

# HANNANS<sub>LTD</sub>

## **Nickel, Gold & Lithium in Western Australia** **Forrestania, Fraser Range, Moogie, Milly Boo & Mt Holland**

[www.hannans.com](http://www.hannans.com)

ASX:HNR

30 October 2020



## Summary

Map showing location of Hannans' Forrestania, Fraser Range, Moogie, Milly Boo and Mt Holland Projects.

Fraser Range, Moogie and Milly Boo are located on the edge of the Yilgarn Craton as are the DeGrussa copper-gold mine (owned by Sandfire Resources NL), Tropicana gold mine (a joint venture between AngloGold Ashanti Australia Ltd and IGO Ltd), the Nova-Bollinger nickel-copper-cobalt mine (owned by IGO Ltd) and the Julimar PGE-nickel-copper deposit (discovered by Chalice Gold Mines Ltd).

# Summary of Exploration Projects

## Nickel (Forrestania) – 100%

- Hannans exploring along strike from two operating world class nickel sulphide mines.
- Exploration planned and executed by Newexco Exploration Pty Ltd.
- 3rd phase of RC drilling recently completed (assays pending, due November 2020), down-hole EM in progress.

## Gold (Forrestania) – 20%

- Hannans free-carried to decision to mine on Forrestania Gold Project.
- JV partner targeting production.

## Nickel-Copper (Fraser Range) – 100%

- Hannans tenement applications recently reviewed by Newexco, certain areas justify further exploration.
- 1st phase of ground geophysics to commence 1st Quarter 2021.

## Gold & Copper (Moogie) – 100%

- Hannans exploring Moogie for large, long life, low cost, sustainable gold and or copper deposit.
- 3rd phase of surface sampling in progress (assays pending, due December 2020).
- Two new tenement applications lodged targeting gold mineralisation.

## Polymetallic Target (Milly Boo) – 100%

- Deep magnetic anomaly originally thought to have characteristics of IOCG target.
- Recently completed ground gravity surface requires follow up.

## Lithium (Mt Holland)

- Mt Holland Lithium Project located adjacent to the world's 3rd largest hard rock lithium deposit.
- RC hole testing geochemical anomaly recently completed (assays pending, due November 2020).

## New Projects (Nickel, Lithium and Gold)

- Discussions ongoing to acquire / farm-in to early / advanced exploration / mining projects.



Ben McCormack from Outlier Geoscience mapping at the Moogie Project (September 2020)

# Forrestania Nickel



Regional location map showing Hannans 100% owned Forrestania Nickel Project outlined in red and major nickel mines (operating and historic) and nickel deposits.



After completing the RC drill hole offside from Red Rock Drilling carefully lower PVC pipe down the hole enabling down-hole geophysical surveys to be completed at a later date (October 2020)



Geologist Tony Pfaff completing XRF analysis of RC drill chips at the Forrestania camp (October 2020)

# Forrestania Nickel Targets

## Project Management

- Hannans engaged Newexco Exploration Pty Ltd late in 2018 to apply its targeting and geological concepts to the Forrestania Nickel Project
- Newexco has completed a data driven review of drill holes, geophysics and surface geochemistry completed by various explorers and concluded, "there's potential to find a deposit similar in size and grade to Flying Fox and Spotted Quoll within Hannans tenure."

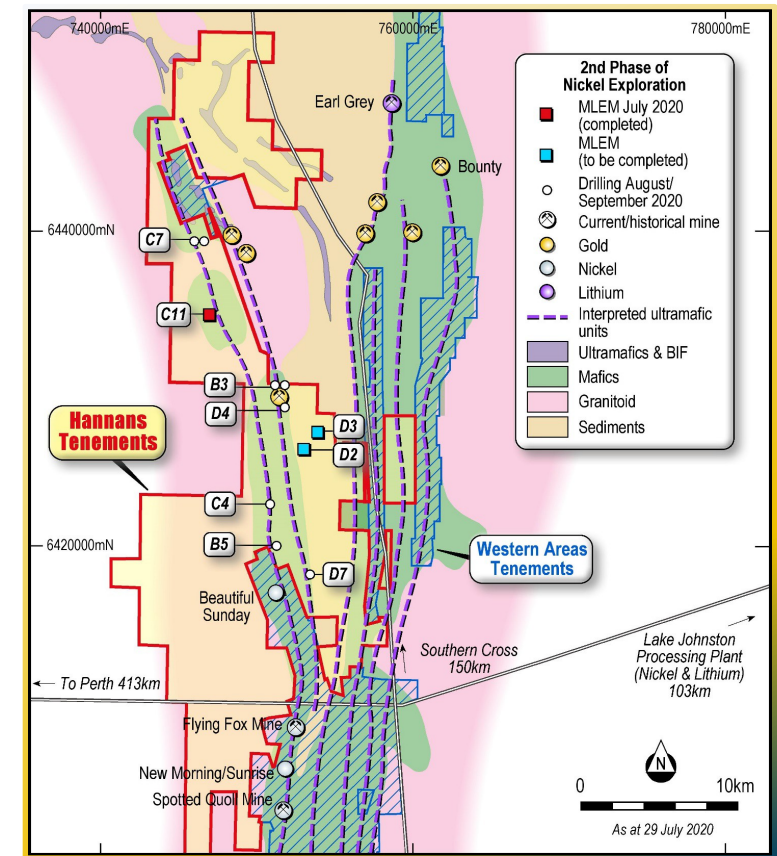
## Significant strike lengths of Western Ultramafic Belt (WUB)

- Strong bias in data distribution towards WUB however parts of the WUB inadequately tested
- 90% of all drilling, 80% of all electromagnetic data and 50% of all surface samples focused on WUB
- Hannans also has significant strike lengths of Mid-Western Ultramafic Belt and Takashi Ultramafic Belt plus minor strike length of Central and Mid-Eastern Ultramafic Belts, these Belts have been lightly explored and are also prospective for nickel sulphide mineralisation

## Targets

- Untested coincident geophysical and geochemical anomalies
- Short strike-length EM anomalies occurring adjacent to large formational conductors
- Geochemical anomalies not followed up
- 'New' search space outside of the WUB and EUB

## Refer Appendix for additional information



Tenement map showing the Forrestania Nickel Project. Refer to Table on the next page for a summary of each of the Target IDs. From west to east the broken lines represent the Western, Mid-Western, Takashi, Central, Mid-Eastern and Eastern Ultramafic Belts. The world class Flying Fox nickel sulphide mine owned by Western Areas Ltd is in the foreground. Distance from Flying Fox to Earl Grey is ~38kms.

