

## QUARTERLY ACTIVITIES REPORT – 31<sup>st</sup> March 2019

### EXPLORATION HIGHLIGHTS

- All granted tenements are up to date regarding statutory requirements.

#### Kookynie and Jungle Hill Gold Projects in Western Australia

- Program of Works approved for Canegrass and Holey Dam drilling, heritage survey scheduled for last week of April 2019 and drilling planned to commence in first half of May 2019

#### Halls Creek Projects Cobalt/Gold in Western Australia

- Lithostructural targeting completed with field testing planned for June/July 2019.

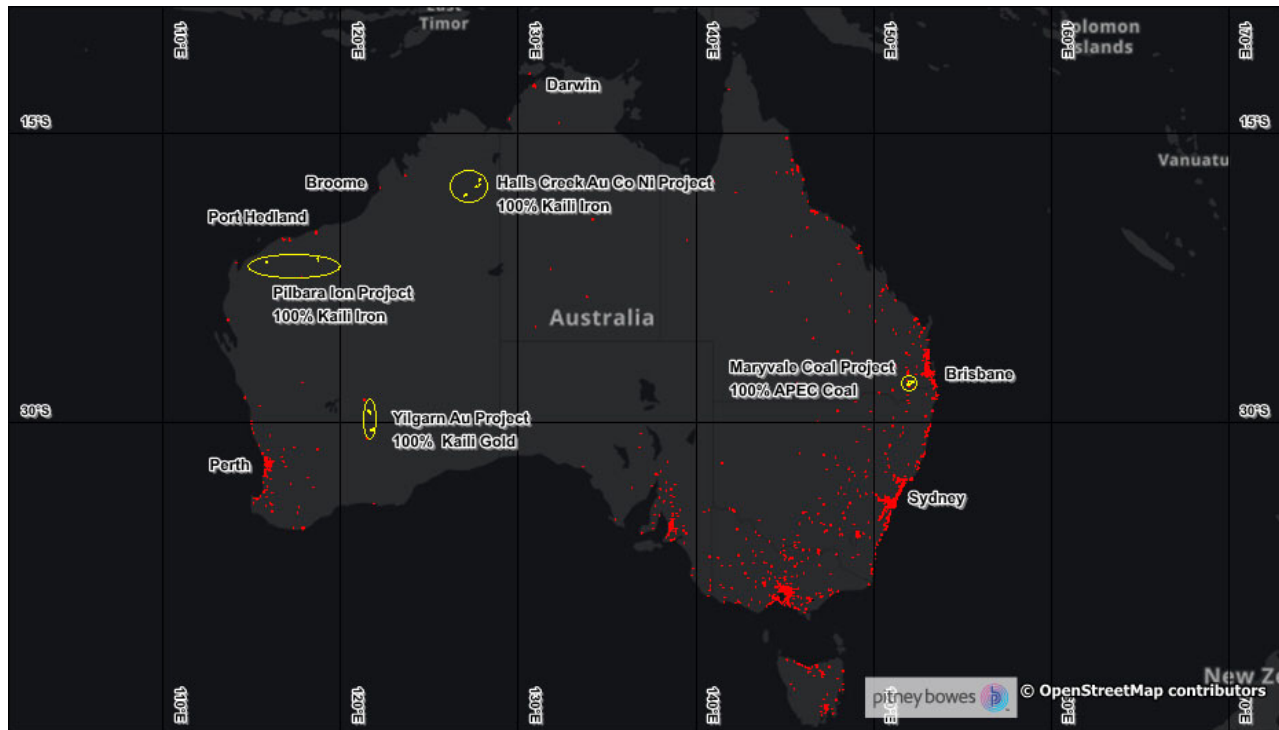


Figure 1: Kaili Resources granted project locations

PROJECT LOCATION	TENEMENT AREA IN SUB BLOCKS	TENEMENT AREA IN KM <sup>2</sup>
Queensland	27	86.4
Western Australia	296	956.84
<b>Total Area</b>	<b>323</b>	<b>1043.24</b>

Table 1: Kaili Resources granted tenement areas, all held 100%. km2 has been calculated at approximately 3.2km<sup>2</sup> per block

## WESTERN AUSTRALIA.

### **Pilbara Craton (Darnell Hill, Bustlers' Bore and Bea Bea Creek) Iron Projects**

*E08/2770-I(Darnell Hill), E46/1084-I(Bustler Bore), E45/4619-I(Bea Bea Creek) are held 100% by wholly owned subsidiary Kaili Iron Pty Ltd. All tenements are granted*



**Figure 2: Kaili Resources iron projects showing iron ore mines as brown diamond**

The Mugarinya Community are yet to provide a budget for the Company's proposed Work Program within the Bea Bea Creek tenement. As the work programs for Bea Bea Creek and Darnell Hill will be carried out in the same time period no field work for either project was completed in the March Quarter. As the wet season will impact on field-based exploration, the next phase of field work is planned for the June/September Quarter 2019.

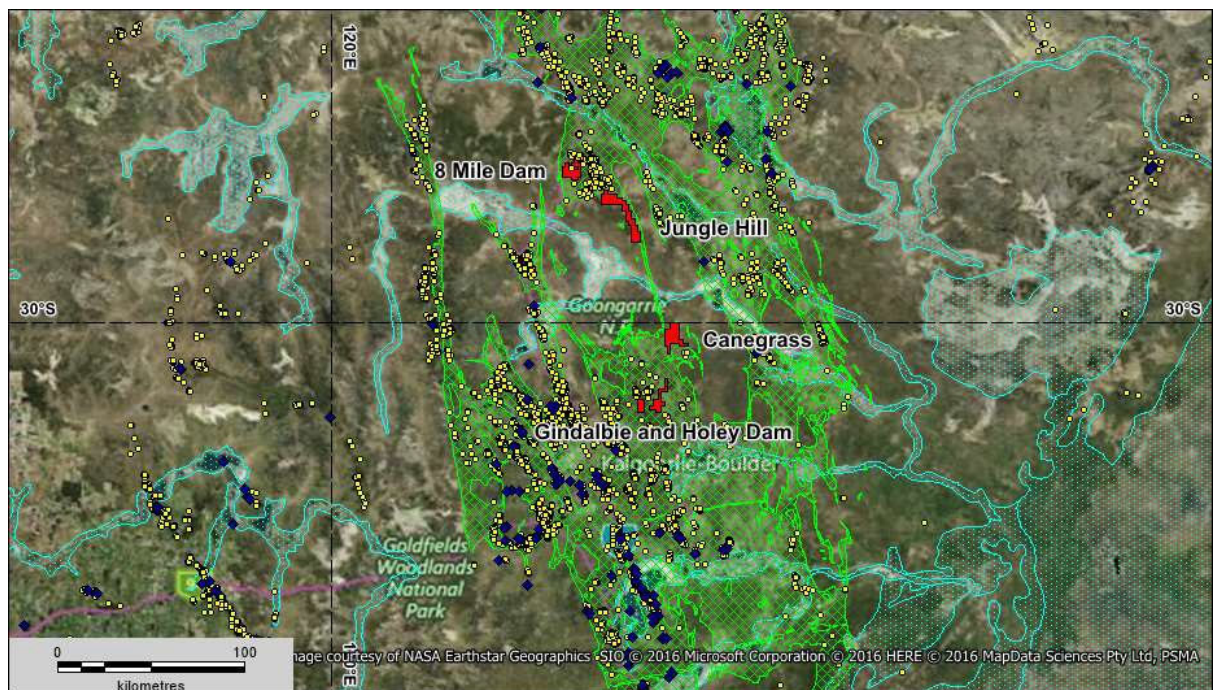


### **Yilgarn Craton (Gindalbie and Kookynie) Gold and Iron Projects**

*E40/354(8 Mile Dam), E31/1114-I(Jungle Hill), E31/1113(Canegrass), E27/550(Holey Dam) and E27/549(Gindalbie dam) are held 100% by wholly owned subsidiary Kaili Gold Pty Ltd. All tenements are granted (Figure 3).*



