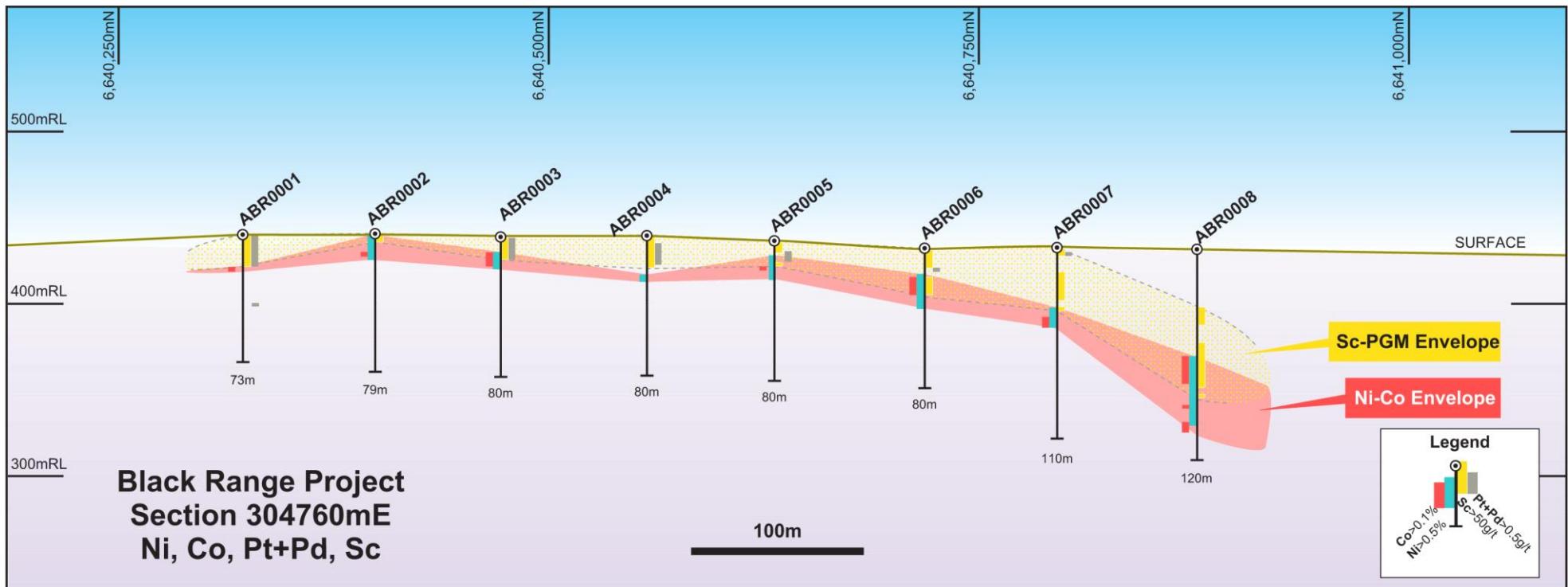


Figure 2 – The 304760mE section (the easternmost north-south section) at Black Range, showing nickel (Ni), cobalt (Co), platinum + palladium (Pt+Pd or PGM), and scandium (Sc) distributions. Envelopes for the nickel-cobalt and for the scandium-platinum group metal mineralisation show lateral continuity.

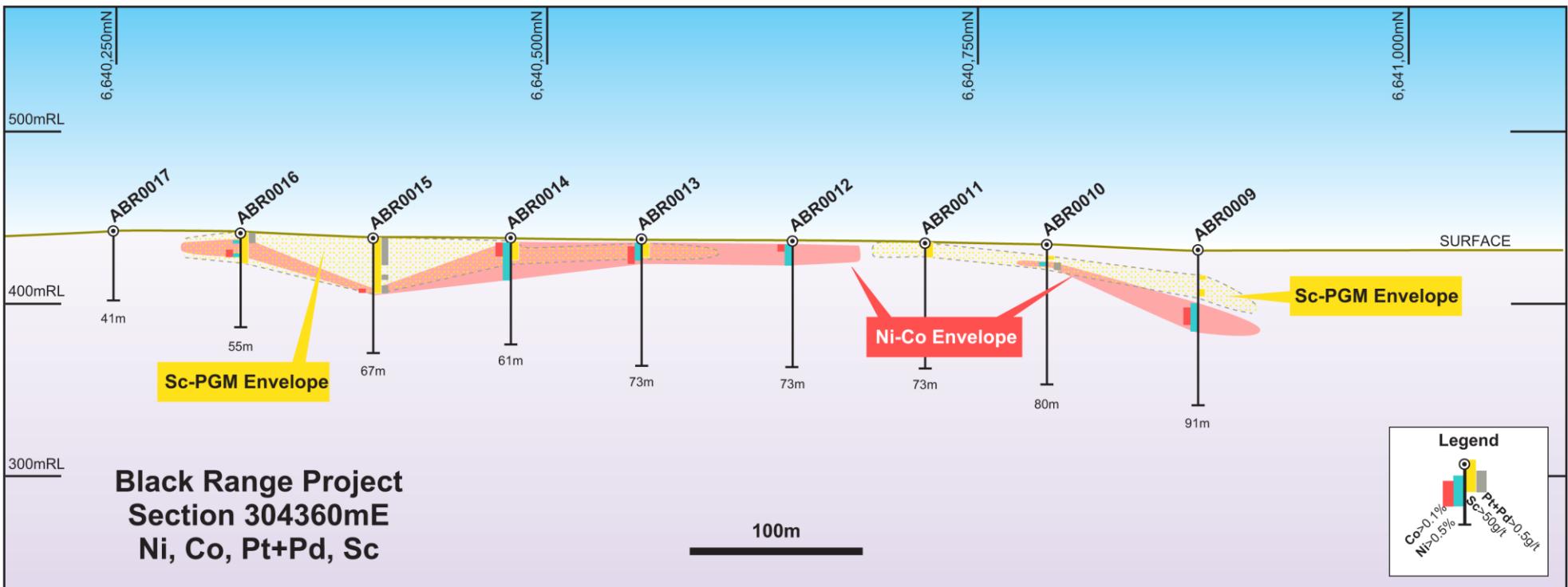


Figure 3 – The 304360mE section (the central north-south section) at Black Range, showing nickel (Ni), cobalt (Co), platinum + palladium (Pt+Pd or PGM), and scandium (Sc) distributions. Envelopes for the nickel-cobalt and for the scandium-platinum group metal mineralisation show lateral continuity.

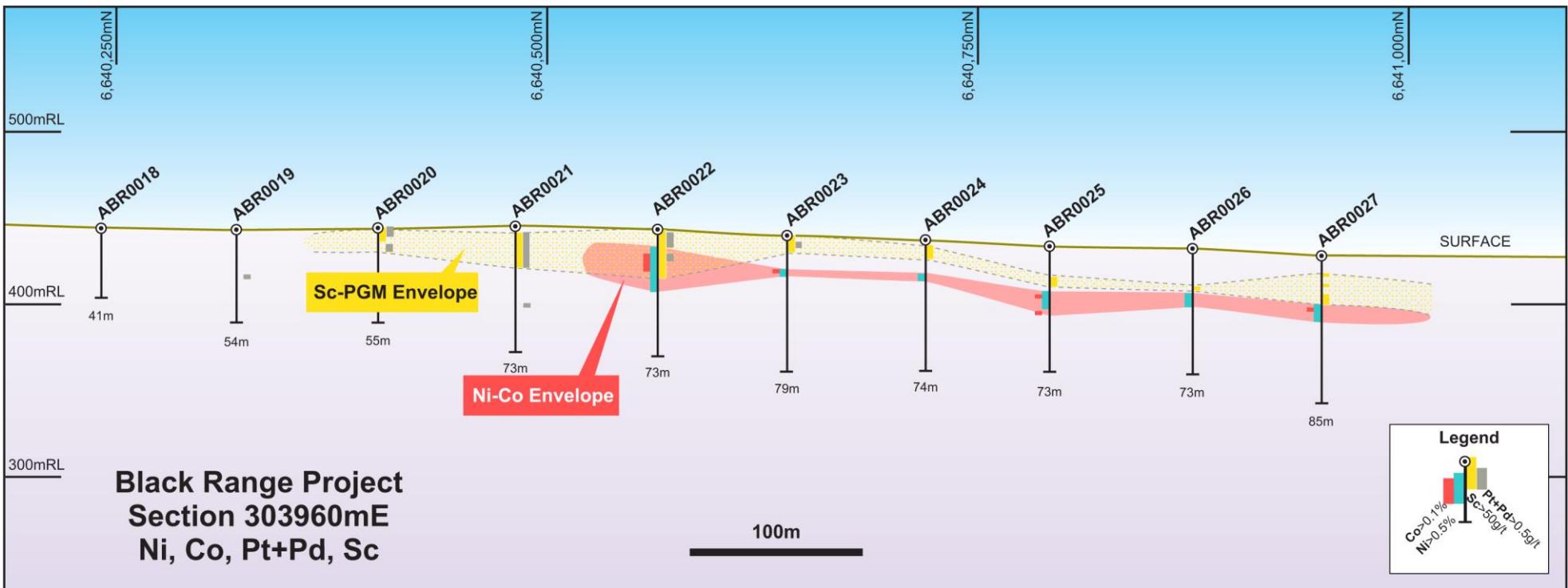


Figure 4 – The 303960mE section (the westernmost north-south section) at Black Range, showing nickel (Ni), cobalt (Co), platinum + palladium (Pt+Pd or PGM), and scandium (Sc) distributions. Envelopes for the nickel-cobalt and for the scandium-platinum group metal mineralisation show lateral continuity.

The Ardea exploration program marks the first recorded occurrence of scandium at Black Range. Historically, scandium was not assayed, so very little of the nature of the mineralisation is known. For example, the host mineral to the scandium within the laterite profile must be determined. The liberation of a scandium product from Black Range leachate would be dependent upon industry accepted metallurgical processes being compatible with the Co-Ni processes being assessed. This will be the subject of planned metallurgical investigations.

Scandium is an uncommon metal that is used as a strengthening agent for aluminium, chiefly in the aeronautical industry.

It should be noted that the analytical technique employed for Ardea's cobalt-nickel laterite reports scandium at a 10g/t detection limit so that replicate assaying using a more precise analytical technique is planned.

Platinum and palladium mineralisation

Platinum and palladium are closely associated with one another at Black Range. Platinum-palladium mineralisation is typically associated with scandium but is not as continuous, and usually occurs in the lower half of the scandium-rich envelope.

Combined platinum and palladium values from the recent drill program are generally less than 1 g/t. Intercepts include:

- ABR0001, **18 m at 0.83 g/t platinum + palladium** from surface
- ABR0003, 12 m at 0.67 g/t platinum + palladium from surface
- ABR0004, **12 m at 0.92 g/t platinum + palladium** from 4.0 m
- ABR0015, 16 m at 0.64 g/t platinum + palladium from surface
- ABR0021, **20 m at 0.66 g/t platinum + palladium** from 4.0 m

Platinum and palladium mineralisation has been recorded historically in both laterite and fresh rock at Mt Carnage, a part of Black Range.

The precise nature of the platinum and palladium mineralisation within the laterite profile is presently unknown, and will be the subject of investigation as the PFS progresses. Means to liberate these metals will be investigated in detail during the course of the current PFS.

Chromium mineralisation

Chromium intercepts are not quoted here, but all lateritic mineralisation at Black Range is either encased within or is immediately adjacent to a thick sub-horizontal chromium envelope. This chromium-rich band is up to 50 m thick, with chromium grades of between 0.9 % and 2.5 %. This contrasts markedly with grades outside of the cobalt mineralised zones of 0.2–0.8 % Cr.

As with the other accessory metals highlighted by this drill program, the nature of the chromium in the laterite profile at Black Range is unknown and will be the subject of investigation. It is likely that residual grains of chromite from the underlying Ora Banda layered mafic intrusion have remained as resistate minerals within the profile. If this is the case, a simple separation method (e.g. gravity, magnetic) could be used to separate and commodify the chromium at Black Range.

Comparison to historic drilling at Black Range.

Prior to Ardea's recent drill program, historic drilling at Black Range comprised 184 drillholes (mostly RAB) for 7,711 m. Using the parameters for defining intercepts in Ardea's drilling, newly calculated intercepts from these programs include:

- BKRC0135, 6 m at 0.32 % cobalt and 0.87 % nickel from 24.0 m
- BRR0071, **20 m at 0.25 % cobalt** and 0.55 % nickel from 28.0 m
- BRR0074, **8 m at 0.32 % cobalt** and 1.15 % nickel from 24.0 m
- BRR0079, 16 m at 0.15 % cobalt and 0.86 % nickel from 16.0 m
- BRR0080, **20 m at 0.15 % cobalt** and 0.56 % nickel from 20.0 m
- BRR0081, 16 m at 0.15 % cobalt and 0.36 % nickel from 32.0 m
- BRR0096, **12 m at 0.23 % cobalt** and 0.76 % nickel from 40.0 m

The historic data show that our recent drill program is consistent with earlier cobalt and nickel results at Black Range. See Appendix 3 for full listing of newly calculated cobalt and nickel intercepts from historic drill holes.

Platinum and palladium were not systematically assayed throughout historic drill programs, so there are only limited data to compare. These include:

- BRRB061, 16 m at 0.74 g/t platinum + palladium from 8.0 m
- BRRB059, 4 m at 0.9 g/t platinum + palladium from surface.

These are also comparable with data collected in the recent drill program. See Appendix 3 for full listing of newly calculated platinum and palladium intercepts from historic drill holes.

Scandium was not assayed in any previous drilling prior to Ardea's project tenure.

A new resource for Black Range

Black Range is part of the KNP Cobalt Zone. The KNP Cobalt Zone contains **49.7 Mt at 0.12 % cobalt and 0.86 % nickel** (Table 1) for a total contained cobalt metal of just under 60,000 t. With a historic resource of **20.1 Mt at 0.75 % nickel and 0.10 % cobalt** (Table 1), Black Range constitutes a significant proportion of the KNP Cobalt Zone resource.

Table 2 – KNP Cobalt Zone, Resource Statement from RMRC consulting group, January 2017.

Area	Prospect	Resource category	Cutoff (% Co)	Size (Mt)	Cobalt (%)	Nickel (%)
Goongarrie	Goongarrie South	Measured	0.08	3.4	0.14	1.19
		Indicated	0.08	11.2	0.11	0.92
		Inferred	0.08	1.4	0.11	0.76
	Big Four	Indicated	0.08	4.5	0.11	0.89
		Inferred	0.08	0.2	0.11	0.95
	Scotia	Inferred	0.08	2.9	0.14	0.88
	<i>Goongarrie subtotal</i>			23.6	0.12	0.94
Siberia	Black Range	Inferred	0.50(Ni)	20.1	0.10	0.75
Yerilla	Aubils	Inferred	0.08	6.0	0.15	0.90
KNP Cobalt Zone total resources				49.7	0.12	0.86

This historic resource at Black Range was based on nickel cutoffs. As the results of this recent program show (Figure 2, Figure 3, and Figure 4), cobalt and nickel distributions vary, so it is expected that the historic resource estimation methodology could be under-calling the true cobalt resource.

The Black Range resource estimate is scheduled to be upgraded in the coming months. At Goongarrie South and Big Four, the resource upgrade of the KNP Cobalt Zone based on cobalt cutoffs is nearing completion and is expected to be announced soon. Work has commenced on upgrading the cobalt resources at Goongarrie Hill and Scotia Dam (which are contiguous with Goongarrie South and Big Four). These are smaller resources that are expected to be completed quickly. Work will then commence on the upgrade of the Black Range resource, which will include all new data generated by the recent drill program.

Once re-estimated and likely Black Range head-grades defined, a program of core drilling will be done, to obtain material for metallurgical test-work.

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

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Compliance Statement (JORC 2012)

A competent person's statement for the purposes of Listing Rule 5.22 has previously been announced by the Company for:

1. Kalgoorlie Nickel Project on 21 October 2013 and 31 June 2014, October 2016, 2016 Heron Resources Annual Report and 6 January 2017;
2. KNP Cobalt Zone Study on 6 January 2017

The Company confirms that it is not aware of any new information or data that materially affects information included in previous announcements, and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. All projects will be subject to new work programs following the listing of Ardea, notably drilling, metallurgy and JORC Code 2012 resource estimation as applicable.

