

ASX Announcement 27 April 2020

## SHALLOW ZONES OF HIGH-GRADE GOLD MINERALISATION INTERSECTED AT CARDINIA GOLD PROJECT, WA

Results demonstrate growing, large-scale mineralised system at Cardinia Hill

#### **Highlights**

- Consistent high-grade, near-surface gold mineralisation intersected in RC drilling at the Cardinia Hill prospect, located 2.5km east of the proposed processing plant site at the Cardinia Gold Project.
- First five RC holes all intersect ore grade mineralisation at Cardinia Hill:

Cardinia Hill RC 15m at 4.42g/t Au from 34m (CH20RC030)

17m at 3.29g/t Au from 10m (CH20RC028) 11m at 1.56g/t Au from 48m (CH20RC026)

5m at 3.06g/t Au from 53m and 7m at 1.83g/t Au from 94m (CH20RC027) 6m at 2.28g/t Au from 52m and 4m at 1.92g/t Au from 70m (CH20RC029)

- The remaining three RC holes in Phase 2 drilling at Cardinia Hill, all intersected zones of enriched sulphide mineralisation and alteration. Assay results are awaited.
- Significant zones of shallow gold mineralisation intersected in numerous air-core holes at Helens East, adjacent to Cardinia Hill. Intersections from 4m composite sampling from the first three lines include:

Helens East AC 6m at 2.05g/t Au from 28m (HE20AC140)

12m at 1.06g/t Au from 0m (HE20AC191) 33m at 1.08g/t Au from 0m (HE20AC221)

- Assays awaited for three lines of AC drilling at Helens South.
- The mineralisation style is sulphide replacement and involves strongly anomalous Ag-As-Cu-Mo-Sb-Te-W rich sulphides and alteration of Cherts and Felsic Volcanics.
- RC and AC drilling rigs are progressing the remaining Phase 2 drilling program at the Comedy King,
   Lewis East and Faye Marie prospects before returning to Cardinia Hill for follow-up programs.



**Kin Mining NL** (ASX: KIN or "the Company") is pleased to report highly encouraging results from ongoing exploration drilling programs at its 100%-owned **Cardinia Gold Project** (CGP) near Leonora in WA.

The Company has received initial assay results from Reverse Circulation (RC) drilling at the Cardinia Hill prospect and from air-core (AC) drilling at the Helens East prospects, located approximately 2.5km east of the proposed processing plant site at the CGP.

The Cardinia Hill RC, Helens East AC and Helens South AC drilling, which commenced in March (refer ASX announcement 11 March 2020), is part of the Phase 2 program designed to in-fill and extend the mineralisation encountered previously at the Cardinia Hill, Comedy King and Lewis East prospects with RC drilling, and provide initial air-core coverage over the Helens East, Helens South and Faye Marie prospects.

The Cardinia Hill, Comedy King and Lewis East prospects were initially targeted with AC drilling, which commenced in December 2019 (refer ASX announcement, 13 January 2020).

The results at Cardinia Hill have confirmed the high-grade nature of the gold mineralisation and the strong association with sulphide-dominant alteration, rich in a host of indicator elements such as arsenic (As), copper (Cu), molybdenum (Mo), silver (Ag), tellurium (Te) and tungsten (W).

The Helens East AC results indicate that mineralisation in the zone between Helens and Cardinia Hill contains several new mineralised trends not previously defined by historical workings or by the limited shallow drilling undertaken by previous explorers.

Commenting on the Phase 2 drill results, Kin Mining Managing Director, Andrew Munckton, said:

"These are some of the best results we have seen to date as part of our strategy to unlock the broader exploration potential of the Cardinia Gold Project, highlighting the opportunity to make substantial new gold discoveries in areas outside of the existing Mineral Resources.

"The RC drilling program that commenced in March has delivered some outstanding intersections, characterised by sulphide mineralisation and alteration in all eight holes completed to date at Cardinia Hill.

"The sulphide-rich intersections and accompanying alteration zones in the first five holes have now returned broad widths of high-grade gold mineralisation with a distinctive suite of indicator minerals. Ore grade intersections have been encountered from close to surface and up to 100m below surface, indicating the potential to extend this style of mineralisation to considerable depth. In addition, the Cardinia Hill mineralisation has now been intersected in RC and AC drilling over a strike length of approximately 500m, and it remains open in all directions indicating the extensive nature of this style of mineralisation.

"The Phase 2 AC drilling program that commenced at Helens East and Helens South spans an area of approximately 1km by 2.5km sitting between the Helens and Cardinia Hill mineralised positions. The Helens East Aircore program consists of three lines of drilling at 200m line spacing. Assays have been returned for these initial lines and have yielded numerous anomalous zones worthy of follow up and ore grade zones of mineralisation in several holes.

"We are now looking forward to the return of the remaining Helens South AC results in coming weeks, which should allow us to prioritise which zones to test further with RC drilling.

"The discovery of high-grade mineralisation at Cardinia Hill and the expanding footprint of mineralisation at Helens East are both indicative of the potential for a very large mineralised system within the Company's Cardinia holdings. The mineralised system appears to be strongly sulphide associated and be controlled by the emerging Helens Fault and Lewis Fault structures. Our geological team now has a solid understanding of the controls on mineralisation and the part that the Helens Fault and Lewis Fault play in the distribution of gold at



Cardinia. We are now exploring the area for large bodies of high-grade gold mineralisation and we continue to apply a systematic approach to their discovery and assessment."

