



Orion Gold_{NL}

ASX Code: ORN

A two-pronged campaign targeting world-class discoveries in nickel and gold

- **Fraser Range Nickel-Copper, WA: exploration delivering encouraging results**
- **Connors Arc, Qld: substantial new epithermal gold-silver target identified**

Investor Presentation Dec 2014

Errol Smart: Managing Director

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- All information in respect of Exploration Results should be read in conjunction with the Competent Person Statements at the end of this presentation.

Orion: Corporate Summary (post underwriting)



Capital Structure Summary

| | |
|---|--------|
| Shares on Issue | 277M |
| Options on Issue | 88M |
| Market Capitalisation (at 3cps) | \$8M |
| Cash on Hand <i>(as at 30 Sep '14 – pre underwriting)</i> | \$0.1M |
| Underwritten Entitlement Offer <i>(closed 21 Nov '14)</i> | \$1M |

Board & Management

| | |
|--------------------|------------------------|
| Denis Waddell | Chairman |
| Errol Smart | CEO, Managing Director |
| Bill Oliver | Technical Director |
| Alexander Haller | Non Executive Director |
| Kim Hogg | Company Secretary |
| Martin Bouwmeester | Business Development |

Significant Holder Name

Number

%

| | | |
|-------------------------------------|-------------|-------|
| Silja Investment Ltd ⁽¹⁾ | 47,373,245 | 17.1% |
| Alexander Haller ⁽¹⁾ | 11,302,248 | 4.1% |
| Creasy Group | 20,765,447 | 7.5% |
| Tarney Holdings | 27,199,514 | 9.8% |
| Significant Holder Total | 106,640,454 | 39% |

⁽¹⁾ Mr Alexander Haller is deemed to have a relevant interest in securities held by Silja Investment Ltd.

➤ Fraser Range Nickel-Copper & Gold Project in Western Australia

- Substantial (>5,000 sq.km) landholding in the emerging Fraser Range Belt
- Located between two of the most significant Australian mineral discoveries of the past decade (Nova and Tropicana)
- Drilling continues to intersect mafic-ultramafic intrusions
- Results from recent Pennor drilling received
- Confirm Pennor & HA2 as compelling Ni-Cu targets

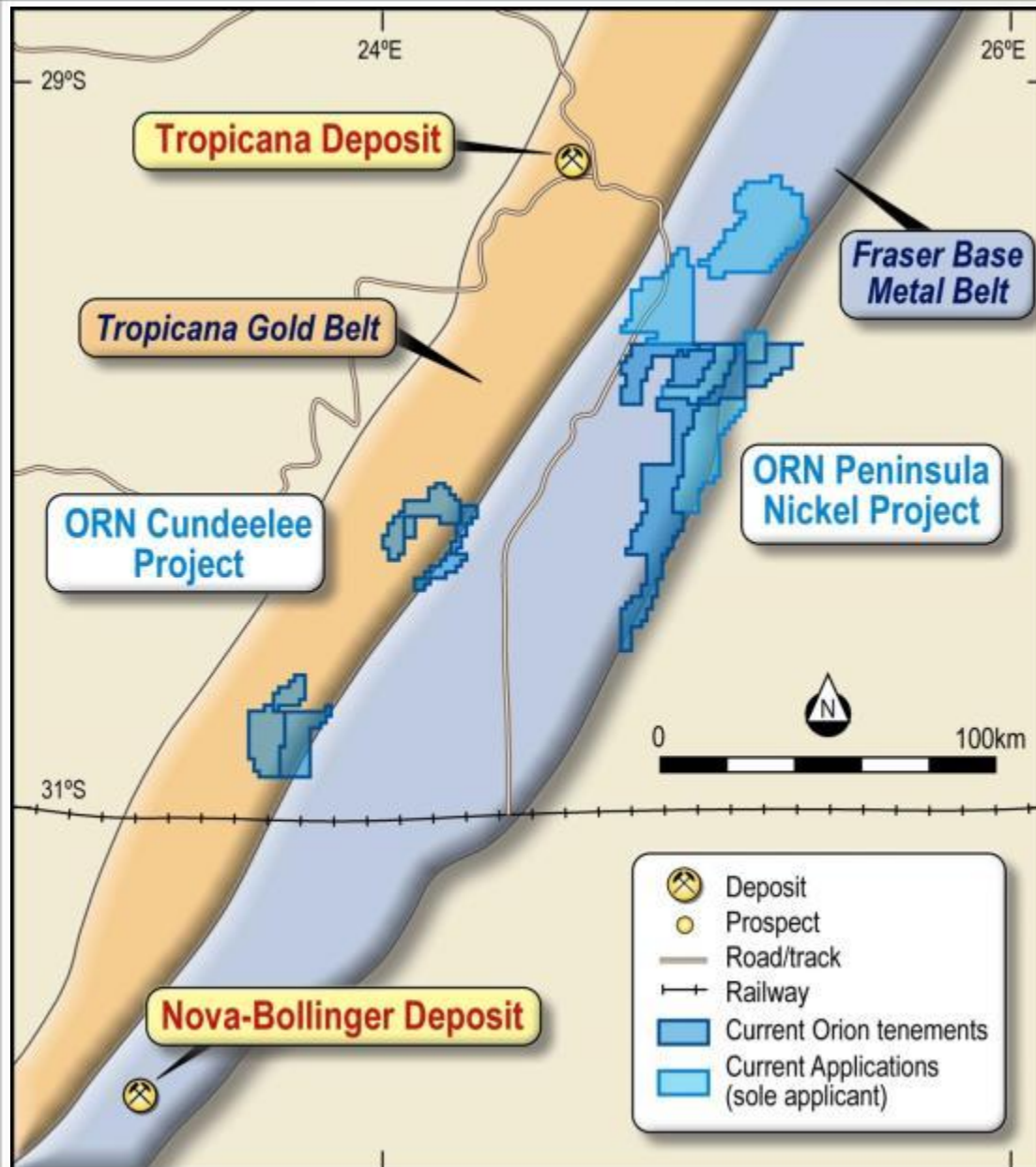


➤ Connors Arc Epithermal Gold Project in Queensland

- Underexplored landholding between Cracow and Mt Carlton recently increased to 2,000sq.km
- Encouraging results in historical shallow drilling
- Mapping has identified that the strike & number of veins is more extensive than first thought
- Indications that this could be one of Australia's only Intermediate Sulphidation Deposits
- Overseas examples include giants such as Pachuca Real (Mexico) & Acupan, Antomok Bagiuo (Philippines)

Orion Gold is focused on acquiring, exploring and developing large tenement holdings or regional scale mineral opportunities in world-class mineral provinces.

Fraser Range - In the Right Neighbourhood



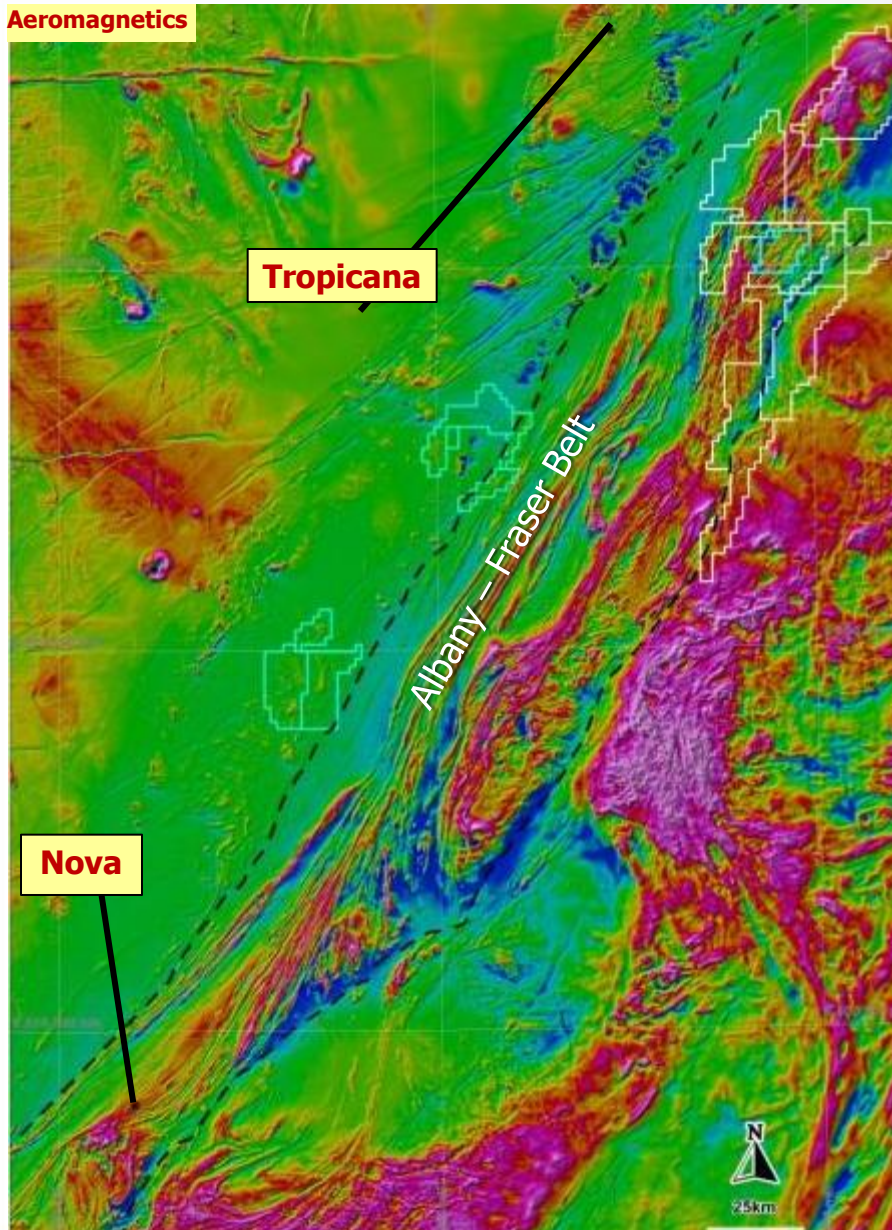
- Substantial land holding in the Albany-Fraser Belt between two of the most significant Australian exploration discoveries of the past decade:
 - *Nova-Bollinger (Ni-Cu-Co)*
– *Sirius Resources*
 - *Tropicana (Au)*
– *AngloGold Ashanti / Independence Group*
- Almost 5,000km² of granted tenements and applications (including competing applications)



