Southern Arc
MINERALS INC.

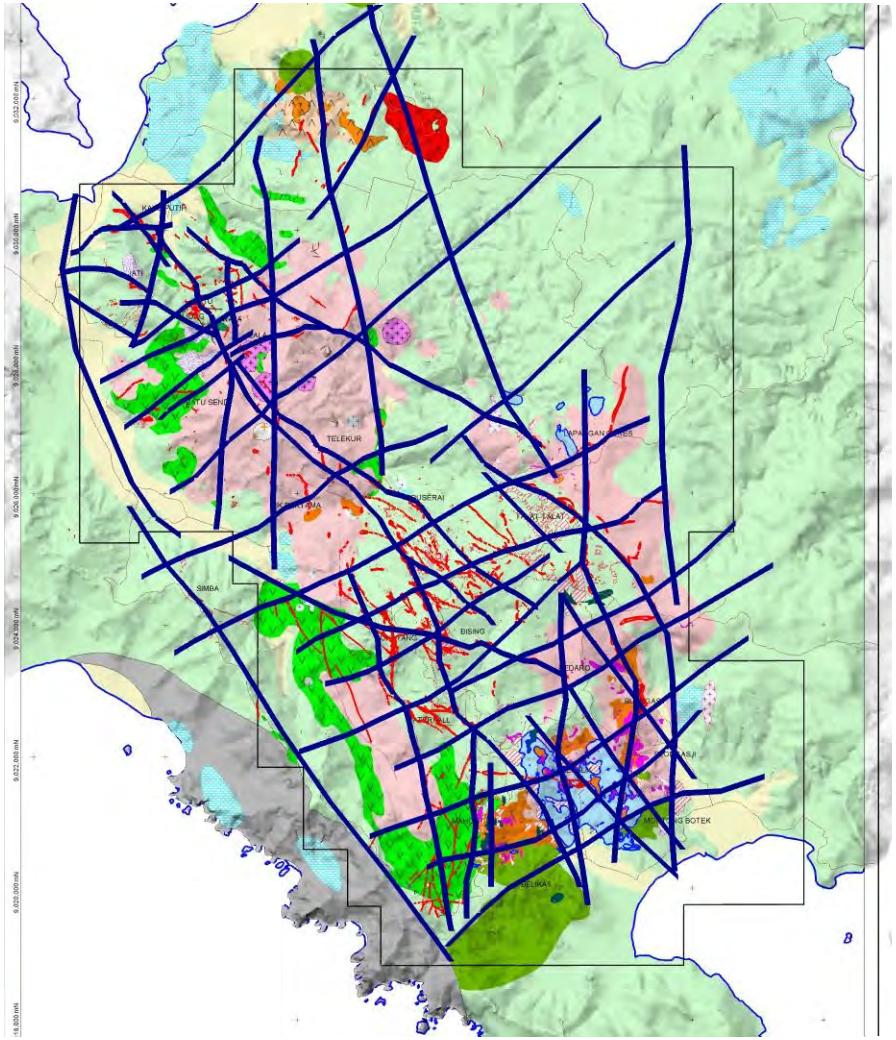
West Lombok Prospectivity Analysis & Porphyry Exploration Targets

Cautionary Note

Some of the statements contained in this presentation are forward-looking statements, such as estimates and statements that describe future plans, objectives or goals, including words to the effect that Southern Arc Minerals Inc. implies a stated condition or that it forecasts certain results could occur. Because forward-looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. Actual results relating to, among other things, reserves, resources, results of exploration, reclamation and other post-closure costs, capital costs and mine production costs could differ materially from those currently forecast in such statements by reason of factors such as changes in general economic conditions and conditions in the financial markets, changes in demand and prices for the minerals, litigation, legislative, environmental and other judicial, regulatory, technological and operational difficulties encountered in connection with mining activities, labour relations matters, costs and changing foreign exchange rates. This list is not exhaustive of the factors that may affect any of forward-looking statements. These and other factors should be considered carefully and readers should not place undue reliance on Southern Arc Minerals Inc. statements.

The technical information in this document has been reviewed by Southern Arc's President & Chief Operating Officer, Dr. Mike Andrews, PhD, FAusIMM, who has sufficient experience relevant to the style of mineralization under consideration and qualifies as a Qualified Person as defined by National Instrument 43-101.

Simplified Geology & Lineament Interpretation



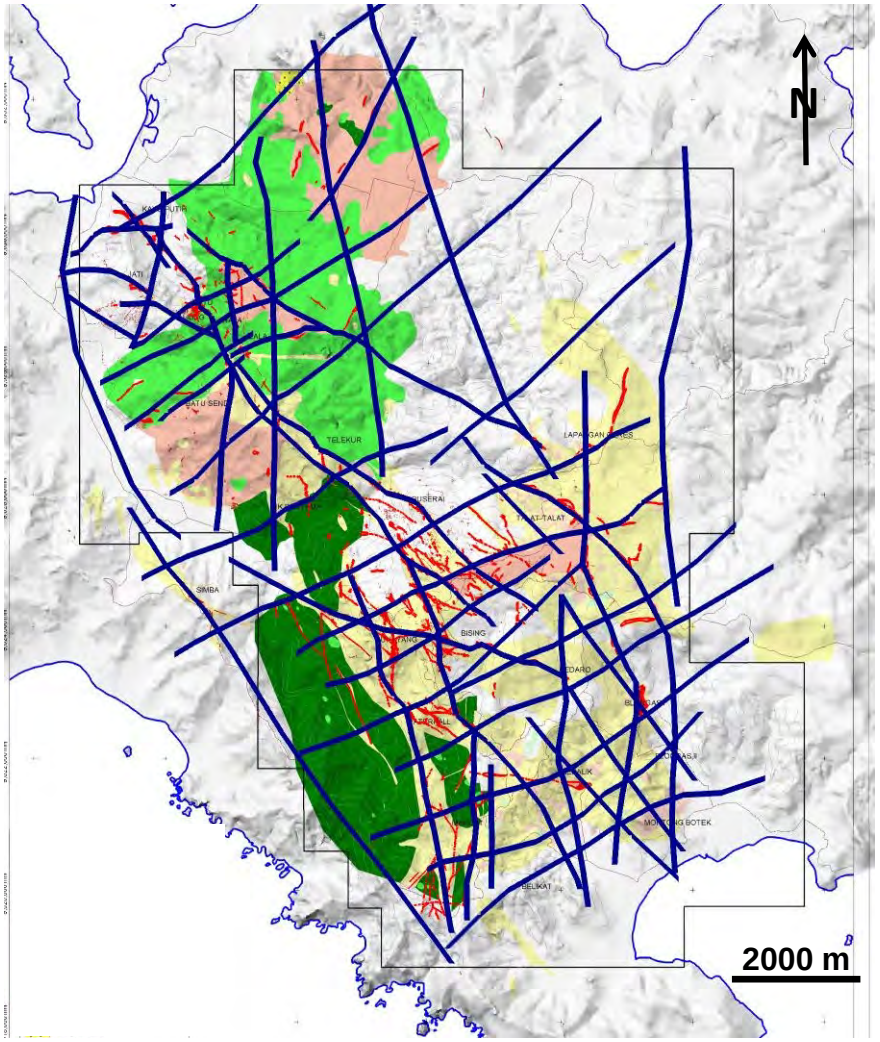
LEGEND :