# Forrestania Target ID Summary

Target ID	Target Type	Technique	Planned	Completed	Schedule
B3	Geophysical	Reverse circulation (RC) drilling	<ul style="list-style-type: none"> <li>MLEM completed. Anomalies identified - three discrete bedrock conductors modelled below and north of Blue Haze Open Pit, possibly associated with rocks prospective for nickel sulphide mineralisation. Two drill holes planned.</li> </ul>	<ul style="list-style-type: none"> <li>This hole was targeting 2 MLEM plates north of Blue Haze pit. The hole passed through the target horizons at 160m and 190m without intersecting any significant massive/semi-massive sulphides. No cumulate ultramafics were intersected. Disseminated pyrite was seen at intervals but was not remarkable. The hole was cased with 50mm PVC to EOH to facilitate DHEM.</li> <li>This hole was targeting a conductive plate at approximately 180m. Ultramafics were encountered from 100m-200m, serpentine and other ultramafics from 200m to EOH. Traces of sulphides from 180m-240m. No sulphides that would explain the targeted plates were encountered. Hole was PVC lined for DHEM surveys.</li> </ul>	<ul style="list-style-type: none"> <li>DHEM October 2020</li> <li>Assays mid November 2020</li> <li>Follow up, pending results</li> </ul>
D4	Geophysical	RC drilling	<ul style="list-style-type: none"> <li>MLEM completed. Several bedrock conductors identified and modelled. One drill hole planned.</li> </ul>	<ul style="list-style-type: none"> <li>This hole was targeting MLEM plates south of Blue Haze pit. The hole passed through the target horizons 170m and 240m without intersecting any significant massive/semi-massive sulphides. The hole was drilled to 258m and left open for DHEM surveying and a possible diamond tail after DHEM surveys. No significant ultramafics were intersected. Disseminated pyrite was seen at intervals but was not remarkable. The hole was not cased with PVC.</li> </ul>	<ul style="list-style-type: none"> <li>DHEM October 2020</li> <li>Assays November 2020</li> <li>Follow up, pending results</li> </ul>
C4	Geophysical	Diamond core (DD) drilling	<ul style="list-style-type: none"> <li>Drill hole FSRC062 did not reach its planned depth. A diamond tail will be required to test the EM conductor and reach the planned end of hole depth. This hole was drilled in August 2020.</li> </ul>		<ul style="list-style-type: none"> <li>Diamond tail 2021</li> </ul>
B5	Geophysical	RC drilling	<ul style="list-style-type: none"> <li>A mid-time anomaly possibly represents a conductor modelled on the ultramafic contact. One drill hole planned.</li> </ul>	<ul style="list-style-type: none"> <li>This hole was targeting poorly constrained EM plates ranging from 200m to 250m depth downhole. The hole was planned to go to 250m but reached 228 metres due to drilling difficulties and water in hole. The hole intersected pyroxenite from 70m-130m, blebby pyrite from 144m to 145m and magnetic chert (probable conductor) from 187m to 228m EOH. The anomaly has probably been explained by the magnetic chert unit. The hole was cased with PVC to facilitate DHEM surveys.</li> </ul>	<ul style="list-style-type: none"> <li>DHEM October 2020</li> <li>Assays November 2020</li> <li>Follow up, pending results</li> </ul>
D7	Geological	RC drilling	<ul style="list-style-type: none"> <li>Shallow drill hole planned to test the western contact beneath the sub crop and the ultramafic stratigraphy where anomalous nickel assays intersected in historical auger sampling, and the recent identification of gossanous sub crop in surface reconnaissance. One drill hole planned.</li> </ul>	<ul style="list-style-type: none"> <li>FSRC071 was testing an area with anomalous nickel/copper geochemistry and also to test pegmatite subcrop that was noted in the area. The hole intersected ultramafics up to 100m and then pegmatites from 100m-120m, ultramafics from 120m-125m and then pegmatites from 125m-135m. The hole finished in ultramafics at 190m. The entire hole was sampled to test for nickel and lithium pegmatites. No significant sulphides (massive or semi-massive) were seen in the logging.</li> </ul>	<ul style="list-style-type: none"> <li>DHEM October 2020</li> <li>Assays November 2020</li> <li>Follow up, pending results</li> </ul>
C7	Geophysical	RC drilling	<ul style="list-style-type: none"> <li>There is coincident anomalous copper geochemistry in soil samples. Interpretation of the 2019 MLEM identified two steeply dipping conductors. The location of these anomalies with respect to the Western Ultramafic Belt warrants follow up. Two drill holes planned.</li> </ul>	<ul style="list-style-type: none"> <li>This hole in the C7 area targeted a weak conductive plate at 160m downhole. Probable ultramafics were intersected from 40-70m. A pegmatitic shear zone with fuchsite (gold indicator) was intersected from 100m-126m, 154m-157m and 167m-174m. No significant sulphides or ultramafics were intersected and a magnetic amphibolite unit was logged from 157m-167m. Excessive water stopped the hole at 180m. The hole was cased with 50mm PVC to EOH to facilitate DHEM.</li> <li>This hole in the C7 area targeted a weak conductive plate expected from 150m-190m downhole. The hole intersected ultramafics from 26m-167m and a pegmatitic shear zone with fuchsite (gold indicator) was intersected from 167m-192m. The hole finished in an amphibolite unit at 210m. No significant sulphides were intersected although disseminated pyrite and pyrrhotite were noted in the hole. Excessive water stopped the hole at 210m. The hole was cased with 50mm PVC to EOH to facilitate DHEM.</li> </ul>	<ul style="list-style-type: none"> <li>DHEM October 2020</li> <li>Assays November 2020</li> <li>Follow up, pending results</li> </ul>

