

aurelia
METALS



NEW DEVELOPMENTS AT THE HERA AU-PB-ZN-AG MINE, NEW SOUTH WALES

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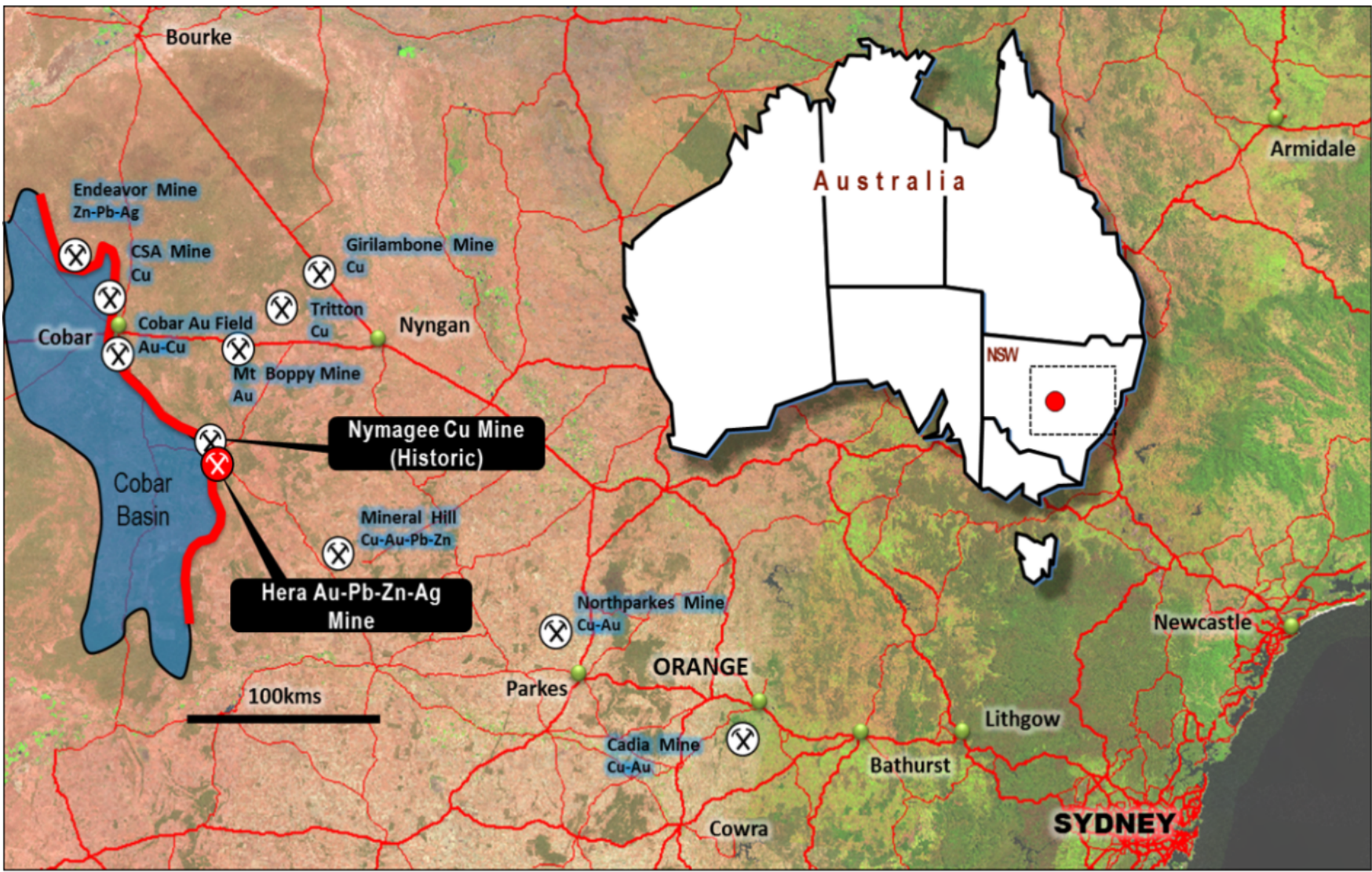
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Competent Persons Statement – Hera Mineral Resource

Compilation of the drilling database, assay validation and geological interpretations for the resource update were completed by Adam McKinnon, BSc (Hons), PhD, MAusIMM, who is a full time employee of Aurelia Metals Limited. The resource estimate has been completed by Rupert Osborn, BSc, MSc, MAIG, who is an employee of H&S Consultants Pty Ltd. Both Dr McKinnon and Mr Osborn have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Dr McKinnon and Mr Osborn consent to the inclusion in this report of the matters based on their information in the form and context in which it appears. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

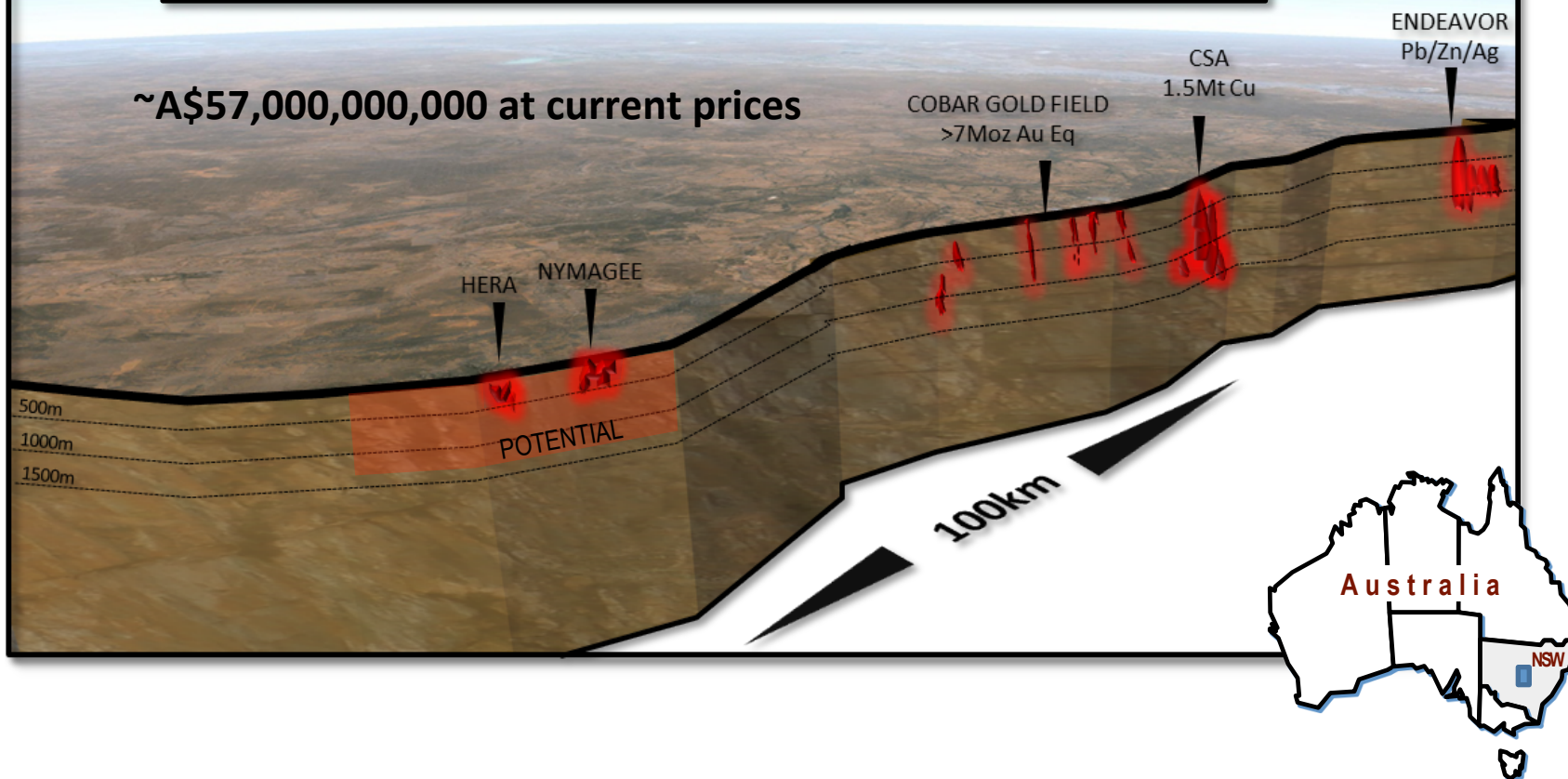
Competent Persons Statement – Hera Ore Reserve

The Ore Reserves were compiled by Jim Simpson, the then Manager Mining at the Hera Gold Mine. Mr Simpson has worked at polymetallic mines at Golden Grove, Mt Isa Mines and Peak Gold Mines. Mr Simpson is a mining engineer with a BE Min Eng obtained at the University of NSW and has worked in underground hard rock mines since 1986 with 30 years’ experience. The Ore Reserve Estimate was produced on site. Mr Simpson has sufficient experience which is relevant to the style of mineralization, type of deposit and mining method under consideration and to the activity which 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 Simpson is a chartered professional and member of the AusIMM and also a registered mining engineer of Queensland, New South Wales and Western Australia. The information on the Hera Reserve Estimate is extracted from the ASX Report dated 31 July 2017 “Hera Resources and Reserves”, available on the Aurelia Metals Website. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.



COBAR BASIN DEPOSITS – HIGH GRADE + LONG LIFE
COBAR SUPERBASIN METAL INVENTORY
6.4Moz Au, 200Moz Ag, 2.2Mt Cu, 4Mt Zn, 3Mt Pb

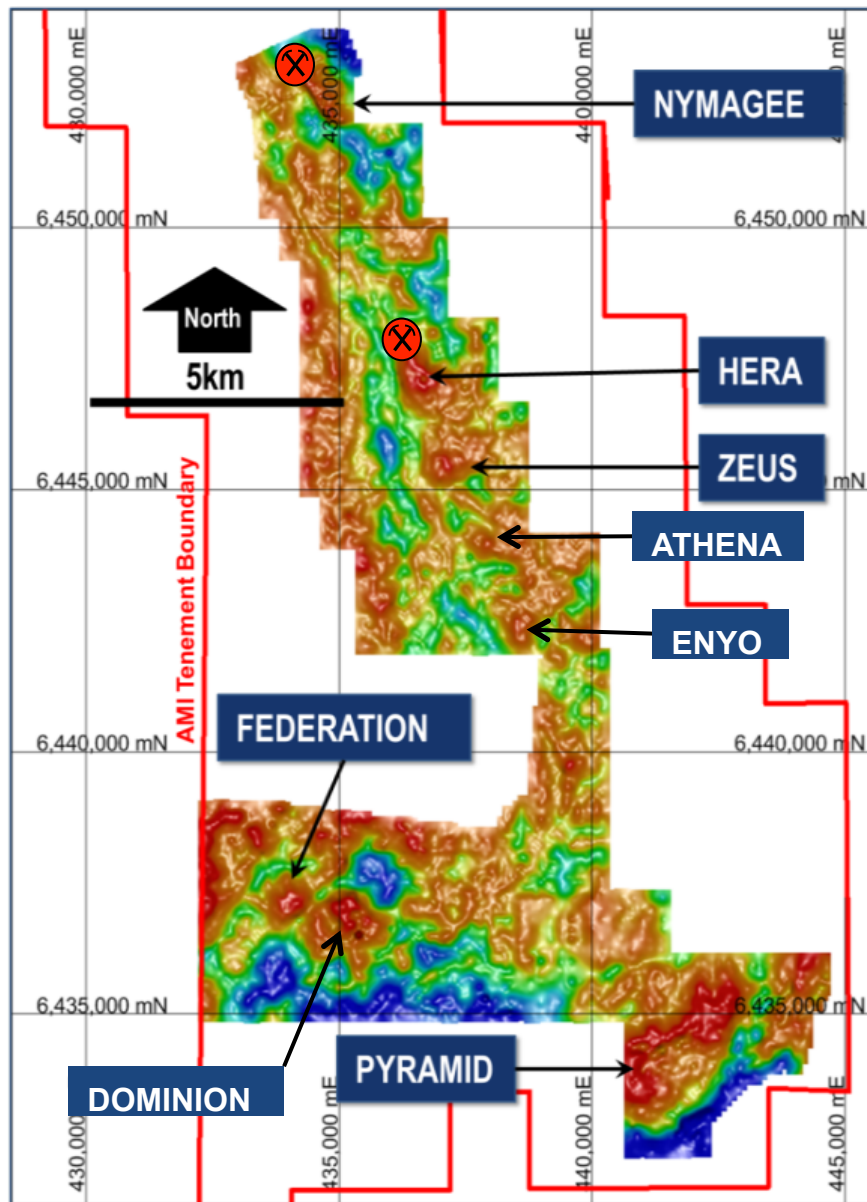
~A\$57,000,000,000 at current prices





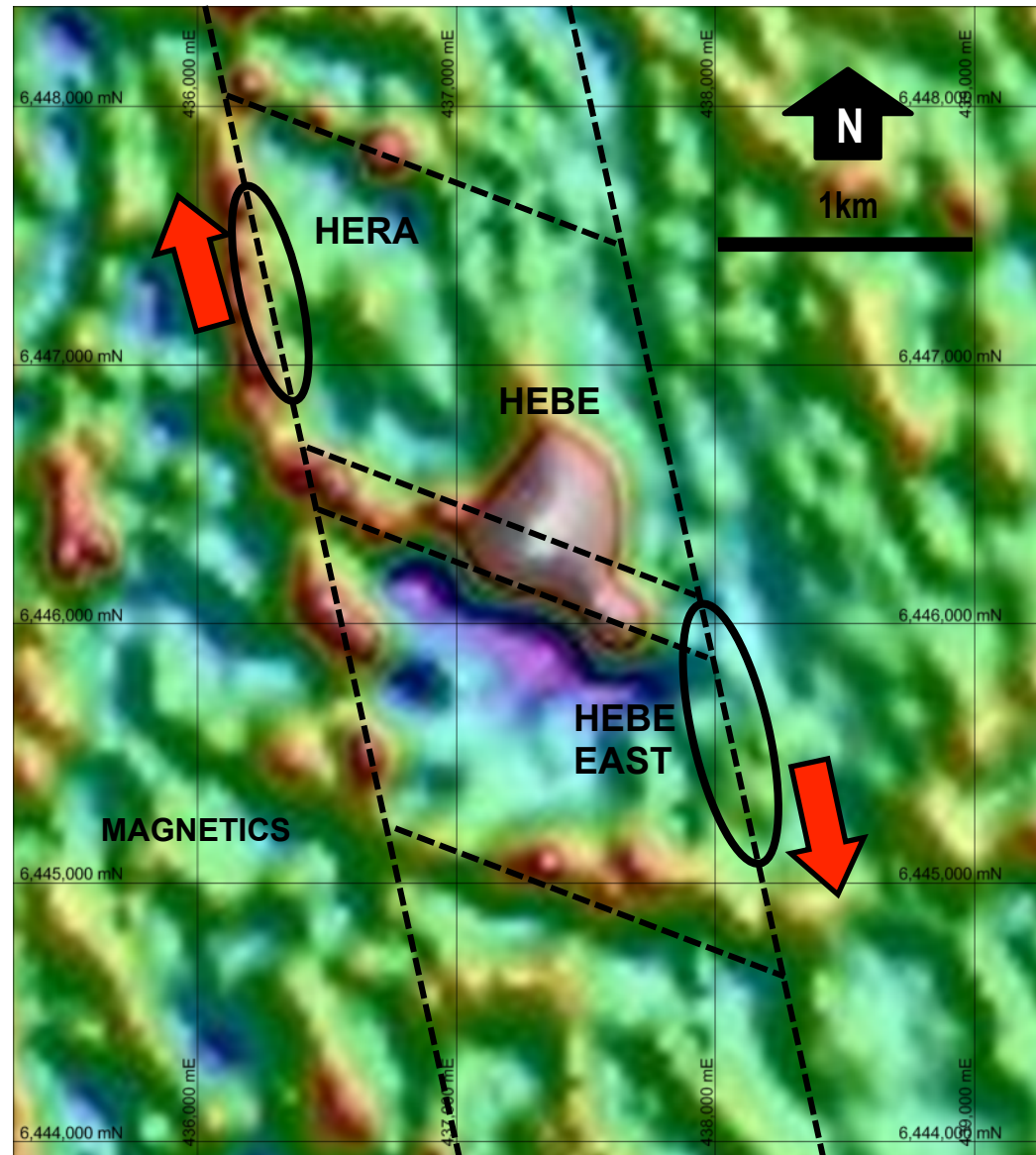
Stoping at the Nymagee Copper Mine (Date Unknown)

