



NIUMINCO GROUP LIMITED

CORPORATE PRESENTATION February 2024



**Gold producer, developer and explorer with assets in
Australia, NZ and PNG**

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The information in this report that relates to exploration results is based on Information reviewed by John Nethery (BSc., Dip. Ed., FAusIMM (CP), FAIG, FSEG, MGSA) who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Nethery is a director of Niuminco Group Limited and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity 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. He consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Australian, PNG & NZ Producer and Explorer



- **EDIE CREEK MINE** – Expanding, producing **gold and silver** mine – operated by Niuminco for past 12 years. New **10-year ML renewal granted July 2022**
- **CHILLAGOE CALCIFER PROJECT** – 90% interest in **3 MLs** in **FN Qld**, highly prospective for **gold/copper** with scattered historic copper workings.
- **NEW ZEALAND OPHIR GOLD PROJECT** – Acquiring 100% interest in potential **+100,000 oz Au** mine with new **10-year Mining Permit** & historic workings
- **SELLHEIM COPPER/GOLD PROJECT**–100% interest in 3 MLs and 2 EPMs, Qld

Edie Creek – An Operating Gold/Silver Mine



Epithermal Gold and Silver Deposit

- Edie Creek is located in the Morobe Province, approximately **5km from Harmony Gold's Hidden Valley Mine**, which produced ~200Koz of Au, 2Moz Ag in 2022.
- Edie Creek comprises **ML 511** covering 3.89 sqr kms. It includes **high grade Au-Ag veins** and **lower grade bulk tonnage options** with **substantial economic potential**.
- Within the consolidated ML 511, Niuminco has developed a **100-person camp, mining/processing infrastructure, maintenance and administration facilities**.
- Measured scale-up of mining & processing over the past 10 years.
- AUD\$10M spent on exploration** by Niuminco.



Edie Creek Production



Significantly Increased Capacity

- Edie Creek processing capacity is now up to **55 tpd** in a single, 11-hour shift.
- Niuminco has created flexibility in its operations to become **cash flow positive** with **either low-volume, high-grade** throughput or **higher-volume, lower-grade** throughput.
- At current gold prices and operating costs, **break-even production at Edie Creek is approx. 20oz Au per month (or 20g Au per day).**
- Edie Creek operations were **cash-flow positive for the 12 months ending 30 June 2022.**



The increase in operating capacity can significantly increase the gold/silver production potential going forward.

Increased Processing Capacity



- **Increased processing capacity** as a result of additions and modifications to processing infrastructure in recent years and proposed future purchases including:
 - Past commissioning of 5tph ball mill and larger vibrating feeder and feed shoot
 - Past upgrade of the Gekko ISP concentrator plant
 - Planned future purchase of the **A\$1.0M “Acacia” cyanide processing plant.**

Increased & more reliable Mining Capacity



Increased and more reliable mining capacity from A\$0.2M planned refurbishment of all items of mining fleet acquired in recent years :

- 2 x Komatsu D85 bulldozers
- Komatsu D65 bulldozer
- 1 x 40t and 2 x 30t articulated tip trucks
- 1x 30t Komatsu fuel/services truck
- 1x 6 tonne and 1x 21t, 1 x 30t & 1 x 35t excavators
- Komatsu wheel loader



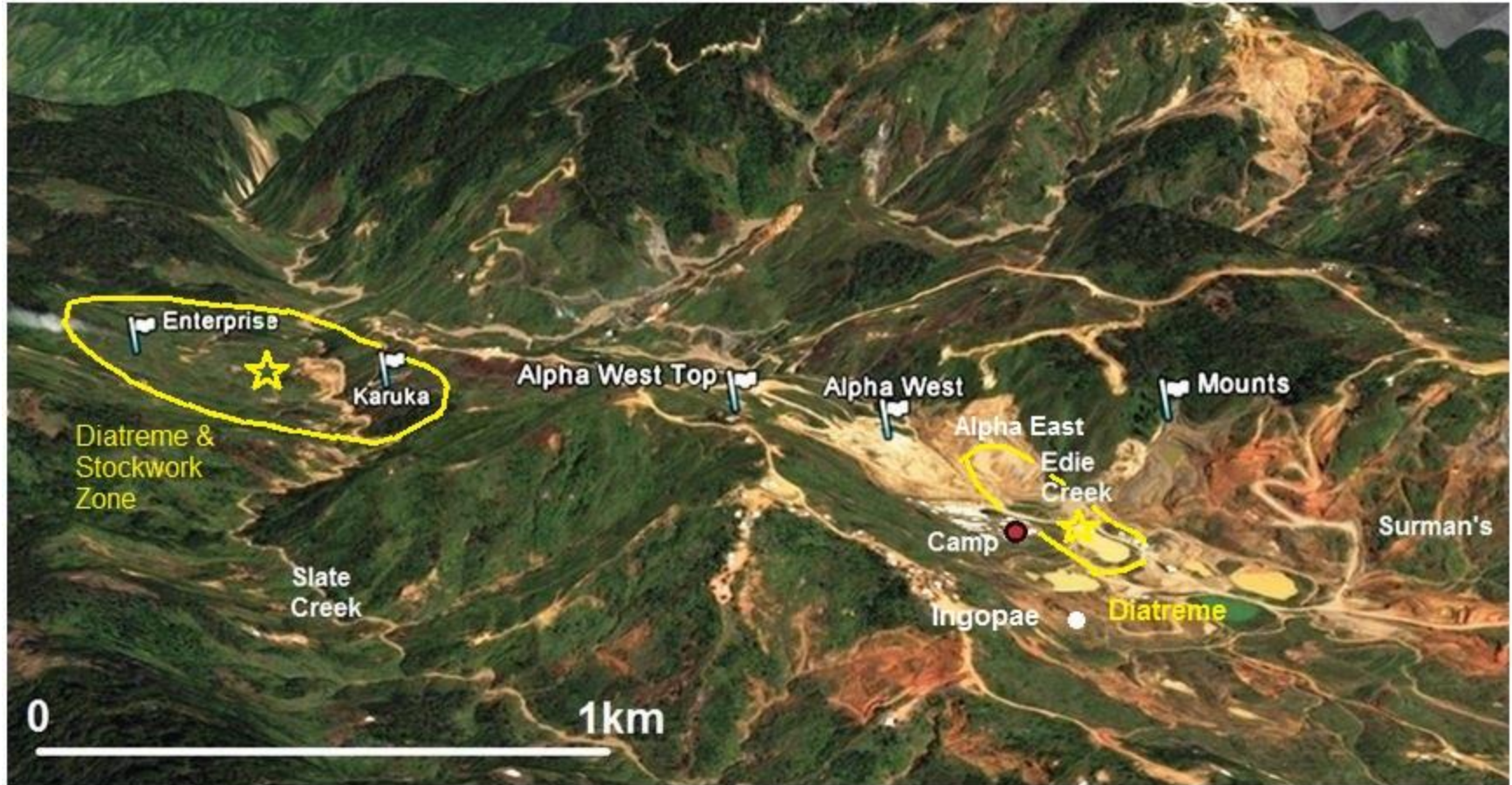
Increased & more reliable Mining Capacity



- Planned purchase of 1x Isuzu truck, 1x utility vehicle (A\$0.1M)
- Planned purchase of an alluvial mining plant
- Acceleration of current mining of medium to high grade vein/lode systems, and
- Mining of recently discovered vein systems & bulk tonnage areas

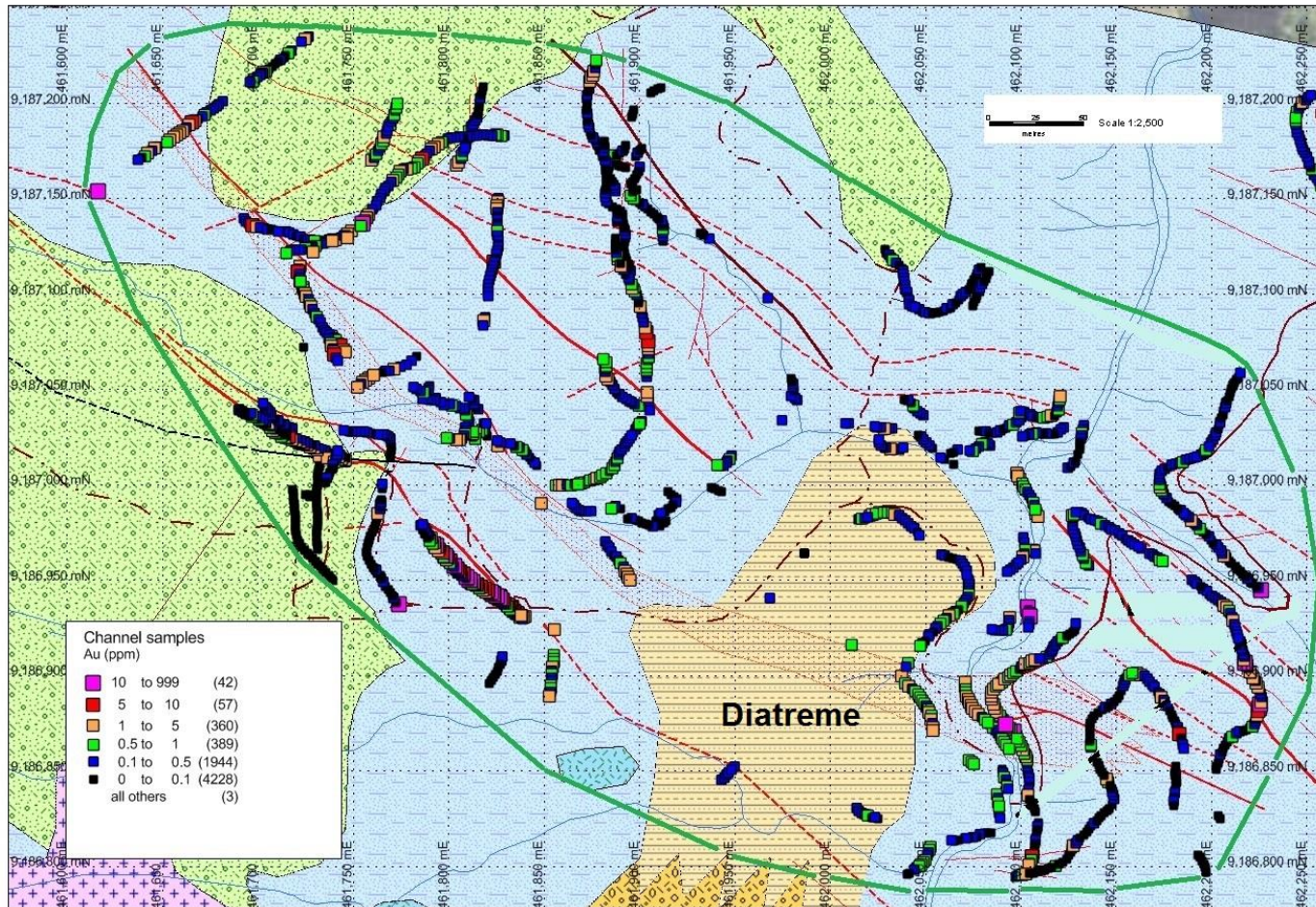


7 known sheetlike epithermal veins & 2 bulk-tonnage diatreme-stockwork zones



Partly mined & drilled higher grade vein systems (Enterprise, Karuka, Alpha West, Alpha East, Mounts, Surmans and Ingopae) & bulk tonnage targets (Karuka-Enterprise, Edie Creek)- 

