

21<sup>st</sup> June 2016

## ASX Announcement

### DRILLING UPDATE AT DIABAROU

#### Summary

- Drilling continues at the Diabarou prospect within the Dandoko Project to assess the open pit resource potential in proximity to the recently announced high grade gold intersections
- 3 diamond drill (DD) holes for 482.2 metres completed with all core logged for geology and structure, and samples dispatched for assay
- The DD holes have been highly successful in providing:
  - Structural information for planning of follow-up reverse circulation (RC) drilling, which is now underway with 5 holes completed to date
  - Geological information on alteration assemblages and gold mineralisation, which is interpreted to be associated with multiple phases of fluid flow within a well-developed fault structure. Visible gold was observed in 2 of the DD holes. The alteration assemblages are similar to those observed and documented at the nearby significant gold discoveries of Goukoto<sup>1</sup> and Fekola<sup>2</sup>, located approximately 40km northwest and 30km west of Diabarou respectively
- Aircore (AC) drilling (33 holes for 2,686 metres) intersects new zones of quartz veining within the southern extensions of the extensive Diabarou gold-in-soil anomaly.
- Assay results will be reported as they become available

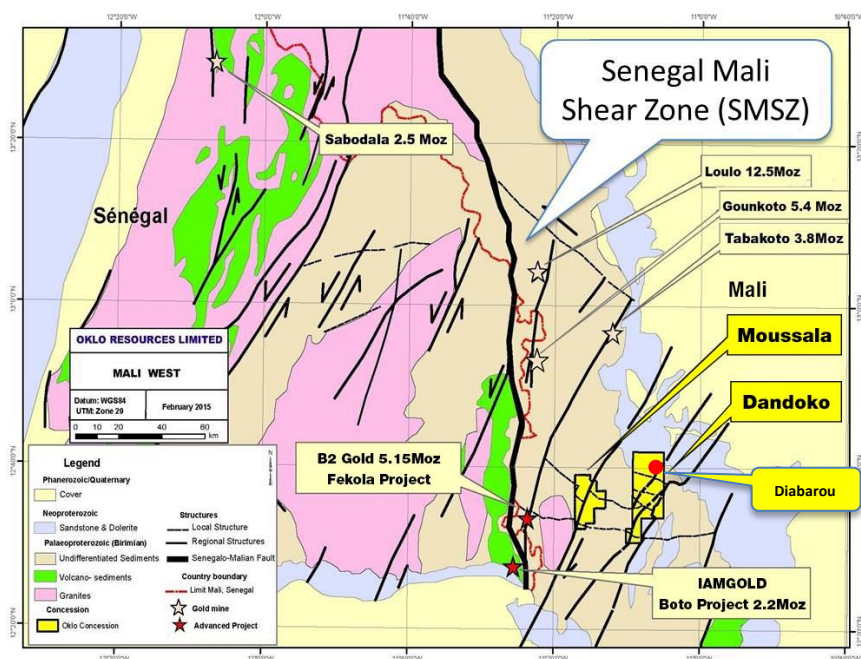
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<sup>1</sup> Harbidge, P and Holliday, J (2011): *Goukoto: A new multimillion ounce gold discovery in the Loulo District of Western Mali*. NewGenGold 2011 Case Histories of discovery.

<sup>2</sup> Boyd, A., Dahl R., Dorling S. (2013): *The Fekola Gold Deposit: A new multi-million ounce gold discovery in the Kenieba District of Western Mali*. NewGenGold 2013 Case Histories of discovery.

**Oklo Resources Limited** (“Oklo” or “the Company”; ASX: OKU) is pleased to provide the following update on drilling activities at its Dandoko gold project in western Mali.

The two stage DD core and RC drilling campaign, which commenced in May 2016, was designed to further evaluate the open pit resource potential of the Diabarou prospect (Figure 1). The AC drilling program provided first pass coverage over the southern extension of the large gold-in-soil anomaly at Diabarou.



**Figure 1: Location of Dandoko and Moussala Gold Projects in West Mali**

## 1. Diamond Drilling

Drilling of 3 diamond holes (DDDK16-001 to DDDK16-003) for 482.2 metres has been successfully completed.

The diamond core holes were designed to twin existing RC drill holes to verify the previously reported high grade gold intersections and provide valuable geological and structural information to assist in the design of the RC program.

The holes intersected a sequence comprising volcanoclastic tuff and graphitic greywacke intruded by diorite and dolerite. The mineralised zones correspond with extensive brecciation and hydrothermal alteration associated with an interpreted fault structure.