**Figure 3: Kaili Resources WA Gold Projects Locations**



**Figure 4: Satellite Image with Eastern Goldfields Superterrane (green hatching) and Kaili Gold tenements in red. Blue diamonds are operating mines of third parties and yellow dots are gold occurrences**

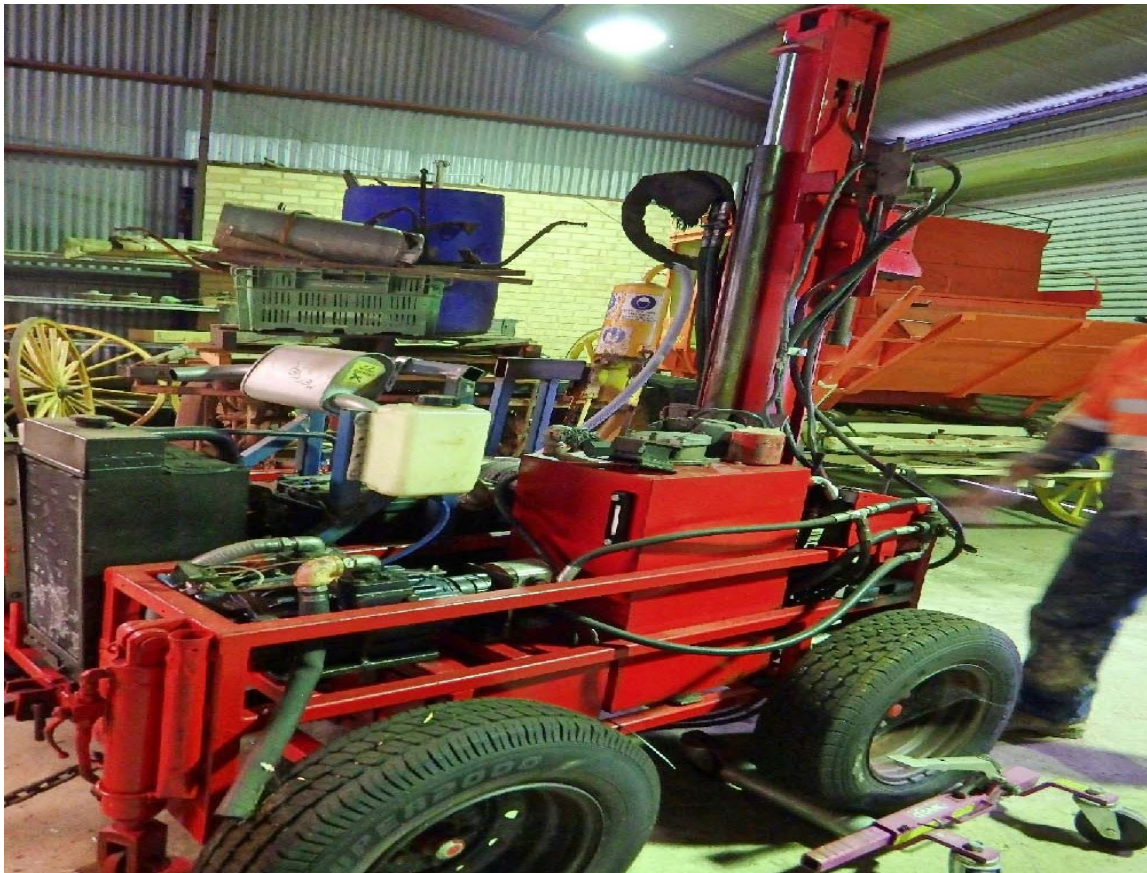


### ***Canegrass and Holey Dam Vacuum Drilling***

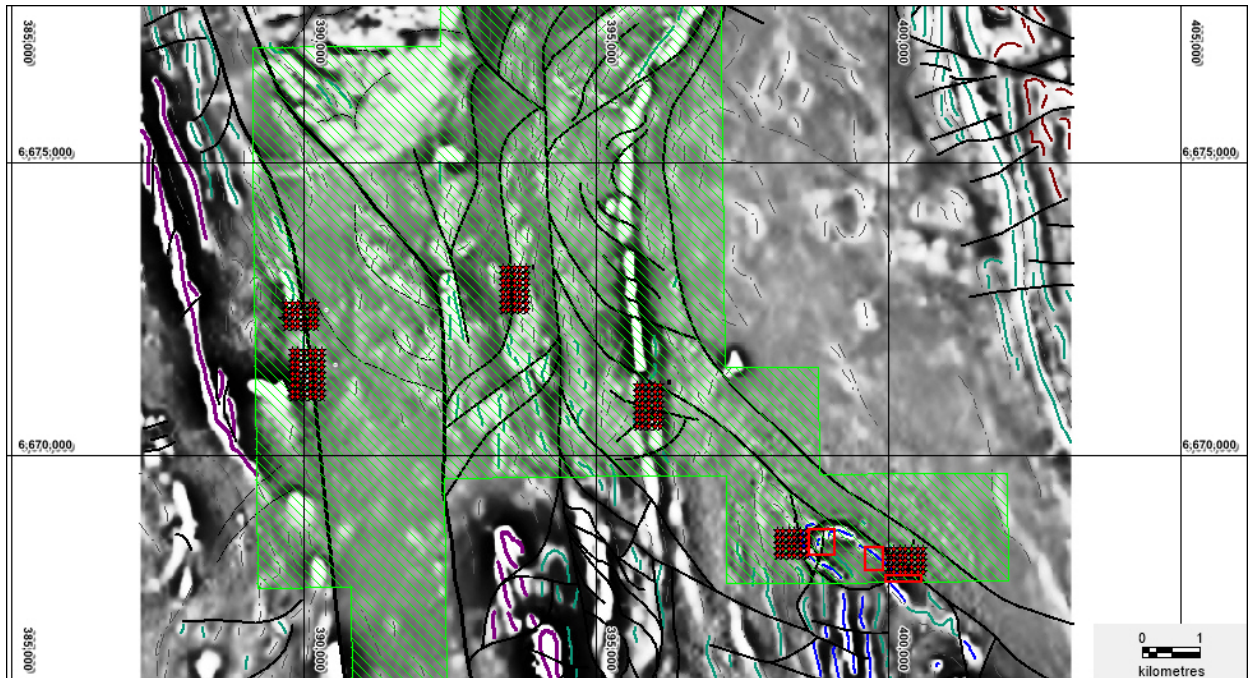
Planning of a 400-hole drill program to test several gold structural/geochemical targets in the Canegrass and Holey Dam tenements has been completed. Shallow (5 to 15m) grid based Vacuum drilling is now planned along E-W lines with vertical hole depths anticipated in the range of 5-15m (**Figures 5 and 6**). The Pathfinder/Strataprobe Vacuum drilling rig represents a relatively light weight drilling solution, particularly for reliable geochemical sampling. The rig (see picture below) can be towed by a Polaris Ranger 800XP ATV on flat terrain although the better method is to use a small 4WD loader that bends rather than removes the vegetation on a drill traverse. The extra wide tyres on the vacuum rig also provide the advantage of a “soft” footprint.