Karuka – Enterprise Diatreme & Stockwork



1300 traverse chip samples over generally 2 metre intervals for cumulative 2600 metres within the 600m x 300m ovoid target area average 0.53 grams/tonne gold

Edie Creek Exploration & Drilling Programs



- Edie Creek is **highly underexplored** – only 51 drill holes for approx. 6,800m since drilling commenced in 1988.
- Testing for **extensions of known vein and lode systems, bulk tonnage and copper-gold porphyry targets** using Niuminco’s own drill rigs and crew.
- **62-hole 2600m Resource drilling program planned for 2023/4.**
- **Very promising results** from 6 holes in the **Enterprise vein system** and 2 holes into the Karuka/Enterprise stock-work, **confirming potential of this bulk-tonnage target.**
- **Exciting new, large vein discovered at Karuka - 4.11g/t Au, 125g/t Ag**

Edie Creek Drilling Programs



- Niuminco crew drilling EDD024 at Karuka/Enterprise stock-work & diatreme.
- EDD024 intercepted **48m @ 1.72g/t** from surface.
- **Future focus** on this area and **copper/gold porphyry** targets

- Drilling one of the six holes in the **Enterprise vein system** (right).
- All 6 holes had **high grade intercepts**
- **Newly discovered Karuka vein** to be drilled

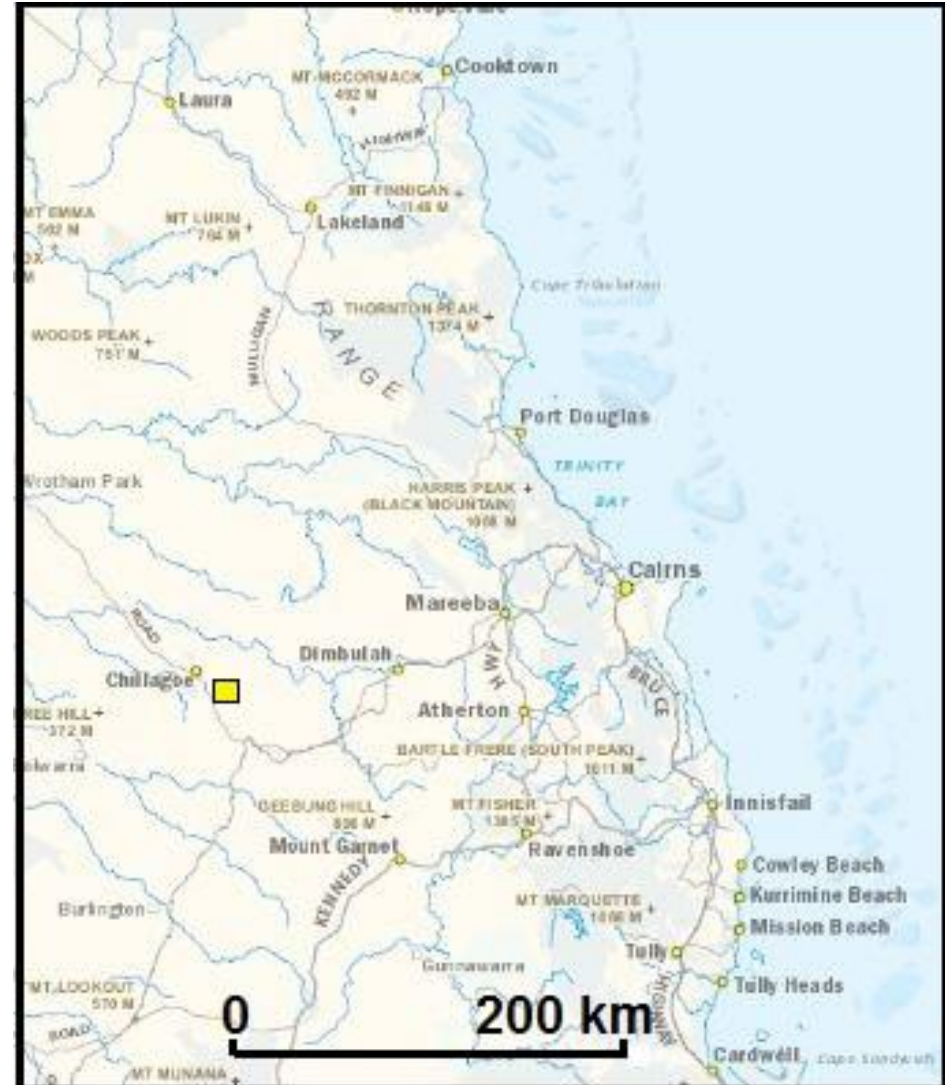


Calcifer Mining Leases, Far North Qld, Aust.



**GOLD – COPPER – TIN
PORPHYRY – SKARN - BRECCIA**

- **NIUMINCO GROUP LTD (90%)**
- **AUSTRALIAN FINEGRAIN MARBLE P/L (10% Carried)**
- **CALCIFER Mineral Field – 10km from Chillagoe - MLs 20513, 20515, 20516**
- **Sonya Hills & Hobson's (1 km²) - Historic small copper workings**
- **Past surface reconnaissance scale mapping, positive rock chip sampling & peripheral shallow Reverse Circulation drilling**



CHILLAGOE DISTRICT

Calcifer is 25km from Red Dome & Mungana

(+2M ozs Au)



