



Quarterly Activities Report: September 2016

KalNorth Gold Mines Limited

Date: 31 October 2016

ASX Code: KGM

Issued Capital

894.24 million Ordinary shares

Current Share Price

\$0.014

Market Capitalisation

\$12.52million

Board Members

Jiajun Hu

Non-executive Chairman

Lijun Yang

Executive Director & Company Secretary

Yuanguang Yang

Non-executive Director

Contact Details

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**Projects located at Eastern Goldfields,
Western Australia**

- **Kurnalpi (100%)**
- **Lindsays (100%)**
- **Kalpini (100%)**

The Board of KalNorth Gold Mines Limited ("KalNorth or the "Company", ASX: KGM) is pleased to provide the report on activities and progress made during the September 2016 Quarter. The three stages of project review and targeting exercise in Kurnalpi project had been successfully conducted by CSA Global Pty Ltd. From the result of 28 defined exploration targets, 3 high and 3 moderately high priority targets will be tested as first pass. The open pit development of Lindsay's project was approved by DMP but its implementation has been delayed whilst negotiations relating to the project are concluded.

Quarterly Highlights:

- The mineralisation related host lithology and tectonic setting in Kurnalpi project had been reclassified and defined on the basis of geochemical signatures of collected samples.
- Au-Ag-Bi-Mo-Te elements group was believed related to mineralisation after comparing samples' multi-geochemical signature to defined gold mineralisation.
- The "oxidised fluid" and "reduced fluid" had been discriminated on the basis of dominant types of alteration assemblage which was considered related to the defined mineralisation.
- The regional structures and evolution model were interpreted to indicate the potential mineralisation related trap sites.
- A gold exploration model for Kurnalpi project had been summarized and targets had been identified.

EXPLORATION REPORT

Kurnalpi Project (100% KGM)

Project Review and Targeting Exercise

The Kurnalpi project is located approximately 85 km north-east of Kalgoorlie with easy road access (Figure 1). It has been extensive historic small scale gold mining and a number of significant companies including the North Mines Ltd and Newcrest Mining Ltd have completed extensive work on this project. There a series of small to moderate size resources had been defined (Figure 1) and KalNorth is performing the exploration to define additional resources to increase the probability of development.

The Company commissioned CSA Global Pty Ltd (CSA) to complete a three staged project review with the intention to physically assess the project area in respect to geology, structure, alteration and mineralisation in order to deliver an integrated interpretation that will allow the delivery of constrained targets. It will allow the Company to prioritize targets and progress exploration.

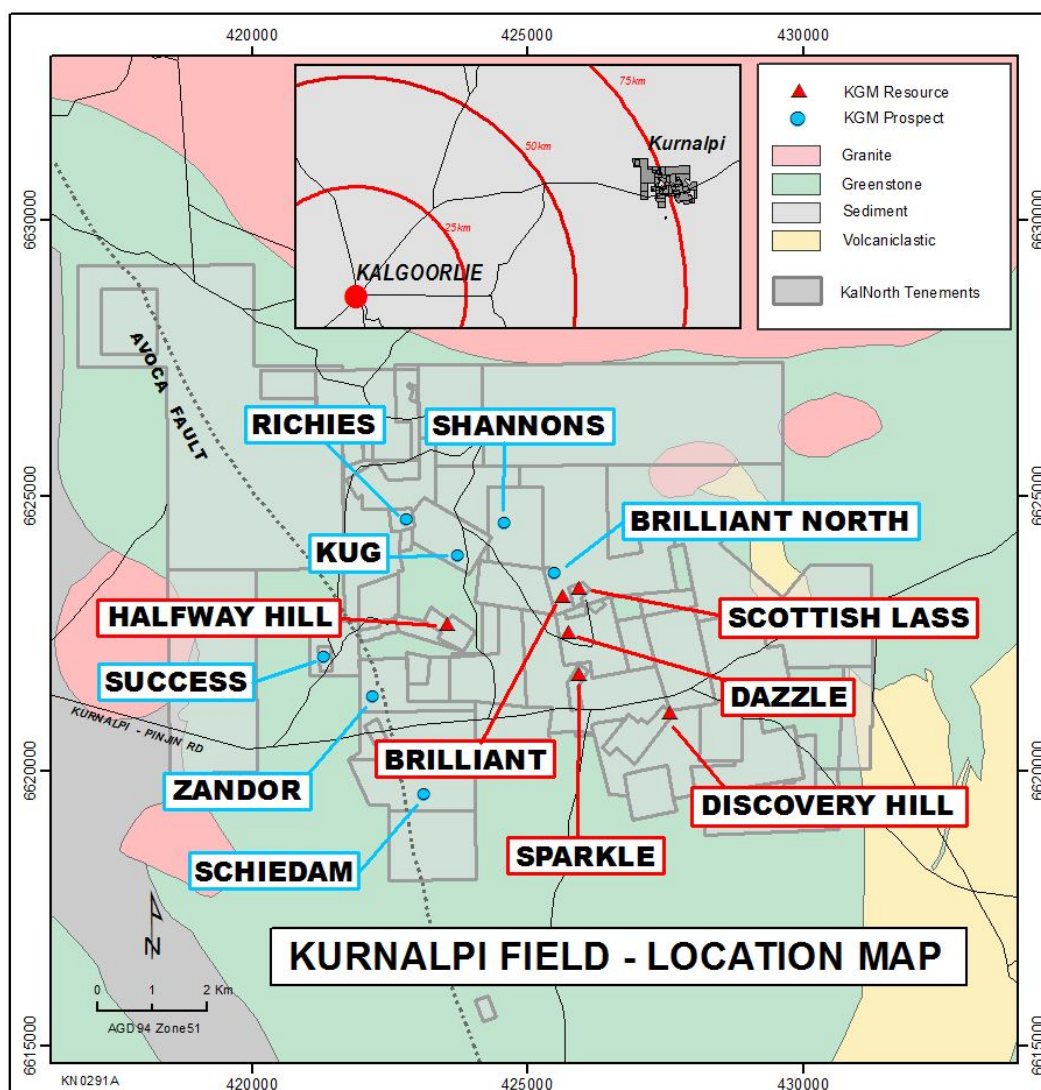


Figure 1. Kurnalpi project location and identified prospect and resource

Summary of staged work outcomes

The 1st stage scope study included review of the existing data including surface geochemistry, drilling database, geophysical data, satellite imagery, Bottom of Hole (BOH) and down-hole multi-element geochemistry as well as other data that KalNorth collected or owned by CSA;