A heritage survey is planned for the last week of April with drilling to commence in the first half of May 2019 with the Program of Works(POW) having been approved by the WA Department of Mines Industry Regulation and Safety (DMIRS).

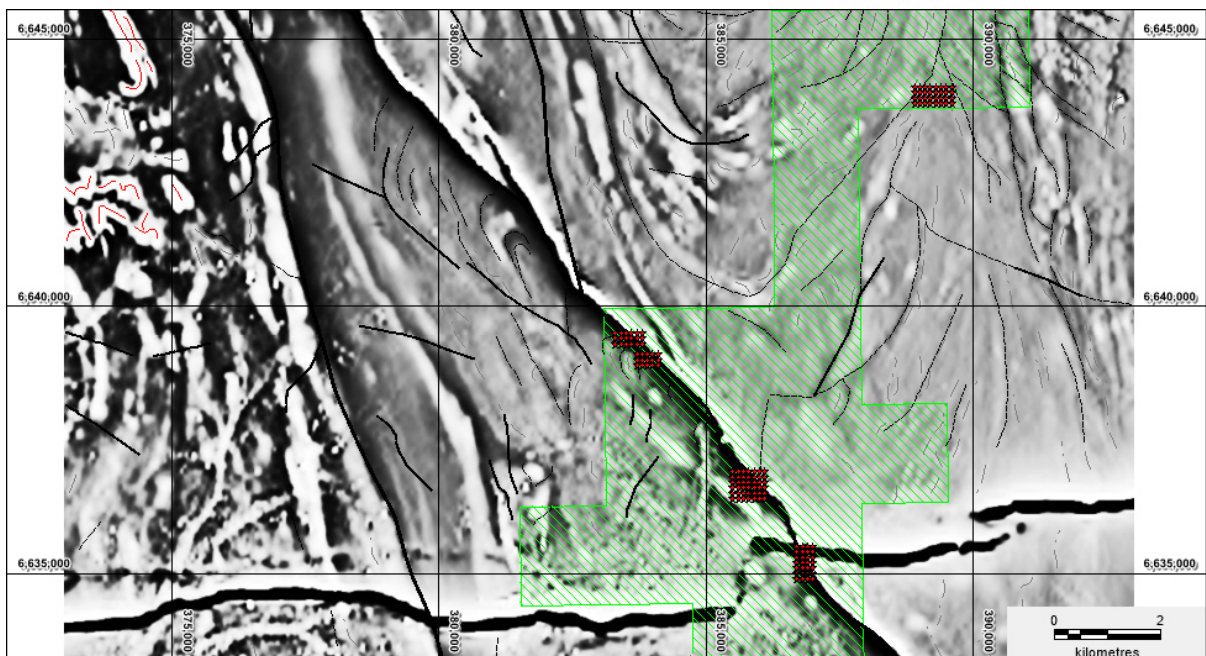
Bottom of hole (BOH) samples will be collected in pre numbered calico bags for despatch to ALS in Kalgoorlie for Au analyses in addition to BOH samples being collected in plastic chip trays for later multi element pXRF analyses by the Company’s Delta Premium instrument.



***Strataprobe Vacuum Drilling Rig***



**Figure 5: Canegrass Tenement – Aeromagnetic image showing structure and proposed vacuum drill traverses. The red boxes are drill areas recently added to the POW**



**Figure 6: Holey Dam Tenement – Aerial image structure and proposed air core drill traverses**

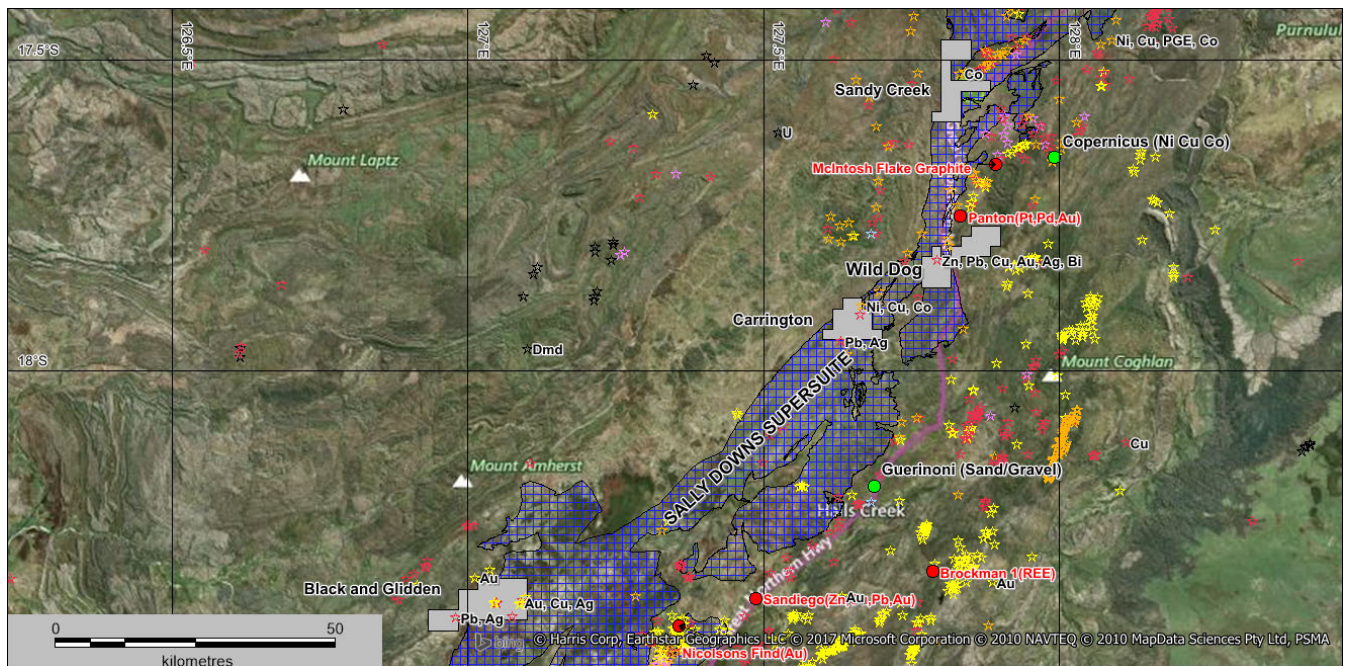


**Halls Creek – (Black and Glidden, Carrington, Sandy Creek and Wild Dog) Cobalt/Gold Projects**  
*E 08/5112, 5113, 5114 and 5115 are held 100% by wholly owned subsidiary Kaili Iron Pty Ltd.  
 All tenements are granted*

The Halls Creek Project comprises 4 granted tenements (**Figure 7**) situated within the NE-SW trending Lamboo Province comprising 4 tectonostratigraphic terranes – Western, Central and Eastern. The western terrane is postulated to be an exotic crustal fragment that was accreted to the Kimberley Craton before 1900 Ma via north-westerly directed subduction. Easterly directed subduction led to the development of an oceanic arc at c. 1865 Ma, outboard of the Kimberley Craton; this initiated the formation of the Central Zone. Eastern Zone rocks are associated with a passive continental margin linked to the North Australian Craton. The Central Terrane comprises a broad suite of felsic to lesser mafic rocks, the Sally Downs Supersuite within which occurs a subsuite of gabbro to norite dominated rocks known as the Sally Malay and McIntosh Suites. The Sally Malay nickel-copper sulphide deposit lies at the base of a small layered intrusion enclosed within granulite facies garnet-cordierite paramigmatites and mafic granulites norite which host most of the mineralization are interpreted as a chilled border zone to the intrusion, into which settled an early separated sulphide liquid. The Hall Creek Project is situated primarily within gabbro to norite rocks of the McIntosh Suite.