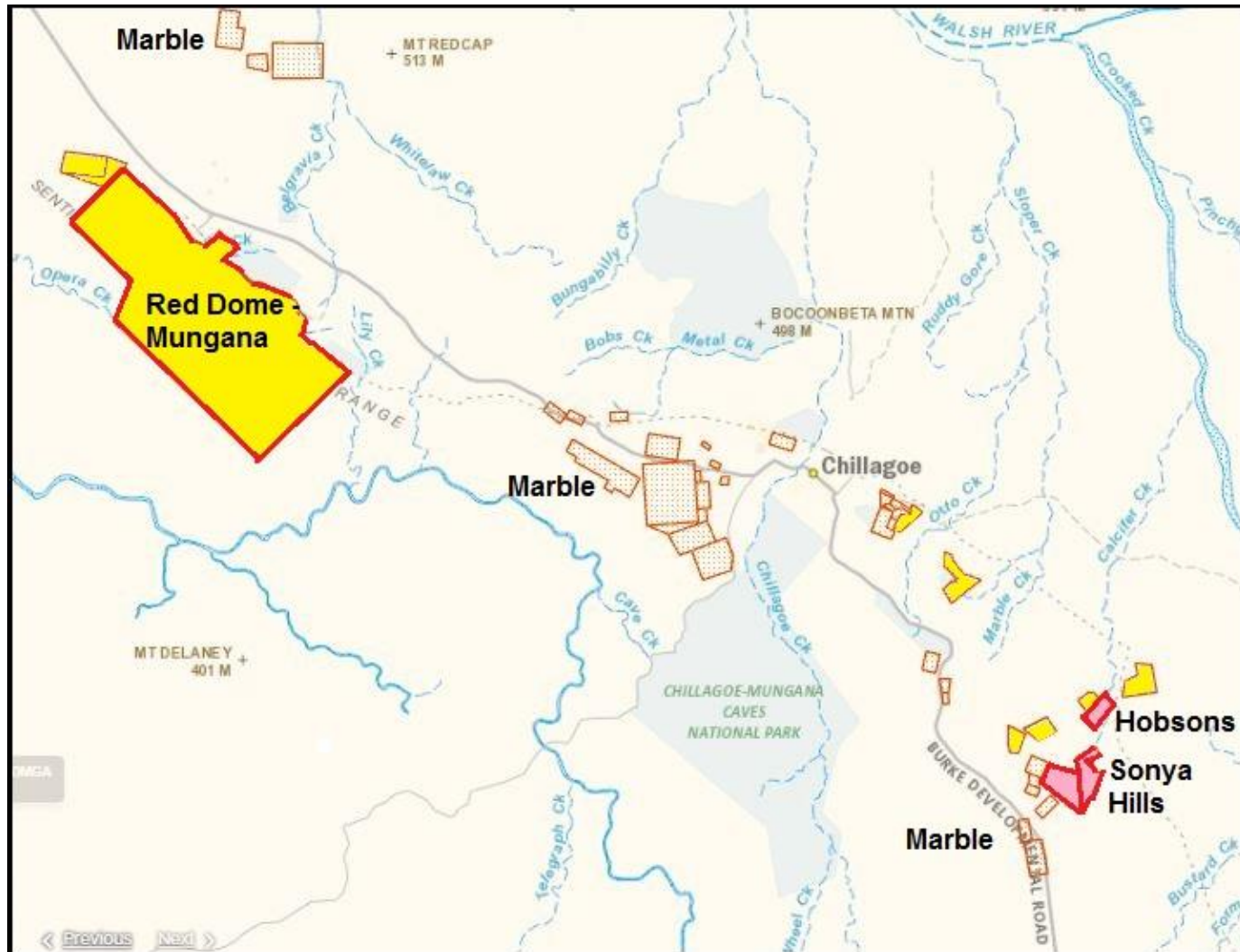
Gold &
base
metals



Marble



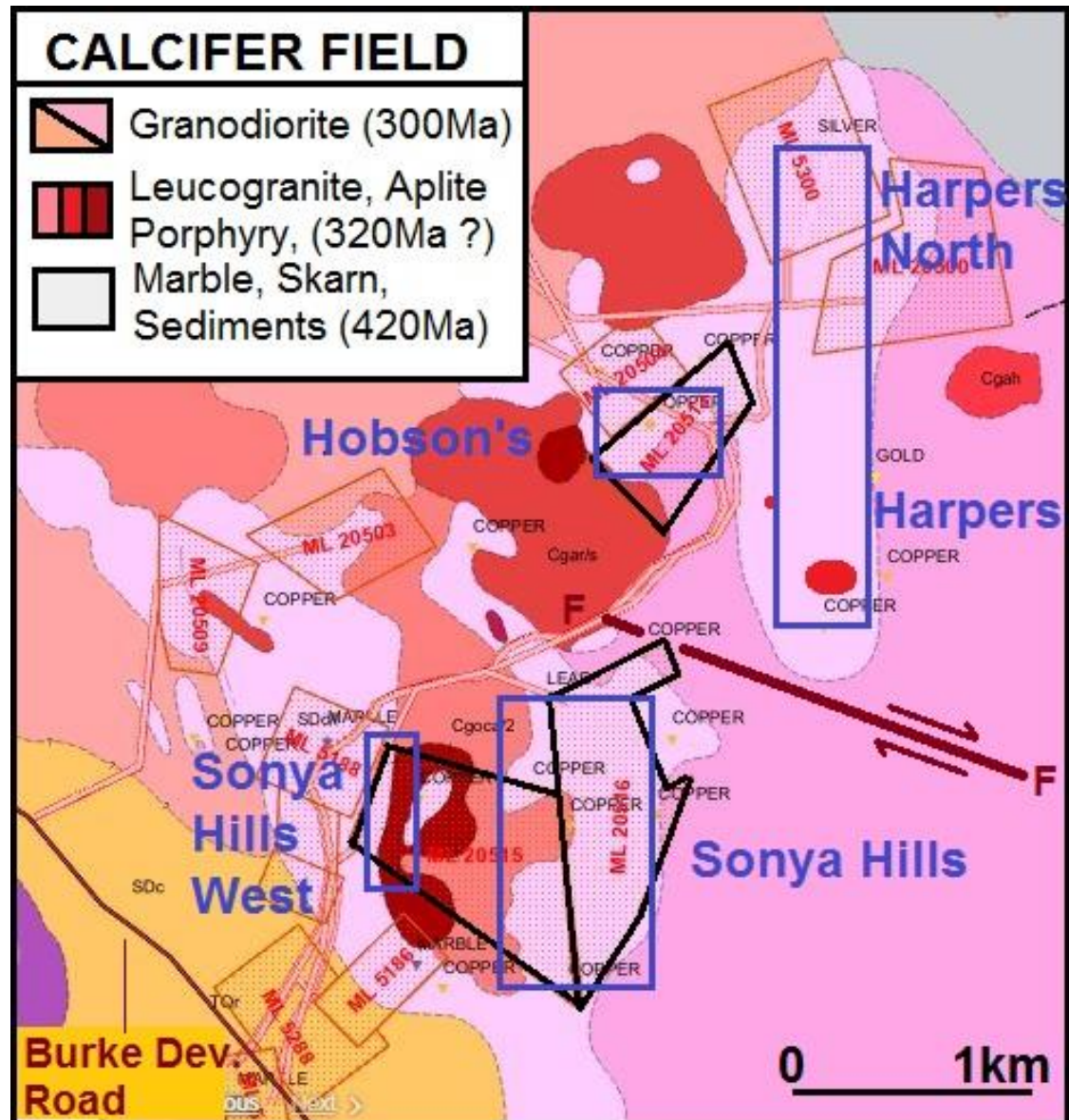
Blanket
cover by
EPMs



Sonya Hills and Hobson's Mining leases



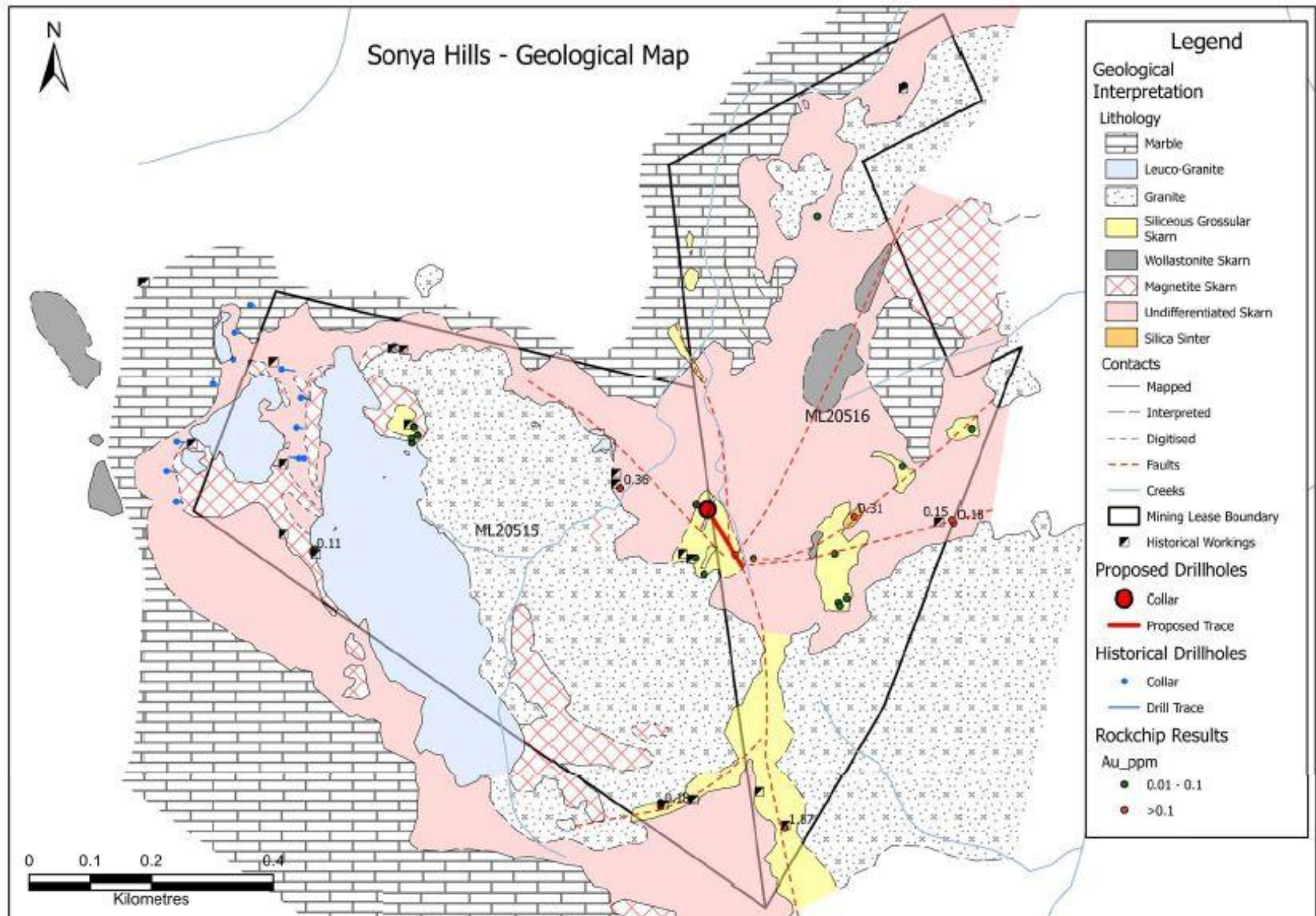
- Multi-phase magma bodies
- Small plugs of gold – bearing leucocratic microgranite, porphyry and aplite
- Wedge of Chillagoe formation sedimentary rocks
- Complex of mining leases, mainly dormant marble leases



Sonya Hills Exploration Programme



- Detailed mapping confirms model & initial drillhole planned



Calcifer - Summary



- Mining Leases (3) with small copper pits over +1 km²
- Surrounded by dormant leases mainly for marble
- Porphyry – skarn – breccia alteration zones **roughly the same size and type as Red Dome (+2M oz Au)**
- Leucogranite, aplite and porphyry inferred to be O'Briens Supersuite the local source for **gold & tin**
- **Rock chip sampling shows broad spread of gold to maximum 8.9 g/t and anomalously high copper.**
- **Multiple strongly anomalous broad gold, tin & copper drill intercepts from previous drilling.**
- **Drill target defined** by geology mapping & sampling

- **Highly Prospective Project in New Zealand**
 - The Ophir Gold Project is located in the **Otago Goldfields** of NZ
 - New **10-year Mining Permit** commencing March 2021
 - New surrounding **5-year exploration permit** commencing July 2021
 - On S-E extension of major shear structure from **adjoining 3.0M oz Au Santana Minerals' deposits**
- **Targeting Gold Production in 2024/5**
 - 2-year development plan for the Ophir Gold project – +100,000 oz Au potential
- **Significant Exploration Upside**
 - Planned extension drilling along strike and down-dip of the brittle shear zone-hosted (orogenic) gold deposit to **define a JORC 2012 Resource.**



OPHIR GOLD PROJECT - New Zealand



- **Open grazing country**
 - Minimal outcrop of host metamorphic rocks
 - Gold-bearing quartz veins outcrop sporadically



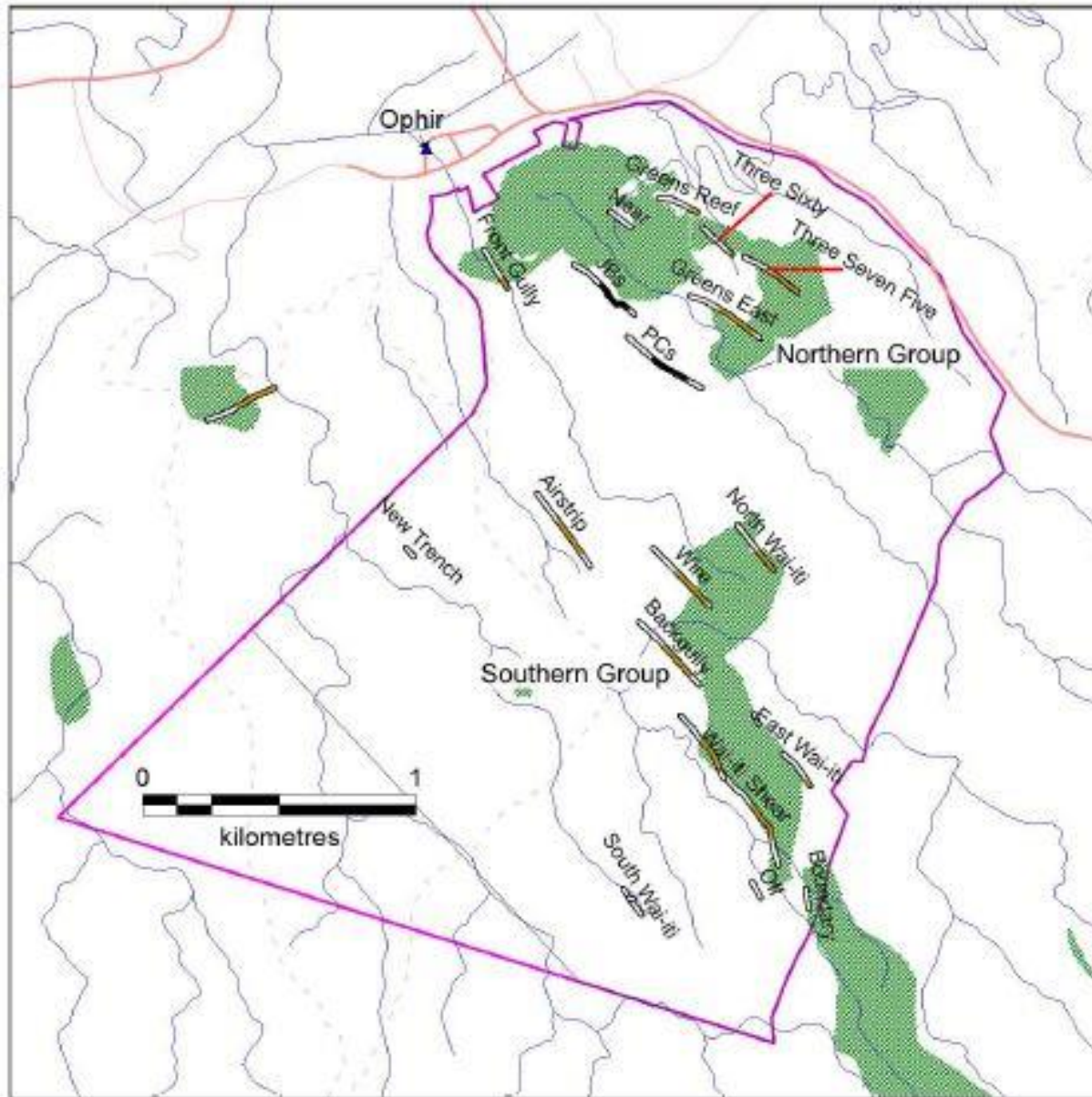


OPHIR GOLD PROJECT - New Zealand



- **MP60348 / EP60640**
 - 15 known gold – bearing shear zones
 - Wai-ihi in MP 60348
 - EP 60640 6 sq km