# Forrestania Gold – Free-Carried to Decision to Mine

## Free-Carried

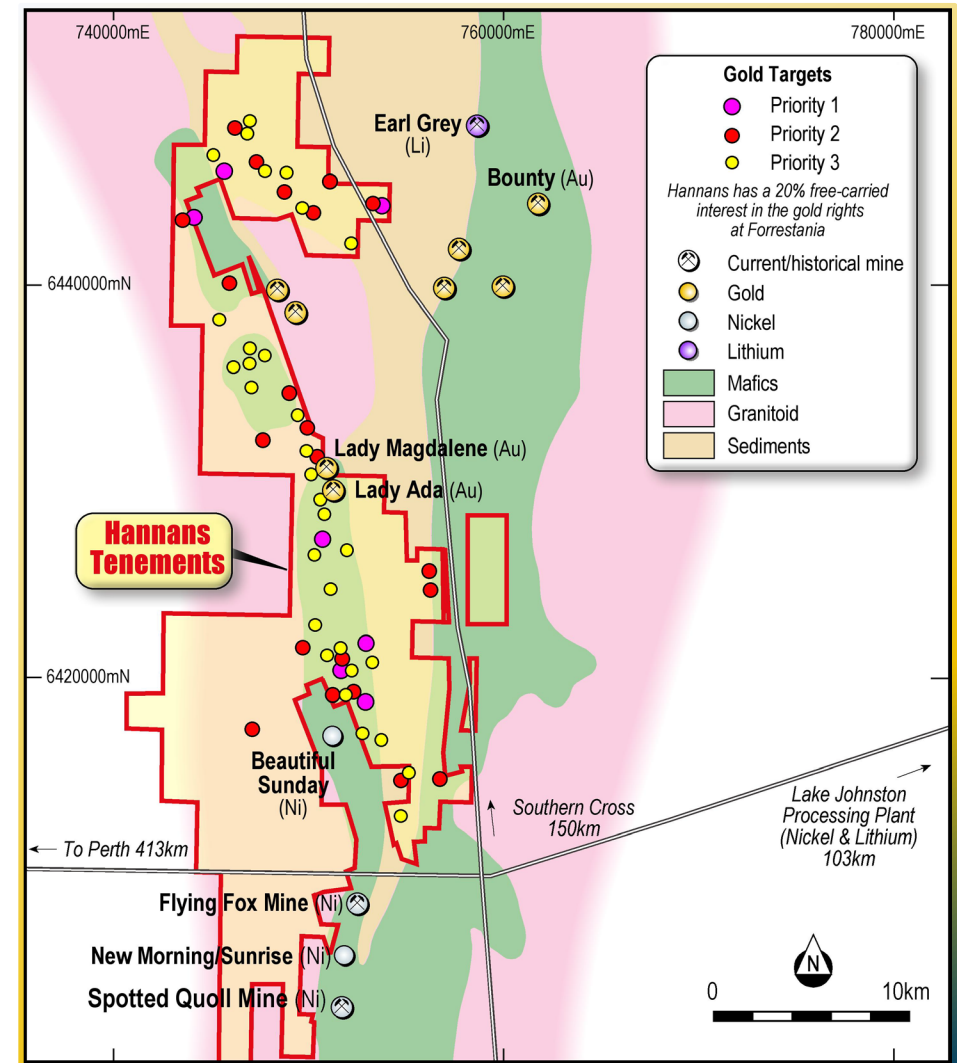
- Hannans also owns a 20% free-carried interest in the Forrestania Gold Project (FGP). Its joint venture partner is Classic Minerals Ltd (ASX:CLZ). Hannans is not required to contribute funding until a decision to mine gold has been made by the joint venture.

## Gold Deposits

- Hannans therefore owns a 20% interest in Lady Magdalene, Lady Ada, Tangerine Trees, Van Uden West and numerous other priority gold targets (refer map to the left). Hannans has no interest in either the Lady Lila or Kat Gap prospects.
- The updated mineral resource estimate for Lady Magdalene is 5.92Mt @ 1.32g/t gold for 251,350 contained ounces. The global mineral resource for Forrestania Gold Project is 6.18 million tonnes grading 1.36g/t gold for 270,100 ounces, including remnant Indicated and Inferred mineral resources at the higher-grade Lady Ada deposit. (Refer ASX release by Classic Minerals Ltd dated 18 December 2019).

## Production

- CLZ aim to establish a 1Mtpa onsite processing plant and a 7-year life of mine (refer ASX release by Classic Minerals Ltd dated 18 November 2019). Click [here](#) for detailed information on the FGP.