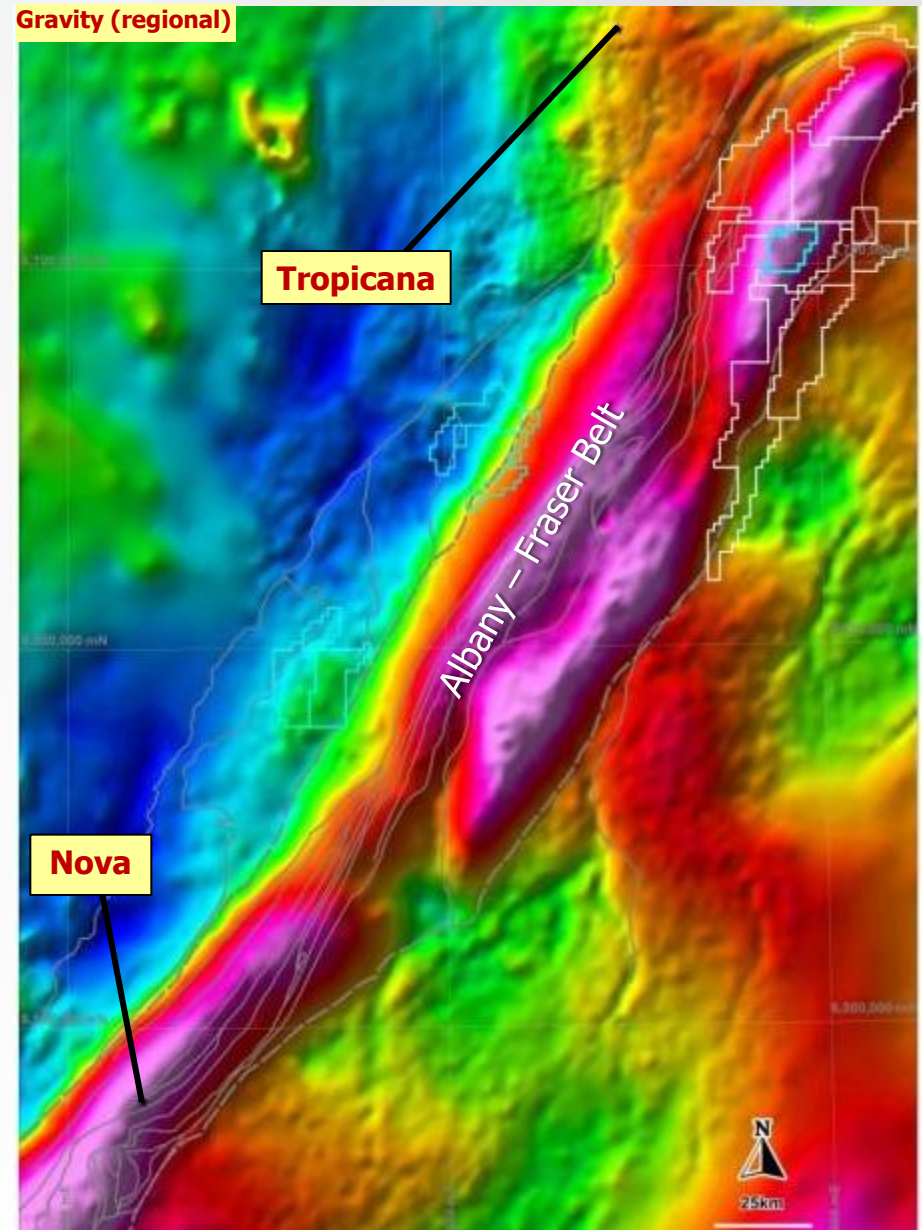
Fraser Range : Ni-Cu Belt



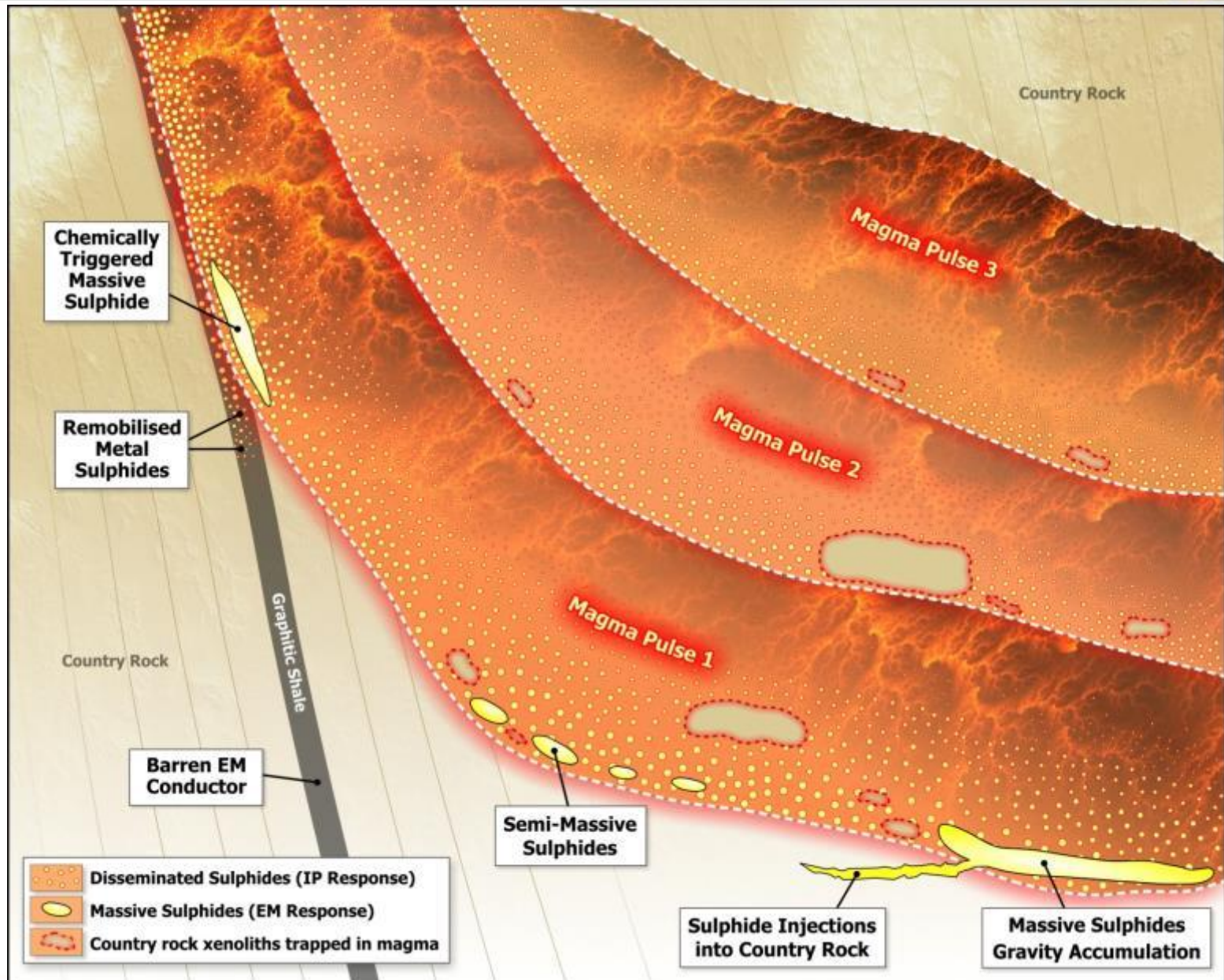
Aeromagnetics



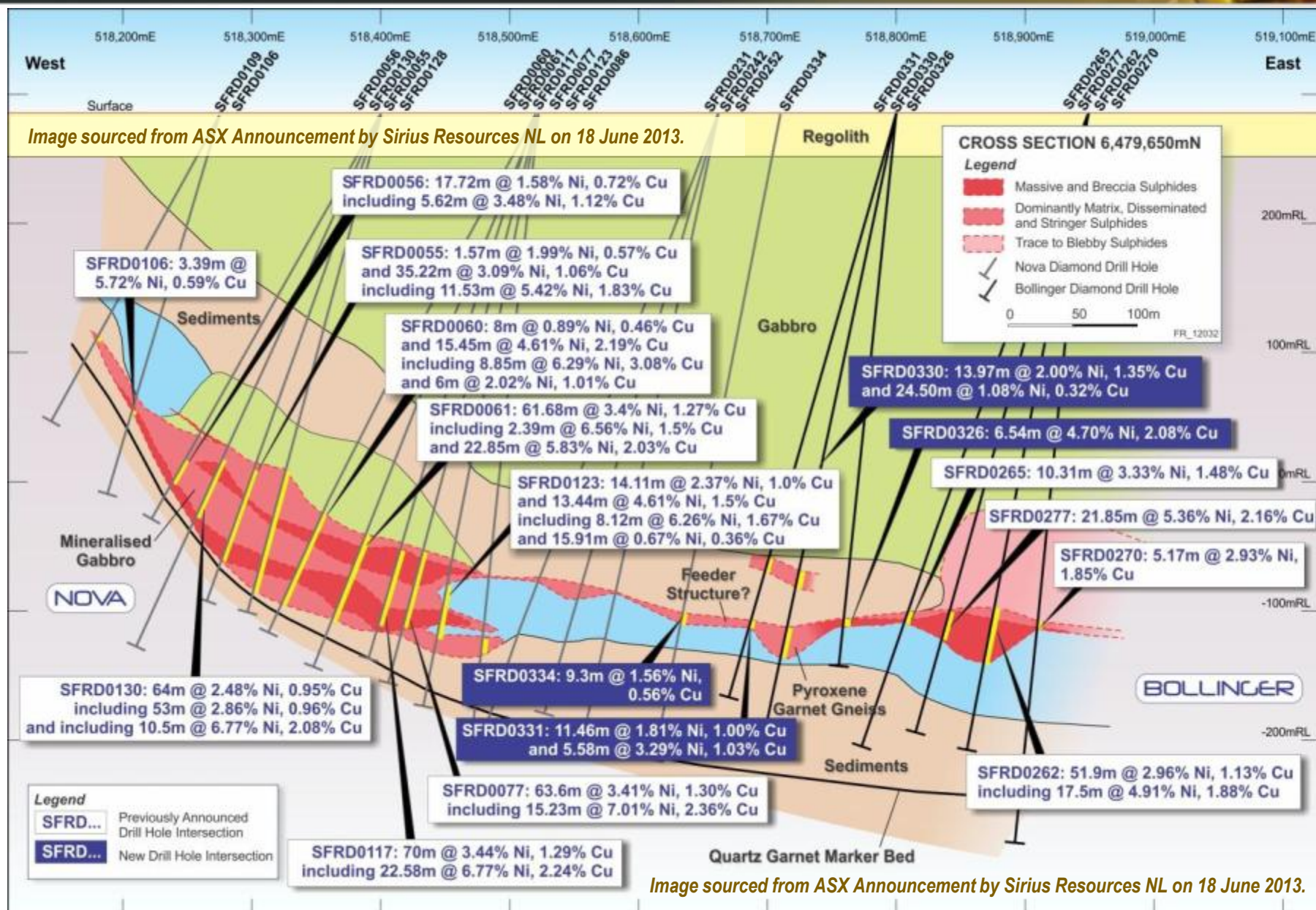
Gravity (regional)



