

ASX ANNOUNCEMENT

30 August 2016

## KAIROS IDENTIFIES MULTIPLE HIGH GRADE GOLD TARGETS AT ROE HILLS

*Gravity surveys scheduled to commence next month with DDH1 engaged to commence drilling in October as target generation process continues to gather momentum*

### Highlights:

- **Highly encouraging results received from the ongoing assessment of the gold potential** of Kairos' 100%-owned Roe Hills Gold Project, 120km east of Kalgoorlie in WA.
- **Multiple high-priority targets identified through initial targeting exercise** completed in collaboration with geophysical/geological consultants Newexco.
- **The highly prospective "Aldiss" Fault now confirmed to extend for over 40 strike kilometres** within Kairos' tenure – and remains essentially unexplored.
- **Extensive areas displaying complex regolith and previously ineffective exploration** highlighted through a review of historical geochemistry by the Company's consultant geochemist, Dr Nigel Brand.
- **Reinterpretation of regional geology highlights the Western BIF/ultramafic package** on Kairos' tenements as being equivalent to the BIF sequences which host Silver Lake Resources' (ASX: SLR) nearby Randalls Project deposits, Cock-eyed Bob, Santa & Maxwells.
- **Applications lodged for strategic tenements covering potential extensions** to Silver Lake's French Kiss, Italia & Salt Lake City deposits.
- **Detailed gravity surveys scheduled to commence in September 2016** to better define potential gold-bearing structures and refine drill targets.
- **DDH1 drilling engaged to** commence drilling at Roe Hills in October 2016, following receipt of statutory approvals and clearances.

Kairos Minerals Ltd (ASX: KAI; "Kairos" or "the Company") is pleased to advise that it has identified multiple priority gold targets at its 100%-owned **Roe Hills Gold Project**, located 120km east-southeast of Kalgoorlie in Western Australia (see Figure 1), further strengthening the significant emerging gold exploration potential of the highly prospective tenement package.

The Company recently commenced an assessment of the gold potential at Roe Hills in parallel with its ongoing resource development and targeting work at the **Mt York Lithium-Gold Project**, located 120km south-east of Port Hedland in WA's East Pilbara region, which has been described in recent

ASX releases. Current JORC 2012 compliant resources at Mt York total 135,000 ounces with work in progress to rapidly expand the project's global resource inventory.

