

Rockwell Minerals (Tasmania) Pty Ltd (ACN 127 819 710) is a wholly owned subsidiary of Elementos Limited (ACN 138 468 756).

**Drilling Report for:**  
**EDGI Round 9**  
**EL7/2005**  
**Cleveland Project**

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**ABSTRACT**

Rockwell Minerals (Tasmania) Pty Ltd was successful in being awarded \$70,000 in Round 9 of the EDGI scheme being administered by Mineral Resource Tasmania on behalf of the Tasmanian Government. This report details the results of the exploration drilling carried out as a prerequisite for making a claim on the grant.

The grant was for the completion of one diamond drill hole for a total of 1,100m into a target beneath the JORC mineral resource contained within the Foleys Zone. The Foleys Zone is located beneath the Cleveland tin/copper JORC mineral resource. The target was for extensions to the tungsten mineralisation previously examined in the mid-1980's. The Foleys Zone contains a JORC Inferred mineral resource of 3.97mt @ 0.28% WO<sub>3</sub>.

The start of the drilling programme was slightly delayed due to the availability of a suitable drilling rig capable of completing the drill hole.

The final drilling programme consisted of two diamond drill holes. C2123 for 200m, C2124 for 663.4m and C2124A for 508m, for a total of 1,371.4m. Drill hole C2124A was a daughter hole commenced from a wedge inserted into C2124 at a depth of 614m.

The drilling programme was completed by Edrill Pty Ltd, employing a UDR1500 track mounted drilling rig.

The drilling programme achieved the original purpose with the successful intersection of significant zones of tungsten mineralisation above a cut-off grade of 0.1% WO<sub>3</sub> over 465.9m from a downhole depth of 651.8m in C2124A. In addition, drill holes C2123 and C2124 intersected previously unknown copper-gold and tin-copper mineralised zones to the west of the known Cleveland tin-copper mineral resource.

A downhole electromagnetic survey is planned for drill hole C2124A to a depth of 614m to test for extensions to the new zones of sulphide mineralisation intersected during the drilling programme. PVC has been inserted into the drill hole.

## Geology

EL7/2005 is located within the Cambrian Luina Group within the Dundas Trough of north-western Tasmania. More specifically, the local geology specific to the purposes of this grant consists of a western sequence of Cambrian undifferentiated mafic and ultra mafic rocks with minor intercalations of fine-grained sedimentary rocks and chert, fault contacted to the east with a west facing, steeply east to sub-vertically dipping Cambrian sequence of greywacke, sandstone, siltstone, shale, chert, volcanoclastics, mafic tuff, basaltic lava flows and calcareous sediments. This has been separated into three formations which are the lower Deep Creek Volcanics, Hall's Formation and uppermost Crescent Spur Formation. The allochthonous western mafic-ultramafics have no specific unit designation.

The sedimentary sequence has been intruded by a steeply dipping, narrow Devonian quartz- feldspar porphyry dyke. The dyke does not outcrop.