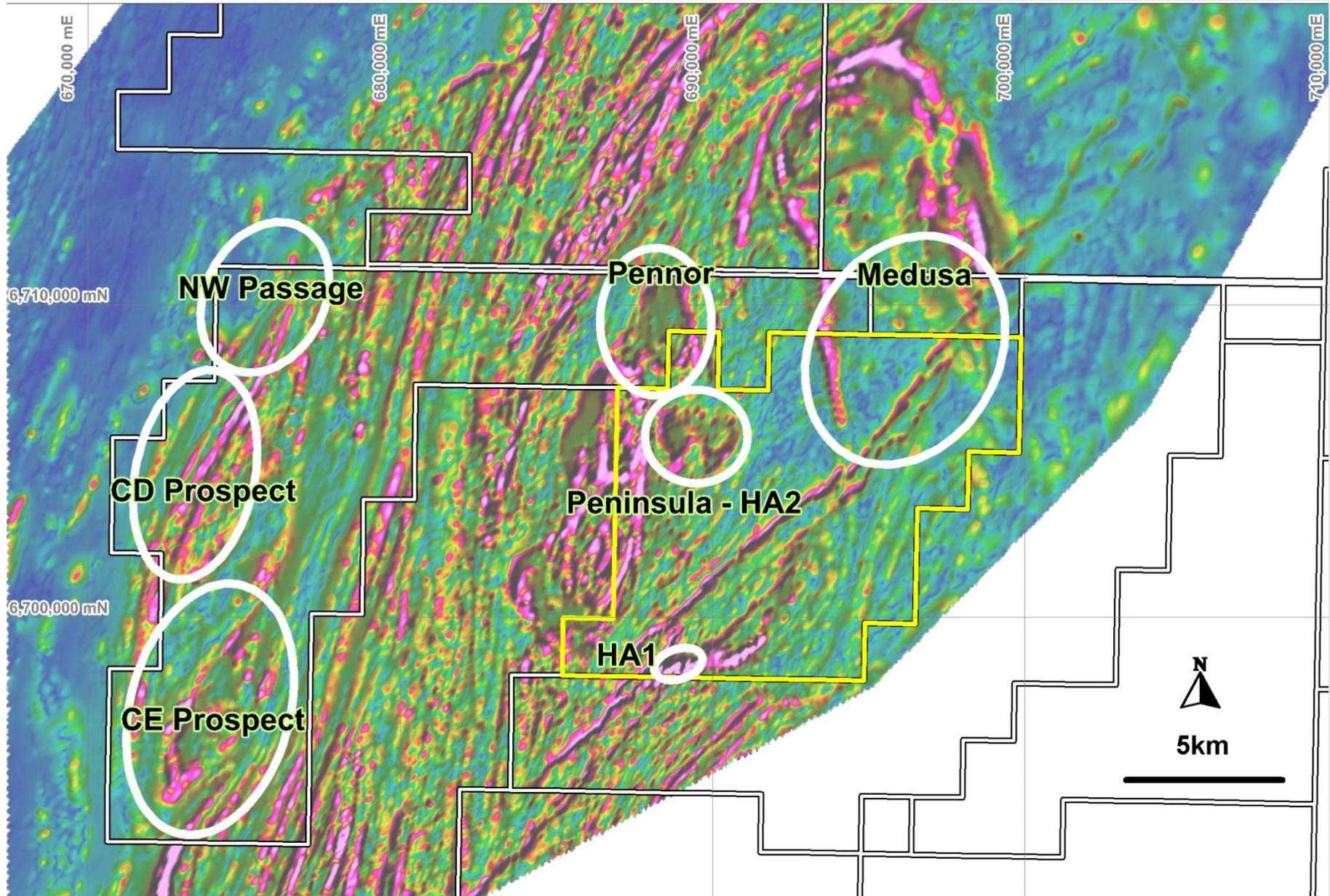
Conceptual Deposit Model – cross section



Conceptual Deposit Model – Nova analogue



Key Targets



Putting the ingredients together - key indicators



| | Geophysics | | | | Geology | | | Geochemistry | | |
|--------|------------|----|----|---------|---------|-----------|------------|--------------|---------------------------|--------------------|
| | Mag | EM | IP | Gravity | Mafic | Sulphides | Mineralogy | Anomalous Ni | Associated Cu, Co, S, PGE | Fertile whole rock |
| HA2 | ✓✓ | | ✓✓ | ✓✓ | ✓ | ✓ | ✓ | ✓✓ | ✓✓ | ✓✓ |
| Pennor | ✓✓ | * | * | ✓ | ✓✓ | ✓ | ✓✓ | ✓✓ | ✓✓ | ✓✓ |
| Medusa | ✓✓ | * | * | ✓✓ | ✓ | * | * | * | * | * |
| HA1 | ✓ | ✓ | * | ✓ | ✓ | ✓ | * | ✓ | ✓ | * |
| CE | ✓ | | * | ✓ | ✓ | ✓ | | ✓ | ✓ | |
| CD | | ✓ | * | | * | * | * | * | * | * |

* = no data available, subject of current / future work program

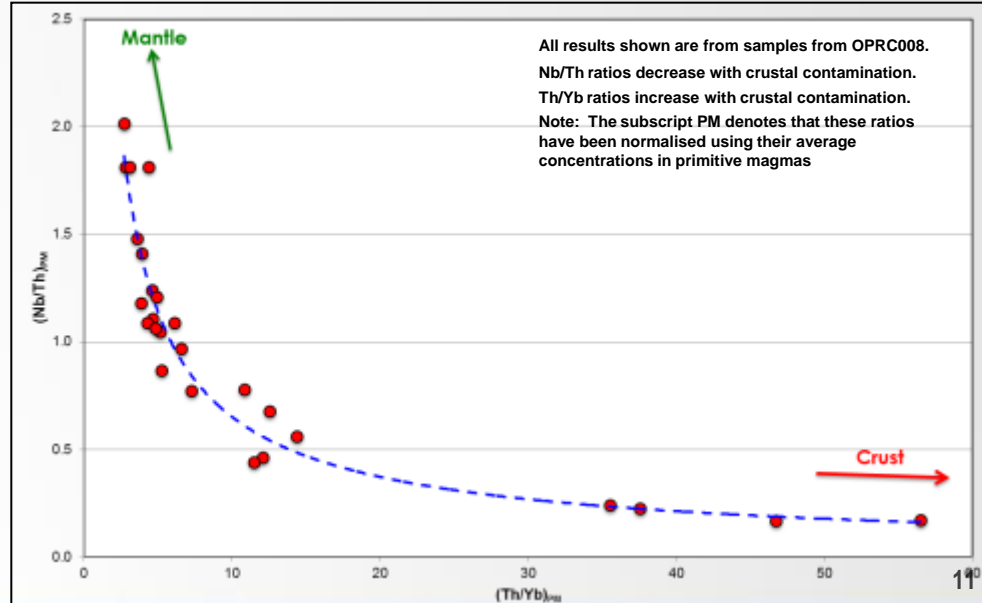
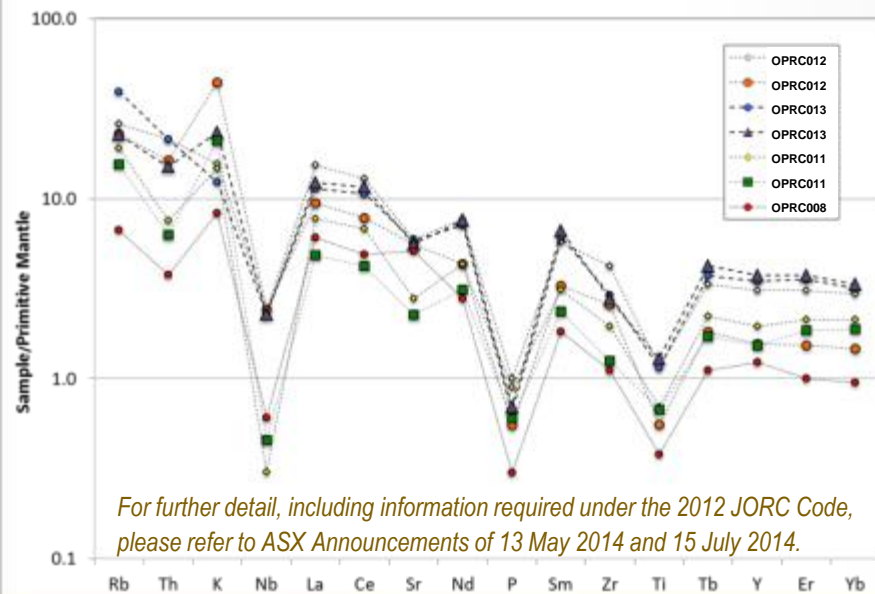
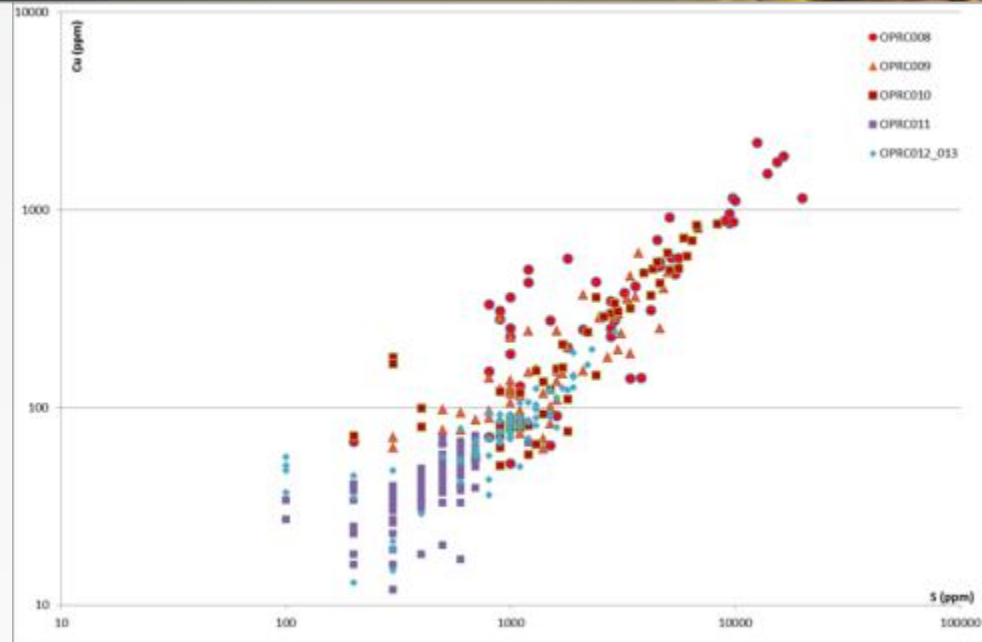
✓ = anomaly / indicator present