The information in this report that relates to the Black Range Exploration Results is based on information originally compiled by current full time employees of Ardea Resources Limited. The Exploration Results and data collection processes have been reviewed, verified and re-interpreted by Mr Ian Buchhorn who is a Member of the Australasian Institute of Mining and Metallurgy and a director of Ardea Resources Limited. Mr Buchhorn has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the exploration activities undertaken 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 Buchhorn consents to the inclusion in this report of the matters based on his information in the form and context that it appears.

The exploration and industry benchmarking summaries are based on information reviewed by Dr Matthew Painter, who is a Member of the Australian Institute of Geoscientists. Dr Painter is a full-time employee and a director of Ardea Resources Limited and has sufficient experience, which 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'. Dr Painter has reviewed this press release and consents to the inclusion in this report of the information in the form and context in which it appears.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This news release contains forward-looking statements and forward-looking information within the meaning of applicable Australian securities laws, which are based on expectations, estimates and projections as of the date of this news release.

This forward-looking information includes, or may be based upon, without limitation, estimates, forecasts and statements as to management's expectations with respect to, among other things, development and business plans, capital and exploration expenditures, the effect on the Company of any changes to existing legislation or policy, government regulation of mining operations, the length of time required to obtain permits, certifications and approvals, the success of exploration, development and mining activities, the geology of the Company's properties, environmental risks, the availability of labour, the focus of the Company in the future, demand and market outlook for metals and the prices thereof, progress in development of mineral properties, the Company's ability to raise funding privately or on a public market in the future, the Company's future growth, results of operations, performance, and business prospects and opportunities. Wherever possible, words such as "anticipate", "believe", "expect", "intend", "may" and similar expressions have been used to identify such forward-looking information. Forward-looking information is based on the opinions and estimates of management at the date the information is given, and on information available to management at such time. Forward-looking information involves significant risks, uncertainties, assumptions and other factors that could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking information. These factors, including, but not limited to, fluctuations in currency markets, fluctuations in commodity prices, the ability of the Company to access sufficient capital on favourable terms or at all, changes in national and local government legislation, taxation, controls, regulations, political or economic developments in Australia or other countries in which the Company does business or may carry on business in the future, operational or technical difficulties in connection with exploration or development activities, employee relations, the speculative nature of mineral exploration and development, obtaining necessary licenses and permits, diminishing quantities and grades of mineral reserves, contests over title to properties, especially title to undeveloped properties, the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drill results and other geological data, environmental hazards, industrial accidents, unusual or unexpected formations, pressures, cave-ins and flooding, limitations of insurance coverage and the possibility of project cost overruns or unanticipated costs and expenses, and should be considered carefully. Many of these uncertainties and contingencies can affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. Prospective investors should not place undue reliance on any forward-looking information.

Although the forward-looking information contained in this news release is based upon what management believes, or believed at the time, to be reasonable assumptions, the Company cannot assure prospective purchasers that actual results will be consistent with such forward-looking information, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither the Company nor any other person assumes responsibility for the accuracy and completeness of any such forward-looking information. The Company does not undertake, and assumes no obligation, to update or revise any such forward-looking statements or forward-looking information contained herein to reflect new events or circumstances, except as may be required by law.

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

Appendix 1 – Collar location data, Black Range

New drill holes by Ardea Resources at Black Range

Drill hole	Type	Depth (m)	Date completed	Grid	Easting (mE)	Northing (mN)	RL (mASL)	Dip (°)	Azimuth (°)
ABR0001	RC	73	06-Apr-17	MGA94_51	304750.44	6640322.98	440.32	-90	000
ABR0002	RC	79	06-Apr-17	MGA94_51	304759.37	6640399.68	440.34	-90	000
ABR0003	RC	80	07-Apr-17	MGA94_51	304761.72	6640472.35	437.38	-90	000
ABR0004	RC	80	07-Apr-17	MGA94_51	304762.08	6640557.29	438.91	-90	000
ABR0005	RC	80	08-Apr-17	MGA94_51	304763.49	6640632.52	436.09	-90	000
ABR0006	RC	80	08-Apr-17	MGA94_51	304758.59	6640719.21	431.80	-90	000
ABR0007	RC	110	09-Apr-17	MGA94_51	304755.97	6640796.23	431.07	-90	000
ABR0008	RC	120	09-Apr-17	MGA94_51	304758.42	6640877.83	429.83	-90	000
ABR0009	RC	91	10-Apr-17	MGA94_51	304358.69	6640877.75	432.60	-90	000
ABR0010	RC	80	10-Apr-17	MGA94_51	304363.07	6640789.59	433.09	-90	000
ABR0011	RC	73	10-Apr-17	MGA94_51	304358.13	6640719.77	436.20	-90	000
ABR0012	RC	73	10-Apr-17	MGA94_51	304347.76	6640642.69	435.78	-90	000
ABR0013	RC	73	11-Apr-17	MGA94_51	304354.56	6640555.11	437.24	-90	000
ABR0014	RC	61	11-Apr-17	MGA94_51	304354.85	6640478.58	438.08	-90	000
ABR0015	RC	67	11-Apr-17	MGA94_51	304360.99	6640398.66	438.85	-90	000
ABR0016	RC	55	11-Apr-17	MGA94_51	304357.33	6640322.40	440.89	-90	000
ABR0017	RC	41	11-Apr-17	MGA94_51	304357.69	6640248.27	443.15	-90	000
ABR0018	RC	41	12-Apr-17	MGA94_51	303963.32	6640240.77	445.57	-90	000
ABR0019	RC	54	12-Apr-17	MGA94_51	303968.07	6640319.48	443.08	-90	000
ABR0020	RC	55	12-Apr-17	MGA94_51	303959.49	6640401.21	444.90	-90	000
ABR0021	RC	73	12-Apr-17	MGA94_51	303957.29	6640481.29	444.26	-90	000
ABR0022	RC	73	12-Apr-17	MGA94_51	303959.79	6640564.29	442.73	-90	000
ABR0023	RC	79	13-Apr-17	MGA94_51	303961.37	6640639.40	440.77	-90	000
ABR0024	RC	74	13-Apr-17	MGA94_51	303966.81	6640719.59	436.15	-90	000
ABR0025	RC	73	13-Apr-17	MGA94_51	303966.99	6640790.96	433.71	-90	000
ABR0026	RC	73	13-Apr-17	MGA94_51	303957.42	6640874.40	432.00	-90	000
ABR0027	RC	85	14-Apr-17	MGA94_51	303962.47	6640952.19	430.75	-90	000

Historic drill holes at Black Range

Drill hole	Type	Depth (m)	Date completed	Grid	Easting (mE)	Northing (mN)	RL (mASL)	Dip (°)	Azimuth (°)
BKRC0072	RC	18	29-Oct-00	MGA94_51	302527.65	6640642.08	437.67	-90	000
BKRC0073	RC	16	29-Oct-00	MGA94_51	302539.76	6640553.95	439.38	-90	000
BKRC0074	RC	22	29-Oct-00	MGA94_51	302937.04	6640646.38	439.46	-90	000
BKRC0075	RC	60	29-Oct-00	MGA94_51	302928.63	6640753.94	434.88	-90	000
BKRC0076	RC	42	29-Oct-00	MGA94_51	302931.77	6640845.35	431.49	-90	000
BKRC0077	RC	60	29-Oct-00	MGA94_51	302931.76	6640936.52	429.24	-90	000
BKRC0078	RC	54	29-Oct-00	MGA94_51	302930.70	6641048.85	428.96	-90	000
BKRC0079	RC	12	29-Oct-00	MGA94_51	303333.16	6640555.18	436.66	-90	000
BKRC0080	RC	12	29-Oct-00	MGA94_51	303331.67	6640661.98	435.24	-90	000
BKRC0081	RC	18	29-Oct-00	MGA94_51	303325.99	6640752.31	434.70	-90	000
BKRC0082	RC	30	29-Oct-00	MGA94_51	303336.12	6640848.66	432.70	-90	000
BKRC0083	RC	30	29-Oct-00	MGA94_51	303327.86	6640939.17	431.55	-90	000
BKRC0084	RC	36	30-Oct-00	MGA94_51	304138.90	6640950.81	431.27	-90	000
BKRC0085	RC	24	30-Oct-00	MGA94_51	304135.62	6640848.60	432.88	-90	000
BKRC0086	RC	28	30-Oct-00	MGA94_51	304135.10	6640756.02	436.50	-90	000
BKRC0087	RC	24	30-Oct-00	MGA94_51	304136.96	6640659.67	439.62	-90	000
BKRC0088	RC	24	30-Oct-00	MGA94_51	304138.01	6640550.83	439.97	-90	000
BKRC0089	RC	32	30-Oct-00	MGA94_51	304139.40	6640457.42	442.94	-90	000
BKRC0090	RC	24	30-Oct-00	MGA94_51	304144.07	6640358.41	440.81	-90	000
BKRC0091	RC	30	30-Oct-00	MGA94_51	304944.35	6640356.65	440.07	-90	000
BKRC0092	RC	30	30-Oct-00	MGA94_51	304933.47	6640271.05	440.40	-90	000

Drill hole	Type	Depth (m)	Date completed	Grid	Easting (mE)	Northing (mN)	RL (mASL)	Dip (°)	Azimuth (°)
BKRC0093	RC	24	30-Oct-00	MGA94_51	304934.99	6640167.53	436.64	-90	000
BKRC0094	RC	24	30-Oct-00	MGA94_51	304938.24	6640070.31	435.15	-90	000
BKRC0095	RC	48	30-Oct-00	MGA94_51	304936.10	6640466.23	438.41	-90	000
BKRC0096	RC	60	31-Oct-00	MGA94_51	305733.42	6640459.29	429.22	-90	000
BKRC0097	RC	54	31-Oct-00	MGA94_51	305734.49	6640357.48	426.63	-90	000
BKRC0098	RC	18	31-Oct-00	MGA94_51	305736.30	6640272.22	427.01	-90	000
BKRC0099	RC	6	31-Oct-00	MGA94_51	305743.22	6640072.01	429.70	-90	000
BKRC0116	RC	66	31-Oct-00	MGA94_51	306530.32	6639578.77	419.51	-90	000
BKRC0117	RC	72	31-Oct-00	MGA94_51	306536.44	6639365.65	419.64	-90	000
BKRC0118	RC	72	01-Nov-00	MGA94_51	302927.75	6641165.36	427.99	-90	000
BKRC0119	RC	12	01-Nov-00	MGA94_51	302930.37	6640555.88	444.41	-90	000
BKRC0120	RC	48	01-Nov-00	MGA94_51	302935.62	6640453.38	448.27	-90	000
BKRC0121	RC	18	01-Nov-00	MGA94_51	302936.19	6640342.39	443.58	-90	000
BKRC0122	RC	6	01-Nov-00	MGA94_51	302937.08	6640156.55	441.69	-90	000
BKRC0123	RC	42	04-Dec-00	MGA94_51	306136.07	6640355.03	422.60	-90	000
BKRC0124	RC	36	04-Dec-00	MGA94_51	305335.47	6640456.93	428.95	-90	000
BKRC0125	RC	18	04-Dec-00	MGA94_51	305340.86	6640350.07	429.81	-90	000
BKRC0126	RC	36	04-Dec-00	MGA94_51	305333.91	6640269.24	430.86	-90	000
BKRC0127	RC	18	04-Dec-00	MGA94_51	305334.80	6640177.29	432.07	-90	000
BKRC0128	RC	48	04-Dec-00	MGA94_51	304936.55	6640566.16	435.32	-90	000
BKRC0129	RC	31	04-Dec-00	MGA94_51	304940.85	6640659.25	432.76	-90	000
BKRC0130	RC	24	05-Dec-00	MGA94_51	304538.02	6640270.77	440.65	-90	000
BKRC0131	RC	36	05-Dec-00	MGA94_51	304534.52	6640357.56	439.66	-90	000
BKRC0132	RC	30	05-Dec-00	MGA94_51	304535.41	6640452.82	437.47	-90	000
BKRC0133	RC	18	05-Dec-00	MGA94_51	304534.06	6640552.62	436.74	-90	000
BKRC0134	RC	54	05-Dec-00	MGA94_51	304536.83	6640653.99	436.94	-90	000
BKRC0135	RC	84	05-Dec-00	MGA94_51	304536.21	6640755.00	432.28	-90	000
BKRC0136	RC	84	06-Dec-00	MGA94_51	304537.69	6640852.99	430.21	-90	000
BKRC0137	RC	18	06-Dec-00	MGA94_51	303731.47	6640356.34	443.10	-90	000
BKRC0138	RC	12	06-Dec-00	MGA94_51	303733.24	6640452.70	444.85	-90	000
BKRC0139	RC	18	06-Dec-00	MGA94_51	303736.00	6640551.75	442.30	-90	000
BKRC0140	RC	24	06-Dec-00	MGA94_51	303733.41	6640653.29	438.71	-90	000
BKRC0141	RC	6	06-Dec-00	MGA94_51	303337.54	6640259.66	442.51	-90	000
BKRC0142	RC	18	06-Dec-00	MGA94_51	303333.88	6640362.15	439.57	-90	000
BKRC0143	RC	18	06-Dec-00	MGA94_51	302534.96	6640447.67	435.78	-90	000
BKRC0144	RC	66	06-Dec-00	MGA94_51	303740.18	6640843.96	433.65	-90	000
BKRC0145	RC	84	07-Dec-00	MGA94_51	303734.91	6640941.92	432.16	-90	000
BKRC0146	RC	60	07-Dec-00	MGA94_51	303736.98	6640744.62	435.30	-90	000
BKRC0147	RC	72	07-Dec-00	MGA94_51	303727.00	6641054.62	431.04	-90	000
BKRC0148	RC	30	07-Dec-00	MGA94_51	303334.09	6640465.57	437.79	-90	000
BRDD001	DD	246.3	06-Dec-11	MGA94_51	305920.00	6640380.00	-65	035	
BRR0049	RAB	50	18-Oct-97	MGA94_51	306262.72	6639991.10	500.00	-90	000
BRR0050	RAB	44	19-Oct-97	MGA94_51	306271.93	6640014.49	500.00	-90	000
BRR0051	RAB	44	19-Oct-97	MGA94_51	306280.04	6640035.07	500.00	-90	000
BRR0052	RAB	33	19-Oct-97	MGA94_51	306288.15	6640055.66	500.00	-90	000
BRR0053	RAB	36	19-Oct-97	MGA94_51	306294.04	6640070.63	500.00	-90	000
BRR0054	RAB	15	19-Oct-97	MGA94_51	306189.01	6639803.97	500.00	-90	000
BRR0055	RAB	59	19-Oct-97	MGA94_51	306191.22	6639809.58	500.00	-90	000
BRR0056	RAB	56	19-Oct-97	MGA94_51	306201.91	6639836.72	500.00	-90	000
BRR0057	RAB	53	20-Oct-97	MGA94_51	306210.38	6639858.24	500.00	-90	000
BRR0058	RAB	47	20-Oct-97	MGA94_51	306219.96	6639882.56	500.00	-90	000
BRR0059	RAB	32	20-Oct-97	MGA94_51	305366.76	6639911.67	500.00	-90	000
BRR0060	RAB	18	20-Oct-97	MGA94_51	305372.66	6639926.64	500.00	-90	000
BRR0061	RAB	20	20-Oct-97	MGA94_51	305375.98	6639935.06	500.00	-90	000
BRR0062	RAB	20	20-Oct-97	MGA94_51	305379.66	6639944.42	500.00	-90	000
BRR0063	RAB	34	20-Oct-97	MGA94_51	305384.45	6639956.58	500.00	-90	000
BRR0064	RAB	32	20-Oct-97	MGA94_51	305390.72	6639972.49	500.00	-90	000
BRR0065	RAB	38	20-Oct-97	MGA94_51	305396.62	6639987.46	500.00	-90	000
BRR0066	RAB	16	10-Oct-97	MGA94_51	304135.86	6640313.26	500.00	-90	000
BRR0067	RAB	21	20-Oct-97	MGA94_51	304135.84	6640321.31	500.00	-90	000
BRR0068	RAB	24	20-Oct-97	MGA94_51	304135.83	6640331.38	500.00	-90	000
BRR0069	RAB	24	20-Oct-97	MGA94_51	304135.81	6640343.46	500.00	-90	000
BRR0070	RAB	57	20-Oct-97	MGA94_51	304135.79	6640355.54	500.00	-90	000
BRR0071	RAB	69	20-Oct-97	MGA94_51	304135.73	6640393.79	500.00	-90	000
BRR0072	RAB	68	21-Oct-97	MGA94_51	304135.69	6640417.96	500.00	-90	000
BRR0073	RAB	67	21-Oct-97	MGA94_51	304135.64	6640452.18	500.00	-90	000