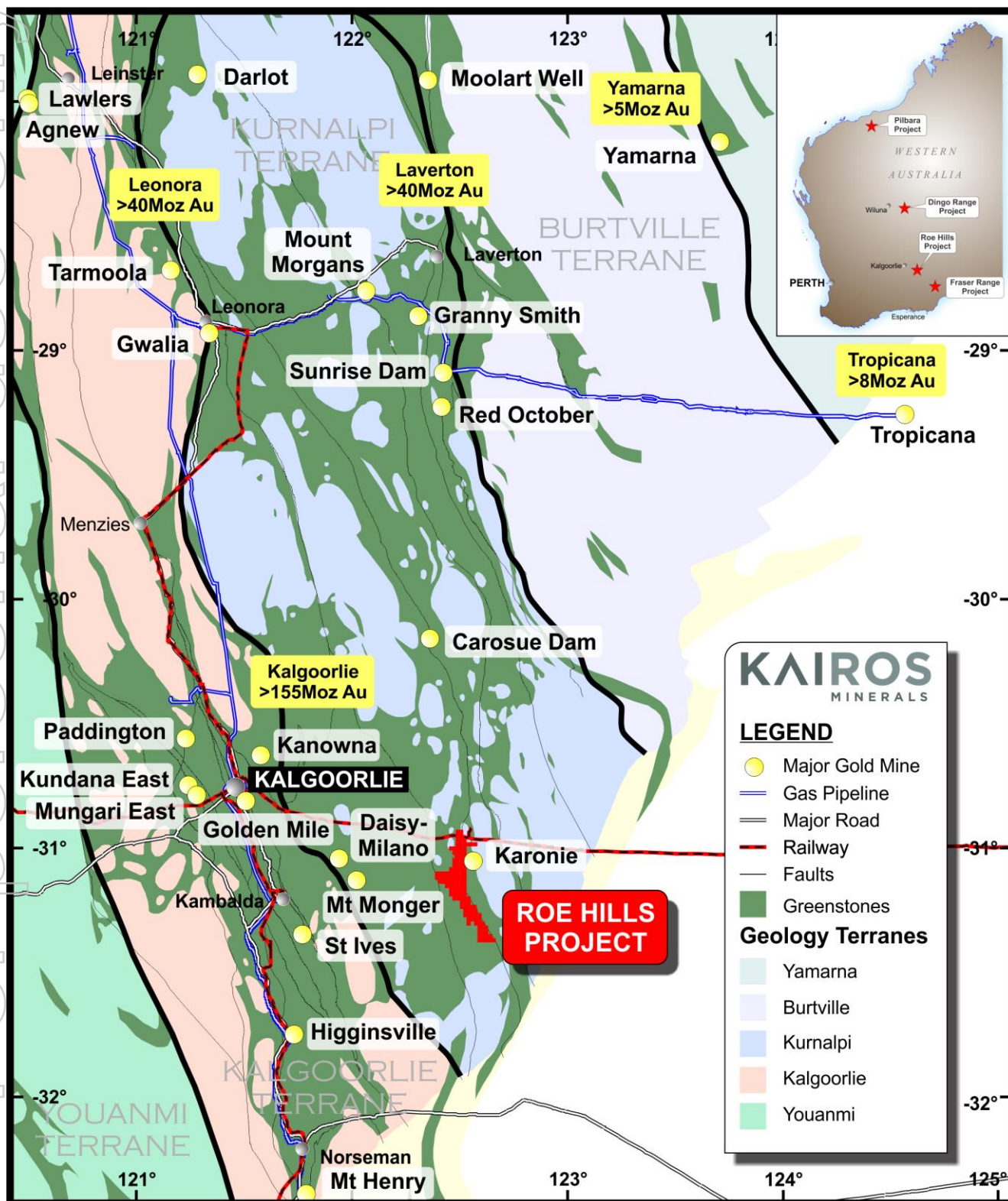


Figure 1. Project location - East Yilgarn Craton (EYC) Kurnalpi Terrane

The Roe Hills Project is located 120km east of Kalgoorlie within the Kurnalpi Terrane of the Eastern Goldfields, Eastern Yilgarn Craton (EYC) in a rapidly emerging gold province which is currently enjoying a significant level of exploration activity and investor interest.

The Company's tenure encompasses a dominant land-holding in the area comprising a total of 324km<sup>2</sup> and covering a 40km continuous strike length of the interpreted southern extensions of the highly prospective Leonora-Laverton greenstone belts, a major gold-bearing terrane of WA.

The Roe Hills Project area is flanked by Silver Lake Resources' (ASX: SLR) Mt Monger/Randalls Gold Operations to the west and the Aldiss Gold Project to the immediate east. Recently, Breaker Resources (ASX: BRB) has confirmed the discovery of a potentially significant new goldfield at its Lake Roe Project, located ~10km to the north-east of Kairos' tenement package within the same tectono-stratigraphic corridor.

Previous gold exploration at Roe Hills was undertaken during the mid-late 1990's by several companies including BHP and WMC; however, despite promising early results gold exploration effectively ceased at Roe Hills in 2001 during a protracted period of historically low commodity prices. No follow-up evaluation or methodical modern exploration for gold has been undertaken during the past 15 years.

By contrast, the Laverton goldfield – which also lies within the Kurnalpi Terrane of the EYC, some 200km to the north of Roe Hills – has grown from a reported gold resource endowment of <3Moz in the early 1990's to a current endowment of >28Moz as a direct result of continued exploration effort, expenditure and subsequent success by companies such as Dacian Gold (Mt Morgans >3Moz); AngloGold Ashanti (Sunrise Dam > 10moz), Goldfields (Wallaby >8Moz, Granny Smith >2 Moz) & Saracen Mineral Holdings (Carosue Dam >4Moz).

The Laverton Goldfield is now widely recognized as Australia's second largest gold district after Kalgoorlie, demonstrating the significant opportunities available through the application of modern exploration methodologies within historically under-explored regions such as Roe Hills.

### **Roe Hills Project – Key Recent Developments**

With the assistance of expert independent consultants, Kairos' geological team has been progressing a detailed review of the gold exploration potential at the Roe Hills Project in preparation for a major new drilling program.