Highly regarded WA based geophysical consultancy Southern Geoscience Consultants have completed the acquisition and processing of all available airborne magnetic, radiometric, gravity and electromagnetic data covering the 4 tenements and have provided lithostructural interpretations and targeting maps and digital data. In addition, targets will be generated for field follow up. Local Sydney company Earth-AI has used an Artificial Intelligence approach to merge all publicly available geochemical, geological and geophysical data to generate targets for fields follow up.

The tenements were granted on 13 August 2018 for a period of 5 years with field-based exploration to commence in the June Quarter 2019



**Figure 7: Halls Creek Project showing the 4 tenement applications located in the vicinity of Hall Creek**

## Black and Glidden E08/5112

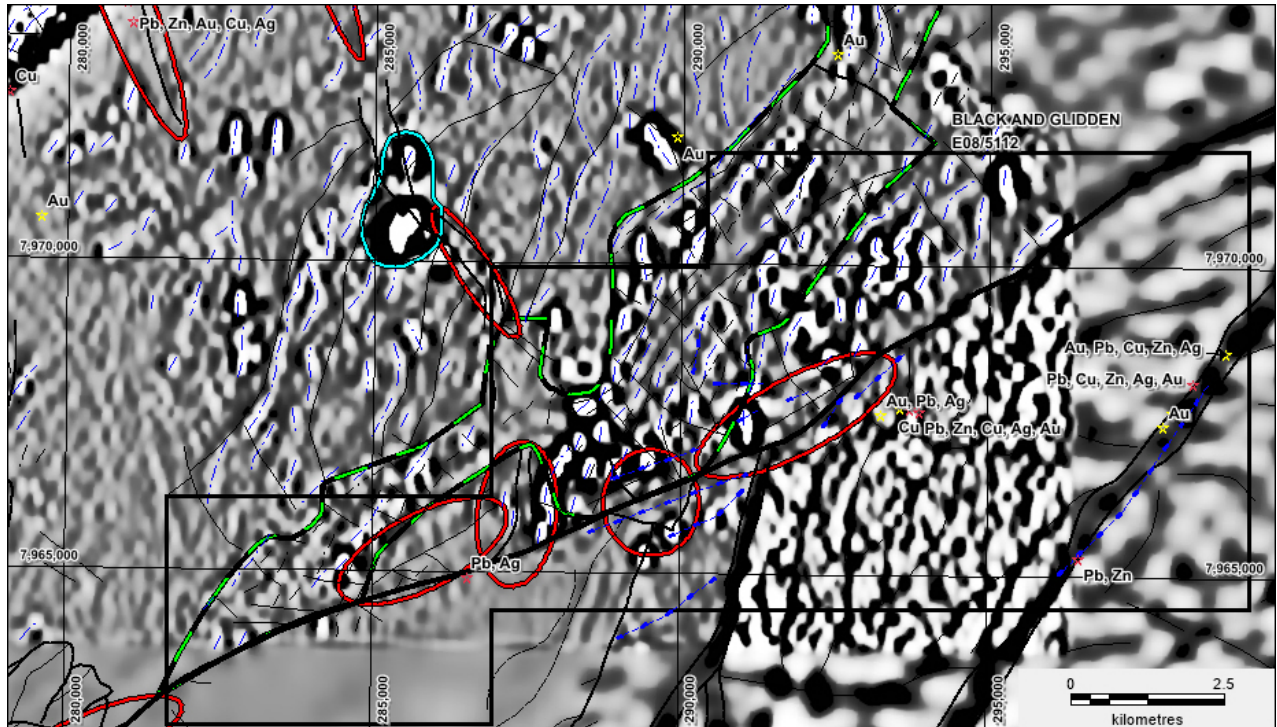


Figure 8 : Black and Glidden tenement showing 2VD aeromagnetics, structures and targets

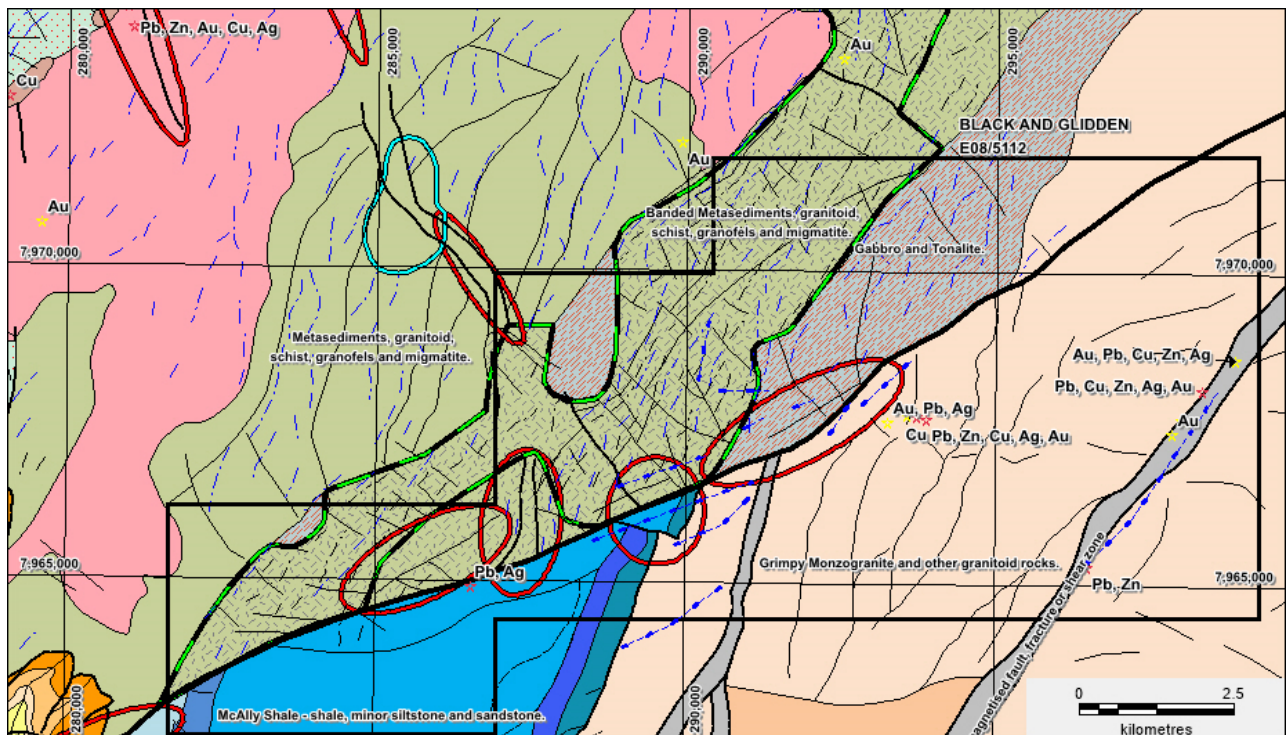
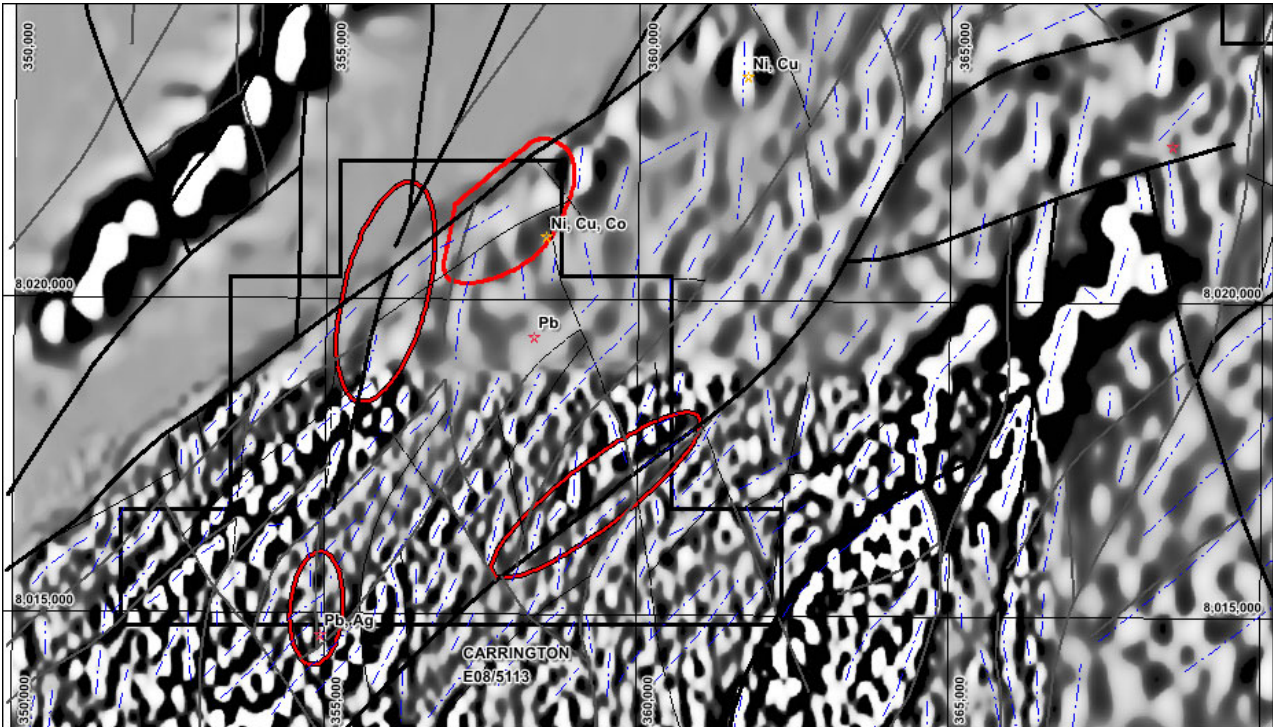