- Andesite dyke
- Andesite
- Andesite porphyry
- Andesite volcanics
- Dacite Crowded
- Dacite Extrusive
- Dacite Porph
- Limestone
- Diorite
- Microdiorite
- HB FPS Diorite Porphyry Blongas-Mbotek type
- Dark diorite
- CGR Diorite
- Basalt
- Dacite
- Quartz Diorite 1
- Quartz Diorite 2
- MSB
- Polymict breccia
- Silicified boulders
- Volcanic breccia
- Clastic sediment
- Alluvium
- Lineament

Geologic-lineament

The geologic-lineaments are based on the distribution of intrusions, quartz-ledges / MSBs and hydrothermal alteration zones. These lineaments are inferred to coincide with deep-seated faults and fracture zones that have guided the emplacement of intrusions and related hydrothermal alteration / mineralization.

Simplified Hydrothermal Alteration & Lineaments



ALTERATION :

- Silica - clay
- Clay
- Epidote
- Chlorite
- Clay-chlorite
- MSB

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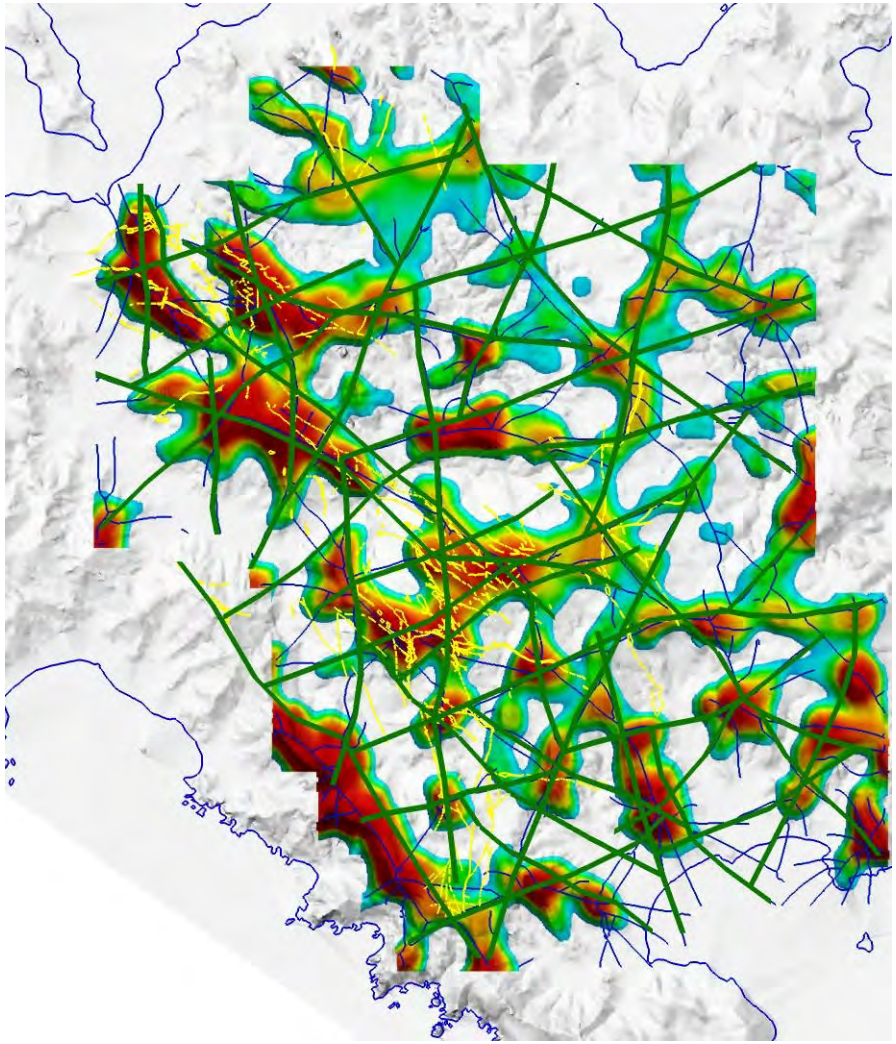
Large-wavelength Topographic Ridges & Lineaments



