

8th March 2023

**ASX Market Announcements** 

# SURFACE EXPLORATION COMPLETED AT IP TARGETS - CANEGRASS PROSPECT F YILGARN (GINDALBIE) GOLD PROJECT – WESTERN AUSTRALIA

- The geochemical survey comprised 25 m x 25 m grid soil sampling across three target areas, and 50 m x 50 m across a fourth target area, in addition to regolith mapping.
- 173 x 300 g soil samples were collected at 20 cm depth and submitted to SGS in Kalgoorlie for Mobile Metal Ion (MMI) testing. In addition, 27 rock samples were collected from across the 4 target areas.
- The duration of the survey was 6 days.
- Drill testing of Prospect F is planned for Q3 2023 guided by the results of the survey.

Kaili Resources Limited ("KLR") is pleased to announce the completion of surficial exploration at Prospect F within Canegrass EL 31/1113 (**Figures 1 and 2**) over 4 target areas defined from the 2022 Induced Polarisation survey (*ASX Announcement 9<sup>th</sup> December 2022 IP Survey Completed at Canegrass*)

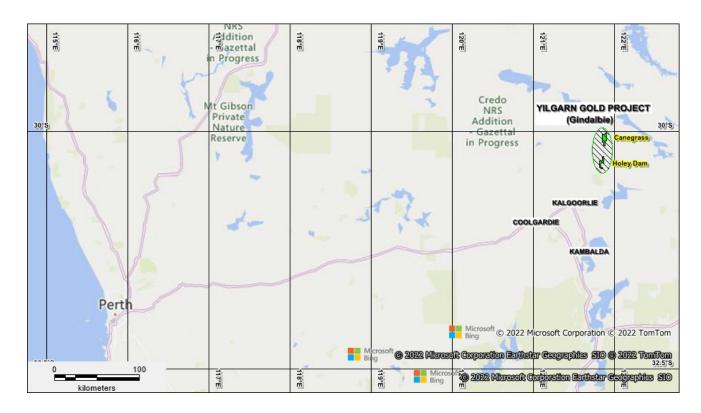


Figure 1: Yilgarn Tenements location of Kaili Resources Group



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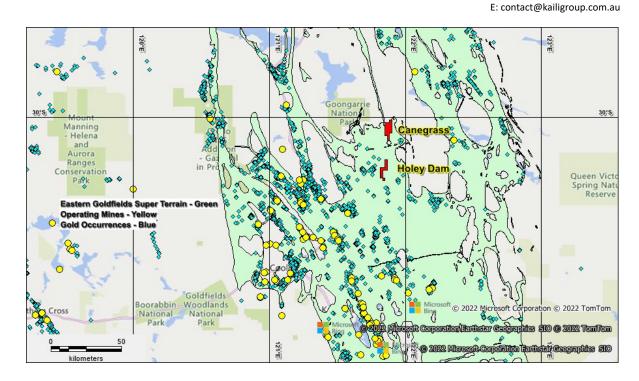


