# Scandinavia: the birth place of nickel

## applying modern technology to historical mineralised fields

Presentation May 2014



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*The information in this report that relates to exploration results is based on information compiled by Mr Peter Williams, Technical Director of Boss Resources Ltd and Dr Marat Abzalov, Executive Director – Geology of Boss Resources Ltd. Mr Williams is a member of the Australian Institute of Geoscientists. He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and 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". Dr Abzalov is a Fellow of Australasian Institute of Mining and Metallurgy (FAusIMM) and he has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and 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". Mr Williams and Dr Abzalov consent to the inclusion in the report of the matters based on information in the form and context in which it appears.*

# New Strategy: New Direction



- New **highly qualified exploration team** with excellent track record
- Rapid evaluation of 2 highly prospective Ni / Cu Projects with walk up drill targets
- **11 strong ground TEM conductors identified** at Skogtrask Ni / Cu Project, Sweden
- 2 x 700m ground TEM conductors at Liakka Ni / Cu Project, Finland
- Conductors proximate to historically drilled **disseminated mineralisation**
  - 12.9m @ 0.7% Cu, 0.2% Ni from 33.9m
  - 27.3m @ 0.7% Cu, 0.3% Ni from 47.2m **incl 10m at 1.0% Cu and 0.5% Ni**
  - 11.8m at 0.6% Ni and 0.2% Cu from 36m
  - 8.4m at 0.6% Ni and 0.5 Cu from 21m
- Conductors coincident with **intense magnetic anomalies**
- **Drilling imminent**
- **Rapid evaluation** of projects using modern innovative geophysical techniques
  - Value-adding exploration programs whilst minimising exploration spend - money into ground not admin
- Capability to develop a pipeline of quality new projects through re-evaluation of historical exploration data using new ideas and relevant technologies
  - management team active in Scandinavia since 2008
- **Aim to make a serious sized discovery within 3 years**
- Highly prospective gold assets in Burkina Faso joint ventured to Gryphon Minerals Ltd (ASX:GRY) with free carry to decision to mine

# The New Team

- **Peter Williams – Technical Director**

  Explorationist / geophysicist with over 30 years experience, Peter is the former Chief Geophysicist and Manager – Geoscience Technology for WMC Resources. Co-founder of the Independence Group Limited he has developed and implemented successfully high powered 3 component 3D TEM applications that lead to the discovery of over 75,000t of nickel at the Victor Long Nickel Mine in Kambalda. He has extensive experience in West Africa where he was the vendor of Gryphon Minerals' Banfora Gold Project, was involved in the project generation of Papillion's Mali projects and was a founding director of Ampella Mining Ltd. Peter was a co-founder of the International Resource Sector Intelligence company, Intierra and was a co-founder of the first dedicated hard rock mineral seismic company in the world, HiSeis, specialising in 3d Seismic surveys. He is also a director of Newgenco.

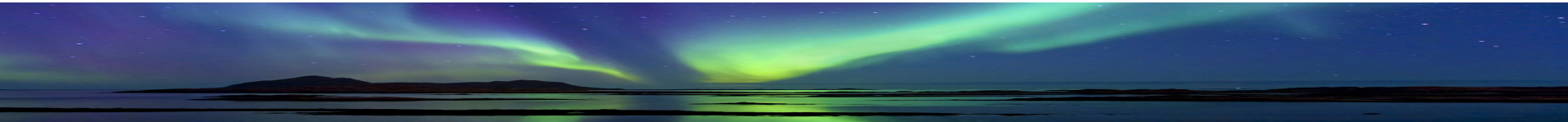
- **Dr Marat Abzalov – Director of Geology**

  Dr Abzalov has PhD in Geology gained studying nickel in Russia and Fennoscandia). He has worked as Exploration Manager – New Opportunities (Eurasia )and Group Geo-statistical Consultant for Rio Tinto. With diverse commodity and geographical experience, Marat has demonstrated skills in greenfields, brownfields and resource modelling. He was involved in the successful resource growth at Olympic Dam (IOCG) and Cliffs (Ni).

- **The Newgenco Group – Joint Venture Partners**

  Newgenco is a dedicated specialist exploration group targeting world class magmatic nickel-copper-PGE orebodies. In November 2008, Newgenco signed a 3-year strategic exploration targeting alliance with TSX- and LME-listed First Quantum Minerals to explore for large magmatic nickel-copper-PGE sulphide resources in Finland, Norway and Sweden. Over the course of the alliance, a significant number of new areas of mineralisation were identified and these projects are currently being explored by JV's between Newgenco and First Quantum. Following the completion of the alliance in 2011, Newgenco is now leveraging off its past experience and extensive data bases to target and identify a pipeline of new project areas.

  - **Dr. John Simmonds**
  - **Dr. Danielle Giovenazzo**
  - **Dr. Rebecca Sproule**



# Corporate Profile

**Capital Structure**

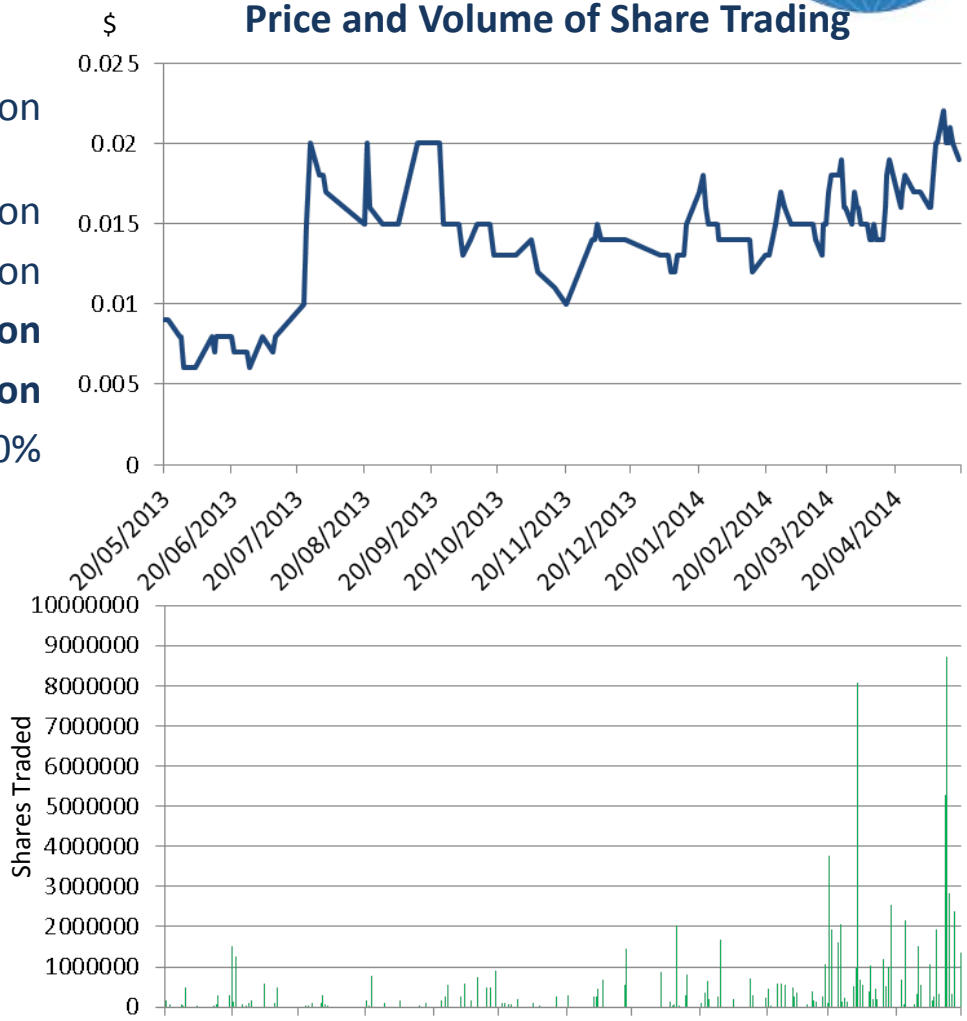
| | |
|---|---|
| Existing Shares (ASX:BOE) | 547 million |
| Unlisted Options (various $0.08-$0.15) | 59.6 million |
| Performance rights** | 40 million |
| **Cash (30 March 2014*)** | **$2.5 million** |
| **Market Cap at $0.018** | **$10 million** |
| Top 20 Shareholders | ~60% |