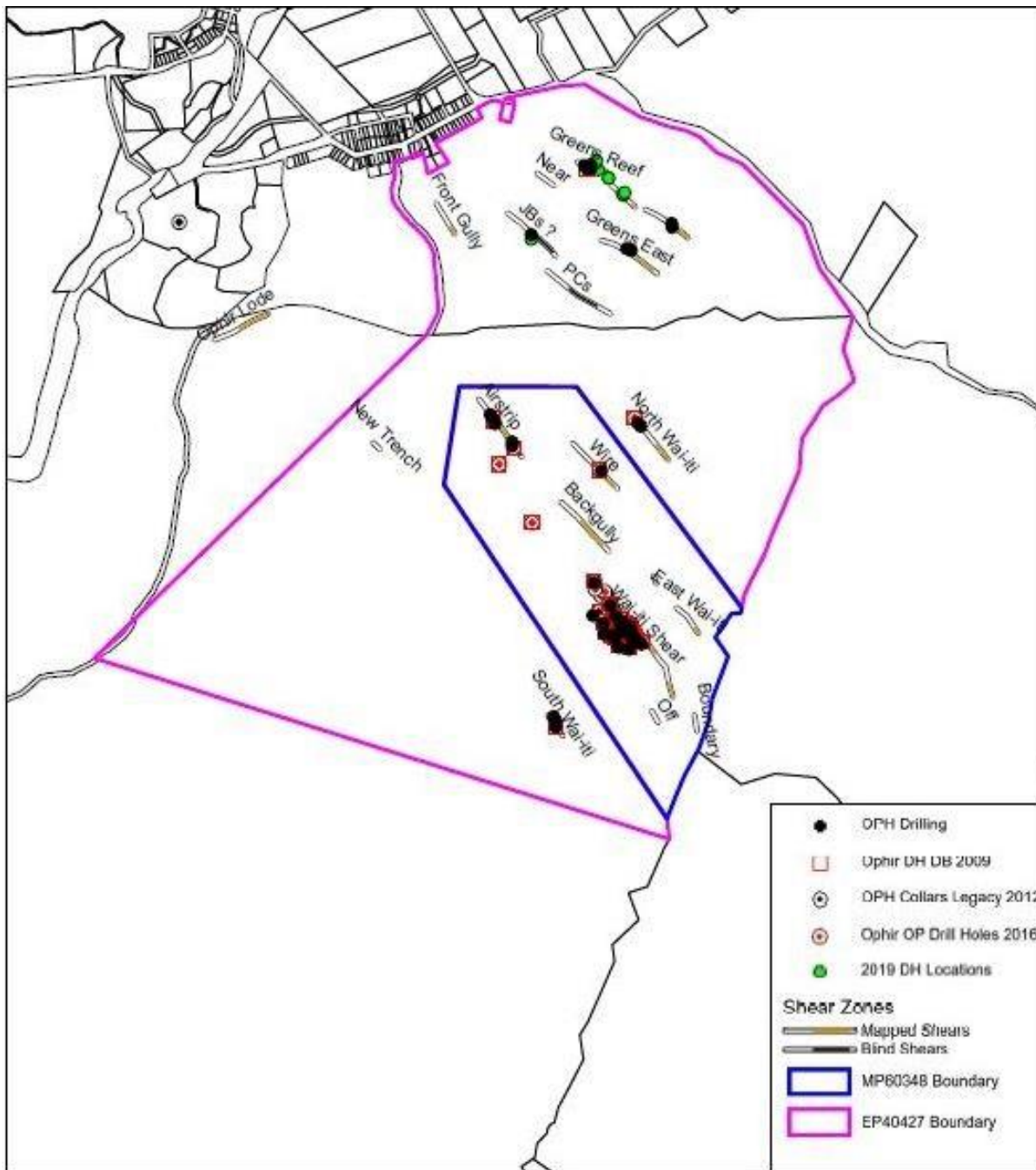
OPHIR GOLD PROJECT - New Zealand



- **Lithology Control**
 - Green schist unit shown
 - Gold-bearing quartz veins seem to be controlled by green schist (altered basalt) boundary with other metamorphic rock units
 - Potential for low grade sheeted veinlets zones throughout green schist.



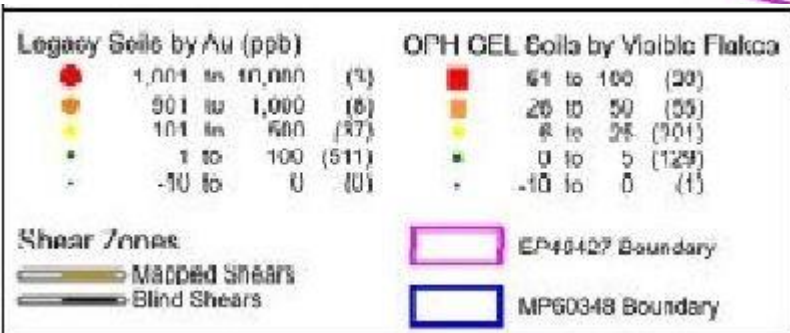
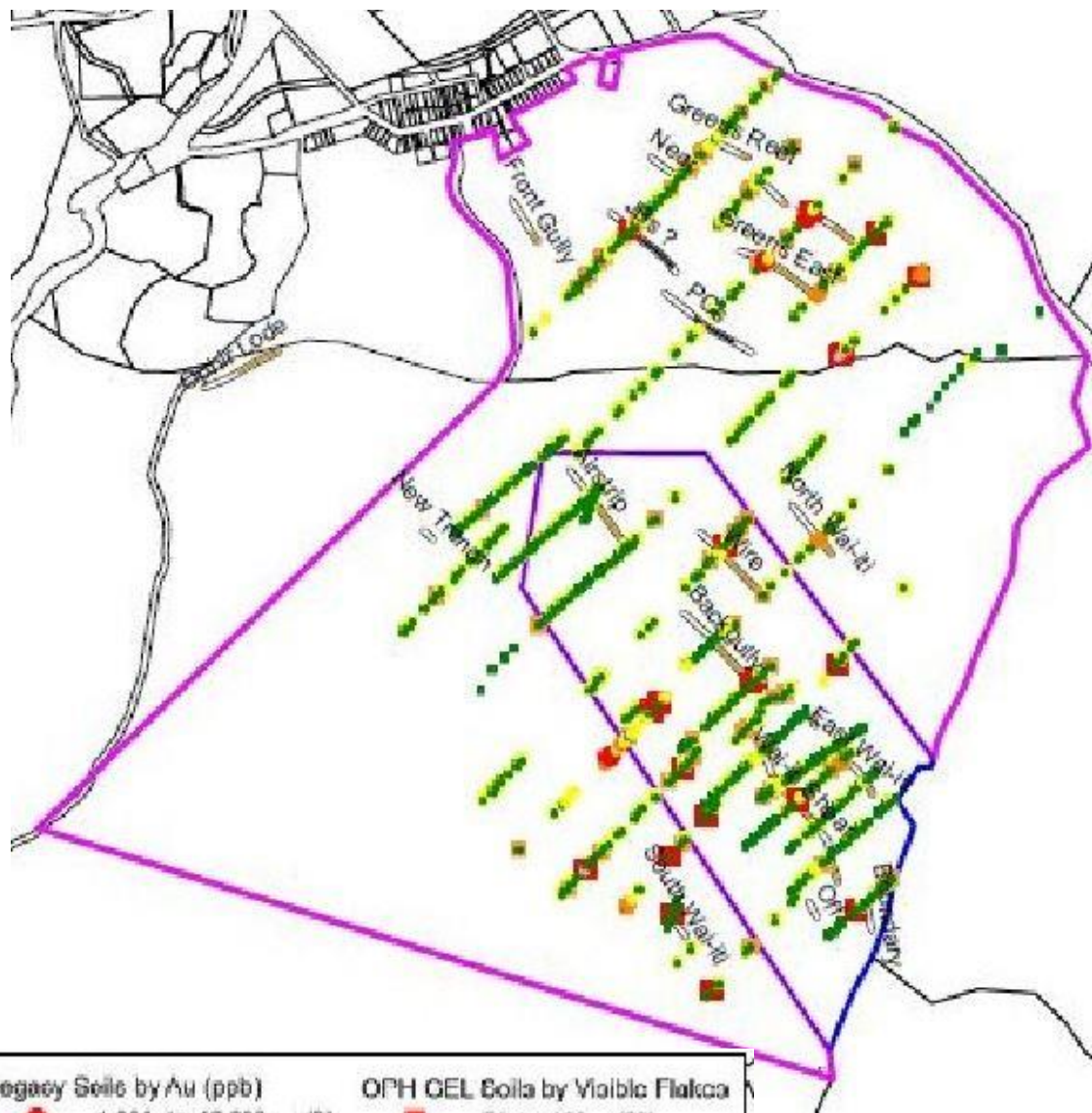
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OPHIR GOLD PROJECT - New Zealand



- **Soil Geochemical**
 - Much low order dispersed anomalism associated.
 - Gold-bearing quartz veins outcrop sporadically
 - 60% of soil samples had visible gold in panned concentrates

OPHIR GOLD PROJECT - New Zealand



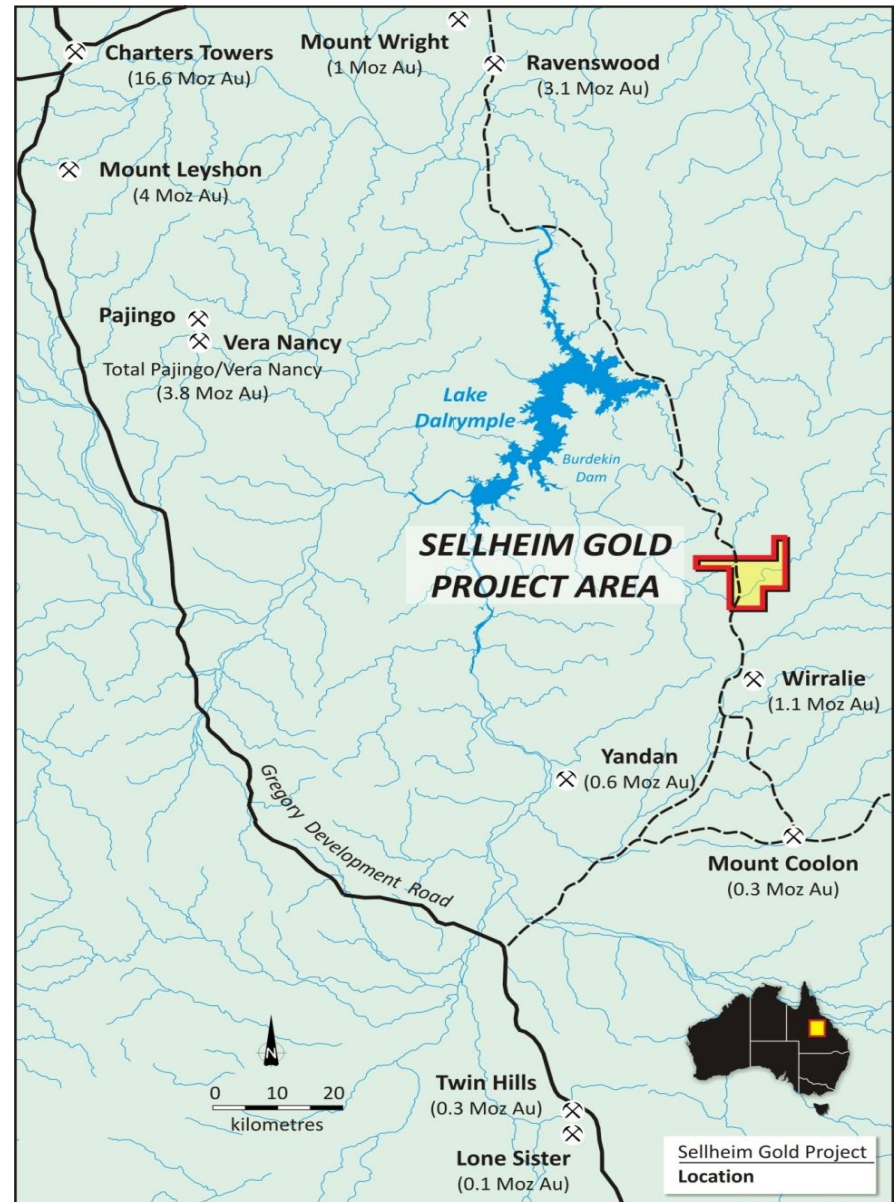
- Wai-ihī and Greens require twinned drill holes to upgrade to JORC Resource.
- Multiple gold-bearing shears, like Macraes, open down dip & along strike
- Amenable to gravity or gravity – flotation concentration



