



11 October 2018

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37,335,750

## Regional exploration program generates new targets at LGP

### Highlights

- Regional targeting exercise being conducted in conjunction with resource expansion drilling and development studies at the Leonora Gold Project.
- Systematic approach utilising geology, geophysics and geochemistry in underexplored areas outside the LGP's three main mining centres.
- New geological mapping has identified new targets with no history of previous exploration.
- These new targets fit the geological models of large (+500koz) deposits in the Leonora-Laverton region (eg. Wallaby, Jupiter and Darlot).
- Work to advance new targets towards drill testing and reinterpretation of historic datasets to generate additional targets is underway.
- Series of historic workings within the Cardinia area largely untested below 30 metres depth present another important area for further work.

Kin Mining NL (**ASX: KIN**) (**Kin or the Company**) is pleased to provide an update on regional exploration activities at its Leonora Gold Project (LGP) in Western Australia. A project-wide targeting program is being undertaken in parallel with exploration and drilling at the main mining centres of the LGP – Cardinia, Mertondale and Raeside – along with the ongoing development studies to deliver the LGP to a lower risk development decision in 2019.

Gold exploration within the project area has been sporadically undertaken for more than 30 years, although activity outside the known orebodies has been limited, particularly in the past 20 years.

Kin has completed a comprehensive, detailed mapping and target generation work program over the core of the LGP tenure. It has identified a number of new targets in covered terrain and reinterpreted historical high grade mining areas with modern “mineralised system” thinking.

Commenting on the program, Managing Director Andrew Munckton said:

“Developing our understanding of the wider exploration potential of the LGP is an important pillar to generate more value for shareholders. The work completed to date has successfully identified prospective new areas which will be progressed towards drilling in 2019 as we remain focussed on our key objectives of expanding resources and delivering the LGP to a lower risk development decision point.”

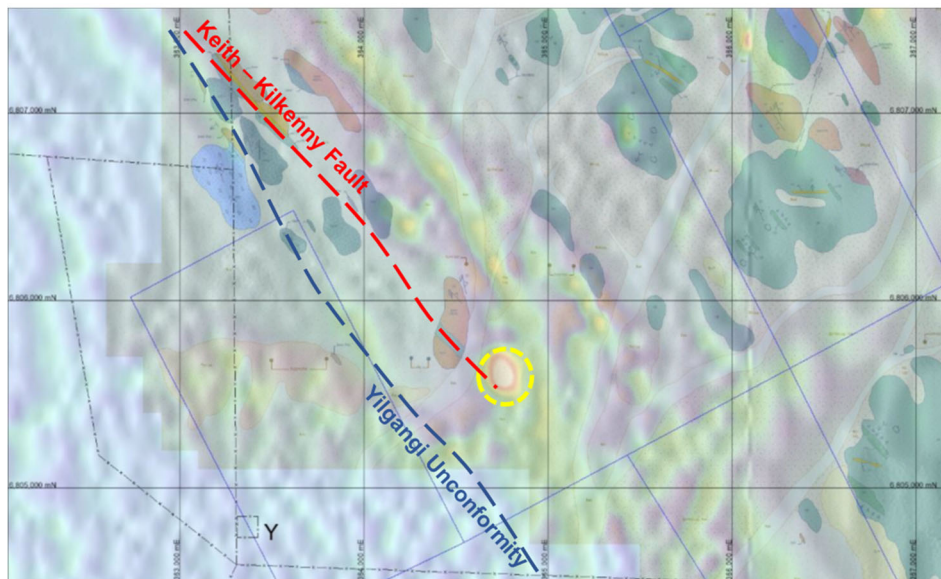
Further information on a number of the new target areas is outlined as follows.

### Dingo Well

Dingo Well is a circular magnetic high anomaly in close proximity to the unconformity of the Pig Well-Yilgarni Formation and chlorite-carbonate-chloritoid altered 'basement' rocks (Figure 1). This area coincides with a strand of the Keith-Kilkenny Fault, considered a major structure of regional significance, adjacent to the southern extension of the Mertondale Shear.

This anomaly is considered a potential Wallaby analogue: a syenite intrusive complex with a flanking halo of actinolite-magnetite alteration. At Wallaby, the footwall to the Wallaby Basin shows extensive chloritoid and chlorite-carbonate alteration in proximity to the unconformity. Circular magnetic anomalies proximal to such a setting should be of interest. There is no surface expression to this anomaly due to complete surficial cover.