✓✓ = strong anomaly / indicator present

Geochemical Data



- Geochemical studies by respected specialist Prof. Reid Keays.
- Anomalous Ni-Cu, associated with sulphur (ie contained in sulphides)
- Crustal contamination of magma (trigger for sulphur saturation & formation of sulphides)
- Both lobes of HA2 intrusion and Pennor are all co-magmatic (formed in same event:)
- Indicates large volume of prospective magma.

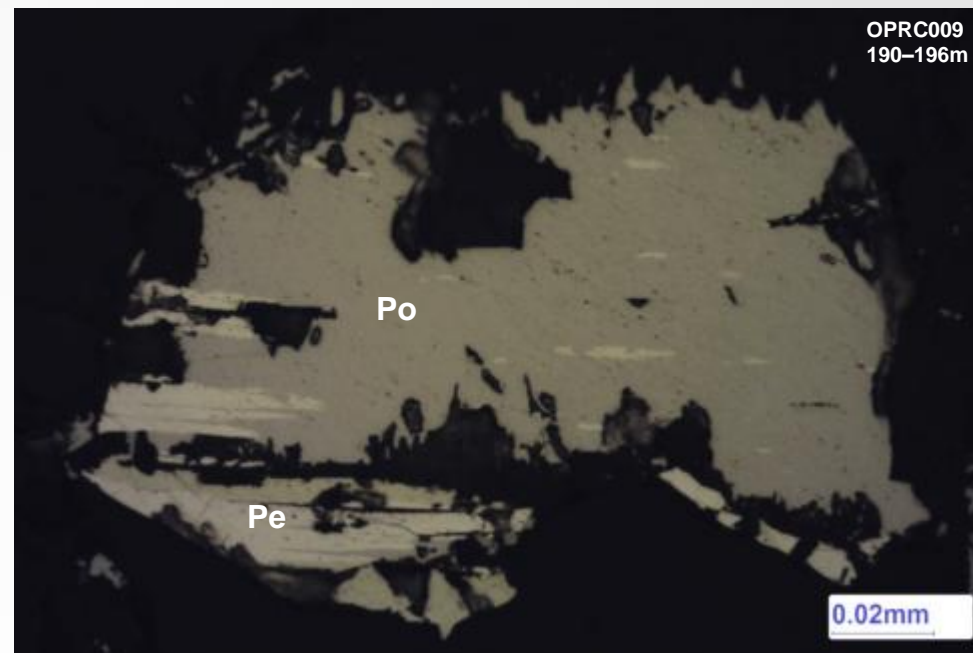
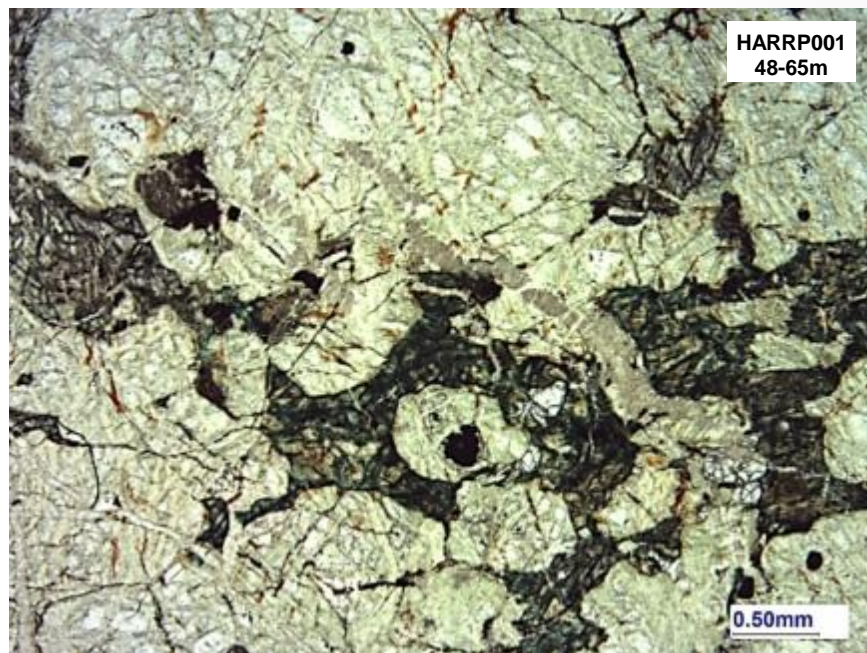


Magmatic Sulphides In Drilling



- Petrographic studies by respected specialist Dr Tony Crawford confirmed presence of magmatic sulphides in Peninsula drilling
 - *Images to right: Pe = Pentlandite, Po = Pyrrhotite*
- Typical mafic-ultramafic intrusives identified - norites, gabbronorites, troctolites and olivine bearing gabbros
- Cumulate textures observed in HA2RP001 suggesting potential feeder zone

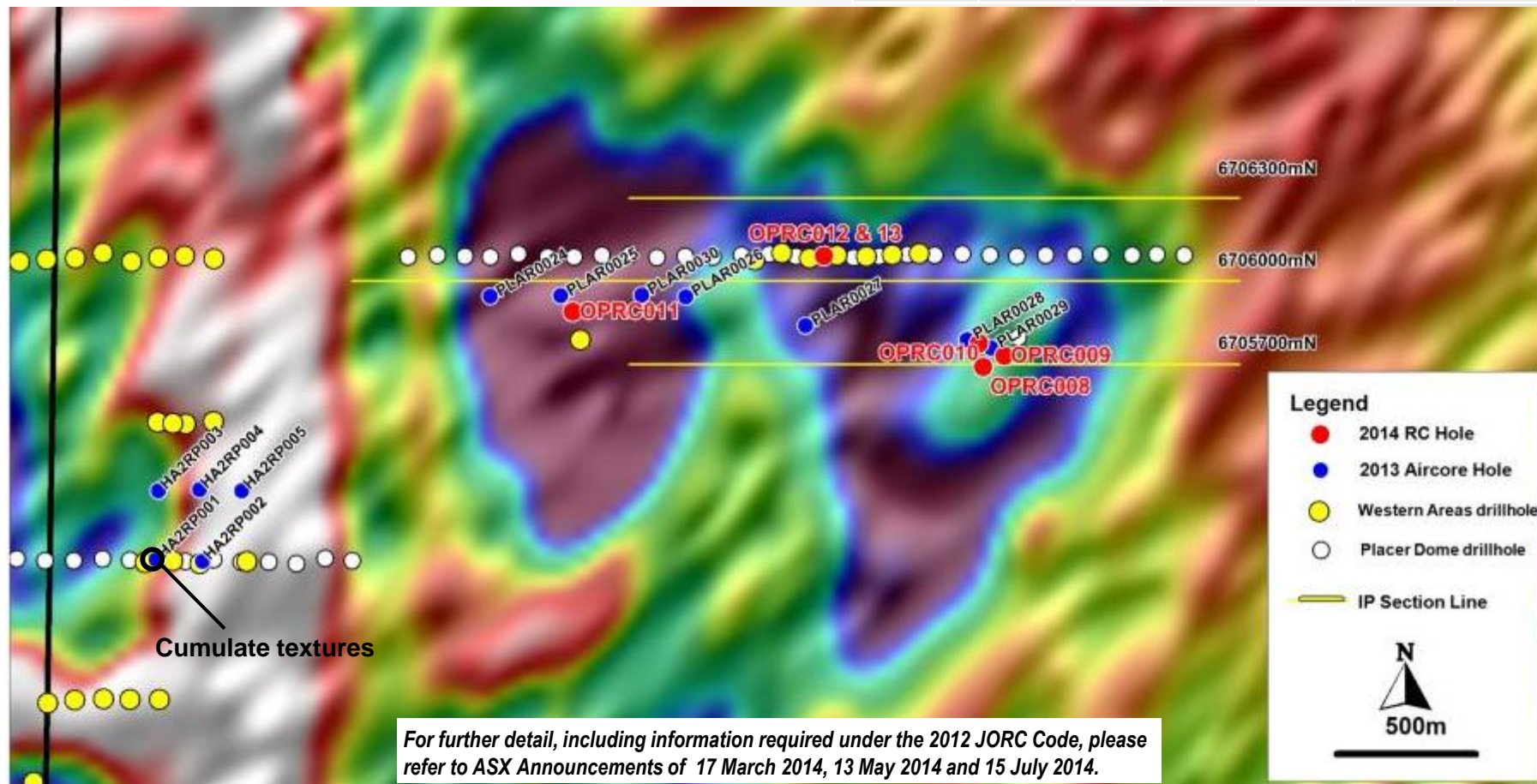
For further detail, including information required under the 2012 JORC Code, please refer to ASX Announcement of 15 July 2014.