Two phases of alteration are observed. An early phase comprising sericite-silica-pyrite-hematitic carbonate and a later phase characterised by quartz-carbonate-pyrite-arsenopyrite-albite-tourmaline associated with visible gold (Figure 2 and 3). The pending assay results will confirm whether both phases of alteration are gold bearing.

The earlier phase of alteration has similar assemblages to those observed and documented at the nearby significant gold discoveries of Gounkoto<sup>1</sup> and Fekola<sup>2</sup>, which are located approximately 40km northwest and 30km west of Diabarou respectively.



Figure 2: Drill core from DDDK16-002. Later stage quartz vein with visible gold (circled) and fragments of footwall graphitic sediments

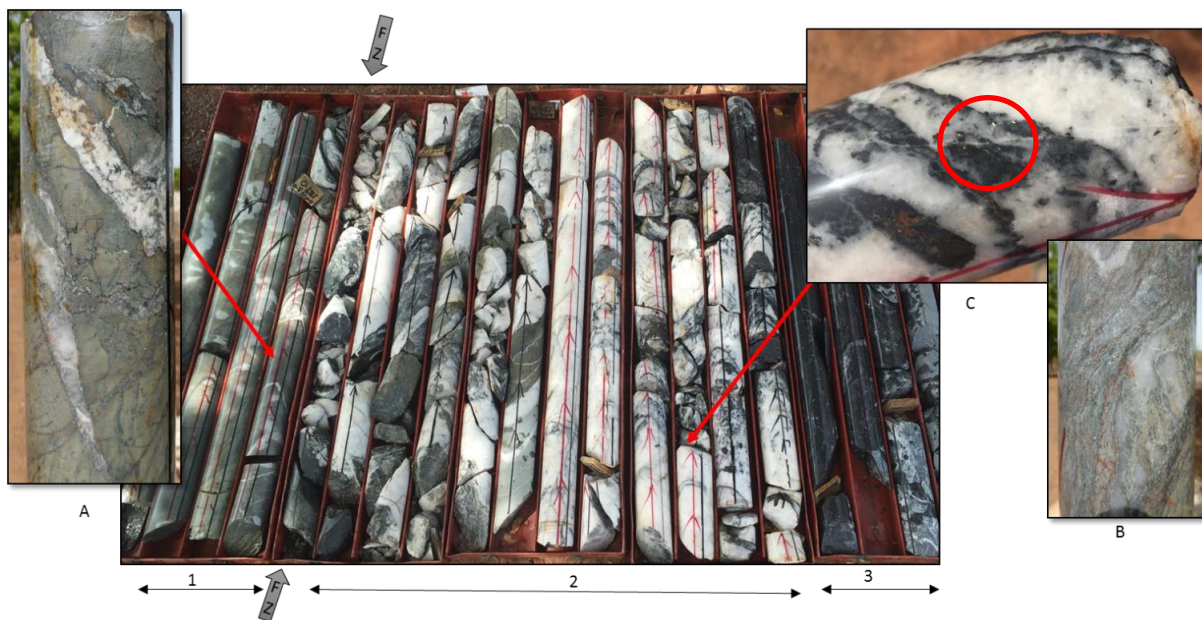


Figure 3: Drill core from DDDK16-002. Zone 1: Hangingwall, early phase sericite, silica, pyrite, hematitic carbonate alteration (inset A) with fault zone (FZ) showing breccia and fragments of footwall and hangingwall material. Zone 2: later stage quartz veining with visible gold associated with later phase pyrite, arsenopyrite, albite and tourmaline (inset B). Zone 3: altered graphitic turbidites at faulted footwall contact with quartz lode. Inset C visible gold (circled) within fragments of graphitic unit included within later stage quartz veining.



Diamond hole DDK16-002 was designed to twin RC hole RCDK15-28, which previously intersected 29m at 10.42g/t gold and finished in mineralisation at a down hole depth of 138m (Figure 4). Hole DDK16-002 was drilled to a depth of 222m and extended the alteration zone by a further 10m down hole. Significantly, an additional zone of alteration was intersected from a down hole depth of 190m with the bottom 10m comprising pervasive sericite-silica-pyrite-hematite-carbonate-arsenopyrite alteration.

Hole DDDK16-003 was drilled on the same section line but in the opposite direction to assist in the geological and structural interpretation of this zone of high grade gold mineralisation.