The 2nd stage consisted of field reconnaissance, mapping and sample collection for lithogeochemical analysis and structure analysis. A total of 666 samples (Figure 2) were collected from the field by locating and accessing historic RAB, AirCore and RC sample spoils or bags left in the field by historic exploration process, another 105 samples (Figure 2) were collected from existing chip trays on store at the company's sample facility in Kalgoorlie. A total of 266 structural measurements (Figure 2) with a focus on veins, foliations and cleavage, lineations, faults and shear zones as well as possible primary bedding were collected to provide additional geological setting context. All samples were analysed in 51 litho-geochemical multi-elements at Bureau Veritas Kalgoorlie Lab and Short Infrared Spectrometry TerraSpec Analyzer (ASD) by Dr. Scott Halley at Mineral Mapping, the former was used to ascertain both the lithology and assess the type and relative strength of alteration within the samples. The later allows the identification of carbonate and filosilicate minerals within the sample that occur commonly in Archaean gold system as alteration products.

The 3rd stage works covered regional interpretation and target analysis completed on the basis of understanding of the local geological setting, collected samples' litho-geochemical characteristics as well as regional structure analysis.

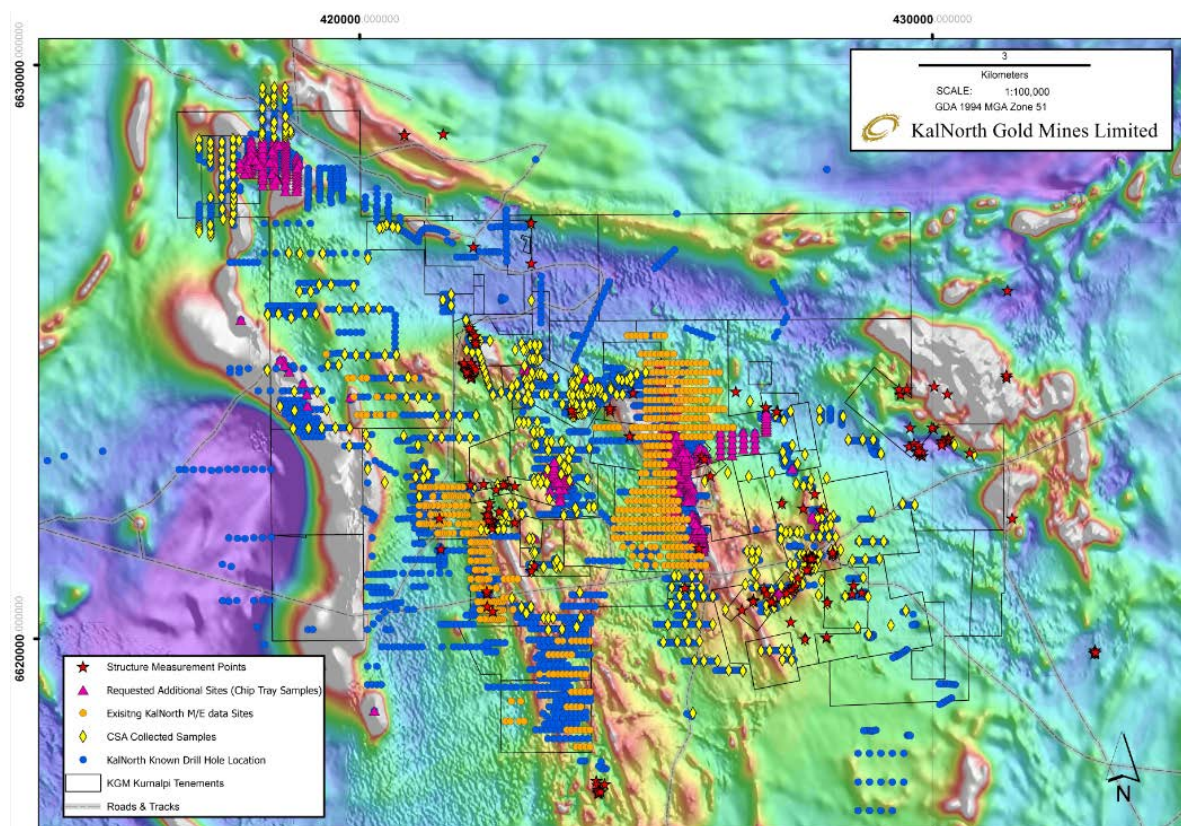


Figure 2. Samples and structural measurements distribution map

Lithological Classification and tectonic setting

From the result of 51 tested elements of each sample which was classified according to the incompatible-immobile elements, inter-element ratios as well as extended trace element diagrams normalized to primitive mantle. Different litho-geochemical groups had been discriminated including four felsic litho-geochemical groups (F1-F4) (Figure 3), eight mafic- intermediate groups (M1-M8) (Figure 4) and three ultramafic groups (UB, UM1 and UM2).

F1 and F4 have very similar extended trace element profiles but F1 samples have slightly steeper overall profiles (e.g. Th_n / Yb_n ratios). F2 and F3 have higher Yb abundances and a flat HREE profile compared to F1 and F4. F2 can be discriminated from F3 on the basis of higher Th-Nb-La.