#### **Cardinia Hill RC**

RC drilling commenced at Cardinia Hill following the receipt of assaying from AC drilling from the Phase 1 program in February 2020. Phase 1 AC drilling results included a number of strong intersections including 9m at 3.05g/t in CH19AC018, 8m at 2.17g/t Au in CH19AC019 and 6m at 1.87g/t Au in CH19AC010 (see ASX announcement 18 February 2020).

An initial eight RC holes were planned to in-fill and extend the mineralisation encountered in the AC drilling along strike (refer Figure 1). All eight (8) RC holes in the Phase 2 drilling program at Cardinia Hill intersected zones of sulphide (pyrite mostly) and dolomite-albite-epidote alteration associated with Cherty sediments within Felsic Volcaniclastics.

The RC holes successfully extended the mineralisation along strike and confirmed the presence of depth extensions of the mineralisation encountered in the previous AC drilling.

Assay results have been returned for the initial five holes and are listed in Table 1.

The drilling shows two zones of strong gold and sulphide mineralisation associated with Chert horizons over approximately 300m of strike down to a maximum depth of 100 vertical metres (see Figures 1 and 2).

The mineralisation remains open and untested by drilling to the south-east and at depth. To the north-west, the trend of mineralisation has been tested by AC drilling and found to be mineralised over significant widths. See Helens East AC drilling results (HE20AC221 - 33m at 1.08g/t Au), in this announcement.

Multi-element assays of the sulphide-rich sections encountered in RC drilling show strong anomalism in indicator minerals associated with the sulphide mineralisation. The indicator minerals consist of a strong Ag-As-Cu-Mo-Sb-Te-W signature. This signature is also reflected in recent multi-element soil geochemistry completed at the Cardinia Project, providing a foundation for further target generation from the soil geochemistry.

Hole ID	From (m)	To (m)	Width (m)	Gold (g/t)	Comments
CH20RC026	26	30	4	1.09	
	41	42	1	1.31	
	48	59	11	1.56	
CH20RC027	41	42	1	2.06	
	53	58	5	3.06	
	87	88	1	1.25	
	94	101	7	1.83	
CH20RC028	10	27	17	3.29	
	49	51	2	1.6	
CH20RC029	25	28	3	1.68	
	43	47	4	0.81	
	52	58	6	2.28	
	70	74	4	1.92	
CH20RC030	34	49	15	4.42	

**Table 1**: Significant intercepts (>1g/t) for Cardinia Hill RC drilling program. True widths are approximately 90% of downhole widths.



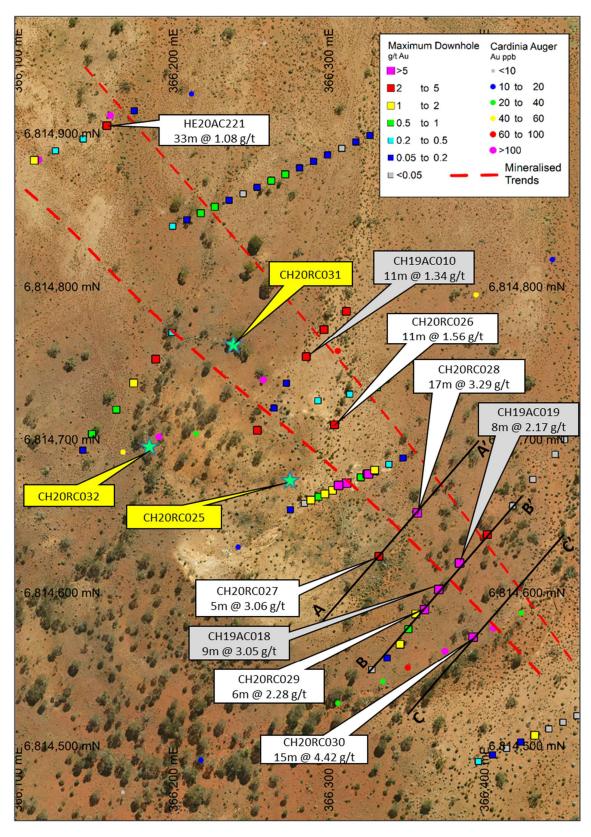
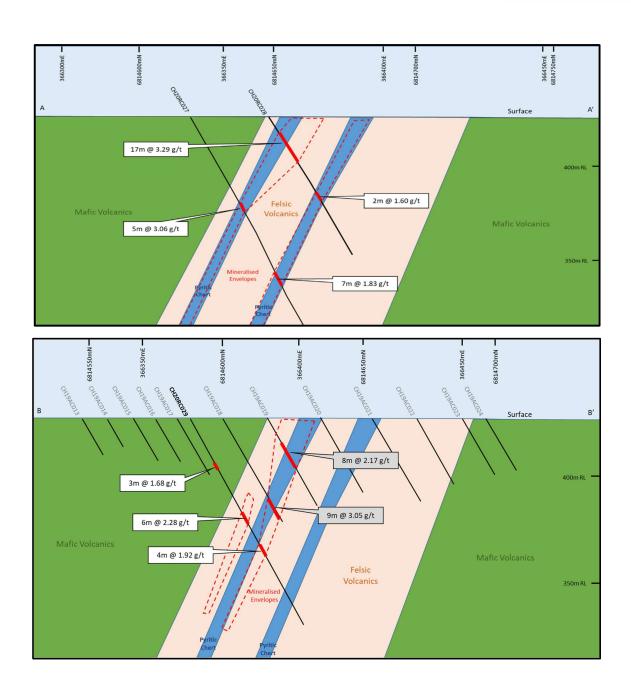
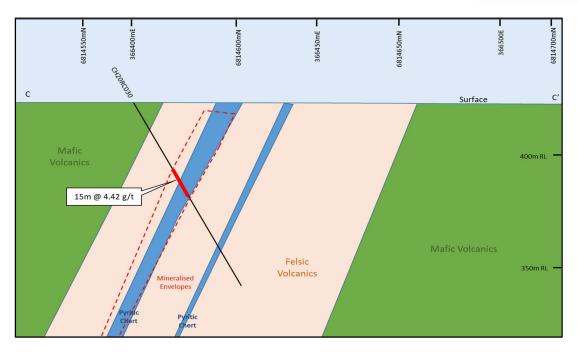