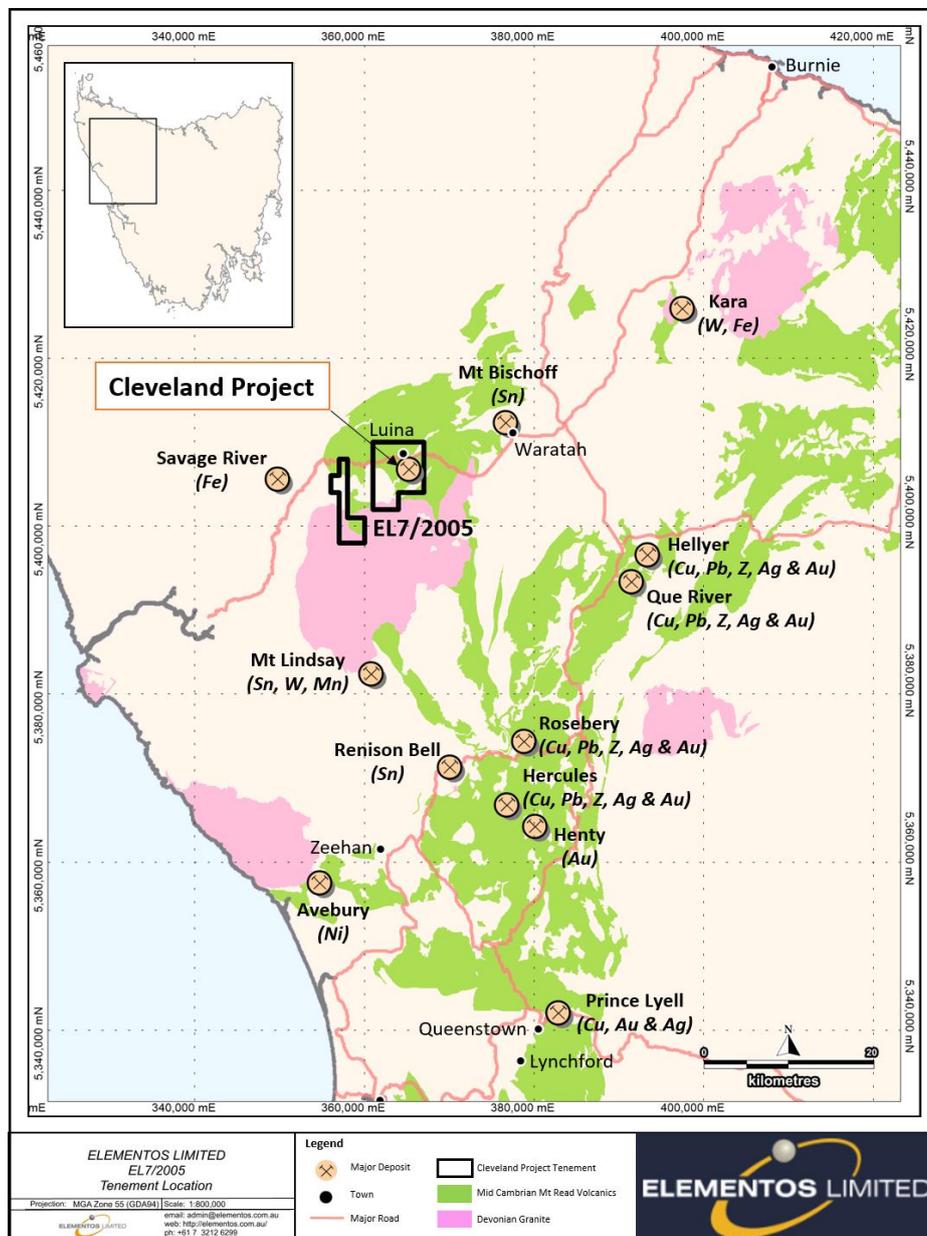


Figure 1. Location plan for EL7/2005

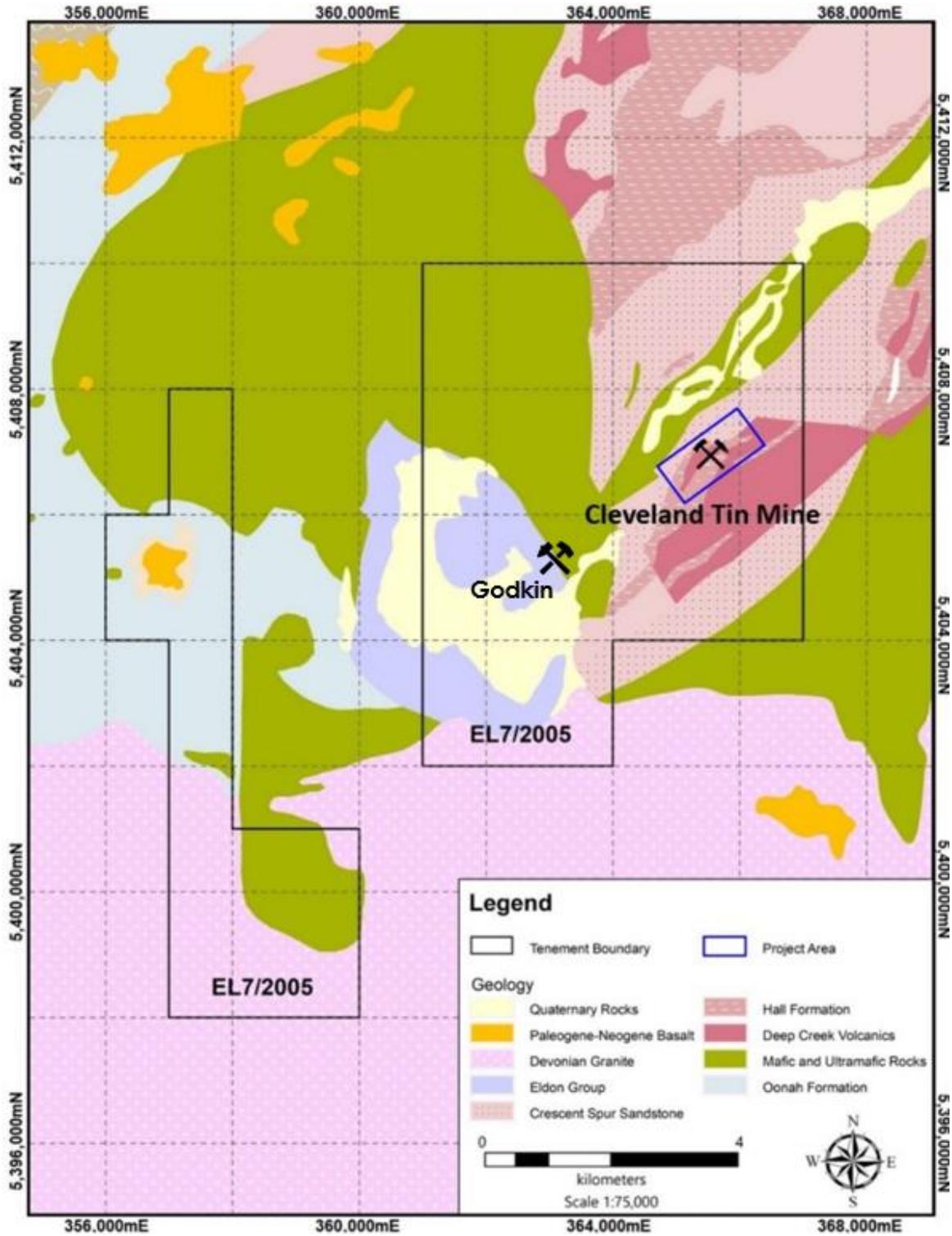


Figure 2. EL7/2005 Regional geology

The geological sequence relevant to this EDGI grant drilling programme is the western mafic and ultramafic units, which consist of mafic and ultramafic lavas and ultramafic intrusives and very minor fine to very fine grained sediments. The Crescent Spur Formation consisting predominantly of massive fine-grained sandstone with lesser interbedded siltstones and shales and the quartz-feldspar porphyry dyke.

Significant vertical to sub-vertical fault zones parallel to stratigraphy occur at irregular intervals throughout the sequence.

## EDGI Grant 9 Drill Programme Report

Two diamond drill holes for a total of 1,371.4m were completed by Edrill Pty Ltd, employing a UDR1500 track mounted drilling rig. The total amount approved for the grant was \$70,000.

The drilling programme was carried out by drilling in the opposite direction to nearly all of the historical surface and underground exploration drilling carried out at Cleveland. The lithological and structural geological sequence between the drill hole collar and the Foleys Zone was largely unknown at the start of the drilling programme. The drilling programme commenced in May 2024. The initial drill hole, C2123, was drilled to a depth of 200m before being abandoned due to the drill stem dropping too steeply, which would result in missing the planned Foleys Zone target zone. Drill hole C2124 was collared adjacent to C2123 with adjustments to the drill hole orientation taking into account the deviation in C2123. Drill hole C2124 encountered difficulties within a fault zone from 640-652m depth. A down hole wedge was placed at a depth of 614m in C2124 at which point drill hole C2124A was commenced using a slightly different technique to successfully control the drill hole through the fault zone. C2124A maintained the planned dip/inclination but the orientation of the drill hole gradually drifted from 130-145° which resulted in the final location of the drill hole being approximately 45m southwest from the planned final destination.