Figure 9: Black and Glidden tenement showing interpreted geology, structures and targets



The Black and Glidden tenement is located 100km west of Halls Creek with the dominant structure being the NE/SW trending Black and Glidden fault which forms a linear topographic feature to the south of the abandoned Mt Amhurst station. A small amount of Pb and Ag was mined from the Black and Glidden mine in the SW of the tenement with a report indicating the mineralisation was associated with a surface gossan. Elevated gold results were obtained from granite hosted quartz veins in the SE of the tenement associated with NE/SW trending shear zones. Several target zones have been delineated as shown in **Figure 9** with the main focus being structurally hosted Au mineralisation. There has been no historical drill testing of the Black and Glidden tenement.

#### **Carrington E08/5113**



**Figure 10: Black and Glidden tenement showing 2VD aeromagnetics, structures and targets**

The Carrington tenement (**Figures 10 and 11**) comprises primarily the McIntosh gabbro/norite which is the main Co/Ni target for the Company in addition to other structural gold/base metal targets delineated by the SCG team. An historical Ni Cu Co mineral occurrence is located in the north of the tenement and is associated with a discrete ElectroMagnetic (EM) conductor as shown in **Figure 12**.



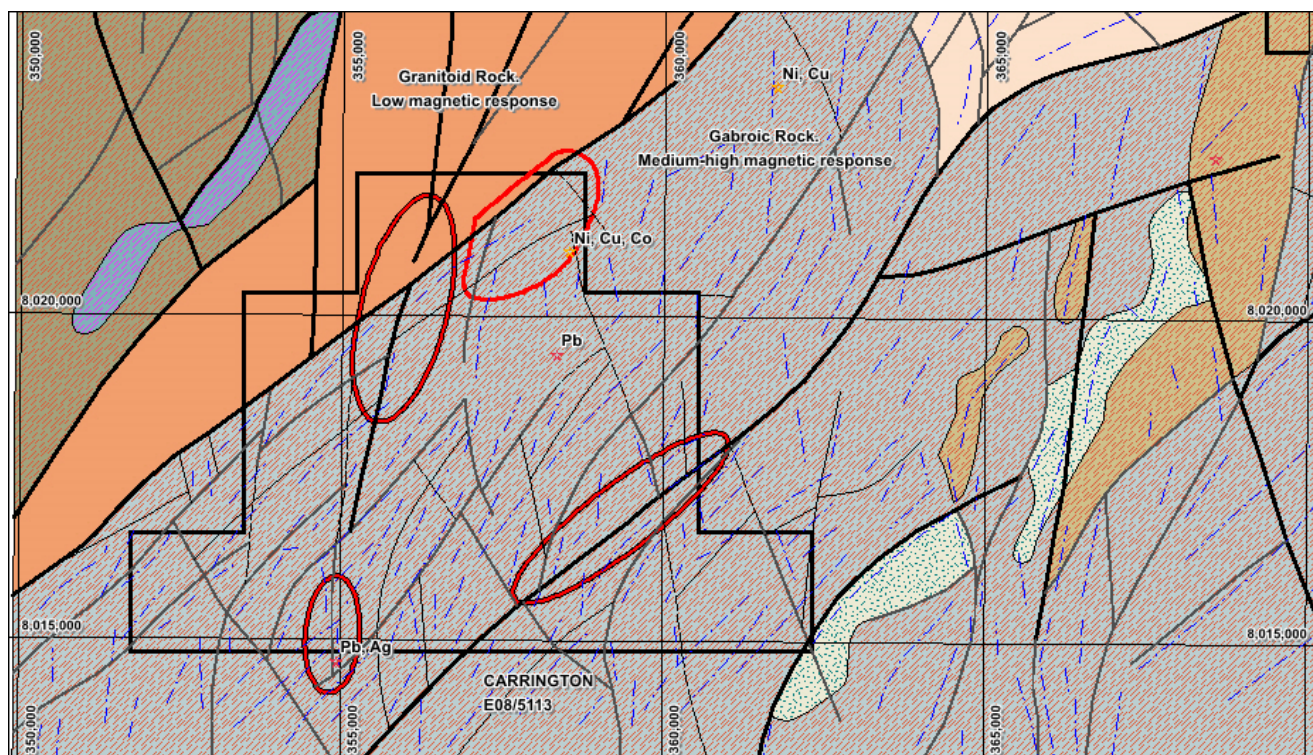


Figure 11: Black and Glidden tenement showing interpreted geology, structures and targets