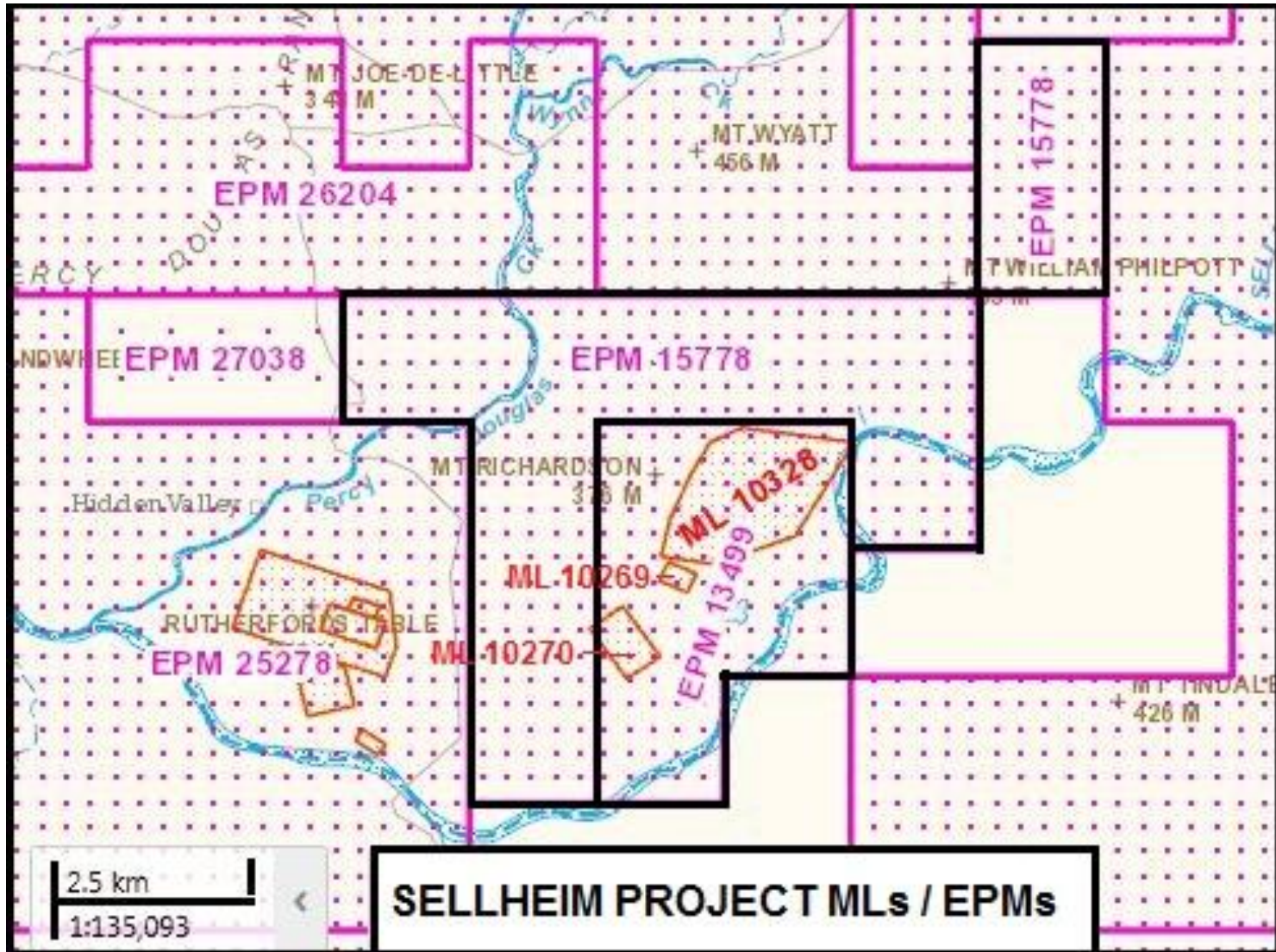
SELLHEIM COPPER/GOLD PROJECT



- **200km S of Townsville via Burdekin Dam**
- **35km S of Burdekin Dam**
- **18km N of Wirralie Gold & 50km N of Mt. Coolon Gold**
- **Brownfield project with +\$5.0M spent on exploration.**
- **Alluvial Plant & Mining equipment**



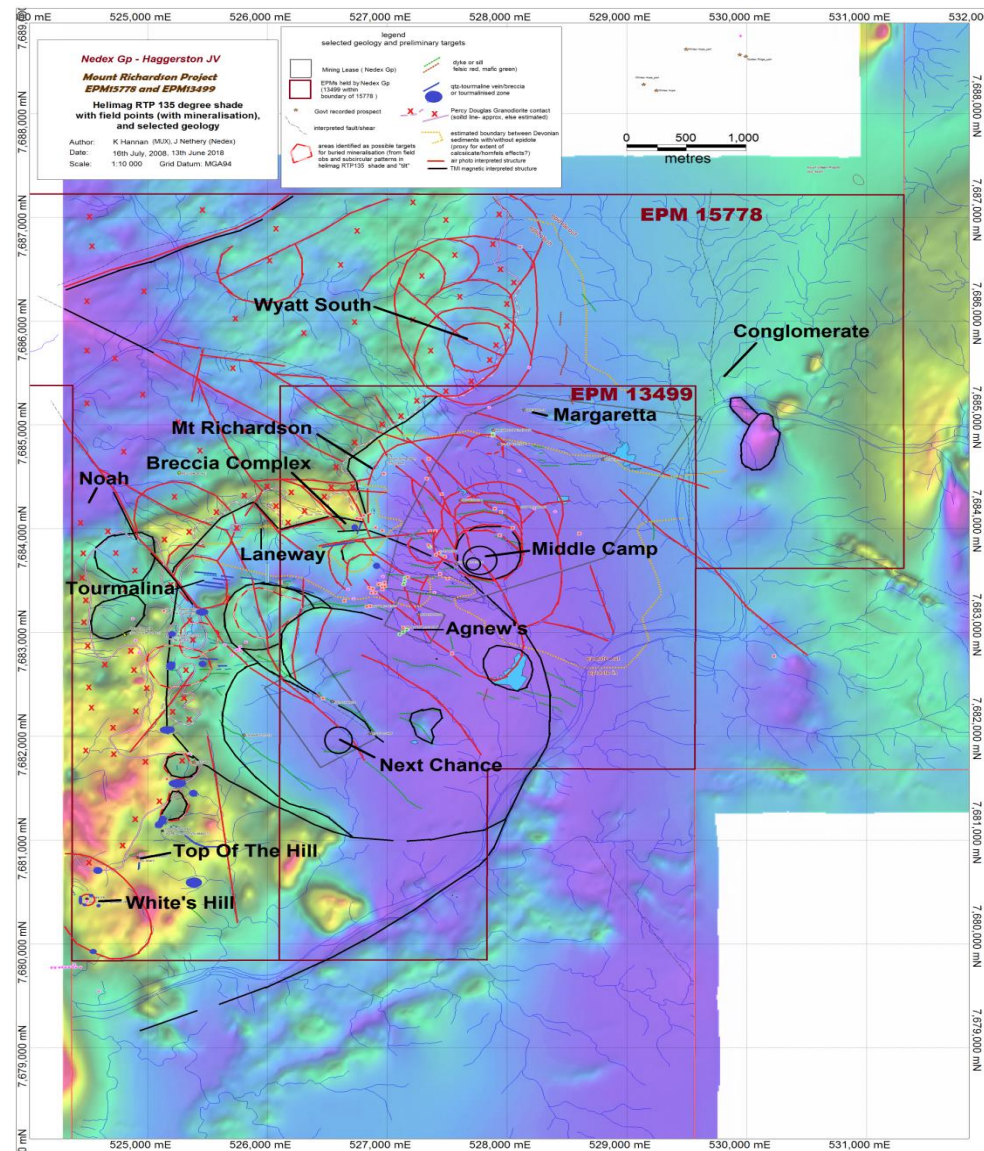
3 - MLs 10269, 10270, 10328
2 - EPMs 15778, 27548 (ex – 13499)