Drill hole	Type	Depth (m)	Date completed	Grid	Easting (mE)	Northing (mN)	RL (mASL)	Dip (°)	Azimuth (°)
BRR0074	RAB	59	21-Oct-97	MGA94_51	304034.83	6640539.61	500.00	-90	000
BRR0075	RAB	57	21-Oct-97	MGA94_51	304034.79	6640568.80	500.00	-90	000
BRR0076	RAB	50	21-Oct-97	MGA94_51	304034.74	6640596.99	500.00	-90	000
BRR0077	RAB	31	21-Oct-97	MGA94_51	304034.70	6640622.16	500.00	-90	000
BRR0078	RAB	66	21-Oct-97	MGA94_51	303934.20	6640514.28	500.00	-90	000
BRR0079	RAB	64	21-Oct-97	MGA94_51	303934.15	6640547.50	500.00	-90	000
BRR0080	RAB	56	21-Oct-97	MGA94_51	303934.10	6640579.72	500.00	-90	000
BRR0081	RAB	54	21-Oct-97	MGA94_51	303934.06	6640607.90	500.00	-90	000
BRR0082	RAB	29	22-Oct-97	MGA94_51	303495.45	6640648.76	500.00	-90	000
BRR0083	RAB	13	22-Oct-97	MGA94_51	303500.98	6640662.80	500.00	-90	000
BRR0084	RAB	14	22-Oct-97	MGA94_51	303503.19	6640668.41	500.00	-90	000
BRR0085	RAB	12	22-Oct-97	MGA94_51	303505.77	6640674.96	500.00	-90	000
BRR0086	RAB	30	22-Oct-97	MGA94_51	303507.98	6640680.57	500.00	-90	000
BRR0087	RAB	18	22-Oct-97	MGA94_51	303513.51	6640694.61	500.00	-90	000
BRR0088	RAB	27	22-Oct-97	MGA94_51	303520.88	6640713.32	500.00	-90	000
BRR0089	RAB	23	22-Oct-97	MGA94_51	303084.33	6640702.61	500.00	-90	000
BRR0090	RAB	25	22-Oct-97	MGA94_51	303088.38	6640712.91	500.00	-90	000
BRR0091	RAB	22	22-Oct-97	MGA94_51	303092.80	6640724.13	500.00	-90	000
BRR0092	RAB	22	22-Oct-97	MGA94_51	303096.86	6640734.43	500.00	-90	000
BRR0093	RAB	25	23-Oct-97	MGA94_51	303100.91	6640744.72	500.00	-90	000
BRR0094	RAB	25	23-Oct-97	MGA94_51	303111.97	6640772.79	500.00	-90	000
BRR0095	RAB	32	23-Oct-97	MGA94_51	303121.18	6640796.18	500.00	-90	000
BRR0096	RAB	66	23-Oct-97	MGA94_51	302973.76	6640421.92	500.00	-90	000
BRR0097	RAB	11	23-Oct-97	MGA94_51	302985.93	6640452.79	500.00	-90	000
BRR0098	RAB	57	23-Oct-97	MGA94_51	302989.61	6640462.15	500.00	-90	000
BRRB001	RAB	7	10-Dec-11	MGA94_51	300480.00	6637750.00	-90	000	
BRRB002	RAB	8	10-Dec-11	MGA94_51	300400.00	6637750.00	-90	000	
BRRB003	RAB	27	10-Dec-11	MGA94_51	300320.00	6637750.00	-90	000	
BRRB004	RAB	66	10-Dec-11	MGA94_51	300240.00	6637750.00	-90	000	
BRRB005	RAB	45	10-Dec-11	MGA94_51	300640.00	6638560.00	-90	000	
BRRB006	RAB	48	10-Dec-11	MGA94_51	300800.00	6638560.00	-90	000	
BRRB007	RAB	43	10-Dec-11	MGA94_51	300960.00	6638560.00	-90	000	
BRRB008	RAB	15	10-Dec-11	MGA94_51	301040.00	6638560.00	-90	000	
BRRB009	RAB	24	10-Dec-11	MGA94_51	300120.00	6638560.00	-90	000	
BRRB010	RAB	17	10-Dec-11	MGA94_51	301200.00	6638560.00	-90	000	
BRRB011	RAB	21	11-Dec-11	MGA94_51	301360.00	6638560.00	-90	000	
BRRB012	RAB	44	11-Dec-11	MGA94_51	301520.00	6638720.00	-90	000	
BRRB013	RAB	10	11-Dec-11	MGA94_51	301360.00	6638720.00	-90	000	
BRRB014	RAB	6	11-Dec-11	MGA94_51	301280.00	6638720.00	-90	000	
BRRB015	RAB	39	11-Dec-11	MGA94_51	301200.00	6638720.00	-90	000	
BRRB016	RAB	36	11-Dec-11	MGA94_51	301120.00	6638720.00	-90	000	
BRRB017	RAB	29	11-Dec-11	MGA94_51	300960.00	6638720.00	-90	000	
BRRB018	RAB	44	11-Dec-11	MGA94_51	300800.00	6638720.00	-90	000	
BRRB019	RAB	27	11-Dec-11	MGA94_51	301040.00	6638880.00	-90	000	
BRRB020	RAB	38	11-Dec-11	MGA94_51	301200.00	6638880.00	-90	000	
BRRB021	RAB	45	11-Dec-11	MGA94_51	301289.00	6638875.00	-90	000	
BRRB022	RAB	46	11-Dec-11	MGA94_51	301360.00	6638880.00	-90	000	
BRRB023	RAB	50	11-Dec-11	MGA94_51	301440.00	6638880.00	-90	000	
BRRB024	RAB	35	11-Dec-11	MGA94_51	301520.00	6638880.00	-90	000	
BRRB025	RAB	30	11-Dec-11	MGA94_51	301700.00	6638880.00	-90	000	
BRRB026	RAB	46	11-Dec-11	MGA94_51	301760.00	6639040.00	-90	000	
BRRB027	RAB	47	11-Dec-11	MGA94_51	301600.00	6639040.00	-90	000	
BRRB028	RAB	48	11-Dec-11	MGA94_51	301520.00	6639040.00	-90	000	
BRRB029	RAB	44	11-Dec-11	MGA94_51	301440.00	6639040.00	-90	000	
BRRB030	RAB	9	11-Dec-11	MGA94_51	301280.00	6639040.00	-90	000	
BRRB031	RAB	42	11-Dec-11	MGA94_51	301120.00	6639040.00	-90	000	
BRRB032	RAB	29	11-Dec-11	MGA94_51	300640.00	6638960.00	-90	000	
BRRB033	RAB	16	11-Dec-11	MGA94_51	300480.00	6638960.00	-90	000	
BRRB034	RAB	10	11-Dec-11	MGA94_51	300400.00	6638960.00	-90	000	
BRRB035	RAB	10	11-Dec-11	MGA94_51	300320.00	6638960.00	-90	000	
BRRB036	RAB	10	11-Dec-11	MGA94_51	300160.00	6638960.00	-90	000	
BRRB037	RAB	18	12-Dec-11	MGA94_51	300640.00	6641680.00	-90	000	
BRRB038	RAB	22	12-Dec-11	MGA94_51	300800.00	6641680.00	-90	000	
BRRB039	RAB	12	12-Dec-11	MGA94_51	301040.00	6641680.00	-90	000	
BRRB040	RAB	8	12-Dec-11	MGA94_51	300720.00	6641360.00	-90	000	
BRRB041	RAB	11	12-Dec-11	MGA94_51	300240.00	6640320.00	-90	000	

Drill hole	Type	Depth (m)	Date completed	Grid	Easting (mE)	Northing (mN)	RL (mASL)	Dip (°)	Azimuth (°)
BRRB042	RAB	21	12-Dec-11	MGA94_51	301240.00	6639600.00		-90	000
BRRB043	RAB	18	12-Dec-11	MGA94_51	301320.00	6639600.00		-90	000
BRRB044	RAB	15	12-Dec-11	MGA94_51	301400.00	6639600.00		-90	000
BRRB045	RAB	12	12-Dec-11	MGA94_51	301480.00	6639600.00		-90	000
BRRB046	RAB	36	12-Dec-11	MGA94_51	301680.00	6639840.00		-90	000
BRRB047	RAB	15	12-Dec-11	MGA94_51	301840.00	6639840.00		-90	000
BRRB048	RAB	15	12-Dec-11	MGA94_51	302000.00	6639840.00		-90	000
BRRB049	RAB	30	12-Dec-11	MGA94_51	302160.00	6639840.00		-90	000
BRRB050	RAB	15	12-Dec-11	MGA94_51	302240.00	6639920.00		-90	000
BRRB051	RAB	6	12-Dec-11	MGA94_51	302240.00	6640080.00		-90	000
BRRB052	RAB	15	12-Dec-11	MGA94_51	302240.00	6640160.00		-90	000
BRRB053	RAB	9	12-Dec-11	MGA94_51	302240.00	6640240.00		-90	000
BRRB054	RAB	6	12-Dec-11	MGA94_51	302240.00	6640320.00		-90	000
BRRB055	RAB	9	12-Dec-11	MGA94_51	302240.00	6640400.00		-90	000
BRRB056	RAB	9	12-Dec-11	MGA94_51	302240.00	6640560.00		-90	000
BRRB057	RAB	28	12-Dec-11	MGA94_51	302240.00	6640720.00		-90	000
BRRB058	RAB	15	12-Dec-11	MGA94_51	304960.00	6640560.00		-90	000
BRRB059	RAB	15	13-Dec-11	MGA94_51	304960.00	6640400.00		-90	000
BRRB060	RAB	42	13-Dec-11	MGA94_51	304960.00	6640320.00		-90	000
BRRB061	RAB	30	13-Dec-11	MGA94_51	304960.00	6640240.00		-90	000
BRRB062	RAB	33	13-Dec-11	MGA94_51	304960.00	6640160.00		-90	000
BRRB063	RAB	9	13-Dec-11	MGA94_51	304960.00	6640000.00		-90	000
BRRB064	RAB	14	13-Dec-11	MGA94_51	304960.00	6639840.00		-90	000
BRRB065	AC	87	13-Dec-11	MGA94_51	300320.00	6639840.00		-90	000
BRRB066	AC	69	13-Dec-11	MGA94_51	300160.00	6639840.00		-90	000
BRRB067	AC	76	13-Dec-11	MGA94_51	300480.00	6639840.00		-90	000
BRRB068	AC	66	13-Dec-11	MGA94_51	300640.00	6639840.00		-90	000
BRRB069	AC	72	13-Dec-11	MGA94_51	300800.00	6639840.00		-90	000
BRRB070	AC	42	13-Dec-11	MGA94_51	300160.00	6640160.00		-90	000
BRRB071	AC	69	13-Dec-11	MGA94_51	300320.00	6640160.00		-90	000
BRRB072	AC	90	02-Feb-12	MGA94_51	300480.00	6640160.00		-90	000
BRRB073	AC	74	02-Feb-12	MGA94_51	300560.00	6640160.00		-90	000
BRRB074	AC	70	02-Feb-12	MGA94_51	300640.00	6640160.00		-90	000
BRRB075	AC	75	02-Feb-12	MGA94_51	300720.00	6640160.00		-90	000
BRRB076	AC	75	03-Feb-12	MGA94_51	300880.00	6640160.00		-90	000
BRRB077	AC	84	03-Feb-12	MGA94_51	300880.00	6640000.00		-90	000
BRRB078	AC	102	03-Feb-12	MGA94_51	300720.00	6640000.00		-90	000
BRRB079	AC	78	03-Feb-12	MGA94_51	300560.00	6640000.00		-90	000
BRRB080	AC	81	03-Feb-12	MGA94_51	300480.00	6640000.00		-90	000
BRRB081	AC	83	03-Feb-12	MGA94_51	300320.00	6640000.00		-90	000
BRRB082	AC	69	03-Feb-12	MGA94_51	300240.00	6640000.00		-90	000
BRRB083	AC	66	04-Feb-12	MGA94_51	300160.00	6640000.00		-90	000
BRRB084	AC	63	04-Feb-12	MGA94_51	300080.00	6639840.00		-90	000
BRRB085	AC	68	04-Feb-12	MGA94_51	300240.00	6639840.00		-90	000
BRRB086	AC	60	04-Feb-12	MGA94_51	300240.00	6640320.00		-90	000
BRRB087	AC	87	04-Feb-12	MGA94_51	300400.00	6640320.00		-90	000
BRRB088	AC	77	04-Feb-12	MGA94_51	300560.00	6640320.00		-90	000
BRRB089	AC	78	04-Feb-12	MGA94_51	300720.00	6640320.00		-90	000
BRRB090	AC	96	04-Feb-12	MGA94_51	300880.00	6640320.00		-90	000
BRRB091	AC	81	05-Feb-12	MGA94_51	300640.00	6641680.00		-90	000
BRRB092	AC	93	05-Feb-12	MGA94_51	300800.00	6641680.00		-90	000
BRRB093	AC	90	05-Feb-12	MGA94_51	300960.00	6641680.00		-90	000
BRRB094	AC	78	05-Feb-12	MGA94_51	301120.00	6641680.00		-90	000
BRRB095	AC	84	05-Feb-12	MGA94_51	301280.00	6641680.00		-90	000
BRRB096	AC	82	06-Feb-12	MGA94_51	300720.00	6641360.00		-90	000
BRRB097	AC	78	06-Feb-12	MGA94_51	300880.00	6641360.00		-90	000
BRRB098	AC	66	06-Feb-12	MGA94_51	301040.00	6641360.00		-90	000
BRRB099	AC	63	06-Feb-12	MGA94_51	301200.00	6641360.00		-90	000
BRRB100	AC	70	06-Feb-12	MGA94_51	301360.00	6641360.00		-90	000

Appendix 2 – Assay results from Black Range

All assays from the 2017 drilling program at Black Range.

Abbreviations used: Co – cobalt, Ni – nickel, Sc – scandium, Pt – platinum, Pd – palladium, Cr – chromium, m – metre, g/t – grams per tonne, ppb – parts per billion, b.d. – below detection.