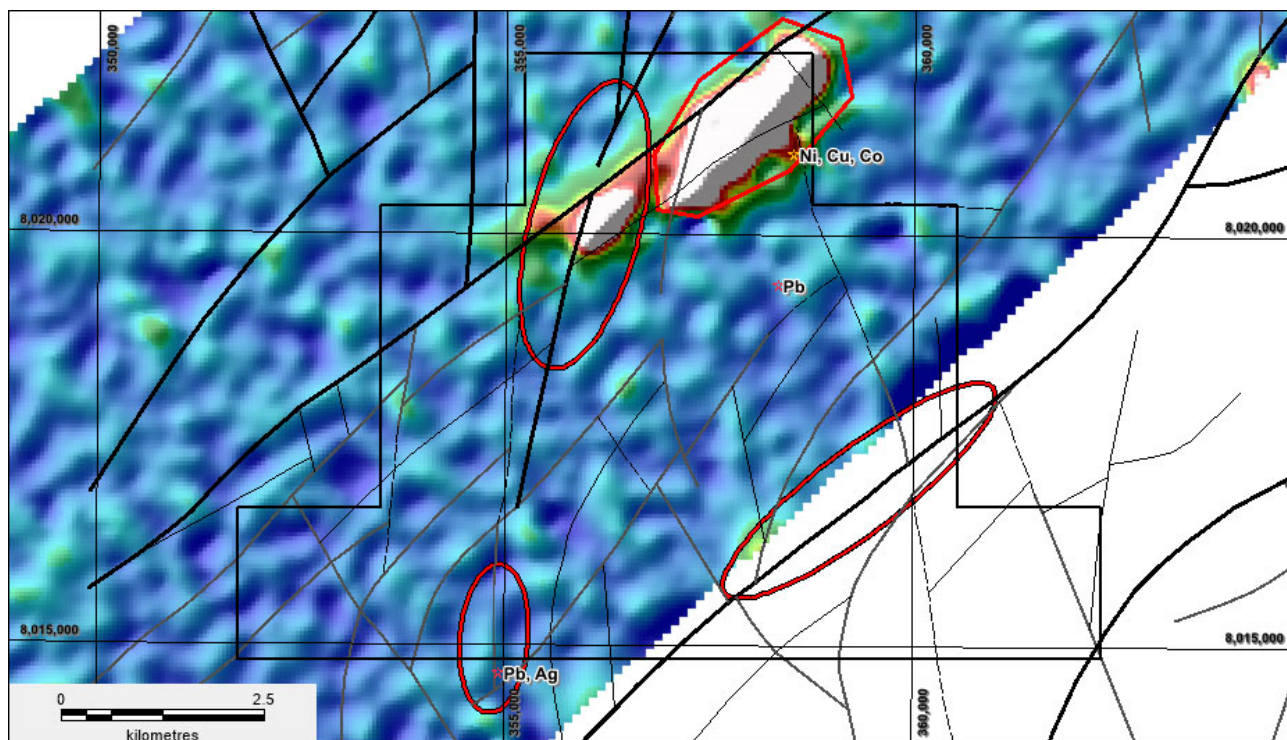


Figure 12: Carrington tenement showing airborne EM image and conductive feature in the north