TMI & Air Photo Interpretation



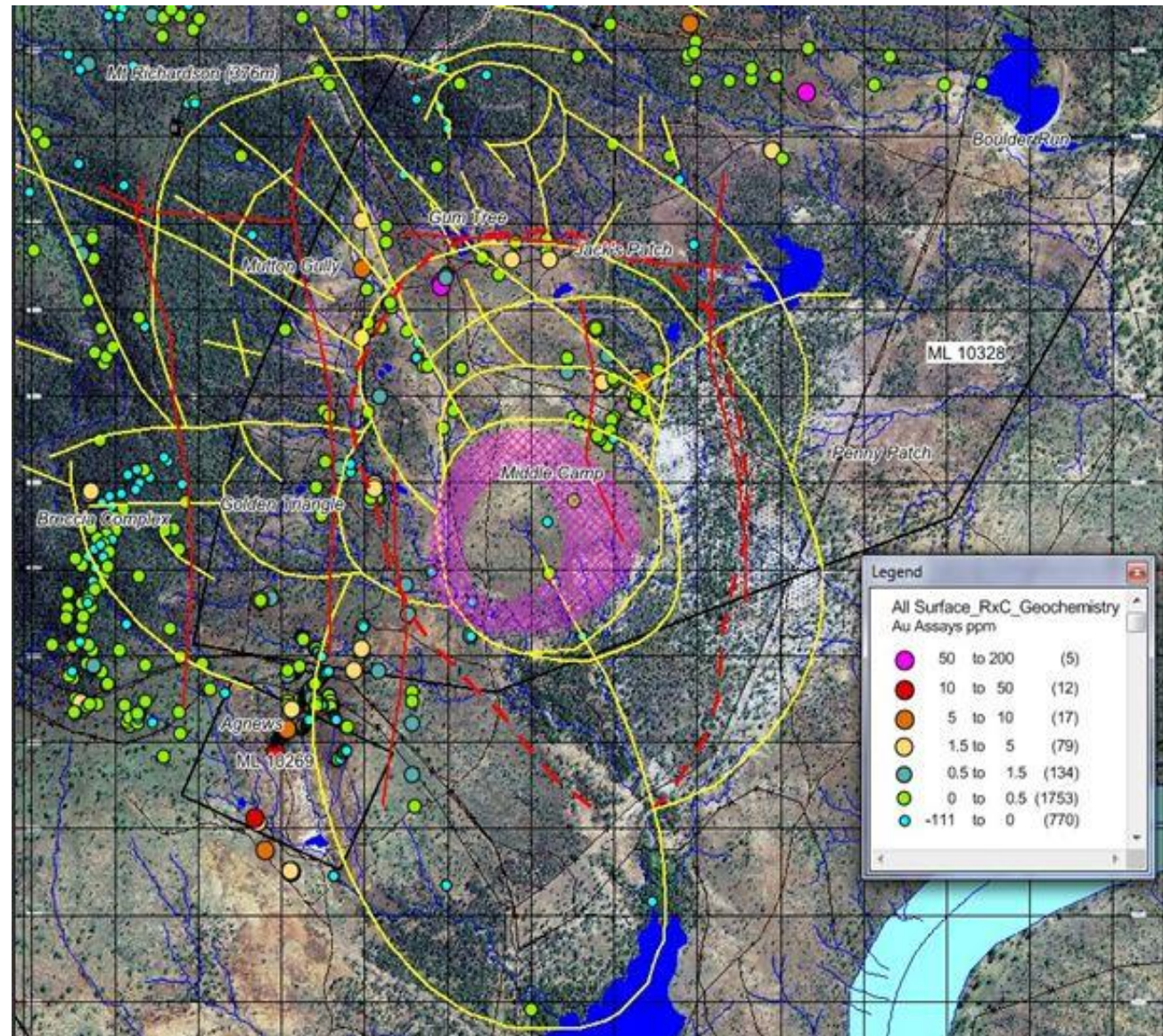
- Mt Richardson field 4 sq.km. in the north
- Central Middle Camp Ellipse, 550m x 500m
- 7km arc of air photo & TMI “bullseyes” with 14 tourmaline breccias ± porphyries



Middle Camp Ellipse



- Central low TMI low
- Elliptical air photograph structure
- Semi-circular halo of eluvial coarse gold & strong outcrop anomalous pattern
- Outer rim skarn quartz + sericite + tourmaline



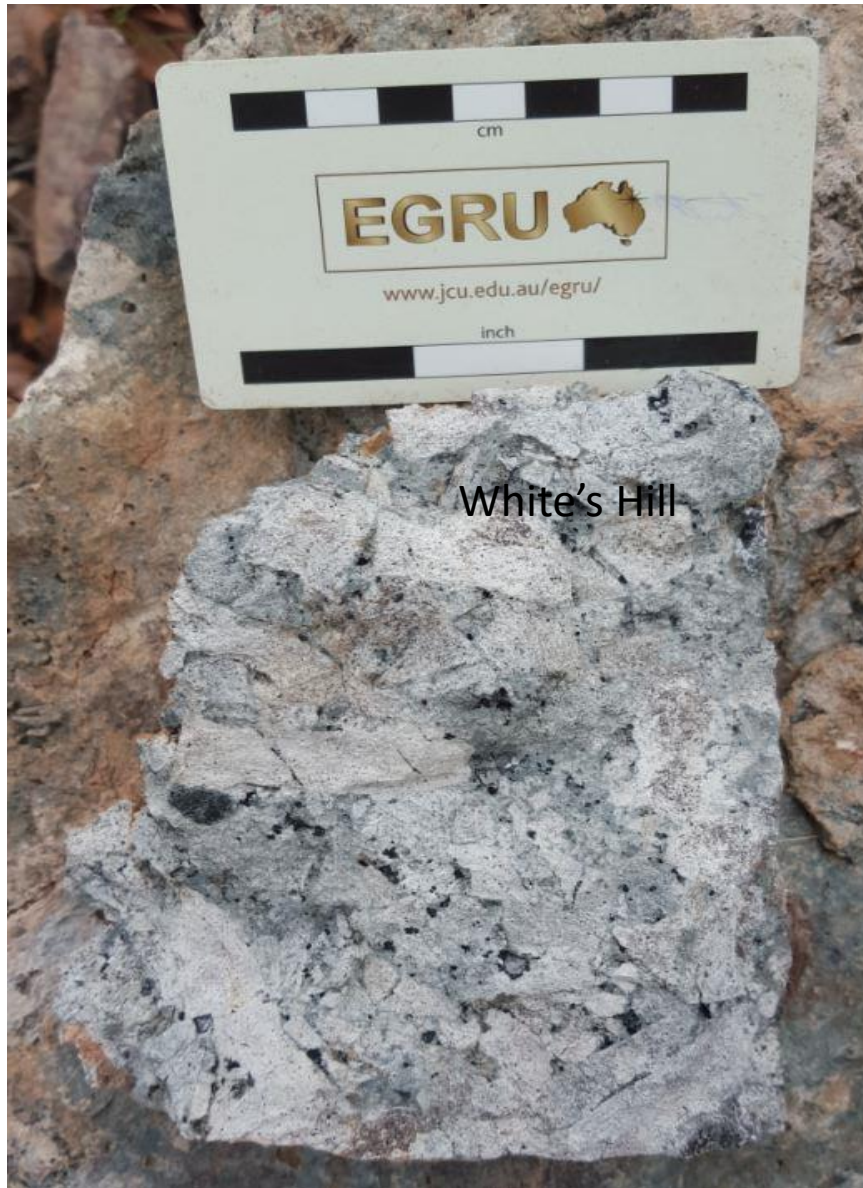
Eluvial Mining Area, Mining P & E



- +1 square kilometre of rehabilitated surface workings mainly by previous lessee
- 2 x mining camps, mining P&E and processing plant