HA2 Technical Review

- 2014 drilling defined substantial lengths of Ni-Cu mineralisation in eastern part of intrusion
- Technical review including geochemical and petrology studies indicated presence of magmatic sulphides and prospective geochemistry (next slides)

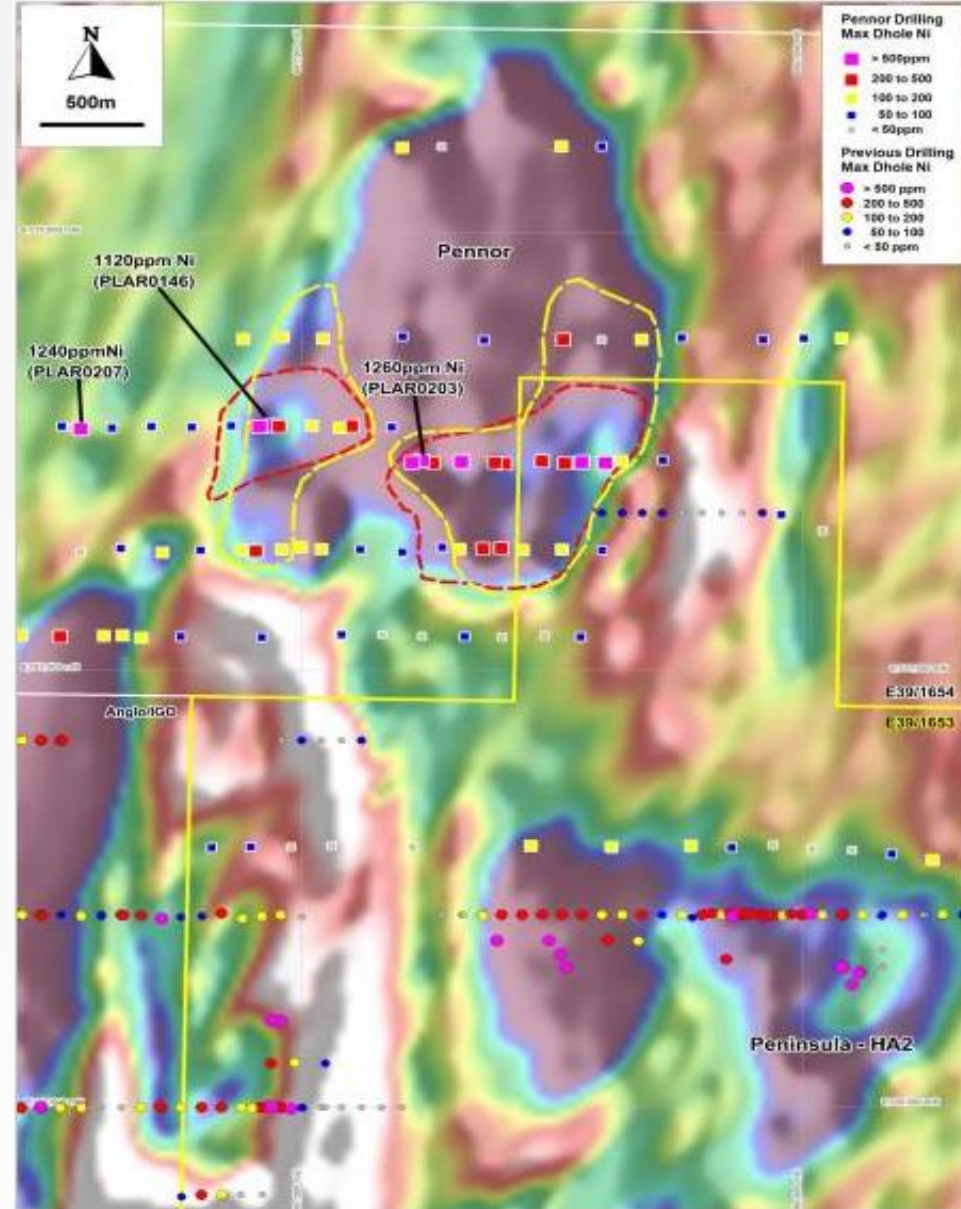
| Hole | From | To | Length | Ni (%) | Cu (%) | Co (%) |
|------------------|------|------|--------|--------|--------|--------|
| OPRC008 | 44 | 124 | 80 | 0.11 | 0.05 | 0.01 |
| <i>Including</i> | 52 | 64 | 12 | 0.22 | 0.11 | 0.02 |
| OPRC009 | 44 | 91 | 47 | 0.08 | 0.02 | 0.01 |
| | 190 | 196 | 6 | 0.10 | 0.05 | 0.01 |
| OPRC010 | 100 | 150* | 50 | 0.09 | 0.04 | 0.01 |
| <i>including</i> | 116 | 126 | 10 | 0.14 | 0.07 | 0.01 |



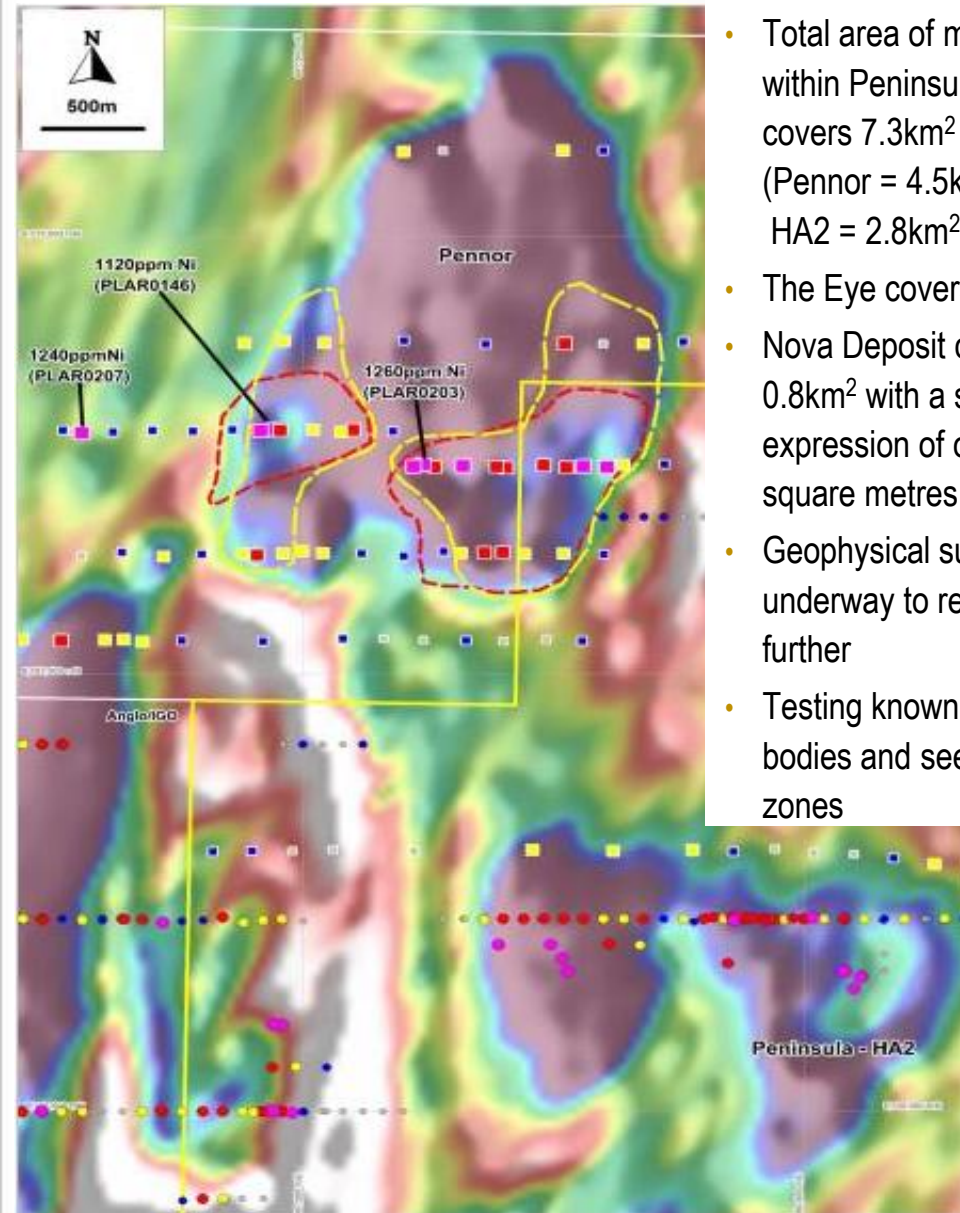
Assays define substantial geochemical anomaly



- Assay results define coherent nickel anomalies over an extensive area within the Pennor mafic intrusion.
- 1.8km² area with results >500ppm Ni
- Nickel tenor is significantly higher than the equivalent program at Peninsula-HA2.
- Geochemical anomalies overlap areas where prospective lithologies were logged in drill chips, refining these targets.
- Geochemical data implies that magmatic processes have been active to concentrate metals, along with crustal contamination
- Confirms the prospectivity of Pennor
- Further geophysical surveys planned.