**Board**

Evan Cranston – Chairman
Peter Williams – Technical Director
Marat Abzalov – Exec Director - Geology
Tom Grove – Non Executive Director

Oonagh Malone – Company Secretary

**Price and Volume of Share Trading**




**13.3m rights convert if share price >8.5c
13.3m rights convert on discovery of 75kt Ni
13.3m rights convert on discovery 125kt Ni
*post completion of GRY transaction ($200,000)

# Why Scandinavia?

- Projects located in low-risk, mining-friendly countries in Europe with 1000+ year history
  - highly attractive taxation and royalty structure
  - outstanding national infrastructure enhances potential for rapid mine development
- Right geological setting to host major discoveries

  - Where nickel was first discovered in 1751
- Scandinavia holds a multiplicity of highly prospective search regions (belts) of interest
  - old cratonic margins
  - deep structure
  - voluminous magmatism of appropriate composition
- Less than 1% outcrop – potential orebodies hidden under cover
- Use of low cost modern geophysics to unearth hidden world class orebodies
  - Sakatti discovery in Finland, Anglo America, 2011



# The Initial Projects

## Skogtrask (Sweden) (right to acquire 100%)

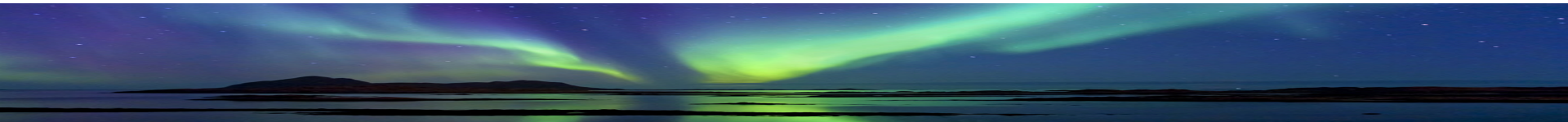
- Known quality Ni-Cu sulphides confirmed by historical government drilling in 1970s
- 22 $km^2$ claim granted to Newgenco
- 11 strong TEM conductors identified to date coincident with intense magnetic anomalies
- Drilling imminent

## Liakka (Finland) (right to acquire 100%)

- Known quality Ni-Cu sulphides confirmed by historical Outokumpu drilling in 1980s
- 29 $km^2$ claim under application by Newgenco
- 2 x 700m long TEM conductors identified
- Exploration license application submitted expected grant 2H 2014

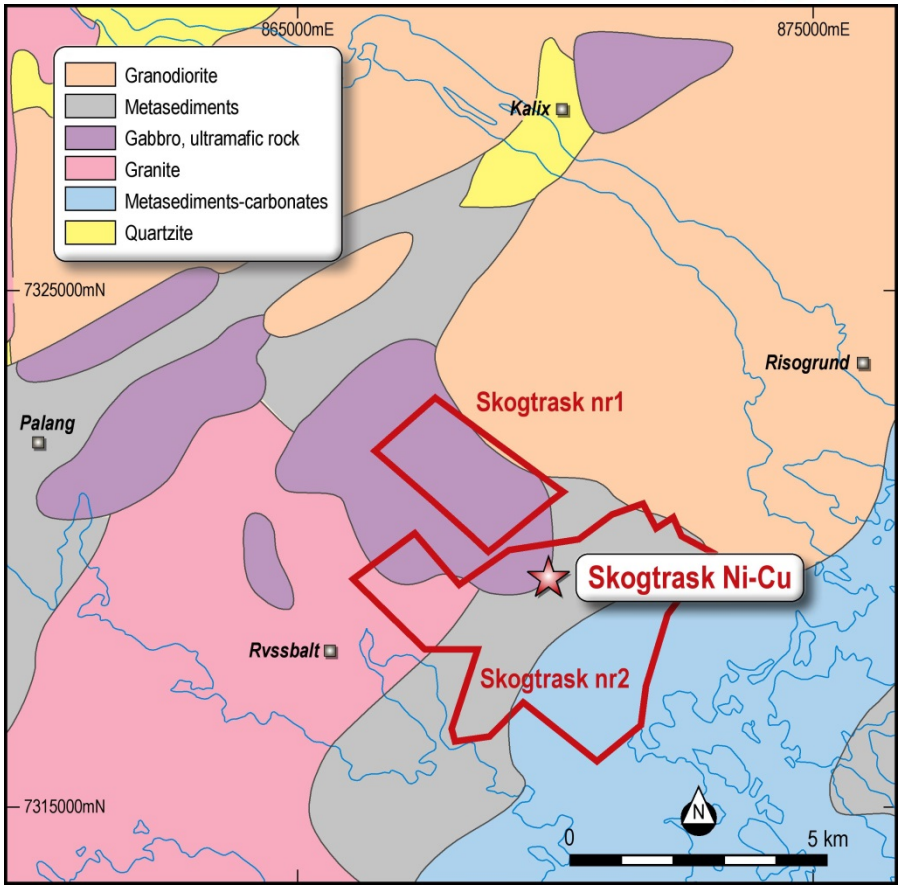
**Pipeline of projects coming from extensive existing knowledge databases and relationships**