Eight mafic-intermediate groups have been interpreted to represent a subtly different magma series. M1-M3 have the steepest extended trace element profiles but M1 can be distinguished by the absence of a negative Nb-Ta anomaly. Group M2 and M3 are similar but M3 has a more pronounced negative Nb anomaly (Lower Nb_n / Th_n ratio) and a slightly steeper overall profile (high Th_n / Yb_n ratio). M4-M8 have relatively flat profiles and M4 and M5 are very similar to each other, have slightly steeper profiles than M6. Only subtly different Nb/Zr ratios discriminate M4 and M5. M8 has the steepest profile of M4-M8, but a flat HREE profile. M7 is very unusual with anomalous high La relative to Th, Nb and Ce, its profiles are akin to, but not as pronounced as the high La and high Yb groups.

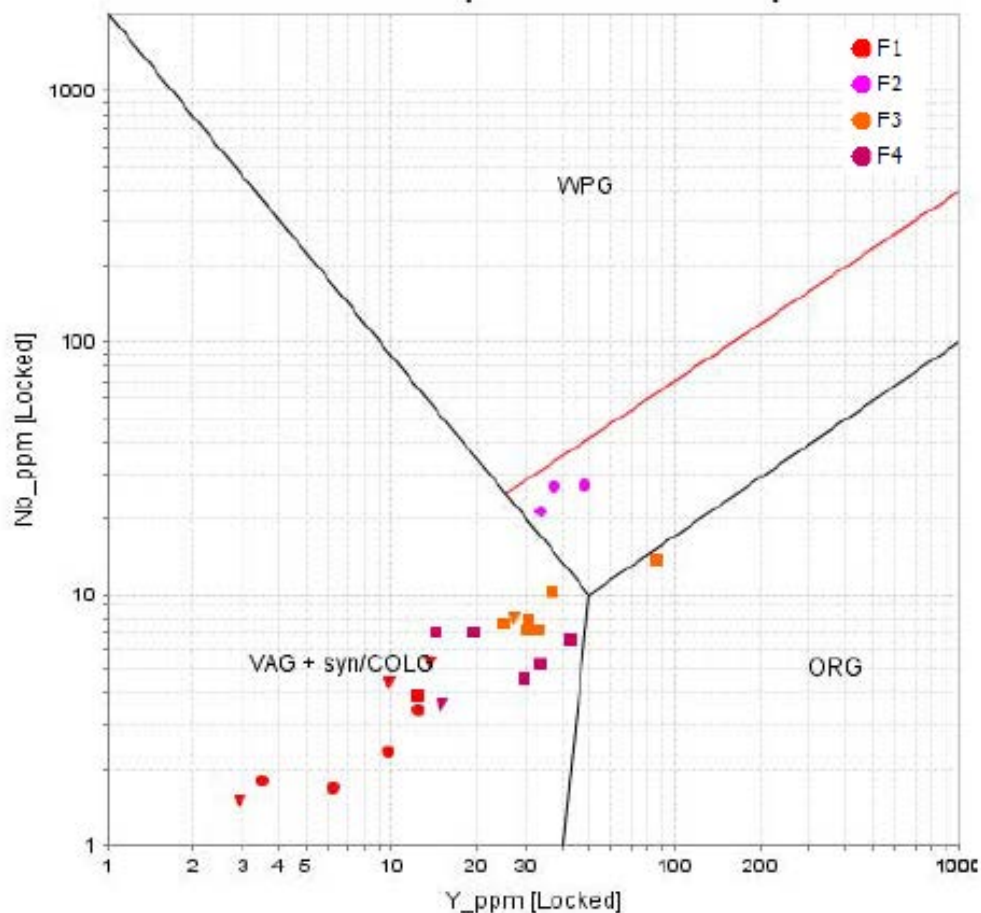


Figure 3. Felsic groups discrimination on the basis of Y versus Nb (Pearce 1984)

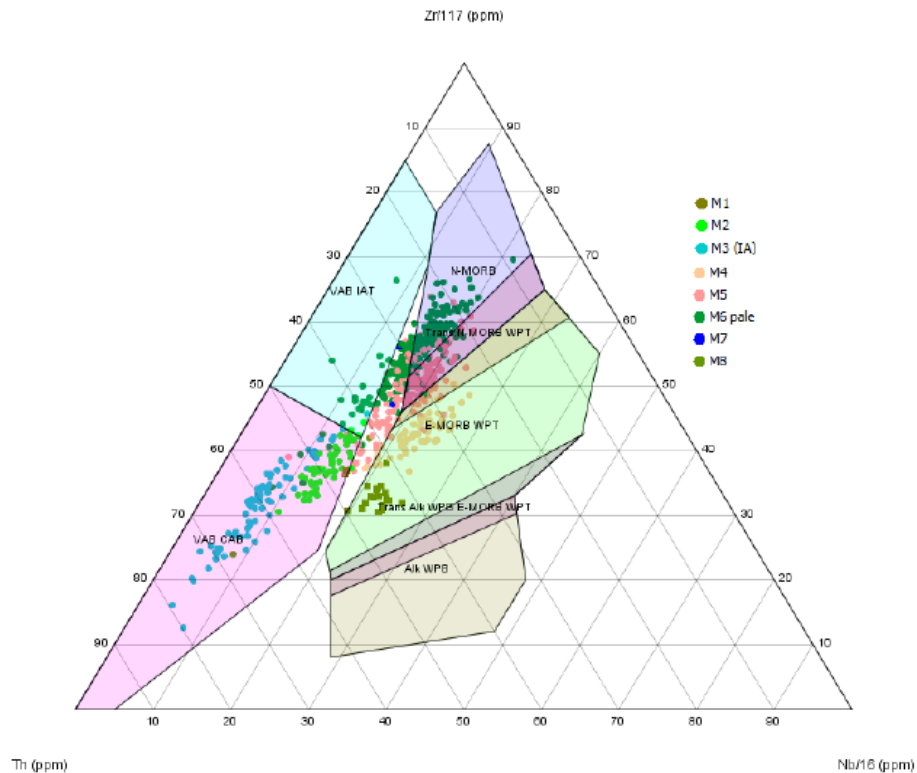


Figure 4. Mafic groups discrimination on the basis of Zr-Th-Nb (Wood 1980)

Ultramafic groups UM1, UM2 and UB all have extended trace element profiles that are parallel to mafic group M6. These samples are interpreted as a single magma series that ranges from UM1 (most depleted profiles and highest Cr/Al ratios) to M6. Very low element abundances typical of ultramafic rocks lead to the erratic values of individual samples in UM1 and UM2, but average profiles define a consistent evolution from UM1 to M6 that corresponds to increased fractionation and decreased olivine content.