Figure 1: Locations and assay results from Cardinia Hill RC drilling program. Yellow labelled RC drill holes are awaiting assay results. Grey labelled drill holes are historical AC assay results (1m splits). True width is approximately 90% of down-hole width.









**Figure 2**: Cross-sections through the Cardinia Hill prospect showing gold mineralisation defined by RC and AC drilling.

True width is approximately 90% of downhole width.

#### **Helens East AC**

The Helens East AC program comprised a total of 4,252m of drilling. It commenced in mid-March as part of the Phase 2 drilling program at Cardinia.

The AC program at Helens East targeted several Chert and Felsic Volcanic horizons that showed alteration and sulphide weathering textures located between the Helens deposit and the emerging Cardinia Hill prospect. The AC drilling also tested the potential northern extensions of the Cardinia Hill trend.

Three drill lines were completed with drilling designed to test to below the top of fresh rock. The weathering profile is relatively shallow, with the area consisting predominantly of sub-cropping lithology.

Drill lines were spaced every 200m along strike and covered an area approximately 1,000m wide by 600m long. Sampling was completed as 4 metre composite assays (see *Figure 3*).

Assay results have been returned for the three lines with significant results (>0.5g/t over 4m composite or less than 4m at bottom of hole sample) encountered in numerous holes and listed in Table 2.

Of significance are the intersections in HE20AC140 (6m at 2.05g/t Au from 28m to bottom-of-hole) and HE20AC191 (12m at 1.06g/t Au from surface) which indicate a zone of mineralisation associated with a sulphidic Chert unit trending south from the Helens deposit.

Also of significance is the intersection in HE20AC221 (33m at 1.06g/t Au from surface to bottom-of-hole), which is interpreted as the northern extension of the Cardinia Hill mineralisation intersected in RC drilling further south east (see Cardinia Hill RC results this announcement).

#### **Helens South AC**

Further AC drilling to the south has also been completed over anomalous soil geochemistry. Three lines of AC drilling have been completed at Helens South with results yet to be returned.



The Helens South AC program totalled 3,834m. Both the Helens East and Helens South AC drilling is targeted over anomalous gold-in-soil geochemistry, illustrated on Figure 4.

Hole ID	From (m)	To (m)	Width (m)	Gold (g/t)	Comments
HE20AC108	20	24	4	0.51	
HE20AC119	36	48	12	0.47	
HE20AC125	32	36	4	0.72	
HE20AC130	36	40	4	0.52	
HE20AC137	20	24	4	0.71	
					New mineralised trend
HE20AC140	28	34	6	2.05	Bottom of hole
HE20AC143	16	20	4	0.59	
HE20AC156	40	42	2	0.64	
HE20AC164	24	28	4	0.65	Cardinia Hill trend -?
HE20AC165	12	16	4	0.65	Cardinia Hill trend -?
HE20AC191	0	12	12	1.06	New mineralised trend
HE20AC194	12	16	4	0.99	New mineralised trend
	28	32	4	1.21	New mineralised trend
HE20AC216	56	60	4	0.64	
HE20AC217	20	24	4	0.78	
HE20AC218	8	12	4	1.66	Cardinia Hill trend
					Bottom of hole, Cardinia
HE20AC221	0	33	33	1.08	Hill trend

 Table 2: Significant intercepts (>0.5g/t) for 4m composite samples of the first 3 lines of the Helens East aircore drilling program.



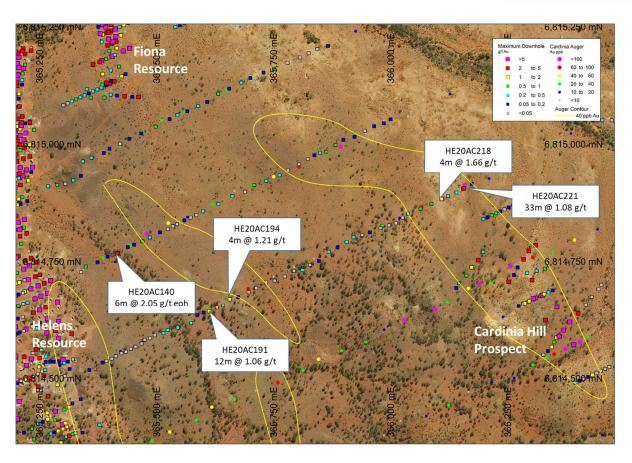


Figure 3: Helens East aircore drilling results over contoured Auger (Soil) geochemistry.