This work has delivered a number of positive interim results, which are summarised below:

- The Roe Hills Project represents a dominant land-holding in an under-explored high quality geological setting with proven gold endowment.
- The project is bounded by the Celia/Claypan and Emu Fault systems and covers 40 strike kilometres of the Keith-Kilkenny Lineament (locally known as the "Aldiss" Fault) – all of which are regionally extensive deep crust/mantle tapping structures, well recognized as controlling the distribution of many of WA's major gold deposits.

- Numerous ENE and WNW “linking” structures transect the project stratigraphy, providing dilational traps within favourable lithologies defining multiple priority targets with the potential to host significant gold mineralisation.
- An initial collaborative targeting exercise undertaken with geophysical and geological consultants Newexco Services Pty Ltd has identified multiple high-priority target areas for gold. These targets, including the Ginger Kiss and Terra trends and the western BIF, are shown in Figure 2. A summary of historical intercepts from these areas is presented below (previously announced in KAI June quarterly):

***Terra Trend***

- Hole UR19 16m @ 46.8g/t Au from 38m  
Including 4m @ 181.4 g/t Au from 38m
- TD1 35m @ 1.0 g/t Au “stockwork” from 116.5m  
Including 3m @ 1.8 g/t Au from 117.1m
- Hole KD1 25m @ 1.2 g/t Au from 161m  
Including 1m @ 20.4 g/t Au from 165m
- Hole KD3 20m @ 0.71 g/t Au from 238m  
Including 7m @ 1.65g/t Au from 237m

***Ginger Kiss Trend***

- KR01 26m @ 0.84 g/t Au from 74m
- GKRC1 4m @ 1.66 g/t Au from 74m
- GKRC2 2m @ 2.2 g/t Au from 74m
- GKRC3 2m @ 0.9 g/t Au from 76m
- GKRC11 4m @ 1.22 g/t Au from 64m

***Talc Lake Trend***

- Hole ROE147 18m @ 1.65 g/t Au from 138m  
Including 2m @ 11.0 g/t Au from 138m

***Sheehans Well Trend***

- Hole ROE247 5m @ 13.7 g/t Au from 50m

- A review of historical geochemical data in conjunction with detailed mapping of the regolith (near-surface environment) by geochemical consultant Dr Nigel Brand has highlighted extensive areas within the Roe Hills tenement package where historical exploration and surface geochemistry is believed to have been ineffective (see Figure 3). This conclusion significantly enhances the exploration potential of the Roe Hills Project;