**Targeting known mineralised regions and applying new technology for rapid assessment of projects**

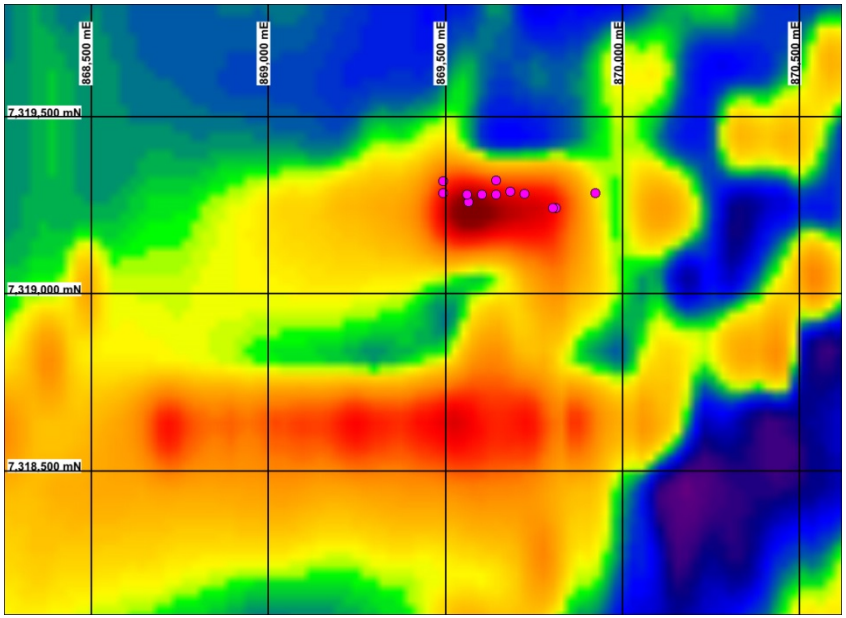


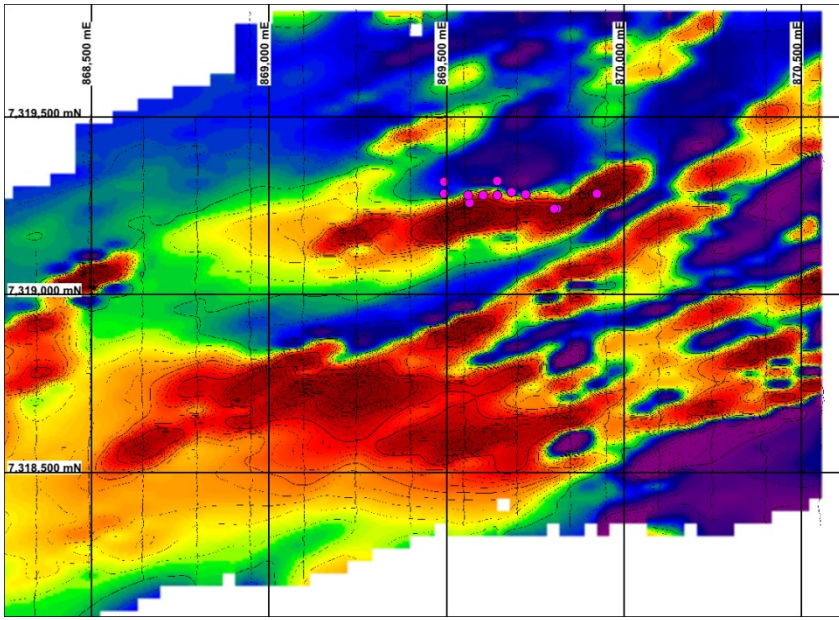
# Skogtrask – Sweden

- **Ultramafic-mafic intrusion within Bothnian Megashear – a long-lived lithospheric break**
- **Poor outcrop due to glacial cover**
- **No exploration since 1971 and no use of modern geophysical technologies**
- **11 shallow DDH (SGU, 1969-71) intersected semi-massive to heavily disseminated sulphides**
- **Historical drilling**
  - **11.8m at 0.6% Ni and 0.2% Cu from 36m**
  - **8.4m at 0.6% Ni and 0.5 Cu from 21m**
- **Cu-Ni sulphides confirmed on surface**
  - **other intrusions with disseminated sulphides confirmed in area**
- **Targeting potential massive Ni-Cu sulphides and IOCG potential**
- **Excellent infrastructure**
  - **Within 12 kms of deep water port**
  - **Extensive road and power network**



