# **ASX Announcement**

9 February 2023



#### **Catalyst Metals**

Catalyst Metals controls two highly prospective gold belts. It has multi asset strategy.

It owns and operates the high-grade Henty Gold Mine in Tasmania which lies within the 25km Henty gold belt.
Production to date is 1.4Moz @ 8.9 g/t.

It also controls +75km of strike length immediately north of the +22Moz Bendigo goldfield and home to the new, greenfield discovery at Four Eagles.

#### **Capital Structure**

Shares o/s: 98.5M Cash: \$18.6m (Dec-22) Debt: Nil

**Board Members** 

**Stephen Boston**Non-Executive Chairman

James Champion de Crespigny Managing Director & CEO

**Bruce Kay**Non-Executive Director

Robin Scrimgeour
Non-Executive Director

#### **Corporate Details**

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# Major breakthrough in hunt for extension of Bendigo Goldfield with consistent visible gold across 350m strike at new Iris Zone

New high-grade zone has shown eight visible gold samples across what appears a continuous zone of mineralisation, immediately beneath Boyd's Dam

#### **Key Points**

- Drilling resumed at Four Eagles Gold Project after delays from seasonal flooding
- Eight holes have reported visible gold samples
- All samples lie within what appears a continuous zone of mineralisation
- Iris Zone extends over 350 metres in strike length; remains open north and south
- Assays received to date include: 5.6m @ 54.0 g/t Au, 1.0m @ 150 g/t Au, 1.3m @ 77.9g/t
   Au, 5.5m @ 10.4 g/t Au and 5.4m @ 5.2g/t Au
- Iris Zone presents first clear proof of concept that Four Eagles contains the same structural style as the 22-million-ounce Bendigo Goldfield, where high-grade mineralised zones repeat at depth
- Importantly, Iris adds to the number of high-grade zones close to the proposed exploration tunnel, potentially changing project economics

Catalyst Metals Limited (ASX: CYL) is pleased to report a major breakthrough in its push to find the extensions of the rich Bendigo Goldfield, with drilling returning multiple occurrences of visible gold in eight diamond drill cores from the Boyd's Dam prospect within the Four Eagles Gold Project.

The new Iris Zone is situated about 150 metres beneath the shallow mineralisation (Figure 3) at Boyd's Dam, which underpins the current resource estimate. The Iris Zone lies within a near-vertical shear zone striking almost north south and containing abundant quartz, often laminated with arsenopyrite and native gold.

Catalyst Technical Director Bruce Kay said: "This is a pivotal breakthrough in our hunt for the extension of the Bendigo Goldfield.

"We have always suspected that there would be stacked gold zones below the shallow Boyd's Dam mineralisation but previous drilling has not been done with the optimal orientation.

The Iris Zone appears to be very consistent and visible gold is always exciting".



To date, Catalyst has identified a number of high-grade areas of mineralisation within close proximity to one another (Boyd's Dam, Hayanmi, Pickles, Cunneens, Eagle 5, Bullock and Iris Zone). These areas of stacked, repetitive mineralisation have the potential to change the project's economics and could eventually all be mined from the one access tunnel (Figure 2).

#### **Four Eagles Gold Project**

The Four Eagles Gold Project is situated along the Whitelaw Gold Corridor, 70 kilometres north of the historic Bendigo Goldfield (Figure 1) and is considered a major structural control of gold mineralisation north of Bendigo. In Victoria, Catalyst manages the entire Whitelaw Gold Belt and has interests in thirteen Exploration Licences and two Retention Licences which extend for 75 kilometres along the Whitelaw and Tandarra Faults north of Bendigo and in other areas north of the Fosterville and Inglewood gold fields (Figure 1).

The structural framework of the mineralisation known at Boyd's Dam has been demonstrated to be borne of a west-dipping 'reverse' fault, which has focussed and introduced gold-bearing fluids into receptive locations along a shallow horizon of the host anticline. This structure (the "Western Shear") is but one of an array of structures, and to date, multiple parallel faults have been identified with multiple diamond drillhole intersections bearing quartz development and in parts anomalous to significant gold grades (Figure 3).