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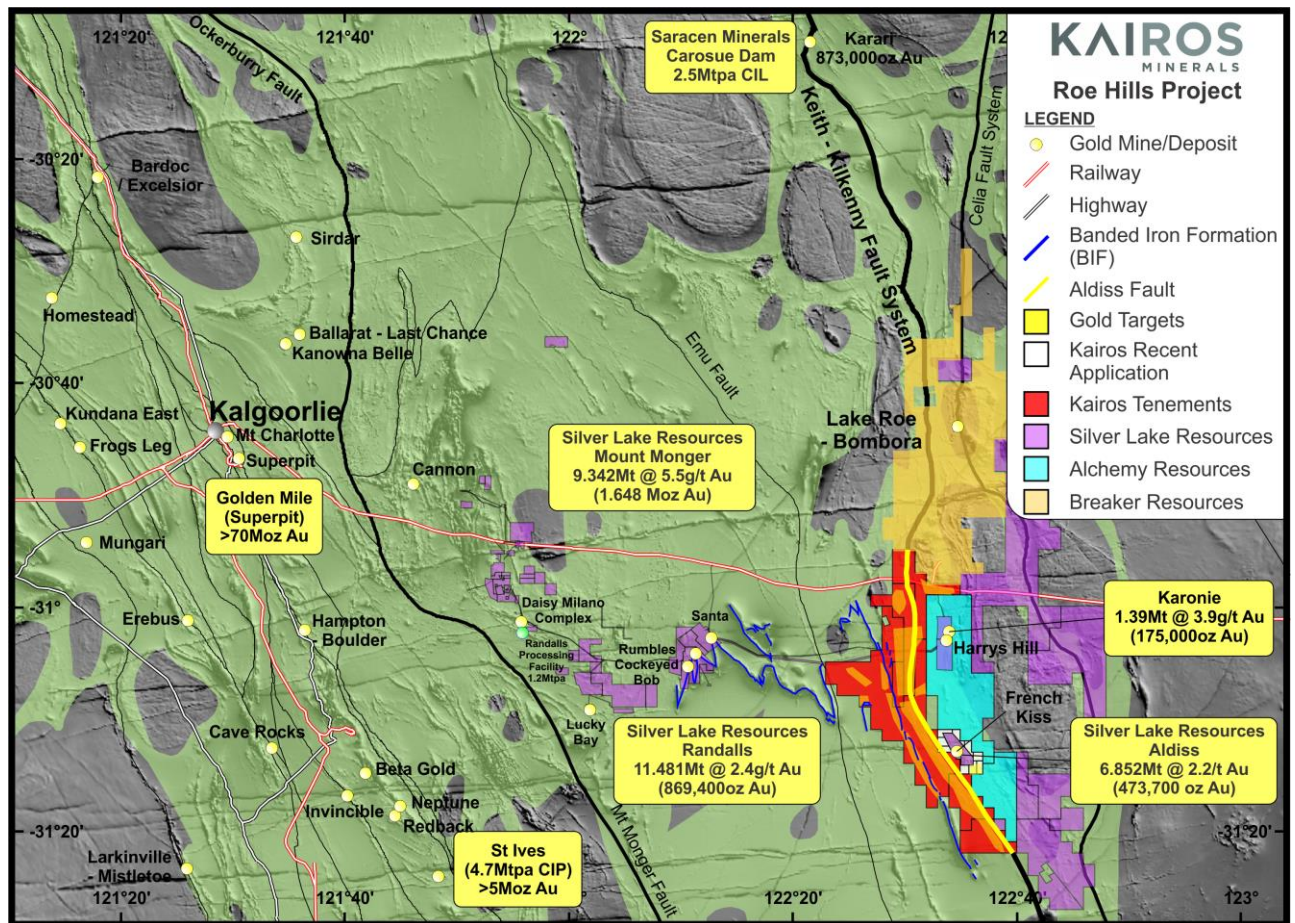


Figure 2. Project location – new tenure & gold targets

- A reinterpretation of the regional geology has highlighted the Western BIF (banded iron formation) ultramafic package at Roe Hills as being a fault dislocated extension of the BIF sequences which host all of the key deposits on Silver Lake Resources' (ASX: SLR) Randall's Project tenements, including Randalls, Cock-eyed Bob, Santa and Maxwells (see Figure 4). This sequence remains under-explored and significantly enhances the prospectivity within Kairos' tenements;
- The Company's geological team has now confirmed the presence of gold-bearing structures and favourable mafic host lithologies within the Ginger Kiss and Terra prospect trends, both of which have strong geological similarities to Silver Lake's Aldiss Project (see Figures 3,4,5,6).
- A review of the French Kiss Deposit (Integra open file Wamex Reports) has highlighted the possibility of gold mineralisation occurring within a conjugate shear set. A shallow east-dipping and south-plunging "main" lode and a previously unrecognized higher grade, steeply west dipping, "secondary" lode. A similar structural setting is interpreted at Ginger Kiss and Terra and both trends will be targeted for drill testing as part of the forthcoming program (see Figures 3,4,5,6).