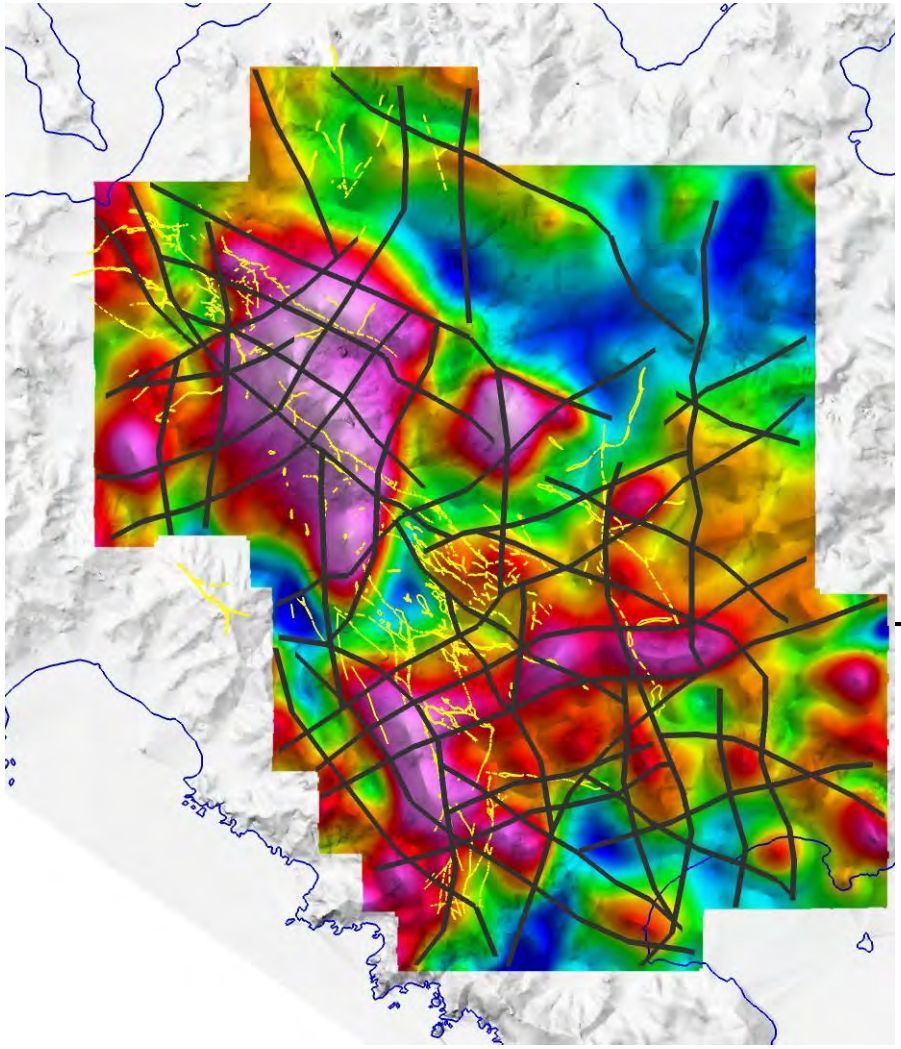
Topographic-lineament

The large-wavelength ridges are color-coded for relative height above the adjacent valleys (cyan to red indicates increasing relative height). The ridges were extracted at a wavelength of 1250 m using a top-hat transform, gray-scale morphological operator by Fathom Geophysics (2011). The dark-blue lines coincide with the axes of the large-wavelength ridges.

The quartz ledges / MSBs are indicated by yellow lines.

The lineaments are drawn to coincide with large-wavelength ridge alignments and disruptions in topographic trends.

Deep Residual RTP Magnetics & Lineaments



The residual of the reduced to the pole magnetics was created by applying a 250 – 1000 m band-pass filter (Fathom Geophysics, 2011). Dark blue to magenta indicate increasing magnetic response.

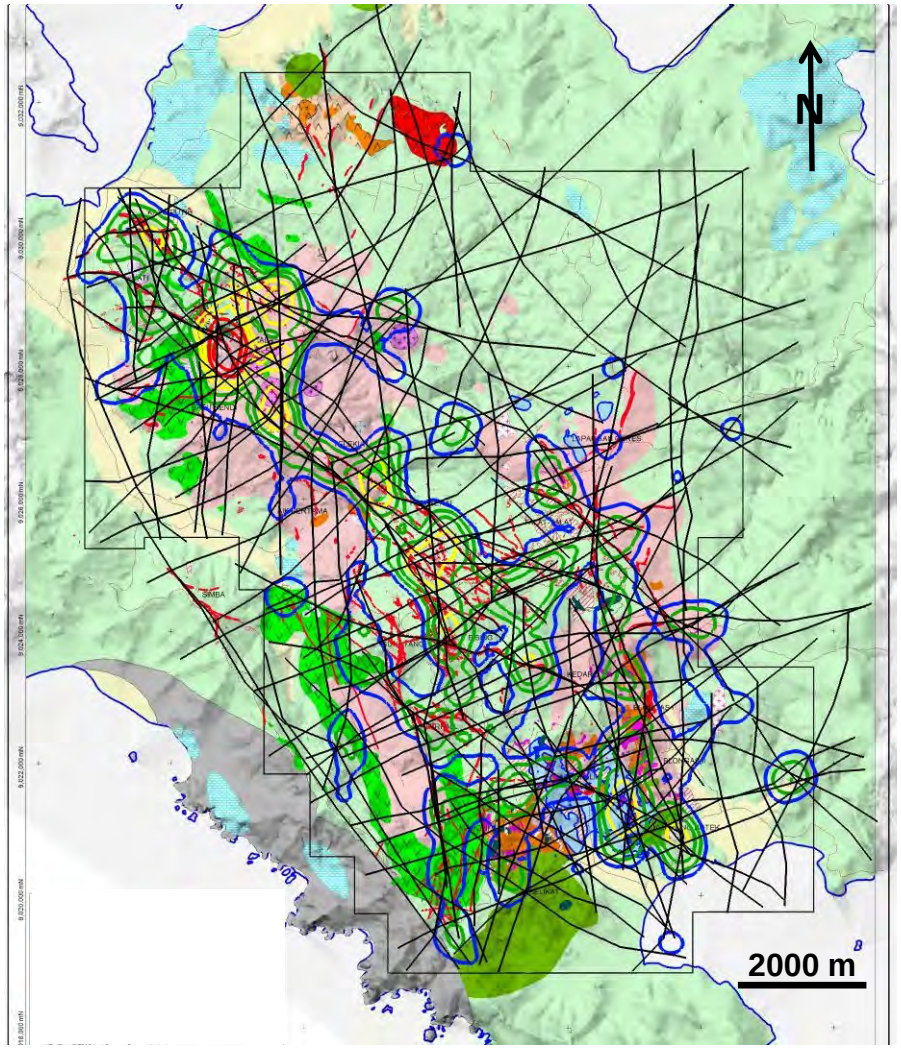
The quartz ledges / MSBs are indicated by yellow lines.

The magnetic-lineaments are drawn to coincide with deep magnetic gradients and the distribution of the high-level magnetic highs that are connected to larger magnetic highs at depth.

Potential magnetic stock / cupola (400 m search diameter)