On the basis of litho-geochemical signatures of each interpreted lithological groups, its tectonic setting was interpreted in the context of regional geological understanding (Figure 5) and named by more meaningful code (Table 1).

Table 1 interpreted tectonic setting of each litho-geochemical group

Code	Interpretation	Code	Interpretation	Code	Interpretation
F1	Arc Felsic 1	M1	E-MORB to Within Plate Basalt	UB	Komatiitic Basalt (N-MORB)
F2	Within Plate Felsic (WPF)	M2	Arc 1 (Basalt)	UM1	Ultramafic 1 (N-MORB)
F3	WPF-Arc Transitional	M3	Arc 2 (Andesite)	UM2	Ultramafic 2 (N-MORB)
F4	Arc Felsic 2	M4	E-MORB 1		
		M5	E-MORB 2		
		M6	N-MORB		
		M7	High La/Th Basalt		
		M8	Arc 3 (Basalt)		

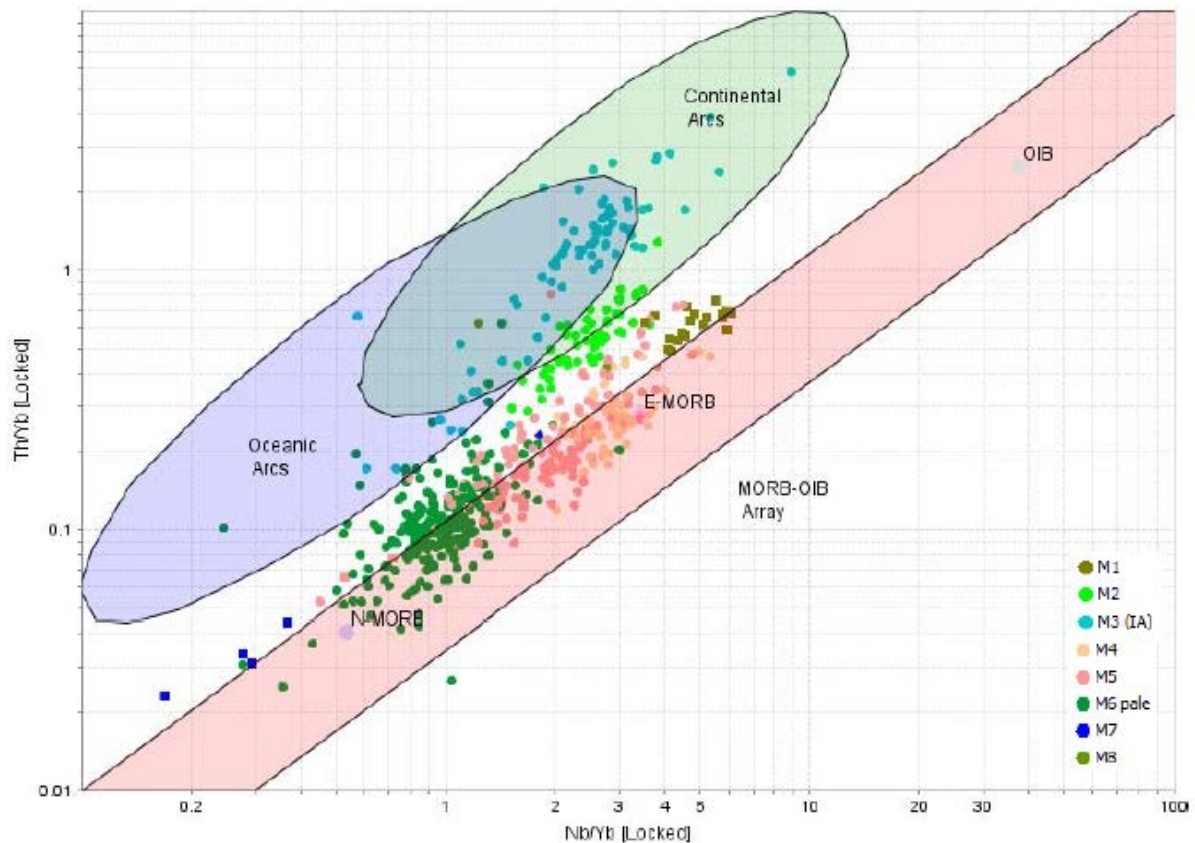


Figure 5. Tectonic setting discrimination diagram based on Nb/Yb versus Th/Yb (Pearce, 2014)

Geochemical signature and alteration related to mineralisation

The relationship of collected sample's multi-geochemical signature with defined gold mineralisation in Kurnalpi project was tested by using Principal Component Analysis (PCA) and an additive Min_Index which the later can be effective when the element association being targeted is known. Although the PCA did not show sensitive to the data but an elements group of **Au-Ag-Bi-Mo-Te** was believed related to mineralisation. The Min_Index created based on this elements group ranked variable maps for Au and the index scored in all BOH samples (Figure 6). The maps identified the trends well in the middle of the mapped area around Brilliant deposit which had been defined and also highlighted other occurrences like the NW for further exploration.

The SWIR analysis and interpretation had been completed by Dr. Scott Halley of Mineral mapping to ascertain alteration types based on collected samples' litho-geochemical analysis results. Within several different dominant mineralogical groups defined by integrated interpretation, while some of these are considered to be related strictly to primary lithology, three (3) groups were interpreted to be indications of mineralisation related process – Albite, hydrothermal chlorite and Sericite (potassic alteration) alteration(Figure 7).