# Higher Resolution Ground Magnetics



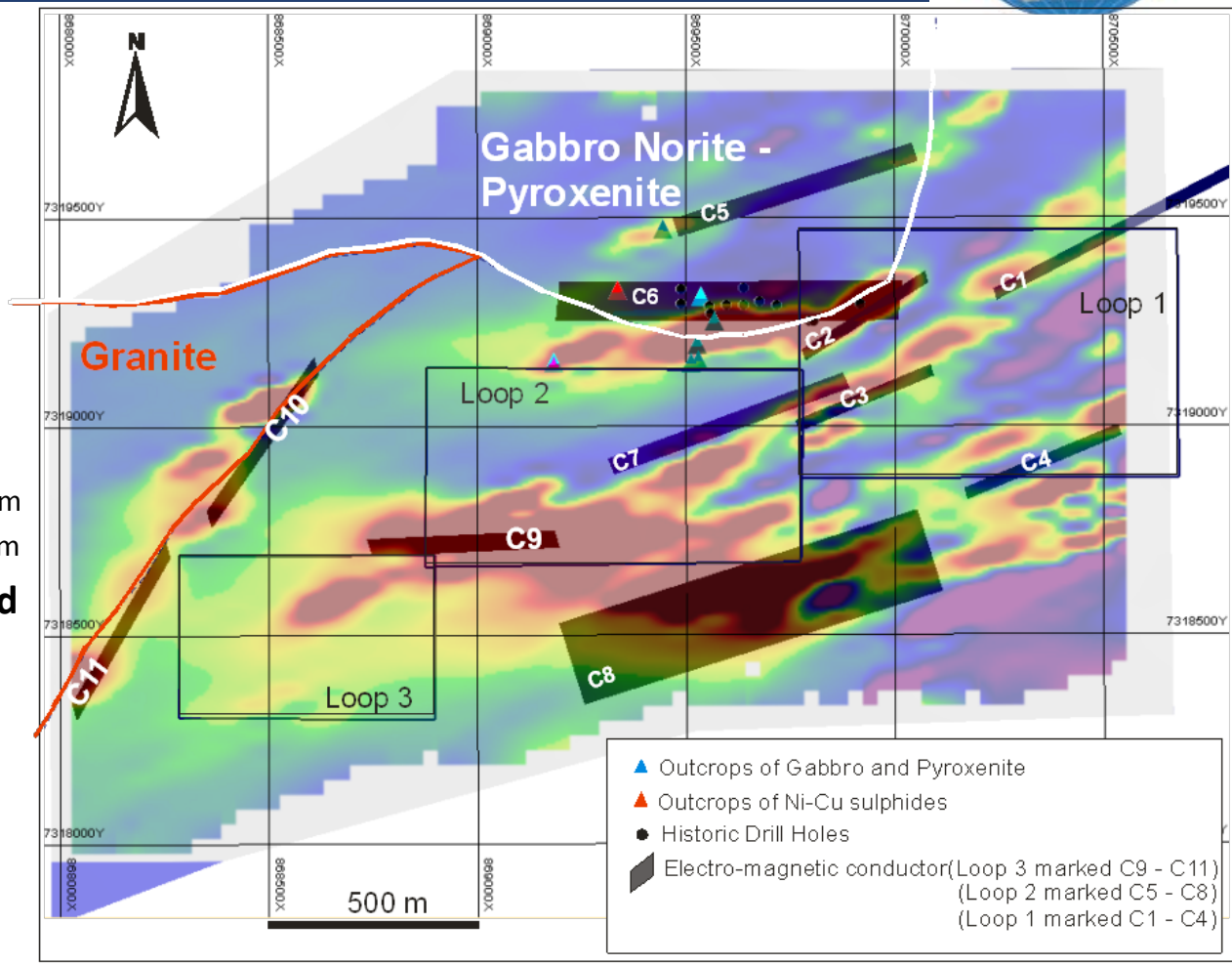

**Airborne Magnetics, 400m line spacing, EW lines (Swedish Government Airborne Survey)**

**Ground Magnetics (Boss), 150 m line spacing, NS lines**

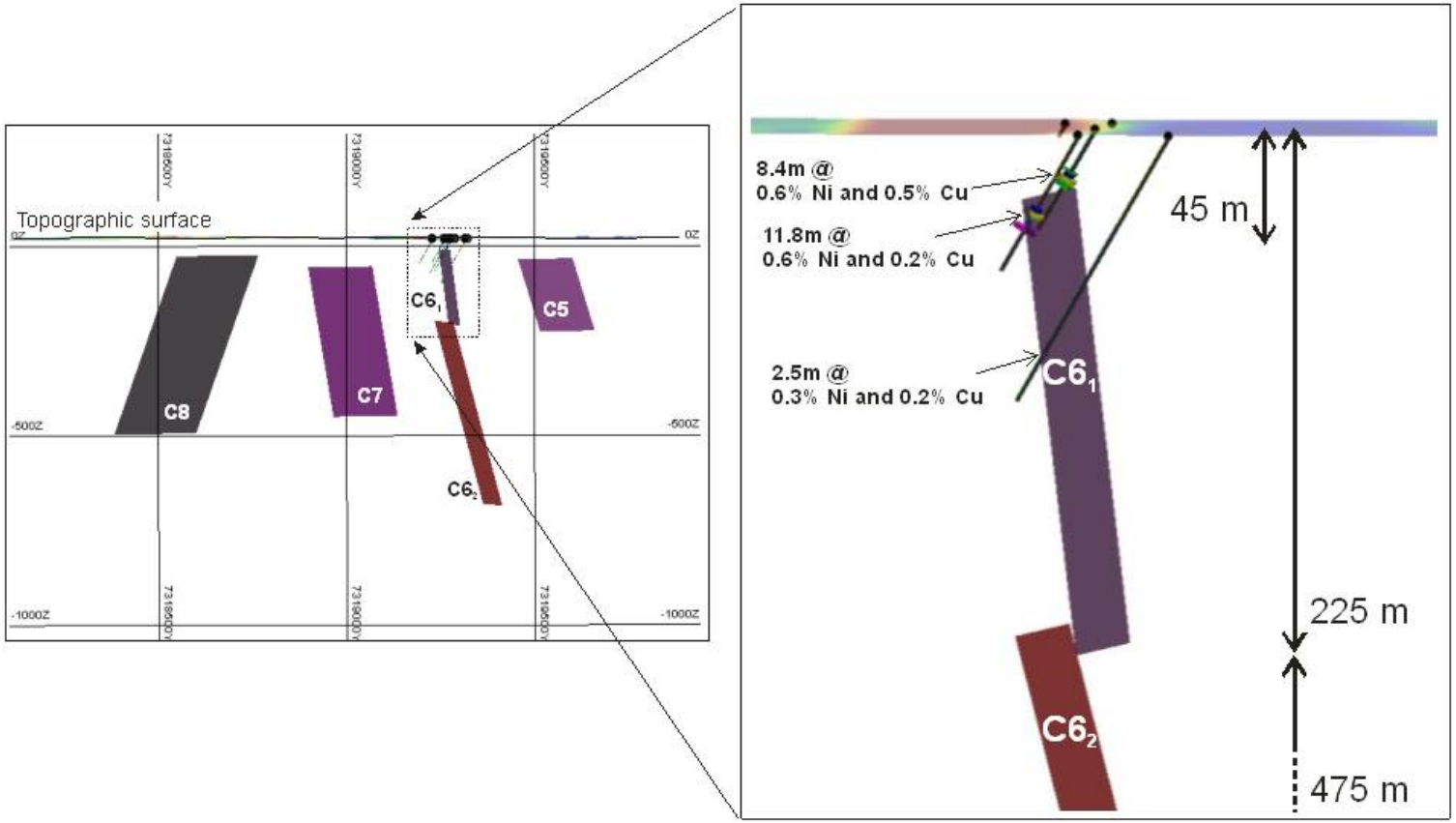
- **900m strike length intense Magnetic anomaly, 20,000 nt amplitude**
- **1000m strike length of potential IOCG style mineralisation**

# Building the 3d conductivity image

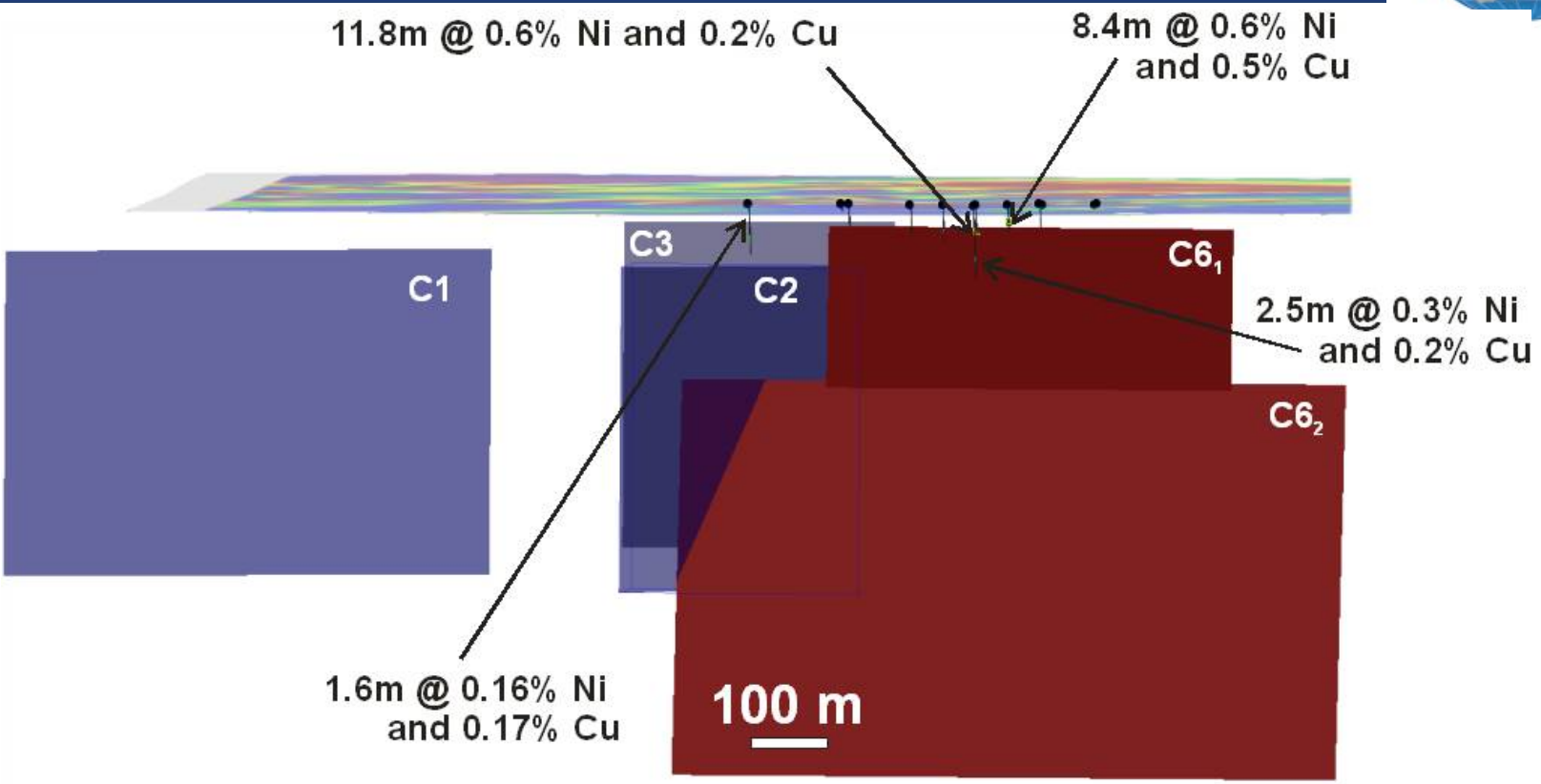
- **Fixed and Moving Loop Ground TEM completed**
  - First time high powered JESSY DEEP SQUID used in Sweden
- **11 strong bedrock conductors mapped**
- **Coincident magnetic and highly conductive sources down dip/plunge from historic drilling**
  - 11.8m @ 0.2% Cu, 0.6% Ni from 36.5m
  - 8.4m @ 0.5% Cu, 0.6% Ni from 20.8m
- **Out cropping pyroxenite mapped 400m west of historical drilling**
  - 0.5% Ni and 0.3% Cu