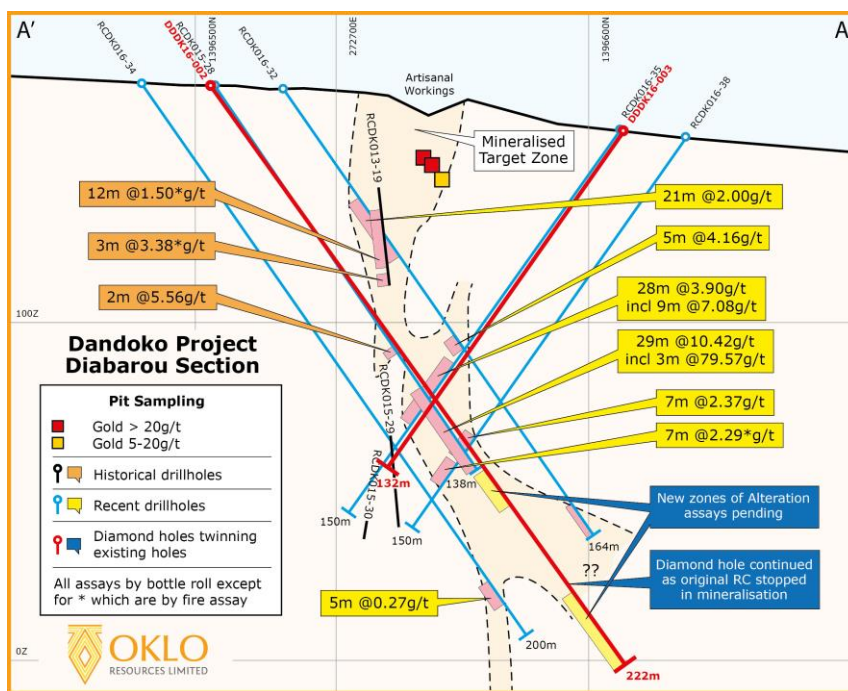


Figure 4: Drill cross section A-A' showing location of DDDK16-002 and DDDK16-003 twinning RC holes RCDK15-28 and RCDK16-35

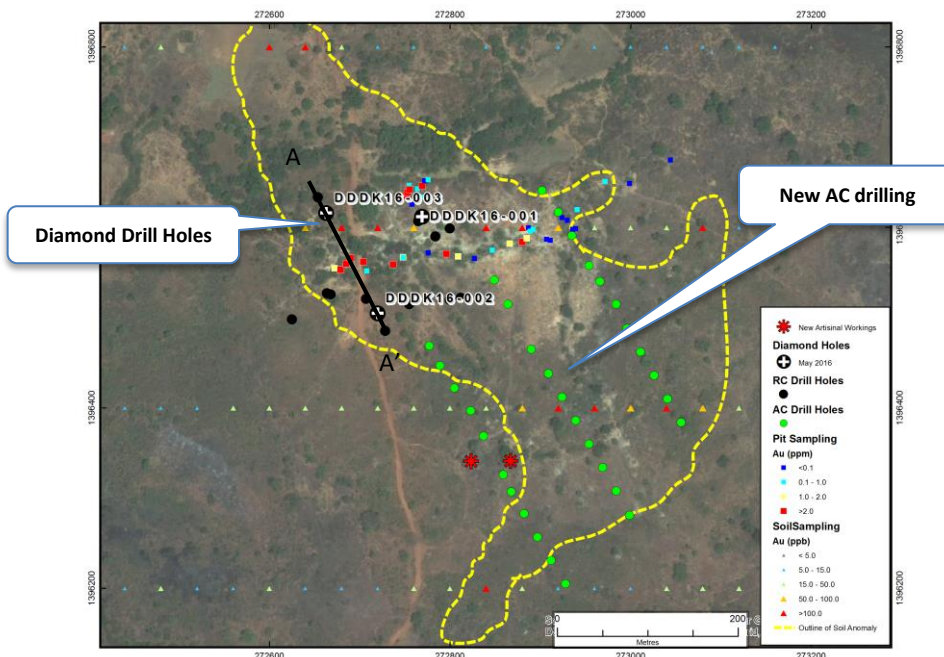


Figure 5: Location of DD, RC and AC drill holes and 2015 artisanal pit sampling and gold-in-soil results

Diamond hole DDK16-001 twinned RC hole RCDK16-37, which previously returned 6m at 53.77g/t gold along with a wide, low grade zone of 74m at 0.39g/t gold. This hole intersected a deeply weathered, feldspathic intrusive with occasional fine quartz veining.

## **2. Aircore Drilling**

A total of 33 AC holes for 2,686 metres have been completed to date over the southern eastern extension to the extensive gold-in-soil anomaly at Diabarou (Figure 5) testing for parallel zones of mineralisation. The holes have intersected weathered sedimentary and volcanic rocks with varying amounts of quartz veining and stringers.