Mineralisation as noted is dominantly related to “oxidised fluids” with an albite-Te-Mo-Bi signature (+/- hydrothermal chlorite) which is widespread throughout the Project area and was interpreted as an indicative of a magmatic dominated fluid source. “Reduced fluid” as represented by the sericite-As-Sb signature is also widely distributed but in more limited zones. It was interpreted that this signature is probably indicative of the location of deeper tapping structures (e.g. the Avoca fault and early extensional structures). The interaction of these two fluid types may be important in the localisation of more significant mineral systems.

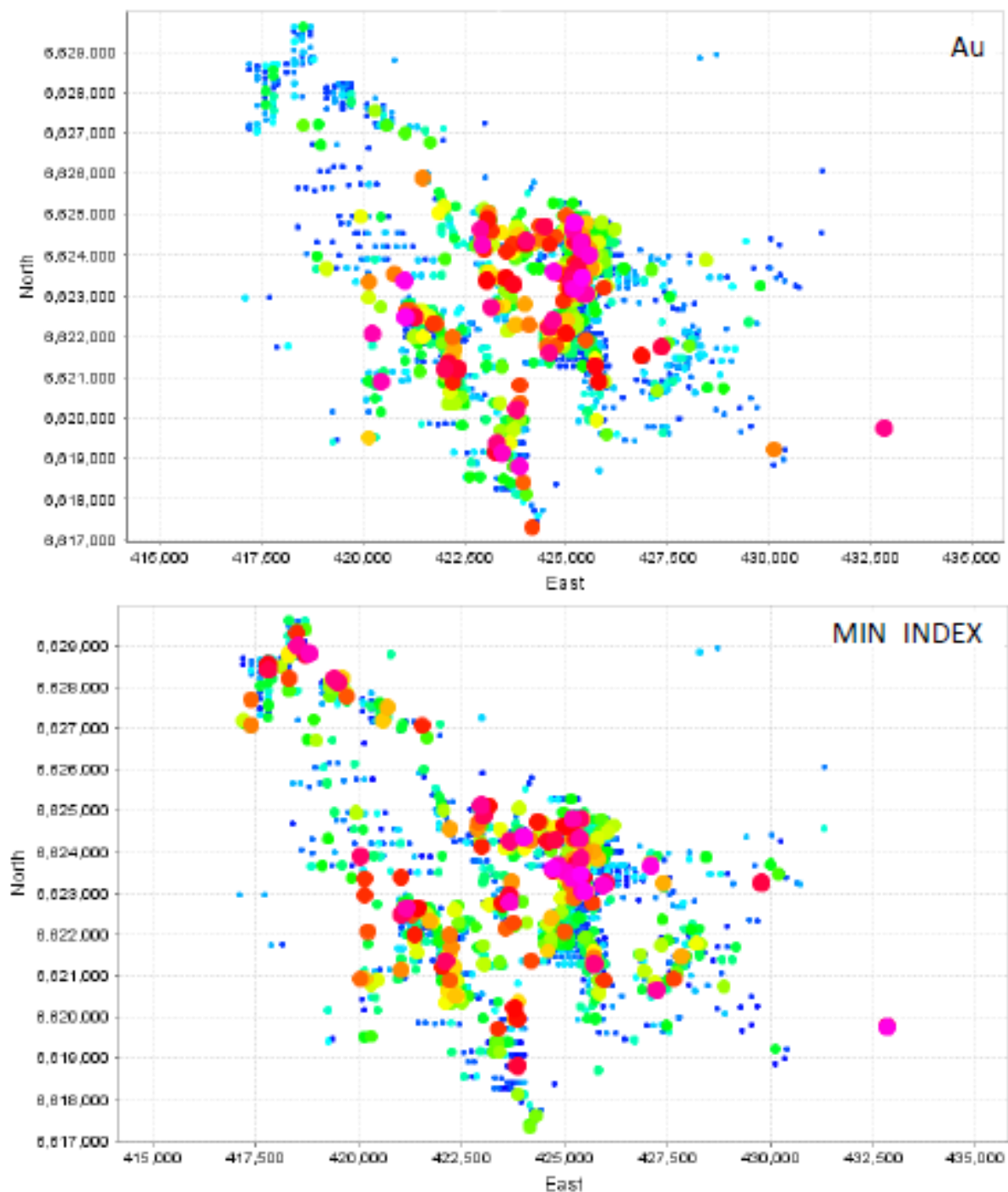


Figure 6 Ranked variable maps for Au and Index score in all BOH samples.