- Located 5km SSE of the historic Nymagee copper mine
- Shallow historic prospecting pits occur in weakly gossanous quartz veins on “The Peak”, immediately to the east of Hera
- Prospective area identified in airborne EM survey in 1974
- CRA drilled sub-economic mineralisation in 1984
- Strong lead soil anomaly identified by Pasminco in 1999
- Discovery hole drilled in 2000 (8.6m@26.6g/t Au, 17.9% Pb+Zn)

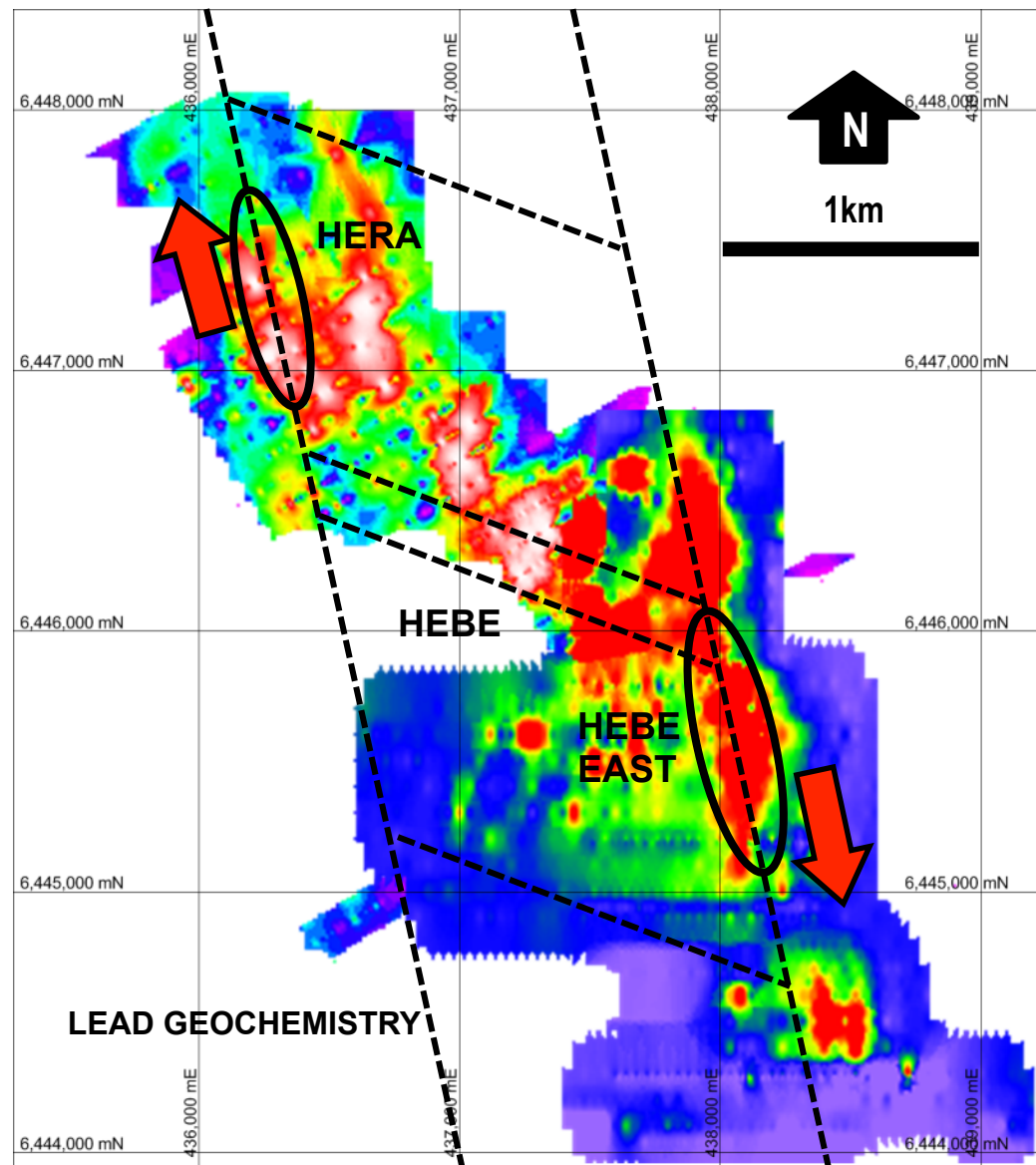


- Strong positive gravity anomalies at Hera and Nymagee
- Probably related to broad alteration systems around mineralisation
- Strong NNW-SSE trend over 15km strike
- Anomalies to the south have coincident geochemical responses
- Ground between Hera and Nymagee poorly explored, negligible drilling

- Large magnetic high to the southeast of Hera
- No discrete magnetic response at Hera
- Pyrrhotite abundant in ore and wallrocks but mostly non-magnetic

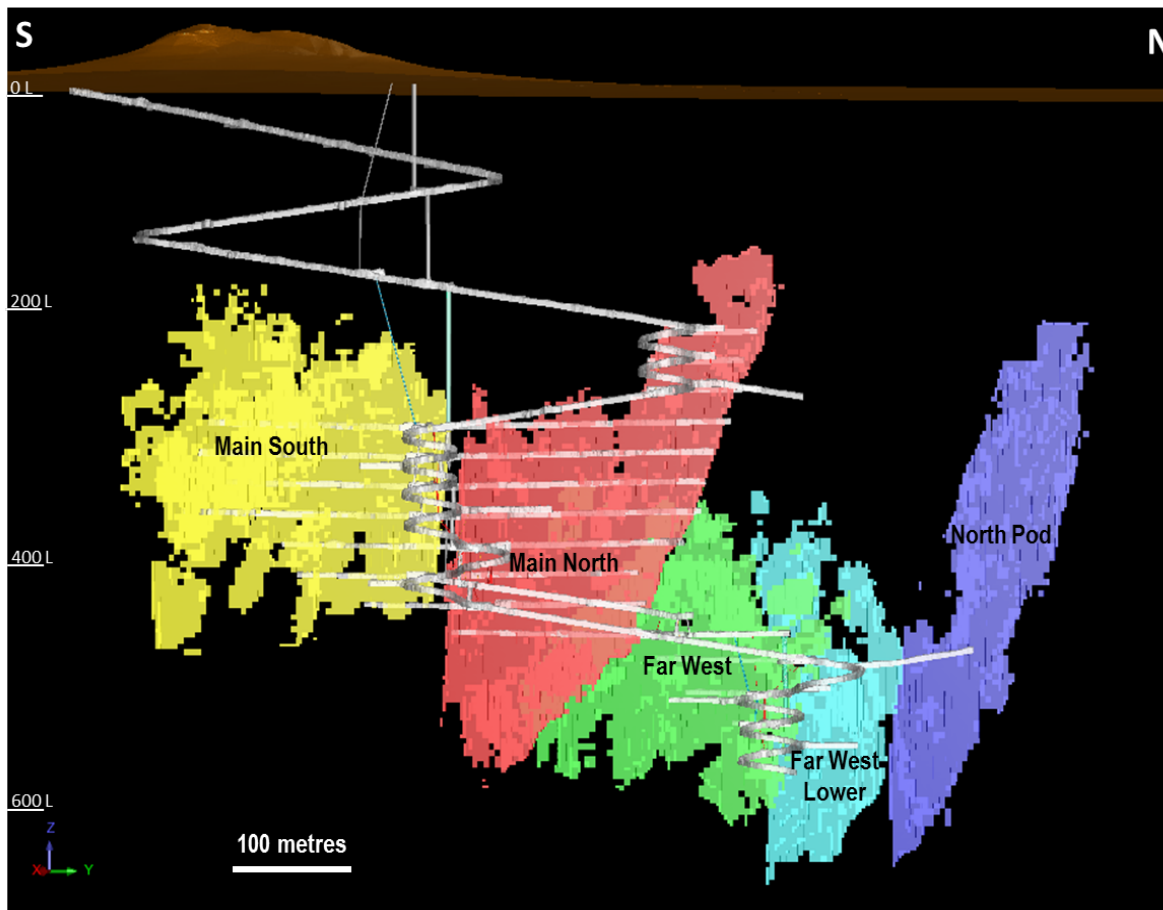


- Strong surface Pb anomalies
- As, Bi, Sb also good pathfinders in the area
- Geochemistry supports structural interpretations
- Strong follow-up exploration targets
- Little drilling >200 metres outside of mine sequence

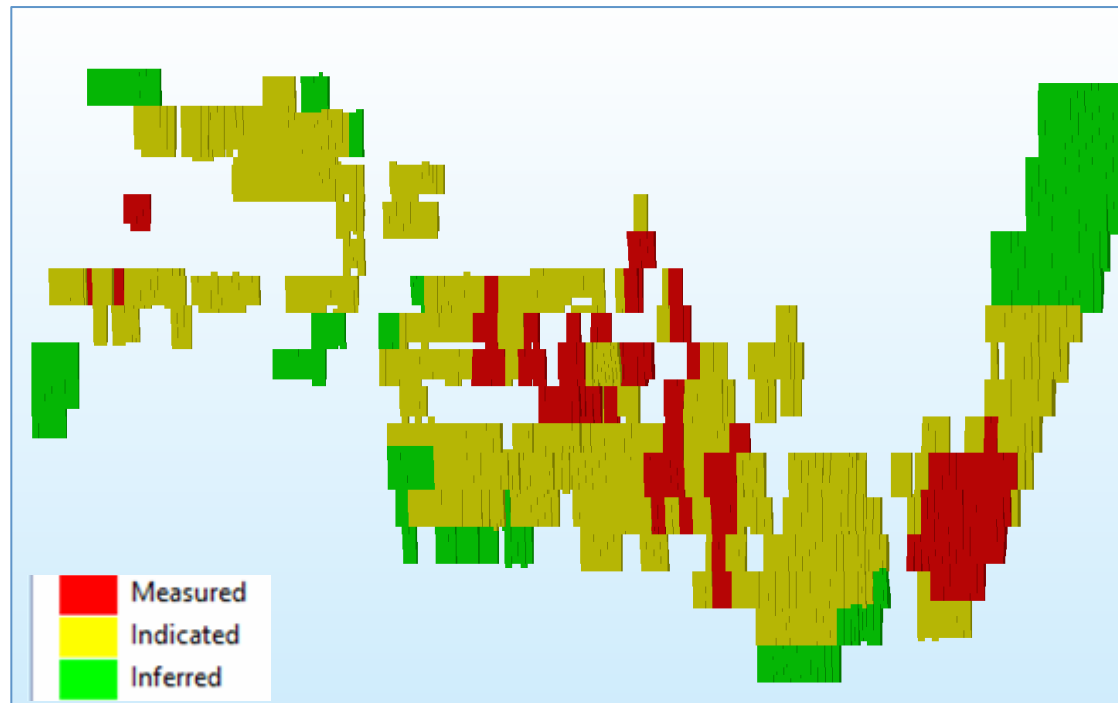


Hera Deposit

Long Section



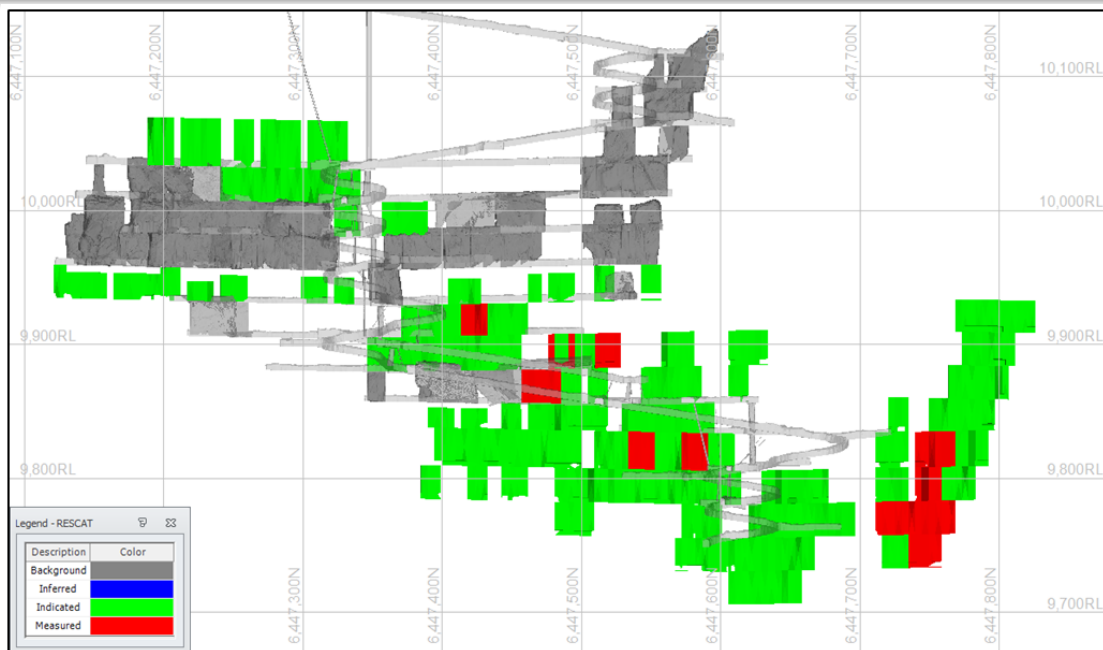
- Five major offset ore zones
- Shallow northerly plunge
- Economic mineralisation commences ~200m below surface, no supergene zone
- Development currently down to 580 metres below surface
- Resources defined to at least 635 metres
- Open at depth to the north
- Majority of remaining production to come from North Pod and Far West lodes
- FY17 production 46Koz Au, 7.9kt Pb and 10.2 kt Zn



Class	Tonnes (Kt)	NSR (AU\$)	Au (g/t)	Pb (%)	Zn (%)	Ag (g/t)
Measured	605	260	3.0	2.8	4.0	24
Indicated	1,729	242	3.0	2.3	3.4	16
Inferred	599	231	1.9	3.2	4.6	46
Total	2,934	244	2.8	2.6	3.8	24

Resources calculated at a \$120 Net Smelter Return (NSR) cut-off as at 30th June 2017

2017 Reserve Update



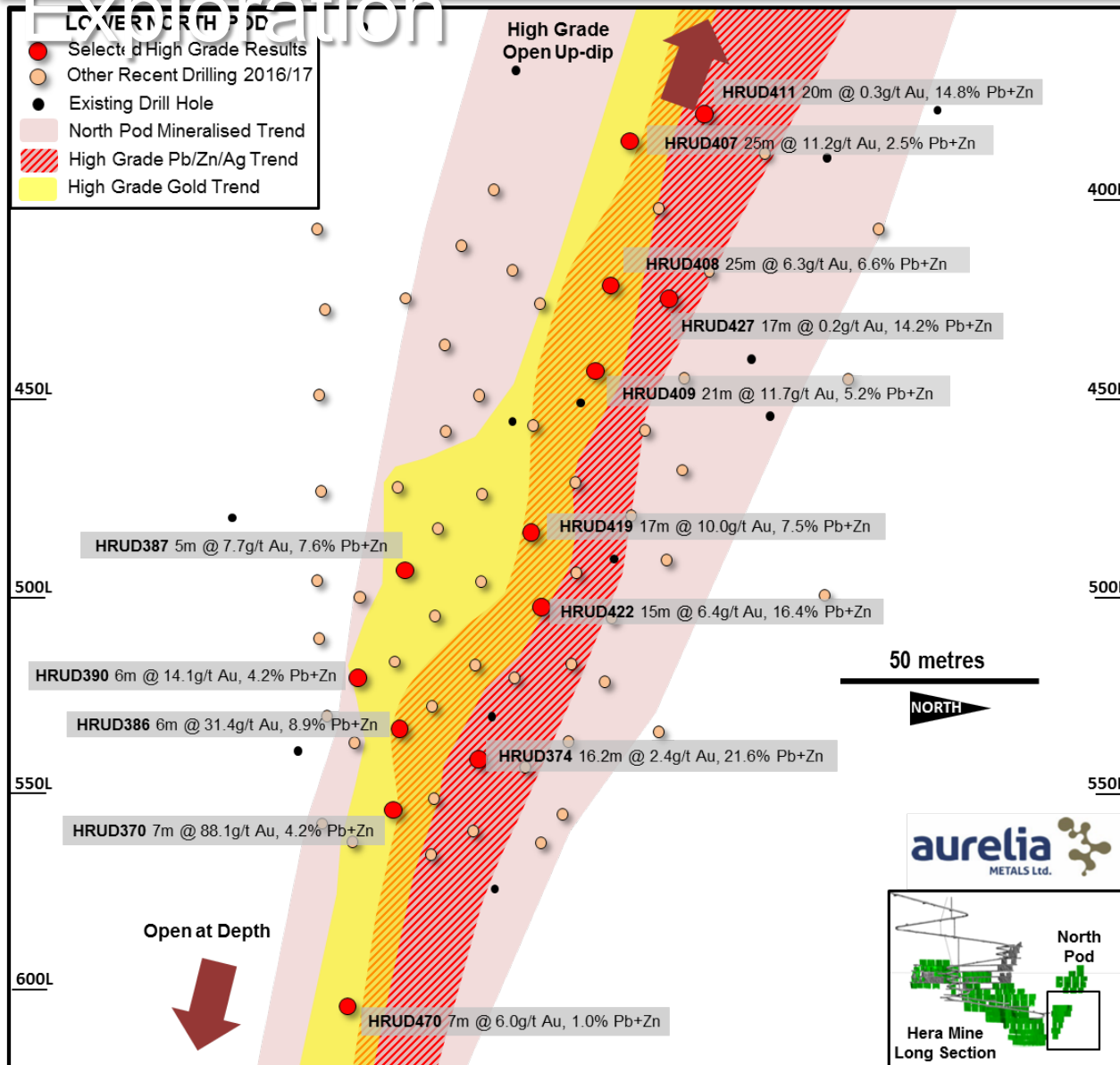
Hera Mine Ore Reserve June 2017 Long Section