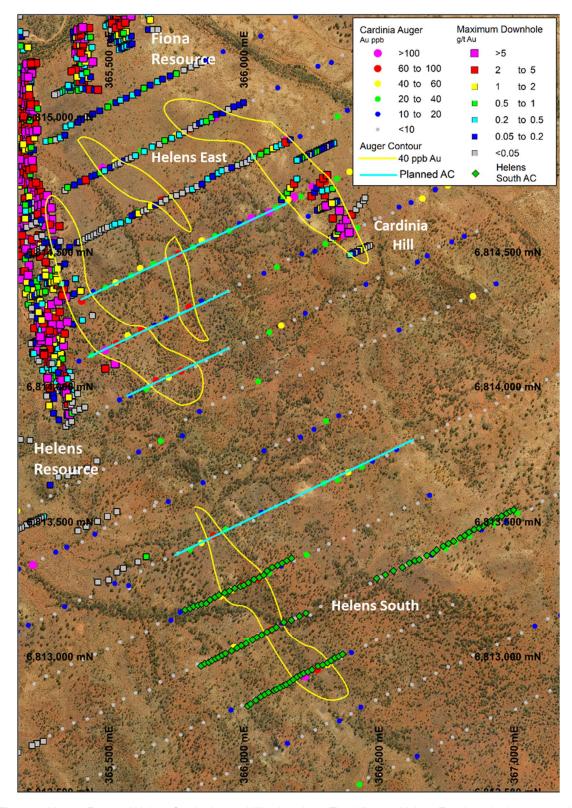


Figure 4: Helens East and Helens South aircore drilling locations. The 3 lines at Helens East have had assay results returned (See Figure 3). The remaining 3 lines of AC drilling at Helens South are awaiting assay results. Aircore drill targeting is guided by the Auger (Soil) multi-element geochemistry.



Project	Hole Id	Easting	Northing	RL	Hole Type	Azimuth	Dip	Depth
Cardinia	CH20RC025	366,280	6,814,679	430	RC	040	-60	156
Hill	CH20RC026	366,305	6,814,709	429	RC	040	-60	96
	CH20RC027	366,333	6,814,623	430	RC	040	-60	138
	CH20RC028	366,358	6,814,652	430	RC	040	-60	84
	CH20RC029	366,363	6,814,589	431	RC	040	-60	114
	CH20RC030	366,394	6,814,571	432	RC	040	-60	96
	CH20RC031	366,242	6,814,763	429	RC	040	-60	96
	CH20RC032	366,184	6,814,697	432	RC	040	-60	114
Helens	HE20AC107	365,272	6,814,909	418	AC	063	-60	38
East	HE20AC108	365,291	6,814,912	418	AC	063	-60	39
	HE20AC109	365,308	6,814,915	419	AC	063	-60	36
	HE20AC110	365,325	6,814,922	417	AC	063	-60	36
	HE20AC111	365,341	6,814,932	417	AC	063	-60	30
	HE20AC112	365,346	6,814,963	418	AC	063	-60	40
	HE20AC113	365,364	6,814,970	419	AC	063	-60	40
	HE20AC114	365,390	6,814,980	420	AC	063	-60	39
	HE20AC115	365,402	6,814,990	420	AC	063	-60	44
	HE20AC116	365,425	6,815,000	420	AC	063	-60	42
	HE20AC117	365,445	6,815,011	420	AC	063	-60	50
	HE20AC118	365,470	6,815,022	419	AC	063	-60	59
	HE20AC119	365,501	6,815,036	419	AC	063	-60	65
	HE20AC120	365,531	6,815,053	419	AC	063	-60	39
	HE20AC121	365,547	6,815,061	420	AC	063	-60	36
	HE20AC122	365,568	6,815,069	420	AC	063	-60	42
	HE20AC123	365,592	6,815,080	420	AC	063	-60	45
	HE20AC124	365,611	6,815,089	421	AC	063	-60	47
	HE20AC125	365,634	6,815,106	416	AC	063	-60	42
	HE20AC126	365,658	6,815,117	414	AC	063	-60	48
	HE20AC127	365,684	6,815,130	416	AC	063	-60	42
	HE20AC128	365,703	6,815,140	417	AC	063	-60	40
	HE20AC129	365,731	6,815,152	425	AC	063	-60	53
	HE20AC130	365,754	6,815,160	414	AC	063	-60	54
	HE20AC131	365,783	6,815,173	413	AC	063	-60	47
	HE20AC132	365,809	6,815,184	414	AC	063	-60	31
	HE20AC133	365,828	6,815,193	410	AC	063	-60	35
	HE20AC134	365,846	6,815,202	412	AC	063	-60	28
	HE20AC135	365,869	6,815,208	420	AC	063	-60	39
	HE20AC136	365,342	6,814,727	418	AC	063	-60	38
	HE20AC137	365,352	6,814,738	416	AC	063	-60	42
	HE20AC138	365,377	6,814,747	416	AC	063	-60	48
	HE20AC139	365,398	6,814,760	440	AC	063	-60	39



