

ASX Announcement 24 June 2021

EXPLORATION UPDATE: CARDINIA HILL AND EASTERN CORRIDOR

Follow-up RC and diamond drilling completed over key targets, enhancing geological understanding of the underexplored Eastern Corridor

Highlights

Cardinia Hill Deeps

- All 20 drill holes intersected the mineralised Cardinia Hill Structure, which has now been extended to over 800m of strike and 200m depth
- Highlights from Reverse Circulation (RC) and diamond (DD) drilling returned to date include:
 - o 7.8m at 2.90g/t Au from 267.2m, incl. 4.8m at 4.16g/t Au from 267.2m (CH21DD149)
 - 3m at 5.87g/t Au from 59m (CH21RC128)

Helens South and Helens East

- Helens South potentially a linking structure between two larger north-south faults similar interpretation to Cardinia Hill structural model
- Best intercept of 2m at 5.96g/t Au from 35m (HS21RC325)

Rangoon and Fiona

- O Recent mapping indicates Cardinia Hill porphyry extends along strike to the north
- Fiona modelled as a linking structure between two larger north-south faults similar interpretation to Cardinia Hill structural model

Kin Mining NL (ASX: KIN or "the Company") is pleased to provide an update on its ongoing exploration program at the **1.23Moz Cardinia Gold Project** (CGP) located near Leonora in Western Australia. This announcement emphasises the recent activities at the Eastern Corridor aimed at extending the depth of known mineralisation and an initial evaluation at a number of targets generated from the Phase 3 exploration program that offer the potential for Resource growth.



Eastern Corridor Exploration Program

The Eastern Corridor targets are located between 500m and 4.5km from the centrally located CGP (Figure 1). Currently, Mineral Resources within the Eastern Corridor total 3.9Mt at 1.59g/t Au for 194koz across four deposits at Helens, Rangoon, Fiona and Cardinia Hill. Refer Table A1 for details.

The area has been covered by detailed magnetics and gravity surveys and underwent deeper RC and DD drilling programs during the Company's Phase 3 exploration program completed over 2020 and early 2021, which revealed porphyry intrusions adjacent to sheared mafic volcanic and felsic volcanic contacts as a primary control of high-grade gold mineralisation.

The gravity survey in particular has enabled detailed mapping of the positions of interpreted shear zones, geological contacts and buried porphyry intrusions, which has resulted in the generation of several exploration targets in addition to the deeper targets associated with the recently-discovered Cardinia Hill deposit.

Results received from the Phase 4 drilling program to date have provided an initial assessment of the mineralisation style and gold grade at each of the targets, which will assist with prioritising them for follow-up programs to target potential additional Resources to feed into a future CGP-based mining and processing operation.

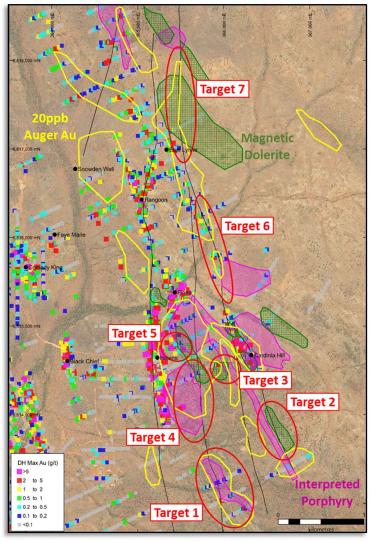


Figure 1 – Kin Mining's Eastern Corridor Targets, part of the Cardinia Gold Project.



Cardinia Hill

The Cardinia Hill Inferred Mineral Resource comprises 1.2Mt at 1.66g/t Au for 61koz estimated in December 2021 to a depth of approximately 125m below surface. The Phase 4 drilling program is designed to extend the Mineral Resource along strike to the north and at depth to 200m below surface. In addition, infill drilling at the southern high-grade shoot is designed to upgrade the Mineral Resource category.

The Phase 4 program consists of an additional 63 drill-holes for 5,070m of RC and 4,630.8m of diamond drilling. To date, assays have been announced for 43 holes of the 63-hole program. Results for a further 6 drill holes are tabled below with 14 holes still outstanding. Highlights from these 6 holes are shown in Table 1 and illustrated in long section of *Figure 2*.

Hole Id	From	То	Width	Grade	Comment
CH21DD095					Waiting results
CH21DD097	105.7	106.0	0.3	1.29	
	171.0	171.9	0.9	6.44	
	193.7	199.0	5.3	1.63	
	224.2	224.7	0.4	1.04	
CH21DD098	9.1	10.1	1.0	2.38	10.1 - 10.3 core loss
	10.3	11.0	0.7	7.13	
	13.3	15.0	1.7	2.90	
	20.2	20.5	0.3	2.81	20.5 - 20.7m core loss
	20.7	21.4	0.7	2.71	
	174.0	174.4	0.4	3.77	
CH21DD102					Waiting results
CH21RC125					Waiting results
CH21RC126					Waiting results
CH21RC127	103	104	1	1.23	
CH21RC128	54	55	1	1.41	Total of 53m at 0.64g/t from 54m
	59	62	3	5.87	
	69	70	1	2.23	
	81	82	1	1.68	
	97	98	1	4.65	
	101	102	1	1.31	
	106	107	1	1.21	
CH21RC129	53	54	1	1.03	
	97	98	1	2.40	
CH21RC130					Waiting results
CH21RC131					Waiting results
CH21RC132					Waiting results
CH21RC140					Waiting results
CH21RC141					Waiting results
CH21DD143					Waiting results
CH21RC144					Waiting results
CH21CD145					Waiting results
CH21DD146					Waiting results
CH21DD147	94.0	95.0	1.0	1.17	



Hole Id	From	То	Width	Grade	Comment
	103.4	103.9	0.5	1.34	
	132.6	133.2	0.6	1.01	
	190.2	191.1	0.9	1.34	
CH21DD148					Waiting results
CH21DD149	267.2	275.0	7.8	2.90	Incl. 4.8m at 4.16g/t from
					267.2m
CH21RC150	20	21	1	2.15	

Table 1: Latest results of the Cardinia Hill drilling programs. Results of greater than 1g/t reported.

The results received to date have confirmed the presence of high-grade mineralisation at depth (such as in CH21DD149 which returned 4.0m at 4.16g/t Au from 267.2m), as well as broad intersections of mineralisation with narrower high-grade sections (such as CH21RC128 which returned 53m at 0.64g/t from 54m including 3m at 5.98g/t from 59m), highlighting the high-grade vein-style mineralisation within broad zones of lower grade alteration at the project. The deeper sections of the deposit also contain narrow lower-grade zones of mineralisation based on results from the 18 holes below the 300mRI (~125m depth below surface) returned to date (*Figure 2*).

Mineralisation along the Cardinia Hill structure has been extended to 800m strike length with drill hole CH21RC163 intersecting 2m at 4.17g/t Au at the northern extent of the drilling and remains open to the north. Assays for the remaining 14 drill holes in the Phase 4 program are expected to be returned over the next four weeks.

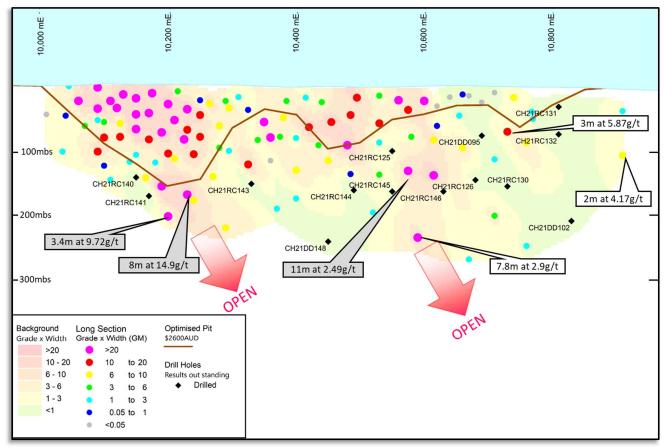


Figure 2: Long section of Cardinia Hill results



Target 1 and 4 – Helens South and Helens East

The Helens South and Helens East targets contain a number of vein and shear structures intersected in 200m spaced AC drilling programs completed in late 2020. AC drilling results were generally 4m and 8m intersections. The Phase 4 RC program aimed to test these shallow AC intersections at depth to confirm geological control and grade continuity. Better results were received from Helens South (Target 1) and included a number of 1m to 2m, high-grade (2g/t to 6g/t) results such as HS21RC325 - 2m at 5.96g/t Au from 35m. See *Table 2* and *Figures 3 and 4*.

The Helens South target is potentially a linking structure between two larger north-south faults, the Fiona East fault and the Cardinia Hill fault. This interpretation is very similar to the current Cardinia Hill structural model.