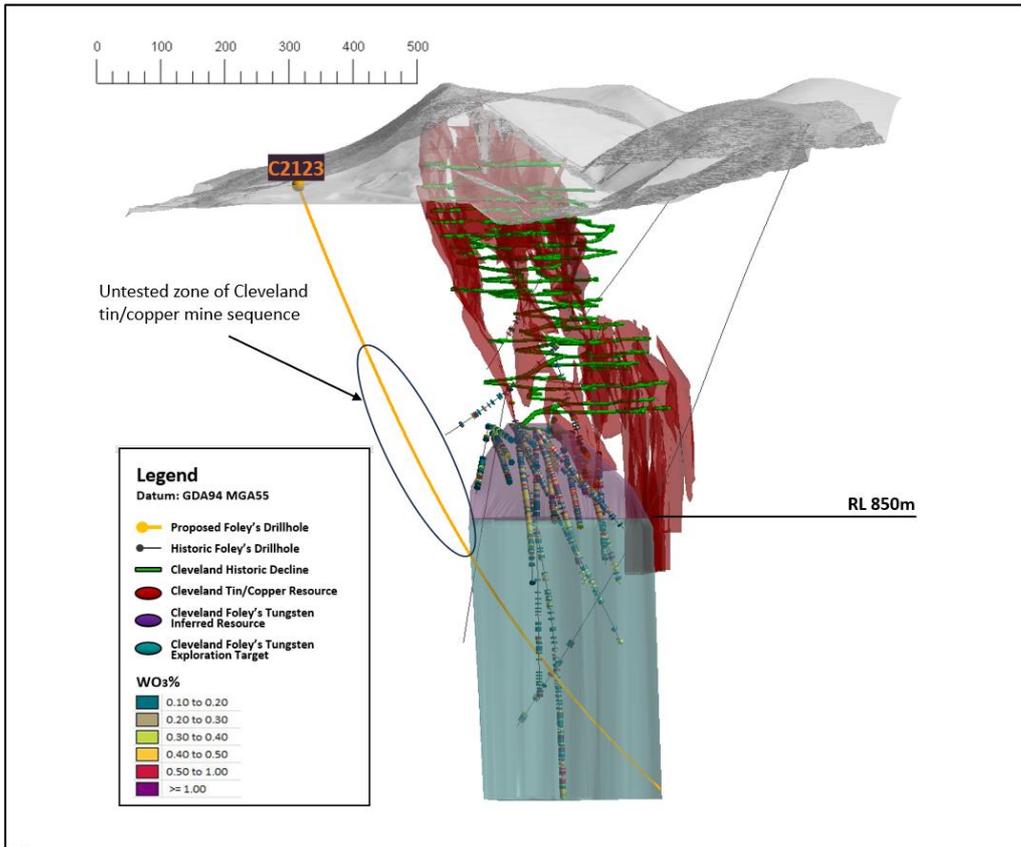
Hole ID	East GDA 94	North GDA 94	RL	Total Depth	Azimuth (t)	Azimuth (m)	Dip
C2123	364887	5407117	341	200.8	130	116.5	-69

**Table 1.** C2123 Drill hole collar data

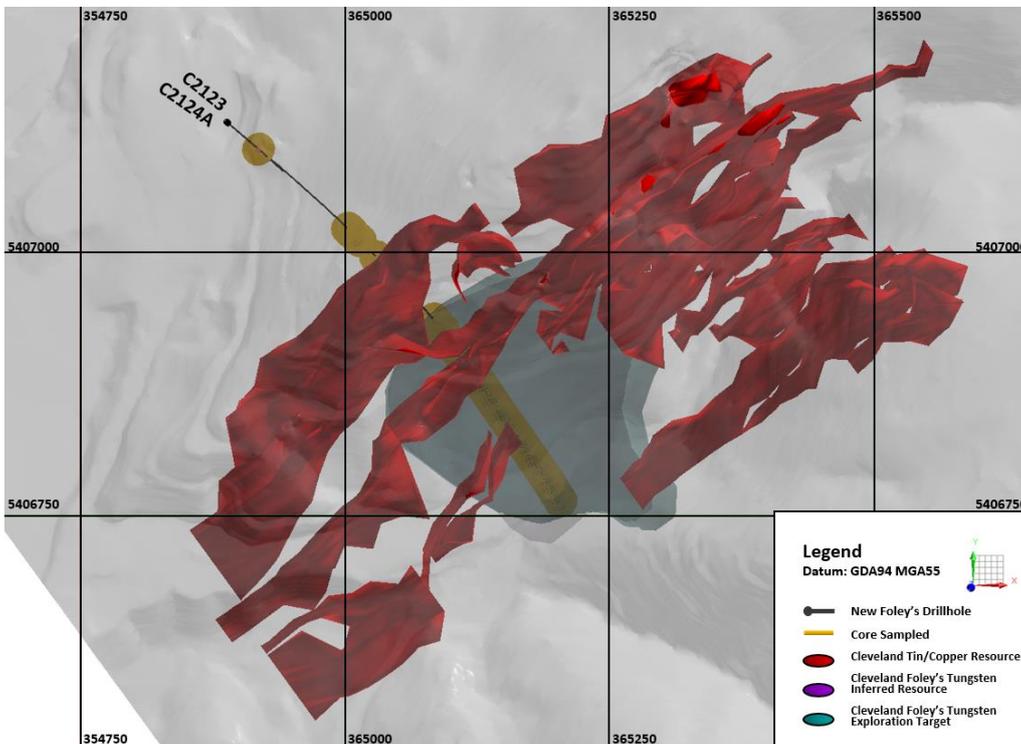
Hole ID	East GDA 94	North GDA 94	RL	Depth (m)	Azimuth (t)	Azimuth (m)	Dip
C2124	364888	5407117	341	1122	130	116.5	-63