Category	Geological lenses	Tonnes (Kt)	NSR (\$/t)	Au (g/t)	Pb (%)	Zn (%)	Ag (g/t)
Probable	Far West	503	268	3.06	2.97	5.06	18.5
	Far West Lower	191	269	3.72	2.59	3.81	16.5
	Hays North	33	200	2.82	2.05	2.70	8.4
	Hays South	30	281	5.30	1.10	1.97	5.4
	Main North	201	233	3.40	2.17	2.96	12.8
	Main South	189	294	4.84	2.39	2.73	12.7
	North Pod	329	285	3.36	3.25	4.39	39.4
Probable		1,476	269	3.53	2.74	4.05	20.9
Total Reserves		1,476	269	3.53	2.74	4.05	20.9

Reserves calculated at a \$160 Net Smelter Return (NSR) cut-off as at 30th June 2017

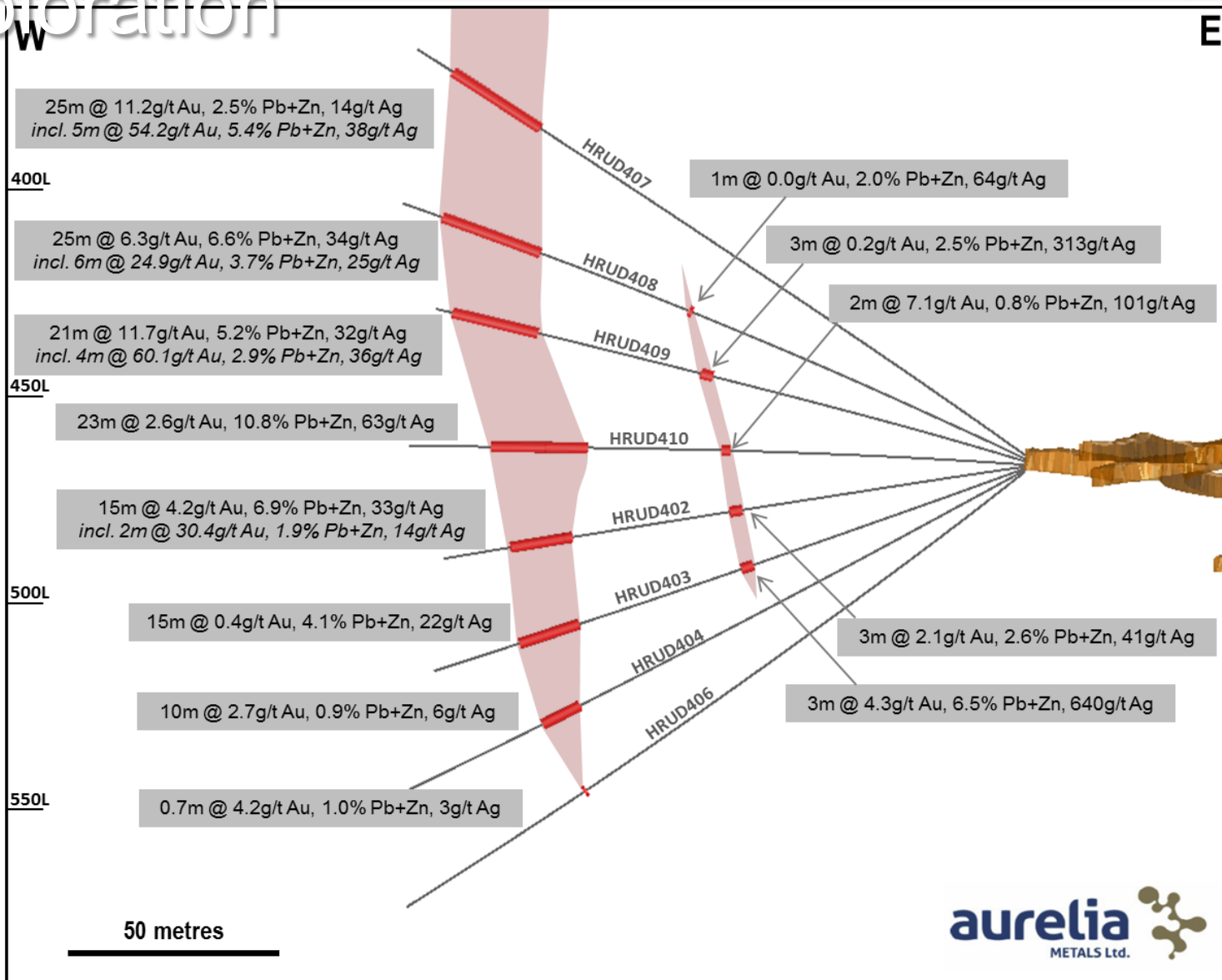
North Pod – Recent Exploration

Exploration



- Intensive drilling shows bimodal mineralisation styles at North Pod
- Overlapping “pipe-like” high grade zones
- South plunging 70-75°
- Massive to semi-massive gal-sphal zone hosted with retrograde skarn/ carbonate
- HG gold zone mostly siliciclastic-hosted
- Still open at depth

North Pod – Recent Exploration



Ore Mineralogy – All Hera

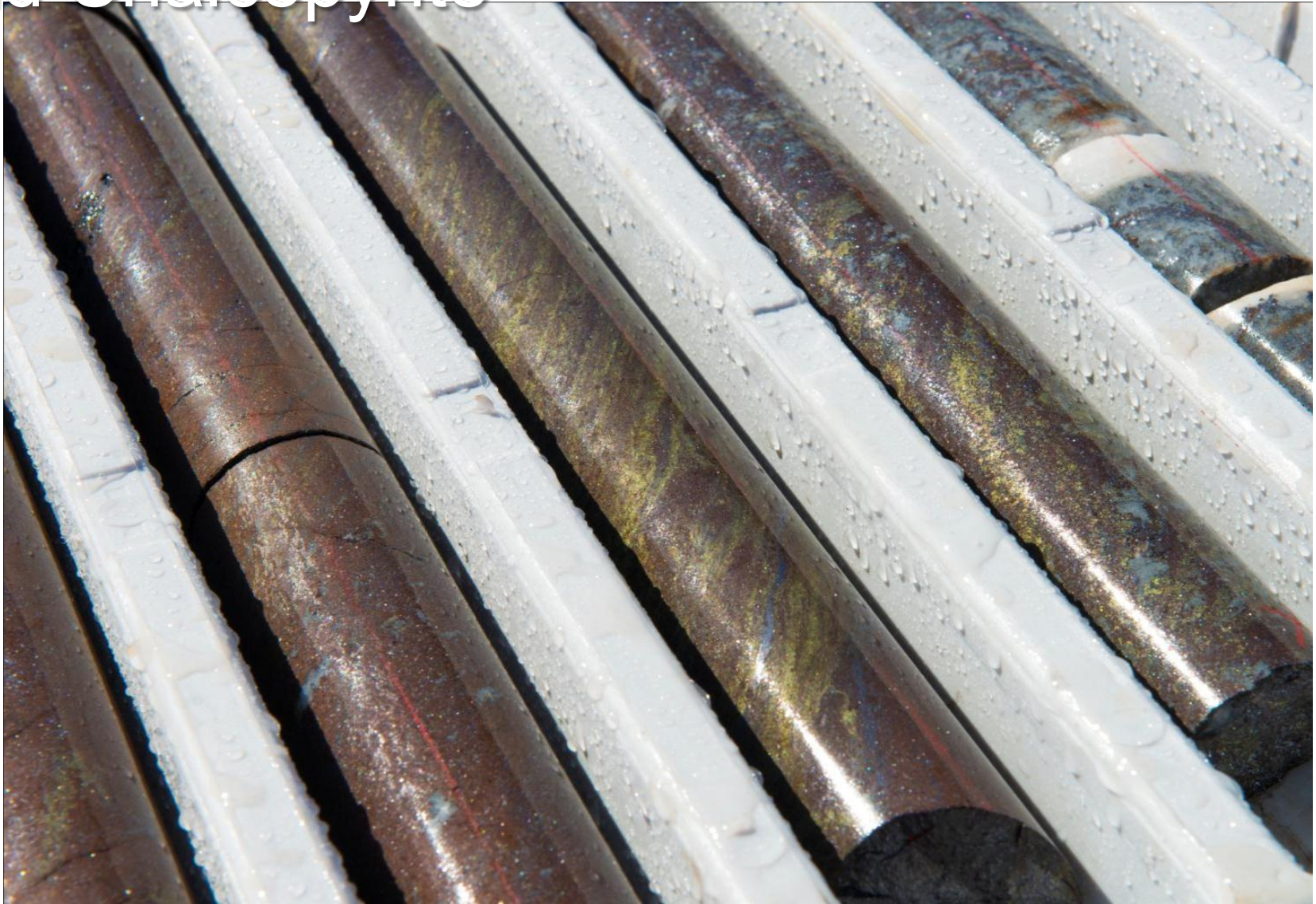
Lodes

Ore Mineral	Formula	Abundance	Ore Mineral	Formula	Abundance
Acanthite	Ag ₂ S	Trace	Gudmundite	FeSbS	Trace
Antimony	Sb	Trace	Marcasite	FeS ₂	Trace
Arsenopyrite	FeAsS	Minor	Pentlandite	(Fe,Ni) ₉ S ₈	Trace
Bismuth	Bi	Trace	Pyrite	FeS ₂	Minor
Bismuthinite	Bi ₂ S ₃	Trace	Pyrrhotite	Fe _(1-x) S	Major
Bornite	Cu ₅ FeS ₄	Trace	Scheelite	CaWO ₄	Trace
Chalcocite	Cu ₂ S	Trace	Silver	Ag	Trace
Chalcopyrite	CuFeS ₂	Minor	Sphalerite	(Zn,Fe)S	Major
Cubanite	CuFe ₂ S ₃	Trace	Stibnite	Sb ₂ S ₃	Trace
Dyscrasite	Ag ₃ Sb	Trace	Tennantite	(Cu,Ag) ₁₂ As ₄ S ₁₃	Trace
Galena	PbS	Major	Tetrahedrite	(Cu,Ag) ₁₂ Sb ₄ S ₁₃	Trace
Gold	Au	Minor	Troilite	FeS	Minor

- 24 ore species identified to date
- Silver/antimony phases mostly present in North Pod
- Comparative study of ore mineralogy between lodes currently underway