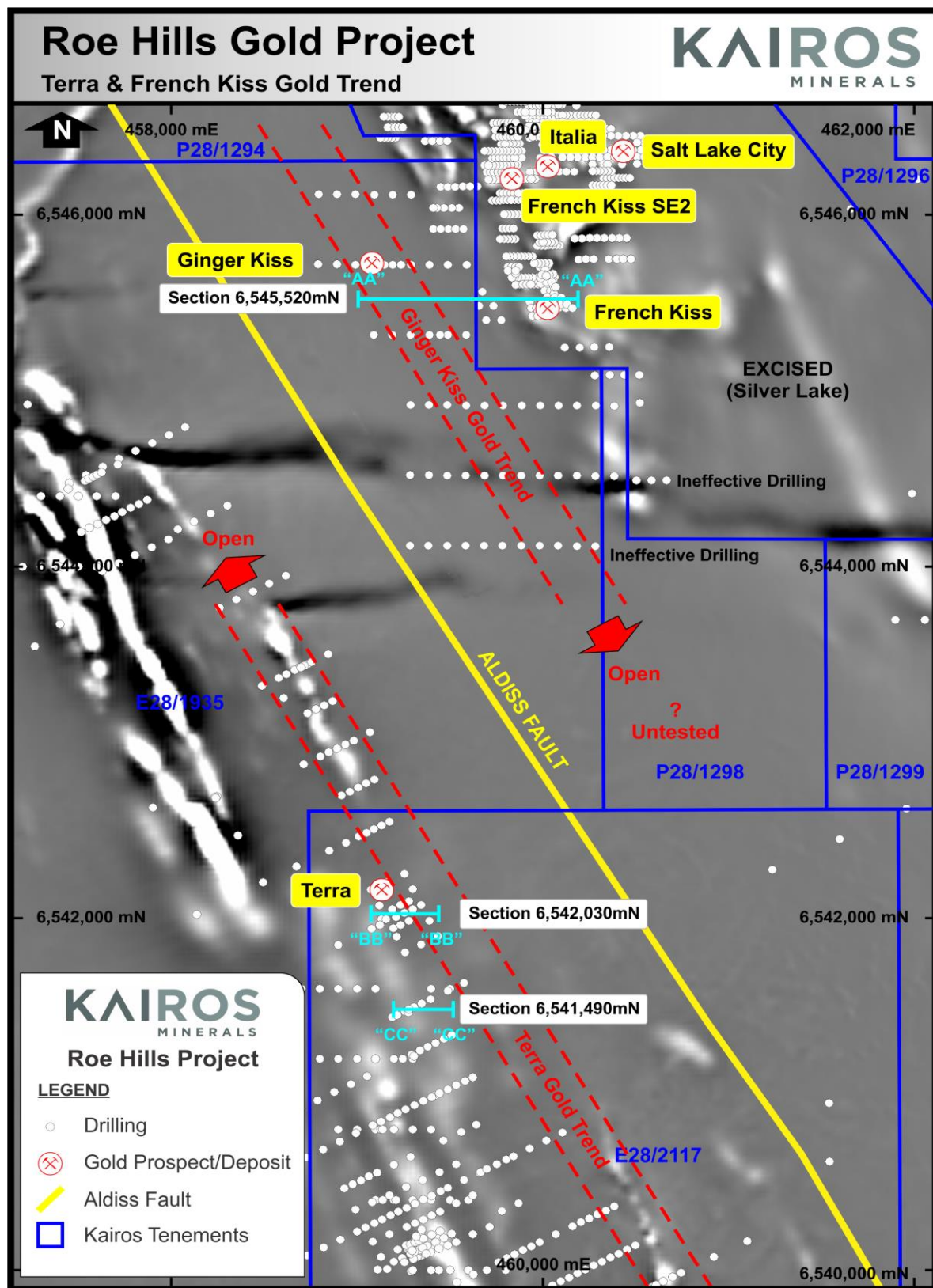


Figure 3. Ginger Kiss & Terra Gold trends over regional magnetics



- Kairos' Ginger Kiss and Terra trends occur within extensive "demagnetized zones" adjacent to Silver Lake's French Kiss deposit and coincident with the interpreted position of the "Aldiss" Fault. This suggests the presence of a major "plumbing system", graben-style block and/or thrust faulting, intense alteration, magnetite destruction and deeper weathering associated with fluid movement along the "Aldiss Fault" and a network of second order structures related to it (see Figure 3);
- In light of these developments, Kairos has applied for several strategic tenements (PLA's), located to the immediate north, south and east of the French Kiss, Italia and Salt Lake City deposits, to secure potential strike and depth extensions to known mineralisation within this highly prospective area (see Figure 2).