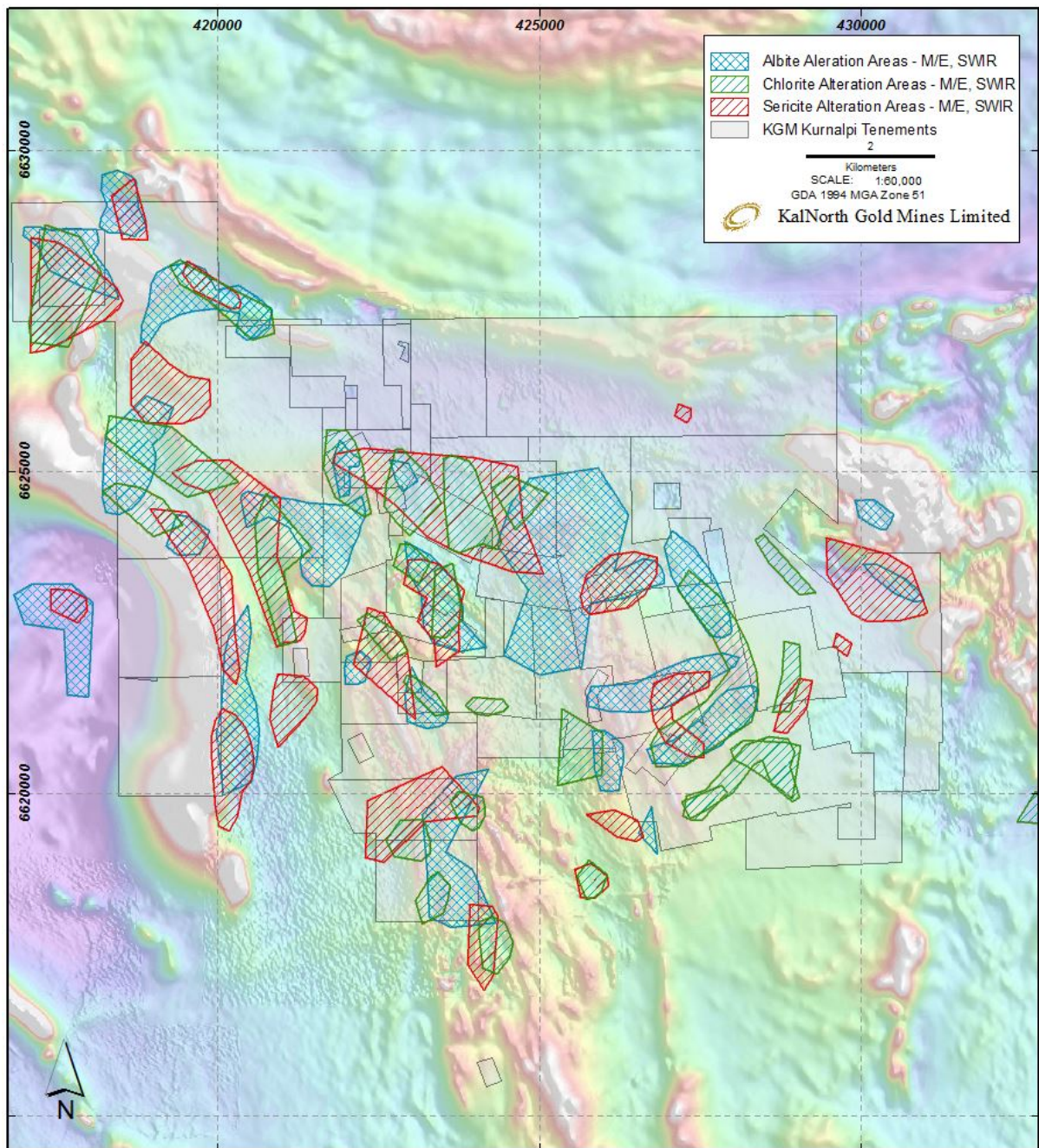


Figure 7. Alteration interpreted distribution with structures

Structure Analysis

The structural setting and paragenesis of Kurnalpi project had been developed by processing filed structure measurements as well as collected dataset including bedding, foliation and cleavage, faults and shears (Figure 8).

A limited Bedding data collected from field work related to the volcanic deposition occurred associate with M5 and M6 type basalts. The foliation and cleavage data collected by CSA were distinguished in relative time sequence (e.g. S1, S2...) which indicated dominant orientation is north-south but generally steep west dipping and north-northwest slightly shallower west dipping. A third set of data can be identified and appears to define a great circle distribution which may define an isoclinal to tight fold or fold system or either smaller or large wavelength. These data related to the

great circle occur dominantly in the interpreted ultramafic to mafic (M4/M5) area of stratigraphy and indicates a “2 composite fabrics” formed concurrently in the NNW striking dominant regional fabric. Four orientations are identified from the faults and shears structural data collected. The dominated orientation is north –northwest which corresponded well with the interpreted S2 orientation and was interpreted to be related to the major inverted extension structures and/or north-south interpreted trending sinistral structures. Two sets of west-northwest-east-southeast dipping fault dipping independently moderately steeply south and moderately north were also identified, these are interpreted to be related to the south –southwest vergent extension structures inferred to be related to domal up-lift associated with the intrusion of the Kurnalpi batholith and possibly related south to south-east –vergent thrusts.

Exploration Model Built and Target Defined

A gold exploration model for Kurnalpi project had been summarized on the basis of above analysis of lithology classification; mineralisation related alteration as well as structures.

Mineralisation related Lithology: Observationally there appears to be much stronger association between E-MORB stratigraphy (M4 and M5) and known mineralisation. Proximity to small volume felsic intrusive may also be important. In addition, the contact between early andesite and the N-MORB (M6) stratigraphy, particularly where early extension structures occur, may also be important.

Mineralisation related Alteration (Fluid): the alteration assemblages provided a proxy for the presence of required fluids. The combined Albite-Te-Mo-Bi (+/- hydrothermal chlorite) assemblage most likely indicates the widespread presence of oxidised-neutral fluids within the project area (“Oxidised fluid”). Similarity of the presence, Albite on a much more limited areal basis, of the sericite-Arsenic-antimony assemblage is likely indicative of the presence of reduced acid fluids (“Reduced fluid”). The location of reduced fluid is believed indicative of those structures that are likely to be deeper tapping and potential important for mineralisation processes (pathways). It may also be that the interaction of the oxidised and reduced fluids may cause gold precipitation in the absence of other controls, may be important mechanism to destabilise gold from solution.

Mineralisation related Structures: structures that have been interpreted to be related to the regionally significant D2/D3 structural event (Swagger, 1997) are likely to be important potential trap sites (Gold occurrences). This will include the major inversion related structures. However, structures that link into these, such as the relatively north-south and north-east oriented sinistral strike slip structures(e.g. Brilliant), south east dextral offset escape related structures(e.g. Schiedam) , and north-north-west to north –west oriented, north east dipping thrust faults(e.g. Scottish Lass). Other locally important extensional and trans current structures related to compressional compensation may also provide useful trap sites. Inversion related pop-up (e.g. Halfway Hill) may also be important.

Refer to summarized exploration model, 28 target areas within the Kurnalpi Project were identified and 3 are considered high priority, 3 are considered moderately high, 9 are considered of moderate priority, 9 are considered moderately low priority and 5 are considered low priority (Figure 8) . The company will check the high and moderately high priorities targets in first pass as well as all targets in further exploration activities.