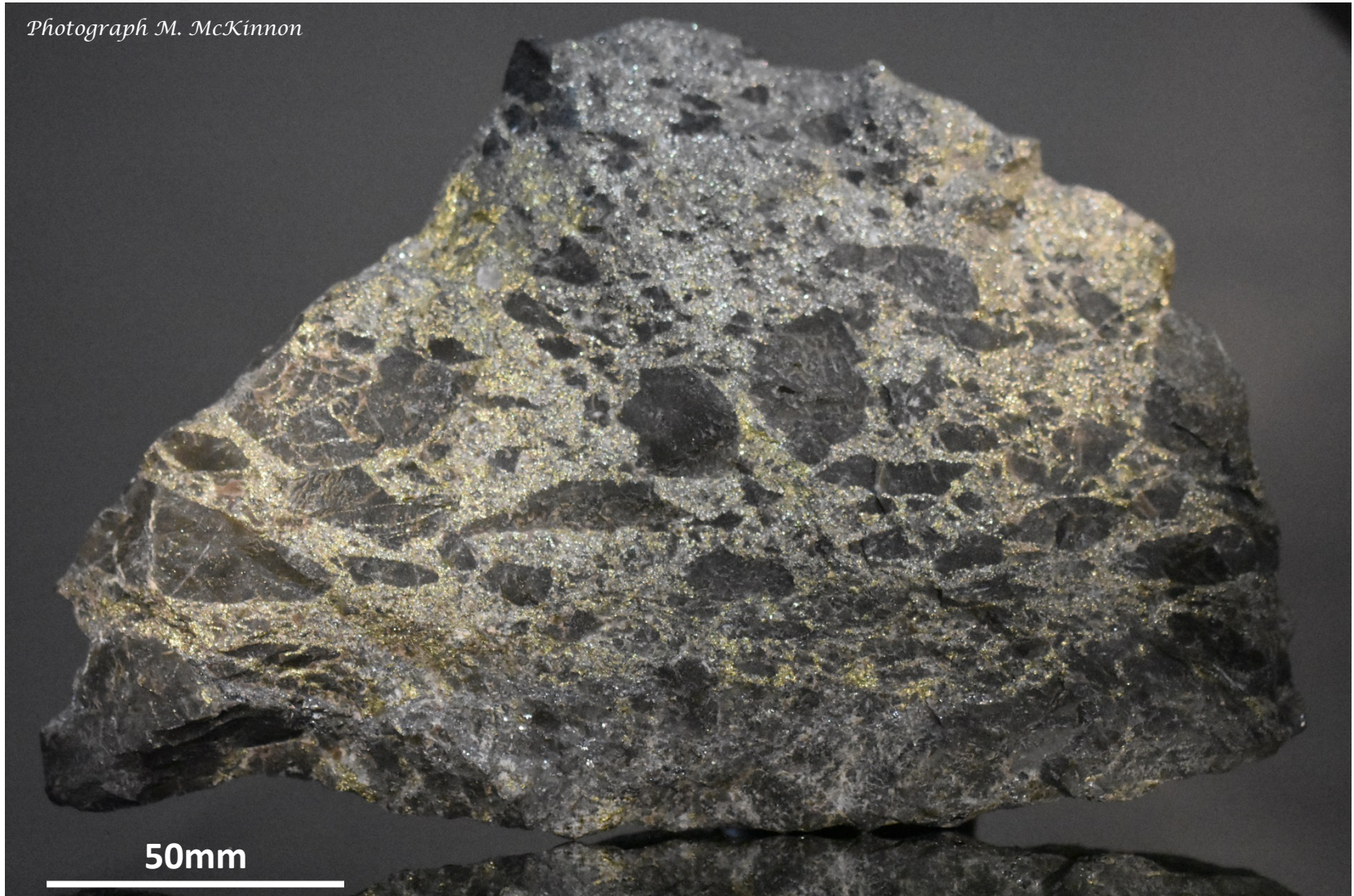
Massive Banded Sphalerite

HRD059, NORTH POD
and Chalcopyrite

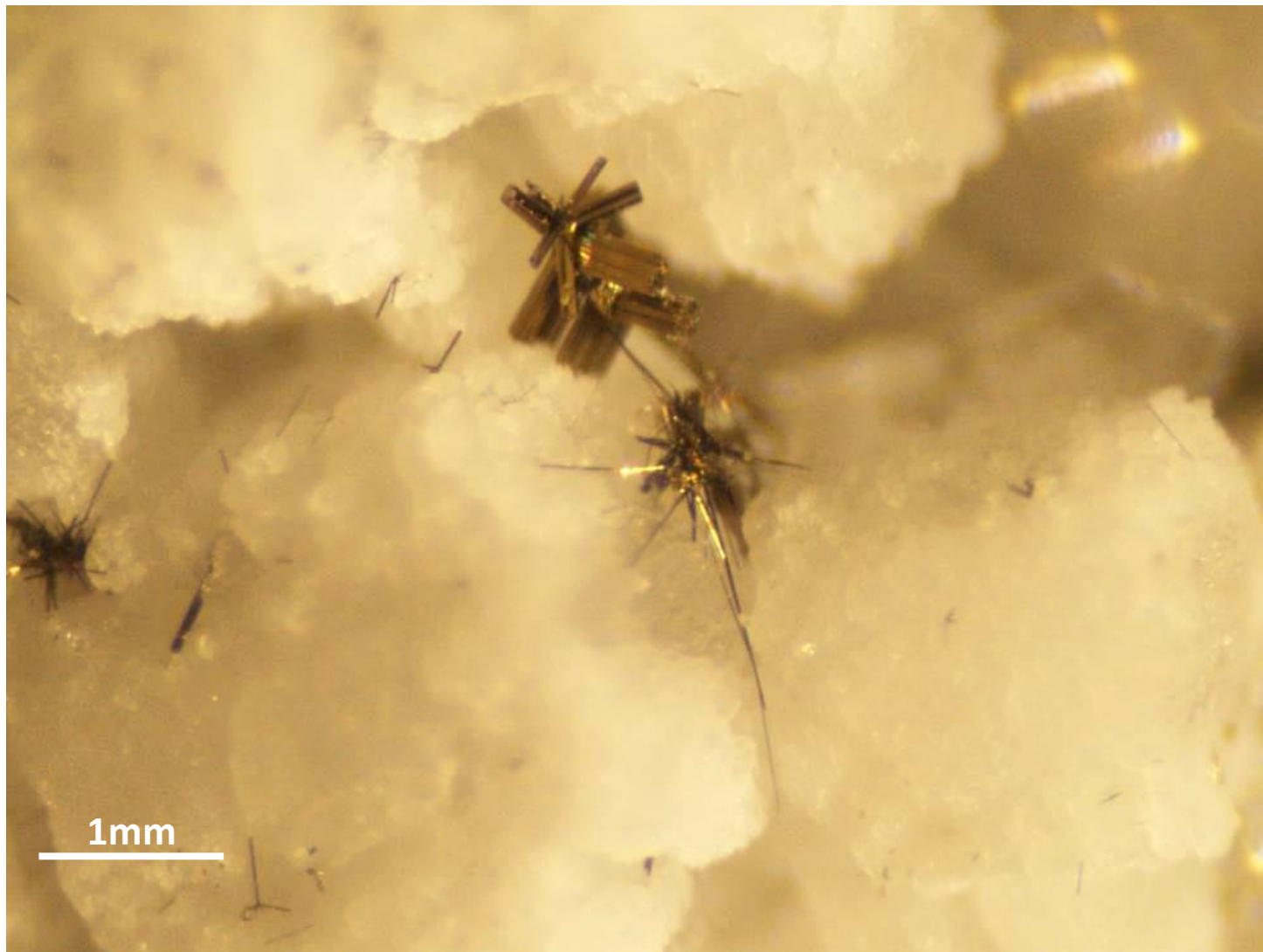


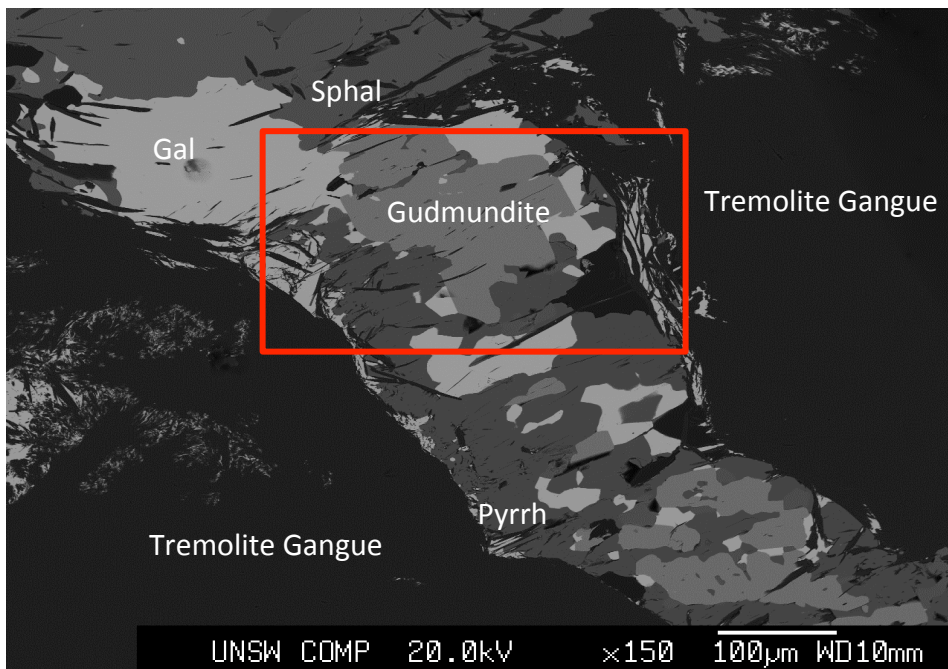
Sulphide Breccia with Pyrrhotite, 410 LEVEL, MAIN LODE NORTH Chalcopyrite & Galena

Photograph M. McKinnon

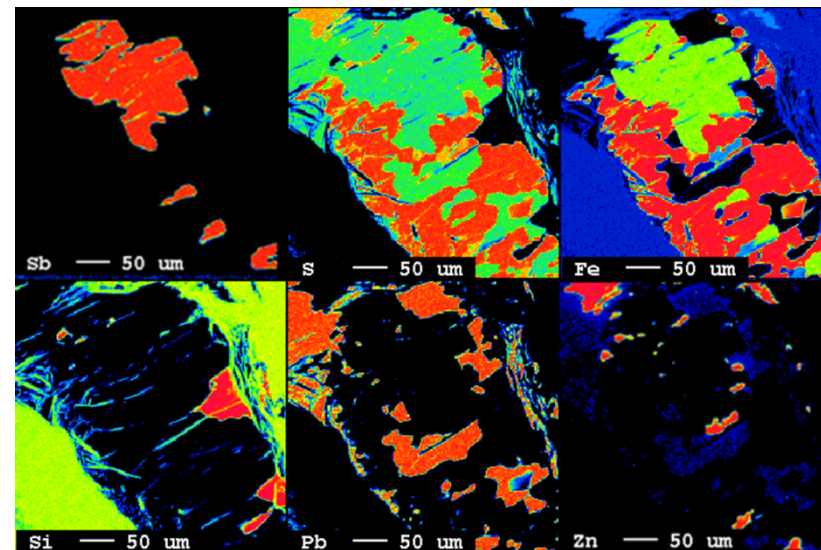


Twinned Cubanite Crystals on 435 LEVEL VENT ACCESS Microcline

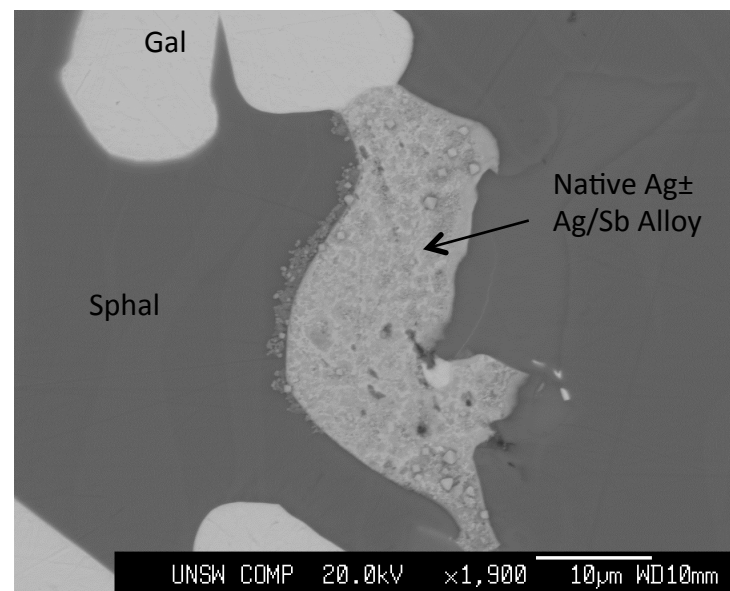




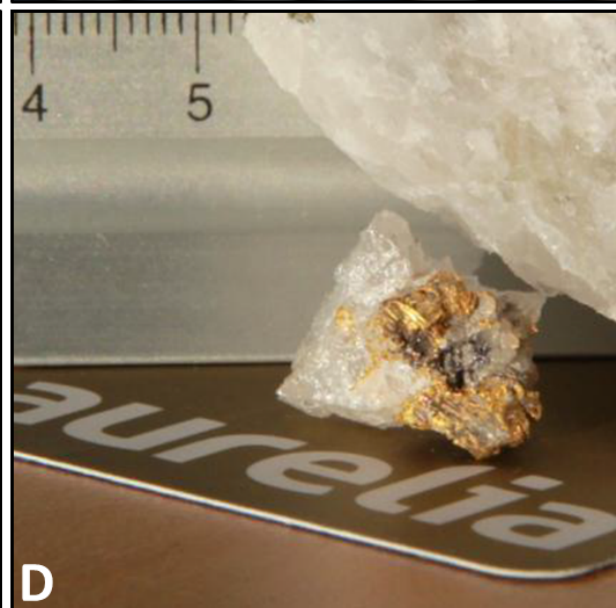
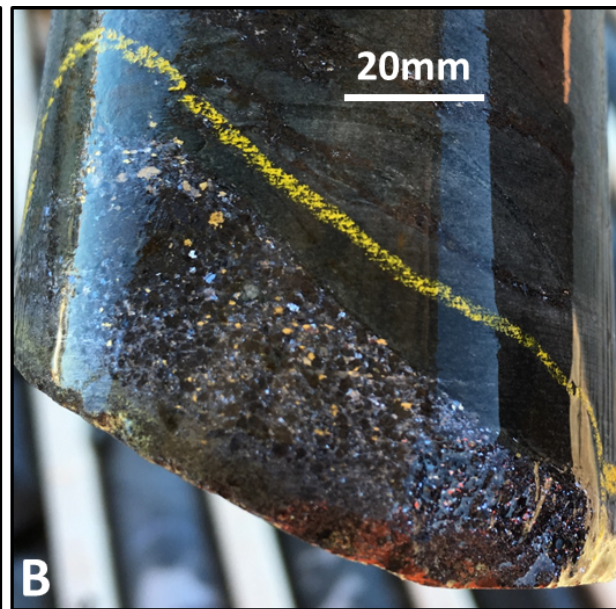
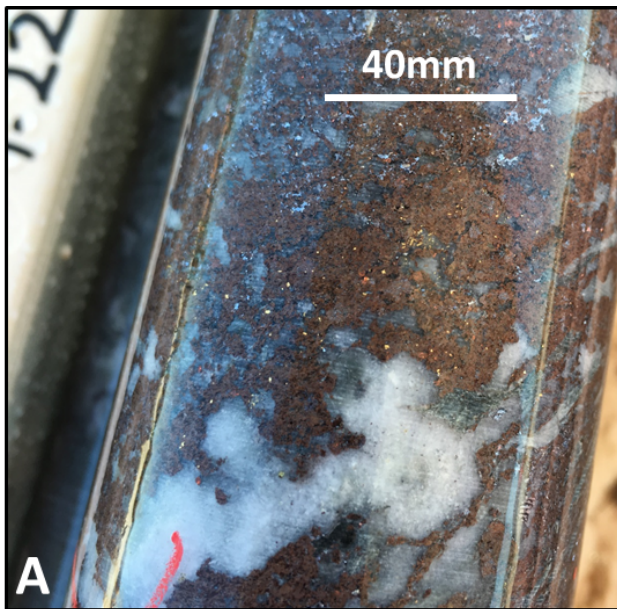
Back-scattered electron (BSE) image showing gudmundite (FeSbS) intergrown with other sulfides in tremolitic gangue, North Pod.



Element map of gudmundite-bearing sulfides.

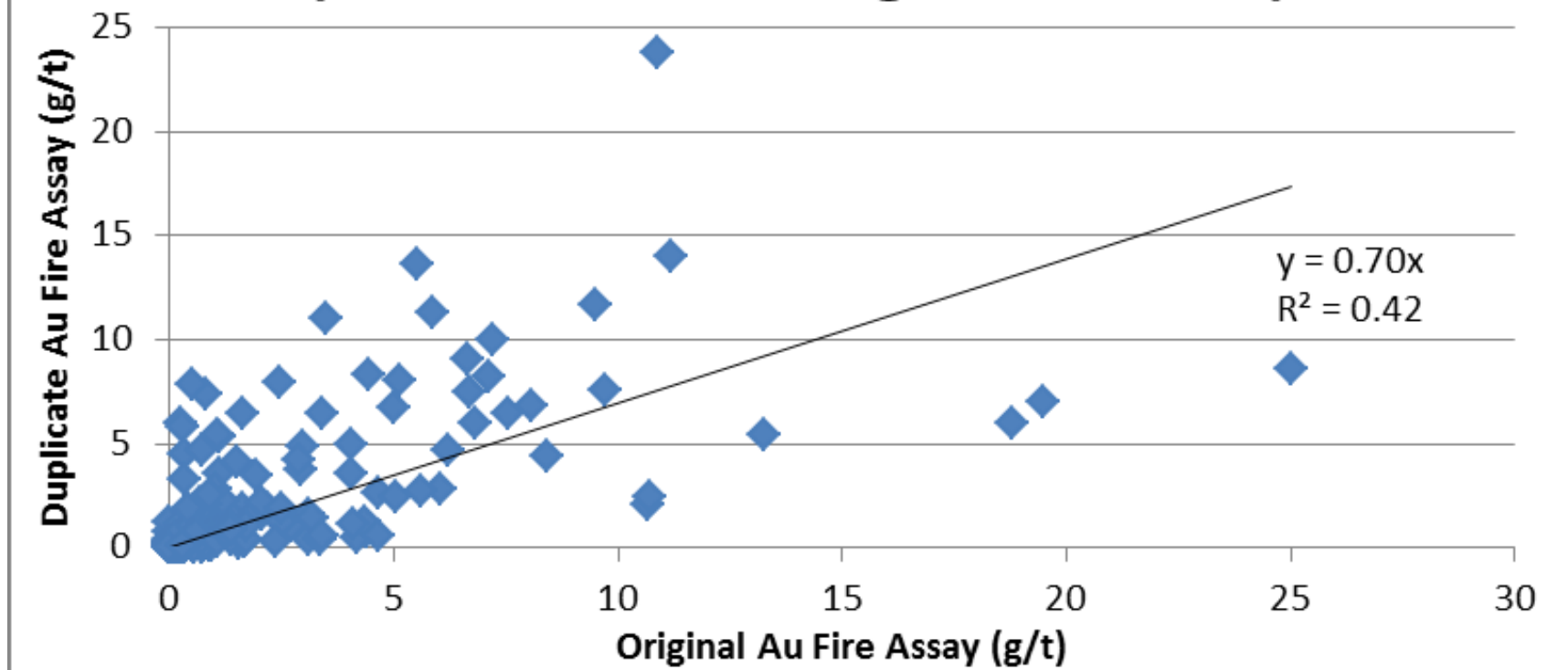


Native silver and unidentified Ag/Sb alloy (possibly dyscrasite), North Pod.