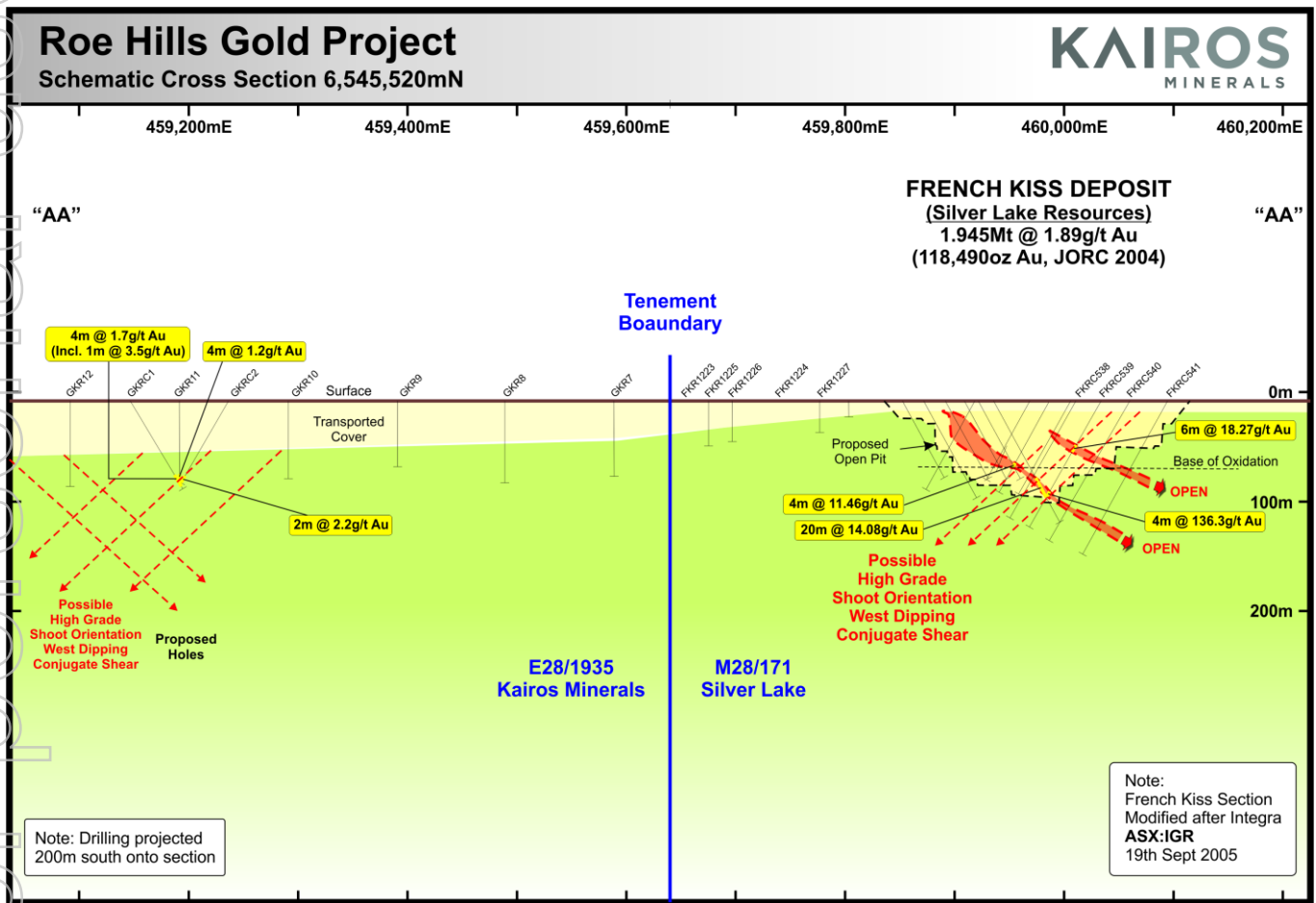


Figure 4. French Kiss – Ginger Kiss Schematic Cross Section

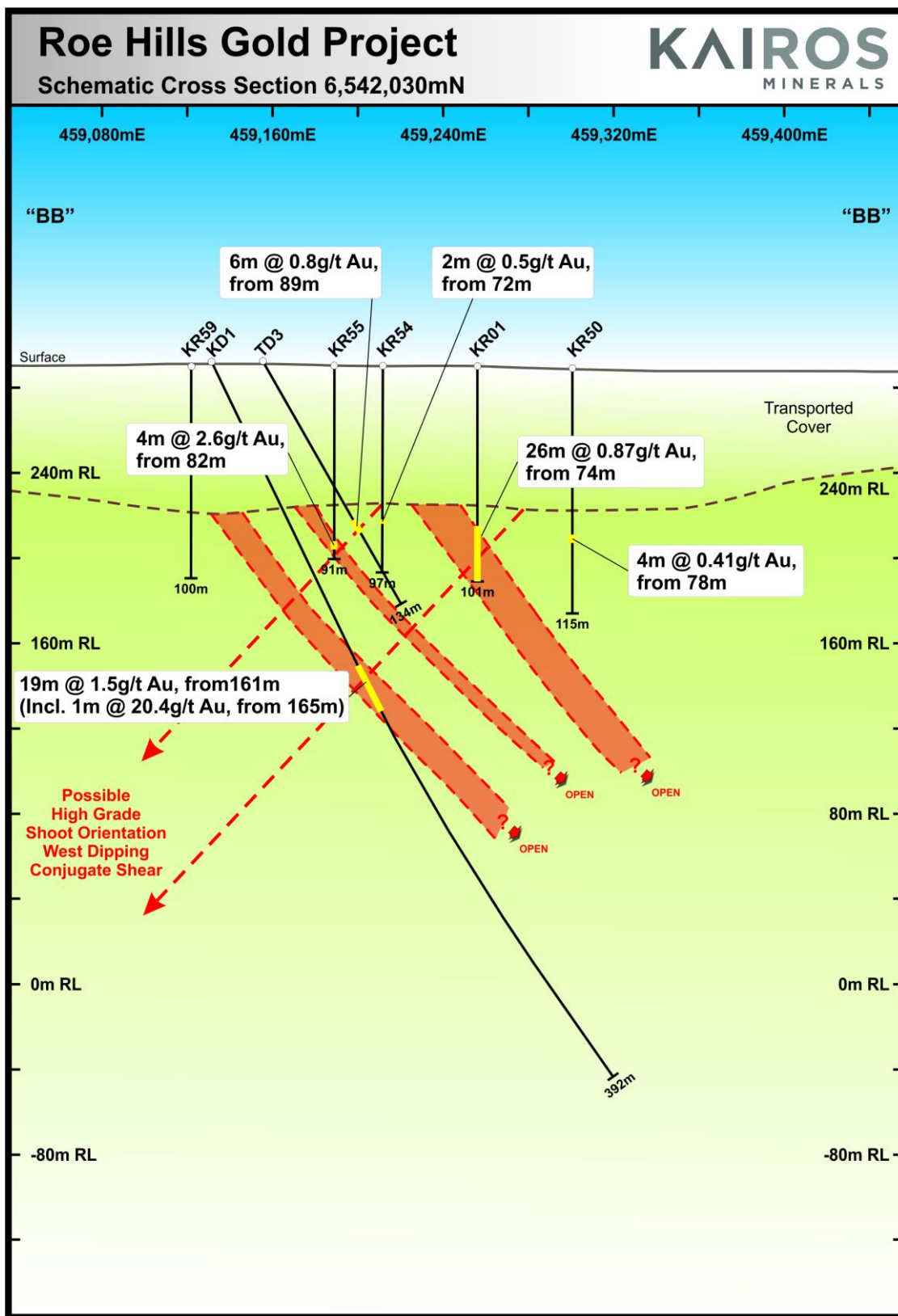


Figure 5. Schematic cross section 6542030 Terra Prospect



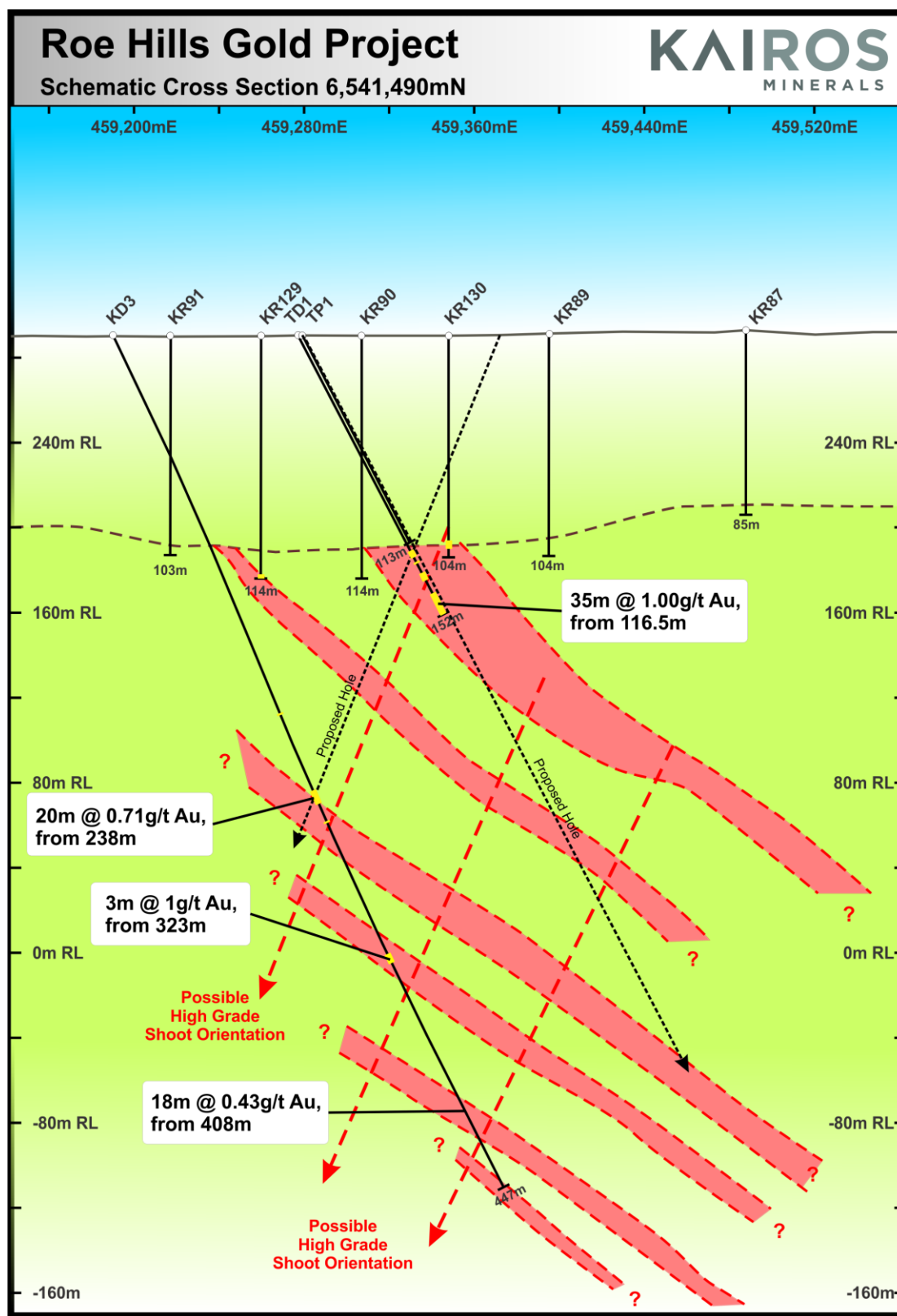


Figure 6. Schematic cross section 6541490 Terra Prospect

## **Next Steps**

Kairos has engaged Haines Surveys to undertake detailed gravity surveys over the Roe Hills Project area. These surveys are scheduled to commence next month, and are designed to better define potential gold-bearing structures and refine drill targets.

The Company has also engaged DDH1 Drilling to undertake a major new drilling program at Roe Hills to test these newly identified gold targets. Drilling is scheduled to commence in October 2016 following the receipt of statutory approvals.