## **3. RC Drilling**

A planned first phase program of 6 RC drill holes is now underway with 5 holes completed to date.

The current round of drilling is expected to be completed by the end of June with assay results to be reported as they become available.

– ENDS –

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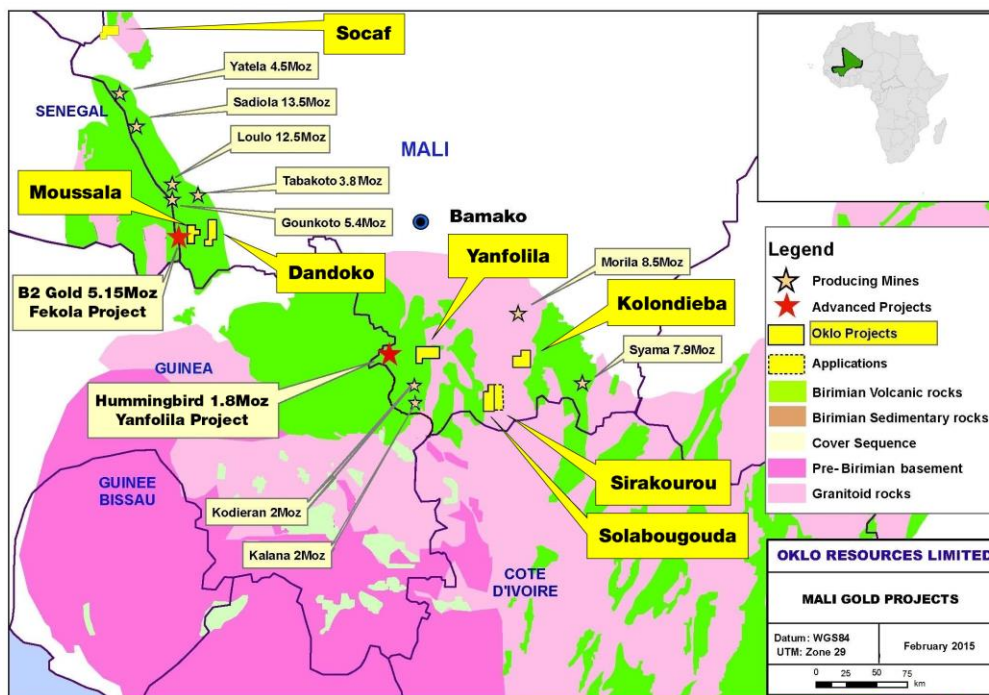
*Further details (including 2012 JORC Code reporting tables where applicable) which relate to exploration results in this announcement can be found in the following announcements lodged on the ASX:*

Drilling underway at Dandoko & further positive results from Yanfolila	19 May 2016
Exploration Update	27 April 2016
Diabarou Bottle Roll Assays Return up to 280g/t Gold	08 April 2016
Further Outstanding, High Grade Gold Intersections Diabarou	01 April 2016
Drilling Completed at Dandoko	21 March 2016
Drilling Underway at Dandoko	07 March 2016
New Assay Results Return 29 Metres at 10.42 g/t Gold	29 January 2016
Dandoko RC Drilling Results	20 January 2016

**About Oklo Resources**

Oklo Resources is an ASX listed exploration company with gold, uranium and phosphate projects located in Mali, Africa.

The Company's focus is its large landholding of eight gold projects covering 1,389km<sup>2</sup> in some of Mali's most prospective gold belts. The Company has a corporate office located in Sydney, Australia and an expert technical team based in Bamako, Mali, led by Dr Madani Diallo who has previously been involved in discoveries totalling in excess of 30Moz gold.



**Figure 6: Location of Oklo Projects in West and South Mali**

**Competent Person's Declaration**

The information in this announcement that relates to Exploration Results is based on information compiled by geologists employed by Africa Mining (a wholly owned subsidiary of Oklo Resources) and reviewed by Mr Simon Taylor, who is a member of the Australian Institute of Geoscientists. Mr Taylor is the Managing Director of Oklo Resources Limited. Mr Taylor is considered to have sufficient experience deemed relevant to the style of mineralisation and type of deposit under consideration, and to the activity that 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 2012 JORC Code). Mr Taylor consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

**Table 1: DIAMOND HOLES**

HoleID	East (mE)	North (mN)	Elevation	Azimuth (deg)	Dip (deg)	Length (m)
DDDK16-001	272769	1396612	166	335	-55	128
DDDK16-002	272720	1396505	171	334	-55	222
DDDK16-003	272663	1396616	163	154	-55	132