**Table 2.** C2124/C2124A Drill hole collar data

The target of this drilling programme was defined after reviewing drill hole assay and geological data from 26 historic drill holes originally completed by the previous Cleveland underground mine operator Aberfoyle Resources. The data indicated potential for a large and continuous body of tungsten mineralisation (in the form of wolframite). The historic drilling is the basis for both the company's published Inferred Tungsten Resource and Exploration Target.



**Figure-3:** Initial design of drill hole C2123 targeting extensions to the Foleys Zone tungsten mineralisation – looking from the southwest.



**Figure 4.** Plan depicting the trace of drill hole C2123, C2124 and C2124A through the Foleys Zone target zone

The completed drill holes have been photographed and geologically and geotechnically logged. Core recovery has also been recorded for each drill hole. Geochemical samples for assay were submitted to ALS Burnie for analysis.

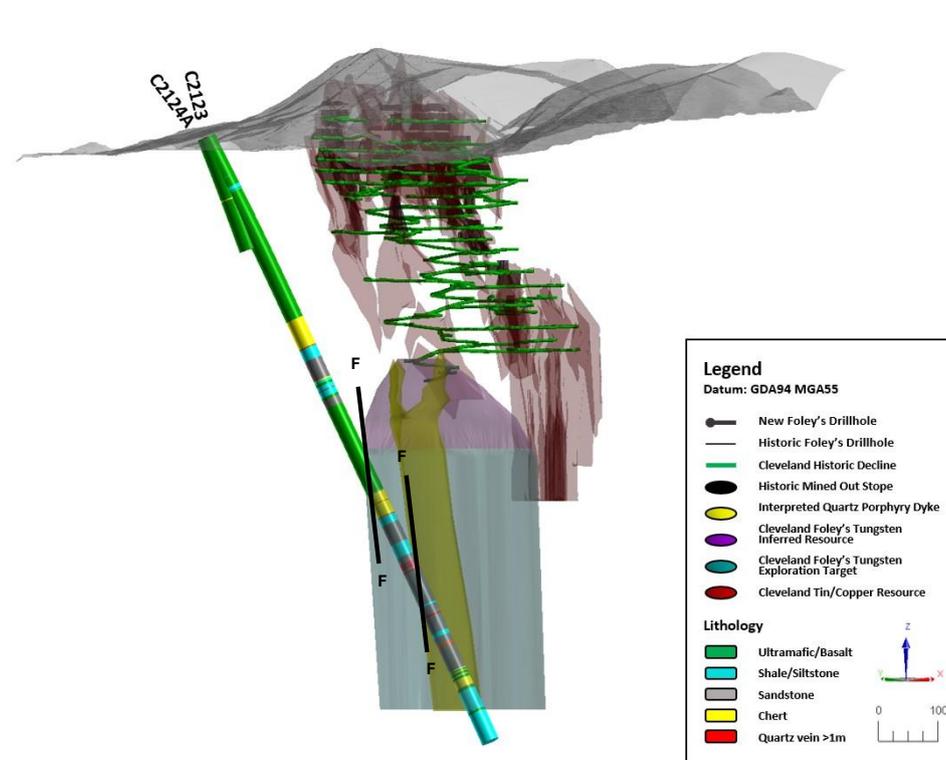


Figure 7. Geological cross-section of C2123, C2124 and C2124A – looking towards the northeast.

The initial drill hole (C2123) intersected a previously unknown narrow zone of high-grade stratiform copper sulphide and gold mineralisation at a downhole depth of 111.0m.