Magnetic-lineament

Combined Lineaments & Fluid Pathway Scores



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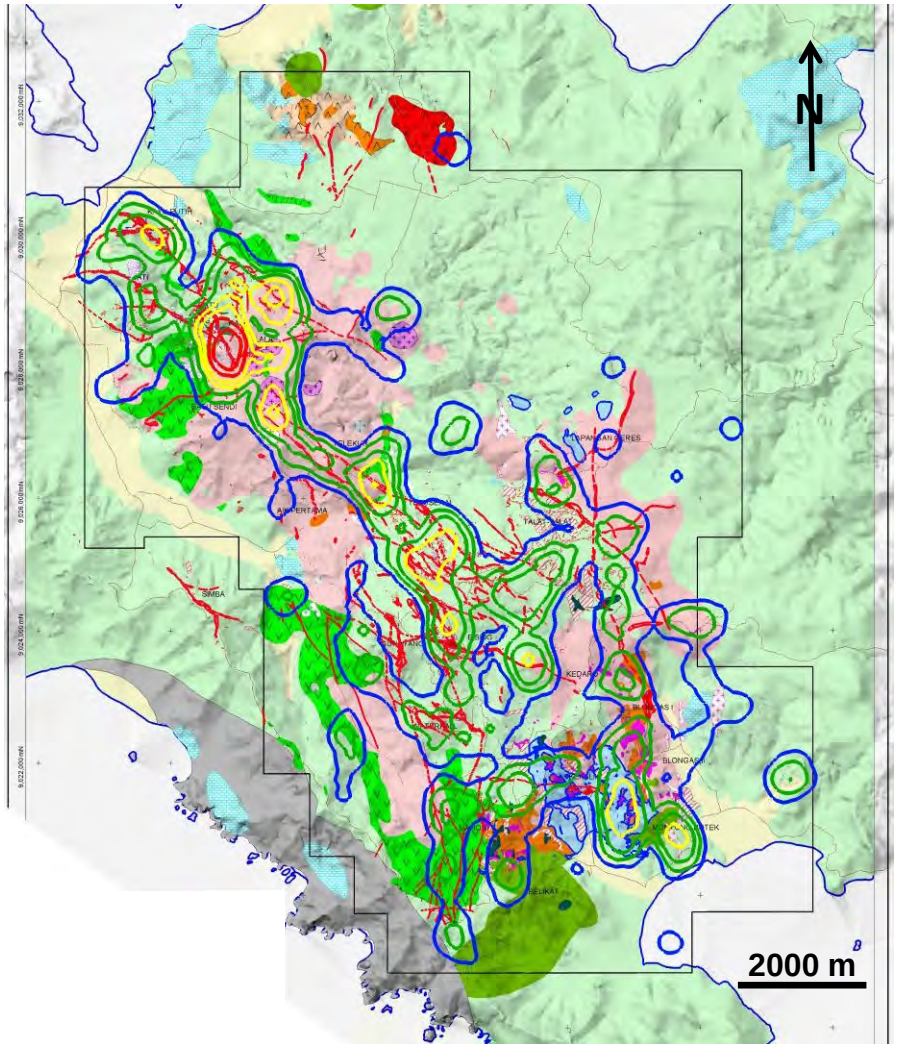
- Polymict breccia
- Silicified boulders
- Volcanic breccia
- Clastic sediment
- Alluvium
- Combined-lineament

Pathway Score-Contours

6
5
4
3
2
1

The pathway score-contours indicate the potential for structurally- controlled pathways to porphyry-related mineralization.

Fluid Pathway Scores Shown on Geology



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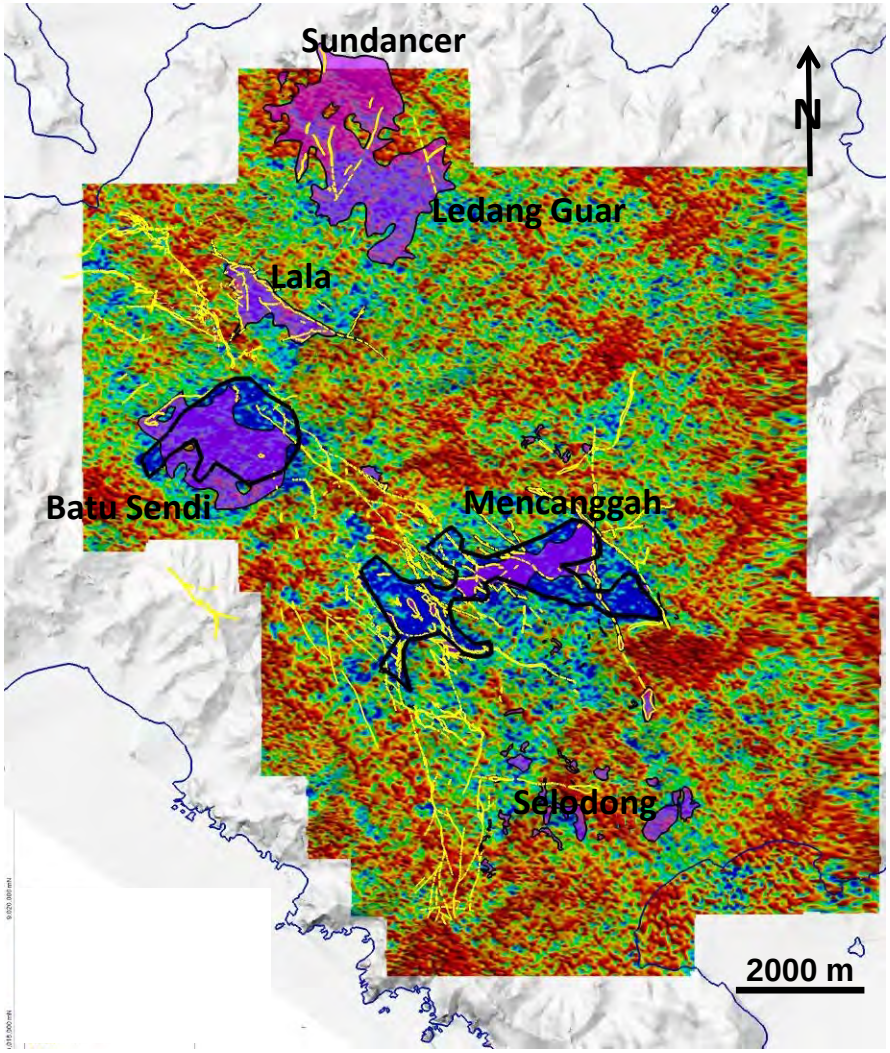
Quartz-ledges / MSBs & Radiometric K/Th Results