Hole	From (m)	To (m)	Width (m)	Sample number	Co (%)	Ni (%)	Sc (g/t)	Pt (ppb)	Pd (ppb)	Cr (%)	Hole	From (m)	To (m)	Width (m)	Sample number	Co (%)	Ni (%)	Sc (g/t)	Pt (ppb)	Pd (ppb)	Cr (%)
ABR0001	0.00	2.00	2.00	R102918	0.002	0.08	90	635	533	0.43	ABR0003	6.00	8.00	2.00	RC537866	0.050	0.35	80	230	288	0.60
ABR0001	2.00	4.00	2.00	R102919	0.002	0.07	80	602	528	0.46	ABR0003	8.00	10.00	2.00	RC537867	0.189	0.52	90	404	440	0.65
ABR0001	4.00	6.00	2.00	R102920	b.d.	0.25	120	413	259	0.96	ABR0003	10.00	12.00	2.00	RC537868	0.217	0.89	60	288	443	1.14
ABR0001	6.00	8.00	2.00	R102921	0.002	0.14	100	841	449	0.79	ABR0003	12.00	14.00	2.00	RC537869	0.098	0.66	30	45	105	1.20
ABR0001	8.00	10.00	2.00	R102922	0.006	0.21	90	523	435	0.52	ABR0003	14.00	16.00	2.00	RC537870	0.158	0.68	20	61	111	0.94
ABR0001	10.00	12.00	2.00	R102923	0.018	0.24	100	235	195	1.07	ABR0003	16.00	18.00	2.00	RC537872	0.061	0.74	30	55	88	0.93
ABR0001	12.00	14.00	2.00	R102924	0.028	0.20	130	326	274	1.39	ABR0003	18.00	20.00	2.00	RC537873	0.016	0.37	10	30	71	0.53
ABR0001	14.00	16.00	2.00	R102925	0.052	0.27	120	287	224	1.57	ABR0003	20.00	22.00	2.00	RC537874	0.025	0.36	20	33	51	0.75
ABR0001	16.00	18.00	2.00	R102926	0.047	0.25	50	328	369	1.49	ABR0003	22.00	24.00	2.00	RC537875	0.040	0.38	30	82	105	0.86
ABR0001	18.00	20.00	2.00	R102927	0.106	0.38	40	97	83	0.80	ABR0003	24.00	26.00	2.00	RC537876	0.028	0.32	20	59	53	1.10
ABR0001	20.00	22.00	2.00	R102928	0.074	0.38	20	72	105	0.73	ABR0003	26.00	28.00	2.00	RC537877	0.024	0.23	10	29	47	0.78
ABR0001	22.00	24.00	2.00	R102929	0.095	0.46	30	94	84	0.72	ABR0003	28.00	30.00	2.00	RC537878	0.018	0.18	10	46	54	0.75
ABR0001	24.00	26.00	2.00	R102930	0.058	0.47	30	168	191	0.83	ABR0003	30.00	32.00	2.00	RC537879	0.020	0.18	20	21	34	0.67
ABR0001	26.00	28.00	2.00	R102932	0.035	0.30	30	79	98	0.64	ABR0003	32.00	34.00	2.00	RC537880	0.021	0.18	30	21	42	0.79
ABR0001	28.00	30.00	2.00	R102933	0.032	0.24	10	68	150	0.55	ABR0003	34.00	36.00	2.00	RC537881	0.020	0.18	10	34	27	0.73
ABR0001	30.00	32.00	2.00	R102934	0.028	0.23	30	96	118	0.54	ABR0003	36.00	38.00	2.00	RC537882	0.019	0.18	10	52	37	0.76
ABR0001	32.00	34.00	2.00	R102935	0.023	0.20	20	48	76	0.54	ABR0003	38.00	40.00	2.00	RC537883	0.020	0.18	10	31	29	0.74
ABR0001	34.00	36.00	2.00	R102936	0.018	0.18	20	76	82	0.60	ABR0003	40.00	42.00	2.00	RC537884	0.015	0.14	b.d.	24	37	0.55
ABR0001	36.00	38.00	2.00	R102937	0.014	0.14	20	44	58	0.49	ABR0003	42.00	44.00	2.00	RC537885	0.011	0.10	10	19	23	0.38
ABR0001	38.00	40.00	2.00	R102938	0.010	0.10	10	46	92	0.38	ABR0003	44.00	46.00	2.00	RC537886	0.008	0.09	b.d.	23	21	0.32
ABR0001	40.00	42.00	2.00	R102939	0.011	0.12	20	218	296	0.37	ABR0003	46.00	48.00	2.00	RC537887	0.008	0.09	b.d.	16	17	0.31
ABR0001	42.00	44.00	2.00	R102940	0.009	0.10	10	283	175	0.36	ABR0003	48.00	50.00	2.00	RC537888	0.007	0.08	b.d.	12	15	0.31
ABR0001	44.00	46.00	2.00	R102941	0.009	0.10	10	38	46	0.36	ABR0003	50.00	52.00	2.00	RC537889	0.006	0.08	b.d.	14	15	0.30
ABR0001	46.00	48.00	2.00	R102942	0.009	0.09	20	69	53	0.33	ABR0003	52.00	54.00	2.00	RC537891	0.011	0.10	b.d.	18	21	0.35
ABR0001	48.00	50.00	2.00	R102943	0.011	0.11	30	49	60	0.39	ABR0003	54.00	56.00	2.00	RC537892	0.012	0.11	10	18	13	0.42
ABR0001	50.00	52.00	2.00	R102944	0.011	0.11	20	24	23	0.41	ABR0003	56.00	58.00	2.00	RC537893	0.013	0.12	10	20	14	0.46
ABR0001	52.00	54.00	2.00	R102945	0.013	0.12	20	35	37	0.42	ABR0003	58.00	60.00	2.00	RC537894	0.014	0.12	20	19	21	0.46
ABR0001	54.00	56.00	2.00	R102946	0.012	0.12	30	20	41	0.39	ABR0003	60.00	62.00	2.00	RC537895	0.014	0.12	10	25	24	0.46
ABR0001	56.00	58.00	2.00	R102947	0.013	0.12	30	32	43	0.42	ABR0003	62.00	64.00	2.00	RC537896	0.013	0.12	20	23	23	0.47
ABR0001	58.00	60.00	2.00	R102948	0.013	0.12	20	20	26	0.44	ABR0003	64.00	66.00	2.00	RC537897	0.014	0.12	10	18	19	0.43
ABR0001	60.00	62.00	2.00	R102949	0.014	0.12	30	62	83	0.44	ABR0003	66.00	68.00	2.00	RC537898	0.014	0.13	20	26	25	0.46
ABR0001	62.00	64.00	2.00	R102951	0.013	0.12	20	40	43	0.45	ABR0003	68.00	70.00	2.00	RC537899	0.012	0.12	10	28	31	0.45
ABR0001	64.00	66.00	2.00	R102952	0.013	0.12	20	30	38	0.43	ABR0003	70.00	72.00	2.00	RC537900	0.013	0.12	20	38	37	0.44
ABR0001	66.00	68.00	2.00	R102953	0.013	0.12	20	33	56	0.43	ABR0003	72.00	74.00	2.00	RC537901	0.013	0.10	20	63	60	0.40
ABR0001	68.00	70.00	2.00	R102954	0.013	0.12	20	53	56	0.43	ABR0003	74.00	76.00	2.00	RC537902	0.014	0.12	10	37	48	0.42
ABR0001	70.00	72.00	2.00	R102955	0.013	0.12	20	36	37	0.44	ABR0003	76.00	78.00	2.00	RC537903	0.013	0.12	b.d.	149	158	0.40
ABR0001	72.00	73.00	1.00	R102956	0.013	0.12	30	40	46	0.45	ABR0003	78.00	80.00	2.00	RC537904	0.013	0.12	20	132	136	0.44
ABR0002	0.00	2.00	2.00	R102957	0.013	0.51	50	83	111	1.59	ABR0004	0.00	2.00	2.00	RC537905	0.009	0.16	60	165	180	1.16
ABR0002	2.00	4.00	2.00	R102958	0.027	0.54	60	186	231	1.39	ABR0004	2.00	4.00	2.00	RC537906	0.009	0.23	50	210	259	0.73
ABR0002	4.00	6.00	2.00	R102959	0.026	0.38	30	109	108	1.44	ABR0004	4.00	6.00	2.00	RC537907	0.022	0.32	50	344	434	0.62
ABR0002	6.00	8.00	2.00	R102960	0.053	0.54	30	92	96	0.86	ABR0004	6.00	8.00	2.00	RC537908	0.017	0.30	80	504	702	0.73
ABR0002	8.00	10.00	2.00	R102961	0.084	0.61	20	60	67	0.76	ABR0004	8.00	10.00	2.00	RC537909	0.012	0.29	80	419	711	0.60
ABR0002	10.00	12.00	2.00	R102962	0.134	0.68	40	85	69	0.75	ABR0004	10.00	12.00	2.00	RC537911	0.013	0.31	90	388	567	0.94
ABR0002	12.00	14.00	2.00	R102963	0.067	0.58	20	88	86	0.86	ABR0004	12.00	14.00	2.00	RC537912	0.013	0.28	100	394	495	1.09
ABR0002	14.00	16.00	2.00	R102964	0.019	0.43	20	65	91	0.77	ABR0004	14.00	16.00	2.00	RC537913	0.021	0.43	60	235	300	1.42
ABR0002	16.00	18.00	2.00	R102965	0.021	0.39	30	52	73	0.76	ABR0004	16.00	18.00	2.00	RC537914	0.018	0.42	60	246	249	1.09
ABR0002	18.00	20.00	2.00	R102966	0.055	0.38	30	74	78	0.74	ABR0004	18.00	20.00	2.00	RC537915	0.013	0.37	30	139	138	1.05
ABR0002	20.00	22.00	2.00	R102967	0.036	0.33	20	50	59	0.72	ABR0004	20.00	22.00	2.00	RC537916	0.064	0.44	30	161	139	0.71
ABR0002	22.00	24.00	2.00	R102968	0.049	0.31	20	47	54	0.73	ABR0004	22.00	24.00	2.00	RC537917	0.066	0.59	20	143	137	0.69
ABR0002	24.00	26.00	2.00	R102969	0.031	0.29	20	52	56	0.78	ABR0004	24.00	26.00	2.00	RC537918	0.052	0.73	30	110	114	1.03
ABR0002	26.00	28.																			

Hole	From (m)	To (m)	Width (m)	Sample number	Co (%)	Ni (%)	Sc (g/t)	Pt (ppb)	Pd (ppb)	Cr (%)
ABR0005	6.00	8.00	2.00	RC537951	0.021	0.52	40	295	445	1.32
ABR0005	8.00	10.00	2.00	RC537952	0.024	0.66	40	309	351	1.58
ABR0005	10.00	12.00	2.00	RC537953	0.039	0.74	40	167	173	1.63
ABR0005	12.00	14.00	2.00	RC537954	0.088	0.84	50	231	178	1.21
ABR0005	14.00	16.00	2.00	RC537955	0.114	0.86	30	182	232	1.33
ABR0005	16.00	18.00	2.00	RC537956	0.027	0.79	30	186	180	0.98
ABR0005	18.00	20.00	2.00	RC537957	0.022	0.64	40	143	180	1.23
ABR0005	20.00	22.00	2.00	RC537958	0.017	0.39	40	119	141	1.01
ABR0005	22.00	24.00	2.00	RC537959	0.013	0.20	30	70	106	0.56
ABR0005	24.00	26.00	2.00	RC537960	0.021	0.19	10	54	94	0.58
ABR0005	26.00	28.00	2.00	RC537961	0.018	0.18	10	48	95	0.58
ABR0005	28.00	30.00	2.00	RC537962	0.022	0.19	20	46	90	0.58
ABR0005	30.00	32.00	2.00	RC537963	0.015	0.17	b.d.	65	105	0.63
ABR0005	32.00	34.00	2.00	RC537964	0.014	0.13	20	72	100	0.53
ABR0005	34.00	36.00	2.00	RC537965	0.014	0.14	10	47	77	0.56
ABR0005	36.00	38.00	2.00	RC537966	0.017	0.17	20	67	75	0.57
ABR0005	38.00	40.00	2.00	RC537967	0.014	0.18	10	39	67	0.61
ABR0005	40.00	42.00	2.00	RC537968	0.012	0.14	10	23	58	0.52
ABR0005	42.00	44.00	2.00	RC537969	0.014	0.13	20	29	66	0.46
ABR0005	44.00	46.00	2.00	RC537971	0.009	0.10	10	28	29	0.31
ABR0005	46.00	48.00	2.00	RC537972	0.004	0.06	b.d.	12	17	0.19
ABR0005	48.00	50.00	2.00	RC537973	0.006	0.08	b.d.	24	34	0.32
ABR0005	50.00	52.00	2.00	RC537974	0.007	0.07	b.d.	15	27	0.27
ABR0005	52.00	54.00	2.00	RC537975	0.006	0.08	b.d.	25	35	0.29
ABR0005	54.00	56.00	2.00	RC537976	0.005	0.07	b.d.	19	31	0.29
ABR0005	56.00	58.00	2.00	RC537977	0.009	0.10	10	24	39	0.36
ABR0005	58.00	60.00	2.00	RC537978	0.011	0.11	20	33	42	0.42
ABR0005	60.00	62.00	2.00	RC537979	0.011	0.11	10	40	47	0.41
ABR0005	62.00	64.00	2.00	RC537980	0.009	0.09	10	24	27	0.35
ABR0005	64.00	66.00	2.00	RC537981	0.012	0.11	b.d.	31	29	0.41
ABR0005	66.00	68.00	2.00	RC537982	0.012	0.12	10	31	37	0.44
ABR0005	68.00	70.00	2.00	RC537983	0.012	0.11	10	12	19	0.44
ABR0005	70.00	72.00	2.00	RC537984	0.013	0.12	30	20	25	0.44
ABR0005	72.00	74.00	2.00	RC537985	0.012	0.12	20	18	18	0.45
ABR0005	74.00	76.00	2.00	RC537986	0.012	0.12	20	14	18	0.46
ABR0005	76.00	78.00	2.00	RC537987	0.013	0.12	20	18	23	0.45
ABR0005	78.00	80.00	2.00	RC537988	0.012	0.12	30	22	33	0.44
ABR0006	0.00	2.00	2.00	RC537989	0.003	0.06	90	116	104	0.88
ABR0006	2.00	4.00	2.00	RC537990	0.002	0.08	100	82	80	0.98
ABR0006	4.00	6.00	2.00	RC537992	0.002	0.08	130	94	120	0.96
ABR0006	6.00	8.00	2.00	RC537993	0.002	0.08	80	111	155	1.04
ABR0006	8.00	10.00	2.00	RC537994	0.004	0.14	70	119	198	0.84
ABR0006	10.00	12.00	2.00	RC537995	0.049	0.31	40	439	421	0.56
ABR0006	12.00	14.00	2.00	RC537996	0.071	0.30	10	146	273	0.23
ABR0006	14.00	16.00	2.00	RC537997	0.092	0.51	40	98	267	0.66
ABR0006	16.00	18.00	2.00	RC537998	0.132	0.70	50	25	32	1.53
ABR0006	18.00	20.00	2.00	RC537999	0.099	0.63	70	92	197	1.17
ABR0006	20.00	22.00	2.00	RC538000	0.140	0.76	60	13	17	1.54
ABR0006	22.00	24.00	2.00	S200001	0.130	0.78	60	36	106	1.81
ABR0006	24.00	26.00	2.00	S200002	0.116	0.84	70	74	164	1.85
ABR0006	26.00	28.00	2.00	S200003	0.069	0.79	40	64	184	1.61
ABR0006	28.00	30.00	2.00	S200004	0.049	0.70	40	60	195	1.19
ABR0006	30.00	32.00	2.00	S200005	0.035	0.67	30	55	150	1.16
ABR0006	32.00	34.00	2.00	S200006	0.035	0.52	30	54	142	0.94
ABR0006	34.00	36.00	2.00	S200007	0.025	0.46	20	45	88	1.00
ABR0006	36.00	38.00	2.00	S200008	0.025	0.42	20	40	121	0.97
ABR0006	38.00	40.00	2.00	S200009	0.018	0.26	20	35	93	0.60
ABR0006	40.00	42.00	2.00	S200010	0.016	0.21	20	31	88	0.56
ABR0006	42.00	44.00	2.00	S200011	0.016	0.19	30	35	79	0.55
ABR0006	44.00	46.00	2.00	S200012	0.016	0.21	20	37	110	0.61
ABR0006	46.00	48.00	2.00	S200013	0.017	0.18	20	25	63	0.54
ABR0006	48.00	50.00	2.00	S200014	0.018	0.16	10	25	47	0.54
ABR0006	50.00	52.00	2.00	S200015	0.010	0.13	10	13	20	0.44
ABR0006	52.00	54.00	2.00	S200016	0.009	0.08	10	11	13	0.27
ABR0006	54.00	56.00	2.00	S200017	0.008	0.08	20	13	14	0.29
ABR0006	56.00	58.00	2.00	S200018	0.008	0.09	10	13	14	0.35
ABR0006	58.00	60.00	2.00	S200019	0.008	0.09	10	13	16	0.33
ABR0006	60.00	62.00	2.00	S200020	0.007	0.08	10	12	12	0.30
ABR0006	62.00	64.00	2.00	S200022	0.011	0.11	20	16	21	0.38
ABR0006	64.00	66.00	2.00	S200023	0.012	0.11	20	16	15	0.42
ABR0006	66.00	68.00	2.00	S200024	0.011	0.12	20	17	18	0.42
ABR0006	68.00	70.00	2.00	S200025	0.012	0.12	10	17	19	0.44
ABR0006	70.00	72.00	2.00	S200026	0.013	0.12	30	19	22	0.45
ABR0006	72.00	74.00	2.00	S200027	0.013	0.12	20	19	21	0.45
ABR0006	74.00	76.00	2.00	S200028	0.013	0.13	20	28	27	0.45
ABR0006	76.00	78.00	2.00	S200029	0.010	0.12	20	19	21	0.43
ABR0006	78.00	80.00	2.00	S200030	0.012	0.12	10	14	20	0.44
ABR0007	0.00	2.00	2.00	S200031	0.016	0.10	60	311	152	0.39
ABR0007	2.00	4.00	2.00	S200032	0.002	0.06	70	425	160	0.59
ABR0007	4.00	6.00	2.00	S200033	0.001	0.04	30	84	76	0.38
ABR0007	6.00	8.00	2.00	S200034	0.002	0.04	20	63	46	0.35
ABR0007	8.00	10.00	2.00	S200035	0.002	0.04	10	51	27	0.43
ABR0007	10.00	12.00	2.00	S200036	0.001	0.04	10	32	21	0.30
ABR0007	12.00	14.00	2.00	S200037	0.002	0.05	40	32	17	1.22
ABR0007	14.00	16.00	2.00	S200038	0.001	0.04	50	26	14	1.31
ABR0007	16.00	18.00	2.00	S200039	0.005	0.13	50	37	50	1.10
ABR0007	18.00	20.00	2.00	S200041	0.007	0.13	50	62	113	1.08
ABR0007	20.00	22.00	2.00	S200042	0.009	0.14	50	90	154	0.92
ABR0007	22.00	24.00	2.00	S200043	0.011	0.15	30	59	113	1.16
ABR0007	24.00	26.00	2.00	S200044	0.013	0.19	50	53	63	1.04
ABR0007	26.00	28.00	2.00	S200045	0.013	0.29	60	31	48	1.23
ABR0007	28.00	30.00	2.00	S200046	0.021	0.31	60	37	57	0.73
ABR0007	30.00	32.00	2.00	S200047	0.038	0.34	30	136	98	0.70
ABR0007	32.00	34.00	2.00	S200048	0.031	0.40	40	135	106	0.64
ABR0007	34.00	36.00	2.00	S200049	0.046	1.18	50	101	106	1.28
ABR0007	36.00	38.00	2.00	S200050	0.030	0.89	10	39	66	0.85
ABR0007	38.00	40.00	2.00	S200051	0.022	0.76	30	50	95	0.99
ABR0007	40.00	42.00	2.00	S200052	0.174	1.12	10	62	100	1.01
ABR0008	0.00	2.00	2.00	S200053	0.120	1.21	10	85	126	1.13
ABR0008	2.00	4.00	2.00	S200054	0.123	0.74	30	80	98	1.02
ABR0008	4.00	6.00	2.00	S200055	0.057	0.38	30	52	77	0.71
ABR0008	6.00	8.00	2.00	S200056	0.087	0.41	b.d.	46	72	