The newly discovered Iris Zone lies on one of these steep western shear zones and seems to mostly occupy the western limb of the Boyd's Dam anticline.

The historic Bendigo Goldfield reportedly produced some 22 million ounces of gold since discovery in 1851<sup>1</sup>. The success of this goldfield is attributed to the unique style and scale of faulting which resulted in the repetition of mineable orebodies at depths well beyond one kilometre.

To date, exploration of the Whitelaw Gold Belt to the north of Bendigo by Catalyst has demonstrated keen similarities to the Bendigo Goldfield such as visible gold in quartz, high grade gold assays, strong arsenious haloes, and close relationships with host rock fold hinges. Examples of visible gold in core appear in Image 1 and Image 2.

The discovery of the Iris Zone has provided a significant, highly sought-after element to the prospectivity of the Whitelaw Gold Belt; the occurrence of a linked, but discrete high-grade mineralised body at depth beneath known mineralisation.

### **Four Eagles Joint Venture Drilling Update and Results**

Diamond drilling continues at the Four Eagles Gold Project with the focus placed on targets in the vicinity of the established Boyd's Dam mineralisation (Figure 2).

As shown on Figure 3, visible gold has now been observed in 8 holes at the Iris Zone, photographs of which are presented as Image 1 and Image 2.

Partial assays have been received for some of these holes, but further sampling is required to ascertain the complete interval of interest. These initial results confirm the presence of high-grade gold mineralisation with the following intercepts:

- 5.6m @ 54.0g/t Au (FEDD135)
- 1.3m @ 77.9g/t Au (FEDD135)

<sup>&</sup>lt;sup>1</sup> https://earthresources.vic.gov.au/geology-exploration/minerals/metals/gold



- 5.4m @ 5.2g/t Au (FEDD134)
- 1.0m @ 150g/t Au (FEDD047)
- 2.0m @ 10.2g/t Au (FEDD015)
- 5.5m @ 10.4g/t Au (FEDD078)

Drilling results continue to show that Four Eagles is a strongly mineralised area and further drilling is likely to define new gold bearing structures.



Image 1: FEDD137 - Visible gold and accessory arsenopyrite at 310m down hole depth



Image 2: FEDD135 - Visible gold at 289m down hole depth



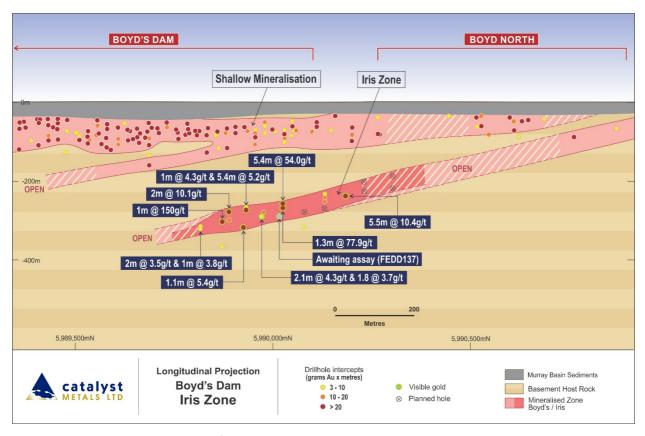


Figure 3: Boyd's Dam longitudinal projection showing the Iris Zone



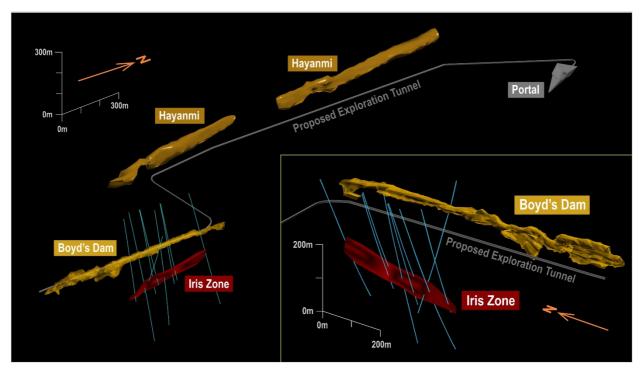


Figure 4: Four Eagles Isometric view – inset focus on Iris Zone (in red) at depth

This announcement has been approved for release by the Board of Directors of Catalyst Metals Limited.