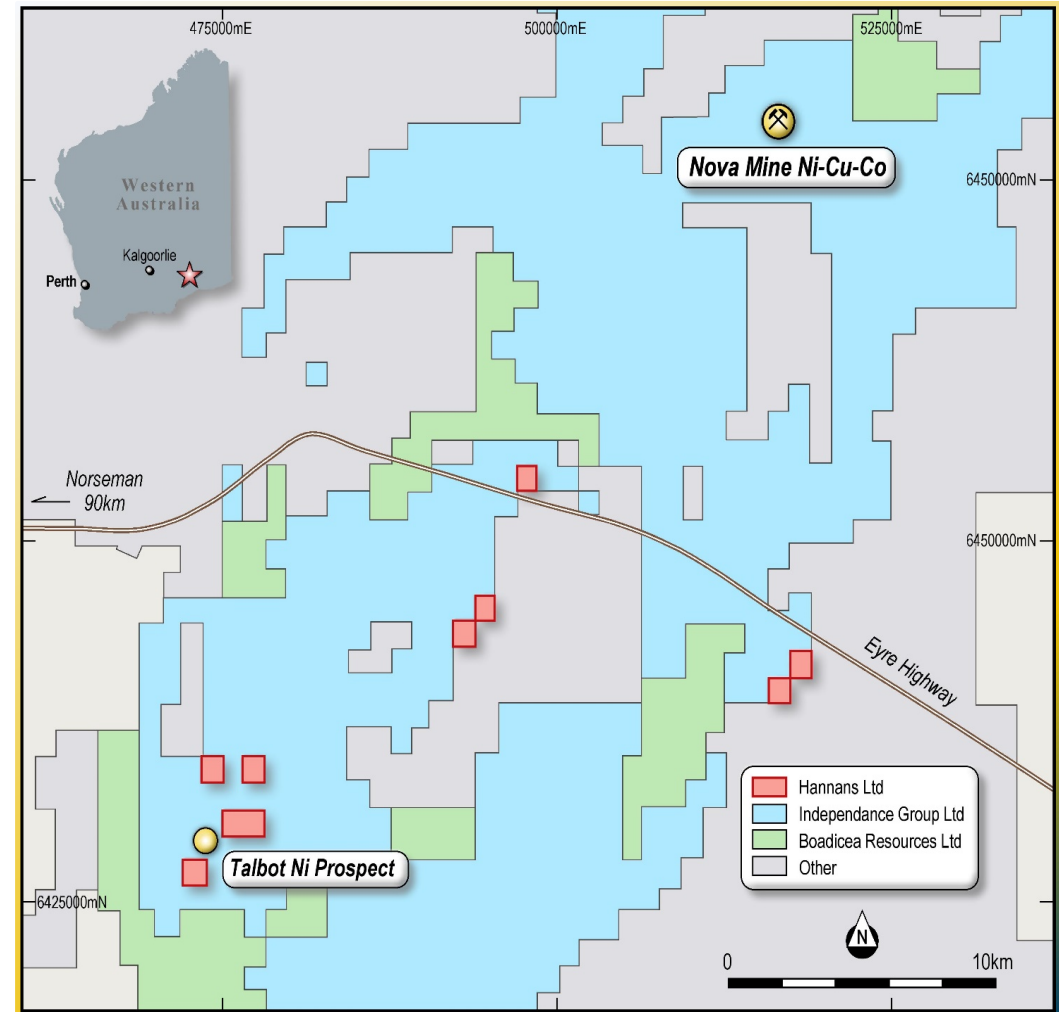
# Fraser Range – Nickel-Copper

## Location

- Several small exploration license applications in the Fraser Range.
- Applications located approximately 100km east of Norseman and 60kms south-west of the operating Nova nickel-copper-cobalt mine.
- Three applications are proximal to the Talbot nickel-copper-cobalt anomaly identified by Newcrest and followed up by Sirius Resources Ltd and IGO Ltd.

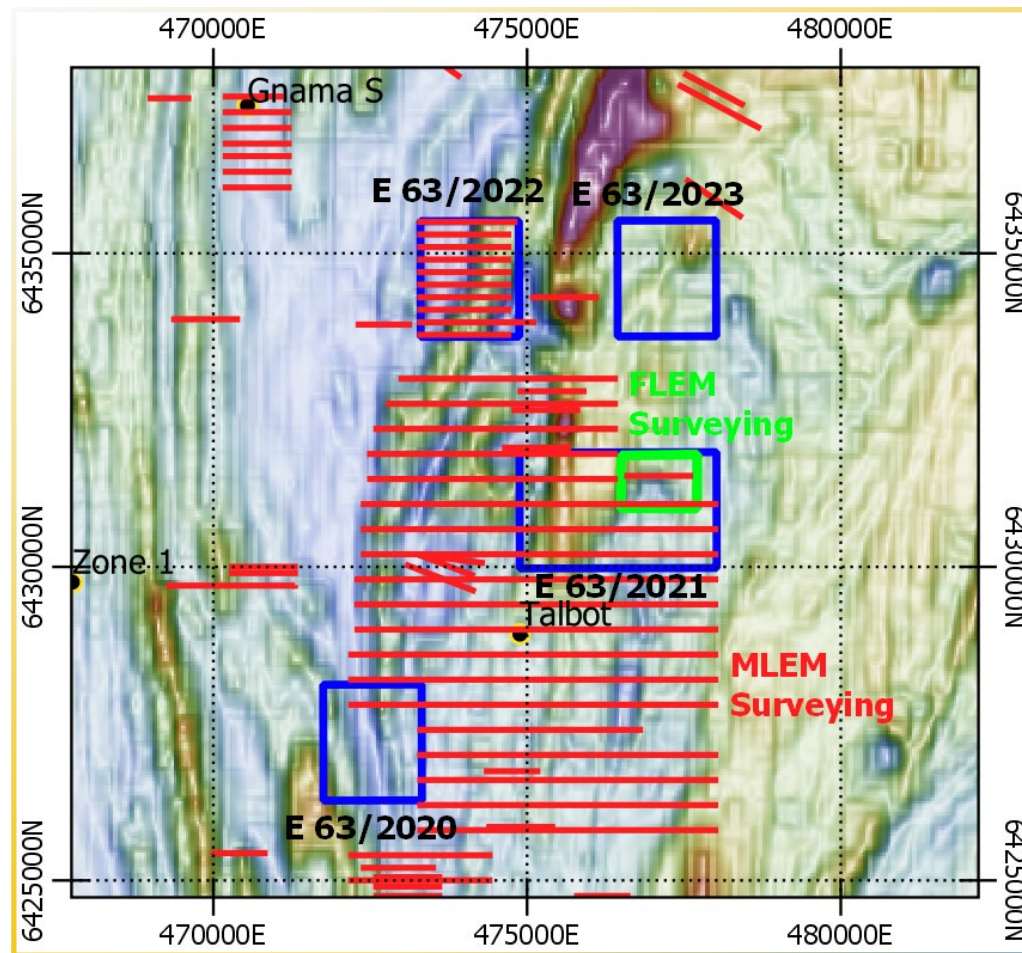
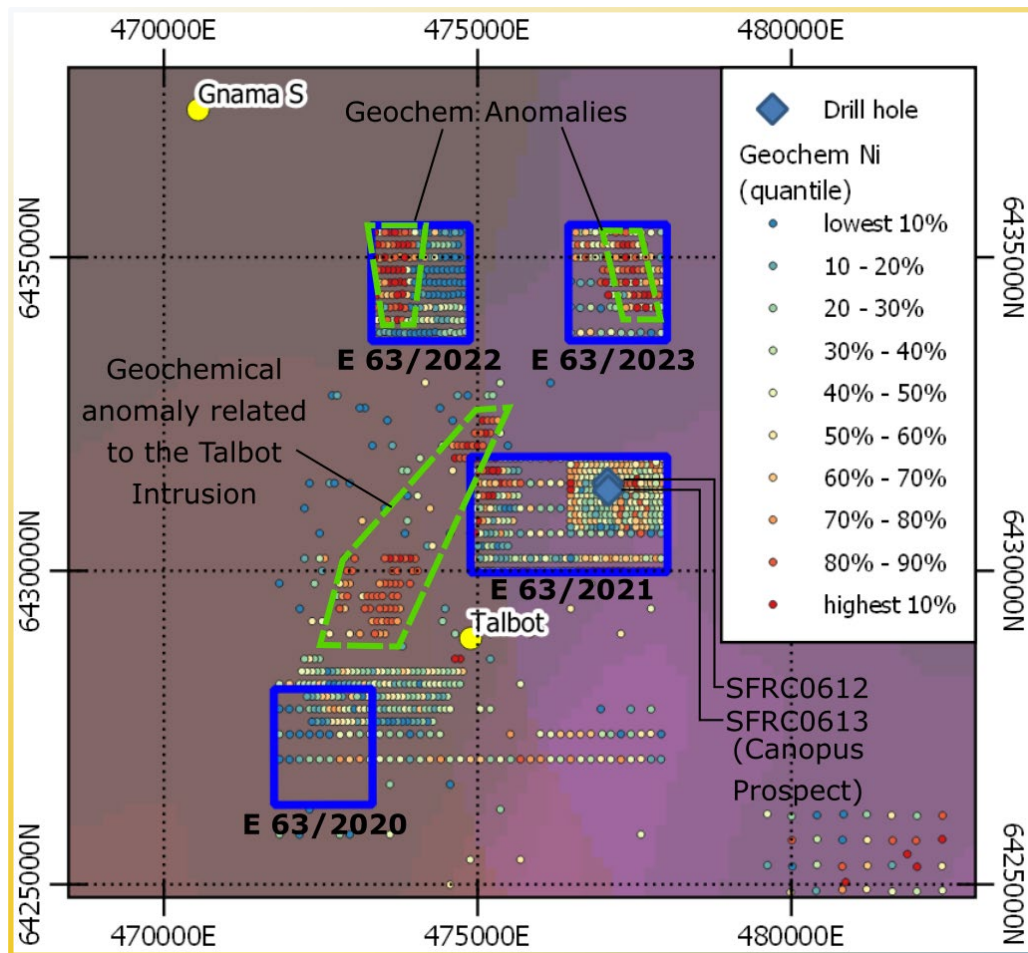
## Exploration