Size of the target – looking for Nova



- Total area of mafic rocks within Peninsula Intrusion covers 7.3km² (Pennor = 4.5km², HA2 = 2.8km²).
- The Eye covers 4.5km²
- Nova Deposit covers 0.8km² with a surface expression of only a few square metres
- Geophysical surveys underway to refine target further
- Testing known mafic bodies and seeking feeder zones

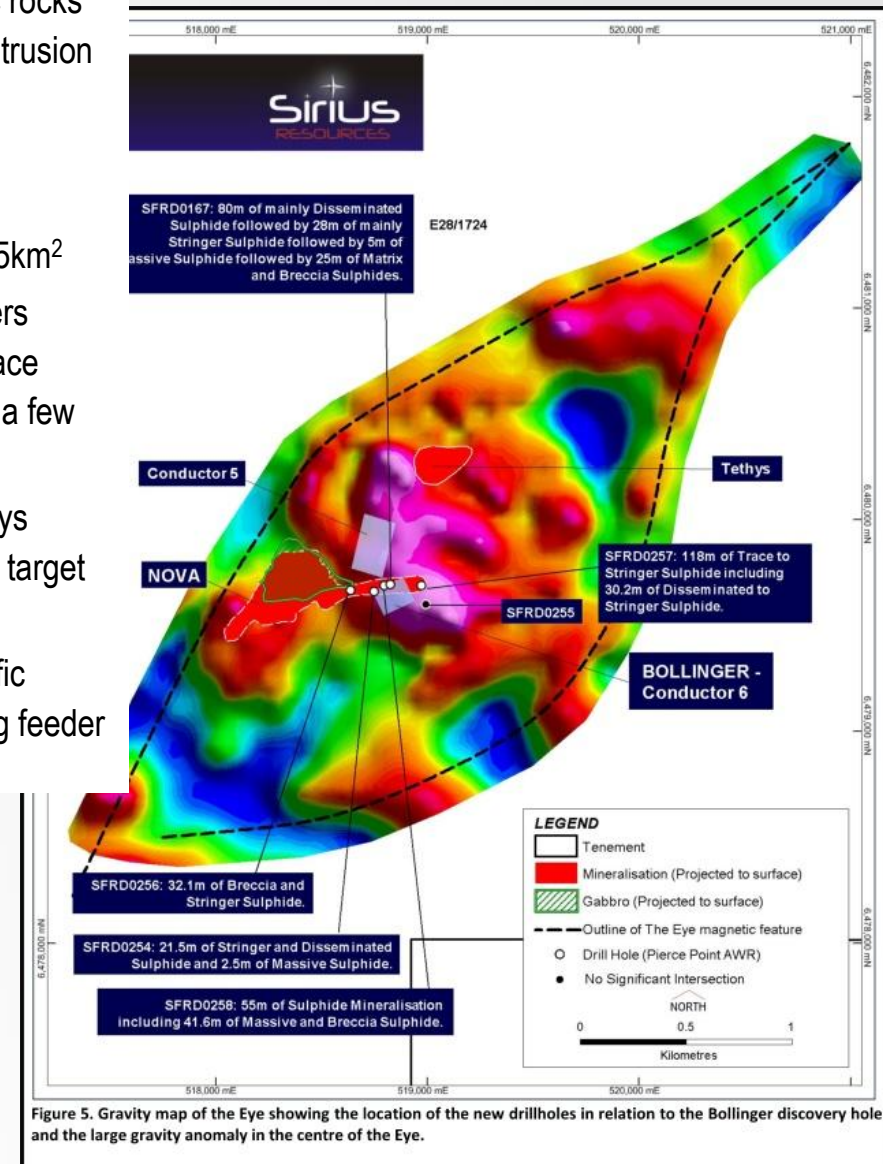
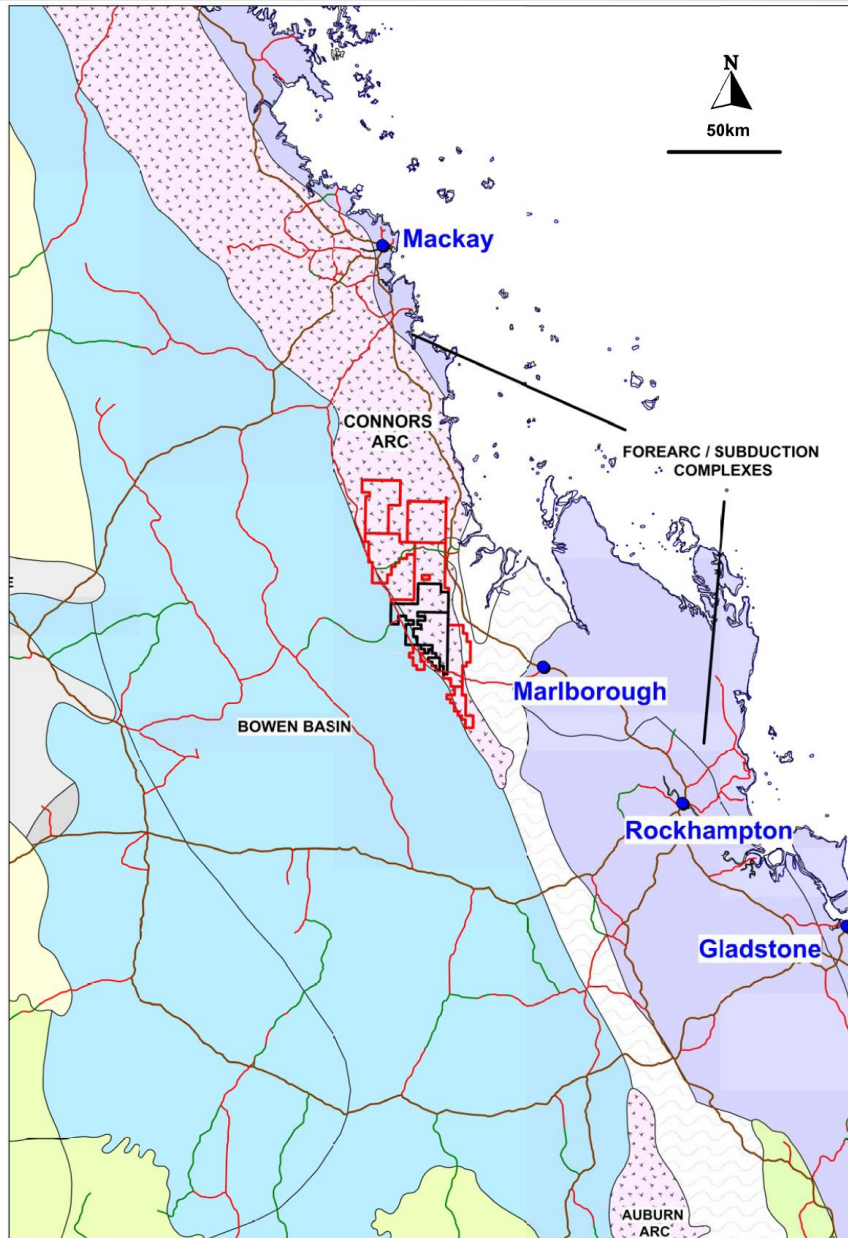


Figure 5. Gravity map of the Eye showing the location of the new drillholes in relation to the Bollinger discovery hole and the large gravity anomaly in the centre of the Eye.

Connors Arc Epithermal Project - Queensland



- Orion's Connors Arc Project area is located between two active mining operations on +1Moz gold deposits:

- **Cracow (LS epithermal)** –
3.4Mt @ 6.6g/t Au for 724koz Au¹
(remaining resource),
ca. 2Moz Au prior production
FY14 production of 95,064ozAu²

- **Mt. Carlton (HS epithermal)** –
11.4Mt @ 2.5g/t Au for 0.93Moz Au
12.3Mt @ 34g/t Ag & 0.28% Cu
for 13.4Moz Ag & 34kt Cu¹
FY14 production of 87,952ozAu eq.²

- Geological and structural setting of project area in common with numerous epithermal and/or porphyry style systems
 - *Immediately along strike from the Mt. Mackenzie high sulphidation epithermal Au mineralisation - a very large, magmatic-hydrothermal system*

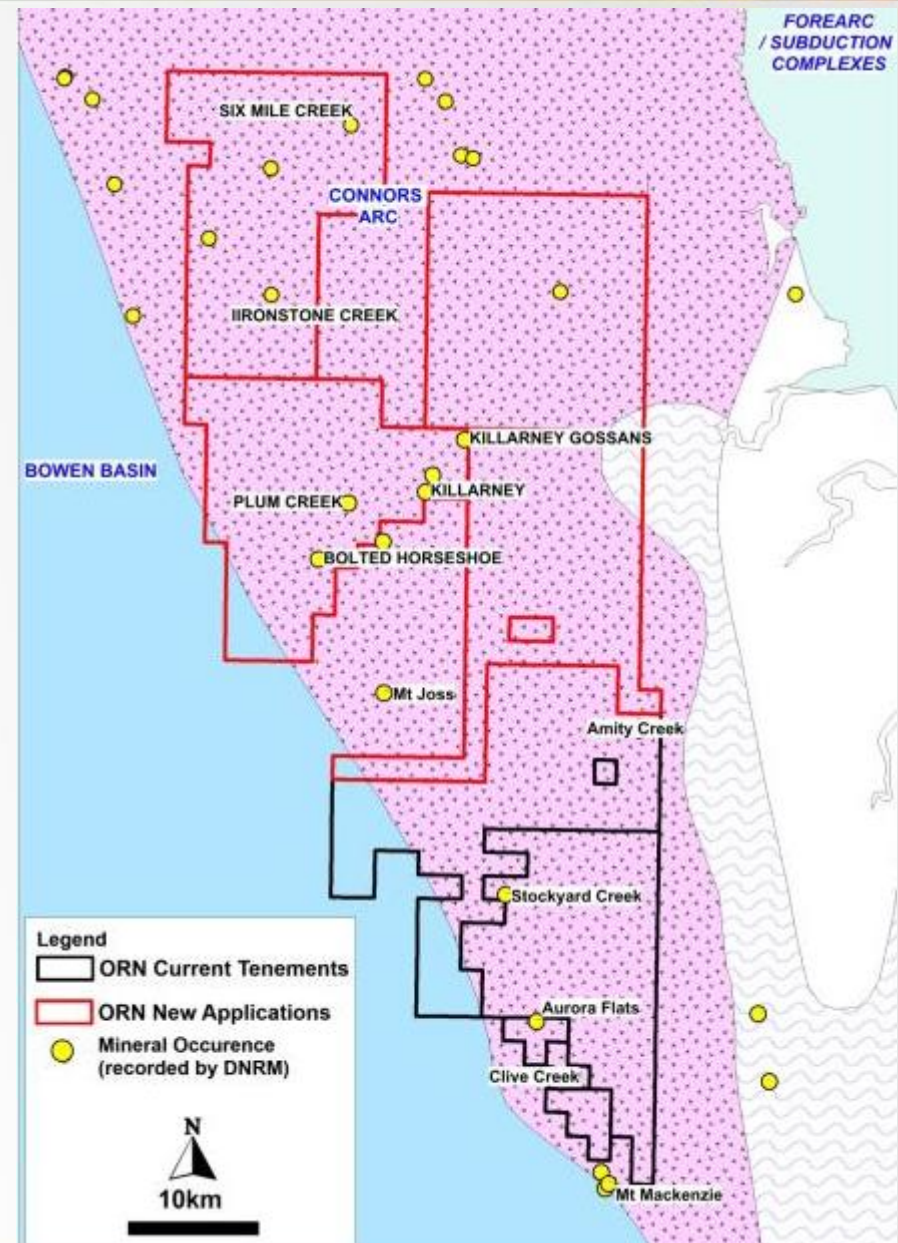
1 = Evolution Mining Ltd website – December 2013 resources statement