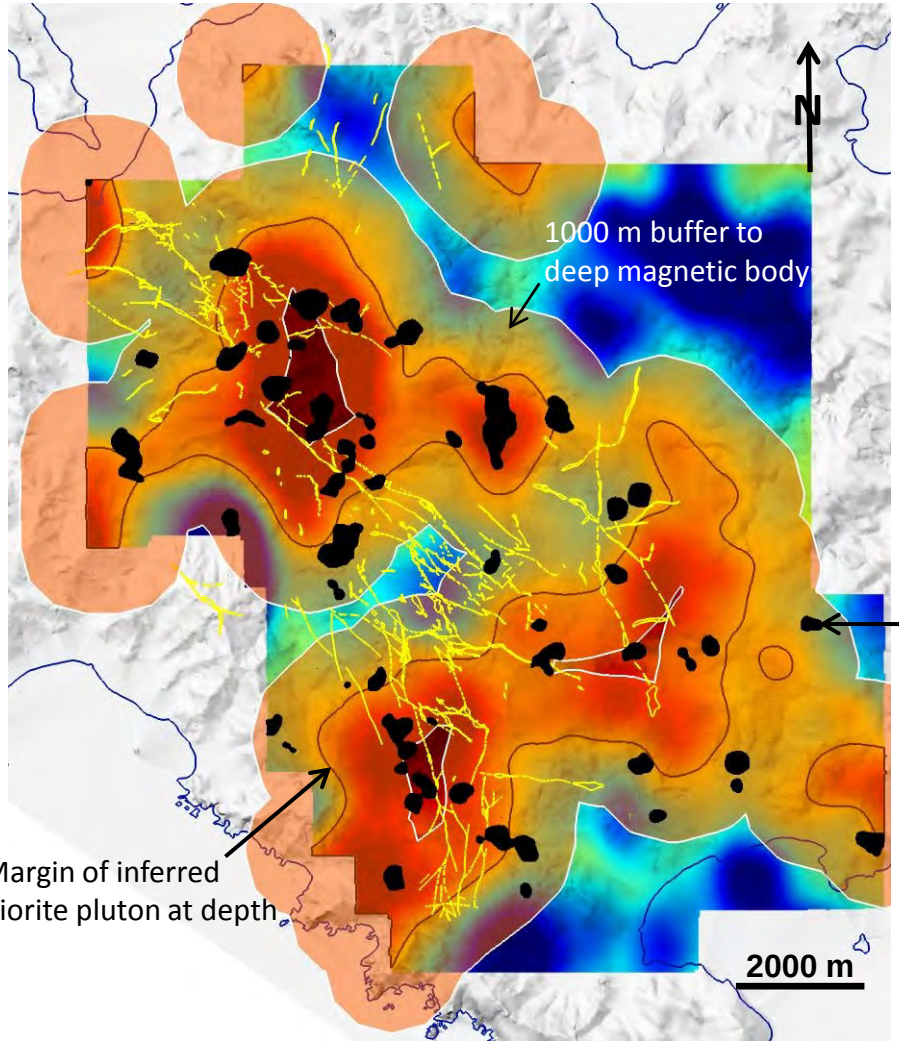
The silica-clay alteration zones indicate the loss of potassium (low K/Th) in the Mencanggah and Batu Sendi areas, which are characterized by advanced argillic alteration. These zones of intense hydrothermal alteration are inferred to be potential lithocaps to concealed porphyry systems.

The quartz ledges / MSBs are indicated by yellow lines.

Silica – clay alteration

Zone of low K/Th in radiometric image

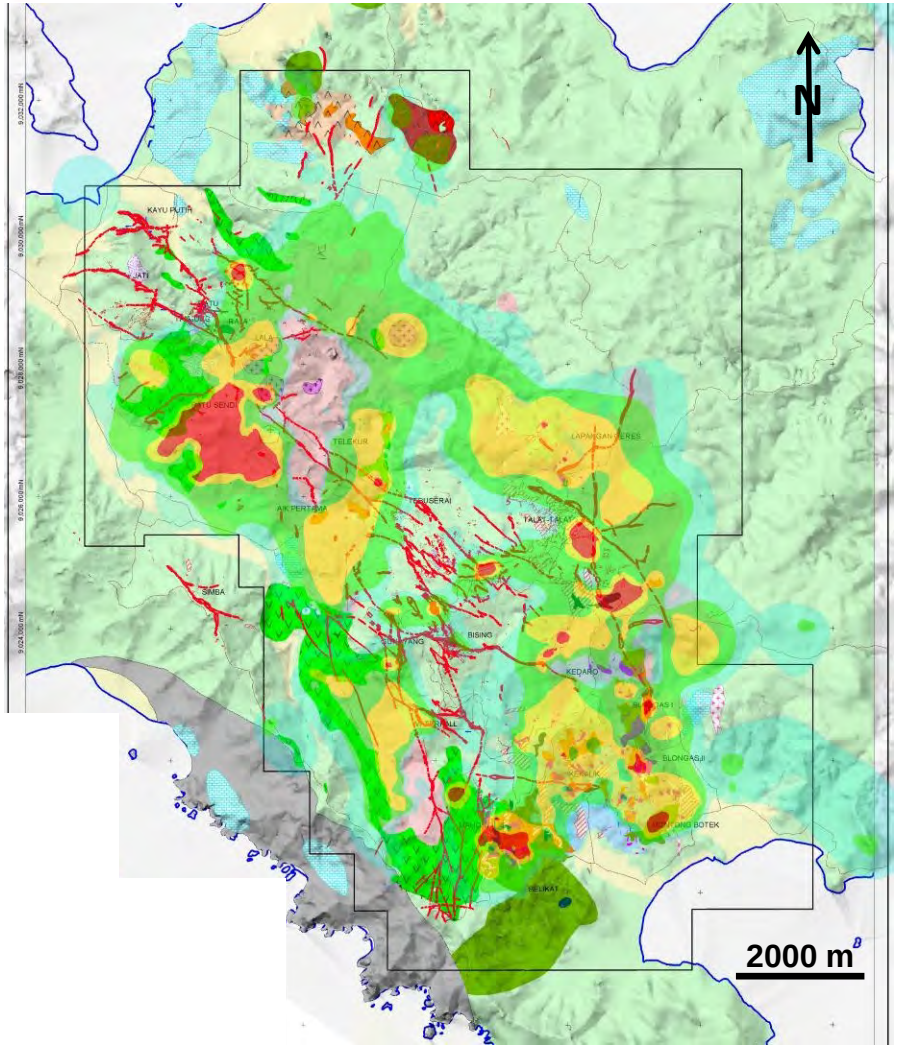
High-level Magnetic-highs with Radial-symmetry (Potential Cupolas) & Deep-level Magnetic Bodies (Inferred Plutons)



High-level, 'connected' magnetic-highs with radial-symmetry (potential stocks and cupolas) shown on a base map of deep-level magnetic-highs (inferred plutons).

The quartz ledges / MSBs are indicated by yellow lines.