# Drill Ready Targets

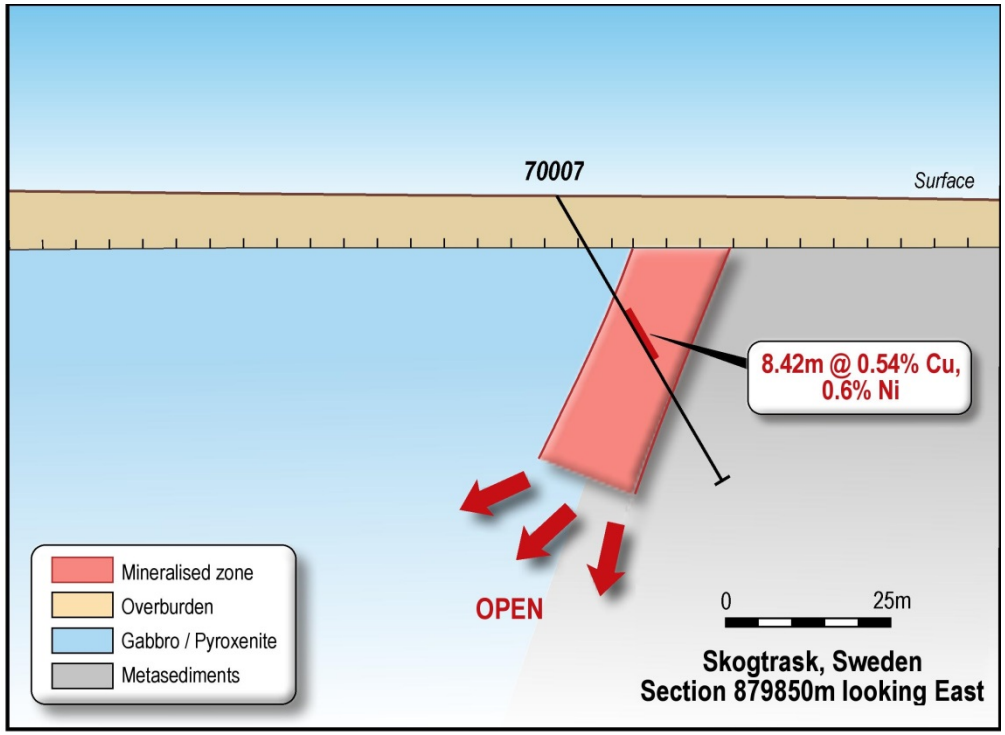


# Drill Ready Targets

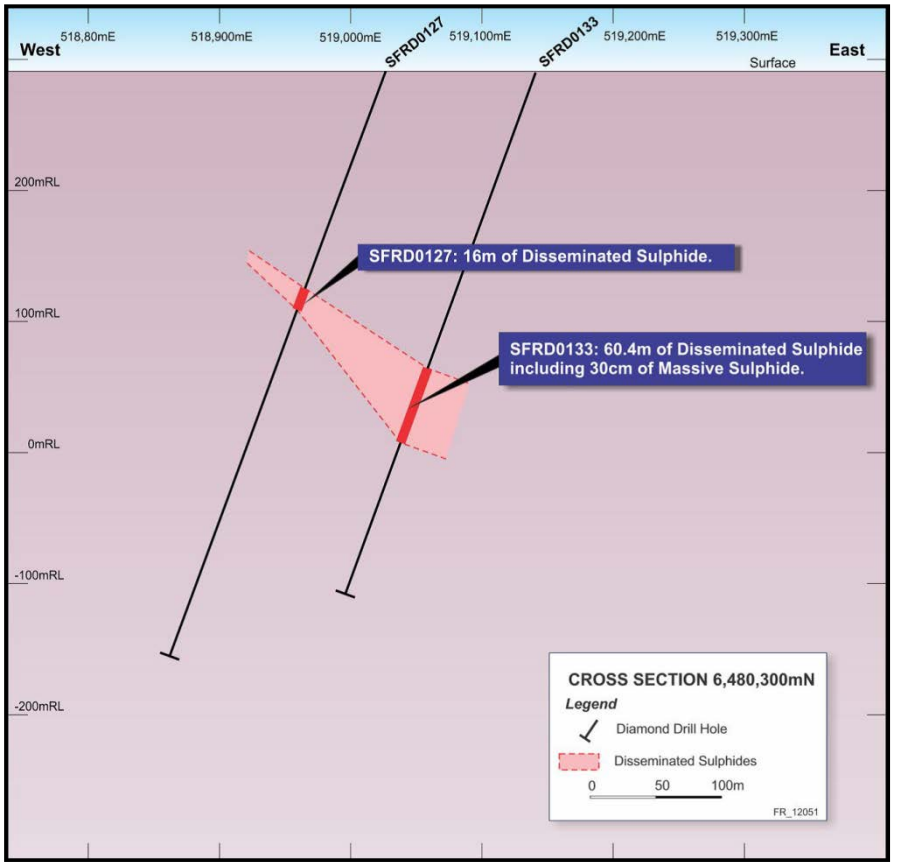



**These drill holes have intersected only upper part of 820m long and 700m deep conductive zone (C6)**

# Shallow Open at Depth




**Cross section from Skogtrask Project illustrating disseminated mineralisation near surface and completely open at depth**