2 = Evolution Mining Ltd ASX Announcement 4 July 2014

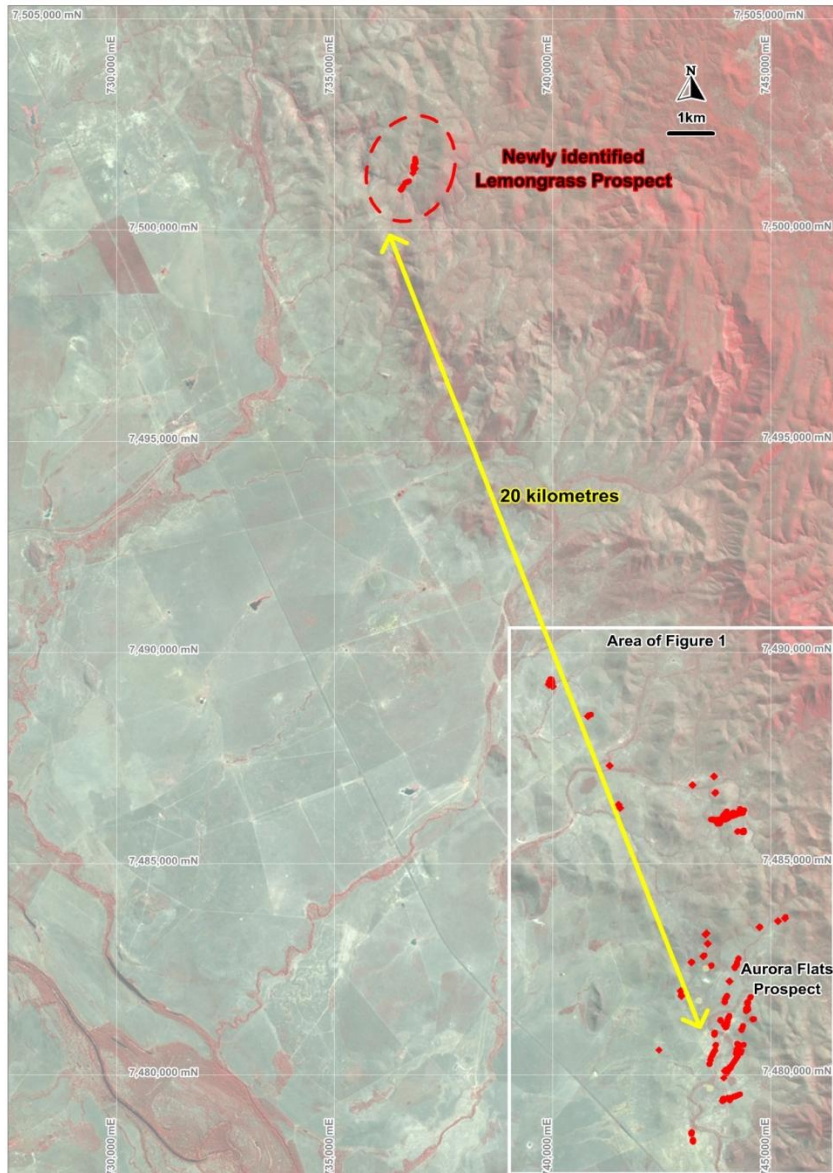
Building a significant landholding in the Connors Arc



- New applications take project area over 2,000sq km
- Adds several new prospects with known epithermal potential but limited modern work
- Several historical gold-copper workings and gossans also recorded within the area
- Mapping and sampling being carried out on tenements to locate epithermal veins, identify textures present and determine level in epithermal system.
- Aurora Flats being tested with deep penetrating resistivity and chargeability survey to refine drilling targets.
 - *Very encouraging initial results*



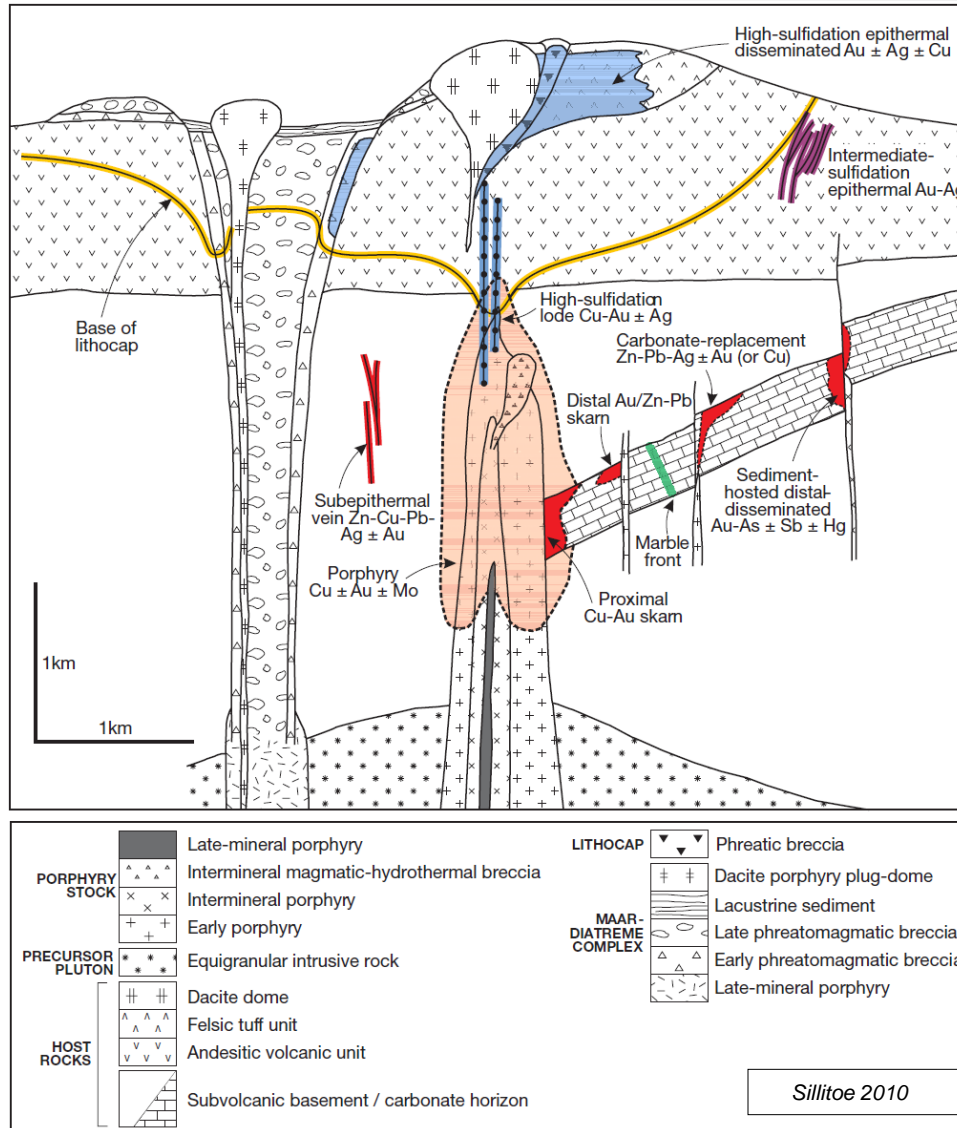
IS Epithermal Veins mapped on Aurora Flats



- Aurora Flats outcrops on grassland among low hills
- Project area accessed by paved roads,
- Historic, shallow drilling returned Au-Ag-Pb-Zn-Mn anomalism characteristic of high level in intermediate sulphidation (“IS”) epithermal system
- Extensive epithermal quartz vein outcrop with diagnostic vein textures
- Professor Noel White secured as expert consultant to advise on interpretation of textures and geochem.

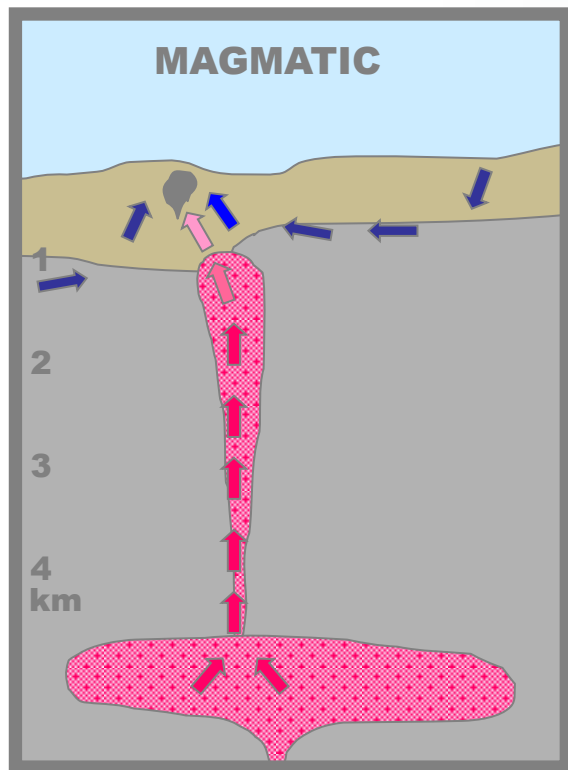
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Epithermal Systems – The Bigger Picture