Figure 2: Eastern Goldfields Super Terrain and Operating Mines

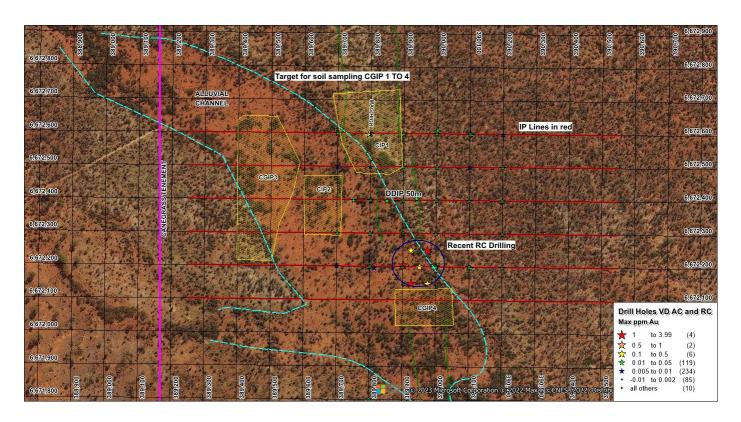


Figure 3: Canegrass Prospect F showing the 4 Target Areas CGIP 1 to 4



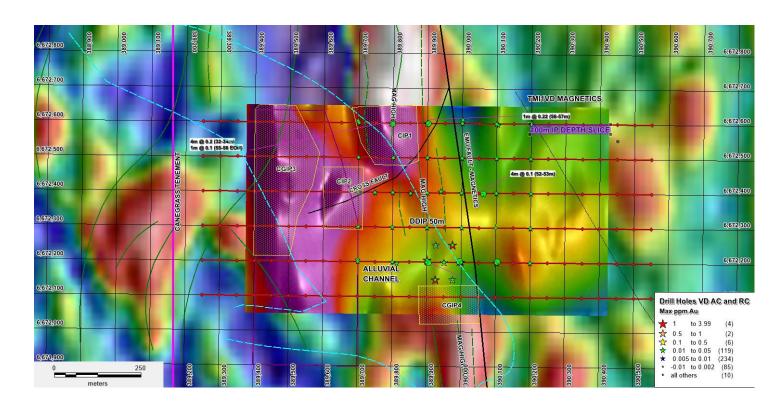


Figure 4: Canegrass Prospect F showing the 4 IP Conductive Target Areas CGIP 1 to 4 with the IP Survey overlayed on the TMI Aeromagnetics – Depth Slice -100m

Following a review of the results of the Canegrass IP Survey four areas have been chosen for field geochemical evaluation prior to RC drill testing proposed for Q3 2023. **Figure 3** shows the 4 target areas CGIP 1 to 4. A paleochannel runs NW to SE through Target 4 as such KLR has decided to use a MMI sampling approach with the soil samples collected on a 25 m x 25 m grid at 20 cm depth below the root layer and submitted to SGS in Kalgoorlie for gold and multi element analyses.

"The MMI<sup>TM</sup> technology is an innovative geochemical process that uses a very different approach to the analysis of metals in soils, using extremely weak solutions of organic and inorganic compounds rather than the conventional aggressive acid digest solutions commonly used in geochemistry".

The IP Survey (**Figure 4**) successfully delineated four target areas (CGIP 1 to 4) located within the western half of the survey area (mafic domain). The warm colours indicate areas of enhanced conductivity that are potential sulphide targets.

- CGIP 1 This is the highest priority target being a conductivity high and linear magnetic high adjacent to the regionally significant Emu Fault.
- CGIP 2 Discrete conductive target associated with a NE-SW splay off the Emu Fault.
- CGIP 3 Broad N-S conductive flat target, possibly lithological but worth testing to see if drilling is warranted.



CGIP 4 – Weak IP conductive target to the south of the RC drilling testing where significant gold in drilling results have been obtained.

KLR's Chief Geologist Mark Derriman said "The IP survey completed in 2022 has added significant exploration targets within Canegrass E31/1113 particularly chargeable target CGIP 1 (**Figure 4**) that is associated with a significant N-S magnetic high and is open for several hundred meters to the north beyond the northern limit of the IP survey. In addition, a significant chargeable anomaly to the east is associated with a magnetically interpreted splay off the Emu Fault as well as a weak chargeable target to the south of the RC drilling that achieved 1 m @ 3.96 g/t Au and several intervals > 1 g/t Au<sup>2</sup> as shown in Figure 4. The soil and rock sampling will add geochemical understanding to the targets ahead of drill testing. We are looking forward to further drill testing in Q3 this year".

## **Background**

Following the results of the RC drilling program in March 2022 at Canegrass Prospect F, KLR completed the IP to test an area of low magnetics that corresponds to the results of elevated gold to 1 m @ 3.96 g/t Au<sup>2</sup> and likely also to be associated with silica and chlorite altered basalt.

The IP survey was for a total of 7.8 line kms using six (6) E-W lines to explore for deeper conductivity targets for future drilling beneath the March 2022 RC drilling.

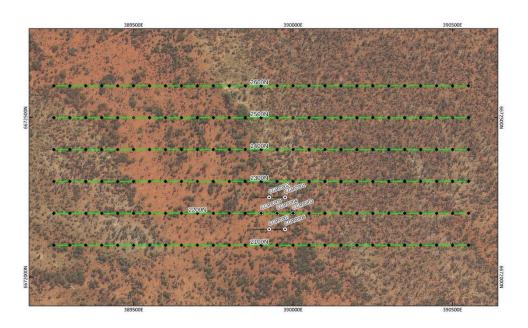


Figure 5: Canegrass Prospect F DDIP 2022 Survey Location Map (GDA94/MGA51). Black dots are DDIP electrode locations. Existing drill collars and traces shown for reference.



## **Survey Specifications**

The IP survey was conducted by Moombarriga Geoscience in November 2022. Equipment used included a Search-Ex WB30 transmitter and a SmarTem 24 receiver system. Receiving electrodes were standard non-polarising porous pots and transmitter electrodes were buried steel plates or stakes. The survey consisted of six EW lines, each 1.3 km long. Line spacing was 100 m.