C2123:- 0.45m @ 9.7% Cu, 5.15g/t Au, 18g/t Ag & 1.35% Zn from 111.0m

The Cu-Au mineralisation consists of semi-massive, laminated pyrite, pyrrhotite and chalcopyrite over 0.45m within a distinct zone of fine-grained sediments between two mafic volcanic units. The mineralisation being reported from C2123 differs from the main Cleveland tin/copper mineralisation in two ways. The Cleveland tin/copper mineralisation has formed by the replacement of carbonate rich sediments whereas the mineralisation in C2123 is interpreted to be primary and stratiform in nature (formed at the same time as the formation of the host sedimentary sequence) and is dominated by copper and gold with no detectable levels of tin.



Figure 5. Drill hole C2123 depicting the semi-massive copper sulphide mineralisation from 111.0m – 111.45m

Additional zones of previously unknown disseminated to semi-massive sulphide tin-copper mineralisation were intersected in drill hole C2124, within the western mafic/ultramafic sequence.

C2124: 1.4m @ 1.0% Sn and 3.76% Cu from 353.7m

C2124: 0.73m @ 0.11% Sn & 0.25% Cu from 359.75m

C2124 - 1.09m @ 0.76% Sn and 0.77% Cu from 389.47m

C2124 – 0.56m @ 1.12% Cu from 486.47m

The Foleys Zone tungsten mineralisation intersected in drill hole C2124/C2124A consisted of a significant continuous zone of approximately 420m of observed quartz veining and lesser quartz breccias within strongly altered host rocks, from 672m – 1092m (downhole), approximately 580m -960m vertically below the old Cleveland tin/copper underground mine portal/entry.

The host rocks consist of fine to very fine-grained sediments and minor basalts. The alteration can be recognised by significant silica and sericite replacement of the host rocks. Significant alteration was initially intersected at a depth of 666m with the first quartz veins containing tungsten mineralisation (wolframite) observed at 672m. This is currently interpreted to be the north-western limit of the Foleys Zone. Significant alteration and mineralised quartz veins were continued to be observed to a depth of 1,092m which is currently interpreted to be the outer southern extent of the Foleys Zone at this location. The Foleys Zone mineralisation was intersected in C2124A over a distance of approximately ~420m and remains open at depth below 356m RL (mine grid).

The previously reported quartz- feldspar porphyry intrusive dyke was not intersected in drill hole C2124A. The quartz veins contained visual wolframite (tungsten) ± scheelite (tungsten) ± molybdenite(molybdenum) ± fluorspar/fluorite ± chalcopyrite (copper) mineralisation from within the targeted Foleys Zone



Figure 5. Mineralised quartz vein in drill hole C2124A from 887.0 – 889.4m



Figure 6. Mineralised quartz/sediment breccia within drill hole C2124A from 940.5 to 945.0m