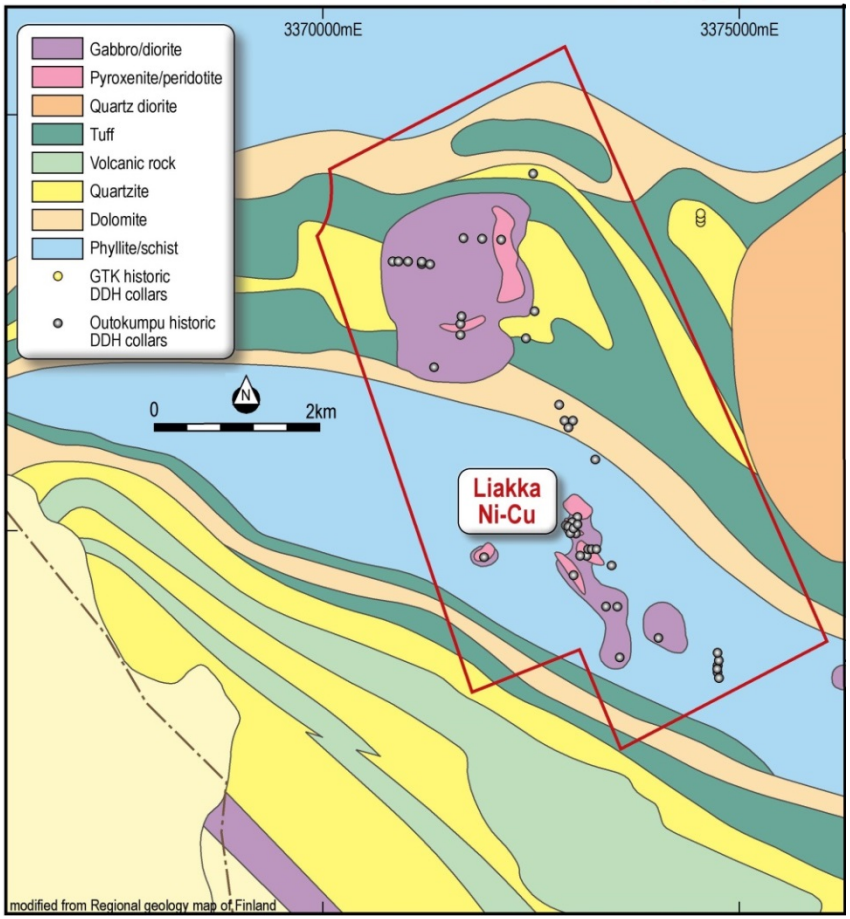



**Cross section from Sirius' Nova deposit illustrating increase in width of mineralisation at depth**

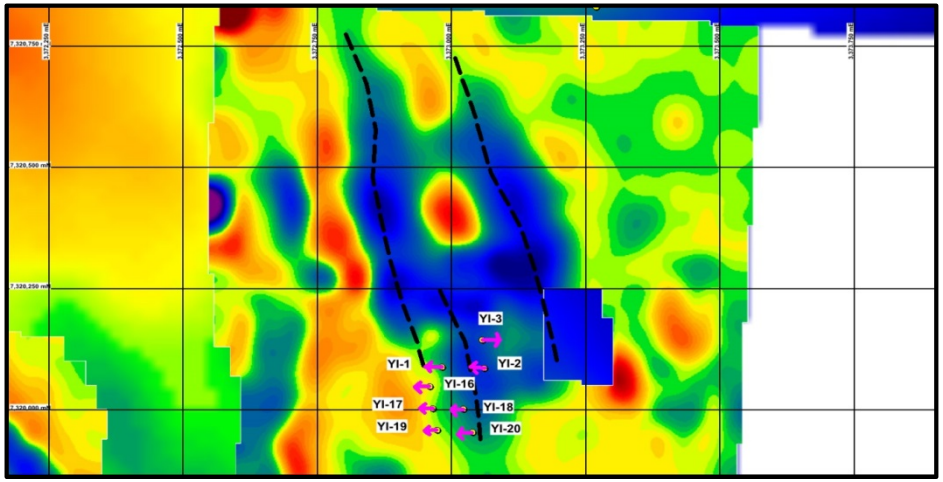
# Liakka – Finland

- Sulphide mineralisation hosted by mafic-ultramafic intrusions of probable Svecofennian age

  (Equivalent to the Hitura deposit – 16mt mined since 1970)
- Poor outcrop due to glacial cover but multiple intrusions evident in the regional magnetic and detailed gravity survey
- Historical exploration (1982-86) focused on larger intrusion: 22 DDH for total 3455m
  - No recent exploration or use of modern geophysical technologies
  - Limited deep drilling below 100 metres
- Nickel tenors 4-6% - high grade potential
- Historical drilling
  - YLI-1 6m @ 0.8% Cu, 0.5% Ni from 23.8m
  - YLI-1 12.9m @ 0.7% Cu, 0.2% Ni from 33.9m
  - YLI-17 27.3m @ 0.7% Cu, 0.3% Ni from 47.2m
    incl 10m at 1.0% Cu and 0.5% Ni
- Potential massive to semi-massive contact and disseminated sulphides in both the main intrusion and the underexplored adjacent intrusions



# Shallow Open at Depth



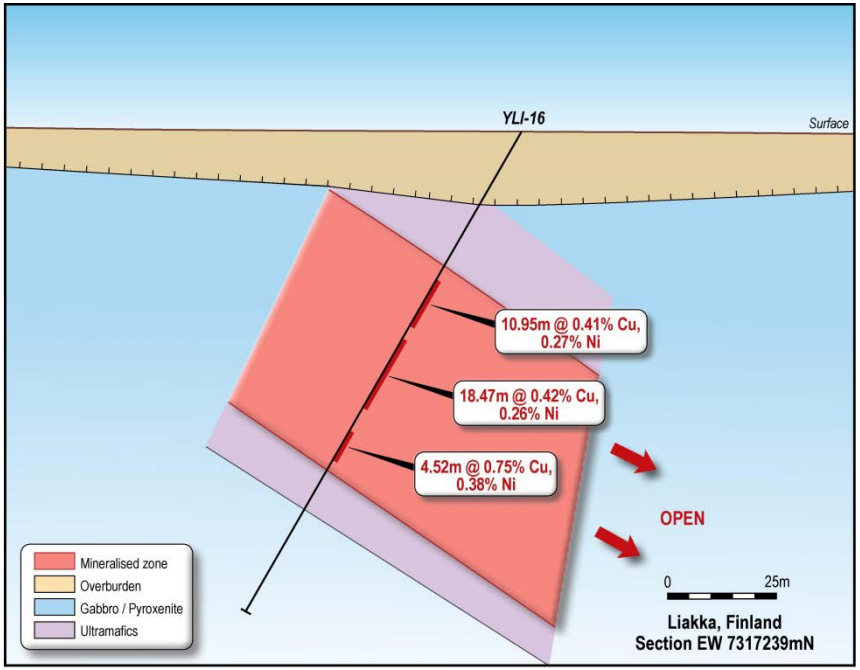

- Ground magnetics and TEM completed
- 2x 700m conductors along strike from Historical mineralisation
- Drill ready targets, 1,400 strike metres
- Exploration Permitting applied for (2H 2014)
- Drill program and DHEM planned and clearance being sort (2H 2014)