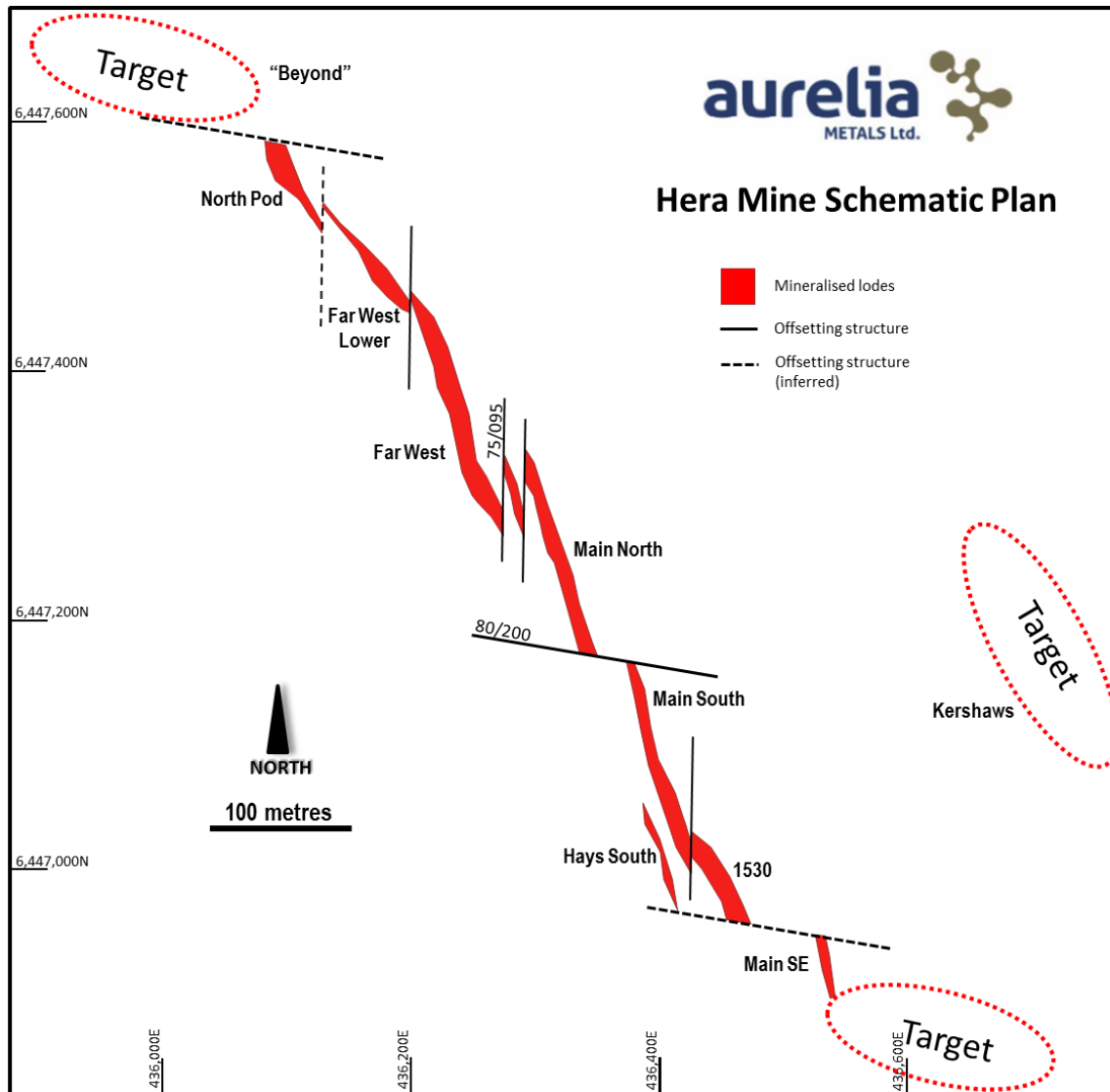


- Gold is spatially associated with sulfides, but not necessarily hosted within them
- Cross-cutting relationships indicate at least some of the gold postdates the main sulfide event
- Mostly coarse-grained, occasionally forms large patches and small veins
- Very high short-range variability
- High gravity recoveries

Comparison of Adjacent Half Cores, Conventional Fire Assays (n=298, Values >50g/t Removed)



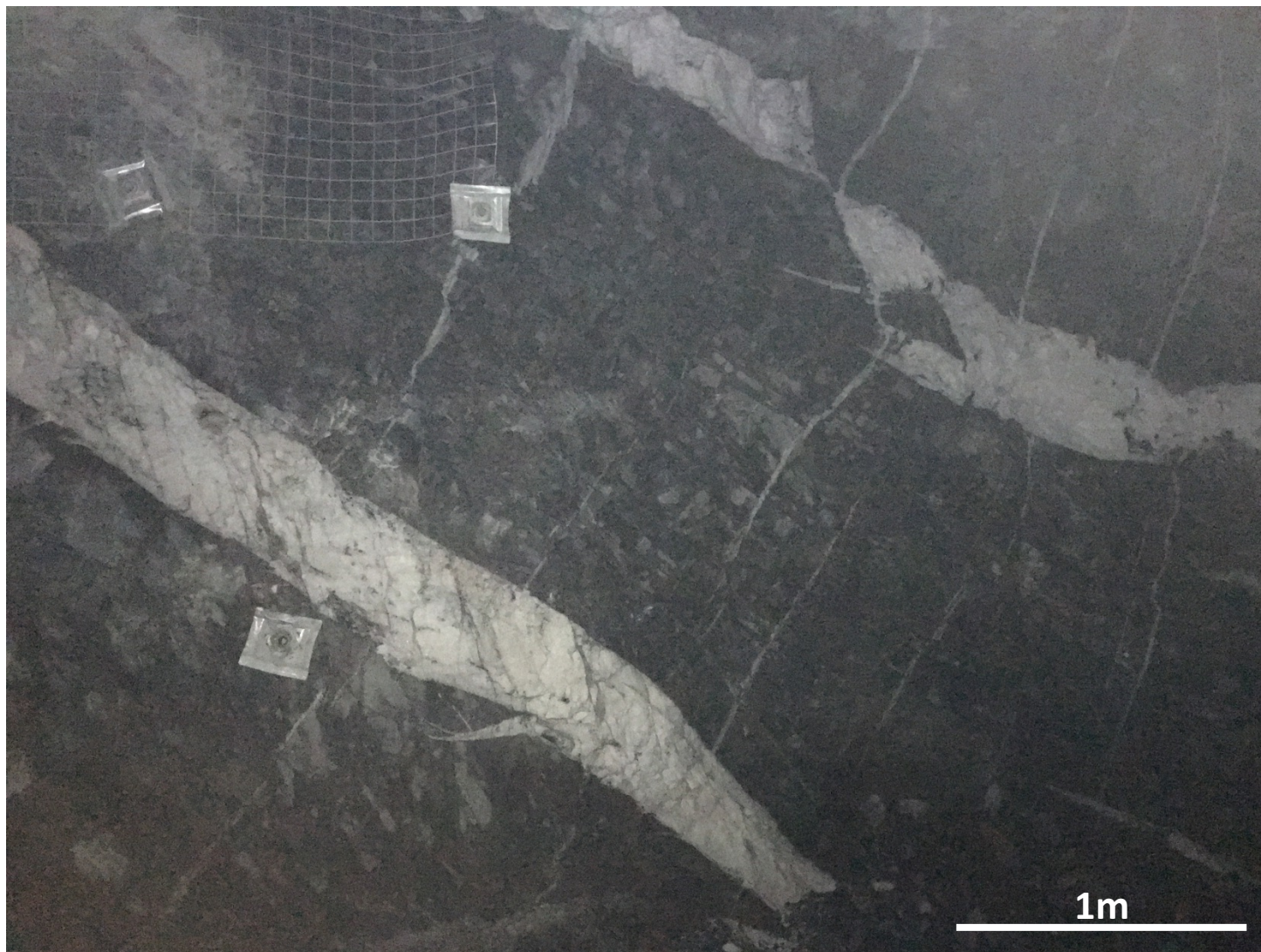
Hera Deposit Schematic Plan



- Structural architecture of Hera lodes only recently established
- Now interpreted as a single broadly stratabound mineralised horizon
- East-west structure offset the Main North and South lodes
- Easterly-dipping, north-south striking structures control southerly plunge of several lodes
- North-south structures intimately associated with late, irregular quartz veins

Massive Quartz Veins

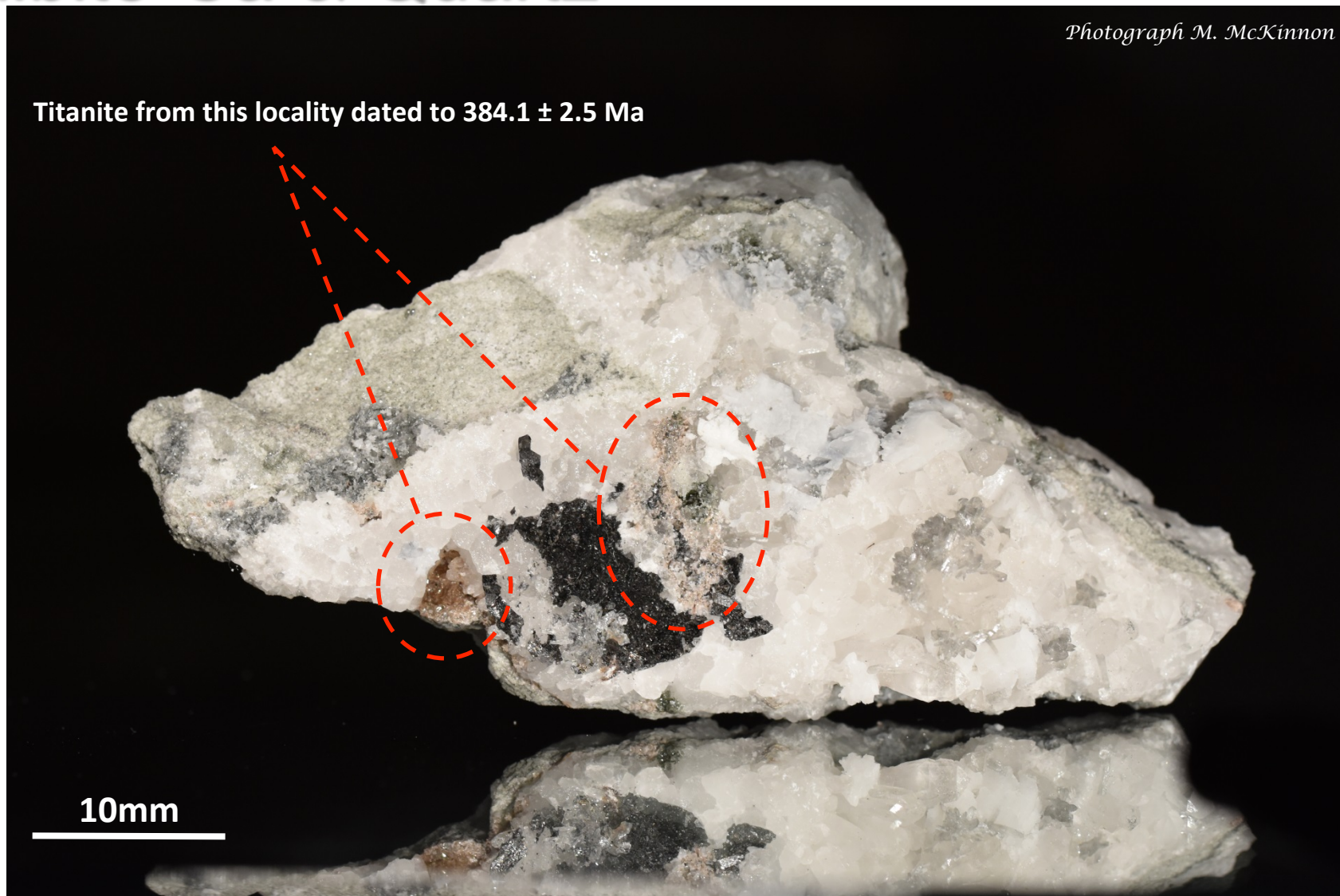
435 LEVEL VENT ACCESS



Sphalerite, Titanite, Microcline, 435 LEVEL VENT ACCESS Stibnite-Ca & Quartz

Photograph M. McKinnon

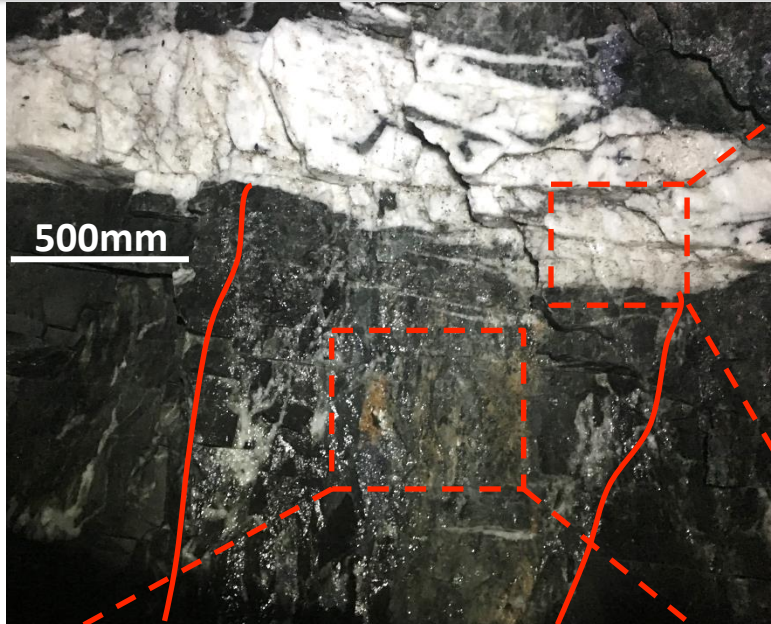
Titanite from this locality dated to 384.1 ± 2.5 Ma



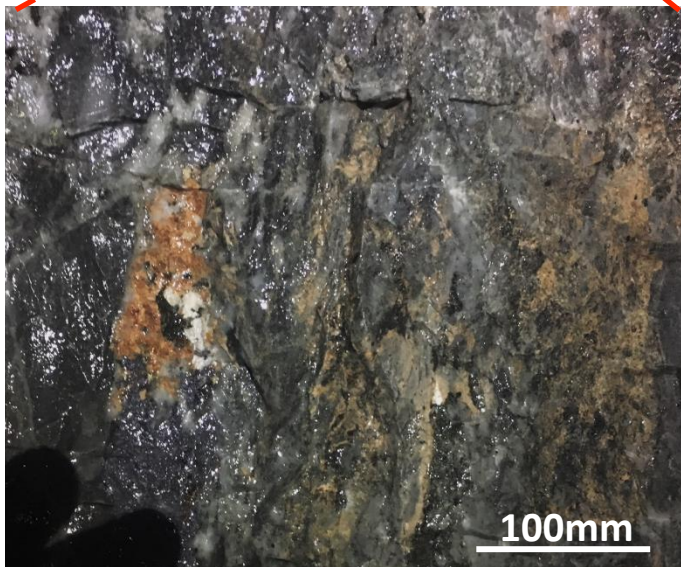
10mm

Late Quartz-Titanite Veins

460NL Drive, Main North Lode



Late massive qz veining with abundant titanite (pink)

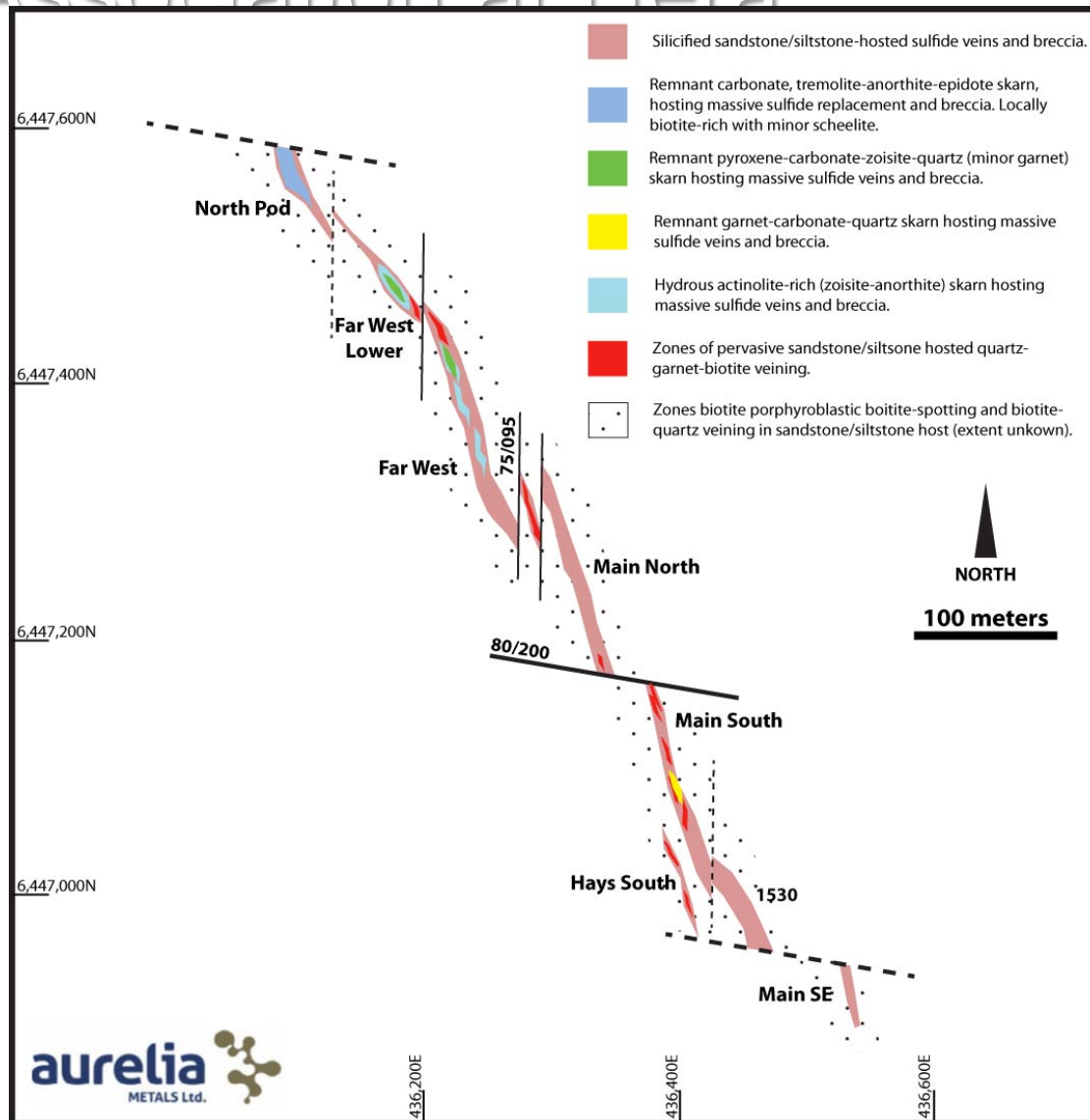


Quartz-garnet-sulfide±scheelite breccia

- Quartz veins clearly crosscut vertical garnet-sulphide breccia zones
- Abundant titanite in late quartz veins
- Titanite dated to **383.9 ± 2.2 Ma**