#### **Investors and Media:**

James Champion de Crespigny Managing Director and CEO T: +61 (8) 6107 5878 admin@catalystmetals.com.au **Paul Armstrong Read Corporate** 



#### Competent person's statement

The information in this report that relates to exploration results is based on information compiled by Mr Bruce Kay, a Competent Person, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Kay is a non-executive director of the Company 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 (the JORC Code). Mr Kay consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **JORC 2012 Mineral Resources and Reserves**

Catalyst confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not been materially modified from the original market announcements



# Figures & Diagrams

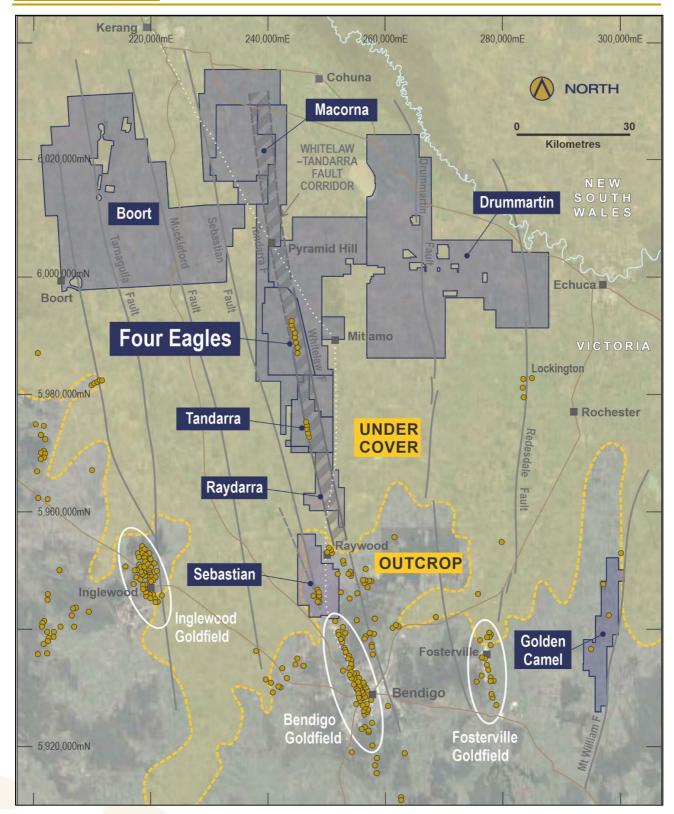


Figure 1: Whitelaw Gold Belt Tenement Holdings showing major Catalyst managed projects



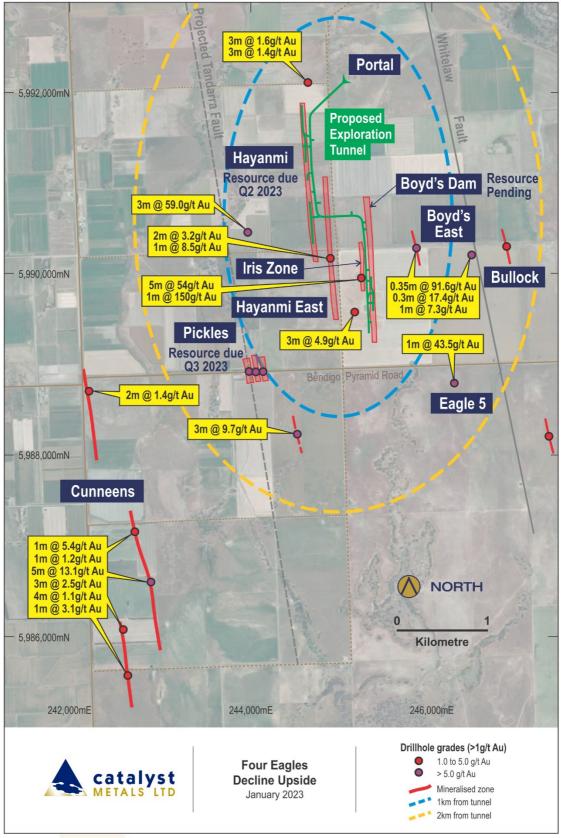


Figure 2: Four Eagles Gold Project showing significant gold occurrences in drilling to date