Liakka Project, Finland: Weighted (pondered) averages for the historic drilling using a cut-off grade of >0.3% Cu

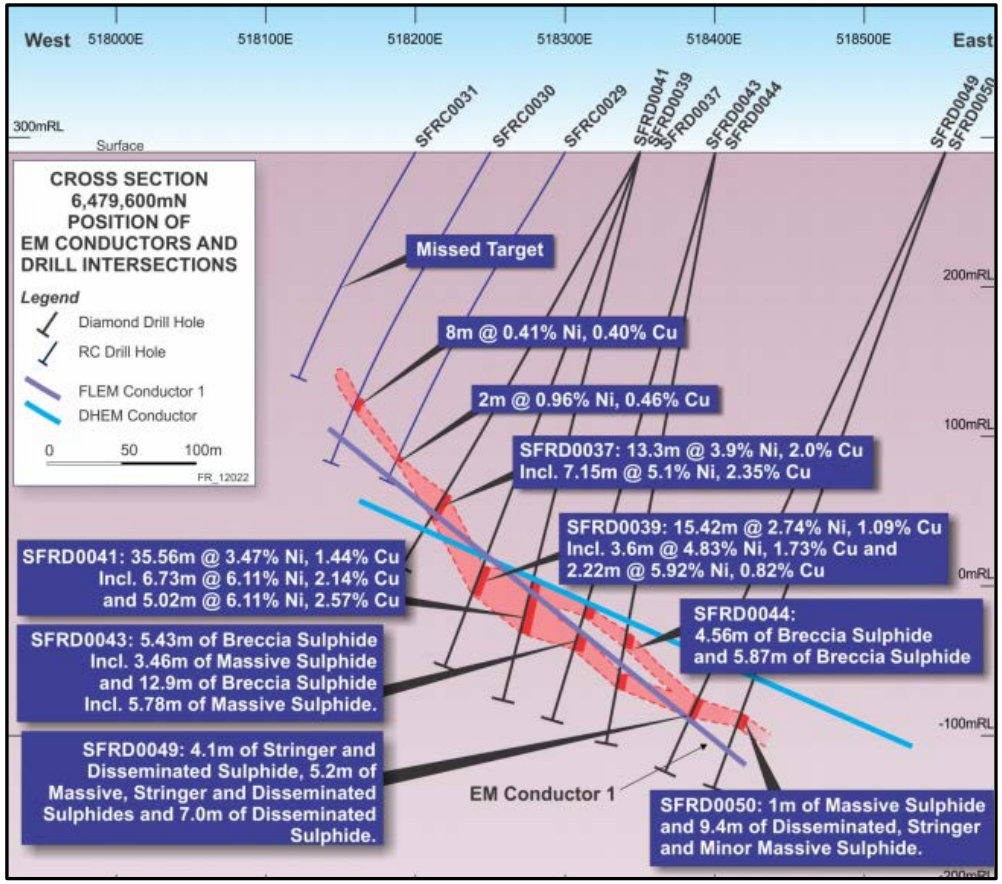
| Hole Number | Down Hole Depth (metres) | Intercept Length (metres) | Copper Grade (% Cu) | Nickel Grade (% Ni) | Gold Grade (ppm Au) | Cobalt Grade (ppm Co) |
|---|---|---|---|---|---|---|
| YL1 | 23.8 | 6.02 | 0.80 | 0.48 | 0.14 | 255 |
| | | | | | | |
| | 33.9 | 11.33 | 0.77 | 0.19 | 0.22 | 130 |
| | | | | | | |
| YL2 | 39.25 | 2.88 | 0.51 | 0.28 | 0.10 | 173 |
| | | | | | | |
| YL3 | 55.58 | 1.72 | 0.34 | 0.23 | 0.07 | 160 |
| | | | | | | |
| YL16 | 41.12 | 10.95 | 0.41 | 0.27 | DNA | 189 |
| | | | | | | |
| | 55.18 | 18.47 | 0.42 | 0.26 | DNA | 189 |
| | | | | | | |
| | 82.9 | 4.52 | 0.75 | 0.38 | DNA | 229 |
| | | | | | | |
| YL17 | 47.2 | 25.87 | 0.73 | 0.41 | DNA | 177 |
| INCLUDING | 62.96 | 10.31 | 1.02 | 0.52 | DNA | 219 |
| | | | | | | |
| YL18 | 94.2 | 8.8 | 0.63 | 0.33 | DNA | 202 |
| INCLUDING | 101 | 2 | 1.45 | 0.50 | DNA | 250 |

DNA= Did Not Assay

# Shallow Open at Depth




**Cross section from Liakka Project illustrating broad zones of disseminated mineralisation completely open at depth**




**Cross section from Sirius' Nova deposit illustrating significant grade improvement at depth**

# Infrastructure




Excellent rail and road



Close to Harjavalta plant of Boliden AB and under-utilised refinery in northern Finland

Close to the heart of Outokumpu's Ferrochrome business (Tornio-Kemi)