Project	Hole Id	Easting	Northing	RL	Hole Type	Azimuth	Dip	Depth
	HE20AC140	365,419	6,814,767	311	AC	063	-60	34
	HE20AC141	365,442	6,814,780	430	AC	063	-60	38
	HE20AC142	365,455	6,814,785	418	AC	063	-60	36
	HE20AC143	365,473	6,814,792	425	AC	063	-60	32
	HE20AC144	365,488	6,814,800	426	AC	063	-60	39
	HE20AC145	365,510	6,814,811	426	AC	063	-60	36
	HE20AC146	365,527	6,814,818	427	AC	063	-60	26
	HE20AC147	365,538	6,814,824	428	AC	063	-60	18
	HE20AC148	365,546	6,814,828	427	AC	063	-60	15
	HE20AC149	365,562	6,814,837	427	AC	063	-60	14
	HE20AC150	365,576	6,814,843	427	AC	063	-60	17
	HE20AC151	365,588	6,814,848	426	AC	063	-60	39
	HE20AC152	365,603	6,814,856	424	AC	063	-60	66
	HE20AC153	365,635	6,814,872	418	AC	063	-60	61
	HE20AC154	365,665	6,814,888	423	AC	063	-60	66
	HE20AC155	365,692	6,814,898	422	AC	063	-60	51
	HE20AC156	365,712	6,814,912	419	AC	063	-60	42
	HE20AC157	365,737	6,814,921	423	AC	063	-60	60
	HE20AC158	365,766	6,814,933	426	AC	063	-60	39
	HE20AC159	365,784	6,814,943	424	AC	063	-60	42
	HE20AC160	365,807	6,814,956	417	AC	063	-60	29
	HE20AC161	365,826	6,814,968	425	AC	063	-60	29
	HE20AC162	365,840	6,814,975	429	AC	063	-60	23
	HE20AC163	365,852	6,814,981	432	AC	063	-60	34
	HE20AC164	365,865	6,814,983	420	AC	063	-60	42
	HE20AC165	365,885	6,814,997	423	AC	063	-60	36
	HE20AC166	365,902	6,815,008	428	AC	063	-60	47
	HE20AC167	365,926	6,815,015	435	AC	063	-60	49
	HE20AC168	365,947	6,815,028	423	AC	063	-60	43
	HE20AC169	365,967	6,815,037	429	AC	063	-60	41
	HE20AC170	365,988	6,815,044	423	AC	063	-60	38
	HE20AC171	366,003	6,815,052	424	AC	063	-60	32
	HE20AC172	365,359	6,814,517	426	AC	063	-60	52
	HE20AC173	365,388	6,814,533	426	AC	063	-60	18
	HE20AC174	365,396	6,814,536	427	AC	063	-60	18
	HE20AC175	365,407	6,814,541	427	AC	063	-60	18
	HE20AC176	365,416	6,814,546	431	AC	063	-60	22
	HE20AC177	365,428	6,814,553	421	AC	063	-60	17
	HE20AC178	365,437	6,814,556	424	AC	063	-60	17
	HE20AC179	365,448	6,814,562	428	AC	063	-60	19
	HE20AC180	365,458	6,814,566	429	AC	063	-60	25



Project	Hole Id	Easting	Northing	RL	Hole Type	Azimuth	Dip	Depth
	HE20AC181	365,471	6,814,573	420	AC	063	-60	24
	HE20AC182	365,477	6,814,581	422	AC	063	-60	24
	HE20AC183	365,489	6,814,584	423	AC	063	-60	24
	HE20AC184	365,499	6,814,591	418	AC	063	-60	24
	HE20AC185	365,518	6,814,595	424	AC	063	-60	25
	HE20AC186	365,527	6,814,602	423	AC	063	-60	36
	HE20AC187	365,548	6,814,607	423	AC	063	-60	30
	HE20AC188	365,577	6,814,617	424	AC	063	-60	33
	HE20AC189	365,590	6,814,634	430	AC	063	-60	32
	HE20AC190	365,603	6,814,639	418	AC	063	-60	28
	HE20AC191	365,615	6,814,642	418	AC	063	-60	28
	HE20AC192	365,632	6,814,651	432	AC	063	-60	25
	HE20AC193	365,645	6,814,655	431	AC	063	-60	33
	HE20AC194	365,659	6,814,669	443	AC	063	-60	37
	HE20AC195	365,677	6,814,673	430	AC	063	-60	42
	HE20AC196	365,699	6,814,684	431	AC	063	-60	29
	HE20AC197	365,716	6,814,693	427	AC	063	-60	18
	HE20AC198	365,737	6,814,704	426	AC	063	-60	10
	HE20AC199	365,755	6,814,708	425	AC	063	-60	15
	HE20AC200	365,777	6,814,717	427	AC	063	-60	19
	HE20AC201	365,796	6,814,729	429	AC	063	-60	22
	HE20AC202	365,814	6,814,731	427	AC	063	-60	30
	HE20AC203	365,831	6,814,742	417	AC	063	-60	26
	HE20AC204	365,849	6,814,750	417	AC	063	-60	51
	HE20AC205	365,871	6,814,770	417	AC	063	-60	48
	HE20AC206	365,889	6,814,779	418	AC	063	-60	40
	HE20AC207	365,909	6,814,791	418	AC	063	-60	42
	HE20AC208	365,923	6,814,801	419	AC	063	-60	33
	HE20AC209	365,942	6,814,805	420	AC	063	-60	27
	HE20AC210	365,959	6,814,811	419	AC	063	-60	24
	HE20AC211	365,981	6,814,820	426	AC	063	-60	18
	HE20AC212	365,999	6,814,826	426	AC	063	-60	20
	HE20AC213	366,014	6,814,830	421	AC	063	-60	16
	HE20AC214	366,029	6,814,843	425	AC	063	-60	27
	HE20AC215	366,040	6,814,851	426	AC	063	-60	55
	HE20AC216	366,066	6,814,862	426	AC	063	-60	67
	HE20AC217	366,090	6,814,872	428	AC	063	-60	48
	HE20AC218	366,112	6,814,882	428	AC	063	-60	34
	HE20AC219	366,125	6,814,888	418	AC	063	-60	37
	HE20AC220	366,143	6,814,896	418	AC	063	-60	31
	HE20AC221	366,159	6,814,905	417	AC	063	-60	33