Project	Hole Id	From	То	Width	Grade	Comment
Helens	HS21RC323	20	22	2	1.64	
South	HS21RC324	7	8	1	2.84	
(Target 1)		41	42	1	2.38	
	HS21RC325	35	37	2	5.96	
		53	54	1	3.96	
	HS21RC325	90	91	1	1.26	
	HS21RC326					NSR
	HS21RC327	33	34	1	6.84	
		81	83	2	3.89	
	HS21RC328					NSR
	HS21RC329					NSR
	HS21RC330	63	64	1	2.53	
	HS21RC331	100	101	1	1.12	
	HS21RC332					NSR
	HS21RC333	82	83	1	1.35	
Helens	HE21RC376	2	3	1	1.81	
East		18	20	2	1.40	
(Target 4)	HE21RC377					NSR
	HE21RC378					NSR
	HE21RC379					NSR
	HE21RC380	18	19	1	2.33	
Table O. Daniel	HE21RC381					NSR

 Table 2: Results of the Helens South and Helens East RC drilling programs



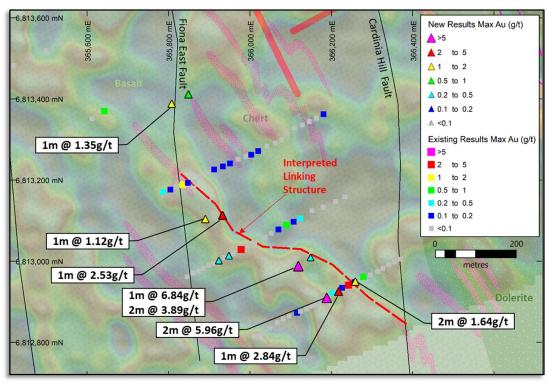


Figure 3: Results from the Helens South RC drilling program. Overlain on the 1:10K geology map and the 1VD gravity image. RC drilling results with white labels.

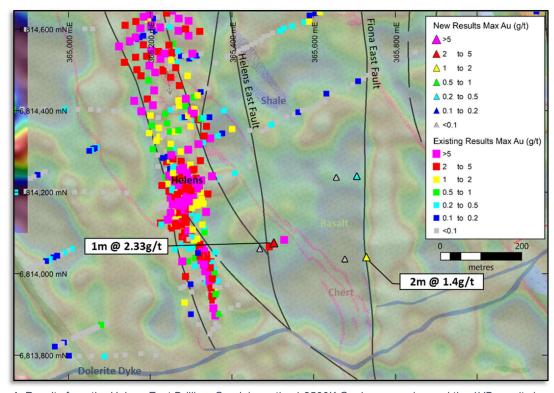


Figure 4: Results from the Helens East Drilling. Overlain on the 1:2500K Geology mapping and the 1VD gravity image.



Target 2, 3, 6 and 7 - Cardinia Hill Fault

The Cardinia Hill deposit sits between two large fault structures that trend N-S within the Eastern Corridor (*see Figure 5*). A number of gold-in-soil geochemical anomalies and recent 200m spaced AC drilling results mark the position of the targets adjacent to the Cardinia Hill structure.

A total of 20 RC holes for 2,136m and one DD hole for 168.5m of drilling has been completed along the structure to the north and south of the Cardinia Hill deposit, with results returned for all holes.

At Target 2, CH21RC160 returned a significant intercept of 14m at 1.41g/t from 6m.

At Target 6, a number of drill holes intersected the Cardinia Hill Fault mineralised structure with generally narrow 1m to 2m mineralised intersections returned to date.

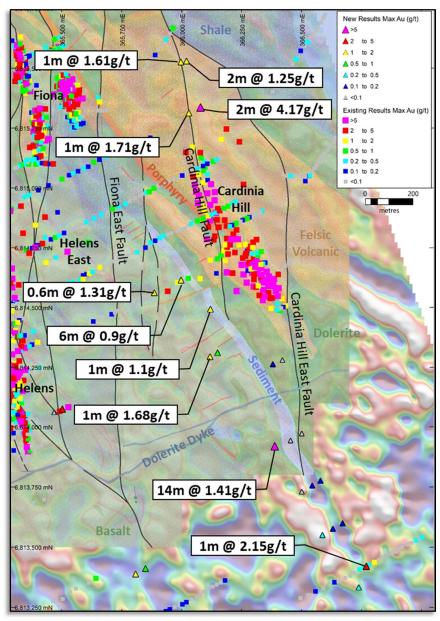


Figure 5: Target 2, 3 and 6 and 7 drilling results. Results from the Cardinia Hill extension (Gravity Targets) Drilling.

Overlain on the 1:2500K Geology mapping and the 1VD gravity image



Project	Hole Id	From	То	Width	Grade	Comment
Cardinia Hill	CH21RC151					NSR
- Gravity	CH21RC152					NSR
Targets	CH21RC153					NSR
(Target 1)	CH21RC154					NSR
	CH21RC155					NSR
	CH21RC156					NSR
	CH21RC157					NSR
	CH21RC158					NSR
	CH21RC159					NSR
	CH21RC160	6	20	14	1.41	
	CH21RC161					NSR
(Target 3)	CH21RC162					NSR
	CH21RC163					NSR
	CH21RC164	80	81	1	1.68	
	CH21RC166	93	94	1	1.1	
	CH21RC167	26	29	3	1	
		31	32	1	1.1	
	CH21DD172	85.4	86.0	0.6	1.31	Within a broader intersection of 4.8m @ 0.56g/t from 77.8m
(Target 6)	CH21RC168	103	105	2	4.17	CH structure
	CH21RC169	16	17	1	1.71	
	CH21RC170	83	85	2	1.25	CH structure
	CH21RC171	0	1	1	1.61	
East Lynne	EL21RC449	8	9	1	1.05	
(Target 7)	EL21RC450	62	63	1	1.17	
	EL21RC451	33	36	3	1.2	
	EL21RC452					NSR
	EL21RC453					NSR
	EL21RC454	35	38	3	1.2	
	EL21RC455					Waiting results
	EL21RC456					NSR
	EL21RC457					NSR
	EL21RC458					NSR
	EL21RC459					NSR
	EL21RC460					NSR
	EL21RC461					NSR

Table 2: Results of the Helens South and Helens East RC drilling programs



Rangoon and Fiona

Drilling at Rangoon has been completed, comprising five DD holes for 697.8m and 14 RC holes for 1,682m. This drilling was designed to better understand the geology of the Resource (32koz at 1.17g/t) and to extend the Resource at depth.

The drilling at Fiona was also designed to enhance understand of the geology of the eastern Resource. Recent 1:2500 scale mapping completed by Model Earth (Jon Standing) has the Cardinia Hill porphyry extending along strike to the north. This mapping now has Fiona modelled as a linking structure between two larger north-south faults, the Fiona fault and the Fiona East fault. Again, this interpretation is very similar to the current Cardinia Hill structural model. Drilling consisted of 15 RC holes for 1,436m.

Results are expected in the coming weeks.

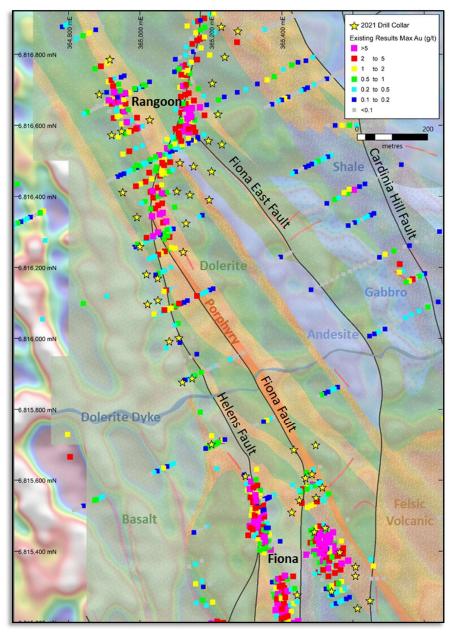


Figure 6: Rangoon and Fiona drill hole locations over 1:2500 geological mapping and gravity image.