Recognising the Skarn

Association at Hera



- High temperature calc-silicate assemblages only recently confirmed
- Complex lateral and vertical zonation
- Most intense skarn developed at depth and towards the north
- Similar skarn mineralisation present in other prospects in the region

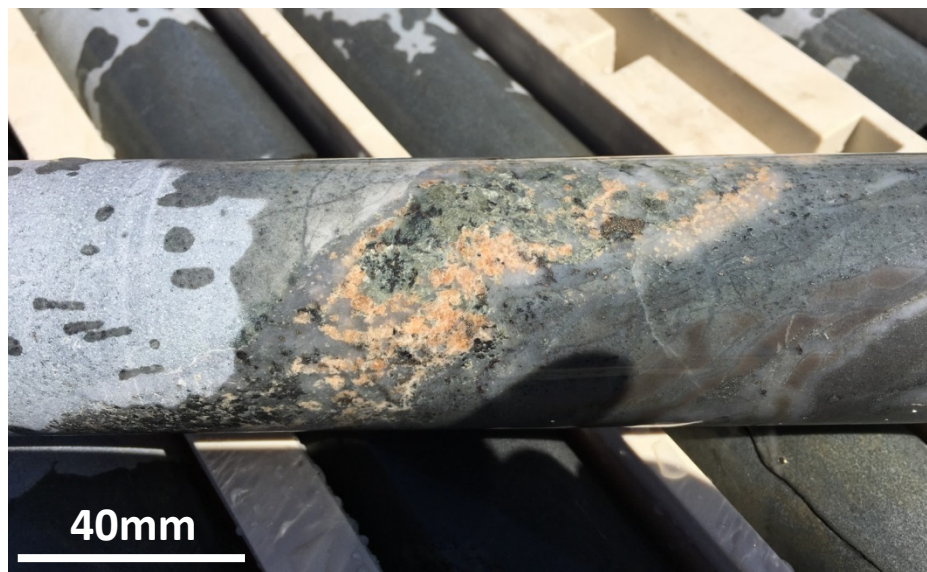
Garnet in Main Lodes



Garnet-quartz vein bordering massive sulphides,
360SA Stope



Garnet in galena, 360SA Stope



Garnet-actinolite-quartz vein in strongly silica/biotite altered host, Main North

Garnet with Calcite

360SA Stope, Main North Lode



Recrystallised calcite, garnet, high-iron sphalerite and galena, 360SA Stope



Calcite clasts (with minor tremolite) in sulphide breccia, 535FWS Drive, Far West Lode



Zoisite-anorthite-tremolite-garnet skarn, 485FWS Drive, Far West Lode

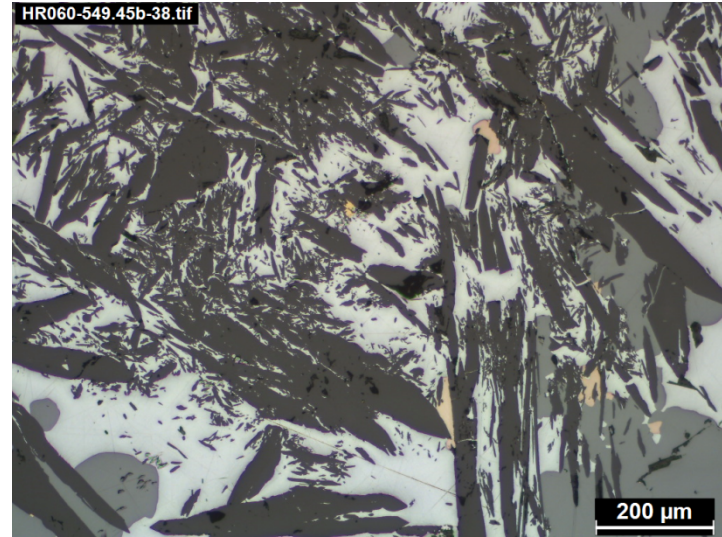


Siliceous breccia with low-iron sphalerite and visible gold. Black spots are intimated intergrowths of tremolite and galena. Hole HRUD525, Far West Lode.

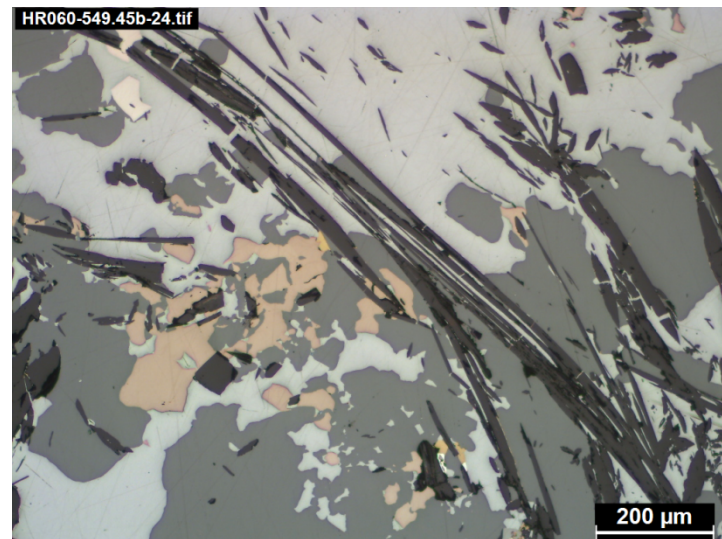
North Pod Skarn Assemblages



Dolomitic carbonate clasts in massive sulphide breccia



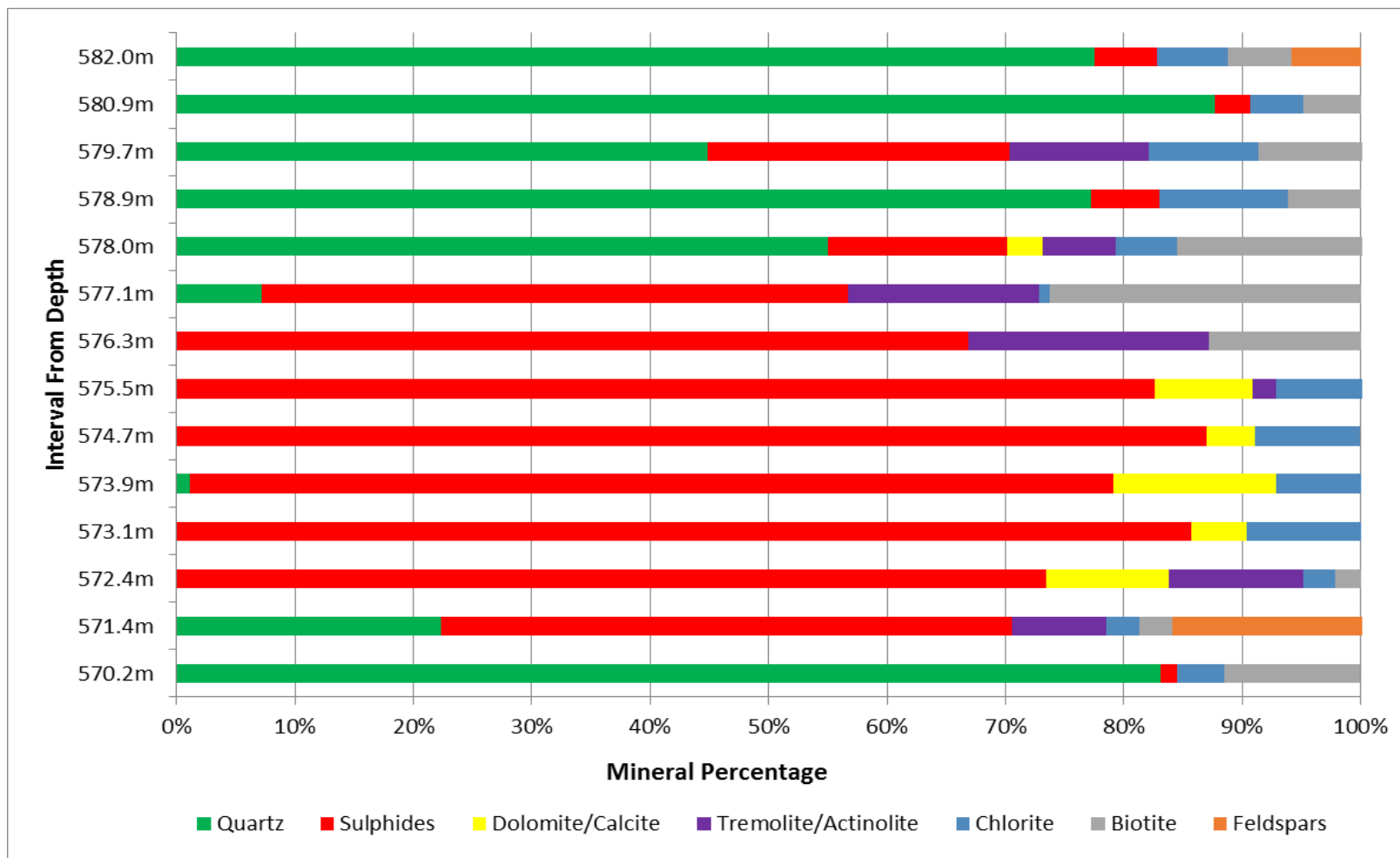
Tremolite intimately intergrown with galena and sphalerite.
HRD060, North Pod.



Acicular tremolite intimately intergrown with galena,
sphalerite and pyrrhotite. HRD060, North Pod.

Assemblages

Simplified mineralogical profile of the mineralised intersection in HRD061 (quantitative XRD)



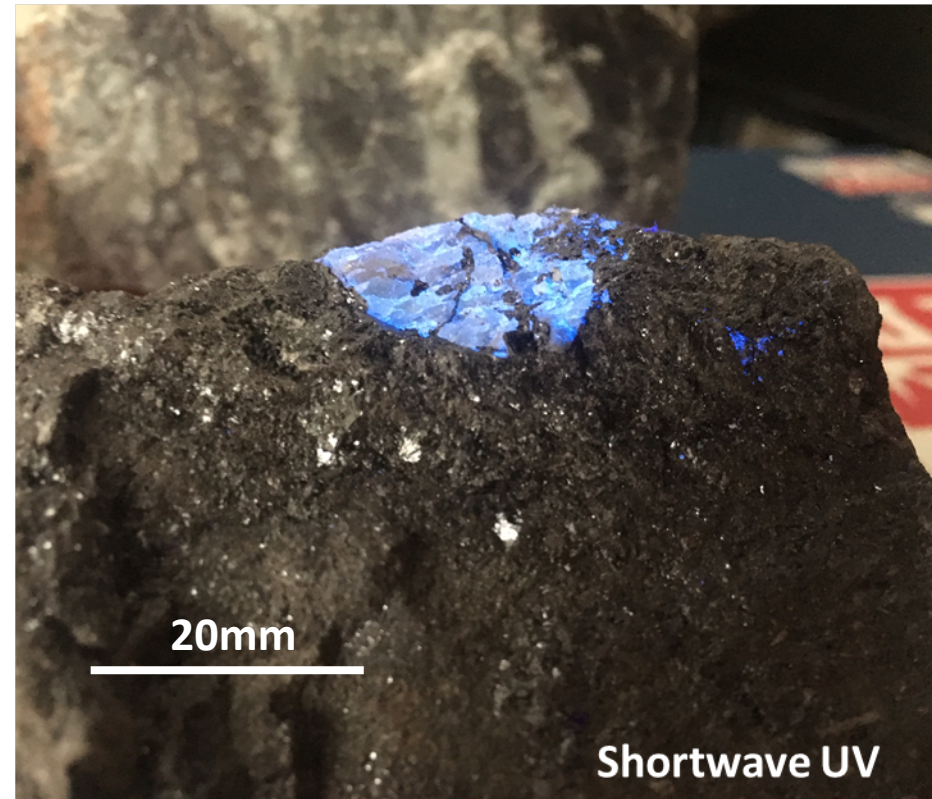
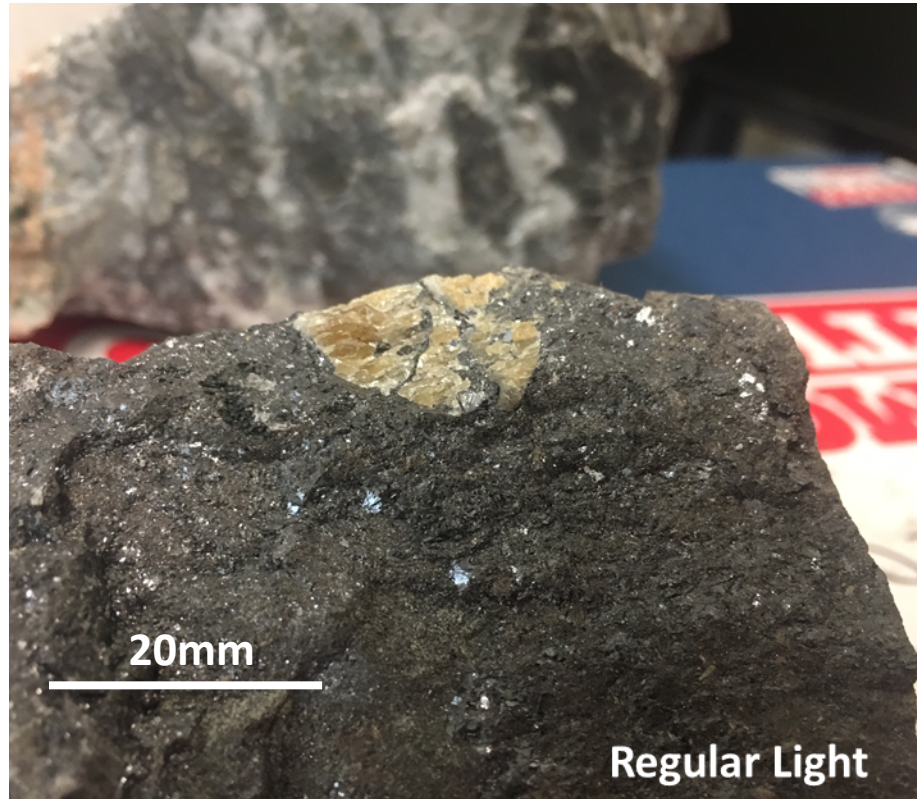
Unmineralised Skarn

HRUD428, North Pod Footwall



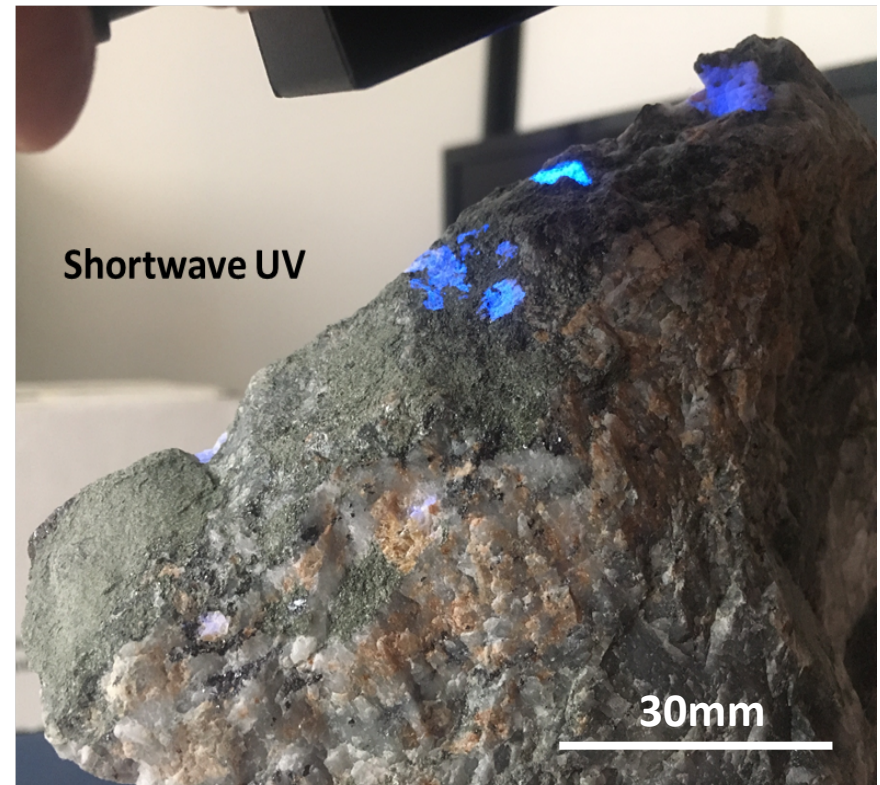
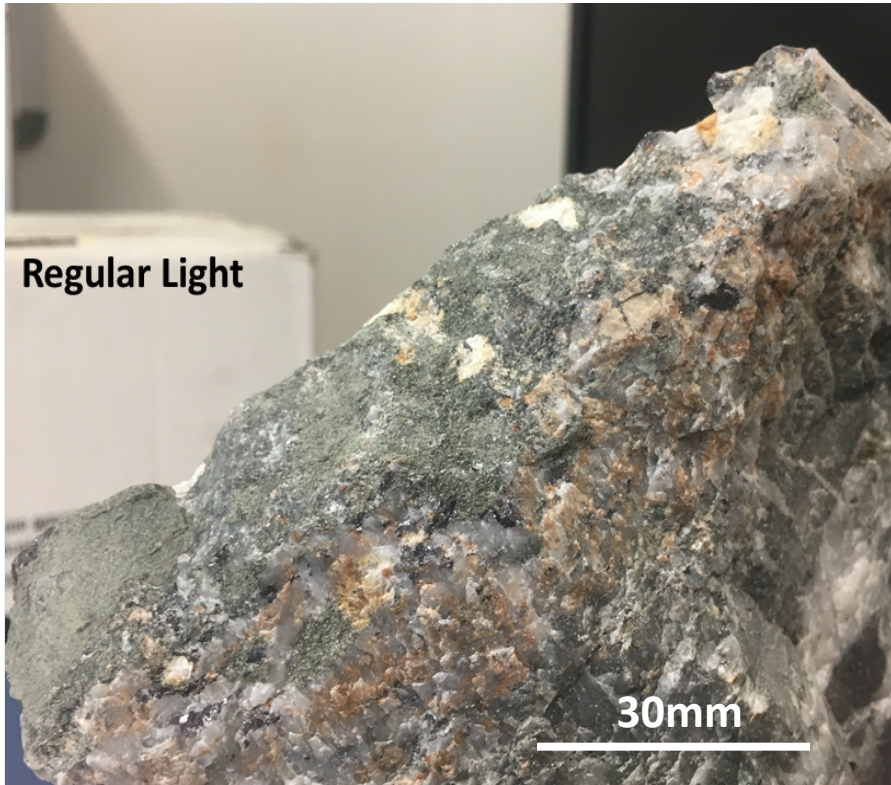
Broad, unmineralised tremolite-zoisite-anorthite skarn intercept from the footwall of North Pod. Zoisite (*var thulite*) is light pink in this zone indicating elevated manganese.