Future work at Dingo Well will include assessment of the geochemical database and broad spaced geochemical sampling, detailed geophysical surveying and aircore drilling to test for dispersion in the weathered profile and signature alteration system



**Figure 1:** Outcrop geology map overlain on magnetic image showing the presence of a circular magnetic high beneath complete cover in close proximity to the unconformity with the Pig Well-Yilgarni Formation.

### Pig Well

This area is characterized by narrow vein, high-grade historic gold mines in the sediments of the Yilgarni Formation of the late conglomerate basin locally known as the Pig Well Graben. The basin is a steep sided, high energy basin interpreted to be >500m deep. The underlying structures are regionally significant as they are sub-parallel with the Keith-Kilkenny Shear Zone

The sedimentary sequence consists of polymictic granitoid pebble conglomerates and feldspathic sandstones and are approximate 30Ma younger than the underlying stratigraphy. Gold is associated with steep to moderately south-west dipping quartz veins in a major north-west trending shear zone.

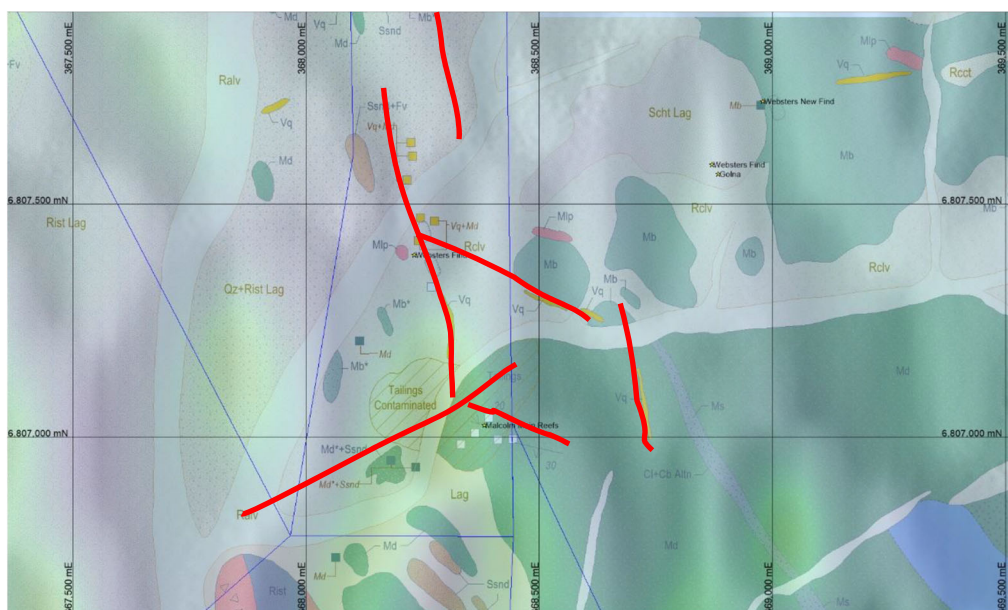
Quartz veins are hosted within the sheared granitoid conglomerate, and related fault scarp material of quartz-sericite schist, and show intense but narrow sericite-carbonate alteration at the vein margins. The gold is associated with pyrite.

The vein systems either penetrate the entire depth of the overlying basin or emanate from an intrusive body emplaced within the conglomerate.

Limited soil geochemical sampling was conducted more than 20 years ago and inadequate regional geochemical drilling was completed. The soil programs completed did not show gold mineralisation over the historical workings.



No soil sampling has been conducted in the area although it has seen limited shallow drilling. Results from this work will be assessed along with detailed geochemical sampling and geophysical surveying. A targeted aircore drilling program will follow.



**Figure 3:** Outcrop geology map of the Websters Find mine camp showing a complex arrangement of quartz reefs. The Main Reef extends to the West-Southwest beneath a large creek drainage.

### Cardinia Area

Located within 3km of the Cardinia processing plant site are numerous sets of historic workings that have received a variety of exploration efforts over several generations. Most have historical aircore or RAB drilling with numerous high grade intersections in the oxide and transitional zones to approximately 30 metres below surface. Limited RC drilling has tested beneath the old workings.

These prospects, along with the Helens, Bruno-Lewis and Kyte mineralisation (total Mineral Resource 330koz<sup>1</sup>), represent a very considerable mineralised system with consistent orientations and overprinting relationships. Most deposits contain intense sericite-pyrite alteration accompanied by laminated, sheeted and stock-work arrays of quartz-pyrite veins. The host rocks are generally basalt and felsic with geological contacts providing an important fluid pathway during mineralisation. A strong structural control is apparent with northeast and north-south orientations dominant.