- A review of historic exploration data has been undertaken by consulting geoscientists Newexco Exploration Pty Ltd – areas within the applications are deemed worthy of follow-up exploration.
- 1st phase of ground geophysical surveys (MLEM) scheduled to start early 2021.



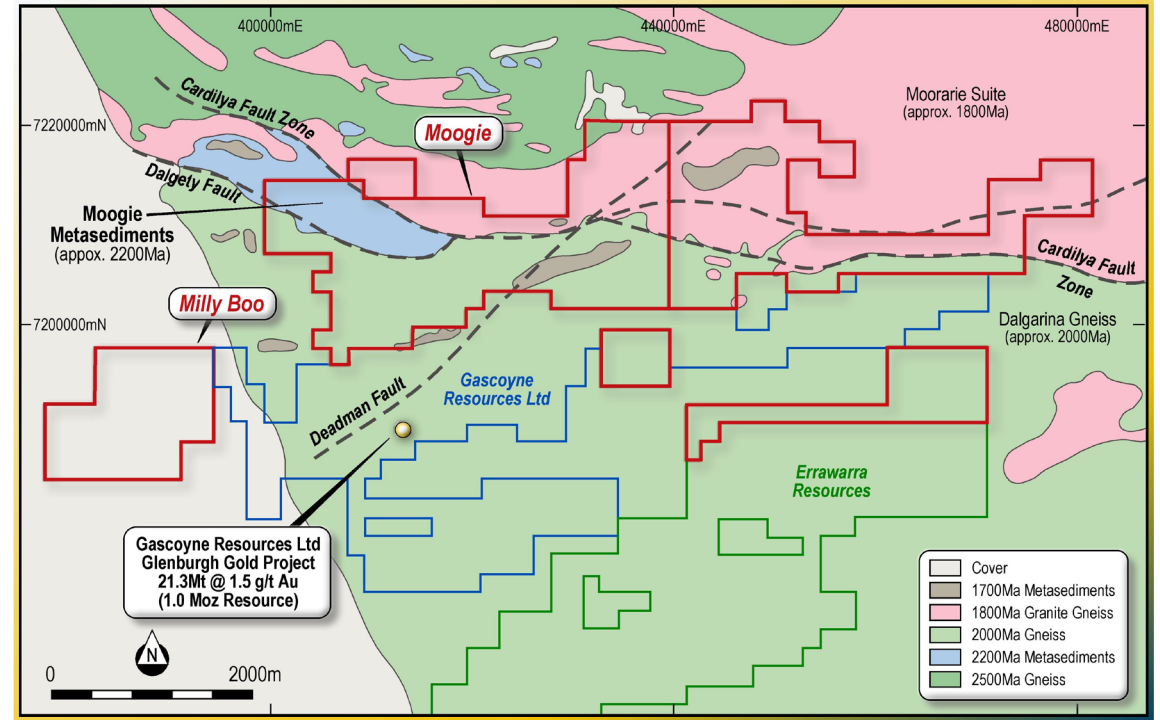
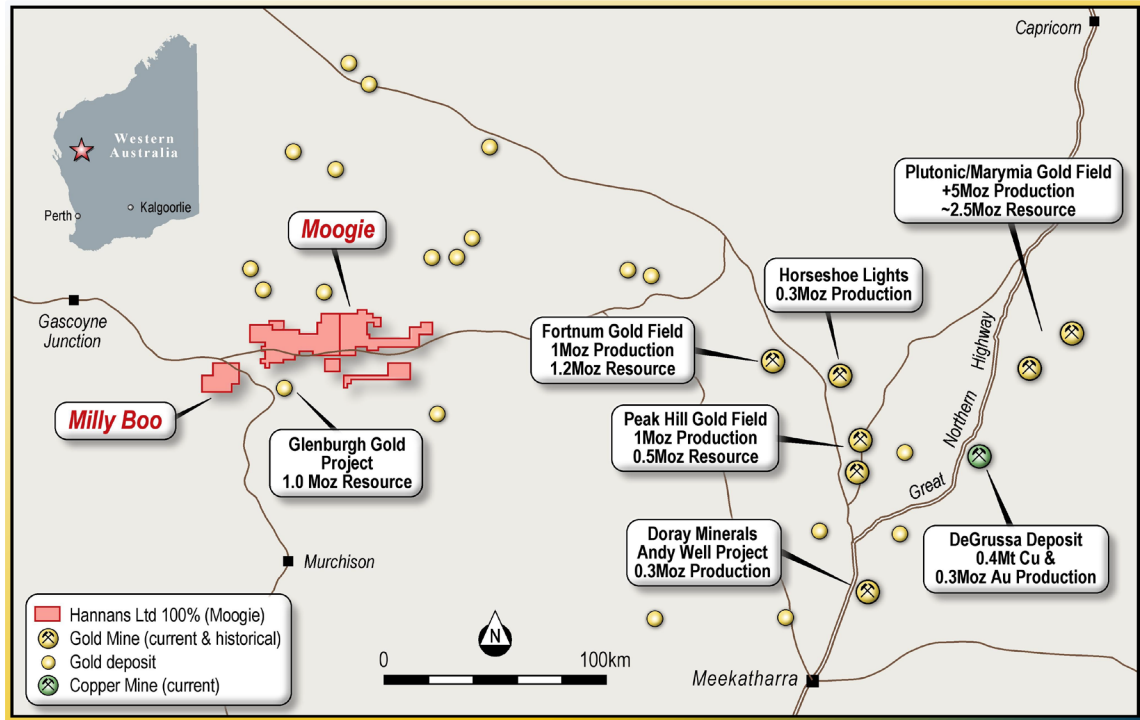