Project	Hole Id	East	North	RL	Dip	Azi	Depth
Rangoon	RN21DD071	365219	6816631	428	-60	287	111.1
	RN21DD072	365104	6816418	435	-61	286	138.4
	RN21DD073	364951	6816409	435	-59	69	144.4
	RN21DD074	365602	6815361	421	-60	250	123.4
	RN21DD075	365441	6815280	419	-61	252	180.5
	RN21RC076	365276	6816864	422	-60	288	163
	RN21RC077	365231	6816876	433	-60	285	91
	RN21RC078	365244	6816792	425	-60	286	115
	RN21RC079	365206	6816720	424	-60	286	103
	RN21RC080	365197	6816556	422	-60	286	115
	RN21RC081	365236	6816548	429	-60	288	133
	RN21RC082	365111	6816496	428	-60	286	92
	RN21RC083	365154	6816488	534	-60	287	115
	RN21RC084	365202	6816470	423	-60	287	139
	RN21RC085	365140	6816402	428	-60	289	150
	RN21RC086	365193	6816393	424	-60	285	145
	RN21RC101	364950	6816581	428	-60	71	97
	RN21RC102	364885	6816685	428	-61	70	115
	RN21RC103	364915	6816787	434	-60	250	109
Fiona	FI21RC001	365648	6815262	419	-60	58	73
	FI21RC002	365613	6815240	418	-60	58	91
	FI21RC003	365607	6815331	419	-60	58	84
	FI21RC004	365539	6815288	418	-60	58	133
	FI21RC005	365563	6815398	418	-60	58	79
	FI21RC006	365522	6815466	418	-60	58	85
	FI21RC007	365491	6815455	416	-71	39	103
	FI21RC008	365496	6815551	417	-60	238	73
	FI21RC009	365514	6815580	417	-60	238	109
	FI21RC010	365428	6815510	417	-60	58	115
	FI21RC011	365466	6815606	418	-60	238	73
	FI21RC012	365484	6815617	418	-60	238	91
	FI21RC013	365449	6815544	419	-60	58	91
	FI21RC014	365434	6815686	419	-60	238	73
	FI21RC015	365495	6815699	419	-60	238	163
Helens East	HE21RC376	365729	6814041	456	-58	76	114
- Gravity	HE21RC377	365676	6814036	456	-59	80	114
Targets 4	HE21RC378	365706	6814239	446	-57	79	138
	HE21RC379	365655	6814237	445	-57	78	138
	HE21RC380	365502	6814075	444	-59	69	102
	HE21RC381	365468	6814061	442	-59	71	102
Helens	HS21RC323	366259	6812949	433	-59	62	96
South -	HS21RC324	366218	6812925	425	-58	59	96
Gravity	HS21RC325	366189	6812909	425	-57	60	150
Targets 1	HS21RC326	366149	6813009	427	-59	61	102



Project	Hole Id	East	North	RL	Dip	Azi	Depth
	HS21RC327	366119	6812987	428	-59	61	102
	HS21RC328	365949	6813014	426	-59	63	102
•	HS21RC329	365924	6813001	426	-57	57	156
	HS21RC330	365933	6813113	426	-58	56	96
	HS21RC331	365891	6813104	411	-58	62	108
	HS21RC332	365849	6813411	427	-59	62	90
	HS21RC333	365808	6813388	429	-58	60	90
East Lynne	EL21RC449	365725	6816138	416	-58	56	96
- Gravity	EL21RC450	365687	6816181	420	-60	57	96
Targets 7	EL21RC451	365723	6816247	419	-60	59	102
	EL21RC452	365679	6816227	424	-60	61	102
	EL21RC453	365617	6816608	428	-60	250	126
	EL21RC454	365662	6816618	436	-59	251	126
	EL21RC455	365480	6817227	432	-57	267	102
	EL21RC456	365457	6817522	434	-58	269	90
	EL21RC457	365502	6817448	431	-57	270	96
	EL21RC458	365495	6818152	421	-61	268	90
	EL21RC459	365536	6818153	423	-58	269	96
	EL21RC460	365490	6818276	439	-59	269	90
	EL21RC461	365531	6818276	429	-59	271	96
Cardinia	CH21RC151	366738	6813333	451	-58	58	108
Hill -	CH21RC152	366671	6813599	452	-59	58	96
Gravity	CH21RC153	366631	6813576	437	-58	57	102
Targets 2	CH21RC154	366587	6813550	434	-59	60	90
	CH21RC155	366579	6813776	430	-60	60	90
	CH21RC156	366545	6813756	420	-59	59	90
	CH21RC157	366501	6813730	425	-59	59	90
	CH21RC158	366501	6813972	494	-59	55	102
	CH21RC159	366454	6813943	399	-59	61	108
	CH21RC160	366388	6813918	447	-60	57	114
	CH21RC161	366420	6814281	442	-59	58	114
Cardinia	CH21RC162	366380	6814264	436	-59	56	114
Hill -	CH21RC163	366150	6814311	446	-61	58	120
Gravity	CH21RC164	366119	6814294	445	-58	62	120
Targets 3	CH21RC166	366120	6814493	441	-59	58	108
	CH21RC167	365998	6814614	460	-57	57	132
	CH21DD172	365886	6814561	435	-60	58	168.5
Cardinia	CH21RC168	366079	6815335	439	-57	247	126
Hill -	CH21RC169	366030	6815312	435	-57	249	114
Gravity	CH21RC170	366020	6815530	416	-58	253	102
Targets 6	CH21RC171	365997	6815525	425	-59	249	96

 Table 3: Details of the CGP Eastern Corridor drill holes for Rangoon, Fiona and Gravity targets 1,2,3,4,6 and 7.

-ENDS-

Authorised for release by the Board of Directors



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ABOUT KIN MINING NL

Kin Mining NL (ASX: KIN) is a West Australian based gold development and exploration company. Kin's key focus is its 100% owned Cardinia Gold Project (CGP) located in the highly prospective North-Eastern Goldfields region of Western Australia. The CGP has a 1.23Moz gold Mineral Resource (see Table A1) defined in both oxide and deeper primary mineralisation with considerable potential to grow this resource with further drilling.

Kin's exploration effort is the systematic program of exploration across the Cardinia Mining Centre that seeks to advance a number of targets in parallel while developing a pipeline of exploration targets for ongoing Mineral Resource expansion.

Table A1. Mineral Resource Estimate Table May 20211

			Car	dinia Golo	l Project	: Mineral	Resource	s: May 2	2021						
			Meas	ured Reso	urces	Indica	ated Reso	urces	Infer	red Resou	urces	Tot	tal Resour	ces	
Project Area	Resource Gold Price (AUD)	Lower Cut off (g/t Au)	Tonnes (Mt)	Au (g/t Au)	Au (k Oz)	Date Announced									
Mertondale															
Mertons Reward	\$2,600	0.4				0.9	2.17	66	1.9	0.65	41	2.9	1.15	106	26-Nov-2
Mertondale 3-4	\$2,600	0.4				1.4	1.85	81	1.0	0.97	31	2.3	1.48	111	26-Nov-2
Γonto	\$2,600	0.4				1.8	1.14	67	1.1	1.24	43	2.9	1.18	111	26-Nov-2
Mertondale 5	\$2,600	0.4				0.5	1.67	26	0.8	1.24	32	1.3	1.40	59	26-Nov-2
clipse	\$2,600	0.4							0.6	1.01	19	0.6	1.01	19	26-Nov-2
Quicksilver	\$2,600	0.4							1.1	1.10	39	1.1	1.10	39	26-Nov-2
Subtotal Mertondale						4.6	1.61	240	6.5	0.98	205	11.1	1.24	445	
Cardinia															
Bruno*	\$2,600	0.4	0.3	1.26	10	2.8	1.13	102	1.1	1.05	36	4.1	1.12	148	10-May-2
.ewis*	\$2,600	0.4	0.6	1.24	20	4.7	1.00	151	2.1	0.80	55	7.4	0.95	226	10-May-2
(yte	\$2,600	0.4				0.3	1.53	17	0.1	0.92	3	0.4	1.38	20	26-Nov-2
Helens	\$2,600	0.4				0.7	2.14	50	0.3	1.94	19	1.0	2.08	69	26-Nov-2
Fiona	\$2,600	0.4				0.6	1.35	25	0.2	1.21	8	0.8	1.32	32	26-Nov-2
Rangoon	\$2,600	0.4				0.5	1.24	21	0.3	1.07	12	0.9	1.17	32	26-Nov-2
Hobby *	\$2,600	0.4							0.5	1.31	22	0.5	1.31	22	10-May-2
Cardinia Hill *	\$2,600	0.4							1.2	1.66	61	1.2	1.66	61	18-Dec-20
Subtotal Cardinia			0.8	1.16	30	9.6	1.18	364	5.8	1.15	216	16.3	1.17	611	
Raeside															
Michaelangelo	\$2,600	0.4				1.1	2.00	73	0.4	2.19	25	1.5	2.04	98	26-Nov-2
.eonardo	\$2,600	0.4				0.4	2.39	30	0.2	2.20	14	0.6	2.32	44	26-Nov-2
orgotten Four	\$2,600	0.4				0.1	2.09	7	0.1	1.96	6	0.2	2.03	14	26-Nov-2
(rang	\$2,600	0.4				0.3	1.74	17	0.0	2.59	2	0.3	1.80	19	26-Nov-2
Subtotal Raeside						2.0	2.04	128	0.7	2.17	47	2.6	2.07	175	
TOTAL			0.8	1.16	30	16.2	1.41	732	13.0	1.12	468	30.0	1.28	1231	

Table A1: Mineral Resource Estimate Table May 2021. Mineral Resources estimated by Jamie Logan, and Mike Millad and reported in accordance with JORC 2012 using a 0.4g/t Au cut-off within AUD2,600 optimisation shells. Note Bruno-Lewis, Cardinia Hill and Hobby estimated by Mike Millad of Cube Consulting.

¹The company confirms that it is not aware of any new information or data that materially affects the information included in the ASX Announcement of 17 May 2021 "Cardinia Gold Project Mineral Resource Increases to 1.23Moz", and that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.