Wild Dog E08/5114/Sandy Creek E08/5115

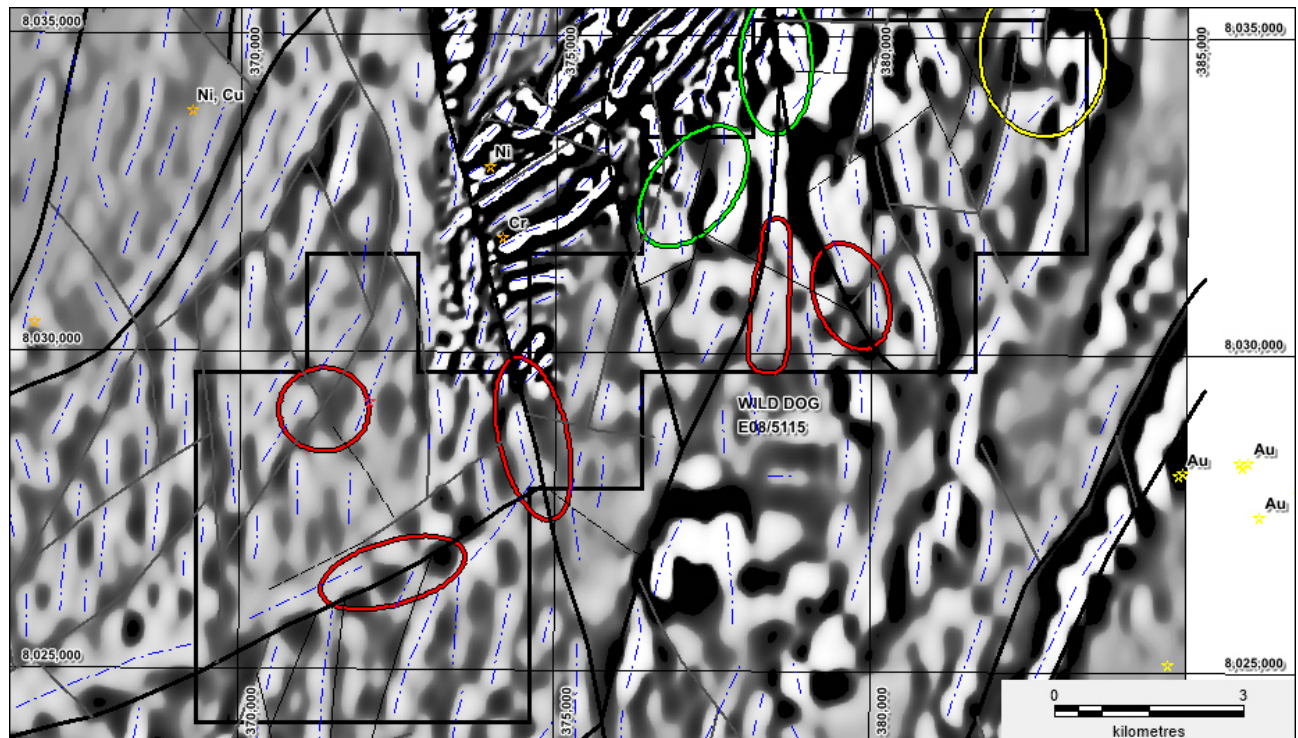


Figure 13: Wild Dog tenement showing 2VD aeromagnetics and target areas

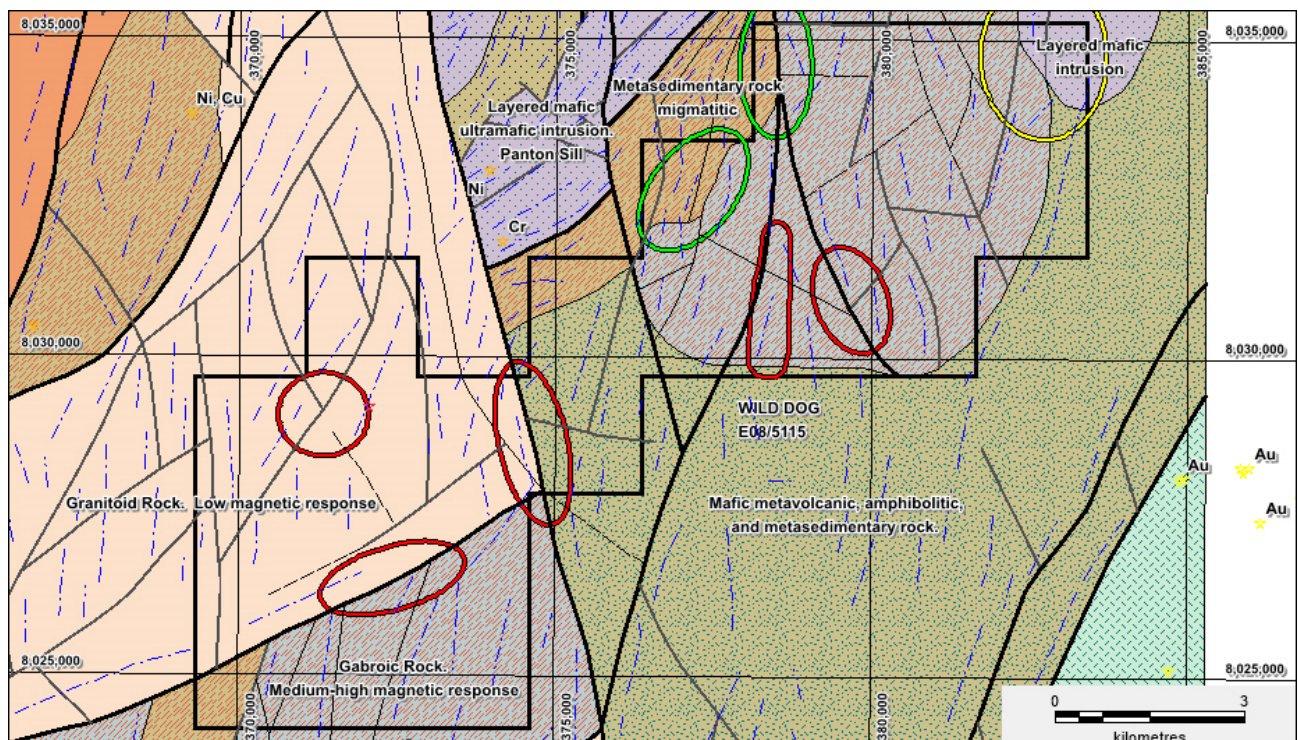
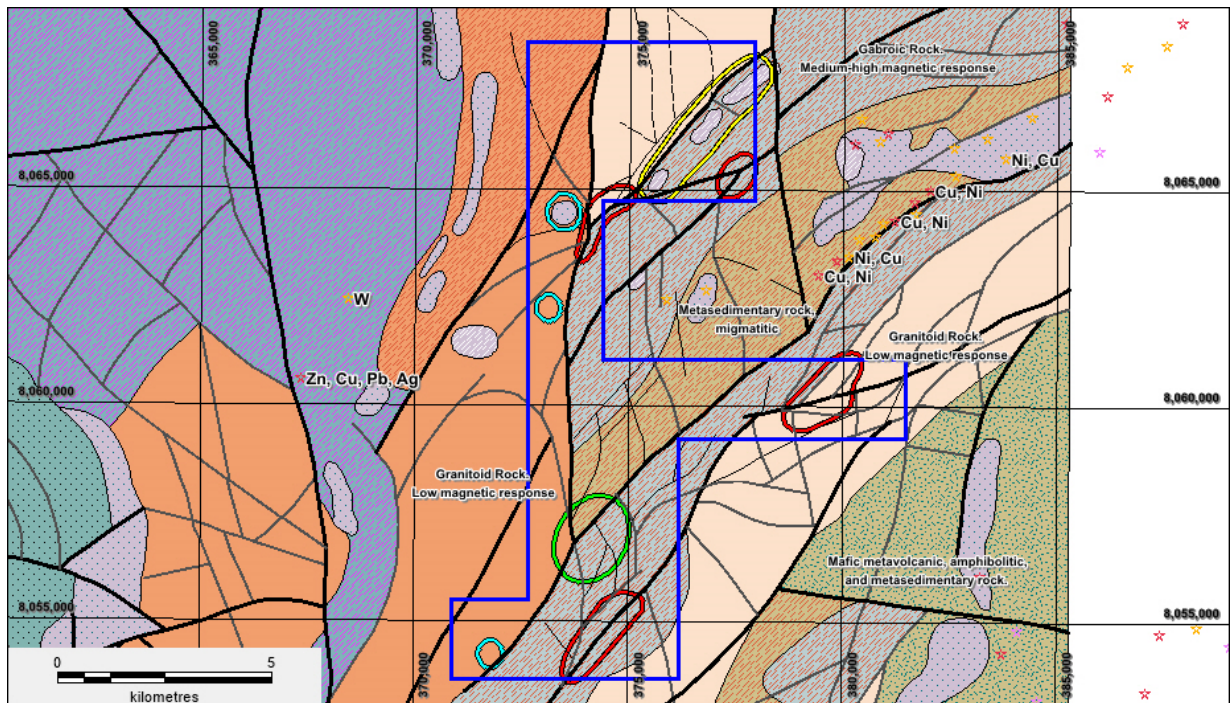


Figure 14: Wild Dog tenement showing interpreted solid geology, structures and target areas



The Wild Dog and Sandy Creek tenements (**Figures 13 and 14**) are structurally complex and comprises layered mafic/ultramafic intrusions and McIntosh gabbro/norite in the north and south of the tenement. A series of Cu,Ni workings are aligned NE/SW to the north of the Sandy Creek with the same lithostructural contact extending into the Sandy Creek tenement and associated with a linear EM conductor.

The Phase 1 exploration program will comprise helicopter supported surficial geochemical sampling and geological mapping of the 4 Halls Creek tenements



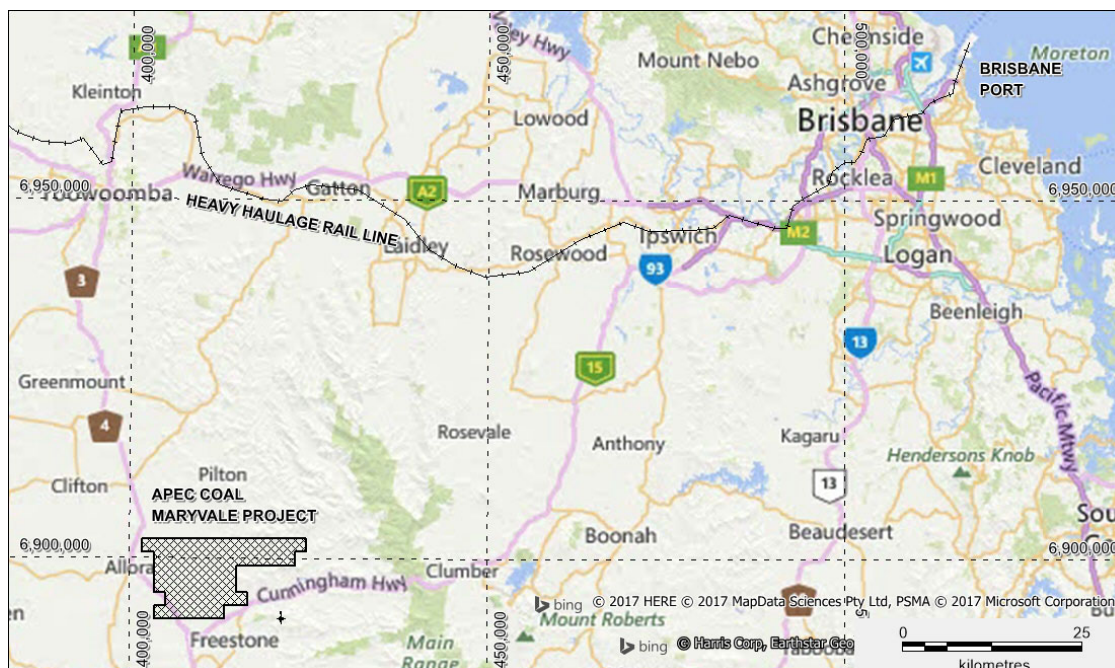
**Figure 15: Sandy Creek tenement showing interpreted solid geology, structures and target areas**

## QUEENSLAND

### Clarence Moreton Basin (Maryvale) Coal Project

*EPC1506 is held 100% by wholly owned subsidiary APEC Coal Pty Ltd*

The Project is strategically located in the Clarence Moreton Basin, 222km from the Port of Brisbane. The Project is adjacent to the New England Highway which connects the project area with Toowoomba for a distance of 77km and from there the heavy haulage rail system can transport coal for export through the Port of Brisbane for 145km (**Figure 16**).