## **Management Comment**

Kairos's Managing Director Joshua Wellisch said the ongoing review of the gold potential at Roe Hills was delivering highly encouraging results, opening up a second significant front for the Company's emerging gold strategy.

"While our main focus remains on the Mt York Lithium-Gold Project, the Roe Hills Project is a very attractive and complementary exploration opportunity in gold, located in the heart of the one of the most active gold exploration districts in Australia.

"The prospectivity of this region has recently been highlighted by the success of Breaker Resources at their Lake Roe Project, just 10km from our tenement package, where they appear to have defined a significant new virgin gold discovery."

"Our tenements are also located very close to several of Silver Lake Resources' key deposits, and our recent work has revealed that many of the key structures which host those deposits extend onto our ground. This has resulted in the identification of several promising exploration targets, which we plan to further evaluate with gravity surveys next month before commencing our next drilling program in October.

"With resource development and exploration activity also gearing up at Mt York, the next few months will be a very active and exciting time for Kairos on a number of fronts."

**ENDS**

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**COMPETENT PERSON STATEMENT:**

**Competent Person:** *The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled and reviewed by Mr N Hutchison, who is a Non-Exec Director for Mining Projects Group and who is a Member of The Australian Institute of Geoscientists. Mr Hutchison has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' (the JORC Code 2012). Mr Hutchison has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears. The Australian Securities Exchange has not reviewed and does not accept responsibility for the accuracy or adequacy of this release.*