COMPETENT PERSON'S STATEMENT

The information contained in this report relating to exploration results relates to information compiled or reviewed by Glenn Grayson. Mr. Grayson is a member of the Australasian Institute of Mining and Metallurgy and is a full-time employee of the company. Mr. Grayson has sufficient experience of relevance to the styles of mineralisation and the types of deposit under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

Mr. Grayson consents to the inclusion in this report of the matters based on information in the form and context in which it appears.



Appendix A JORC 2012 TABLE 1 REPORT

Cardinia Gold Project - Section 1 & 2

Section 1 Sampling Techniques and Data

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

Criteria	 JORC Code explanation 	Commentary
Sampling techniques	Nature and quality of sampling (eg cut	<u>Diamond</u>
	channels, random chips, or specific specialised industry standard	Historic (pre-2014) diamond core (DD) sampling utilised half core or quarter core sample intervals; typically varying from 0.3m to 1.4m in length. 1m sample intervals were favoured and sample boundaries principally coincided with geological contacts.
	measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples	Recent (2014-2018) diamond core (DD) samples, either HQ3 or NQ2 in size diameter, were either cut in half longitudinally or further cut into quarters, using a powered diamond core drop saw centered over a cradle holding core in place. Core sample intervals varied from 0.2 to 1.25m in length but were predominantly aligned to 1m intervals or with sample boundaries which respected geological contacts.
	should not be taken as limiting the broad meaning of sampling.	2019 diamond core samples, either HQ3 or NQ2 in size diameter, were either cut in half longitudinally or a third longitudinally, using an automated Corewise core saw Core was placed in boats, holding core in place. Core sample intervals varied from 0.3 to
	Include reference to measures taken to ensure sample representivity and the	1.3m in length but were predominantly aligned to 1m intervals or with sample boundaries which respected geological contacts RC
	appropriate calibration of any measurement tools or systems used.	Historic reverse circulation (RC) drill samples were collected over 1m downhole intervals beneath a cyclone and typically riffle split to obtain a sub-sample (typically 3-4kg). 1m sub-samples were typically collected in pre-numbered calico bags and 1m sample rejects were commonly stored at the drill site. 3m or 4m composited interval samples were often collected by using a
	Aspects of the determination of mineralisation that are Material to the	scoop (dry samples) or spear (wet samples). If composite samples returned anomalous results once assayed, the single metre sub-samples of the anomalous composite intervals were retrieved and submitted for individual gold analysis.
	Public Report. In cases where 'industry standard' work	Recent reverse circulation (RC) drill samples were collected by passing through a cyclone, a sample collection box, and riffle or cone splitter. All RC sub-samples were collected over one metre downhole intervals and averaged 3-4kg.
	has been done this would be relatively simple (eg 'reverse circulation drilling	2019 RC drilling samples were collected in 1m downhole intervals by passing through a cyclone, a collection box and then dropping through a cone splitter. All RC sub-samples were collected over one metre downhole intervals and averaged 3-4kg.
	was used to obtain 1 m samples from	<u>AC/RAB</u>
	which 3 kg was pulverised to produce a 30g charge for fire assay'). In other	Historic air core (AC) and rotary air blast (RAB) were typically collected at 1 metre intervals and placed on the ground with 3-4k sub-samples collected using a scoop or spear. Three metre or four metre composited interval samples were often collected by



Criteria	JORC Code explanation	Commentary
	cases more explanation may be required, such as where there is coarse	using a scoop (dry samples) or spear (wet samples). If composite samples returned anomalous results once assayed, the single metre sub-samples of the anomalous composite intervals were retrieved and submitted for individual gold analysis.
	gold that has inherent sampling	Assay Methodology
	problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Historic sample analysis typically included a number of commercial laboratories with preparation as per the following method, oven drying (90-110°C), crushing (<-2mm to <-6mm), pulverizing (<-75μm to <-105μm), and riffle split to obtain a 30, 40, or 50gram catchweight for gold analysis. Fire Assay fusion, with AAS finish was the common method of analysis however, on occasion, initial assaying may have been carried out via Aqua Regia digest and AAS/ICP finish. Anomalous samples were subsequently re-assayed by Fire Assay fusion and AAS/ICP finish.
		Recent sample analysis typically included oven drying (105-110°C), crushing (<-6mm & <-2mm), pulverising (P90% <-75µm) and sample splitting to a representative 50gram catchweight sample for gold only analysis using Fire Assay fusion with AAS finish.
		Multi element analysis was also conducted on approximately 10% of samples, predominantly through ore zones. This was conducted via a 4-acid digest with ICP-MS/OES determination for a 48 element suite.
		Rock Chips
		All rock chip samples are taken using a pick. The samples are taken from outcrop where possible. Samples are also taken from in situ float material or waste rock around historic workings, where outcrop is not present. Care is taken to ensure all samples are representative of the medium being sampled. For example, if a 1m sediment unit is being sampled, a channel sample will be taken across the entire unit.
		All recent drilling, sample collection and sample handling procedures were conducted and/or supervised by KIN geology personnel to high level industry standards. QA/QC procedures were implemented during each drilling program to industry standards.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast,	Drilling carried out since 1986 and up to the most recent drill programs completed by KIN Mining was obtained from a combination of reverse circulation (RC), diamond core (DD), air core (AC), and rotary air blast (RAB) drilling.
	auger, Bangka, sonic, etc) and details	Data prior to 1986 is limited due to lack of exploration.
	(eg core diameter, triple or standard	<u>Diamond</u>
	tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).	Historic DD was carried out using industry standard 'Q' wireline techniques, with the core retrieved from the inner tubes and placed in core trays. Core sizes include NQ/NQ3 (Ø 45-48mm) and HQ/HQ3 (Ø 61-64mm). At the end of each core run, the driller placed core blocks in the tray, marked with hole number and depth. Core recovery was usually measured for each core run and recorded onto the geologist's drill logs.
		2017 – 2018 DD was carried out by contractor Orbit Drilling Pty Ltd ("Orbit Drilling") with a Mitsubishi truck-mounted Hydco 1200H 8x4 drill rig, using industry standard 'Q' wireline techniques. 2019 DD was carried out y Topdrill Pty Ltd. With a Sandvick DE840 mounted on a Mercedes Benz 4144 Actros 8x8 Carrier. The rig is fitted with Sandvik DA555 hands free diamond drilling rod handler and Austex hands free hydraulic breakout.
		Drill core is retrieved from the inner tubes and placed in plastic core trays and each core run depth recorded onto core marker blocks and placed at the end of each run in the tray. Core sizes include NQ2 (Ø 47mm) and HQ3 (Ø 64mm).
		Recent DD core recovery and orientation was obtained for each core run where possible, using electronic core orientation tools



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		(e.g. Reflex EZ-ACT) and the 'bottom of core' marked accordingly.
		2017 -18 drilling was measured at regular downhole intervals, typically at 10-15m from surface and then every 30m to bottom of hole, using electronic multi-shot downhole survey tools (i.e. Reflex EZ-TRAC or Camteq Proshot). Independent programs of downhole deviation surveying were also carried out to validate previous surveys. These programs utilised either electronic continuous logging survey tool (AusLog A698 deviation tool) or gyroscopic survey equipment.
		2019 DD was surveyed at regular downhole intervals (every 30m with an additional end-of-hole survey) using electronic gyroscopic survey equipment.
		<u>RC</u>
		Historic RC drilling used conventional reverse circulation drilling techniques, utilising a cross-over sub, or face-sampling hammers with bit shrouds. Drill bit sizes typically ranged between 110-140mm.
		2017-18 RC drilling was carried out by Orbit Drilling's truck-mounted Hydco 350RC 8x8 Actross drill rigs with 350psi/1250cfm air compressor, with auxiliary and booster air compressors (when required). Drilling utilised mostly downhole face-sampling hammer bits (Ø 140mm), with occasional use of blade bits for highly oxidized and soft formations. The majority of drilling retrieved dry samples, with the occasional use of the auxiliary and booster air compressors beneath the water table, to maintain dry sample return as much as possible. RC drillhole deviations were surveyed downhole, typically carried out inside a non-magnetic stainless steel (s/s) rod located above the hammer, using electronic multi-shot downhole tool (e.g. Reflex EZ-TRAC). In some instances, drillholes were surveyed later in open hole. Independent programs of downhole deviation surveying were also carried out to validate previous surveys. These programs utilised either electronic continuous logging survey tool (AusLog A698 deviation tool) or gyroscopic survey equipment.
		2019 RC drilling was carried out by Swick Mining Services truck-mounted Swick version Schramm 685 RC Drill Rig (Rod Handler & Rotary Cone Splitter) with support air truck and dust suppression equipment. Drilling utilised downhole face-sampling hammer bits (Ø 140mm). The majority of drilling retrieved dry samples, with the occasional use of the auxiliary and booster air compressors beneath the water table, to maintain dry sample return as much as possible.
		2019 RC was surveyed at regular downhole intervals (every 30m with an additional end-of-hole survey) using electronic gyroscopic survey equipment.
		AC/RAB
		Historic AC drilling was conducted utilising suitable rigs with appropriate compressors (eg 250psi/600cfm). AC holes were drilled using 'blade' or 'wing' bits, until the bit was unable to penetrate ('blade refusal'), often near the fresh rock interface. Hammer bits were used only when it was deemed necessary to penetrate further into the fresh rock profile or through notable "hard boundaries" in the regolith profile. No downhole surveying is noted to have been undertaken on AC drillholes.
		Historic RAB drilling was carried out using small air compressors (eg 250psi/600cfm) and drill rods fitted with a percussion hammer or blade bit, with the sample return collected at the drillhole collar using a stuffing box and cyclone collection techniques. Drillhole sizes generally range between 75-110mm. No downhole surveying is noted to have been undertaken on RAB drillholes.
Drill sample recovery	Method of recording and assessing core	<u>Diamond</u>
	and chip sample recoveries and results	Historic core recovery was recorded in drill logs for most of the diamond drilling programs since 1985. A review of historical