# Fraser Range – Proximal to Talbot Ni-Cu-Co Prospect



Hannans tenement applications outlined in blue.

# Moogie – Gold & Nickel-Copper



## Location

- Major tenement position, comprising four exploration license applications located ~ 260kms north-west of Meekatharra and 270kms east of Carnarvon in the Gascoyne Province, Western Australia. Located adjacent to the 1.0Moz Glenburgh Gold Project owned by Gascoyne Resources Ltd.

## Gold & Nickel-Copper

- The project tenure covers the intersection of the crustal scale Cardilya Fault with the northeast trending Deadman Fault. The project is considered prospective for orogenic gold and or copper mineralisation and intrusion-related Ni-Cu-PGE mineralisation.

# Moogie – Gold & Nickel-Copper



Photo (above) looking south-east over the Dalgety Downs 4 Prospect within the Moogie Project. Moogie is located in the Upper Gascoyne region of Western Australia. For scale, Hannans' 4WD is the small reflection. (September 2020).



Photo (left) shows sample of outcropping quartz-magnetite breccia from the Dalgety Downs 4 Prospect. Mapping in the vicinity of the Dalgety Downs 4 Prospect identified small outcrops of quartz-magnetite (+ silica-albite) breccia with some copper-oxide mineralisation around the margins, over a strike length of ~4km. Significantly, this breccia appears to post-date the strong metamorphic fabric of the surrounding gneissic rock. Multi-element analysis of these breccia samples indicates elevated Bi and Mo in addition to weak Cu and Au anomalism (MS045), warranting further investigation of the exploration potential of this prospect. For more information click [here](#). Sample collected by, and organised to be cut and polished by Nicholas Swanepoel.

# Milly Boo

## – Polymetallic Target

### Location

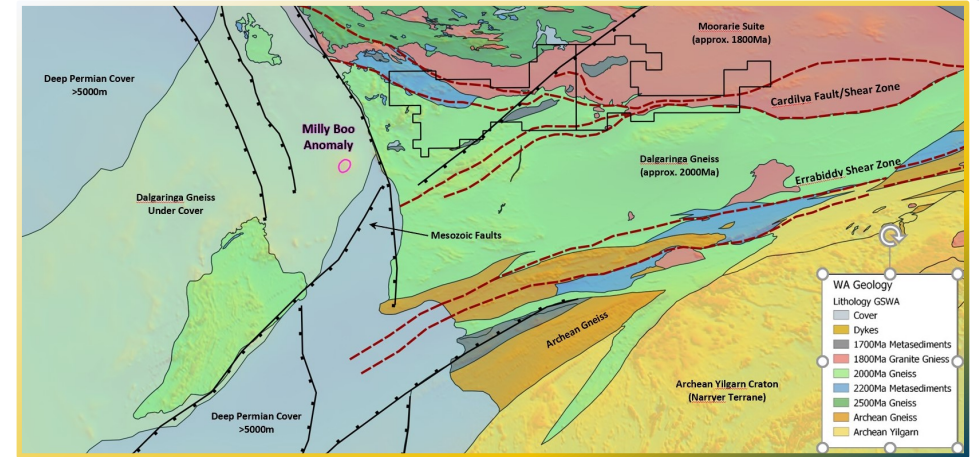
- Milly Boo tenement application located in the Gascoyne Province, located ~260kms north-west of Meekatharra and 270kms east of Carnarvon, WA.

### Concept

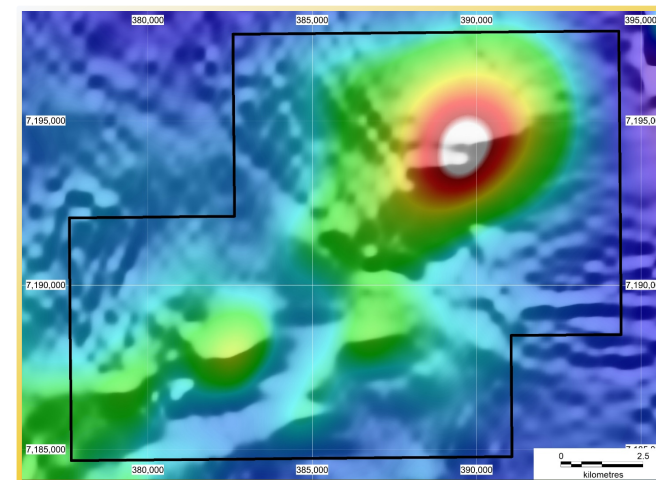
- Application covers a very deep magnetic anomaly identified thought to have characteristics of an Iron Oxide Copper Gold (IOCG) target.
- Milly Boo represents a magnetic anomaly potentially situated in ~2000Ma gneissic rocks of the Dalgaringa Supersuite, under significant Permian cover (+1000m). It is located beneath a corridor of Mesozoic-aged faulting (of the Permian cover) that makes it difficult to interpret the underlying Proterozoic structures from geophysics. Subsidiary magnetic anomalies south-west of Milly Boo are potentially magnetic components of Proterozoic lithology. The significantly stronger Milly Boo magnetic anomaly requires some other explanation.