White's Hill

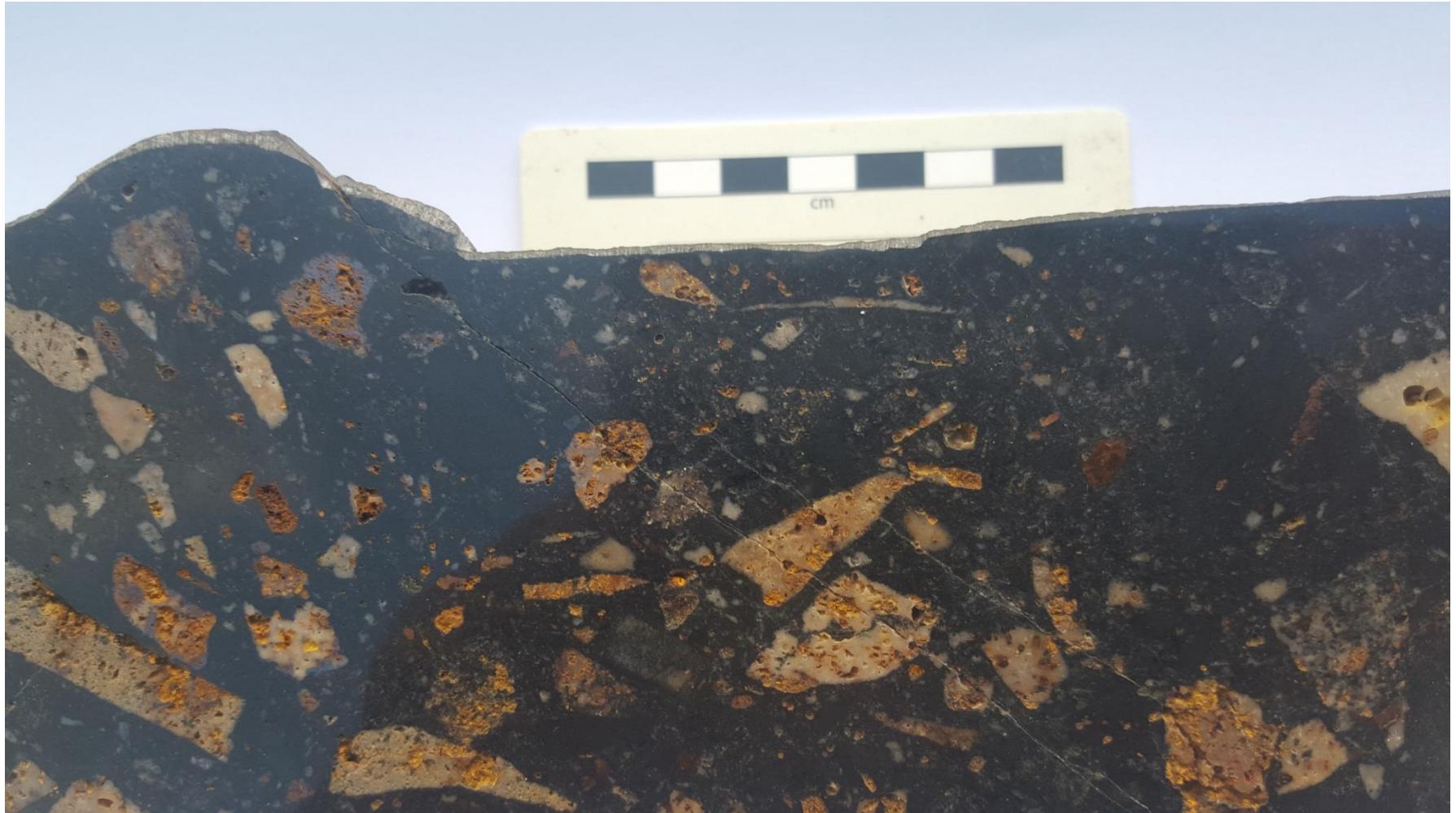


- Autobrecciated Rhyolite
- Matrix infill + tourmaline + sulphides + gold

Tourmalina



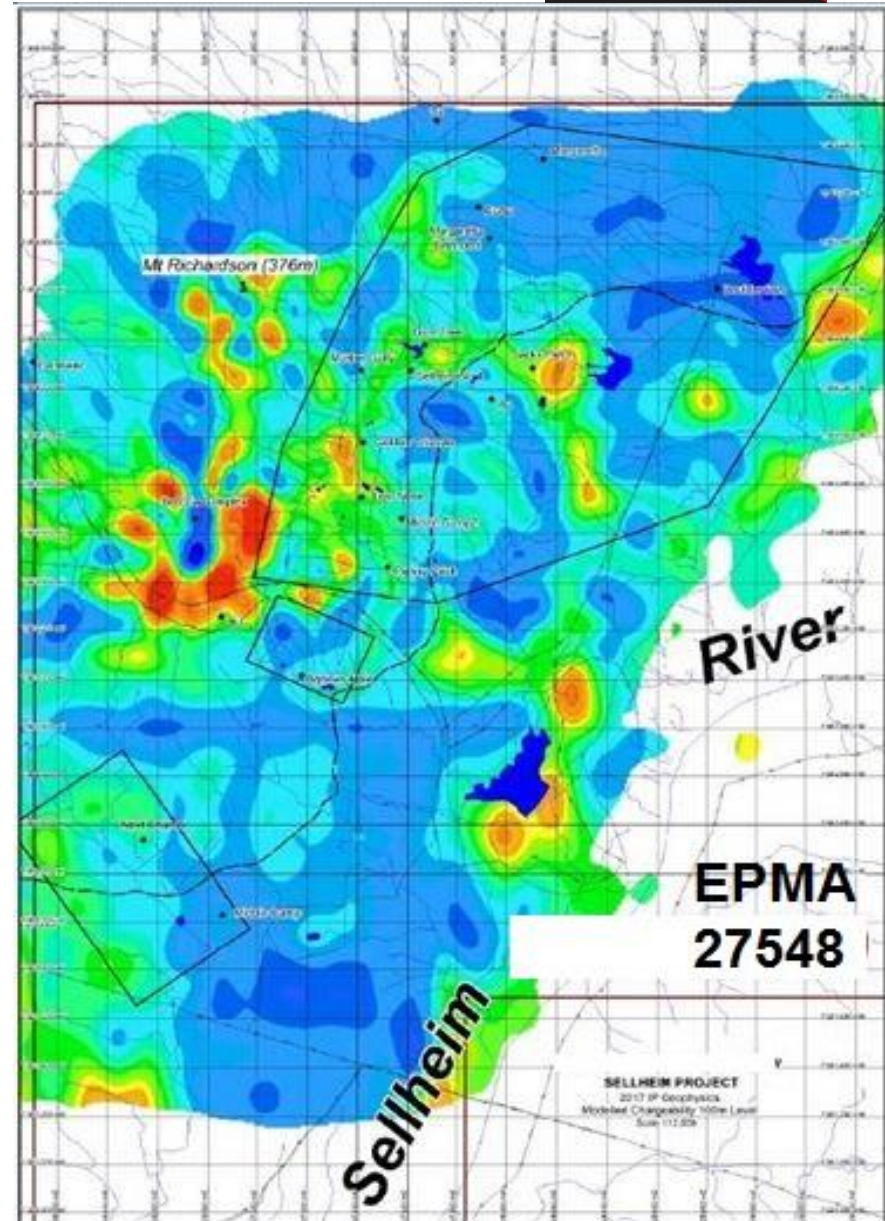
- Quartz + tourmaline + gossan/sulphide breccia
- ± rhyolite / porphyry / microgranite ± GOLD



2013, 2016 & 2017

IP data merge

- Used same IP gear
- Same Consultant – Steve Collins
- Breccia Complex Chargeability “doughnut”
- Middle Camp Ellipse outer halo



1990 - 2018 DRILLING HISTORY



- 108 drill holes (56 Pre-Nedex, 52 Nedex JV)
- 2115m - Open hole percussion
- 6014m - Reverse Circulation percussion
- 5366m - PQ, HQ, NQ coring
- Broad scatter of anomalous Au and Cu (344 > 0.1g/t Au, 133 > 0.3g/t Au, 33 > 1.0g/t Au)
- Highly stockworked porphyries on ellipse rim
- **Middle Camp - A gold-bearing rhyolite porphyry “finger” defined 2018**

2019 JV CONCLUSIONS



- HQ coring focused mainly on IP Chargeability anomalies & Geochemical anomalies.
- Most of these geophysical / geochemical anomalies were found to relate to **sheared sulphides within a zone of shallow-dip thrusting.**
- Thrusting developed along unconformable interface between basal permeable conglomerate & sandstone of Cycle 1 Drummond and underlying folded Ukalunda Formation.
- Inferred source of sulphides from down-plunge porphyry-type mineralisation below thrust

2024 EXPLORATION CONCEPT

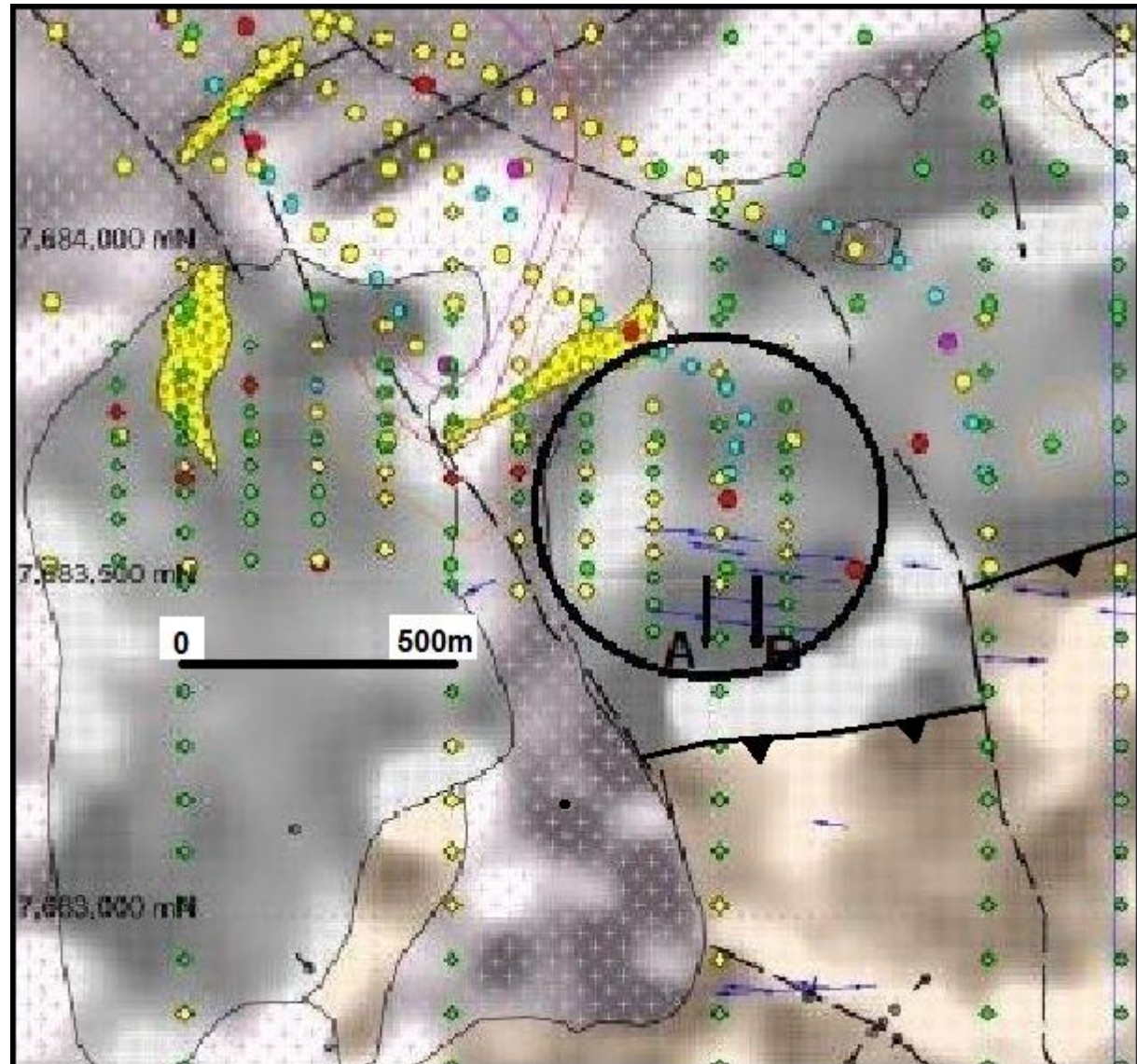


- Targets below thrust structure on Tourmalina, Middle Camp Ellipse (500m x 550m), & Agnew's Breccia Complex
- Only 2 previous holes into target rim intersected **porphyry "fingers"** with stockwork of endoskarn with inner propylitic retrograde overprint.
- 2023/4 target deeper (?) potassic zone on larger **rhyolite porphyry** intrusive (see documented models e.g. Gustafson and Hunt 1975)
- Tourmalina – Multiple linear **gold-bearing quartz + tourmaline + gossan + rhyolite porphyry clasts breccia** – initial 2 DDHs for 400 m of drilling.

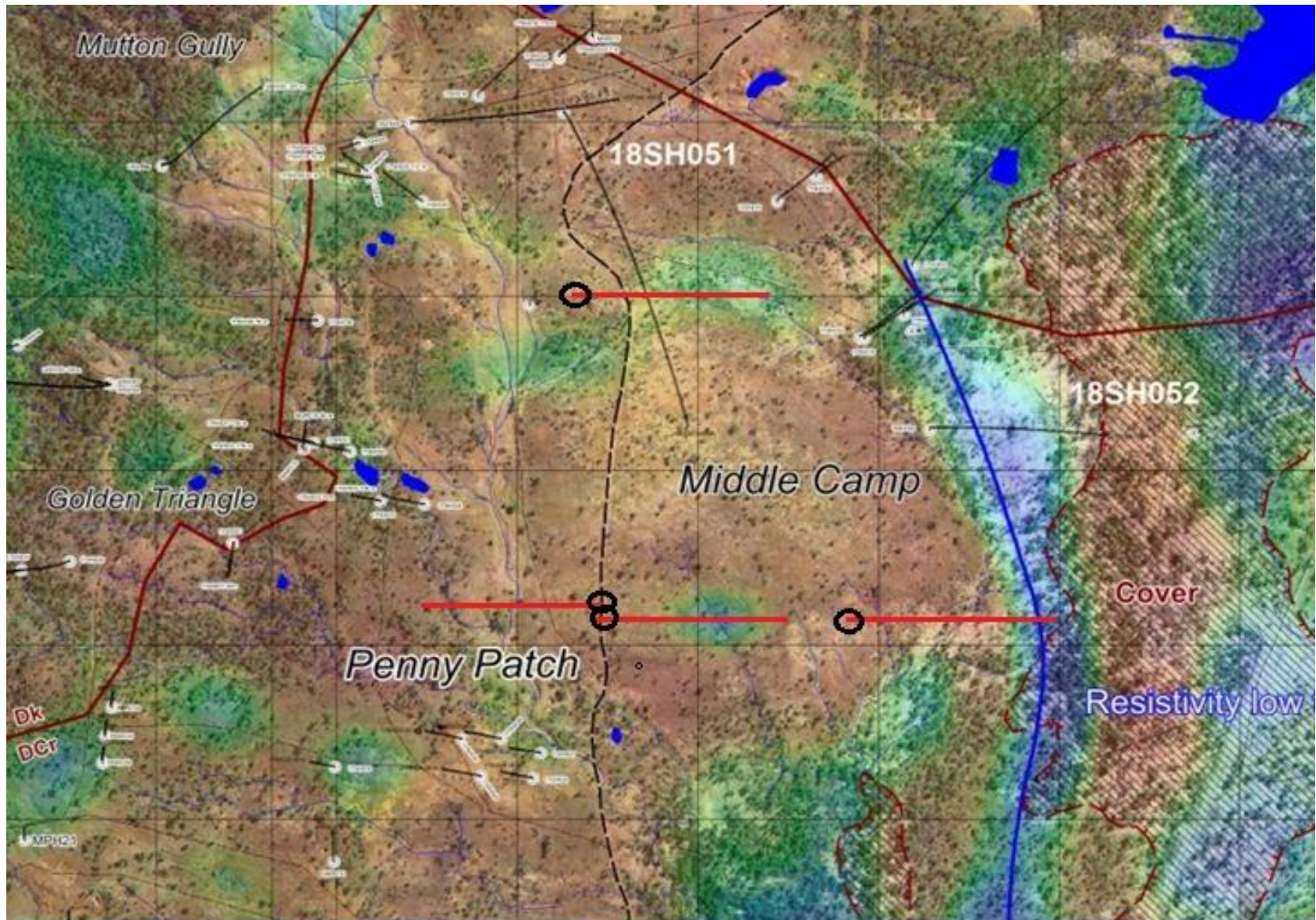
TOURMALINA PORPHYRY BRECCIA



- Quartz + tourmaline + gossan breccia
- Several (yellow) porphyry plugs
- Large IP Chargeability anomaly
- Gold in soils & visible
- 2 drillholes planned (A, B)
- Below thrust