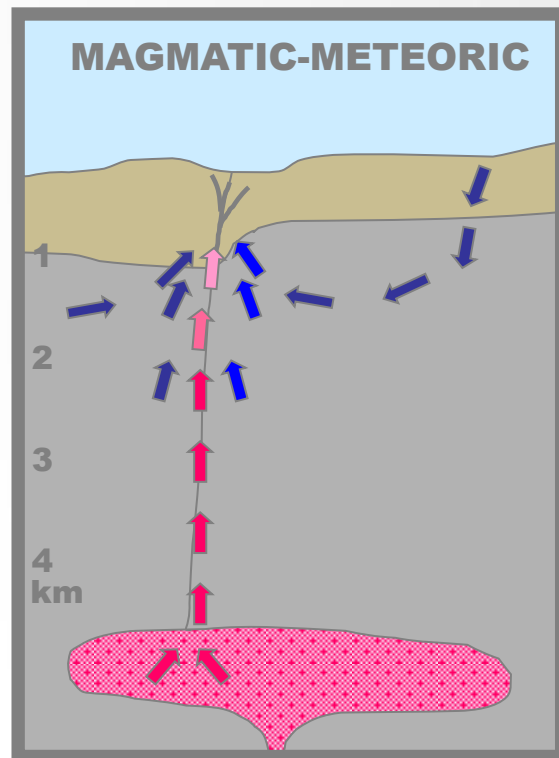


- IS Systems form in active volcanic terrain
 - Metal rich fluids sourced from both magmatic and meteoric sources
 - Expect to find HS systems and possibly porphyries in surrounds (may be blind)
 - Typically critical temperature and pressure for deposition of IS metal deposits encountered 250 – 300m below surface at time of deposition
 - Deposits are “blind to surface”
 - Barren or irregular low grade quartz veins may persist to surface
 - Historic explorers often failed to test veins deep enough
- Competent andesitic strata are best hosts

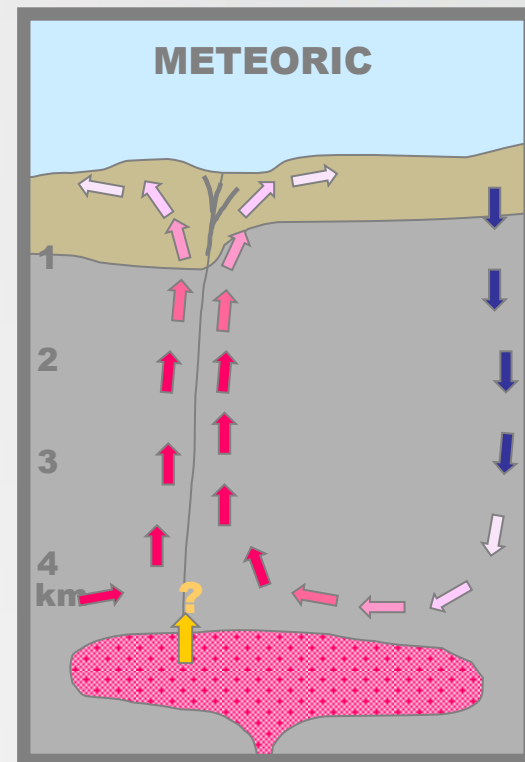
Classification of Epithermal Systems



Textures restricted



Textures diverse, - modest



Textures: diverse - spectacular

HIGH SULFIDATION

INTERMEDIATE SULFIDATION

LOW SULFIDATION

Au-Ag-Cu

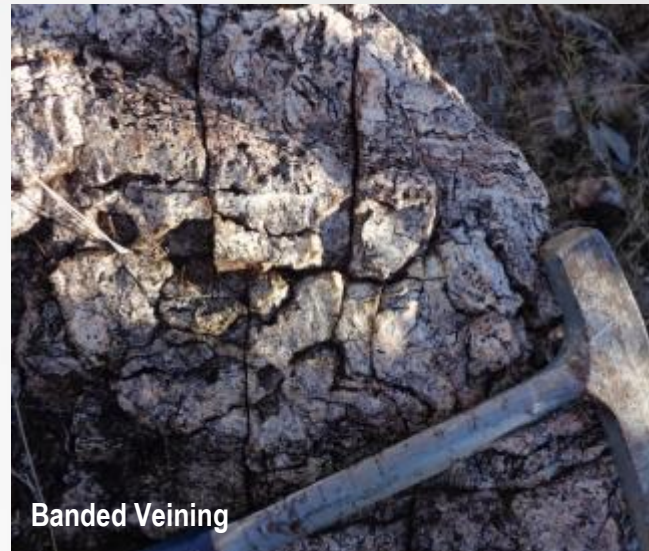
Au-Ag or Ag-Au

Au-Ag

Aurora Flats Vein Textures Diagnostic of High Level IS



Crustiform, colloform quartz with bluish chalcedony



Banded Veining



Epithermal quartz with adularia casts & Mn nodules plus staining

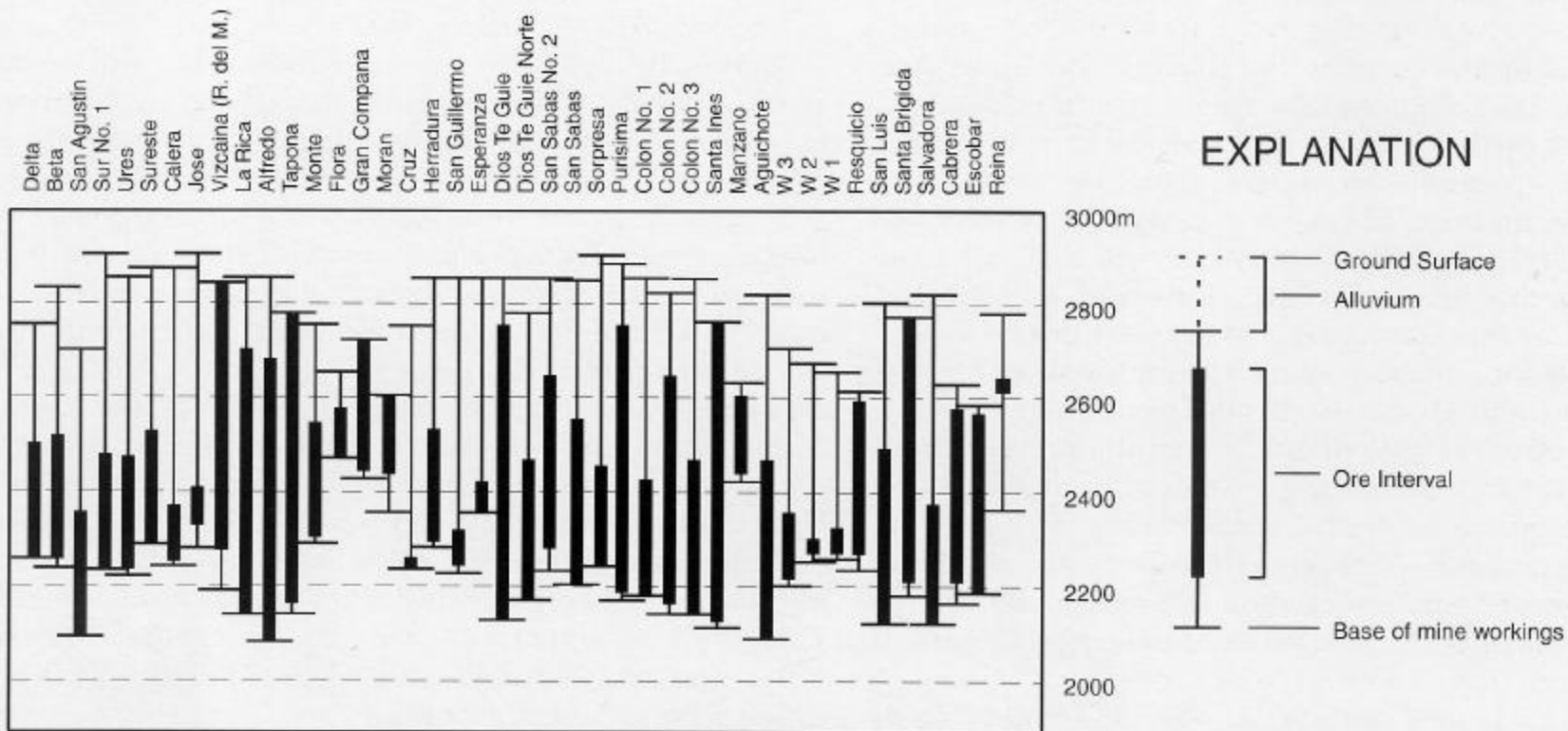
- Epithermal textures of quartz veins seen in outcrop are diagnostic of high level in the system
- Top of target for high grade Au-Ag horizon is interpreted 200-300m below current surface
 - *Historic drilling tested veins to only 80m below surface.*
- SWIR analysis confirms high level based on alteration mineralogy
- The textures combined with anomalous Mn-Zn-Pb and Ag>>Au in drilling are characteristic of Intermediate Sulphidation System

Typical Vertical Interval of IS Epithermal Payshoots



Pachuca - Real del Monte district - vertical extent of mineralized veins

Produced 7 Moz Au ; 1.4 Boz Ag



From Cooke and Simmons (2000)
after Geyne et al (1983)

Summary: Reasons to Invest in Orion



- Quality projects in key locations chasing “giants”:
 - *Nova-Bollinger (Ni), Tropicana (Au)*
 - *Cracow, Mt Carlton, Pajingo (Australia), Pachuca-Real (Mexico) and Acupan Antomok, Bagiuo, (Phillipines) (Au)*
- An “A-list” of significant shareholders
 - *Extensive technical expertise*
 - *Proven track record*
 - *Continued active support*
- Highly experienced operations team
- Exploration programs underway - closing in on discovery
 - *Strong news flow from drilling and other activities*



Orion Gold is focused on acquiring, exploring and developing large tenement holdings or regional scale mineral opportunities in world-class mineral provinces....

Competent Persons Statement



The information in this report that relates to Exploration Results at the Fraser Range Projects complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (“JORC Code”) and is based on information compiled by Mr Bill Oliver, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Oliver is the Technical Director of Orion Gold NL and 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 (“JORC Code”). Mr Oliver consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Information in this report which related to Exploration Results and other technical information about the Connors Arc Project complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (“JORC Code”) and is based on information compiled and assessed under the supervision of Mr Bruce Wilson, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Wilson is the principal of Mineral Man Pty Ltd, a consultant to Orion Gold NL, and 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 (“JORC Code”). Mr Wilson consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