Magmatic-hydrothermal Focus-scores Shown on Simplified Geology



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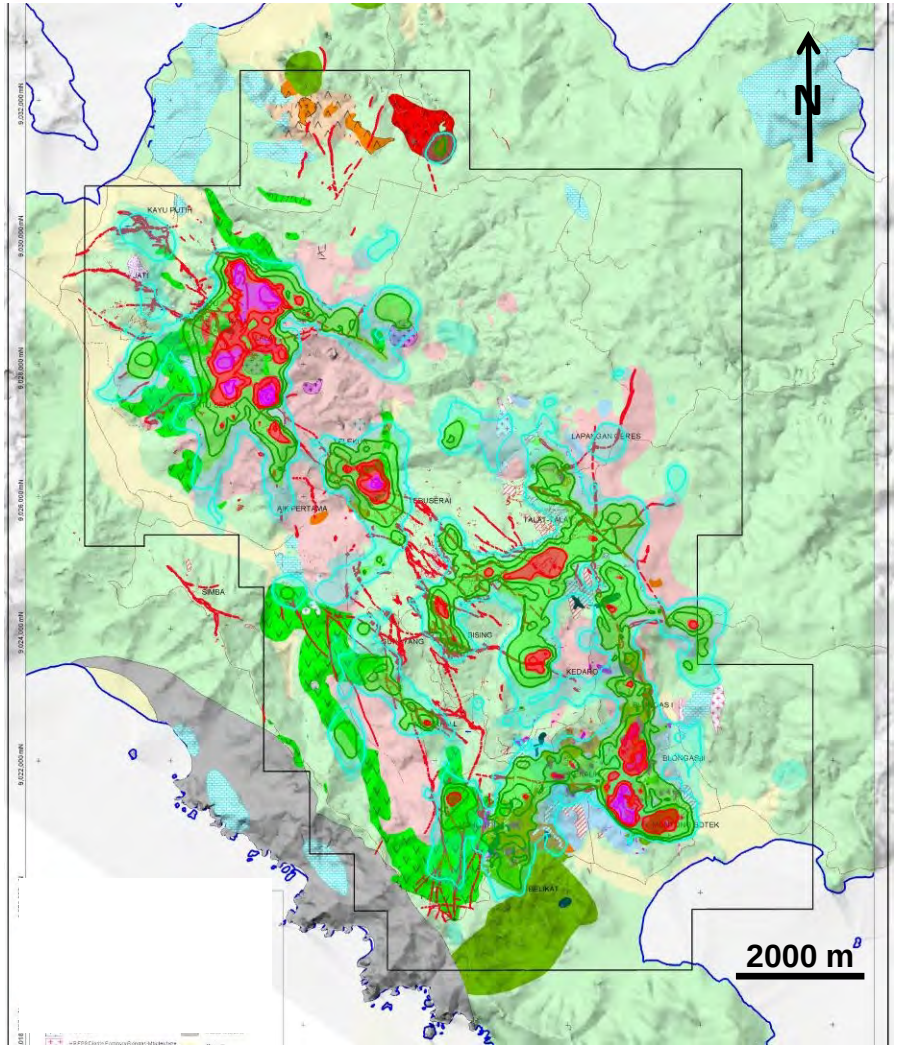
Focus Scores

5
4
3
2

The scores are derived by the number of overlapping favourable geological- and geophysical-features. The scores indicate the probability for the focusing of ascending magma and the development of a porphyry-system.

Pathway x Focus Scores Shown on Simplified Geology



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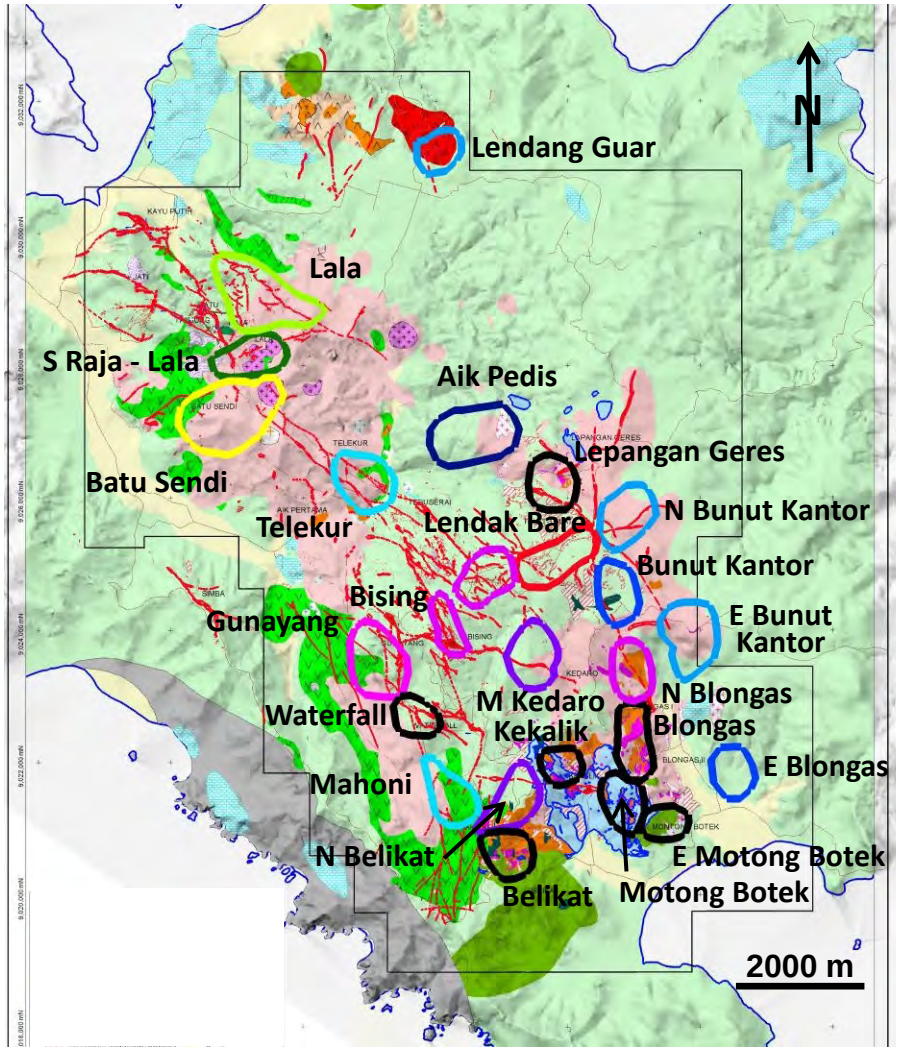
Pathway x Focus Scores

16 – 22.5
12 – 16
7 – 12
4 – 7

The scores are derived by multiplying the pathway-scores by the focus-scores. If any area lacks a potential pathway or focus, then the potential for a porphyry deposit is considered to be poor.