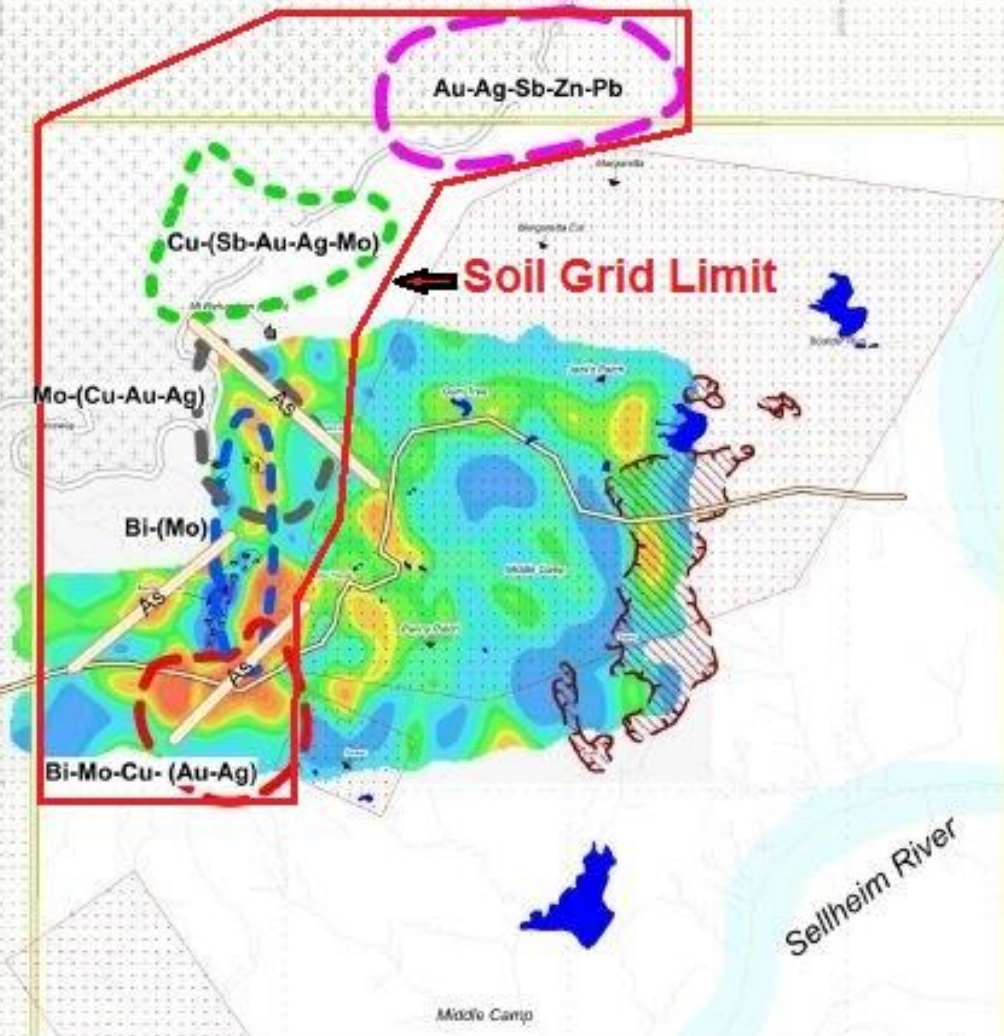


Middle Camp Ellipse Rim & Resistivity Lows





Agnew's Area
south of Breccia
Complex.
Strong IP
Chargeability.
Geochemical
strong soils
Au Bi Mo Cu Ag
pathfinders



SELLHEIM PROJECT: Metal Zoning in SCI Soil Samples

Broad zones with anomalous metals in soils,
and NE and NW arsenic trends.
Zones and trends are defined by $\geq +2$ standard deviations from the mean.

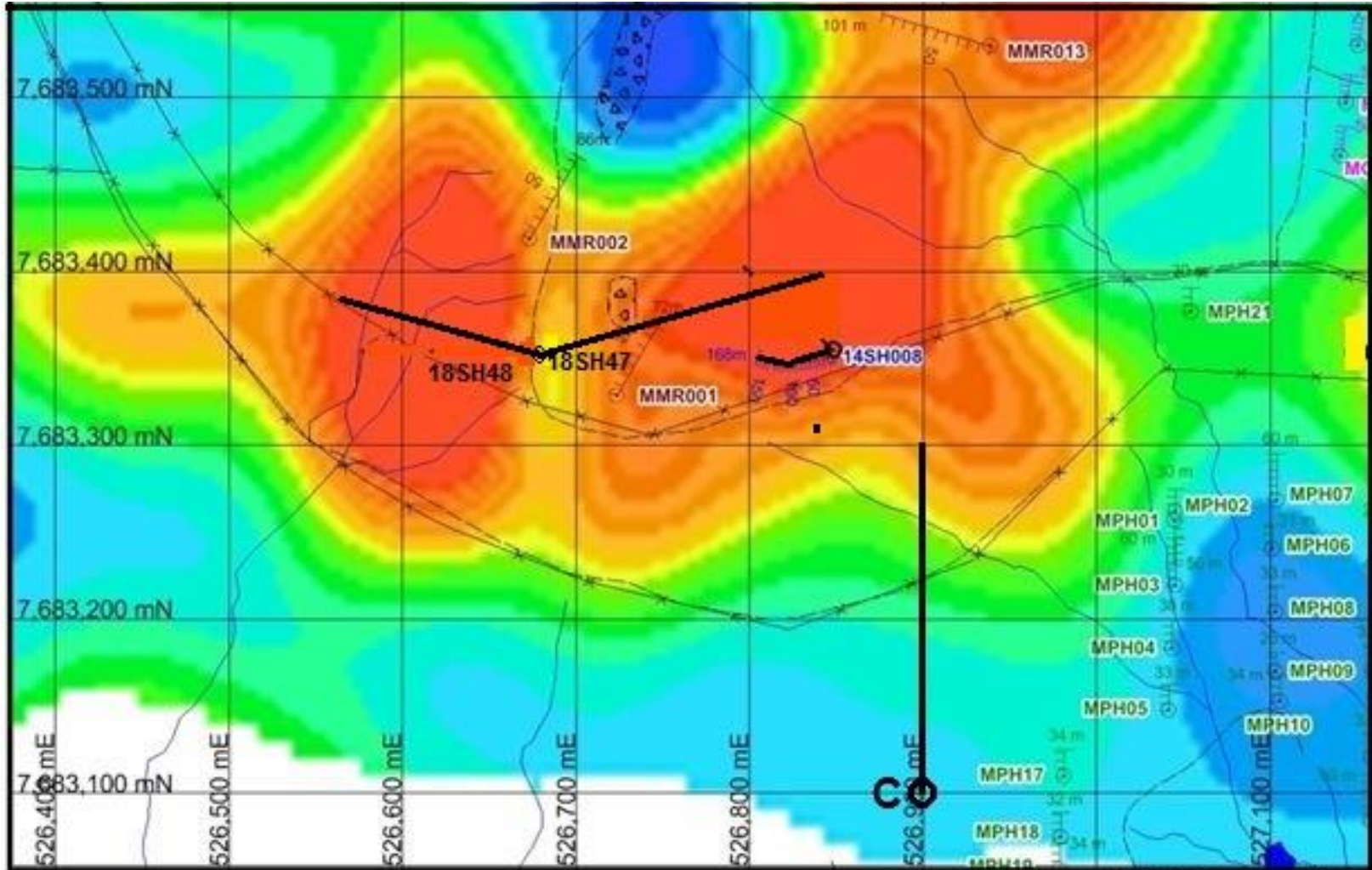
Soil zoning is overlain on IP contour map CD100.

Drawn: K. Camuti, Lantana Exploration. Geology: M. Barr, R. Gordon
Date: March 2018. Scale: 1:20,000. Grid: MGA94 Z55

AGNEW'S PORPHYRY TARGET



- IP targeted 18SH047, 048 had SE plunge thrust sulphidic veins indicating deep towards Agnew's



SELLHEIM SUMMARY



- Mt Richardson – Middle Camp – Breccia Complex
4 sq.km. skarn, propylitic, phyllic alteration zone
- Porphyry, Skarn, Breccia, Thrust, Epithermal vein
- Multiphase - Age range 360Ma (Bimurra Volcanics) to 310Ma (Bulgonunna Volcanics).
- Middle Camp Ellipse - Low TMI / remote sensed elliptical structure, with IP halo
- Recessive halo of eluvial coarse to nuggety gold, with IP chargeability & high gold rock chips
- Prominent 7km arcuate rim – Phyllic alteration, 14 tourmaline breccias & porphyry “fingers”
- Target Middle Camp Ellipse, Agnews, Tourmalina

Highly Prospective Projects –Aust, NZ, PNG



- **Highly Prospective Projects in PNG, Australia and New Zealand**
 - Niuminco has now **focused its PNG operations on its Edie Creek gold & silver mine.**
 - In Australia, a **90% interest in the three MLs at Chillagoe in Far North Queensland** and a **100% interest in the Sellheim Project, QLD** – both highly prospective for gold and copper.
 - In New Zealand acquiring 100% interest in the **Ophir Gold Project in the Otago Goldfields**
- **Potential to Grow Gold and Silver Production**
 - Niuminco has steadily **increased both its mining and processing capacity at its Edie Creek Mine over the past decade.** This increase in capacity has given Niuminco the flexibility to significantly increase gold and silver production at the Edie Creek Mine through high-grade, low-volume mining & processing or low-grade, higher-volume mining & processing. **A 10-year renewal of the mining lease was granted in July 2022.**
 - **Development of the Ophir Gold project in NZ – 10-year mining permit, surrounding 5-year exploration permit and +100k oz Au potential with much exploration upside.**
- **Significant Near-Term Exploration Upside**
 - Niuminco will continue drill-testing at its Edie Creek mine for extensions of known vein and lode systems, as well as identified, bulk tonnage and new exploration targets. Edie Creek’s 2023/4 drill program is designed to both source feed for the processing plant and to delineate a maiden JORC 2012 Resource.
 - Drilling on the Chillagoe, Sellheim and Ophir Gold Projects.

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