As with most historic mining in the region, earlier production from the Cardinia area exhibited high grades (Table 2).

**Table 2:** Historic production from the Cardinia area.

Mining Centre	Production (oz)	Grade (g/t)
Black Chief	523	19.9
Nevertire	1,503	236.1
East Lynne	1,744	43.7
Rangoon	275	3.7
Pride of the North	74.4	56.0

In addition to the historically mined and outcropping veining and alteration, there are a number of other targets in this area.

Planned work includes the detailed review of the geochemical data set and additional geochemistry where results may be unreliable. Aircore drilling for geochemical coverage will be undertaken as a next step.

**–ENDS–**

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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 focus is its 100% owned Leonora Gold Project (LGP) located in the highly prospective North-Eastern Goldfields region of Western Australia. The LGP has a +1Moz<sup>1</sup> gold Mineral Resource defined in both supergene and deeper primary mineralisation with considerable potential to grow this resource with further drilling.

# <sup>1</sup>LGP Mineral Resources (September 2018)

Deposit	Cutoff g/t Au	Indicated			Inferred			Total		
		Tonnes (Mt)	Au (g/t)	Au (k oz)	Tonnes (Mt)	Au (g/t)	Au (k oz)	Tonnes (Mt)	Au (g/t)	Au (k oz)
MERTONDALE										
Mertons Reward	0.5	2.75	1.37	121	0.36	1.33	15	3.11	1.37	137
Mertondale 3-4	0.5	2.08	1.50	100	0.48	1.33	21	2.56	1.47	121
Tonto	0.5	2.67	1.18	101	0.18	1.30	8	2.85	1.18	109
Mertondale 5	0.5	0.81	1.83	48	0.22	1.71	12	1.03	1.80	60
*Eclipse	0.5				1.23	1.39	55	1.23	1.39	55
*Quicksilver	0.5				0.81	1.54	40	0.81	1.54	40
TOTAL		8.30	1.39	370	3.29	1.43	151	11.59	1.40	521
CARDINIA										
Bruno Lewis Link	0.5	1.09	1.30	45	0.72	1.55	36	1.81	1.40	81
Lewis	0.5	2.48	1.21	96	0.22	1.31	9	2.70	1.22	105
Kyte	0.5	0.51	1.28	21	0.02	1.60	1	0.53	1.30	22
**Helens	0.5	0.62	2.18	43	0.41	2.07	28	1.03	2.14	71
Fiona	0.5	0.33	1.90	20	0.11	1.30	5	0.44	1.70	24
Rangoon	0.5	0.41	1.37	18	0.19	1.18	7	0.60	1.31	25
TOTAL		5.44	1.39	243	1.67	1.59	86	7.11	1.44	330
RAESIDE										
Michelangelo	0.5	2.47	1.61	128	0.09	1.51	4	2.56	1.61	132
Leonardo	0.5	0.75	1.81	44	0.15	1.23	6	0.90	1.71	50
*Forgotten Four	0.5				0.21	2.12	14	0.21	2.12	14
*Krang	0.5				0.15	2.11	10	0.15	2.11	10
TOTAL		3.22	1.66	172	0.60	1.81	35	3.82	1.68	206
GRAND TOTAL		16.96	1.44	785	5.56	1.52	272	22.52	1.46	1,057

## NOTES:

All resources other than Helens, Eclipse, Quicksilver, Forgotten Four and Krang have been estimated by CM in 2017 and reported @ 0.5g/t Au within Entech AUD2,200 pit shells. See ASX Announcement 30th August 2017 "Kin Defines +1 Million ounces of Gold at the Leonora Gold Project."

\* Mineral Resources estimated by McDonald Speijers in 2009, audited by Carras Mining Pty Ltd in 2017 and reported in accordance with JORC 2012 using a 0.5g/t Au cut-off within Entech AUD2,200 pit shells.

\*\* Mineral Resources estimated by Jamie Logan in 2018 and reported @ 0.5g/t AU within a KIN AUD2,000 pit shell. See ASX Announcement 10th September 2018 "Helens Mineral Resource Update."

Totals may not tally due to rounding.

Other than the update to the Helens Resource 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 30 August 2017 "Kin Defines +1 Million ounces of Gold at the Lenora Gold Project", and that all material assumptions and technical parameters underpinning the estimates in that announcements continue to apply and have not materially changed.