The survey utilised a roll along dipole-dipole (DDIP) configuration using 50 m transmitter dipoles and 16 m  $\times$  50 m receiver dipoles. Station moves were 50 m. See **Table 1 and Figure 5** for the survey layout.

Line	Start	End	Length_m
2100N	89250E	90550E	1300
2200N	89250E	90550E	1300
2300N	89250E	90550E	1300
2400N	89250E	90550E	1300
2500N	89250E	90550E	1300
2600N	89250E	90550E	1300

**Table 1**. Canegrass Prospect F DDIP 2022 Survey Specifications. Coordinates are truncated GDA94/MGA51 coordinates.

#### **Presentation of Results**

**Figure 6** shows the 2D model sections from all lines as stacked sections and **Figure 7** shows selected depth slices (draped below topography) through the 3D inversion models.

Note the chargeable anomaly on lined 2600 to 2400 centred on 389800E. This chargeable anomaly is spatially associated with a linear N-S magnetic high.

- There is a chargeable anomaly on most lines between 389400 to 389600E and has been interpreted
  by the consultant geophysicist as a "lithological target". This anomaly is in areas where there has
  been no drilling, so several field traverses will be completed to see if there are any geological or
  regolith surface expressions for this anomaly. This target may be drill tested to confirm the nature
  of the anomaly.
- There is a weak chargeability feature 100 m south of the RC drilling to be further investigated.



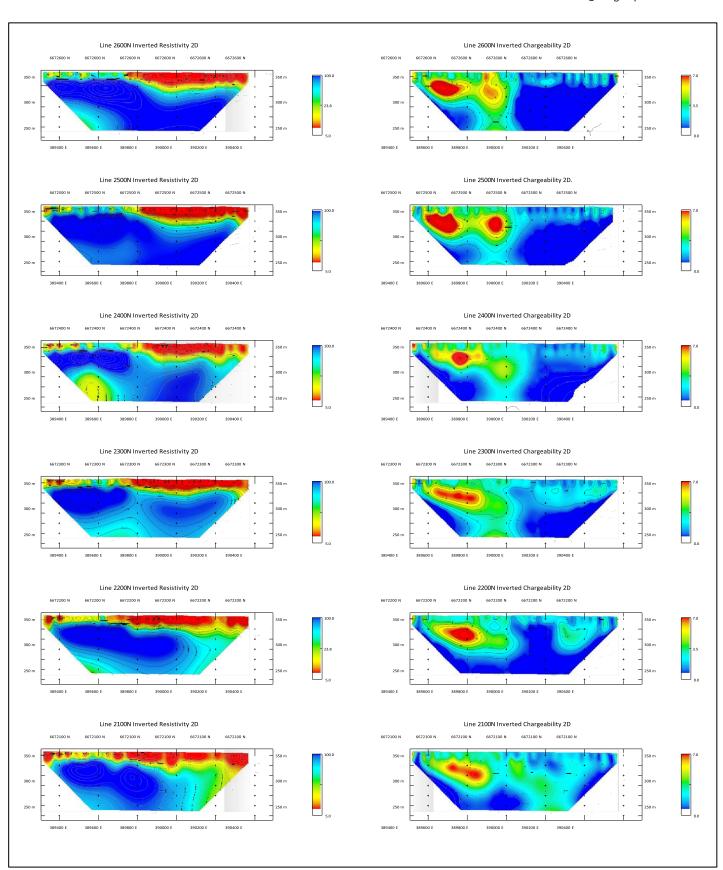


Figure 6. Canegrass DDIP Survey – 2D Model Sections for all lines.