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		reports indicates that core recovery was generally good (>80%) with lesser recoveries recorded in zones of broken ground and/or areas of mineralisation. Overall recoveries are considered acceptable for resource estimation.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Recent core recovery data was recorded for each run by measuring total length of core retrieved against the downhole interval actually drilled and stored in the database. KIN representatives continuously monitor core recovery and core presentation quality as drilling is conducted and issues or discrepancies are rectified promptly to maintain industry best standards. Core
	Whether a relationship exists between sample recovery and grade and whether	recoveries averaged >95%, even when difficult ground conditions were being encountered. When poor ground conditions were anticipated, a triple tube drilling configuration was utilised to maximize core recovery
	sample bias may have occurred due to	RC/AC/RAB
	preferential loss/gain of fine/coarse	Historic sample recovery information for RC, AC, and RAB drilling is limited.
	material.	Recent RC drilling samples are preserved as best as possible during the drilling process. At the end of each 1 metre downhole interval, the driller stops advancing, retracts from the bottom of hole, and waits for the sample to clear from the bottom of the hole through to the sample collector box fitted beneath the cyclone. The sample is then released from the sample collector box and passed through either a 3-tiered riffle splitter or cone splitter fitted beneath the sample box.
		Drilling prior to 2018 utilised riffle split collection whereas sample collection via a cone splitter was conducted for drilling undertaken since March 2018; cyclone cleaning processes remained the same.
		Sample reject is collected in plastic bags, and a 3-4kg sub-sample is collected in pre-marked calico bags for analysis. Once the samples have been collected, the cyclone, sample collector box and riffle splitter are flushed with compressed air, and the splitter cleaned by the off-sider using a compressed air hose at both the end of each 6 metre drill rod and then extensively cleaned at the completion of each hole. This process is maintained throughout the entire drilling program to maximise drill sample recovery and to maintain a high level of representivity of the material being drilled.
		RC drill sample recoveries are not recorded in the database however a review by Carras Mining Pty Ltd (CM) in 2017, of RC drill samples stored in the field, and ongoing observations of RC drill rigs in operation by KIN representatives, suggests that RC sample recoveries were mostly consistent and typically very good (>90%).
		Collected samples are deemed reliable and representative of drilled material and no material discrepancy, that would impede a mineral resource estimate, exists between collected RC primary and sub-samples.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support	Logging data coded in the database, prior to 2014, illustrates at least four different lithological code systems, a legacy of numerous past operators (Hunter, MPI, Metana, CIM, MEGM, Pacmin, SOG, and Navigator). Correlation between codes is difficult to establish however, based on historical reports, drill hole logging procedures appear consistent with normal industry practices of the time.
	appropriate Mineral Resource estimation, mining studies and	KIN has attempted to validate historical logging data and to standardize the logging code system by incorporating the SOG and Navigator logging codes into one.
	metallurgical studies.	<u>Diamond</u>
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Historical diamond core logging was recorded into drill logs for most of the diamond drilling programs since 1985. A review of historical reports indicates that logging noted core recovery, fractures per metre and RQD, lithology, alteration, texture, mineralisation, weathering, and other features. Core was then marked up for cutting and sampling.
	channel, etc., photography.	Navigator's procedure for logging of diamond core included firstly marking of the bottom of the core (for successful core



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	The total length and percentage of the relevant intersections logged.	orientations), then recording of core recovery, fractures per metre and RQD, lithology, alteration, texture, mineralisation, weathering, and other features. Core was then marked up for cutting and sampling. Navigator DD logging is predominantly to geological contacts.
		Navigator logging information was entered directly into hand held digital data loggers and transferred directly to the database, after validation, to minimize data entry errors.
		Drill core photographs, for drilling prior to 2014, are available only for diamond drillholes completed by Navigator.
		KIN DD logging is carried out on site once geology personnel retrieve core trays from the drill rig site. Core is collected from the rig daily. The entire length of every hole is logged. Recorded data includes lithology, alteration, structure, texture, mineralisation, sulphide content, weathering and other features. Drillhole collar coordinates, azimuth, dip, depth and sampling intervals are also recorded. KIN DD logging is to geological contacts.
		Qualitative logging includes classification and description of lithology, weathering, oxidation, colour, texture and grain size. Quantitative logging includes percentages of identified minerals, veining, and structural measurements (using a kenometer tool). In addition, logging of diamond drilling includes geotechnical data, RQD and core recoveries.
		Drill core is photographed at the Cardinia site, prior to any cutting and/or sampling, and then stored in this location. Photographs are available for every diamond drillhole completed by KIN and a selection of various RC chip trays. SG data is also collect
		All information collected is entered directly into laptop computers or tablets, validated in the field, and then transferred to the database.
		The level of logging detail is considered appropriate for exploration and to support appropriate mineral resource estimation, mining studies, and metallurgical studies.
		Diamond drillholes completed for geotechnical purposes were independently logged for structural data by geotechnical consultants.
		RC/AC/RAB
		Historical RC, AC, and RAB logging (including Navigator) was entered on a metre by metre basis. Logging consisted of lithology, alteration, texture, mineralisation, weathering, and other features
		For the majority of historical drilling (pre-2004) the entire length of each drillhole have been logged from surface to 'end of hole'.
		KIN RC logging of was carried out in the field and logging has predominantly been undertaken on a metre by metre basis. KIN logging is inclusive of the entire length of each RC drillhole from surface to 'end of hole'.
		Recorded data includes lithology, alteration, structure, texture, mineralisation, sulphide content, weathering and other features. Drillhole collar coordinates, azimuth, dip, depth and sampling intervals are also recorded.
		Qualitative logging includes classification and description of lithology, weathering, oxidation, colour, texture and grain size. Quantitative logging includes identification and percentages of mineralogy, sulphides, mineralisation, and veining.
		Photographs are available for a selection of recent KIN RC drillholes.



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		All information collected is entered directly into laptop computers or tablets, validated in the field, and then transferred to the database.
		The level of logging detail is considered appropriate for exploration and to support appropriate mineral resource estimation, mining studies, and metallurgical studies.
		Rock Chips
		All rock chip samples are inspected by the sampling geologist and logged for lithology, alteration, mineralisation, veining, and structural fabric. This is a combination of qualitative and quantitative data.
Sub-sampling techniques and	If core, whether cut or sawn and	<u>Diamond</u>
sample preparation	whether quarter, half or all core taken.	Historic diamond drill core (NQ/NQ3 or HQ/HQ3) samples collected for analysis were longitudinally cut in half, and occasionally
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	in quarters for the larger (HQ/HQ3) diameter holes, using a powered diamond core drop saw centered over a cradle holding the core in place. Half core or quarter core sample intervals typically varied from 0.3m to 1.4m in length. 1m sample intervals were favoured and are the most common method of sampling, however sample boundaries do principally coincide with geological contacts. The remaining core was retained in core trays.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	2017-18 diamond drill core samples collected for analysis were longitudinally cut in half, with some samples cut into quarters, using a powered diamond core drop saw blade centered over a cradle holding the core in place. Core sample intervals varied from 0.2 to 1.25m in length but were predominantly aligned to 1m intervals or with sample boundaries which respected geological contacts. The remaining core was retained in their respective core trays and stored in KIN's yard for future reference.
	Quality control procedures adopted for	All KIN diamond drill core is securely stored at the KIN Leonora Yard.
	all sub-sampling stages to maximise representivity of samples.	2019 diamond drill core samples collected for analysis were longitudinally cut in half, with some samples cut into thirds, using an automated Corewise powered diamond core saw with the blade centered over a boat holding the core in place. Core sample
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance	intervals varied from 0.2 to 1.25m in length but were predominantly aligned to 1m intervals or with sample boundaries which respected geological contacts. The remaining core was retained in their respective core trays and stored in KIN's yard for future reference. All KIN diamond drill core is securely stored at the Cardinia coreyard.
	results for field duplicate/second-half sampling.	All sub-sampling techniques and sample preparation procedures conducted and/or supervised by KIN geology personnel are to standard industry practice. Sub-sampling and sample preparation techniques used are considered to maximise representivity of drilled material. QA/QC procedures implemented during each drilling program are to industry standard practice.
	Whether sample sizes are appropriate to the grain size of the material being	Samples sizes are considered appropriate for this style of gold mineralisation and as an industry accepted method for evaluation of gold deposits in the Eastern Goldfields of Western Australia.
	sampled.	RC/AC/RAB
		Historic sampling was predominantly conducted by collecting 1m samples from beneath a cyclone and either retaining these primary samples or passing through a riffle splitter to obtain a 3-4kg sub-sample for analysis. First pass sampling often involved collecting composite samples by using a scoop (dry samples) or spear/tube (wet samples) to obtain 3m or 4m composited intervals, with the single metre split samples being retained at the drill site as spoil or in sample bags. If composite sample assays returned anomalous results, the single metre samples for this composite were retrieved and submitted for analysis. RC/AC/RAB sampling procedures are believed to be consistent with the normal industry practices at the time.
		Samples obtained from conventional RC drilling techniques with cross-over subs often suffered from down hole contamination,