Project	Hole Id	Easting	Northing	RL	Hole Type	Azimuth	Dip	Depth
	HE20AC222	366,176	6,814,915	417	AC	063	-60	35
	HE20AC223	366,193	6,814,923	417	AC	063	-60	46
	HE20AC224	366,211	6,814,934	419	AC	063	-60	45
	HE20AC225	366,226	6,814,942	423	AC	063	-60	48
Helens	HS20AC226	366,496	6,813,288	433	AC	063	-60	61
South	HS20AC227	366,529	6,813,301	434	AC	063	-60	64
	HS20AC228	366,558	6,813,316	433	AC	063	-60	67
	HS20AC229	366,591	6,813,328	437	AC	063	-60	53
	HS20AC230	366,617	6,813,344	438	AC	063	-60	44
	HS20AC231	366,638	6,813,353	430	AC	063	-60	38
	HS20AC232	366,654	6,813,357	433	AC	063	-60	37
	HS20AC233	366,682	6,813,372	444	AC	063	-60	42
	HS20AC234	366,704	6,813,380	428	AC	063	-60	37
	HS20AC235	366,718	6,813,393	437	AC	063	-60	41
	HS20AC236	366,742	6,813,407	436	AC	063	-60	30
	HS20AC237	366,762	6,813,417	436	AC	063	-60	29
	HS20AC238	366,781	6,813,426	436	AC	063	-60	37
	HS20AC239	366,805	6,813,437	436	AC	063	-60	39
	HS20AC240	366,822	6,813,446	435	AC	063	-60	28
	HS20AC241	366,838	6,813,458	434	AC	063	-60	32
	HS20AC242	366,857	6,813,469	396	AC	063	-60	32
	HS20AC243	366,876	6,813,473	435	AC	063	-60	36
	HS20AC244	366,890	6,813,481	431	AC	063	-60	37
	HS20AC245	366,907	6,813,493	427	AC	063	-60	30
	HS20AC246	366,920	6,813,501	417	AC	063	-60	27
	HS20AC247	366,941	6,813,511	428	AC	063	-60	29
	HS20AC248	366,958	6,813,518	434	AC	063	-60	33
	HS20AC249	366,978	6,813,528	435	AC	063	-60	30
	HS20AC250	366,990	6,813,536	436	AC	063	-60	34
	HS20AC251	367,003	6,813,541	438	AC	063	-60	28
	HS20AC252	365,787	6,813,171	438	AC	063	-60	33
	HS20AC253	365,805	6,813,176	423	AC	063	-60	34
	HS20AC254	365,818	6,813,184	422	AC	063	-60	33
	HS20AC255	365,834	6,813,188	426	AC	063	-60	42
	HS20AC256	365,848	6,813,193	424	AC	063	-60	39
	HS20AC257	365,865	6,813,195	427	AC	063	-60	39
	HS20AC258	365,879	6,813,208	426	AC	063	-60	41
	HS20AC259	365,897	6,813,218	428	AC	063	-60	49
	HS20AC260	365,912	6,813,226	433	AC	063	-60	48
	HS20AC261	365,934	6,813,234	433	AC	063	-60	46
	HS20AC262	365,951	6,813,241	428	AC	063	-60	45



Project	Hole Id	Easting	Northing	RL	Hole Type	Azimuth	Dip	Depth
	HS20AC263	365,971	6,813,251	431	AC	063	-60	46
	HS20AC264	365,992	6,813,258	427	AC	063	-60	37
	HS20AC265	366,004	6,813,262	426	AC	063	-60	42
	HS20AC266	366,021	6,813,272	432	AC	063	-60	42
	HS20AC267	366,042	6,813,284	433	AC	063	-60	51
	HS20AC268	366,062	6,813,291	435	AC	063	-60	48
	HS20AC269	366,078	6,813,300	438	AC	063	-60	34
	HS20AC270	366,091	6,813,315	437	AC	063	-60	48
	HS20AC271	366,109	6,813,328	437	AC	063	-60	37
	HS20AC272	366,129	6,813,336	435	AC	063	-60	44
	HS20AC273	366,146	6,813,344	436	AC	063	-60	45
	HS20AC274	366,163	6,813,353	435	AC	063	-60	44
	HS20AC275	366,181	6,813,362	434	AC	063	-60	33
	HS20AC276	365,846	6,812,962	431	AC	063	-60	42
	HS20AC277	365,860	6,812,971	431	AC	063	-60	37
	HS20AC278	365,874	6,812,976	430	AC	063	-60	35
	HS20AC279	365,886	6,812,982	430	AC	063	-60	36
	HS20AC280	365,900	6,812,990	430	AC	063	-60	30
	HS20AC281	365,910	6,812,994	430	AC	063	-60	29
	HS20AC282	365,924	6,813,002	430	AC	063	-60	42
	HS20AC283	365,937	6,813,009	426	AC	063	-60	45
	HS20AC284	365,959	6,813,018	428	AC	063	-60	45
	HS20AC285	365,979	6,813,028	429	AC	063	-60	42
	HS20AC286	365,995	6,813,038	430	AC	063	-60	50
	HS20AC287	366,012	6,813,046	430	AC	063	-60	54
	HS20AC288	366,037	6,813,059	429	AC	063	-60	41
	HS20AC289	366,053	6,813,069	406	AC	063	-60	40
	HS20AC290	366,071	6,813,078	407	AC	063	-60	47
	HS20AC291	366,090	6,813,089	407	AC	063	-60	47
	HS20AC292	366,108	6,813,097	404	AC	063	-60	59
	HS20AC293	366,124	6,813,106	407	AC	063	-60	80
	HS20AC294	366,152	6,813,125	424	AC	063	-60	80
	HS20AC295	366,180	6,813,133	433	AC	063	-60	78
	HS20AC296	366,210	6,813,147	434	AC	063	-60	78
	HS20AC297	366,234	6,813,159	433	AC	063	-60	80
	HS20AC298	366,019	6,812,815	433	AC	063	-60	23
	HS20AC299	366,029	6,812,822	435	AC	063	-60	46
	HS20AC300	366,049	6,812,836	436	AC	063	-60	33
	HS20AC301	366,067	6,812,848	433	AC	063	-60	30
	HS20AC302	366,082	6,812,857	434	AC	063	-60	34
	HS20AC303	366,096	6,812,865	435	AC	063	-60	36