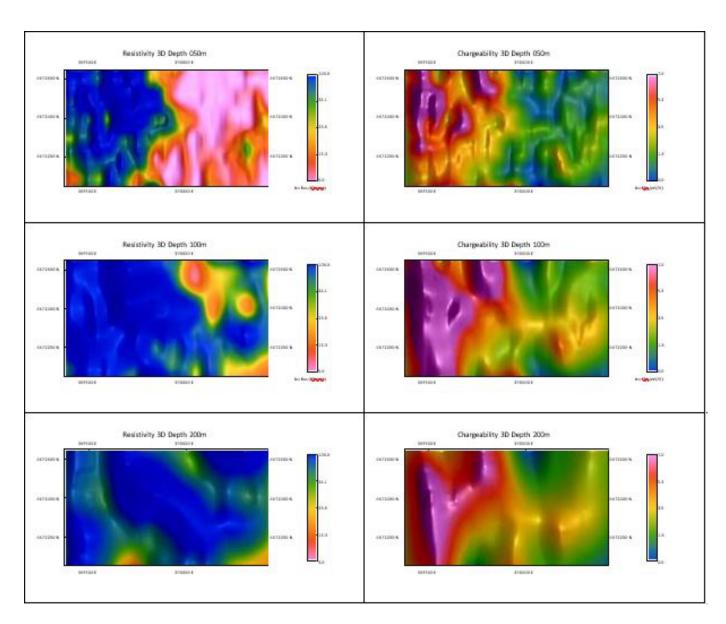


Figure 7. Canegrass DDIP Survey – 3D Model Depth Slices (draped below topography

### **Discussion of Results**

There is generally good agreement between the 2D and 3D inversion models for the Canegrass DDIP data. This adds to the confidence that can be placed in the models.

The resistivity data shows very conductive cover across the eastern half of the survey area. This cover has resistivity values less than 10  $\Omega$ m and is around 50 m to 70 m thick. The western half also has cover of around 50 m thickness although it is not as conductive with resistivity values of 20 to 50  $\Omega$ m. Below the cover is resistive basement (> 100  $\Omega$ m).

The chargeability data maps an extensive NS trending chargeability high (10-15 mV/V) along the western side of the survey area (centred on 389500E). The zone appears to be 200 m to 300 m wide,



basically, flat lying with a depth extent of around 50 m, and it sits beneath the conductive cover layer. This is expected to be a stratigraphic or lithological response.

There is a secondary NS trending chargeability high in the centre of the survey area across the three northern lines. It is located around 389800E at depths between 50 m and 150 m, again below the conductive cover layer. The zone is strongest on line 2500N and 2600N (7 to 10 mV/V). The 2D inversion model for 2600N suggests a sub-vertical shape with potential for depth extent of 200 m to 250 m. This zone is directly along strike to the north from the existing drilling at Canegrass and is directly adjacent to a linear magnetic high. KLR has in this field work carried out out field traverses across the area of the IP survey to map the geology and regolith and will use the information gained in conjunction with the results of the RC survey to plan the next round of drill testing proposed for Q3 2023 within the Canegrass tenement.

The Canegrass area was targeted originally by KLR as comprising extensive mafic volcanics and intrusives with an associated regionally significant north-south structure (Emu Fault) which is associated with gold mineralisation to the north of E31/1113 at the historic Gindalbie Mining Centre. The location of the March 2022 RC drilling (**Figure 5**) program was a follow up to the 2020 Aircore Drilling Program which highlighted Area F as an area with elevated gold and that intersected 1 m @ 3.96 g/t Au² on the most southern line in hole CGAC025 that had the same collar as CGRC005 with the holes drilled at 90 degrees and 270 degrees respectively.

The March 2022 RC program comprising 7 holes aimed to test the gold anomalous southern line in addition to drilling 50 m to the north (6672250mN) and south (6672150N) **Figures 6 and 7.** 

## **Canegrass Previous Drilling Results**

The 7 RC holes for 612 m drilling in March 2022 returned the following results<sup>1</sup>:

Elevated gold intersections >0.25 g/t Au were obtained in most drill holes with the southern-most line having 4 m composite intersections of 0.6 g/t Au and 0.5 g/t Au in addition to other intersection to 1 m @ 1.4 g/t Au. Two 4 m composites in holes CGRC006 and GCRC007 returned significant results over the interval and have been re-sampled as  $4 \times 1$  m intervals (CGRC007 – 36-40 m and 64-72 m, CGRC006 – 68-76 m and 84-88 m) for a total of  $20 \times 1$  m splits of the original 4 m composite samples.

Significant gold intervals are shown below:

# CGRC001

3 m @ 0.6 g/t 51-53m including 1 m @ 1.0 g/t 51-52 m.

# CGRC003

3 m @ 0.38 g/t 69-71 m

# CGRC004

1 m @ 0.32 g/t 62-63 m

## CGRC006

4 m @ 0.52 g/t (4 m composite to be split into 1 m samples)

## CGRC007

4 m @ 0.6 g/t (4 m composite to be split into 1m samples) 1 m @ 0.54 g/t 73-74 m 1 m @ 1.4 g/t 77-78 m



(See ASX Announcements of <sup>1</sup>4 April 2022 and <sup>2</sup>3 December 2020. In accordance with Listing Rule 5.23 the Company reports that it is not aware of any new information or data that materially affects the information included in those announcements)

The RC sections were interpreted as shown in **Figures 8** and **9**. The surface layer comprises ferricrete and silcrete that grades downwards into upper saprolite (usually mottled), lower saprolite and saprock as fresh bedrock is approached. The ferricrete is magnetic comprising maghemite. All holes intersected basalt or variations of a mafic extrusive rock and in some cases the basalt was altered (silica and chlorite) with local quartz veins and trace to 5% disseminate pyrite.