**Figure 16: Maryvale Project Location Map**

**TABLE 2: INFERRED (ISG) RESOURCE ESTIMATE**

Resource Polygon	Working Section	Thickness (m)	Inherent Moisture (ad%)	Ash (ad%)	Volatiles (ad%)	Density (RD)	Tonnage (Mt)
Maryvale ISG Total	BU31-35	2.85	7.2	47.2	25.6	1.68	97

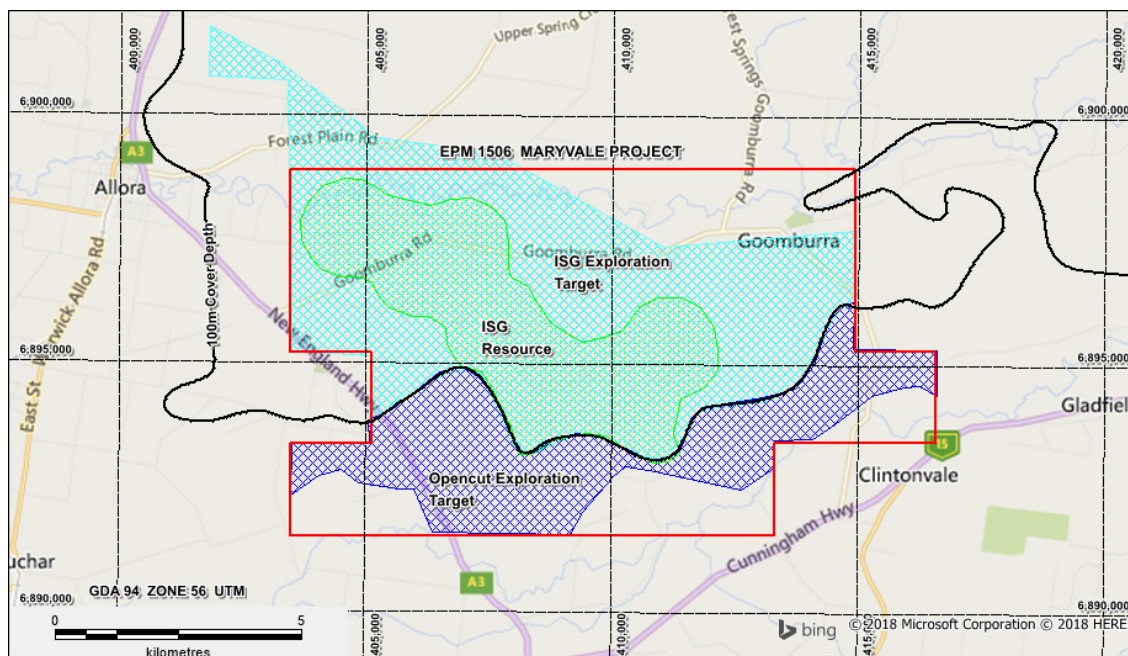
**TABLE 3: EXPLORATION TARGET OPEN-CUT AND ISG ESTIMATES**

Resource Polygon	Working Section	Thickness (m)	Tonnage (Mt)
Open-Cut Total	BU31-BU35	3.3	80-105
ISG Total	BU31-BU35	2.5	90-125

**Table 2 and 3: ISG Resource and Exploration Target Estimates – Maryvale Project**



The maiden JORC 2012 compliant resource is managed by 100% owned subsidiary APEC Coal Pty Ltd. The JORC Resource work was managed by Brisbane consultancy Geoconsult Pty Ltd (“Geoconsult”), primarily incorporating data acquired from the 2010 and 2016 drilling programs. Geoconsult staff has the relevant experience to be the competent person for the preparation of the Resource and Exploration Targets (**Figure 17**). **Table 2** and **3** summarise the Resource and Exploration Target Estimates.



**Figure 17: Maryvale Project showing the ISG Resource and Exploration Targets**

During the Quarter Kaili reviewed exploration to date with a view to expanding the current resource base into the exploration target areas. There was no field based exploration in the Quarter.

## LICENCES STATUS

Pursuant to ASX Listing Rule 5.4.3 the Company reports as follows in relation to minerals tenements (**Table 4**) held at the end of the March 2019 quarter and acquired or disposed of during that quarter and their locations. There was no change in beneficial interests under farm-in or farm-out agreements.

Granted	Tenement	Name	Commodity	Region	Registered Holder	Beneficial Interest	Area km <sup>2</sup>	Expiry
9/03/2017	E08/2770-I	Darnell Hill	Iron	WA - Pilbara Craton	Kaili Iron Pty Ltd	100%	67.2	8/03/2022
28/07/2016	E45/4619-I	Bea Bea Creek	Iron	WA - Pilbara Craton	Kaili Iron Pty Ltd	100%	105.6	27/07/2021
21/11/2016	E46/1084-I	Bustler's Bore	Iron	WA - Pilbara Craton	Kaili Iron Pty Ltd	100%	64.0	20/11/2021
8/07/2016	E40/354	8 Mile Dam	Gold	WA - Yilgarn Craton	Kaili Gold Pty Ltd	100%	70.4	7/07/2021
30/05/2016	E31/1114	Jungle Hill	Gold	WA - Yilgarn Craton	Kaili Gold Pty Ltd	100%	150.4	29/05/2021
30/05/2016	E31/1113	Canegrass	Gold	WA - Yilgarn Craton	Kaili Gold Pty Ltd	100%	108.8	29/05/2021
1/07/2016	E27/550	Holey Dam	Gold	WA - Yilgarn Craton	Kaili Gold Pty Ltd	100%	67.2	31/06/2021
1/07/2016	E27/549	Gindalbie Dam	Gold	WA - Yilgarn Craton	Kaili Gold Pty Ltd	100%	25.6	31/06/2021
13/05/2009	EPC 1506	Maryvale 1	Coal	QLD - Surat Basin	APEC Coal Pty Ltd	100%	86.4	13/05/2020
31/08/2018	E80/5112	Black and Glidden	Cobalt/Gold	WA - Lamboo Province	Kaili Iron Pty Ltd	100%	102.4	31/08/2023
31/08/2018	E80/5113	Carrington	Cobalt/Gold	WA - Lamboo Province	Kaili Iron Pty Ltd	100%	51.2	31/08/2023
31/08/2018	E80/5114	Sandy Creek	Cobalt/Gold	WA - Lamboo Province	Kaili Iron Pty Ltd	100%	64	31/08/2023
31/08/2018	E80/5115	Wild Dog	Cobalt/Gold	WA - Lamboo Province	Kaili Iron Pty Ltd	100%	70.4	31/08/2023
							1,033.60	

**Table 4: Tenement schedule**

*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.*

**Miss Jing Li**  
**Director**  
**30<sup>th</sup> April 2019**