Porphyry Exploration Targets & Pathway x Focus Scores Shown On Simplified Geology



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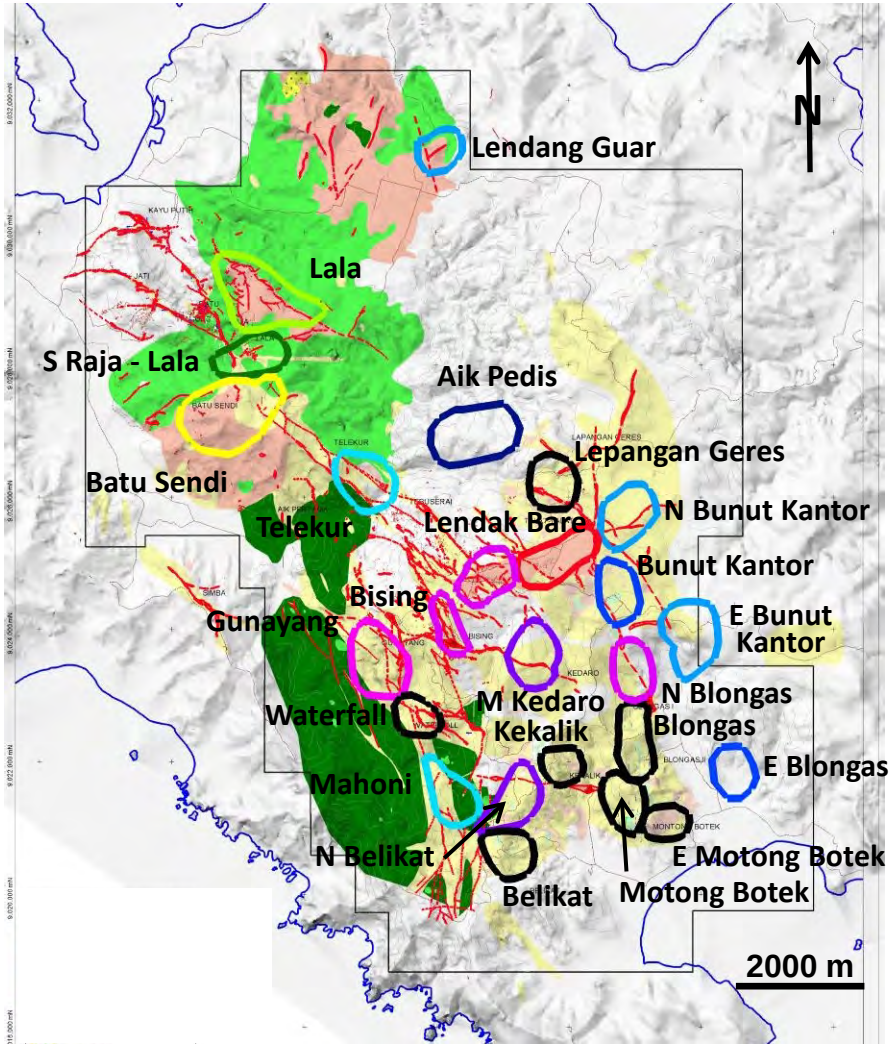
Pathway x Focus Scores

- 16 – 22.5
- 12 – 16
- 7 – 12
- 4 – 7

Target Classification

- A1
- A2
- A3
- A4
- B1
- B2
- B3
- C1
- C2
- C3
- C4
- D

Porphyry Exploration Targets & Pathway x Focus Scores Shown on Hydrothermal Alteration



ALTERATION :

- Silica - clay
- Clay
- Epidote
- Chlorite
- Clay-chlorite
- MSB

Target Classification:

A = follow-up mapping required (prior to drill-testing);
B = ridge / spur soil sampling;
C = reconnaissance needed;
D = target previously tested by drilling.

The targets are ranked by decreasing priority for each classification (1 = high-priority and 4 = lower-priority).