### **APPENDIX 1: FOUR EAGLES GOLD PROJECT DRILLHOLE DATA**

Table 1a: Four Eagles diamond drill hole collars (FEDD123 to FEDD135)

Hole	Easting (MGA)	Northing (MGA)	RL	Depth	Azimuth	Dip	Target
FEDD123	244446	5991250	95.84	507.6	91.12	-59.66	Hayanmi
FEDD124	245377	5989869	96.43	501.5	89.05	-59.91	Boyd East
FEDD125	245360	5989792	96.35	579.5	90	-60	Boyd East
FEDD126	245360	5989980	96	53.5	90	-60	Boyd East
FEDD127	245358	5989980	98	456.6	89.98	-66.56	Boyd East
FEDD128	245565	5989792	98	479.2	90.22	-66.01	Boyd East
FEDD129	245567	5989792	98	460	89.32	-59.82	Boyd East
FEDD130	245532	5989875	98	504.5	89.75	-65.94	Boyd East
FEDD131	245204	5989830	97	359.3	90.03	-71.17	Boyd's Dam
FEDD132	245203	5989830	97	361.4	89.48	-72.93	Boyd's Dam
FEDD133	245176	5989930	97	369.6	89.18	-68.64	Boyd's Dam
FEDD134	245179	5989930	97	330.6	89.65	-66.96	Boyd's Dam
FEDD135	245190	5990030	97	332.8	90.72	-69.54	Boyd's Dam

Table 1b: Four Eagles diamond drill re-assay results using aqua regia (ALS Code Au-OG43 for first pass) and BLEG (ALS Code Au-MECN15 2kg aliquot) for the Iris Zone mineralisation. Intersections greater than 0.5g/t Au shown, and in lieu of this maximum gold assay

Hole	From	То	Metres	Au ppm	Comment
FEDD123	176.05	176.7	0.65	0.65	Aqua regia assay
FEDD123	180.5	181.2	0.7	10.4	Aqua regia assay
FEDD123	250.65	251.05	0.4	3.84	Aqua regia assay
FEDD123	460.55	461.3	0.75	1.92	Aqua regia assay
FEDD124	225.2	226.2	1	0.62	Aqua regia assay
FEDD124	251.7	252.7	1	1.17	Aqua regia assay
FEDD125	76.5	77.45	0.95	0.75	Aqua regia assay
FEDD125	79.8	80.5	0.7	1.02	Aqua regia assay
FEDD125	83.9	87	3.1	7.4	Aqua regia assay
FEDD125	91.15	95.9	4.75	1.37	Aqua regia assay
FEDD126	Failed Drillhole Collar				Aqua regia assay
FEDD127	71.1	71.9	0.8	1.54	Aqua regia assay
FEDD127	76.4	79.5	3.1	1.44	Aqua regia assay
FEDD128	383.7	384.5	0.8	0.11	Aqua regia assay
FEDD129	221	222	1	0.75	Aqua regia assay
FEDD130	461.2	462.2	1	0.06	Aqua regia assay
FEDD131	301.2	302.2	1	0.53	Aqua regia assay
FEDD132	328.5	330.5	2	3.47	Iris Zone (BLEG)
FEDD132	334.5	335.5	1	3.78	Iris Zone (BLEG)
FEDD133	336.7	337.8	1.1	5.38	Iris Zone (BLEG)



Hole	From	То	Metres	Au ppm	Comment
FEDD134	284.2	285.2	1	1.17	Iris Zone (BLEG)
FEDD134	290	291	1	4.34	Iris Zone (BLEG)
FEDD134	296	301.4	5.4	5.23	Iris Zone (BLEG)
FEDD135	279.5	285.1	5.6	53.96	Iris Zone (BLEG)
FEDD135	289	290.3	1.3	77.86	Iris Zone (BLEG)