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		especially beneath the water table. Samples obtained from RC drilling techniques using the face sampling hammer suffered less from down hole contamination and were more likely to be kept dry beneath the water table, particularly if auxiliary and booster air compressors were used. These samples are considered to be representative.
		The vast majority of Reverse Circulation (RC) drill samples were collected at 1m downhole intervals from beneath a cyclone and then riffle split to obtain a sub-sample (typically 3-4kg). After splitting, 1m sub-samples were typically collected in prenumbered calico bags, and the 1m sample rejects were commonly stored at the drill site in marked plastic bags, for future reference. First pass sampling often involved collecting composite samples by using a scoop (dry samples) or spear/tube (wet samples) to obtain 3m or 4m composited intervals, with the single metre split sub-samples being retained at the drill site. If the composite sample assays returned anomalous results, single metre sub-samples for the anomalous composite intervals were retrieved and submitted for analysis.
		Navigator included standards, fields duplicate splits (since 2009), and blanks within each drill sample batch, at a ratio of 1 for every 20 samples, with the number of standards being inserted at a ratio of 1 for every 50 samples.
		Recent RC sub-samples were collected over 1 metre downhole intervals and retained in pre-marked calico bags, after passing through a cyclone and either a riffle splitter, prior to March 2018, or cone splitter, after March 2018. The majority of RC sub-samples consistently averaged 3-4kg. Sample reject from the riffle splitter were retained and stored in plastic bags, and located near each drillhole site. When drilling beneath the water table, the majority of sample returns were kept dry by the use of the auxiliary and booster air compressors. Very few wet samples were collected through the splitter, and the small number of wet or damp samples is not considered material for resource estimation work.
		KIN RC drill programs utilise field duplicates, at regular intervals at a ratio of 1:25, and assay results indicate that there is reasonable analytical repeatability; considering the presence of nuggety gold.
		All sub-sampling techniques and sample preparation procedures conducted and/or supervised by KIN geology personnel are to standard industry practice. Sub-sampling and sample preparation techniques used are considered to maximise representivity of drilled material. QA/QC procedures implemented during each drilling program are to industry standard practice.
		Samples sizes are considered appropriate for this style of gold mineralisation and as an industry accepted method for evaluation of gold deposits in the Eastern Goldfields of Western Australia.
		No duplicates are taken for rock chip sampling. Sample sizes are approximately 3kg, this is considered appropriate for the material being sampled.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the	Numerous assay laboratories and various sample preparation and assay techniques have been used since 1981. Historical reporting and descriptions of laboratory sample preparation, assaying procedures, and quality control protocols for the samples from the various drilling programs are variable in their descriptions and completeness.
technique is For geophysi handheld XR parameters (technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the	Assay data obtained prior to 2001 is incomplete and the nature of results could not be accurately quantified due to the combinations of various laboratories and analytical methodologies utilised.
		Since 1993, the majority of samples submitted to the various laboratories were typically prepared for analysis firstly by oven drying, crushing and pulverizing to a nominal 85% passing 75µm.
	analysis including instrument make and	In the initial exploration stages, Aqua Regia digest with AAS/ICP finish, was generally used as a first pass detection method, with follow up analysis by Fire Assay fusion and AAS/ICP finish. This was a common practice at the time. Mineralised intervals were



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	model, reading times, calibrations	subsequently Fire Assayed (using 30, 40 or 50 gram catchweights) with AAS/ICP finish.
	factors applied and their derivation, etc. Nature of quality control procedures	Approximately 15-20% of the sampled AC holes may have been subject to Aqua Regia digest methods only, however AC samples were predominantly within the oxide profile, where aqua regia results would not be significantly different to results from fire assay methods.
	adopted (eg standards, blanks, duplicates, external laboratory checks)	Limited information is available regarding check assays for drilling programs prior to 2004.
	and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	During 2004-2014, Navigator utilised six different commercial laboratories during their drilling programs, however Kalgoorlie Assay Laboratories conducted the majority of assaying for diamond, RC, and AC samples using Fire Assay fusion on 40 gram catchweights with AAS/ICP finish.
		Since 2009 Navigator regularly included field duplicates and Certified Reference Material (CRM), standards and blanks, with their sample batch submissions to laboratories at average ratio of 1 in 20 samples. Sample assay repeatability and blank and CRM standard assay results were typically within acceptable limits.
		KIN sample analysis from 2014 to 2018 was conducted by SGS Australia Pty Ltd's ("SGS") Kalgoorlie and Perth laboratories. Sample preparation included oven drying (105°C), crushing (<6mm), pulverising (P90% passing 75μm) and riffle split to obtain a 50 gram catchweight. Analysis for gold only was carried out by Fire Assay fusion technique with AAS finish (SGS Lab Code FAA505).
		 KIN regularly insert blanks and CRM standards in each sample batch at a ratio of 1:50. This allows for at least one blank and one CRM standard to be included in each of the laboratory's fire assay batch of 50 samples. Field duplicates are typically collected at a ratio of 1:50 samples and test sample assay repeatability. Blanks and CRM standards assay result performance is predominantly within acceptable limits for this style of gold mineralisation.
		 KIN requests laboratory pulp grind and crush checks at a ratio of 1:50 or less since May 2018 in order to better qualify sample preparation and evaluate laboratory performance. Samples have generally illustrated appropriate crush and grind size percentages since the addition of this component to the sample analysis procedure.
		 SGS include laboratory blanks and CRM standards as part of their internal QA/QC for sample preparation and analysis, as well as regular assay repeats. Sample pulp assay repeatability, and internal blank and CRM standards assay results are typically within acceptable limits.
		From late 2018 samples have been analysed by Intertek Genalysis, with sample preparation either at their Kalgoorlie prep laboratory or the Perth Laboratory located in Maddington. Sample preparation included oven drying (105°C), crushing (<6mm), pulverising (P90% passing 75µm) and split to obtain a 50 gram catchweight. Analysis for gold only was carried out by Fire Assay fusion technique with AAS finish.
		 KIN regularly insert blanks and CRM standards in each sample batch at a ratio of 1:25. Kin accepts that this ratio of QAQC is industry standard. Field duplicates are typically collected at a ratio of 1:25 samples and test sample assay repeatability. Blanks and CRM standards assay result performance is predominantly within acceptable limits for this style of gold mineralisation.
		 KIN requests laboratory pulp grind and crush checks at a ratio of 1:50 or less since May 2018 in order to better qualify sample preparation and evaluate laboratory performance. Samples have generally illustrated appropriate crush and grind size percentages since the addition of this component to the sample analysis procedure.
		Genalysis include laboratory blanks and CRM standards as part of their internal QA/QC for sample preparation and analysis,