Scheelite with Sphalerite and Galena 410 South Ore Drive, Main South Lode

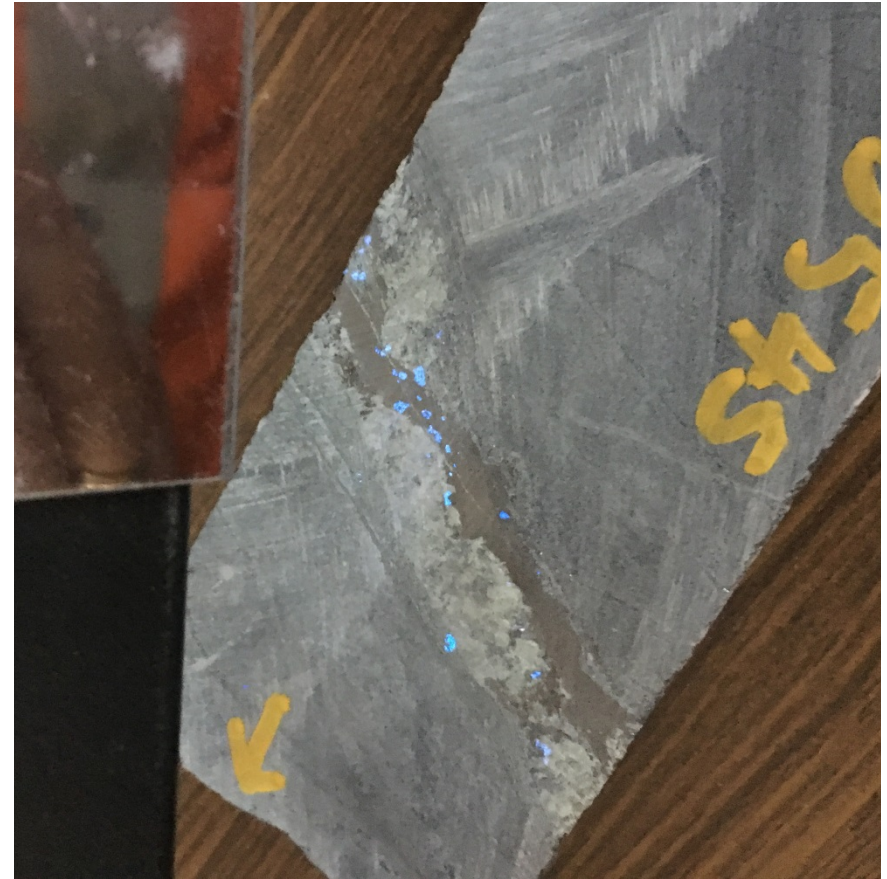


Scheelite with Massive Chlorite and Garnet

360SA Stope, Main South Lode



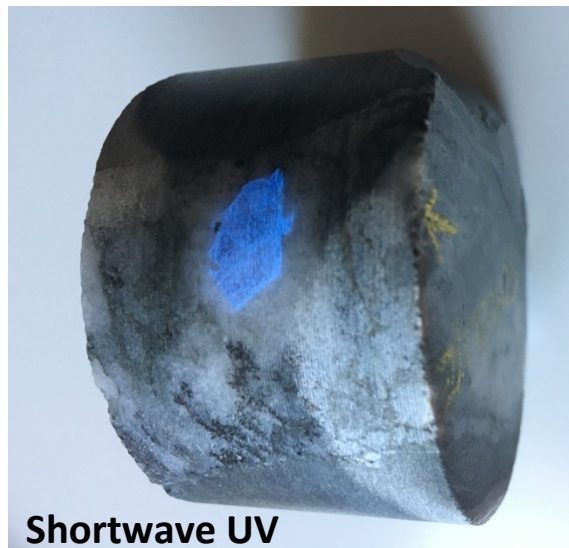
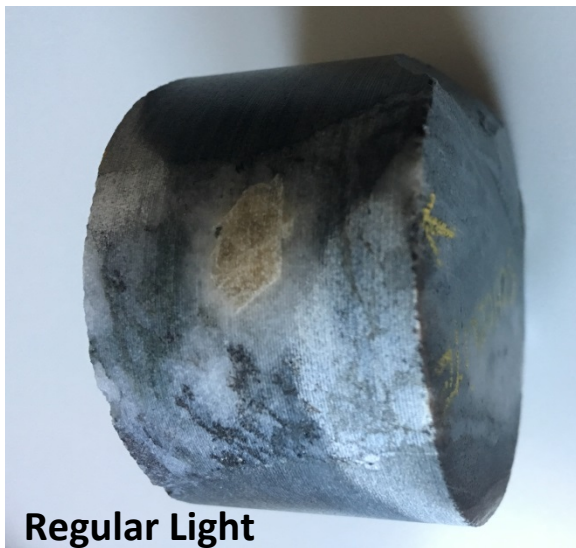
Scheelite-Bearing Hydrous HRUD545, Far West Lower Skarn/Sulphide Veins



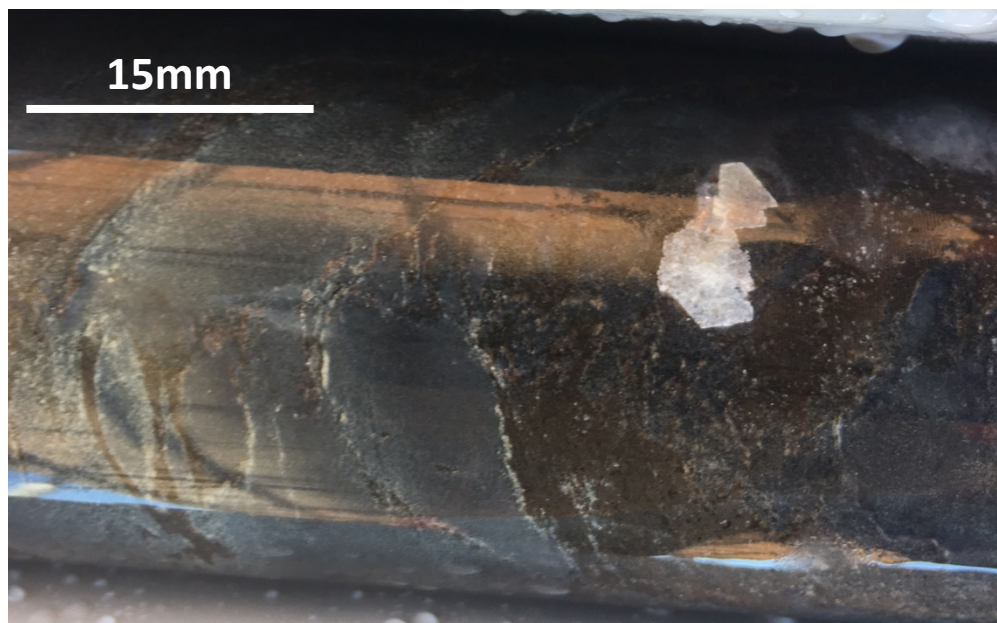
Sphalerite-galena-tremolite-garnet veins with abundant scheelite (under shortwave UV light), Far West Lower

Euhedral/Subhedral Scheelite

Main North and North Pod Deeps



Scheelite in quartz-biotite vein, HRUD468, Main North Footwall



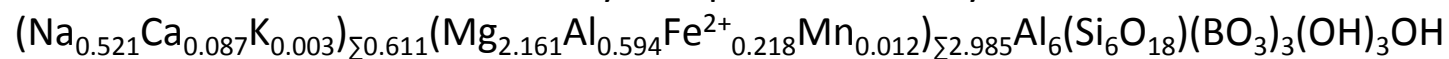
Scheelite with massive biotite, HRUD470, North Pod Deeps

Fibrous Tourmaline

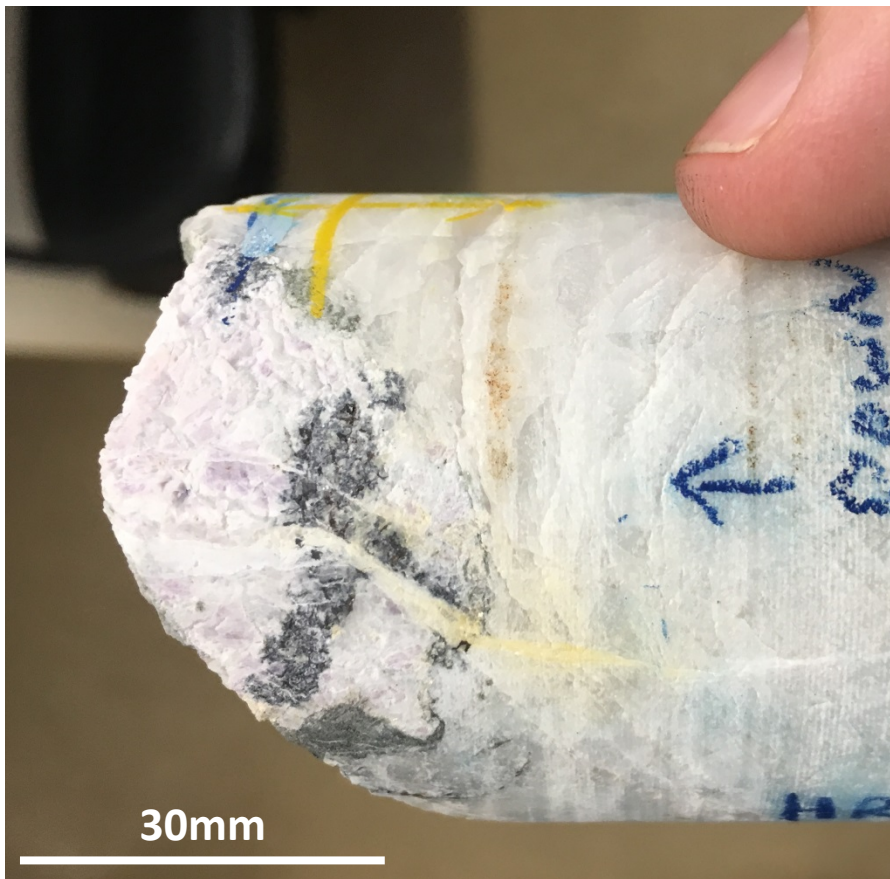
310 South Ore Drive, Main South Lode



Preliminary Compositional Analysis:



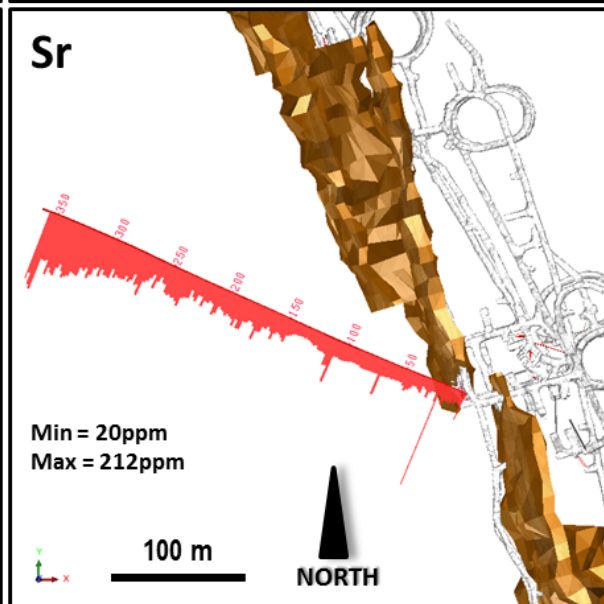
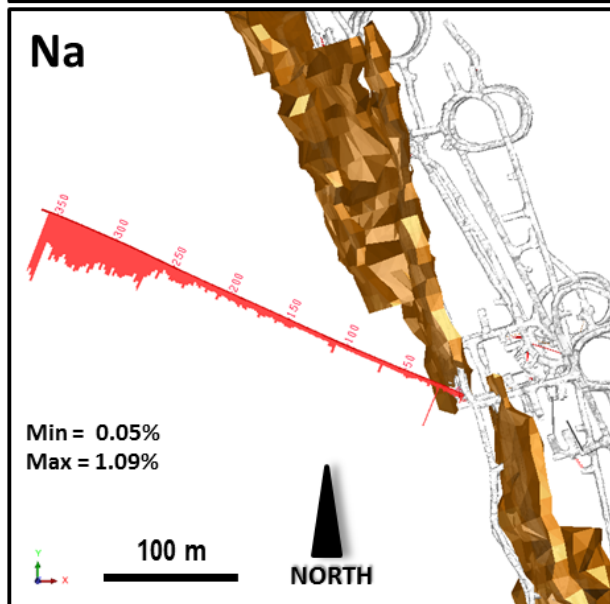
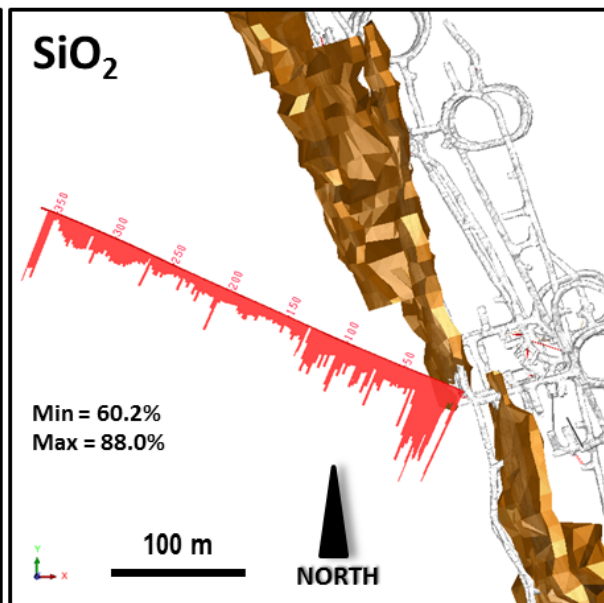
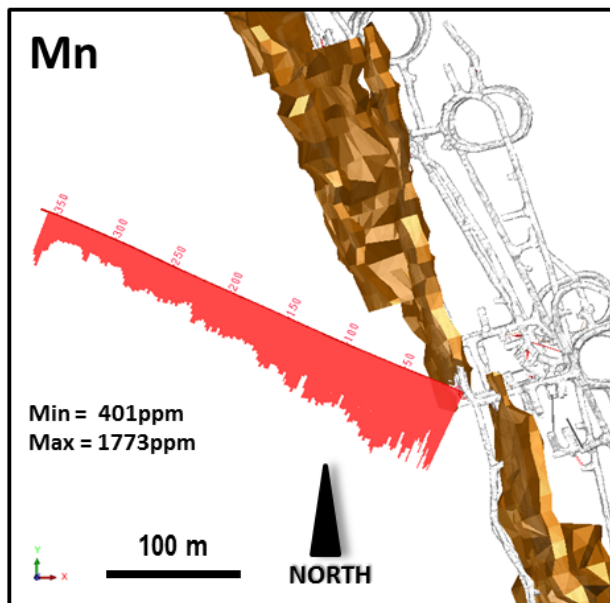
Other Potential Magmatic Indicators