Hole	From (m)	To (m)	Width (m)	Sample number	Co (%)	Ni (%)	Sc (g/t)	Pt (ppb)	Pd (ppb)	Cr (%)
ABR009	8.00	10.00	2.00	S200156	0.002	0.03	10	50	28	0.39
ABR009	10.00	12.00	2.00	S200157	0.002	0.03	10	46	23	0.53
ABR009	12.00	14.00	2.00	S200158	0.002	0.03	b.d.	34	21	0.56
ABR009	14.00	16.00	2.00	S200159	0.001	0.07	40	15	14	1.22
ABR009	16.00	18.00	2.00	S200161	0.002	0.06	60	17	34	1.33
ABR009	18.00	20.00	2.00	S200162	0.002	0.08	30	43	99	1.36
ABR009	20.00	22.00	2.00	S200163	0.006	0.07	20	32	93	1.44
ABR009	22.00	24.00	2.00	S200164	0.006	0.09	20	33	79	1.73
ABR009	24.00	26.00	2.00	S200165	0.005	0.17	50	70	70	1.36
ABR009	26.00	28.00	2.00	S200166	0.010	0.28	60	93	80	0.98
ABR009	28.00	30.00	2.00	S200167	0.009	0.24	30	45	72	0.72
ABR009	30.00	32.00	2.00	S200168	0.009	0.43	30	56	47	0.72
ABR009	32.00	34.00	2.00	S200169	0.055	0.54	40	168	133	0.73
ABR009	34.00	36.00	2.00	S200170	0.169	0.60	40	90	117	0.67
ABR009	36.00	38.00	2.00	S200171	0.096	0.75	40	42	68	1.65
ABR009	38.00	40.00	2.00	S200172	0.095	0.92	30	50	86	1.46
ABR009	40.00	42.00	2.00	S200173	0.118	0.72	30	48	95	1.84
ABR009	42.00	44.00	2.00	S200174	0.127	1.09	20	31	50	1.37
ABR009	44.00	46.00	2.00	S200175	0.093	1.30	20	28	50	1.28
ABR009	46.00	48.00	2.00	S200176	0.041	0.87	10	31	58	1.04
ABR009	48.00	50.00	2.00	S200177	0.033	0.50	20	29	48	0.94
ABR009	50.00	52.00	2.00	S200178	0.033	0.44	20	36	64	1.04
ABR009	52.00	54.00	2.00	S200179	0.020	0.33	20	34	68	0.85
ABR009	54.00	56.00	2.00	S200181	0.024	0.33	20	35	61	0.97
ABR009	56.00	58.00	2.00	S200182	0.018	0.25	10	25	47	1.05
ABR009	58.00	60.00	2.00	S200183	0.019	0.25	10	28	46	0.76
ABR009	60.00	62.00	2.00	S200184	0.015	0.18	10	26	46	0.62
ABR009	62.00	64.00	2.00	S200185	0.016	0.16	20	21	50	0.54
ABR009	64.00	66.00	2.00	S200186	0.013	0.16	b.d.	32	51	0.52
ABR009	66.00	68.00	2.00	S200187	0.015	0.16	10	23	40	0.51
ABR009	68.00	70.00	2.00	S200188	0.013	0.16	b.d.	42	73	0.56
ABR009	70.00	72.00	2.00	S200189	0.011	0.14	10	12	28	0.41
ABR009	72.00	74.00	2.00	S200190	0.008	0.10	b.d.	19	43	0.32
ABR009	74.00	76.00	2.00	S200191	0.013	0.13	10	16	26	0.44
ABR009	76.00	78.00	2.00	S200192	0.011	0.12	10	12	32	0.40
ABR009	78.00	80.00	2.00	S200193	0.013	0.13	20	57	30	0.45
ABR009	80.00	82.00	2.00	S200194	0.013	0.13	10	10	17	0.43
ABR009	82.00	84.00	2.00	S200195	0.012	0.12	20	10	21	0.43
ABR009	84.00	86.00	2.00	S200196	0.012	0.12	20	12	12	0.43
ABR009	86.00	88.00	2.00	S200197	0.013	0.12	20	17	19	0.43
ABR009	88.00	90.00	2.00	S200198	0.013	0.12	30	14	40	0.44
ABR009	90.00	91.00	1.00	S200199	0.012	0.12	20	10	26	0.44
ABR010	0.00	2.00	2.00	S200200	0.004	0.09	40	109	56	0.70
ABR010	2.00	4.00	2.00	S200202	0.001	0.05	30	84	49	0.75
ABR010	4.00	6.00	2.00	S200203	0.002	0.11	20	54	57	1.18
ABR010	6.00	8.00	2.00	S200204	0.004	0.09	50	49	67	1.38
ABR010	8.00	10.00	2.00	S200205	0.014	0.35	40	66	126	1.04
ABR010	10.00	12.00	2.00	S200206	0.026	0.81	20	192	427	0.48
ABR010	12.00	14.00	2.00	S200207	0.028	0.45	20	227	399	0.47
ABR010	14.00	16.00	2.00	S200208	0.057	0.50	10	65	82	0.49
ABR010	16.00	18.00	2.00	S200209	0.054	0.48	10	66	64	0.49
ABR010	18.00	20.00	2.00	S200210	0.029	0.31	30	57	50	0.44
ABR010	20.00	22.00	2.00	S200211	0.019	0.19	10	59	47	0.45
ABR010	22.00	24.00	2.00	S200212	0.011	0.14	b.d.	34	29	0.34
ABR010	24.00	26.00	2.00	S200213	0.009	0.14	b.d.	22	27	0.35
ABR010	26.00	28.00	2.00	S200214	0.012	0.15	10	24	29	0.51
ABR010	28.00	30.00	2.00	S200215	0.013	0.16	10	32	37	0.52
ABR010	30.00	32.00	2.00	S200216	0.014	0.16	20	20	29	0.55
ABR010	32.00	34.00	2.00	S200217	0.016	0.16	20	22	28	0.55
ABR010	34.00	36.00	2.00	S200218	0.015	0.17	10	22	27	0.56
ABR010	36.00	38.00	2.00	S200219	0.016	0.17	20	21	54	
ABR010	38.00	40.00	2.00	S200221	0.013	0.16	10	23	26	0.51
ABR010	40.00	42.00	2.00	S200222	0.015	0.16	20	23	25	0.54
ABR010	42.00	44.00	2.00	S200223	0.014	0.16	10	21	22	0.52
ABR010	44.00	46.00	2.00	S200224	0.015	0.16	10	20	23	0.53
ABR010	46.00	48.00	2.00	S200225	0.014	0.16	10	20	21	0.56
ABR010	48.00	50.00	2.00	S200226	0.015	0.16	10	23	23	0.55
ABR010	50.00	52.00	2.00	S200227	0.013	0.16	10	19	22	0.58
ABR010	52.00	54.00	2.00	S200228	0.016	0.16	20	17	24	0.59
ABR010	54.00	56.00	2.00	S200229	0.018	0.17	30	27	34	0.58
ABR010	56.00	58.00	2.00	S200230	0.013	0.15	10	15	21	0.55
ABR010	58.00	60.00	2.00	S200231	0.012	0.16	10	16	18	0.60
ABR010	60.00	62.00	2.00	S200232	0.013	0.14	20	17	21	0.46
ABR010	62.00	64.00	2.00	S200233	0.008	0.10	b.d.	11	13	0.34
ABR010	64.00	66.00	2.00	S200234	0.010	0.10	20	12	11	0.36
ABR010	66.00	68.00	2.00	S200235	0.009	0.09	10	26	34	0.42
ABR010	68.00	70.00	2.00	S200236	0.009	0.10	b.d.	19	22	0.36
ABR010	70.00	72.00	2.00	S200237	0.012	0.12	10	23	16	0.44
ABR010	72.00	74.00	2.00	S200238	0.012	0.12	20	18	16	0.45
ABR010	74.00	76.00	2.00	S200239	0.013	0.12	10	14	21	0.44
ABR010	76.00	78.00	2.00	S200241	0.013	0.12	20	22	27	0.45
ABR010	78.00	80.00	2.00	S200242	0.012	0.12	10	21	14	0.44
ABR011	0.00	2.00	2.00	S200243	0.007	0.11	100	89	143	1.76
ABR011	2.00	4.00	2.00	S200244	0.006	0.10	80	93	150	1.47
ABR011	4.00	6.00	2.00	S200245	0.004	0.08	40	57	95	1.46
ABR011	6.00	8.00	2.00	S200246	0.005	0.07	50	48	81	1.50
ABR011	8.00	10.00	2.00	S200247	0.004	0.08	20	51	99	0.97
ABR011	10.00	12.00	2.00	S200248	0.008	0.09	10	55	58	0.40
ABR011	12.00	14.00	2.00	S200249	0.002	0.06	b.d.	18	20	0.23
ABR011	14.00	16.00	2.00	S200250	0.004	0.06	b.d.	155	167	0.21
ABR011	16.00	18.00	2.00	S200251	0.009	0.08	10	28	91	0.33
ABR011	18.00	20.00	2.00	S200252	0.008	0.10	b.d.	14	24	0.39
ABR011	20.00	22.00	2.00	S200253	0.009	0.10	b.d.	13	21	0.42
ABR011	22.00	24.00	2.00	S200254	0.006	0.09	b.d.	12	15	0.31
ABR011	24.00	26.00	2.00	S200255	0.007	0.10	b.d.	14	19	0.35
ABR011	26.00	28.00	2.00	S200256	0.012	0.13	10	18	23	0.50
ABR011	28.00	30.00	2.00	S200257	0.013	0.13	30	21	30	0.53
ABR011	30.00	32.00	2.00	S200258	0.015	0.15	20	34	54	0.56

Hole	From (m)	To (m)	Width (m)	Sample number	Co (%)	Ni (%)	Sc (g/t)	Pt (ppb)	Pd (ppb)	Cr (%)
ABR0011	32.00	34.00	2.00	S200259	0.014	0.15	10	29	37	0.56
ABR0011	34.00	36.00	2.00	S200260	0.012	0.15	1			