Project	Hole Id	Easting	Northing	RL	Hole Type	Azimuth	Dip	Depth
	HS20AC304	366,116	6,812,872	434	AC	063	-60	27
	HS20AC305	366,125	6,812,876	432	AC	063	-60	29
	HS20AC306	366,139	6,812,882	431	AC	063	-60	23
	HS20AC307	366,151	6,812,890	430	AC	063	-60	24
	HS20AC308	366,161	6,812,894	429	AC	063	-60	21
	HS20AC309	366,175	6,812,902	427	AC	063	-60	10
	HS20AC310	366,187	6,812,912	426	AC	063	-60	15
	HS20AC311	366,202	6,812,922	424	AC	063	-60	30
	HS20AC312	366,215	6,812,929	428	AC	063	-60	23
	HS20AC313	366,226	6,812,935	429	AC	063	-60	21
	HS20AC314	366,242	6,812,941	429	AC	063	-60	36
	HS20AC315	366,257	6,812,949	429	AC	063	-60	39
	HS20AC316	366,279	6,812,962	429	AC	063	-60	34
	HS20AC317	366,296	6,812,966	427	AC	063	-60	40
	HS20AC318	366,314	6,812,974	429	AC	063	-60	24
	HS20AC319	366,327	6,812,982	430	AC	063	-60	27
	HS20AC320	366,341	6,812,992	435	AC	063	-60	32
	HS20AC321	366,356	6,812,998	436	AC	063	-60	33
	HS20AC322	366,370	6,813,005	429	AC	063	-60	32

Table 3: Drill hole details Phase 2 RC and AC program Cardinia Hill, Helens East and Helens South

#### -ENDS-

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**Media enquiries** 

About Kin Mining NL

**Investor enquiries** 

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 an 945koz¹ gold Mineral Resource defined in both oxide and deeper primary mineralisation with considerable potential to grow this resource with further drilling.

<sup>1</sup>The company confirms that it is not aware of any new information or data that materially affects the information included in the ASX Announcement of 17th February 2020 "CGP Mineral Resource Estimate Upgrade to 945koz", and that all material assumptions and technical parameters underpinning the estimates in that announcements continue to apply and have not materially changed.



				ardinia Gol	The second second										
	Resource		Meas	ured Reso	urces	Indic	ated Resou	ırces	Inferred Resources			То	tal Resourc	es	ļ.
Project Area	Lower Cut	Tonnes (Mt)	Au (g/t Au)	Au (k Oz)	Tonnes (Mt)	Au (g/t Au)	Au (k Oz)	Tonnes (Mt)	Au (g/t Au)	Au (k Oz)	Tonnes (Mt)	Au (g/t Au)	Au (k Oz)	Date Announce	
Mertondale															
Mertons Reward	\$2,000	0.5	_			0.8	2.30	60	0.4	1.01	15	1.2	1.86	74	17-Apr-19
Mertondale 3-4	\$2,000	0.5				1.2	1.99	75	0.4	1.36	20	1.6	1.82	95	17-Apr-19
onto	\$2,000	0.5				1.6	1.19	63	0.8	1.30	32	2.4	1.23	95	17-Feb-20
Mertondale 5	\$2,000	0.5				0.4	1.84	24	0.4	1.36	18	0.8	1.60	42	17-Feb-20
clipse	\$2,000	0.5							0.7	1.00	22	0.7	1.00	22	17-Feb-20
Quicksilver	\$2,000	0.5							1.1	1.11	39	1.1	1.11	39	17-Feb-20
Subtotal Mertondale						4.0	1.72	222	3.8	1.17	145	7.9	1.45	367	
Cardinia															
Bruno	\$2,000	0.5				0.9	1.02	28	1.9	1.28	78	2.8	1.20	106	09-Jul-19
.ewis	\$2,000	0.5	0.4	1.04	12	3.6	0.93	108	1.0	1.06	33	4.9	0.97	153	09-Jul-19
(yte	\$2,000	0.5				0.3	1.57	16	0.0	1.30	2	0.4	1.54	18	17-Apr-19
Helens	\$2,000	0.5				0.7	2.18	47	0.2	1.83	14	0.9	2.09	61	17-Apr-19
iona	\$2,000	0.5				0.5	1.41	24	0.2	1.29	7	0.7	1.38	31	17-Feb-20
Rangoon	\$2,000	0.5				0.5	1.26	20	0.3	1.07	11	0.8	1.19	31	17-Feb-20
Hobby	\$2,000	0.5							0.1	2.10	8	0.1	2.10	8	17-Feb-20
Subtotal Cardinia			0.4	1.04	12	6.5	1.17	244	3.8	1.27	153	10.6	1.20	409	
Raeside															
Viichaelangelo	\$2,000	0.5				1.1	2.03	72	0.4	2.15	26	1.5	2.06	98	17-Feb-20
.eonardo	\$2,000	0.5				0.4	2.38	30	0.1	1.92	9	0.5	2.26	39	17-Feb-20
orgotten Four	\$2,000	0.5				0.1	2.11	7	0.1	1.97	6	0.2	2.04	14	17-Feb-20
(rang	\$2,000	0.5				0.3	1.85	16	0.0	1.71	2	0.3	1.84	17	17-Feb-20
Subtotal Raeside						1.9	2.08	125	0.7	2.05	43	2.5	2.07	168	
			0.4	1.04	12	12.4	1.49	591	8.3	1.28	341	21.0	1.40	945	

Table 4. Mineral Resource Estimate Table February 2020

Mineral Resources estimated by Jamie Logan of Kin Mining NL, and reported in accordance with JORC 2012 using a 0.5g/t Au cut-off within A\$2,000 optimisation shells.