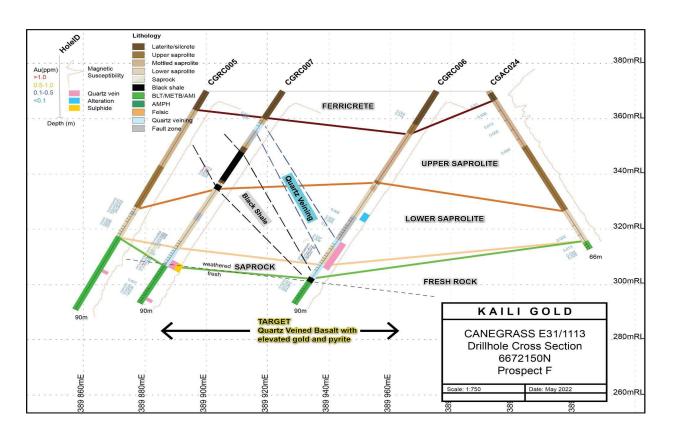


Figure 8: RC Interpreted Drill Cross Section 6672150N.



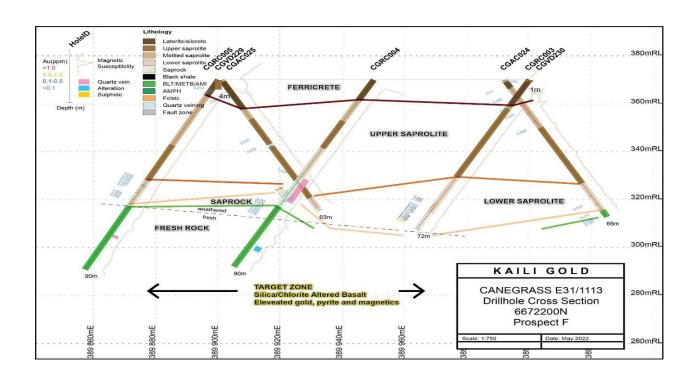


Figure 9: RC Interpreted Drill Cross Section 6672200N.

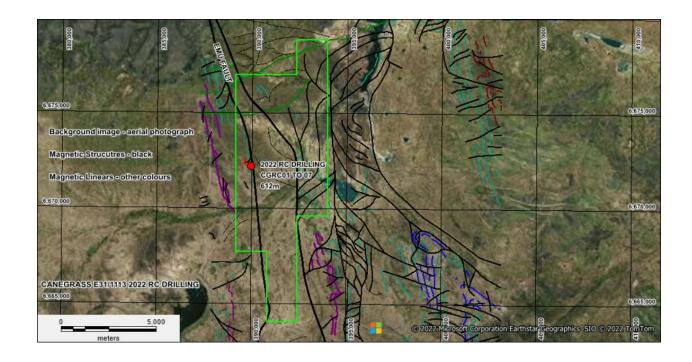


Figure 10: Aerial Imagery with tenure, aeromagnetic structures, and RC drilling



The association of a significant regional fault, a competency contrast between the mafic and felsic volcanics and elevated gold/pyrite in the RC drilling indicates further drilling may be warranted once all the data including those from the current IP survey has been reviewed along with all historical data (**Figure 10**).

#### **Previous Related ASX Announcements:**

3<sup>rd</sup> December 2020 – Drilling Results at Gindalbie Gold Project Yilgarn Craton WA

17th February 2022 – Drilling Completed at Gindalbie WA

4th April 2022 – RC Drilling Results at Canegrass, Gindalbie Project

15th November 2022 – IP Survey Commences at Canegrass Yilgarn Gold Project WA

9th December 2022 – IP Survey Completed at Canegrass WA

1<sup>st</sup> March 2023 – Surface Exploration Commenced at Canegrass IP Targets

#### **Competent Person Statement**

The information in the report above that relates to Exploration Results, Exploration Targets and Mineral Resources is based on information compiled by Mr Mark Derriman, who is the Company's Consultant Geologist and a member of The Australian Institute of Geoscientists (1566). Mr Mark Derriman has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activities 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, Exploration Targets, Mineral Resources and Ore Reserves. Mr Mark Derriman consents to the inclusion in this report of matters based on his information in the form and context in which it appears.

# Forward-Looking Statement

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements. Although Kaili Resources Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

## Authorised by.

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