Hole	From (m)	To (m)	Width (m)	Sample number	Co (%)	Ni (%)	Sc (g/t)	Pt (ppb)	Pd (ppb)	Cr (%)
ABR0014	4.00	6.00	2.00	S200362	0.286	0.96	60	93	131	1.90
ABR0014	6.00	8.00	2.00	S200363	0.204	0.84	50	91	115	1.70
ABR0014	8.00	10.00	2.00	S200364	0.102	0.86	70	107	158	1.39
ABR0014	10.00	12.00	2.00	S200365	0.083	0.71	50	117	192	1.42
ABR0014	12.00	14.00	2.00	S200366	0.057	0.56	20	57	102	0.87
ABR0014	14.00	16.00	2.00	S200367	0.046	0.73	30	70	121	0.97
ABR0014	16.00	18.00	2.00	S200368	0.023	0.52	30	39	101	0.93
ABR0014	18.00	20.00	2.00	S200369	0.070	0.49	30	50	142	0.85
ABR0014	20.00	22.00	2.00	S200370	0.079	0.40	40	127	157	1.09
ABR0014	22.00	24.00	2.00	S200371	0.020	0.58	20	29	110	0.73
ABR0014	24.00	26.00	2.00	S200372	0.017	0.26	10	51	80	0.62
ABR0014	26.00	28.00	2.00	S200373	0.019	0.20	30	34	75	0.62
ABR0014	28.00	30.00	2.00	S200374	0.013	0.13	b.d.	20	53	0.48
ABR0014	30.00	32.00	2.00	S200375	0.013	0.11	b.d.	18	51	0.35
ABR0014	32.00	34.00	2.00	S200376	0.012	0.11	10	28	46	0.34
ABR0014	34.00	36.00	2.00	S200377	0.009	0.11	10	36	57	0.37
ABR0014	36.00	38.00	2.00	S200378	0.009	0.10	b.d.	11	33	0.35
ABR0014	38.00	40.00	2.00	S200379	0.009	0.11	10	11	27	0.32
ABR0014	40.00	42.00	2.00	S200380	0.009	0.10	b.d.	16	24	0.32
ABR0014	42.00	44.00	2.00	S200382	0.009	0.10	b.d.	20	25	0.38
ABR0014	44.00	46.00	2.00	S200383	0.009	0.10	10	10	24	0.33
ABR0014	46.00	48.00	2.00	S200384	0.010	0.10	10	13	29	0.35
ABR0014	48.00	50.00	2.00	S200385	0.011	0.11	10	15	26	0.37
ABR0014	50.00	52.00	2.00	S200386	0.009	0.11	b.d.	55	35	0.34
ABR0014	52.00	54.00	2.00	S200387	0.014	0.16	10	24	40	0.46
ABR0014	54.00	56.00	2.00	S200388	0.012	0.12	10	29	46	0.42
ABR0014	56.00	58.00	2.00	S200389	0.013	0.12	10	27	51	0.42
ABR0014	58.00	60.00	2.00	S200390	0.013	0.12	10	16	31	0.43
ABR0014	60.00	61.00	1.00	S200391	0.014	0.12	10	29	29	0.45
ABR0015	0.00	2.00	2.00	S200392	0.006	0.11	70	349	381	0.47
ABR0015	2.00	4.00	2.00	S200393	0.004	0.12	80	285	320	0.54
ABR0015	4.00	6.00	2.00	S200394	0.005	0.14	110	360	410	0.55
ABR0015	6.00	8.00	2.00	S200395	0.008	0.17	170	349	406	0.61
ABR0015	8.00	10.00	2.00	S200396	0.009	0.39	150	259	369	0.97
ABR0015	10.00	12.00	2.00	S200397	0.012	0.45	90	248	344	1.25
ABR0015	12.00	14.00	2.00	S200398	0.013	0.38	70	228	291	1.81
ABR0015	14.00	16.00	2.00	S200399	0.009	0.43	70	203	315	2.19
ABR0015	16.00	18.00	2.00	S200401	0.009	0.38	70	156	221	2.76
ABR0015	18.00	20.00	2.00	S200402	0.011	0.37	60	166	207	2.63
ABR0015	20.00	22.00	2.00	S200403	0.009	0.11	60	173	210	1.99
ABR0015	22.00	24.00	2.00	S200404	0.009	0.10	70	321	280	1.57
ABR0015	24.00	26.00	2.00	S200405	0.024	0.25	60	156	218	1.14
ABR0015	26.00	28.00	2.00	S200406	0.056	0.31	50	161	201	0.96
ABR0015	28.00	30.00	2.00	S200407	0.052	0.25	80	241	336	1.98
ABR0015	30.00	32.00	2.00	S200408	0.184	0.35	70	219	326	1.79
ABR0015	32.00	34.00	2.00	S200409	0.037	0.29	30	142	197	1.02
ABR0015	34.00	36.00	2.00	S200410	0.031	0.30	30	202	175	0.85
ABR0015	36.00	38.00	2.00	S200411	0.020	0.22	30	59	142	0.70
ABR0015	38.00	40.00	2.00	S200412	0.013	0.13	10	51	86	0.46
ABR0015	40.00	42.00	2.00	S200413	0.010	0.11	60	117	40	0.40
ABR0015	42.00	44.00	2.00	S200414	0.010	0.11	b.d.	87	98	0.39
ABR0015	44.00	46.00	2.00	S200415	0.009	0.09	b.d.	44	74	0.34
ABR0015	46.00	48.00	2.00	S200416	0.009	0.10	b.d.	155	80	0.40
ABR0015	48.00	50.00	2.00	S200417	0.011	0.11	b.d.	112	108	0.44
ABR0015	50.00	52.00	2.00	S200418	0.010	0.11	10	68	124	0.42
ABR0015	52.00	54.00	2.00	S200419	0.012	0.12	10	45	103	0.41
ABR0015	54.00	56.00	2.00	S200421						0.00
ABR0015	56.00	58.00	2.00	S200422	0.013	0.12	10	59	95	0.44
ABR0015	58.00	60.00	2.00	S200423	0.013	0.13	20	38	59	0.45
ABR0015	60.00	62.00	2.00	S200424	0.014	0.13	20	65	59	0.44
ABR0015	62.00	64.00	2.00	S200425	0.014	0.13	20	165	70	0.44
ABR0015	64.00	66.00	2.00	S200426	0.013	0.12	20	34	51	0.43
ABR0015	66.00	67.00	1.00	S200427	0.015	0.13	30	27	54	0.46
ABR0016	0.00	2.00	2.00	S200428	0.005	0.11	70	478	329	0.41
ABR0016	2.00	4.00	2.00	S200429	0.002	0.42	70	562	301	0.54
ABR0016	4.00	6.00	2.00	S200430	0.004	0.80	50	382	195	0.69
ABR0016	6.00	8.00	2.00	S200431	0.008	0.27	60	252	174	0.81
ABR0016	8.00	10.00	2.00	S200432	0.051	0.32	50	219	127	1.01
ABR0016	10.00	12.00	2.00	S200433	0.106	0.40	50	208	100	0.91
ABR0016	12.00	14.00	2.00	S200434	0.120	0.55	40	90	60	0.86
ABR0016	14.00	16.00	2.00	S200435	0.068	0.43	50	212	120	0.86
ABR0016	16.00	18.00	2.00	S200436	0.028	0.43	50	175	89	0.74
ABR0016	18.00	20.00	2.00	S200437	0.016	0.23	40	151	112	0.63
ABR0016	20.00	22.00	2.00	S200438	0.013	0.14	30	110	71	0.40
ABR0016	22.00	24.00	2.00	S200439	0.014	0.12	30	161	122	0.41
ABR0016	24.00	26.00	2.00	S200440	0.013	0.11	30	138	100	0.35
ABR0016	26.00	28.00	2.00	S200442	0.009	0.11	30	287	142	0.29
ABR0016	28.00	30.00	2.00	S200443	0.009	0.09	30	134	92	0.29
ABR0016	30.00	32.00	2.00	S200444	0.009	0.08	30	88	50	0.29
ABR0016	32.00	34.00	2.00	S200445	0.009	0.08	30	164	95	0.28
ABR0016	34.00	36.00	2.00	S200446	0.010	0.09	40	96	57	0.32
ABR0016	36.00	38.00	2.00	S200447	0.011	0.10	20	45	35	0.33
ABR0016	38.00	40.00	2.00	S200448	0.010	0.12	30	142	79	0.29
ABR0016	40.00	42.00	2.00	S200449	0.009	0.10	30	117	75	0.30
ABR0016	42.00	44.00	2.00	S200450	0.015	0.13	20	70	178	0.44
ABR0016	44.00	46.00	2.00	S200451	0.011	0.10	20	95	74	0.34
ABR0016	46.00	48.00	2.00	S200452	0.008	0.09	30	86	63	0.30
ABR0016	48.00	50.00	2.00	S200453	0.011	0.11	20	144	74	0.38
ABR0016	50.00	52.00	2.00	S200454	0.009	0.12	b.d.	54	56	0.38
ABR0016	52.00	54.00	2.00	S200455	0.012	0.12	20	54	49	0.41
ABR0016	54.00	55.00	1.00	S200456	0.012	0.13	10	66	68	0.42
ABR0017	0.00	2.00	2.00	S200457	0.011	0.09	30	180	83	0.34
ABR0017	2.00	4.00	2.00	S200458	0.008	0.09	40	169	102	0.50
ABR0017	4.00	6.00	2.00	S200459	0.006	0.07	30	137	92	0.42
ABR0017	6.00	8.00	2.00	S200461	0.006	0.09	30	128	67	0.48
ABR0017	8.00	10.00	2.00	S200462	0.006	0.08	30	137	65	0.54
ABR0017	10.00	12.00	2.00	S200463	0.010	0.07	40	116	60	0.37

Hole	From (m)	To (m)	Width (m)	Sample number	Co (%)	Ni (%)	Sc (g/t)	Pt (ppb)	Pd (ppb)	Cr (%)
ABR0017	12.00	14.00	2.00	S200464	0.018	0.11	30	92	46	0.29
ABR0017	14.00									

Hole	From (m)	To (m)	Width (m)	Sample number	Co (%)	Ni (%)	Sc (g/t)	Pt (ppb)	Pd (ppb)	Cr (%)
ABR0021	10.00	12.00	2.00	S200565	0.007	0.10	110	373	238	0.41
ABR0021	12.00	14.00	2.00	S200566	0.009	0.11	80	368	415	0.54
ABR0021	14.00	16.00	2.00	S200567	0.005	0.12	70	365	455	0.54
ABR0021	16.00	18.00	2.00	S200568	0.007	0.26	70	361	396	0.65
ABR0021	18.00	20.00	2.00	S200569	0.006	0.28	70	303	343	0.43
ABR0021	20.00	22.00	2.00	S200570	0.011	0.33	60	274	323	1.37
ABR0021	22.00	24.00	2.00	S200571	0.019	0.36	50	266	390	1.67
ABR0021	24.00	26.00	2.00	S200572	0.014	0.38	30	177	307	0.98
ABR0021	26.00	28.00	2.00	S200573	0.015	0.39	30	102	157	0.88
ABR0021	28.00	30.00	2.00	S200574	0.021	0.43	20	88	137	0.79
ABR0021	30.00	32.00	2.00	S200575	0.034	0.38	20	81	121	0.68
ABR0021	32.00	34.00	2.00	S200576	0.070	0.36	20	117	135	0.62
ABR0021	34.00	36.00	2.00	S200577	0.042	0.30	10	77	117	0.56
ABR0021	36.00	38.00	2.00	S200578	0.042	0.29	30	99	155	0.57
ABR0021	38.00	40.00	2.00	S200579	0.028	0.22	20	115	211	0.56
ABR0021	40.00	42.00	2.00	S200581	0.023	0.20	20	113	194	0.63
ABR0021	42.00	44.00	2.00	S200582	0.015	0.15	20	135	254	0.53
ABR0021	44.00	46.00	2.00	S200583	0.012	0.11	30	406	476	0.44
ABR0021	46.00	48.00	2.00	S200584	0.016	0.16	10	82	127	0.65
ABR0021	48.00	50.00	2.00	S200585	0.016	0.16	10	84	121	0.59
ABR0021	50.00	52.00	2.00	S200586	0.015	0.15	20	69	164	0.63
ABR0021	52.00	54.00	2.00	S200587	0.016	0.16	10	49	124	0.59
ABR0021	54.00	56.00	2.00	S200588	0.018	0.16	20	79	143	0.61
ABR0021	56.00	58.00	2.00	S200589	0.018	0.16	20	175	192	0.65
ABR0021	58.00	60.00	2.00	S200590	0.013	0.15	10	72	243	0.61
ABR0021	60.00	62.00	2.00	S200591	0.015	0.16	20	148	173	0.57
ABR0021	62.00	64.00	2.00	S200592	0.019	0.15	10	114	96	0.60
ABR0021	64.00	66.00	2.00	S200593	0.016	0.15	20	76	81	0.49
ABR0021	66.00	68.00	2.00	S200594	0.013	0.13	20	128	142	0.42
ABR0021	68.00	70.00	2.00	S200595	0.011	0.11	10	36	56	0.40
ABR0021	70.00	72.00	2.00	S200596	0.012	0.11	10	32	57	0.40
ABR0021	72.00	73.00	1.00	S200597	0.012	0.12	20	53	68	0.43
ABR0022	0.00	2.00	2.00	S200598	0.005	0.13	80	209	236	1.02
ABR0022	2.00	4.00	2.00	S200599	0.005	0.19	80	264	282	0.95
ABR0022	4.00	6.00	2.00	S200601	0.055	0.22	70	343	451	0.89
ABR0022	6.00	8.00	2.00	S200602	0.043	0.28	70	213	378	1.16
ABR0022	8.00	10.00	2.00	S200603	0.027	0.31	70	220	469	0.97
ABR0022	10.00	12.00	2.00	S200604	0.024	0.53	60	126	249	1.13
ABR0022	12.00	14.00	2.00	S200605	0.024	0.61	60	126	336	1.02
ABR0022	14.00	16.00	2.00	S200606	0.117	0.60	60	165	338	1.00
ABR0022	16.00	18.00	2.00	S200607	0.369	0.82	60	228	297	1.08
ABR0022	18.00	20.00	2.00	S200608	0.308	1.12	70	224	181	1.37
ABR0022	20.00	22.00	2.00	S200609	0.386	1.14	50	135	285	1.08
ABR0022	22.00	24.00	2.00	S200610	0.144	0.86	60	89	219	1.04
ABR0022	24.00	26.00	2.00	S200611	0.088	0.69	60	75	124	1.69
ABR0022	26.00	28.00	2.00	S200612	0.028	0.70	50	131	104	2.95
ABR0022	28.00	30.00	2.00	S200613	0.045	0.62	30	64	123	1.70
ABR0022	30.00	32.00	2.00	S200614	0.028	0.50	10	87	112	0.77
ABR0022	32.00	34.00	2.00	S200615	0.049	0.60	10	39	111	0.63
ABR0022	34.00	36.00	2.00	S200616	0.039	0.54	10	40	94	0.62
ABR0022	36.00	38.00	2.00	S200617	0.022	0.42	20	31	85	0.53
ABR0022	38.00	40.00	2.00	S200618	0.019	0.35	20	44	105	0.68
ABR0022	40.00	42.00	2.00	S200619	0.021	0.25	10	50	145	0.65
ABR0022	42.00	44.00	2.00	S200620	0.019	0.22	10	60	94	0.62
ABR0022	44.00	46.00	2.00	S200622	0.019	0.17	10	34	96	0.71
ABR0022	46.00	48.00	2.00	S200623	0.018	0.19	10	56	71	0.62
ABR0022	48.00	50.00	2.00	S200624	0.019	0.19	10	50	112	0.60
ABR0022	50.00	52.00	2.00	S200625	0.016	0.17	10	43	108	0.57
ABR0022	52.00	54.00	2.00	S200626	0.016	0.16	10	52	155	0.52
ABR0022	54.00	56.00	2.00	S200627	0.016	0.16	10	39	102	0.54
ABR0022	56.00	58.00	2.00	S200628	0.016	0.17	10	36	66	0.60
ABR0022	58.00	60.00	2.00	S200629	0.012	0.14	20	27	44	0.41
ABR0022	60.00	62.00	2.00	S200630	0.008	0.10	b.d.	24	33	0.32
ABR0022	62.00	64.00	2.00	S200631	0.009	0.10	10	32	42	0.34
ABR0022	64.00	66.00	2.00	S200632	0.006	0.07	b.d.	43	35	0.20
ABR0022	66.00	68.00	2.00	S200633	0.007	0.08	b.d.	19	30	0.25
ABR0022	68.00	70.00	2.00	S200634	0.007	0.08	b.d.	12	26	0.25
ABR0022	70.00	72.00	2.00	S200635	0.013	0.12	10	16	34	0.43
ABR0022	72.00	73.00	1.00	S200636	0.012	0.12	20	25	27	0.42
ABR0023	0.00	2.00	2.00	S200637	0.006	0.11	50	146	171	0.72
ABR0023	2.00	4.00	2.00	S200638	0.008	0.15	60	167	150	1.14
ABR0023	4.00	6.00	2.00	S200639	0.015	0.15	50	200	252	0.85
ABR0023	6.00	8.00	2.00	S200641	0.027	0.21	80	250	315	0.74
ABR0023	8.00	10.00	2.00	S200642	0.036	0.28	50	162	209	0.61
ABR0023	10.00	12.00	2.00	S200643	0.018	0.39	40	95	189	1.03
ABR0023	12.00	14.00	2.00	S200644	0.015	0.44	40	94	180	1.57
ABR0023	14.00	16.00	2.00	S200645	0.015	0.25	30	86	138	1.16
ABR0023	16.00	18.00	2.00	S200646	0.017	0.30	20	57	98	0.93
ABR0023	18.00	20.00	2.00	S200647	0.052	0.49	30	40	71	0.97
ABR0023	20.00	22.00	2.00	S200648	0.313	0.78	10	47	69	0.89
ABR0023	22.00	24.00	2.00	S200649	0.061	0.88	20	29	58	0.69
ABR0023	24.00	26.00	2.00	S200650	0.019	0.27	10	35	60	0.62
ABR0023	26.00	28.00	2.00	S200650A	0.032	0.34	b.d.	22	51	0.46
ABR0023	28.00	30.00	2.00	S200651	0.018	0.25	b.d.	34	71	0.66
ABR0023	30.00	32.00	2.00	S200652	0.020	0.24	20	33	70	0.68
ABR0023	32.00	34.00	2.00	S200653	0.020	0.23	10	43	80	0.66
ABR0023	34.00	36.00	2.00	S200654	0.020	0.22	10	43	95	0.69
ABR0023	36.00	38.00	2.00	S200655	0.020	0.22	b.d.	33	64	0.68
ABR0023	38.00	40.00	2.00	S200656	0.019	0.21	10	28	58	0.67
ABR0023	40.00	42.00	2.00	S200657	0.018	0.20	b.d.	32	49	0.68
ABR0023	42.00	44.00	2.00	S200658	0.022	0.21	10	33	60	0.69
ABR0023	44.00	46.00	2.00	S200659	0.016	0.20	b.d.	21	68	0.68
ABR0023	46.00	48.00	2.00	S200661	0.014	0.17	b.d.	19	62	0.56
ABR0023	48.00	50.00	2.00	S200662	0.017	0.19	b.d.	28	56	0.66
ABR0023	50.00	52.00	2.00	S200663	0.017	0.18	10	35	66	0.56
ABR0023	52.00	54.00	2.00	S200664	0.013	0.14	10	11	23	0.40
ABR0023	54.00	56.00	2.00	S200665	0.011	0.11	b.d.	18	33	0.39
ABR0023	56.00	58.00	2.00	S200666	0.007	0.09	b.d.	11	23	0.28