#### **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
Criteria  Sampling techniques	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	Diamond  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.  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.  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 1.3m in length but were predominantly aligned to 1m intervals or with sample boundaries which respected geological contacts.  RC  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 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.
	simple (eg 'reverse circulation drilling	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.
	was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse	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.  AC/RAB
	gold that has inherent sampling	Historic air core (AC) and rotary air blast (RAB) were typically collected at 1 metre intervals and placed on the ground with



Criteria	JORC Code explanation	Commentary
	problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	3-4kg sub-samples collected using a scoop or spear. Three metre or four metre composited interval samples were often collected by 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.
	Í	Assay Methodology
		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 tube, depth of diamond tails, face-	<u>Diamond</u>
	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.



Criteria	JORC Code explanation	Commentary
		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 (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



Criteria	JORC Code explanation	Commentary
		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 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.	Historic core recovery was recorded in drill logs for most of the diamond drilling programs since 1985. A review of historical 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.  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 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  RC/AC/RAB  Historic sample recovery information for RC, AC, and RAB drilling is limited.  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
Logging	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	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.  KIN has attempted to validate historical logging data and to standardize the logging code system by incorporating the SOG



Criteria	JORC Code explanation	Commentary
	metallurgical studies.	and Navigator logging codes into one.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Diamond  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.
	The total length and percentage of the relevant intersections logged.	Navigator's procedure for logging of diamond core included firstly marking of the bottom of the core (for successful core 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.



Criteria	JORC Code explanation	Commentary
		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.
		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
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	occasionally in quarters for the larger (HQ/HQ3) diameter holes, using a powered diamond core drop saw centered o cradle holding the core in place. Half core or quarter core sample intervals typically varied from 0.3m to 1.4m in lengt 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
	Quality control procedures adopted for	yard for future reference. 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.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance	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. 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
	Whether sample sizes are appropriate to	practice.
	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.



Criteria	JORC Code explanation	Commentary
	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, 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 pre-numbered 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



Criteria	JORC Code explanation	Commentary
		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 considered partial or total.	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.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the	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 model, reading times, calibrations factors applied and their derivation, etc.	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 subsequently Fire Assayed (using 30, 40 or 50 gram catchweights) with AAS/ICP finish.
	Nature of quality control procedures adopted (eg standards, blanks,	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.
	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).
		<ul> <li>KIN regularly insert blanks and CRM standards in each sample batch at a ratio of 1:50. This allows for at least one blan 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 resul performance is predominantly within acceptable limits for this style of gold mineralisation.</li> </ul>
		<ul> <li>KIN requests laboratory pulp grind and crush checks at a ratio of 1:50 or less since May 2018 in order to better qualif 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.</li> </ul>
		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 result.



Criteria	JORC Code explanation	Commentary
		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.
		<ul> <li>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.</li> </ul>
		<ul> <li>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.</li> </ul>
		<ul> <li>Genalysis 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.</li> </ul>
		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 75µm). 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.



Criteria	JORC Code explanation	Commentary
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.  The use of twinned holes.  Documentation of primary data, data entry procedures, data verification, data	During 2009, a selection of significant intersections had been verified by Navigator's company geologists and an independent 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 proportion of discrepancies indicated that the assay database was probably reliable at that time.
	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.
		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
		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	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



Criteria	JORC Code explanation	Commentary
	control.	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 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	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.



Criteria	JORC Code explanation	Commentary
	continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and 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	The vast majority of historical drilling, pre-Navigator (pre-2004), and KIN drilling is orientated at -60°/245° (WSW) and -60°/065° (ENE).
	mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if	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.
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.



Criteria	JORC Code explanation	Commentary
		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 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 tenement 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:
		<ol> <li>Gloucester Coal Ltd (formerly CIM Resources Ltd and Centenary International Mining Ltd) in respe of M37/86 - 1% of the quarterly gross value of sales for gold ounces produced, in excess of 10,00 ounces.</li> </ol>
		There are no known native title interests, historical sites, wilderness areas, national park or environmenta impediments over the outlined current resource areas, and there are no current impediments to obtainin 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 included 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 transporte firstly to Sons of Gwalia's processing plant in Leonora, and finally to Navigator's processing plant located a Bronzewing, where approximately 100,000 tonnes were processed at an average head grade of 2.33 g/t a (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.



Criteria	JORC Code explanation	Commentary
		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.
	<ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	
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	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



Criteria	JORC Code explanation	Commentary
	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.	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 views.	Appropriate maps and sections are included in the main body of this report.
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.  All meaningful and material information relating to this mineral resource estimate is or has been previousl 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	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.



Criteria	JORC Code explanation	Commentary
	substances.	
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	KIN intend to continue exploration and drilling activities at in the described area, with the intention to increase the project's resources.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	