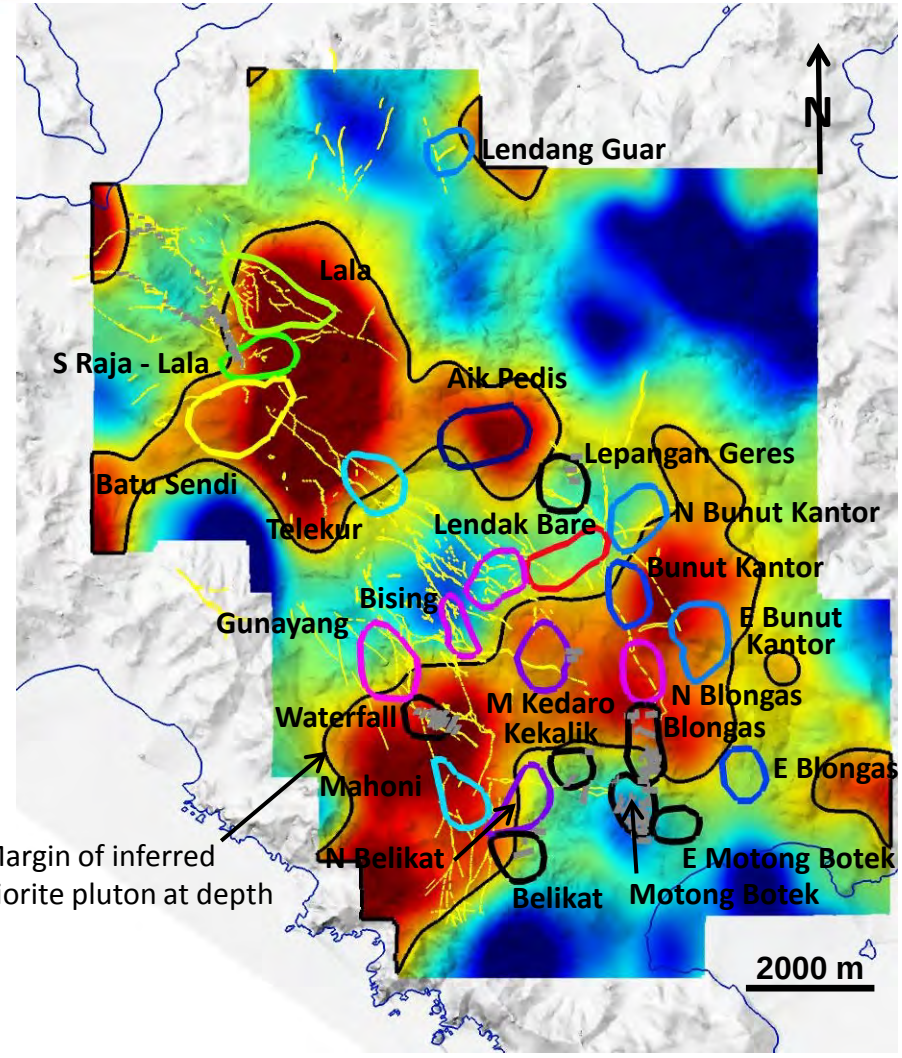
Pathway x Focus Scores

- 16 – 22.5
- 12 – 16
- 7 – 12
- 4 – 7

Target Classification

A1	C1
A2	C2
A3	C3
A4	C4
B1	D
B2	
B3	

Porphyry Exploration Targets Shown on Deep-level Magnetics



The most prospective porphyry-systems drilled to date (Motong Botek and Blongas) occur near the margin of the deep-level magnetic high (inferred diorite pluton). Several targets that also sit near this same margin have yet to be drill-tested. These include the *A-class* targets of North Belikat, Bising, West and East Lendak Bare, and Gunayan. The *B-class* targets in the Batu Sendi, South Raja and Lala areas lie within mapped diorite near the western margin of a deep-level magnetic body. The Telekur *C-class* target lies along the south-eastern margin of this northern diorite body.

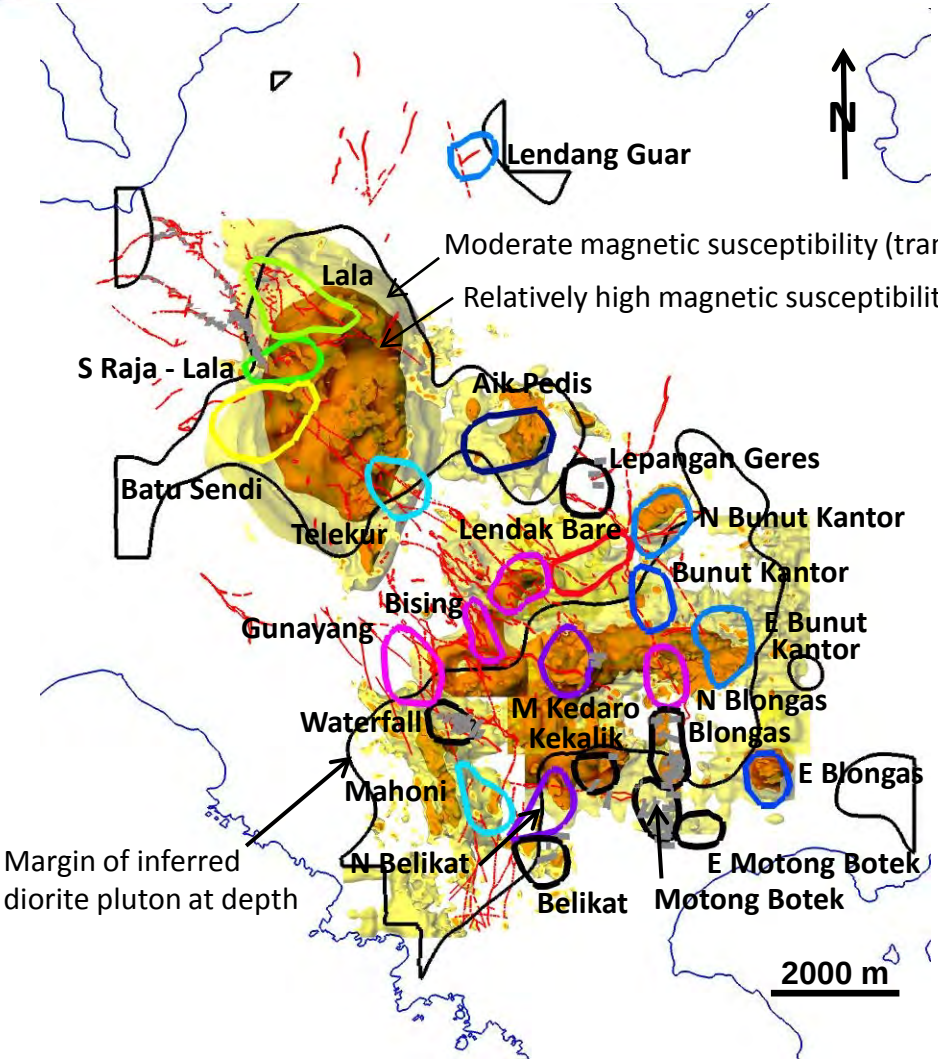
The quartz ledges / MSBs are indicated by yellow lines.

Completed drill-holes are shown as grey line-traces.

Target Classification

A1	C1
A2	C2
A3	C3
A4	C4
B1	D
B2	
B3	

Porphyry Exploration Targets & 3D Magnetic Inversion Models



The inversion models were produced by Fathom Geophysics (2011). The transparent yellow shells indicate moderate magnetic-susceptibilities and the solid orange shells indicate higher magnetic-susceptibilities.

The quartz ledges / MSBs are indicated by red lines.

Completed drill-holes are shown as grey line-traces.

Target Classification

A1	C1
A2	C2
A3	C3
A4	C4
B1	D
B2	
B3	

Porphyry Potential, SW Lombok
Conclusions & Recommendations

- Spatial coincidence between major geological-, topographic- and geophysical-lineaments
  - Geology controls topographic- and magnetic-expressions
  - Combined lineament density used as an indication of favorable pathways for porphyry emplacement
- Intrusion distribution, magnetic / radiometric expression and silica-clay alteration indicate zones of focused magmatic-hydrothermal fluid-flow
  - Diorite pluton margins, quartz diorite and dacite porphyries, high-level magnetic highs near deep-magnetic bodies, silica-clay alteration zones and zones of low K/Th radiometric response indicate focus zones
- Eighteen untested porphyry targets created on basis of prospectivty analysis
  - Pathway x focus scores, three-dimensional magnetic inversions and molybdenum-in-soil results used to generate exploration targets
  - Targets classified by recommended future exploration program and ranked by prospectivity within each target class
  - The most prospective targets include Makam Kedaro, North Belikat, Bising and West Lendak Bare (*A-class)*; Batu Sendi and Lala (*B-class*); and Mahoni and Telekur (*C-class*).
- Future exploration to include mapping, sampling, SWIR-clay analyses and drilling
  - Detailed mapping of *A*- and *B-class* targets to focus on porphyry-style quartz veins and fractures, distribution of quartz-bearing porphyritic intrusions and dike swarms
  - Ridge and spur soil sampling in *B-Class* targets to determine if metal zoning is present
  - Consider pyrophyllite-alunite-dickite-bearing silica-clay zones as potential lithocaps to porphyry systems
  - Reconnaissance mapping of *C-class* targets to determine potential and future exploration program