Hole	From (m)	To (m)	Width (m)	Sample number	Co (%)	Ni (%)	Sc (g/t)	Pt (ppb)	Pd (ppb)	Cr (%)
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Hole	From (m)	To (m)	Width (m)	Sample number	Co (%)	Ni (%)	Sc (g/t)	Pt (ppb)	Pd (ppb)	Cr (%)
ABR026	24.00	26.00	2.00	S200769	0.034	0.42	30	54	133	1.28
ABR026	26.00	28.00	2.00	S200770	0.029	0.52	b.d.	37	46	1.19
ABR026	28.00	30.00	2.00	S200771	0.016	0.50	b.d.	30	44	1.07
ABR026	30.00	32.00	2.00	S200772	0.020	0.61	b.d.	33	47	1.03
ABR026	32.00	34.00	2.00	S200773	0.061	0.58	b.d.	43	44	0.83
ABR026	34.00	36.00	2.00	S200774	0.049	0.47	b.d.	39	37	1.09
ABR026	36.00	38.00	2.00	S200775	0.026	0.38	b.d.	29	31	0.69
ABR026	38.00	40.00	2.00	S200776	0.015	0.25	b.d.	32	50	0.64
ABR026	40.00	42.00	2.00	S200777	0.015	0.21	b.d.	22	34	0.63
ABR026	42.00	44.00	2.00	S200778	0.015	0.20	b.d.	25	35	0.59
ABR026	44.00	46.00	2.00	S200779	0.013	0.18	b.d.	22	36	0.58
ABR026	46.00	48.00	2.00	S200781	0.015	0.17	b.d.	29	34	0.58
ABR026	48.00	50.00	2.00	S200782	0.014	0.16	b.d.	29	35	0.59
ABR026	50.00	52.00	2.00	S200783	0.015	0.16	b.d.	24	36	0.60
ABR026	52.00	54.00	2.00	S200784	0.015	0.15	b.d.	27	32	0.60
ABR026	54.00	56.00	2.00	S200785	0.013	0.15	b.d.	30	43	0.55
ABR026	56.00	58.00	2.00	S200786	0.013	0.15	b.d.	29	26	0.64
ABR026	58.00	60.00	2.00	S200787	0.013	0.16	b.d.	19	25	0.56
ABR026	60.00	62.00	2.00	S200788	0.012	0.15	b.d.	18	25	0.56
ABR026	62.00	64.00	2.00	S200789	0.013	0.14	b.d.	18	27	0.50
ABR026	64.00	66.00	2.00	S200790	0.007	0.10	b.d.	12	20	0.35
ABR026	66.00	68.00	2.00	S200791	0.006	0.09	b.d.	14	36	0.33
ABR026	68.00	70.00	2.00	S200792	0.013	0.12	b.d.	19	29	0.43
ABR026	70.00	72.00	2.00	S200793	0.013	0.13	b.d.	16	30	0.45
ABR026	72.00	73.00	1.00	S200794	0.014	0.13	10	26	54	0.45
ABR027	0.00	2.00	2.00	S200795	0.002	0.03	10	89	33	0.40
ABR027	2.00	4.00	2.00	S200796	b.d.	0.01	10	37	20	0.18
ABR027	4.00	6.00	2.00	S200797	0.002	0.03	40	30	14	0.22
ABR027	6.00	8.00	2.00	S200798	0.001	0.02	20	70	20	0.44
ABR027	8.00	10.00	2.00	S200799	b.d.	0.02	20	49	24	0.32
ABR027	10.00	12.00	2.00	S200800	0.002	0.02	50	61	22	0.67
ABR027	12.00	14.00	2.00	S200802	0.002	0.03	10	41	40	0.20
ABR027	14.00	16.00	2.00	S200803	0.002	0.03	20	48	52	0.22
ABR027	16.00	18.00	2.00	S200804	0.002	0.04	70	29	36	0.26
ABR027	18.00	20.00	2.00	S200805	0.002	0.04	40	47	41	0.38
ABR027	20.00	22.00	2.00	S200806	0.004	0.10	40	11	10	1.28
ABR027	22.00	24.00	2.00	S200807	0.007	0.20	60	34	54	1.40
ABR027	24.00	26.00	2.00	S200808	0.007	0.18	80	32	62	1.96
ABR027	26.00	28.00	2.00	S200809	0.016	0.33	60	78	94	0.92
ABR027	28.00	30.00	2.00	S200810	0.085	1.07	30	62	44	0.72
ABR027	30.00	32.00	2.00	S200811	0.199	0.98	10	62	53	0.63
ABR027	32.00	34.00	2.00	S200812	0.075	0.85	20	40	55	0.61
ABR027	34.00	36.00	2.00	S200813	0.052	0.94	10	32	48	0.65
ABR027	36.00	38.00	2.00	S200814	0.032	0.71	10	18	43	0.68
ABR027	38.00	40.00	2.00	S200815	0.024	0.35	20	19	34	0.61
ABR027	40.00	42.00	2.00	S200816	0.016	0.25	20	20	45	0.60
ABR027	42.00	44.00	2.00	S200817	0.017	0.21	30	16	33	0.59
ABR027	44.00	46.00	2.00	S200818	0.015	0.18	10	21	34	0.61
ABR027	46.00	48.00	2.00	S200819	0.013	0.16	20	17	40	0.58
ABR027	48.00	50.00	2.00	S200821	0.011	0.15	b.d.	39	47	0.53
ABR027	50.00	52.00	2.00	S200822	0.014	0.15	30	16	35	0.57
ABR027	52.00	54.00	2.00	S200823	0.013	0.15	10	15	31	0.55
ABR027	54.00	56.00	2.00	S200824	0.014	0.16	10	14	33	0.52
ABR027	56.00	58.00	2.00	S200825	0.013	0.15	10	17	29	0.53
ABR027	58.00	60.00	2.00	S200826	0.014	0.14	30	19	40	0.53
ABR027	60.00	62.00	2.00	S200827	0.013	0.14	10	13	25	0.53
ABR027	62.00	64.00	2.00	S200828	0.013	0.13	20	11	23	0.52
ABR027	64.00	66.00	2.00	S200829	0.012	0.14	20	13	29	0.48
ABR027	66.00	68.00	2.00	S200830	0.018	0.15	10	27	91	0.46
ABR027	68.00	70.00	2.00	S200831	0.012	0.14	10	12	28	0.49
ABR027	70.00	72.00	2.00	S200832	0.016	0.14	30	27	39	0.47
ABR027	72.00	74.00	2.00	S200833	0.011	0.13	b.d.	b.d.	1	0.45
ABR027	74.00	76.00	2.00	S200834	0.012	0.13	30	17	55	0.53
ABR027	76.00	78.00	2.00	S200835	0.012	0.11	10	14	31	0.41
ABR027	78.00	80.00	2.00	S200836	0.013	0.12	20	14	33	0.42
ABR027	80.00	82.00	2.00	S200837	0.012	0.12	20	10	21	0.42
ABR027	82.00	84.00	2.00	S200838	0.013	0.12	10	9	21	0.42
ABR027	84.00	85.00	1.00	S200839	0.012	0.12	b.d.	9	15	0.42

Appendix 3 – Collated intercepts, Black Range

Parameters used to define cobalt, PGE, and scandium intercepts at Black Range

Parameter	Cobalt-nickel	Platinum+Palladium (PGE)	Scandium
Minimum cutoff	0.10 % Co	0.5 g/t Pt+Pd	50 g/t Sc
Minimum intercept thickness	2 m	2 m	2 m
Maximum internal waste thickness	4 m	3 m	3 m

Cobalt, PGE, and scandium intercepts from new drilling at Black Range

Drillhole	Cobalt-Nickel intercepts	PGE intercepts	Scandium intercepts
ABR0001	2 m at 0.11 % Co and 0.38 % Ni from 18.0 m	18 m at 0.83 g/t Pt+Pd from surface 2 m at 0.51 g/t Pt+Pd from 40.0 m	18 m at 97.8 g/t Sc from surface
ABR0002	2 m at 0.13 % Co and 0.68 % Ni from 10.0 m		4 m at 55 g/t Sc from surface
ABR0003	8 m at 0.17 % Co and 0.69 % Ni from 8.0 m	12 m at 0.67 g/t Pt+Pd from surface	12 m at 68.3 g/t Sc from surface
ABR0004		12 m at 0.92 g/t Pt+Pd from 4.0 m	18 m at 70 g/t Sc from surface
ABR0005	2 m at 0.11 % Co and 0.86 % Ni from 14.0 m	6 m at 0.8 g/t Pt+Pd from 4.0 m	6 m at 56.7 g/t Sc from surface 2 m at 50 g/t Sc from 12.0 m
ABR0006	10 m at 0.12 % Co and 0.74 % Ni from 16.0 m	2 m at 0.86 g/t Pt+Pd from 10.0 m	10 m at 94 g/t Sc from surface 10 m at 62 g/t Sc from 16.0 m
ABR0007	6 m at 0.14 % Co and 1.02 % Ni from 40.0 m	2 m at 0.59 g/t Pt+Pd from 2.0 m	4 m at 65 g/t Sc from surface 16 m at 50 g/t Sc from 14.0 m 2 m at 50 g/t Sc from 34.0 m
ABR0008	16 m at 0.14 % Co and 0.74 % Ni from 60.0 m 2 m at 0.12 % Co and 0.97 % Ni from 88.0 m 6 m at 0.17 % Co and 0.46 % Ni from 98.0 m		10 m at 60 g/t Sc from 32.0 m 26 m at 47.7 g/t Sc from 52.0 m 2 m at 50 g/t Sc from 82.0 m
ABR0009	10 m at 0.12 % Co and 0.81 % Ni from 34.0 m		2 m at 60 g/t Sc from 16.0 m 4 m at 55 g/t Sc from 24.0 m
ABR0010		4 m at 0.62 g/t Pt+Pd from 10.0 m	2 m at 50 g/t Sc from 6.0 m
ABR0011			8 m at 67.5 g/t Sc from surface
ABR0012	4 m at 0.17 % Co and 0.73 % Ni from 2.0 m		
ABR0013	10 m at 0.21 % Co and 0.75 % Ni from 4.0 m		8 m at 57.5 g/t Sc from 2.0 m
ABR0014	8 m at 0.2 % Co and 0.87 % Ni from 2.0 m		10 m at 58 g/t Sc from 2.0 m
ABR0015	2 m at 0.18 % Co and 0.35 % Ni from 30.0 m	16 m at 0.64 g/t Pt+Pd from surface 2 m at 0.6 g/t Pt+Pd from 22.0 m 4 m at 0.56 g/t Pt+Pd from 28.0 m	32 m at 83.1 g/t Sc from surface
ABR0016	4 m at 0.11 % Co and 0.48 % Ni from 10.0 m	6 m at 0.75 g/t Pt+Pd from surface	18 m at 54.4 g/t Sc from surface
ABR0017			
ABR0018			
ABR0019		2 m at 0.51 g/t Pt+Pd from 26.0 m	
ABR0020		6 m at 0.85 g/t Pt+Pd from surface 4 m at 0.66 g/t Pt+Pd from 10.0 m	8 m at 90 g/t Sc from surface
ABR0021		20 m at 0.66 g/t Pt+Pd from 4.0 m 2 m at 0.88 g/t Pt+Pd from 44.0 m	20 m at 84 g/t Sc from 4.0 m
ABR0022	10 m at 0.27 % Co and 0.91 % Ni from 14.0 m	8 m at 0.66 g/t Pt+Pd from 2.0 m 4 m at 0.51 g/t Pt+Pd from 14.0 m	28 m at 64.3 g/t Sc from surface
ABR0023	2 m at 0.31 % Co and 0.78 % Ni from 20.0 m	2 m at 0.57 g/t Pt+Pd from 6.0 m	10 m at 58 g/t Sc from surface
ABR0024			8 m at 45 g/t Sc from 2.0 m

Drillhole	Cobalt-Nickel intercepts	PGE intercepts	Scandium intercepts
ABR0025	2 m at 0.2 % Co and 1.04 % Ni from 28.0 m 2 m at 0.1 % Co and 0.47 % Ni from 38.0 m		6 m at 56.7 g/t Sc from 18.0 m
ABR0026			2 m at 50 g/t Sc from 22.0 m
ABR0027	2 m at 0.2 % Co and 0.98 % Ni from 30.0 m		2 m at 50 g/t Sc from 10.0 m 2 m at 70 g/t Sc from 16.0 m 6 m at 66.7 g/t Sc from 22.0 m

Cobalt, PGE, and scandium intercepts from historic drilling at Black Range

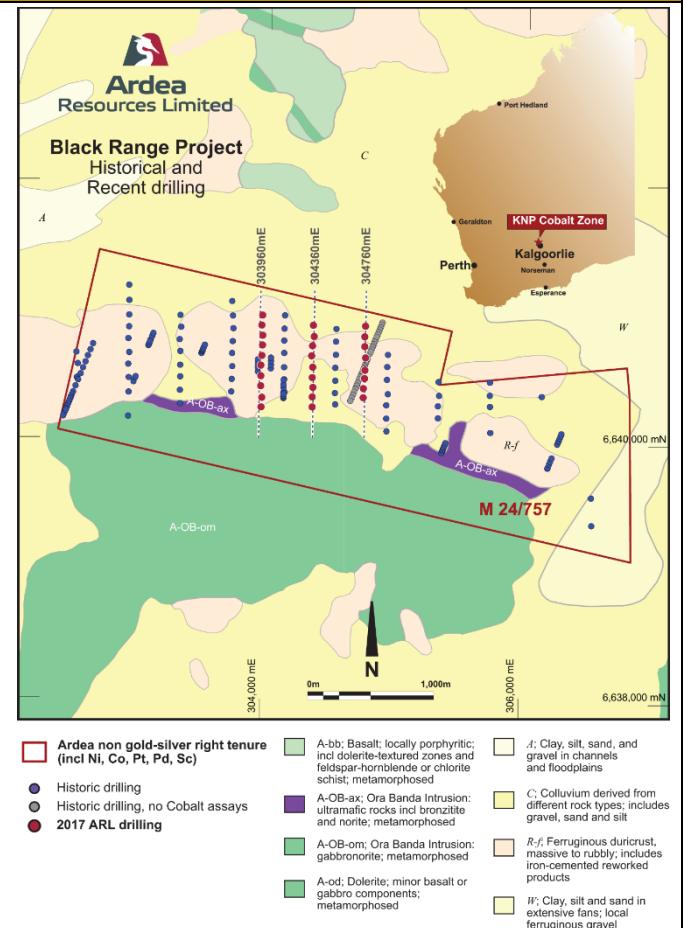
Drillhole	Cobalt-Nickel intercepts	PGE intercepts	Scandium intercepts
BKRC0120	6 m at 0.17 % Co and 1 % Ni from 28.0 m	No data	No data
BKRC0121	6 m at 0.21 % Co and 1.74 % Ni from 8.0 m	No data	No data
BKRC0129	2 m at 0.16 % Co and 0.98 % Ni from 20.0 m	No data	No data
BKRC0132	2 m at 0.17 % Co and 0.83 % Ni from 2.0 m	No data	No data
BKRC0133	4 m at 0.14 % Co and 0.82 % Ni from 2.0 m	No data	No data
BKRC0134	8 m at 0.14 % Co and 0.86 % Ni from 20.0 m	No data	No data
BKRC0135	6 m at 0.32 % Co and 0.87 % Ni from 24.0 m 6 m at 0.22 % Co and 0.72 % Ni from 38.0 m	No data	No data
BKRC0136	12 m at 0.14 % Co and 1.2 % Ni from 36.0 m	No data	No data
BKRC0144	4 m at 0.11 % Co and 1.05 % Ni from 34.0 m	No data	No data
BKRC0145	4 m at 0.13 % Co and 0.31 % Ni from 68.0 m	No data	No data
BKRC0147	6 m at 0.15 % Co and 0.62 % Ni from 60.0 m	No data	No data
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BRR0069	4 m at 0.16 % Co and 0.61 % Ni from 16.0 m	No data	No data
BRR0070	4 m at 0.14 % Co and 0.49 % Ni from 16.0 m	No data	No data
BRR0071	20 m at 0.25 % Co and 0.55 % Ni from 28.0 m	No data	No data
BRR0072	4 m at 0.11 % Co and 0.73 % Ni from 28.0 m	No data	No data
BRR0073	8 m at 0.24 % Co and 1.86 % Ni from 16.0 m	No data	No data
BRR0074	8 m at 0.32 % Co and 1.15 % Ni from 24.0 m	No data	No data
BRR0075	4 m at 0.15 % Co and 1.3 % Ni from 24.0 m	No data	No data
BRR0076	4 m at 0.14 % Co and 1.18 % Ni from 24.0 m	No data	No data
BRR0078	4 m at 0.1 % Co and 0.71 % Ni from 24.0 m	No data	No data
BRR0079	16 m at 0.15 % Co and 0.86 % Ni from 16.0 m	No data	No data
BRR0080	20 m at 0.15 % Co and 0.56 % Ni from 20.0 m	No data	No data
BRR0081	4 m at 0.16 % Co and 0.29 % Ni from 20.0 m 16 m at 0.15 % Co and 0.36 % Ni from 32.0 m	No data	No data
BRR0096	12 m at 0.23 % Co and 0.76 % Ni from 40.0 m	No data	No data
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BRRB008		4 m at 0.5 g/t Pt+Pd from 0.0 m	No data
BRRB009		8 m at 0.54 g/t Pt+Pd from 12.0 m	No data
BRRB014		4 m at 0.53 g/t Pt+Pd from 0.0 m	No data
BRRB022		4 m at 0.65 g/t Pt+Pd from 16.0 m	No data
BRRB052		4 m at 0.67 g/t Pt+Pd from 0.0 m	No data
BRRB059		4 m at 0.9 g/t Pt+Pd from 0.0 m	No data
BRRB060	4 m at 0.19 % Co and 0.48 % Ni from 32.0 m	4 m at 0.57 g/t Pt+Pd from 4.0 m	No data
BRRB061		16 m at 0.74 g/t Pt+Pd from 8.0 m	No data