Project proximate to deep water ports

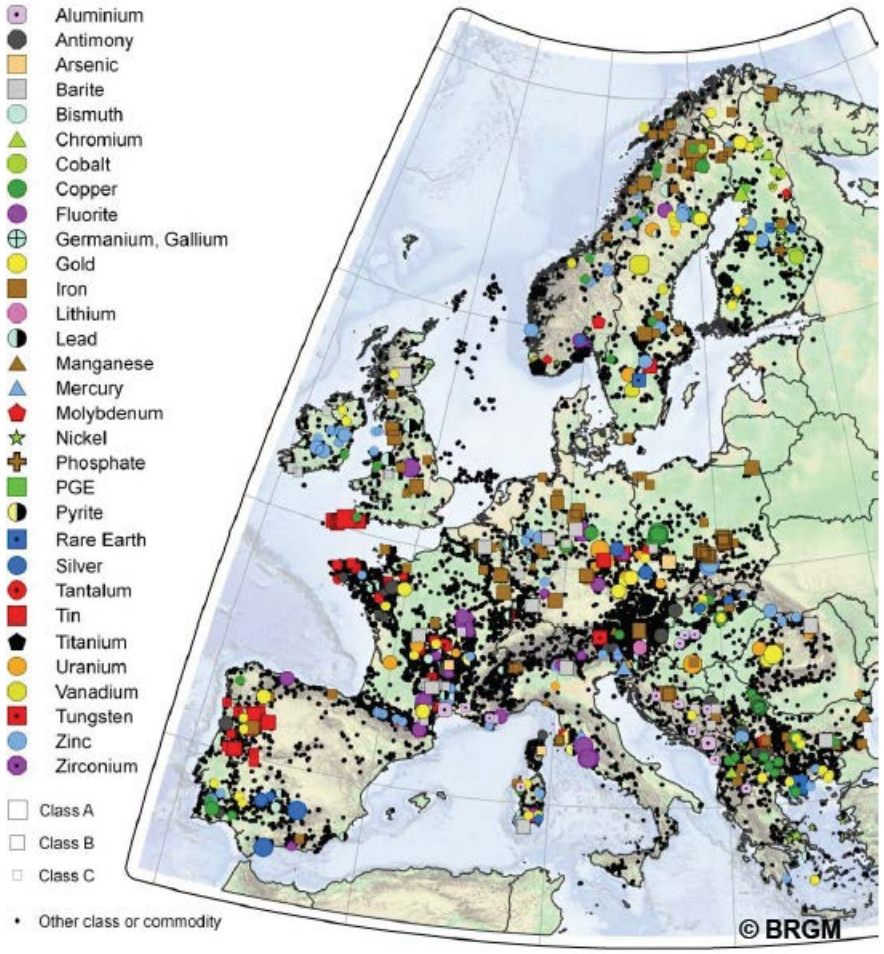


High voltage power through permits

# Other Areas of Interest

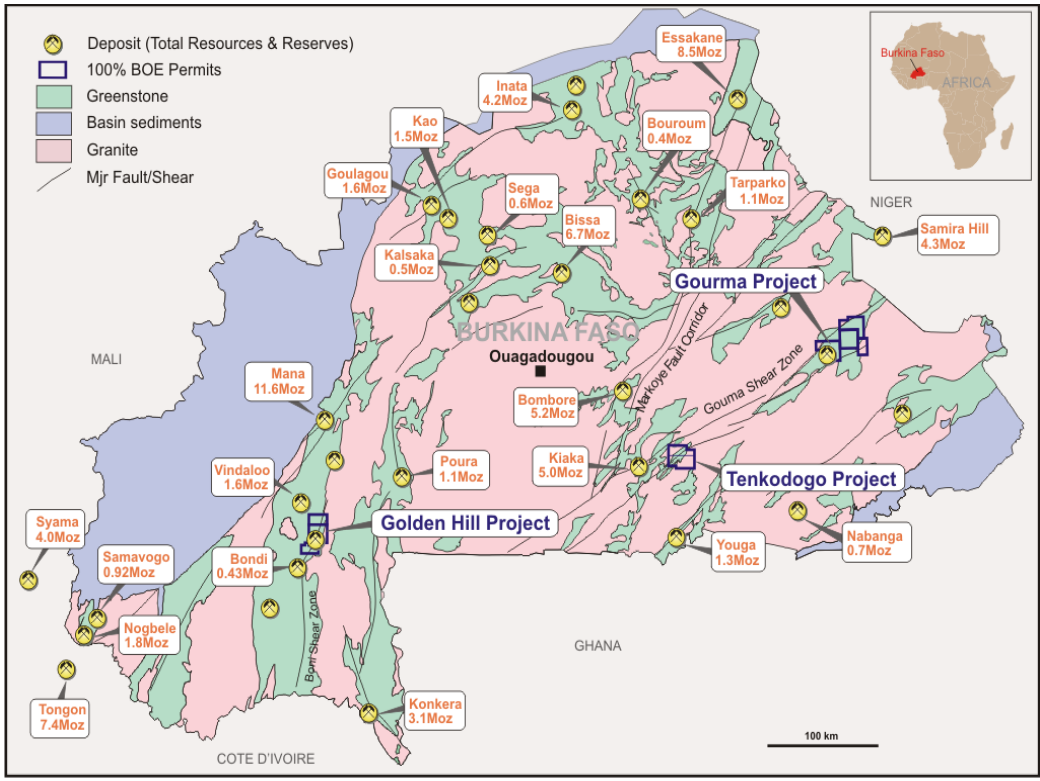
**Disciplined strategy to target new projects:**

- **Strong preference for high value ore types**
- **Known mineralisation – not greenfield**
  - **Reduces early stage exploration expenses**
- **Modern geophysical technologies and processing techniques**
  - **Magnetics**
  - **Electro Magnetics**
  - **Gravity**
  - **Induced Polarisation**
  - **Early mover in applying Seismic in hard rock mining**
- **Significant portion of Europe never subject to modern day exploration techniques and technology**
- **Stable and developed mining jurisdictions**
- **Existing infrastructure to enable rapid development**



# Gold assets in West Africa

- **JV with Gryphon Minerals Ltd (ASX:GRY)**
- **Free carried 30% to DTM**
- **Golden Hill Gold Project, Burkina Faso**
  - 470km$^2$ brownfields project on the Boni Shear Zone in the Hounde Greenstone Belt
  - 14km southeast of the 2.0Moz Vindaloo deposit (currently under BFS) and 10km north of the 0.43Moz Bondi deposit
  - 4 prospects with best shallow intercepts (<60m) including:
    - 22m at 12.4g/t Au
    - 14m at 8.4g/t Au
    - 28m at 3.4g/t Au
    - 34m at 2.6g/t Au
    - 2m @ 168.8 gpt Au from 22m
    - 2m @ 98.4 gpt Au from 4m
    - 2m @ 58.9 gpt Au from 2m
    - 2m @ 53.14 gpt Au from 24m

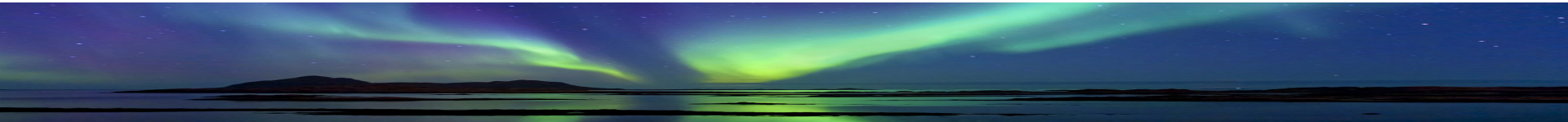



- **Gourma Gold Project, Burkina Faso**
  - 850km$^2$ greenfields project in unexplored "Elephant country" on the Gourma Shear Zone, 80km southwest of the 4.3Moz Samira Hill deposit
- **Tenkodogo Gold Project, Burkina Faso**
  - 430km$^2$ greenfields project on the Gourma Shear Zone
  - 30km east of the 5Moz Kiaka Deposit

# Value Adding Milestones



- [x] New project generation strategy
- [x] New highly experienced technical team with excellent track record
- [x] Acquisition of Skogtrask and Liakka Ni-Cu projects
- [x] Identification of strong TEM conductors at Skogtrask and Liakka
- [ ] Drilling of geophysical conductors at Skogtrask and Liakka imminent
- [ ] Review and acquisition of additional value adding projects
- [ ] Additional news flow from Gryphon's exploration programs in Burkina Faso



# Why Boss?



- New value adding exploration strategy
  - focus on high value ore types
  - low cost highly effective exploration techniques
  - focus on putting money in the ground not in administration
- Highly experienced and competent exploration team with excellent track record
- 2 new, exciting low cost Ni-Cu projects with imminent drilling
- 13 strong TEM conductors identified with coincident disseminated sulphide mineralisation and intense magnetism
- Stable mining friendly mining jurisdictions
- Close to extensive first world infrastructure for rapid project development
- Excellent government support
- Set to leverage off existing knowledge, relationships and databases to deliver pipeline of projects
- Sufficient cash position to carry out initial exploration
- Addition news flow from Gryphons exploration programs in Burkina Faso

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