### Exploration

- Hannans completed a ground-based gravity survey to verify the IOCG target model. The survey comprised 770 gravity stations on a 200x200m grid and data was acquired by Atlas Geophysics using a Scintrex CG5 gravity meter.
- The survey identified a gravity anomaly higher up in cover sediments that did not fit an IOCG model but will be investigated further.

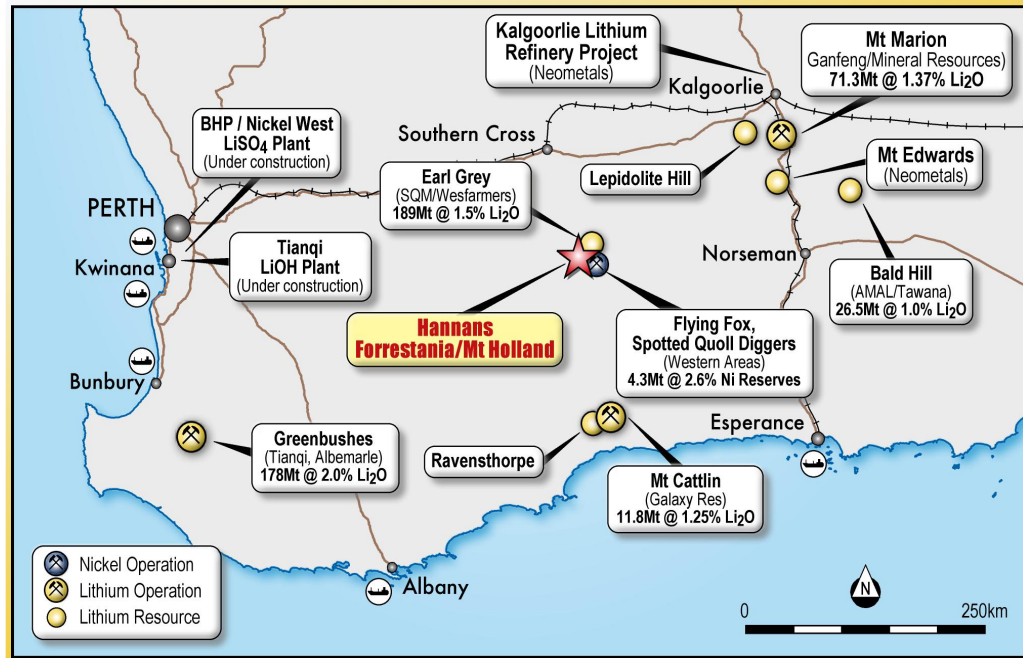


Geological setting of the Milly Boo Project.

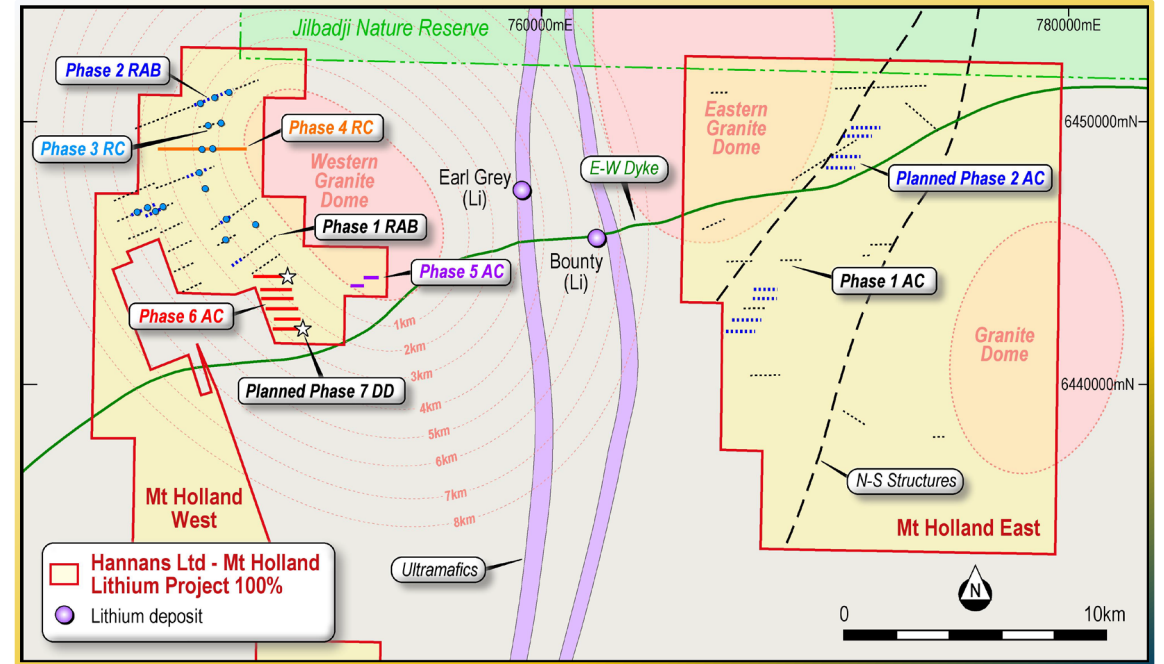


Deep magnetic anomaly within the Milly Boo Project

# Mt Holland – Lithium



Regional location map showing Hannans Mt Holland Lithium Project and major lithium deposits, mines and processing facilities.



Hannans 100% Mt Holland Lithium Project located adjacent to the world's 3<sup>rd</sup> largest hard rock lithium deposit, the Earl Grey owned by SQM and Wesfarmers Ltd. Figure (above) shows location of all phases of Hannans drilling completed. The Phase 7 DD holes at Mt Holland West were planned to test the pegmatite in fresh rock that sits beneath the anomalous lithium results received in the Phase 6 aircore (AC) drilling. One RC hole (not DD) was drilled in October 2020 to test the target. The hole intersected granite and pegmatites from 0m-48m and then 48m-138m weathered and then fresh granite. No spodumene or lepidolite was noted/logged. Assays will determine if significant Li bearing pegmatites were intersected. The planned Phase 2 AC drilling at Mt Holland East will test the validity of geochemical anomalism identified in the Phase 1 AC drilling.