Appendix 4 – JORC Code, 2012 Edition, Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section applies to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques <i>Note: Due to the similarity of the deposit styles, procedures and estimations used this table represents the combined methods for all Ardea Resources (ARL) Cobalt and Nickel Laterite Resources. Where data not collected by ARL has been used in the resource calculations, variances in techniques are noted.</i>	<ul style="list-style-type: none"> 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 disclosure of detailed information. 	<ul style="list-style-type: none"> In this most recent program, Ardea sampled the Black Range deposit by drilling using Reverse Circulation (RC) on a grid spacing of 400mE x 40mN. Holes were vertical (-90 degree dip), designed to optimally intersect the sub-horizontal mineralisation. All holes were sampled on 2 metre, or rarely 1 metre, down hole intervals. The drill spacing was designed to augment and infill between historic drilling, leading to an overall drill density of 40x200m.



Criteria	JORC Code explanation	Commentary
Drilling techniques	<ul style="list-style-type: none"> • 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). 	<ul style="list-style-type: none"> • RC drilling was performed with a face sampling hammer (bit diameter between 4½ and 5 ¼ inches) and samples were collected by either a cone (majority) or riffle splitter using 2 metre composites. Sample condition, sample recovery and sample size were recorded for all drill samples collected by ARL.
Drill sample recovery	<ul style="list-style-type: none"> • Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> • RC chip sample recovery was recorded by visual estimation of the reject sample, expressed as a percentage recovery. Overall estimated recovery was approximately 80%, which is considered to be acceptable for nickel-cobalt laterite deposits. RC Chip sample condition recorded using a three code system, D=Dry, M=Moist, W=Wet. A small proportion of samples were moist or wet (11.5%), with the majority of these being associated with soft goethite clays, where water injection has been used to improve drill recovery. • Measures taken to ensure maximum RC sample recoveries included maintaining a clean cyclone and drilling equipment, using water injection at times of reduced air circulation, as well as regular communication with the drillers and slowing drill advance rates when variable to poor ground conditions are encountered.
Logging	<ul style="list-style-type: none"> • Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> • Visual geological logging was completed for all RC drilling on 1 metre intervals. The logging system was developed by Heron Resources Limited specifically for the KNP and was designed to facilitate future geo-metallurgical studies. Logging was performed at the time of drilling, and planned drill hole target lengths adjusted by the geologist during drilling. The geologist also oversaw all sampling and drilling practices. A mixture of ARL employees and contract geologists supervised all drilling. A small selection of representative chips were also collected for every 1 metre interval and stored in chip-trays for future reference. Only drilling contractors with previous nickel laterite experience and suitable rigs were used. • The geological legend used by ARL is a qualitative legend designed to capture the key physical and metallurgical features of the nickel-cobalt laterite mineralisation. Logging captured the colour, regolith unit and mineralisation style, often accompanied by the logging of protolith, estimated percentage of free silica, texture, grain size and alteration. Logging correlated well with the geochemical algorithm developed by Heron Resources Limited for the Yerilla Nickel Project for material type prediction from multi-element assay data.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> • 2 metre (and rarely 1 metre) composite samples were recovered using a 15:1 rig mounted cone splitter or trailer mounted riffle splitter during drilling into a calico sample bag. Sample target weight was between 2 and 3kg. In the case of wet clay samples, grab samples taken from sample return pile, initially into a calico sample bag. Wet samples stored separately from other samples in plastic bags and riffle split once dry. • QAQC was employed. A standard, blank or duplicate sample was inserted into the sample stream 10 metres on a rotating basis. Standards were either quantified industry standards, or standards made from homogenised bulk samples of the mineralisation being drilled (in the case of the Yerilla project). Every 30th sample a duplicate sample was taken using the same sample sub sample technique as the original sub sample. Sample sizes are appropriate for the nature of mineralisation.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	<ul style="list-style-type: none"> • All Ardea samples were submitted to Kalgoorlie ALS laboratories and transported to ALS Perth, where they were pulverised. Analysis at ALS Perth was by ICP utilising a 50g charge (lab method PGM-ICP24) for PGM suite elements (Au, Pt, Pd). Additional analysis was undertaken by sending subsamples to ALS

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • For geophysical tools, spectrometers, handheld XRF instruments, etc, the 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<p>Brisbane where analysis by silicate fusion / XRF analysis (lab method ME-XRF12n) for multiple grade attributes for laterite ores (Al_2O_3, As, BaO, CaO, Cl, Co, Cr_2O_3, Cu, Fe_2O_3, Ga, K_2O, MgO, MnO, Na_2O, Ni, P_2O_5, Pb, Sc, SiO_2, SO_3, SrO, TiO_2, V_2O_5, Zn, ZrO_2). Fusion / XRF analysis is an industry standard method used to analyse nickel laterite ores and ALS is a reputable commercial laboratory with extensive experience in assaying nickel laterite samples from numerous Western Australian nickel laterite deposits.</p> <ul style="list-style-type: none"> • ALS routinely inserts analytical blanks, standards and duplicates into the client sample batches for laboratory QAQC performance monitoring. • Ardea also inserted QAQC samples into the sample stream at a 1 in 20 frequency, alternating between duplicates splits, blanks (industrial sands) and standard reference materials. • Additionally, a review was conducted for geochemical consistency between historically expected data, recent data, and geochemical values that would be expected in a nickel laterite profile. • All of the QAQC data has been statistically assessed. There were some inconsistencies in the returning results from standards submitted, relating to the XRF analysis suite. This has been thoroughly investigated with the conclusion that either some standards were not correctly identified and recorded on submission, or time/external influence has had an impact on some of the quality of the values standards, as figures reported for the relevant errant standards were significantly different to the normal recognisable standard values. Ardea has undertaken its own further in-house review of QAQC results of the ALS routine standards, 100% of which returned within acceptable QAQC limits. This fact combined with the fact that the data is demonstrably consistent and repeated for expected Ni/Co values within the lateritic ore profiles of both reported areas and is also consistent with nearby abundant historic drilling data, has meant that the results are considered to be acceptable and suitable for reporting.
Verification of sampling and assaying	<ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> • No independent verification has been undertaken. • No twinned holes were drilled. • A review of logged geology and geochemical domains within drill holes reconciles consistently with values that would be expected within the lateritic profiles of both areas. Data values are within the numerical ranges that are consistent with 200 m proximal drill hole values for the respective orebodies (i.e. values are not considered outliers or skewed). Scandium has not been historically evaluated and is unusually high in drill hole AKR0015, however historic drill holes were not assayed for scandium so no comparison is available. • No adjustments have been made to the assay data.
Location of data points	<ul style="list-style-type: none"> • 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. • Specification of the grid system used. • Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> • All drill holes surveyed using an RTK DGPS system with either a 3 or 7 digit accuracy. The coordinates are stored in the exploration database referenced to the MGA Zone 51 Datum GDA94. • All holes drilled as part of the Black Range program were vertical. No holes were down-hole surveyed. The sub-horizontal orientation of the mineralisation, combined with the soft nature of host material results in minimal deviation of vertical RC drill holes. For example, a small number of vertical open RC holes were check surveyed at Jump Up Dam, and found to have deviation over 60m of less than 1 metre, which is considered sufficiently accurate for this style of mineralisation. • The grid system for all models is GDA94. Where historic data or mine grid data has been used it has been transformed into GDA94 from its original source grid via the appropriate transformation. Both original and transformed data is stored in the digital database. • A DTM was constructed from picked up drill collar locations. The use of collar data is considered

Criteria	JORC Code explanation	Commentary
		sufficiently accurate for reporting of resources, but is not suitable for mine planning and reserves.
Data spacing and distribution	<ul style="list-style-type: none"> • Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied. 	<ul style="list-style-type: none"> • This drill program at Black Range was drilled at a grid spacing of 400mE x 40mN. Black Range has historically been drilled on a series of uniform grids ranging from a maximum of 400mE x 100mN to 200mE x 40mN. • Sample compositing has not been applied to the newly collected data.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> • All drill holes in this program were vertical and give a true width of the regolith layers and mineralisation. • On a local scale there is some variability due to sub-vertical to vertical structures which may not be picked up with the relatively broad spaced vertical drill pattern employed. This local variability is not considered to be significant for the project overall, but will have local effects on mining and scheduling later in the project life.
Sample security	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • All samples were collected and accounted for by ARL employees during drilling. All samples were bagged into plastic bags and closed with cable ties. Samples were transported to Kalgoorlie from site by ARL employees/contractors in sealed bulka bags. • Consignments were transported to ALS Laboratories in Perth by Coastal Midwest Transport. All samples were transported with a manifest of sample numbers and a sample submission form containing laboratory instructions. Any discrepancies between sample submissions and samples received were routinely followed up and accounted for.
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> • ARL has periodically conducted internal reviews of sampling techniques relating to resultant exploration datasets, and larger scale reviews capturing the data from multiple drilling programmes within the KNP. • Internal reviews of the exploration data included the following: <ul style="list-style-type: none"> • Unsurveyed drill hole collars (less than 1% of collars). • Drill Holes with overlapping intervals (0%). • Drill Holes with no logging data (less than 2% of holes). • Sample logging intervals beyond end of hole depths (0%). • Samples with no assay data (from 0 to <5% for any given project, usually related to issues with sample recovery from difficult ground conditions, mechanical issues with drill rig, damage to sample in transport or sample preparation). <ul style="list-style-type: none"> • Assay grade ranges. • Collar coordinate ranges • Valid hole orientation data. • The ALS Laboratory was visited by ARL staff in 2016, and the laboratory processes and procedures were reviewed at this time and determined to be robust.

Section 2 - Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> The tenement on which the Black Range drilling was undertaken is M24/757. The tenement and land tenure status for the KNP prospect areas containing continuous cobalt rich laterite mineralisation is summarised in Table 3 following and in the Ardea Prospectus, section 9 "Solicitor's Report on Tenements".
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The Black Range deposit was initially discovered and drilled by Anaconda Nickel Limited. Much historic drilling and assessment of the Black Range Project was undertaken by Heron Resources Limited.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The KNP nickel-cobalt laterite mineralisation developed during the weathering and near surface enrichment of Archaean-aged olivine-cumulate ultramafic units. The mineralisation is usually within 60 metres of surface and can be further subdivided on mineralogical and metallurgical characteristics into upper iron-rich material and lower magnesium-rich material based on the ratios of iron to magnesium. The deposits are analogous to many weathered ultramafic-hosted nickel-cobalt deposits both within Australia and world-wide. Cobalt-rich mineralisation is typically best developed in iron-rich material in regions of deep weathering in close proximity to major shear zones or transfer shear structures and to a lesser extent as thin zones along the interface of ferruginous and saprolite boundaries at shallower depths proximal to shear structures. The Cobalt Zone is associated with a distinctive geo-metallurgical type defined as "Clay Upper Pyrolusitic". Mineralogy is goethite, gibbsite and pyrolusite (strictly "asbolite" or "cobaltian wad"). The Cobalt Zones typically occur as sub-horizontal bodies at a palaeo-water table within the KNP (late stage supergene enrichment). This material is particularly well developed at Goongarrie South.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All holes drilled in this most recent program are listed in "Appendix 1 – Collar location data, Black Range". Also listed are all historic drill holes from programs for which ARL holds at least some assay data.
Drill hole Information	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All assay data relating to the metals of interest at Black Range, namely cobalt, nickel, scandium, platinum, palladium, and chromium, are listed in "Appendix 2 – Assay results from Black Range". Other elements were assayed but have not been reported here. They are of use and of interest from a scientific and metallurgical perspective, but are not considered material and their exclusion does not detract from the

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>Where aggregate intercepts incorporate 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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<p>understanding of this report.</p> <ul style="list-style-type: none"> Most drill hole samples have been collected over 2m down hole intervals. All newly defined cobalt intercepts at Black Range (calculated both from new data and historic data) were calculated using the following parameters: <ul style="list-style-type: none"> 0.10 % cobalt minimum cutoff; 2 m minimum intercept; and 4 m internal waste. Platinum and palladium are closely associated metals in nature in general and at Black Range in particular. Platinum and palladium are two of a group of metals that are typically referred to as Platinum Group Elements (PGEs) or Platinum Group Metals (PGMs). All newly defined platinum and palladium intercepts at Black Range (calculated both from new data and historic data) were calculated using the following parameters: <ul style="list-style-type: none"> 0.50 g/t platinum+palladium minimum cutoff; 2 m minimum intercept; and 3 m internal waste. All newly defined scandium intercepts at Black Range were calculated using the following parameters: <ul style="list-style-type: none"> 50 g/t scandium minimum cutoff; 2 m minimum intercept; and 3 m internal waste. Assay compositing techniques were not used in this assessment. No metal equivalent calculations have been used in this assessment.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> The nickel-cobalt laterite mineralisation at Black Range has a strong global sub-horizontal orientation. This is also true of the Pt+Pd and Sc mineralisation. All drill holes are vertical. All drill holes intersect the mineralisation at approximately 90° to its orientation. All down hole widths approximate true widths.
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Maps and sections of the cobalt, nickel, platinum, palladium, and scandium mineralisation are shown within the report. Every drillhole on every section drilled is shown.
Balanced reporting	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> Not applicable to this report. All results are report either in the text or in the associated appendices. Examples of high-grade mineralisation are labelled as such.
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> No other data are, at this stage, known to be either beneficial or deleterious to recovery of the metals reported. Uncertainties surrounding the possibility of recovery of the metals of interest are noted prominently in the report.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main</i> 	<ul style="list-style-type: none"> Further drilling is likely to be undertaken at Black Range but has not yet been defined. Further drilling could include infill drilling as well as extension of lines to the north and south as appropriate. Metallurgical assessment of all metals of interest at Black Range will be undertaken during the Pre-

Criteria	JORC Code explanation	Commentary
	<i>geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Feasibility Study (PFS) about to commence on the KNP Cobalt Zone. Features such as the host minerals to the platinum, palladium, scandium, and chromium, and their recoverability will be assessed in detail.