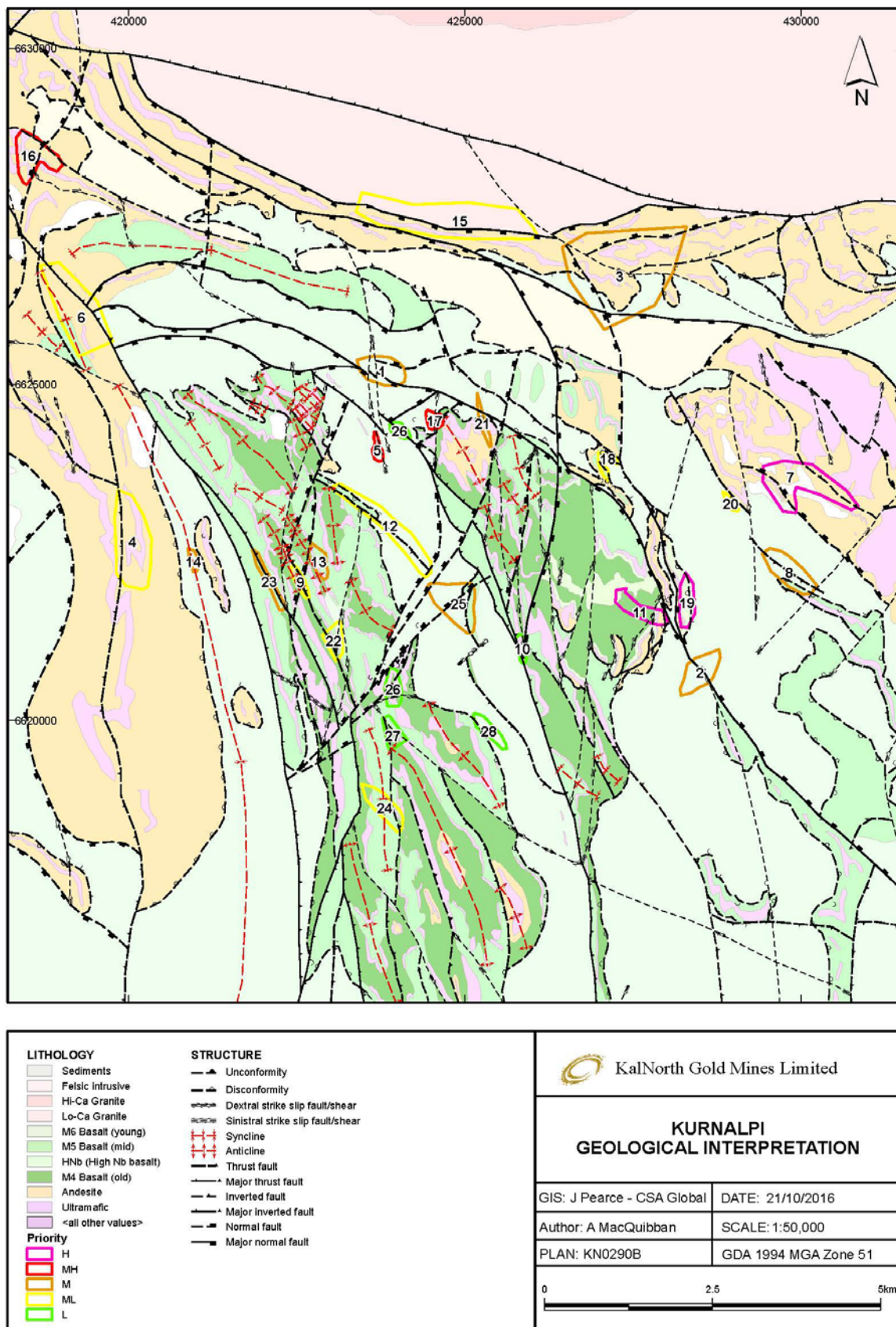


Figure 8. Prioritised targets

Lindsays Project (100% KGM)

As previously announcement, KalNorth Gold Mines Limited (ASX:KGM) (**KalNorth**) and Keras (Gold) Australia Pty Ltd (**Keras**) entered into a Heads of Agreement on 11 March 2016 (**HOA**) to regulate activities relating to the contemplated development of KalNorth's Lindsay's Project. KalNorth's 10 May 2016 ASX release confirmed that Keras had exercised an option to mine. That option remains subject to the economic evaluation referred to in KalNorth's 14 March 2016 ASX release and the completion of a formal agreement between the parties.

Keys terms of the HOA made provision for further activities to investigate the economic mining of the Lindsay's Project deposits, the lodgment of certain mining approvals and further negotiations regarding a formal arrangement between the parties. The completion of a formal agreement is a precondition to the development proceeding. Those activities and negotiations are advancing and KalNorth and Keras anticipate making a decision during the next quarter regarding whether mining can be undertaken economically, the contractual terms and the respective participation of the parties in the development.

Kalpini Project (100% KGM)

The Kalpini Project is located midway between Lindsays and Kurnalpi and consists of only one tenement currently which contains the Kalpini gold resource. The gold resource is hosted at three prospects, Atlas, Gambia and Camelia which all hosted within dolerite but having contrasting controls on the mineralisation.

The Company continues supervising several prospectors who are working on this project under the agreement within this quarter and the under regolith information reported by the prospectors was considered in further exploration.

CORPORATE REPORT

Further Financial Facility Draw Down

The Company refers to the \$2 million convertible note facility ("CNF") made available to it by the then largest shareholder, Cross-Strait Common development fund Co., Limited ("Cross Strait"). The Cross Strait CNF was approved by shareholders at the November 2015 AGM and subsequently received other regulatory approvals in late February 2016. The CNF was drawn down to an amount of \$300,000 as at end of the previous quarter. During the current quarter a further drawn of \$700,000 was made.

Cash Reserves

Total expenditure for the September 2016 quarter amounted to \$432,542 of which \$190,361 was attributable to exploration and evaluation, compared to a total expenditure of \$385,965 in the June 2016 quarter.