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		as well as regular assay repeats. Sample pulp assay repeatability, and internal blank and CRM standards assay results are typically within acceptable limits.
		The nature and quality of the assaying and laboratory procedures used are considered to be satisfactory and appropriate for use in mineral resource estimations.
		Fire Assay fusion is considered to be a total extraction technique. The majority of assay data used for the mineral resource estimations were obtained by the Fire Assay technique with AAS or ICP finish. AAS and ICP methods of detection are both considered to be suitable and appropriate methods of detection for this style of mineralisation
		Aqua Regia is considered a partial extraction technique, where gold encapsulated in refractory sulphides or some silicate minerals may not be fully dissolved, resulting in partial reporting of gold content.
		No other analysis techniques have been used to determine gold assays.
		Ongoing QAQC monitoring program identified one particular CRM returning spurious results. Further analysis demonstrated that the standard was compromised and was subsequently removed and destroyed. A replacement CRM of similar grade was substituted into the QAQC program.
		KIN continues to both develop and reinforce best practice QAQC methods for all drilling operations and the treatment and analysis of samples. Regular laboratory site visits and audits have been introduced since April 2018 and will be conducted on a quarterly basis. This measure will ensure that all aspects of KIN QAQC practices are adhered to and align with industry best practice.
		All rock chip samples have been submitted to Intertek Genalysis (Perth) for analysis by 50g Fire assay, with multi-element analysis via a 4-acid digest for a 48-element suite. Sample preparation included oven drying (105°C), crushing (<6mm), pulverising (P90% passing 75 μ m). Blanks and standards are inserted by the lab at a minimum rate of 1 in 50. Lab repeats are performed for samples with particularly high gold values. Due to the nature and intended uses of this data, this QAQC procedure is intentionally less rigorous than that used for drilling samples.
Verification of sampling and assaying	The verification of significant intersections by either independent or	Verification of sampling, assay techniques, and results prior to 2004 is limited due to the legacy of the involvement of various companies, personnel, drilling equipment, sampling protocols and analytical techniques at different laboratories.
	alternative company personnel.	During 2009, a selection of significant intersections had been verified by Navigator's company geologists and an independent
	The use of twinned holes.	consultant McDonald Speijers ("MS"). MS were able to validate 92% of the assay records in 50 randomly selected check holes, and only 6 assay discrepancies were detected (< 0.2%), only 2 of those were considered significant. MS concluded that the very small
	Documentation of primary data, data	proportion of discrepancies indicated that the assay database was probably reliable at that time.
	entry procedures, data verification, data storage (physical and electronic) protocols.	In 2009, Runge Ltd ("Runge") completed a mineral resource estimate report for the Cardinia Project area, including the Helens, Rangoon, Kyte and Bruno_Lewis deposits. Runge's database verification included basic visual validation in Surpac and field verification of drillhole positions in February 2009. Runge did not report any significant issues with the database.
	Discuss any adjustment to assay data.	Since 2014, significant drill intersections have been verified by KIN company geologists during the course of the drilling programs.
	and any adjustment to assay autor	During 2017, Carras Mining Pty Ltd ("CM") carried out an independent data verification. 38,098 assay records for KIN 2014-2017 drilling programs were verified by comparing laboratory assay reports against the database. 6 errors were found, which are not considered material and which represented only 0.03% of all database records verified for KIN 2014-2017 drilling programs



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		No adjustments, averaging or calibrations are made to any of the assay data recorded in the database. QA/QC protocol is considered industry standard with standard reference material submitted on a routine basis.
		Recent (2014-2018) RC and diamond drilling by KIN included twinning of some historical holes within the Helens and Rangoon resource areas. There is no significant material difference between historical drilling information and KIN drilling information.
		Areas without twinned holes illustrate a drill density that is considered sufficient to enable comparison with surrounding historic information. No material difference of a negative nature exists between historical drilling information and KIN drilling information.
		KIN diamond holes drilled for metallurgical and geotechnical test work illustrate assay results with adequate correlation to both nearby historical and recent drilling results.
		No adjustment or calibration has been made to assay data.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole	Several local grids were established and used by previous project owners. During the 1990s, SOG transformed the surface survey data firstly to AMG and subsequently to MGA (GDA94 zone51).
	surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Navigator recognised errors in the collar co-ordinates resulting from transformations and as a result, a significant number of holes were resurveyed and a new MGA grid transformation generated. Historical collars have been validated against the original local grid co-ordinates and independently transformed to MGA co-ordinates and checked against the database. Navigator's MGA co-ordinates were checked against the surveyor's reports.
	Specification of the grid system used. Quality and adequacy of topographic control.	Drilling was carried out using these various local grids. Since 2004, All Navigators drill hole collars were surveyed on completion of drilling in the Australian MGA94, Zone51 grid using RTK-DGPS equipment by licensed surveyors, with more than 80% of the pickups carried out by independent contractors.
		Almost all the diamond and at least 70% of Navigator RC holes were downhole surveyed. Pre-Navigator, single shot survey cameras were used, with typical survey intervals of 30-40 metres.
		Recent KIN drill hole collars are located and recorded in the field by a contract surveyor using RTK-DGPS (with a horizontal and vertical accuracy of ±50mm). Location data was collected in the GDA94 Zone51 grid coordinate system.
		Downhole surveying was predominantly carried out by the drilling contractor which, prior to late 2018, was Orbit Drilling Pty Ltd. This was conducted using a downhole electronic single shot magnetic tool. (Relfex EZ-shot), which is industry standard practice. This is considered sufficiently accurate except where significant magnetic interference is encountered. The magnetic field is recorded on every survey and flagged when likely to interfere with the reading. These surveys are downgraded in the database. In addition, if the downhole survey tool is located within 15 metres of the surface, there is risk of influence from the drill rig affecting the azimuth readings. This was observed for the survey readings, which include total magnetic intensity (TMI) measurements, where TMI is spurious for readings taken at downhole depths less than 20 metres. These spurious readings are included in the database, but are not used.
		Downhole surveying in 2019 has been conducted by the drilling contractors (Topdrill Pty Ltd and Swick Mining Services Pty Ltd) utilizing downhole electronic gyroscopic survey tools. These are considered very accurate and not susceptible to magnetic interference. No further surveying required to check drill hole deviation.
		A small selection of drillhole collars, which do not have DGPS collar surveys, were picked up with a handheld GPS and individually



Criteria	JORC Code explanation	Commentary
		appraised in regards to their location prior to modelling; the position of these collars is deemed appropriate for the resource estimation work.
		Considering the history of grid transformations and surviving documentation, there might be some residual risk of error in the MGA co-ordinates for old drillholes, however this is not considered to be material for the resource estimation.
		Azimuth data was historically recorded relative to magnetic north. Much of the historical drilling data was recorded relative to magnetic north. Variation in magnetic declination for the Cardinia Project area is calculated at +0.823° East (1985) to +1.301° East (2017), with a maximum variation of +1.575° in 2005. The difference between true north and magnetic north, and the annual variation in magnetic declination since 1985 is not significant, therefore magnetic north measurements have been used, where true north data is unavailable, for all survey data used in resource estimation processes.
		The accuracy of drill hole collars and downhole data are located with sufficient accuracy for use in resource estimation work.
		For rock chip samples, locations are recorded at the time of sampling using a handheld GPS in the GDA94 Zone51 grid coordinate system.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill hole spacing patterns vary considerably throughout the Cardinia Gold Project area and are deposit specific, depending on the nature and style of mineralisation being tested.
	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.	Drill hole spacing within the resource areas is sufficient to establish an acceptable degree of geological and grade continuity and is appropriate for both the mineral resource estimation and the resource classifications applied.
	Whether sample compositing has been applied.	
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible	The Cardinia greenstone sequence displays a NNW to NW trend. Drilling and sampling programs were carried out to obtain unbiased locations of drill sample data, generally orthogonal to the strike of mineralisation.
	structures and the extent to which this is known, considering the deposit type.	At Helens mineralisation is structurally controlled in sub-vertical shear zones, with supergene components of varying lateral extensiveness present in the oxide profile.
	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	The vast majority of historical drilling, pre-Navigator (pre-2004), and KIN drilling is orientated at -60°/245° (WSW) and -60°/065° (ENE).
		At Bruno-Lewis and Kyte, mineralisaton is either stratigraphy parallel (trending NNW, steep to moderately W-dipping) or cross-cutting and dipping shallowly to the NE (striking NW). The vast majority of the drilling is therefore predominantly orientated at -60°/225-250° or -60°/090°. Grade Control drillholes were drilled vertically. Since late 2018, Kin's drilling has been largely oriented to 070° to target contact lodes and 225-250° to target the NE-dipping potassic lodes.
	material.	The chance of sample bias introduced by sample orientation is considered minimal. No orientation sampling bias has been identified in data thus far.



Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample	No sample security details are available for pre-Navigator (pre-2004) drill or field samples.
	security.	Navigator drill samples (2004-2014) were collected in pre-numbered calico bags at the drill rig site. Samples were then collected by company personnel from the field and transported to the secure Navigator yard in Leonora. Samples were then batch processed (drillhole and sample numbers logged into the database) and then packed into 'bulkabag sacks'. The bulkabags were tied off and stored securely in the Navigator yard until being transported to the selected laboratory. There was no perceived opportunity for the samples to be compromised from collection of samples at the drill site to delivery to the laboratory.
		2017 -18 KIN RC drill samples were collected in pre-numbered calico bags at the drill rig site. The samples were then batch processed (drillhole and sample numbers encoded onto a hardcopy sample register) in the field, and then transported and stacked into 'bulkabag sacks' at the secure KIN yard location in Leonora. Bulkabags were tied off and stored securely in the yard until being transported to the laboratory.
		2019 RC drill samples were collected in pre-numbered calico bags at the drill rig site. The samples were then batch processed (drillhole and sample numbers encoded onto a hardcopy sample register) in the field, and then transported and stacked into 'bulkabag sacks' at the Cardinia office.
		2017-18 KIN DD samples were obtained by KIN personnel in pre-numbered calico bags at the KIN yard location in Leonora. Samples were then stacked into 'bulkabag sacks' at the yard location and stored securely until being transported to the laboratory.
		2019 samples were obtained by KIN personnel in pre-numbered calico bags at the core yard located at the Cardinia office. Samples were then stacked into 'bulkabag sacks' at the yard location and stored securely until being transported to the laboratory.
		Transport contractors are utilised to transport samples to the laboratory. No perceived opportunity for samples to be compromised from collection of samples at the drill site, to delivery to the laboratory, where they were stored in their secure compound, and made ready for processing is deemed likely to have occurred.
		On receipt of the samples, the laboratory independently checked the sample submission form to verify samples received and readied the samples for sample preparation. SGS and Genalysis sample security protocols are of industry standard and deemed acceptable for resource estimation work.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Historic drilling and sampling methods and QA/QC are regarded as not being as thoroughly documented compared to current standards. Inhouse reviews of various available historical company reports of drilling and sampling techniques indicates that these were most likely conducted to industry best practice and standards of the day.
		Independent geological consultants Runge Ltd completed a review of the Cardinia Project database, drilling and sampling protocols, and so forth in 2009. The Runge report highlighted issues with bulk density and QA/QC analysis within the supplied database. Identified issues were subsequently addressed by Navigator and KIN.
		Carras Mining Pty Ltd (CM), an independent geological consultant, reviewed and carried out an audit on the field operations and database in 2017. Drilling and sampling methodologies observed during the site visits were to industry standard. No issues were identified for the supplied databases which could be considered material to a mineral resource estimation. During the review, Carras Mining logged the oxidation profiles (base of complete oxidation and top of fresh rock) for each of the deposit areas, based on visual inspection of selected RC drill chips from KIN's recent drilling programs, and a combination of historical and KIN drillhole logging. Final adjustments were made with input from KIN geologists. The oxidation profiles were used to assign bulk densities



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		and metallurgical recoveries to the 2017 resource models.
		Past bulk density test work has been inconsistent with incorrect methods employed, to derive specific gravity or in-situ bulk density, rather than dry bulk density. Navigator (2009) and recent KIN (2017) bulk density test work was carried out using the water immersion method on oven dried, coated samples to derive dry bulk densities for different rock types and oxidation profiles. This information has been incorporated into the database for resource estimation work. CM conducted site visits during 2017 to the laboratory to validate the methodology.
		Drilling, sampling methodologies, and assay techniques used in these drilling programs are considered to be appropriate and to mineral exploration industry standards of the day.
		Laboratory site visits and audits were introduced in April 2018 and are conducted on a quarterly basis. This measure ensures that all aspects of KIN QAQC practices are adhered to and align with industry best practice.

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	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title	The Cardinia Project, 35-40km NE of Leonora is managed, explored and maintained by KIN, and constitute a portion of KIN's Leonora Gold Project (LGP), which is located within the Shire of Leonora in the Mt Margaret Mineral Field of the North Eastern Goldfields.
	interests, historical sites, wilderness or national park and environmental settings.	The Helens and Rangoon area includes granted mining tenements M37/316 and M37/317, The tenements are held in the name of Navigator Mining Pty Ltd, a wholly owned subsidiary of KIN.
	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.	The Bruno-Lewis and Kyte areas includes granted mining tenements M37/86, M37/227, M37/277, M37/300, M37/428 and M37/646. The tenements are held in the name of Navigator Mining Pty Ltd, a wholly owned subsidiary of KIN. The following royalty payment may be applicable to the areas within the Cardinia Project's Bruno and Lewis areas that comprise the deposits being reported on:
		1. Gloucester Coal Ltd (formerly CIM Resources Ltd and Centenary International Mining Ltd) in respect of M37/86 - 1% of the quarterly gross value of sales for gold ounces produced, in excess of 10,000 ounces.
		There are no known native title interests, historical sites, wilderness areas, national park or environmental impediments over the outlined current resource areas, and there are no current impediments to obtaining a licence to operate in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	At Cardinia, from 1980-1985, Townson Holdings Pty Ltd ("Townson") mined a small open pit over selected historical workings at the Rangoon prospect. Localised instances of drilling relating to this mining event are not recorded and are considered insubstantial and immaterial for resource modelling. Companies involved in the collection of the majority of the gold exploration data since 1985 and prior to 2014 include:



Criteria	JORC Code explanation	Commentary
		Thames Mining NL ("Thames") 1985; Mt Eden Gold Mines (Aust) NL (also Tarmoola Aust Pty Ltd "MEGM") 1986-2003; Centenary International Mining Ltd ("CIM") 1986-1988, 1991-1992; Metana Minerals NL ("Metana") 1986-1989; Sons of Gwalia Ltd ("SOG") 1989, 1992-2004; Pacmin Mining Corporation ("Pacmin") 1998-2001, and Navigator Resources Ltd ("Navigator") 2004-2014.
		In 2009 Navigator commissioned Runge Limited ("Runge") to complete a Mineral Resource estimate for the Bruno, Lewis, Kyte, Helens and Rangoon deposits. Runge reported a JORC 2004 compliant Mineral Resource estimate, at a cut-off grade of 0.7g/t Au, totaling 1.45Mt @ 1.3 g/t au (61,700 oz Au) for Helens and Rangoon, and totaling 4.34Mt @ 1.2 g/t au (169,700 oz Au) for Bruno, Lewis and Kyte.
		A trial pit (Bruno) was mined by Navigator in 2010, and a 'test parcel' of ore was extracted and transported firstly to Sons of Gwalia's processing plant in Leonora, and finally to Navigator's processing plant located at Bronzewing, where approximately 100,000 tonnes were processed at an average head grade of 2.33 g/t au (7,493 oz Au).
Geology	Deposit type, geological setting and style of mineralisation.	The Cardinia Project area is located in the central part of the Norseman-Wiluna Greenstone Belt, which extends for some 600km on a NNW trend across the Archean Yilgarn Craton of Western Australia.
		The regional geology comprises a suite of NNE-North trending greenstones positioned within the Mertondale Shear Zone (MSZ) a splay limb of the Kilkenny Lineament. The MSZ denotes the contact between Archaean felsic volcanoclastics and sediment sequences in the west and Archaean mafic volcanics in the east. Proterozoic dolerite dykes and Archaean felsic porphyries have intruded the sheared mafic/felsic volcanoclastic/sedimentary sequence.
		Locally within the Cardinia Project area, the stratigraphy consists of intermediate, mafic and felsic volcanic and intrusive lithologies and locally derived epiclastic sediments, which strike NNW, dipping steep-to-moderately to the west. Structural foliation of the areas stratigraphy predominantly dips steeply to the east but localised inflections are common and structural orientation can vary between moderately (50-75°) easterly to moderately westerly dipping.
		Mineralisation at Helens is controlled by a cross-cutting fault, hosted predominantly in mafic rock units, adjacent to the felsic volcanic/sediment contacts. The ore zones are associated with increased shearing, intense alteration and disseminated sulphides. Minor supergene enrichment occurs locally within mineralised shears throughout the regolith profile.
		Mineralisation at Bruno-Lewis is largely controlled by the stratigraphic contact between basalt and felsic volcanics. Gold is associated with significant sulphide mineralisation in the sediments and volcaniclastics between the 2 volcanic units. Gold Is also hosted within shallowly NE-dipping lodes, associated with increased potassic-sericite alteration and quartz stockwork veining. These lodes also host the mineralisation at Kyte. Substantial supergene mineralisation sits above both styles of mineralisation.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Material drilling information for exploration results has previously been publicly reported in numerous announcements to the ASX by Navigator (2004-2014) and KIN since 2014.



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	 easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	When exploration results have been reported for the resource areas, the intercepts are reported as weighted average grades over intercept lengths defined by geology or lower cut-off grades, without high grade cuts applied. Where aggregate intercepts incorporated short lengths of high grade results, these results were included in the reports. Since 2014, KIN have reported RC drilling intersections with low cut off grades of >= 0.5 g/t Au and a maximum of 2m of internal dilution at a grade of <0.5g/t Au. There is no reporting of metal equivalent values.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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').	The orientation, true width, and geometry of mineralised zones have been primarily determined by interpretation of historical drilling and continued investigation and verification of KIN drilling. Drill intercepts are reported as downhole widths not true widths. Accompanying dialogue to reported intersections normally describes the attitude of mineralisation.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional	Appropriate maps and sections are included in the main body of this report.



Criteria	JORC Code explanation	Commentary
	views.	
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Public reporting of exploration results by KIN and past tenement holders and explorers for the resource areas are considered balanced. Representative widths typically included a combination of both low and high grade assay results.
	reporting of Exploration Results.	All meaningful and material information relating to this mineral resource estimate is or has been previously reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Since 2018, a campaign of determining Bulk Densities has been undertaken. The water displacement method is used on drill samples selected by the logging geologist. These measurements are entered into the logging software interface and loaded to the Datashed database.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	KIN intend to continue exploration and drilling activities at in the described area, with the intention to increase the project's resources.