# Directors



## **Jonathan Murray, Independent Non-Executive Chairman**

- ❑ Director of Hannans Ltd (2010).
- ❑ Partner of Steinepreis Paganin
- ❑ Principal legal practice areas include equity capital markets, takeovers, project acquisitions and divestments, corporate governance, commercial law and strategy.



## **Damian Hicks, Executive Director**

- ❑ Director of Hannans Ltd (2002).
- ❑ Financial, legal and compliance qualifications.
- ❑ Principal responsibilities includes strategy formulation, team development, deal origination & execution, stakeholder relationships and capital raising



## **Markus Bachmann, Non-Executive Director**

- ❑ Director of Hannans Ltd (2012).
- ❑ Corporate finance professional
- ❑ Founding partner of Craton Capital (cratoncapital.com)
- ❑ Craton Capital awarded Fund Manager of the Year at the Mining Journal's "Outstanding Achievement Awards" during December 2010.



## **Amanda Scott, Non-Executive Director**

- ❑ Director of Hannans (2016).
- ❑ Exploration Manager for Hannans Group (2008-2016).
- ❑ Consulting Geologist with 13 years experience.
- ❑ Extensive experience in the Yilgarn and Pilbara regions of Western Australia and the Caledonides and Kiruna regions of Scandinavia exploring for gold, copper, nickel, PGEs, iron and manganese.
- ❑ Responsible for generating all of Hannans projects since 2008.



## **Clay Gordon, Non-Executive Director**

- ❑ Director of Hannans (2016).
- ❑ Bachelor of Applied Science (Geology) and a Master of Science (Mineral Economics). Member of the AusIMM and AIG.
- ❑ +25 years' experience in senior roles (operational, management and corporate) within large and small resource companies active in a range of commodities within Australia, Africa and South East Asia.

# Corporate Overview

Fully paid ordinary shares	~ 1.98 billion
Share price	0.7 cents
Options (Ex. price 1.2 – 2.7 cents)	129.5 million
Market capitalisation	~ \$13.8 million
Top 20 holding	63%
Neometals Ltd shareholding	36%
Cash & Investments	~ \$0.4 M
Debt	Nil



Hannans Ltd share price chart for the last 5 years.

# Contact Details

Jonathan Murray  
Chairman  
+61 8 9321 4000  
[jmurray@steinpag.com.au](mailto:jmurray@steinpag.com.au)

Damian Hicks  
Executive Director  
+61 8 9324 3388  
[dhicks@hannans.com](mailto:dhicks@hannans.com)



**hannans.com**



**@Hannans\_Ltd**



**Hannans Ltd**



# Competent Persons Statement

- The information in this document that relates to exploration results at Forresteria is based on information compiled by Adrian Black, a Competent Person who is a Member of the AIG (1364). Adrian Black is a consultant to Hannans Ltd and its subsidiary companies. Adrian Black has sufficient experience, which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been 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 (JORC Code). Mr Black consents to the inclusion in the report of the matters based on his information in the form and context to which it appears.
- The information in this document that relates to exploration results is based on information compiled by Amanda Scott, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy (Membership No.990895). Amanda Scott is a full-time employee of Scott Geological AB. Amanda Scott is a Non-Executive director of Hannans Ltd and holds shares and options in the company. Amanda Scott has sufficient experience, which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been 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 (JORC Code). Amanda Scott consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.
- The information in this document that relates to exploration results at Mt Holland is based on information compiled by Dr Bryan Smith, a Competent Person who is a Member of the Australian Institute of Geoscientists. Dr Smith is a consultant to Hannans Ltd and its subsidiary companies. Dr Smith has sufficient experience, which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been 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 (JORC Code). Dr Smith consents to the inclusion in the report of the matters based on his information in the form and context to which it appears.
- The information in this document that relates to exploration results at Forresteria, Moogie and Mt Holland has been extracted from ASX releases made by the Company and joint venture partner Classic Minerals Ltd prior to the date of this presentation. Hannans confirms that it's not aware of any new information or data that materially affects the information included in the ASX releases previously made by the Company.

# Appendix: Forresteria – Flying Fox and Spotted Quoll

- The Forresteria region contains several different mineralisation settings and styles: basal massive sulphide, disseminated sulphides in cumulates and remobilised massive and matrix sulphides, exhibiting a range of geophysical responses, occurring in a range of rock types / settings and therefore you need to keep an open mind.
- Two major nickel sulphide deposits (Flying Fox and Spotted Quoll) are along strike from Hannans' tenure plus the New Morning nickel resource and significant prospect (Beautiful Sunday) about Hannans' tenure.
- Previous explorers (mainly Outokumpu and others) believed they had tested all the targets and there was nothing left to find at Forresteria. At Flying Fox the initial discovery hole of the "new" orebody was almost identical in set-up to three other deep holes (3 x 700m) that Outokumpu had drilled. The "new" discovery hole was targeted at the same basal ultramafic / metasediment footwall of the Western Ultramafic Belt supported by a newly interpreted downhole electromagnetic (DHEM) conductor plate model designed by Newexco.
- History shows explorers had driven over Spotted Quoll for 34 years and had downgraded the area because it had already been "tested" by an old AMAX drillhole WBD12, however that hole had stopped approximately 10 metres short of the orebody.
- Western Areas Ltd, owners of Flying Fox and Spotted Quoll have yet to define the deposit limits and are still drilling extensions to both deposits today.
- The footprints of these deposits are also significant. Flying Fox strike length measures about 300m on surface and over 600m at depth with a plunge extent of roughly 1,600m – 2,000m. The thickest ore at Flying Fox was approximately 18m true thickness and this was hit early on when targeting the kernel of the DHEM anomaly. Spotted Quoll strike length measures 350m on surface and plunges to greater than 1,600m at depth. The thickest ore intersected by surface drilling at Spotted Quoll was approximately 18m (10-12m true thickness) at a grade of 10% Ni.
- Flying Fox and Spotted Quoll deposits were found using "conventional" geological concepts and geophysical technology that was new but readily available at the time. Newexco played key roles in the discovery of the "new" Flying Fox and Spotted Quoll - their targeting and geological concepts were slightly different along with the belief, will and determination to find new deposits.