During the quarter the Company received a successful outcome after completing the required documentation and submission of a claim under the Federal Governments Research and Development (R&D) tax incentive scheme ("scheme") for the 2015 financial year. The Company

received a cash refund of \$157,912 pursuant to its R&D claim which relates to costs incurred in relation to nuggets research programme which the Company set up with Geological Survey of West Australia ("GSWA") at the Kurnalpi Gold Project.

The Cash balance at the end of quarter was \$582,437.

For further information please contact

Lijun Yang

Executive Director and Company Secretary

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Location map of KalNorth projects showing roads and local processing plants

About KalNorth Gold Mines Limited

KalNorth Gold Mines Limited (ASX Code: KGM) is a gold exploration company based in Kalgoorlie, Western Australia (WA). The Company's core suite of tenements, all 100% owned, are located some 50 to 80km north-east of the world renowned gold mining town of Kalgoorlie, WA. There are currently three main gold projects each with resources within the KGM holding: Lindsay's, Kalpini and Kurnalpi (collectively the KalNorth Field).

Competent Person Statement-Exploration Results and Mineral Resources

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr Lijun Yang, a Competent Person who is a member of Australian Institute of Geoscientists. Mr Yang is an Executive Director and a full time employee of the Company now. Mr Yang has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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". Mr Yang consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Tenement Holdings and Movements

Mining Tenements and Beneficial Interest Held as at the end of the September 2016 Quarter

Tenement	Holder	Status	Project	Interest %
L27/0088	KALNORTH GOLD MINES LIMITED	LIVE	Kalpini	100
M27/0485	KALNORTH GOLD MINES LIMITED	LIVE	Kalpini	100
E28/1477	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
E28/2015	KALNORTH GOLD MINES LIMITED	LIVE	Kurnalpi	100
E28/2153	KALNORTH GOLD MINES LIMITED	LIVE	Kurnalpi	100
E28/2226	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
E28/2256	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
E28/2541	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
M28/0007	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
M28/0066	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
M28/0072	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
M28/0076	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
M28/0084	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
M28/0089	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
M28/0090	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
M28/0092	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
M28/0113	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
M28/0374	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
M28/0375	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1097	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1100	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1101	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1102	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1103	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1104	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1105	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1106	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1107	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1108	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1111	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1112	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1113	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1114	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1115	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1116	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1117	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1118	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1119	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1125	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1126	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1154	KALNORTH GOLD MINES LIMITED	LIVE	Kurnalpi	100
P28/1155	KALNORTH GOLD MINES LIMITED	LIVE	Kurnalpi	100
P28/1156	KALNORTH GOLD MINES LIMITED	LIVE	Kurnalpi	100
P28/1157	KALNORTH GOLD MINES LIMITED	LIVE	Kurnalpi	100
P28/1180	KALNORTH GOLD MINES LIMITED	LIVE	Kurnalpi	100
P28/1184	KALNORTH GOLD MINES LIMITED	LIVE	Kurnalpi	100
P28/1186	KALNORTH GOLD MINES LIMITED	LIVE	Kurnalpi	100
P28/1187	KALNORTH GOLD MINES LIMITED	LIVE	Kurnalpi	100

P28/1190	KALNORTH GOLD MINES LIMITED	LIVE	Kurnalpi	100
P28/1191	KALNORTH GOLD MINES LIMITED	LIVE	Kurnalpi	100
P28/1226	LUSITAN PROSPECTING PTY LTD	LIVE	Kurnalpi	100
P28/1227	LUSITAN PROSPECTING PTY LTD	LIVE	Kurnalpi	100
P28/1228	LUSITAN PROSPECTING PTY LTD	LIVE	Kurnalpi	100
P28/1229	LUSITAN PROSPECTING PTY LTD	LIVE	Kurnalpi	100
P28/1230	LUSITAN PROSPECTING PTY LTD	LIVE	Kurnalpi	100
P28/1231	LUSITAN PROSPECTING PTY LTD	LIVE	Kurnalpi	100
P28/1254	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1255	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
P28/1282	SHANNON RESOURCES PTY LTD	LIVE	Kurnalpi	100
M28/0377	SHANNON RESOURCES PTY LTD	PENDING	Kurnalpi	100
M28/0378	SHANNON RESOURCES PTY LTD	PENDING	Kurnalpi	100
M28/0379	SHANNON RESOURCES PTY LTD	PENDING	Kurnalpi	100
M28/0380	SHANNON RESOURCES PTY LTD	PENDING	Kurnalpi	100
M28/0381	SHANNON RESOURCES PTY LTD	PENDING	Kurnalpi	100
M28/0382	SHANNON RESOURCES PTY LTD	PENDING	Kurnalpi	100
M28/0383	SHANNON RESOURCES PTY LTD	PENDING	Kurnalpi	100
M28/0384	SHANNON RESOURCES PTY LTD	PENDING	Kurnalpi	100
E16/0491	LUSITAN PROSPECTING PTY LTD	PENDING	-	100
E27/0517	KALNORTH GOLD MINES LIMITED	LIVE	Lindsays Find	100
L27/0082	KALNORTH GOLD MINES LIMITED	LIVE	Lindsays Find	100
L27/0084	KALNORTH GOLD MINES LIMITED	LIVE	Lindsays Find	100
M27/0034	KALNORTH GOLD MINES LIMITED	LIVE	Lindsays Find	100
M27/0169	KALNORTH GOLD MINES LIMITED	LIVE	Lindsays Find	100
M27/0486	KALNORTH GOLD MINES LIMITED	LIVE	Lindsays Find	100
M15/1806	KALNORTH GOLD MINES LIMITED	LIVE	Spargoville	100
E27/0524	HERON RESOURCES LIMITED	LIVE	Kalpini	100% Au rights

Tenements Relinquished During the September 2016 Quarter

Tenement	Holder	Status	Date	Reason	Project	Interest %
P15/5766	KALNORTH GOLD MINES LIMITED	DEAD	8-Jul-2016	Surrendered	Spargoville	100

Tenements Acquired During the September 2016 Quarter- Nil

None of the mineral interests listed above are the subject of any farm-in / farm-out or joint venture arrangements.