## JORC 2012 Edition, Table 1 Checklist Diamond Drilling

Diamond Core Sampling	
Techniques and Data	
Criteria	Explanation
Sampling techniques	<ul> <li>All basement material collected in commercially available diamond core trays. The cover alluvium is not the subject of resource development and is not sampled.</li> <li>Diamond core is cleaned and marked metre-by-metre</li> <li>The geologist determines which intervals are to be sampled in consultation with criteria such as quartz vein development, sulphide occurrence, and visible gold occurrence.</li> <li>Samples are selected to reflect lithological, structural, and mineralisation boundaries and reflect drill core intervals ranging from 0.2m to 1.0m. The selected intervals for sampling are cut with a diamond-impregnated saw, with half being collected in a calico bag for laboratory submission, the remaining half being transferred back to the source core tray for storage.</li> </ul>
Drilling techniques	<ul> <li>Holes are initiated using 120mm blade drilling, with cuttings lifted by drilling mud to the base of cover. PVC casing is installed to preserve the collar condition for subsequent drilling.</li> <li>Mud drilled precollars are achieved by a diamond drill rig.</li> <li>At end-of-precollar depth, the rod string is removed from the hole and steel HWT or PQ casing is installed and shoed into the base-of-hole.</li> <li>HQ triple tube barrel and HQ drill rods are installed to precollar depth. Beyond this depth the hole is progressed to final depth with DDH drilling techniques, generally employing three-metre barrel and rods. Where ground conditions are poor, 1.5-metre rods are employed to alleviate core loss at tube extraction.</li> </ul>
Drill sample recovery	<ul> <li>Core runs are documented by the driller, and recoveries measured by the geologist to ensure recovery is known and strategies implemented to maximise recovery (target being above 90%).</li> <li>Drillers are under instruction to monitor recovery and rectify core loss through adjusting drill rig operation.</li> <li>All diamond core is drilled using triple tube equipment to assist in delivering acceptable core recovery.</li> </ul>
Logging	<ul> <li>Diamond core is geologically logged for lithology, alteration, quartz veining and to a standard acceptable for subsequent interpretation for use in estimation.</li> <li>Geological logging aspects are qualitative with exception of quartz vein content which is estimated semi-quantitatively</li> <li>Drill core structural measurements are logged prior to cutting/sampling. Drill core orientations are performed on each core run, and where successful are applied to structural measurements to provide known orientations of structures. Where orientations are not successful, the S1 cleavage is exploited as a proxy to orientation; in which case the database is flagged as such.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>Lab submission samples collected as described above. No quarter coring is routinely required.</li> <li>Samples dispatched to commercial assay laboratory (Catalyst have used ALS Pty Ltd exclusively); samples crushed, dried, and pulverised in entirety, with 25g – 30g aliquots selected for analysis (laboratory repeat splits historically demonstrate acceptable reproducibility and hence accuracy for this style of mineralisation)</li> </ul>