**White and pale purple fluorite in quartz,
North Pod footwall**

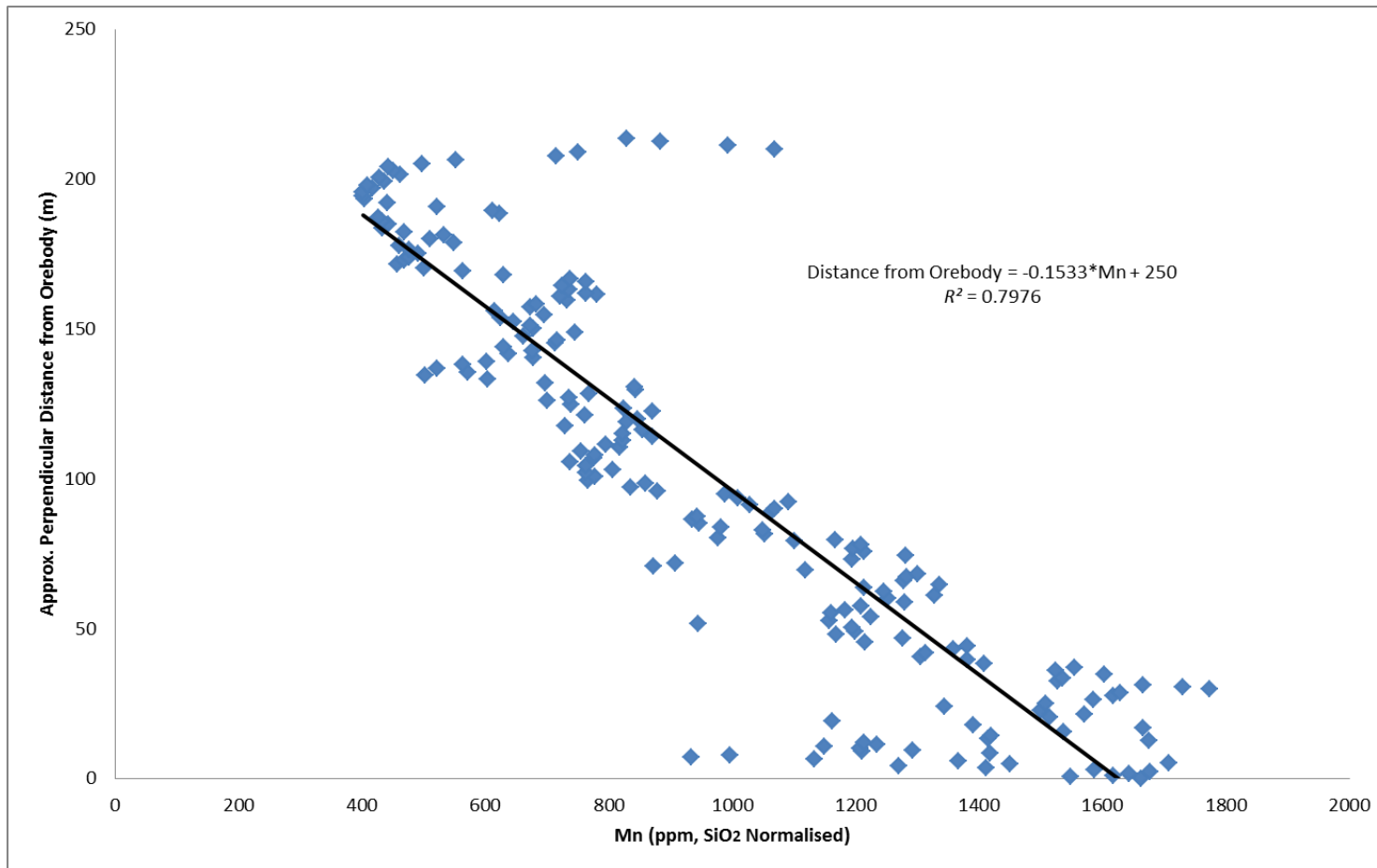


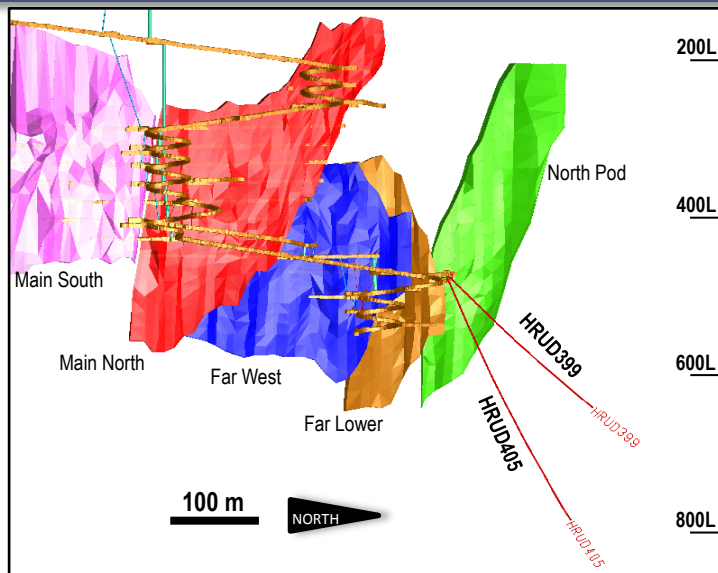
**Massive albite (pale green) and quartz
veining, 285SR Drive, Main South Lode.
Dark patches are Fe-Chlorite**



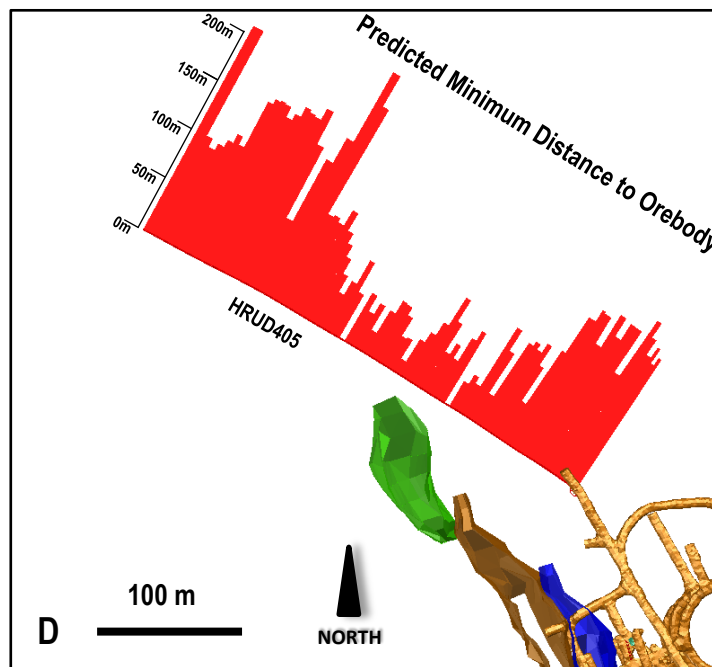
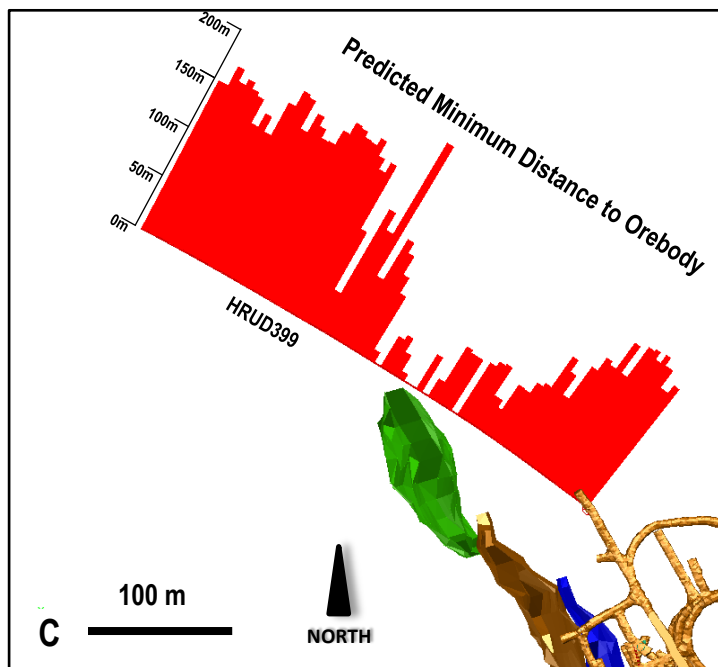
- HRUD165 drilled nearly flat to west away from known mineralisation
- EOH reaches 215 metres perpendicular from orebody
- Strong enrichment in silica close to lodes
- Mn enriched near lodes with consistent near linear drop at distance
- Intense depletion of Na (and Sr to a lesser extent) for at least 135 from the to orebody
- Depletion zone is consistent with previous observations at CSA e.g. Robertson & Taylor (1987)
- Note unexplained anomaly at end of hole for all elements

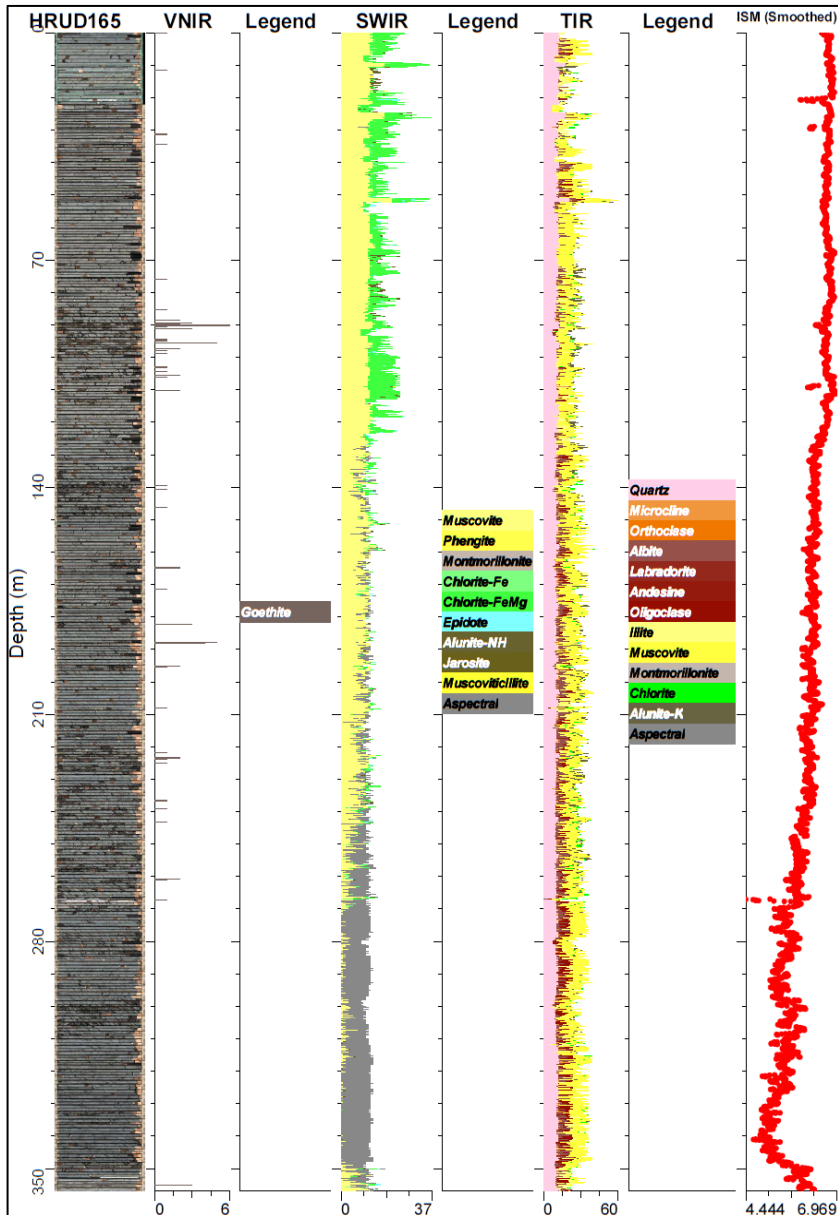
Relationship of Manganese to Perpendicular Distance from Orebody in HRUD165



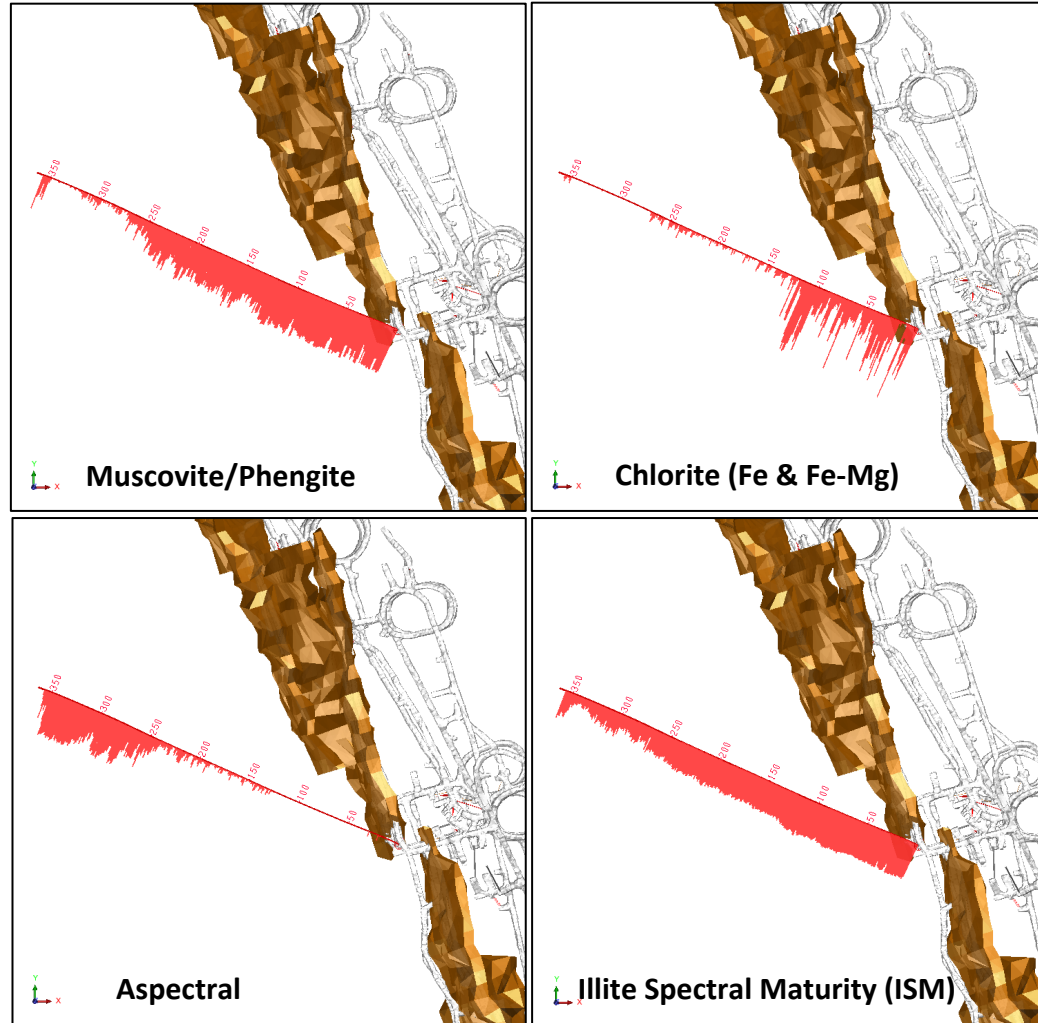


- HRUD399 and HRUD405 drilled NW of North Pod, targeting offset extensions at depth
- Neither hole intercepted mineralisation, both pass very close to known North Pod lode
- Mn-distance relationship from HRUD165 applied to both holes
- **Mn very effectively shows the proximity of North Pod without a mineralised intercept**





HyLogger™ SWIR responses plotted down hole in HRUD165



- The authors would like to thank Dr Ian Graham and students Angela Lay and Lachlan Burrows of the University of NSW for providing some of the mineralogical data used here
- Aurelia Metals management are thanked for permission to publish data related to the Hera project