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Diamond Core Sampling	
Techniques and Data Criteria	Explanation
Quality of assay data and laboratory tests	<ul> <li>Gold assay determined by ICPMS via aqua regia digestion (ALS code Au-OG43). Experience has shown this method to be applicable for fine grained gold population of the mineralisation due to the completion of digestion. There is a technical constraint in that coarse-grained gold may not completely enter solution resulting in conservative assay.</li> <li>For exploration along the Whitelaw Gold Belt (such as at Four Eagles),</li> </ul>
	<ul> <li>anomalous runs of samples are re-assayed by a bulk leach method (BLEG) employing a 2kg aliquot.</li> <li>Laboratory and client certified reference materials (3 x standards) are implemented every 20<sup>th</sup> sample. Performances outside 2 standard deviations as per specification are reviewed with the laboratory, and 3 standard deviations default to a re-assay in every instance.</li> </ul>
Verification of sampling and assaying	<ul> <li>Data management procedures are in place. Data management has been outsourced to a specialist provider.</li> <li>There has been no verification of significant intersections by independent nor alternative company personnel.</li> <li>Drillhole sampling and geological data logged electronically and imported electronically into the master database.</li> <li>There have been no adjustments to data as provided by the commercial assay laboratory.</li> </ul>
Location of data points	<ul> <li>All drillhole location coordinates are measured using differential GPS to MGA94 Zone 55</li> <li>Collar locations to within an estimated precision of 10mm horizontally and 20mm vertically.</li> <li>All drillholes are downhole surveyed. Drilling orientation established prior to collaring with clinometer and compass.</li> </ul>
Data spacing and distribution	<ul> <li>Diamond drillholes drilled at a section spacing of approximately 100 metres. Drillholes were targeted to intersect prospective structural positions some 100m to 300m beneath the oxide-zone mineralisation. This spacing is designed to be of a sufficient density to ultimately be included in resource estimation.</li> <li>For the purpose of the reporting of exploration results, assays are aggregated to reflect continuously sampled zones of significant anomalism for gold.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Drillhole sections were aligned approximately 90 degrees from the strike of mineralisation. Holes were generally inclined 60 - 85 degrees to the east to provide cross-strike investigation within holes and to establish continuity of west-dipping mineralisation.</li> </ul>
Sample security	<ul> <li>All samples are controlled by the responsible geologist and stored in secured facility prior to despatch to the laboratory.</li> <li>Samples are transported directly to laboratory by a commercial transportation contractor with security in place.</li> <li>Sample number receipt information from laboratory cross-referenced and rationalised against sample number dispatch information.</li> </ul>
Audits or reviews	No processes or data used in developing the release of exploration results have been subject to audit or review by non-company personnel or contractors to reduce costs and timelines for reporting. Catalyst Metals Limited currently reserve this process for release of Mineral Resource and Ore Reserve statements.



	METALS
Reporting of Exploration Results	
Criteria	Explanation
Mineral tenement and land tenure status	<ul> <li>The Four Eagles Gold Project is within RL006422 in the vicinity of Mitiamo Victoria, 50% owned by Kite Gold Pty Ltd (subsidiary of Catalyst Metals Ltd) and 50% owned by Gold Exploration of Victoria Pty Ltd (subsidiary of Hancock Prospecting Pty Ltd)</li> <li>RL006422 is valid and due for expiry on 28/03/2028</li> <li>Exploration activities were confined to free-hold farmland.</li> </ul>
Exploration done by other parties	None in the area drilled
Geology	<ul> <li>Gold-arsenic bearing narrow veins in Ordovician sediments in the vicinity of a district-scale anticlines.</li> <li>Deposits assessed as being northern extension of Bendigo Goldfield, with potential for post-mineralisation influence/redistribution by proximal granitic intrusion.</li> <li>There is potential for some supergene gold enrichment in paleoweathering profile.</li> </ul>
Drillhole Information	<ul> <li>Appendix 1, Table 1a: Collar location coordinates, downhole depths, azimuths, declinations</li> <li>Appendix 1, Table 1b: Downhole intervals of resource, gold grade of intervals</li> </ul>
Data aggregation methods	<ul> <li>No top-cutting applied to assay data</li> <li>Zones of significance identified as those with assays in excess of 0.5g/t and internal dilution of three consecutive metres or less.</li> <li>Reported zones are continuous, with no sample or assay gaps.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>The strike of mineralisation is demonstrated to be generally aligned with MGA94 grid.</li> <li>The dip of mineralisation is expected to be variably west-dipping with dilatational zones being moderately west-dipping possibly rotated and approaching sub-horizontal orientation.</li> <li>Diamond drillholes are oriented with a dip to the east to provide effective geometry with respect the described geometry of mineralisation.</li> <li>Due to the complexity of slate belt gold mineralisation, the true width of mineralisation has not been resolved. As such, significant mineralised intersections have been reported as downhole intervals.</li> </ul>
Diagrams	<ul> <li>Figures 1 and 2 show the project area in plan at regional and district scales respectively</li> <li>Figure 3 shows the Iris Zone in longitudinal projection looking westward – depicting the relative positioning within the Boyd's Dam prospect</li> <li>Figure 4 shows the Iris Zone in relation to the planned Four Eagles project development</li> </ul>
Balanced reporting	Table 1b shows all drilling including those that did not demonstrate significant gold intercepts.
Other substantive exploration data	No other exploration results that have not previously been reported, are material to this report.
Further work	Deep diamond drilling will continue through to further delineate identified mineralisation