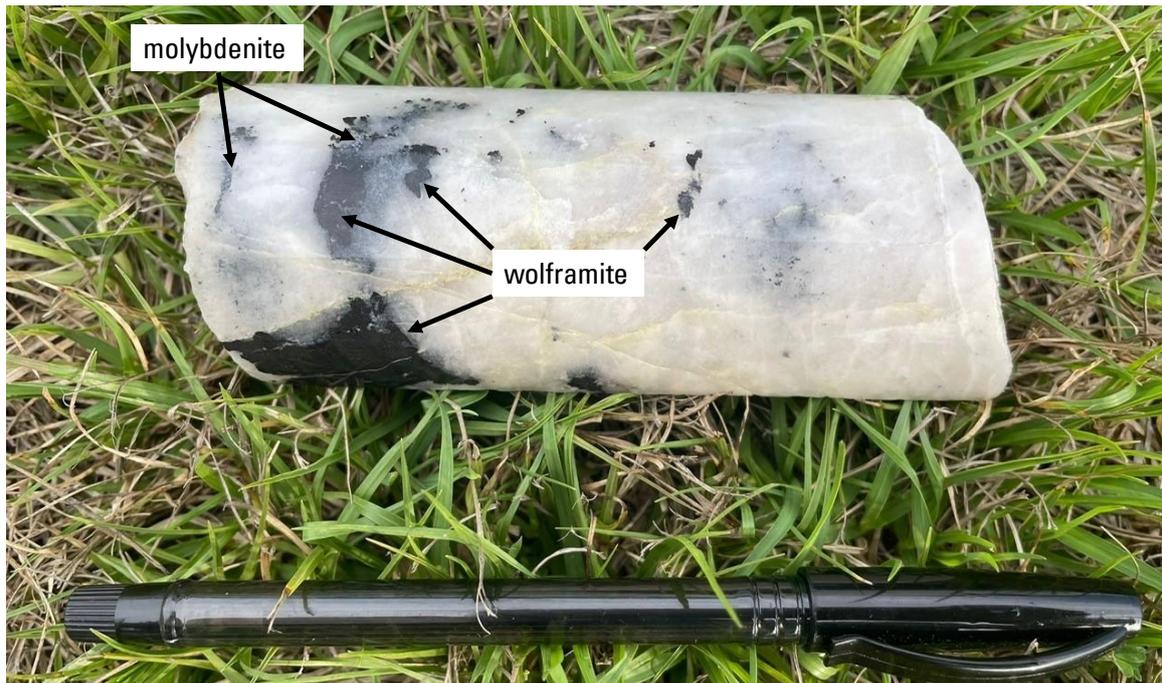


Figure 7. Close-up image of NQ diameter drill core from C2124A from 887.9-888.0m (Figure 3) depicting coarse grained wolframite and molybdenite within a steeply dipping cross-cutting quartz vein.

Early exploration by Aberfoyle Ltd and others (Dronseika 1983, Jackson et.al. 2000) reported that the Foleys Zone tungsten mineralisation was closely associated with a narrow steeply dipping quartz porphyry dyke. Intersecting the porphyry dyke was one of the targets of drill hole C2124/C2124A, however ground conditions resulted in the drill hole deviating away from the ultimate target, being the dyke, and passing close to and parallel to the southwestern side of the interpreted dyke position.

The intersection of numerous mineralised quartz veins in close proximity to the porphyry dyke over a significant

distance and at depth increases the knowledge on the size, scale and potential of the Foleys Zone mineralising system.

Quantitative analysis of the quartz vein orientations from C2124A revealed approximately 64% of the veins had a dip between 70° - 90° (vertical). This information is similar to that recorded in earlier work on the initial resource estimation on the Foleys Zone (Dronseika, 1983).

A number of narrow but significant fault zones were intersected within the western mafic/ultramafic sequence and within the Crescent Spur sediments. The orientation of these structures varied in azimuth from 030° to 075°. The dip of the structures were consistently vertical to sub-vertical (80° - 90°).

A number of significant intersections of rubidium, molybdenum and bismuth were detected in addition to the broad zone of tungsten mineralisation in drill hole C2124A.

### **Tungsten intercepts above a cut-off grade of 0.1% WO<sub>3</sub>:**

- 319.5m @ 0.18% WO<sub>3</sub> from 772.4m - inc. 47.5m @ 0.40% WO<sub>3</sub> from 779.5m - inc. 2.7m @ 1.24% WO<sub>3</sub> from 779.5m
- inc. 1.8m @ 2.28% WO<sub>3</sub> from 798.0m
- inc. 14.8m @ 0.13% WO<sub>3</sub> from 830.7m
- inc. 2.0m @ 0.42% WO<sub>3</sub> from 853.5m
- inc. 7.0m @ 0.12% WO<sub>3</sub> from 861.5m
- inc. 24.9m @ 0.24% WO<sub>3</sub> from 876.1m
- inc. 14.4m @ 0.25% WO<sub>3</sub> from 904.7m
- inc. 32.6m @ 0.14% WO<sub>3</sub> from 933.6m
- inc. 6.3m @ 0.18% WO<sub>3</sub> from 990.7m
- inc. 10.63m @ 0.34% WO<sub>3</sub> from 1000.6m - inc. 1.11m @ 1.62% WO<sub>3</sub> from 1010.1m
- inc. 13.3m @ 0.32% WO<sub>3</sub> from 1014.4m - inc. 1.0m @ 1.58% WO<sub>3</sub> from 1015.4m
- inc. 2.5m @ 0.37% WO<sub>3</sub> from 1036.5m
- inc. 5.5m @ 0.17% WO<sub>3</sub> from 1054.5m
- inc. 5.66m @ 0.24% WO<sub>3</sub> from 1063.0m
- inc. 10.31m @ 0.23% WO<sub>3</sub> from 1085.5m

Additionally:

- 1.39m @ 0.43% WO<sub>3</sub> from 677.95m
- 1.1m @ 1.64% WO<sub>3</sub> from 702.3m
- 14m @ 0.17% WO<sub>3</sub> from 713.0m
- 6.15m @ 0.20% WO<sub>3</sub> from 733.0m

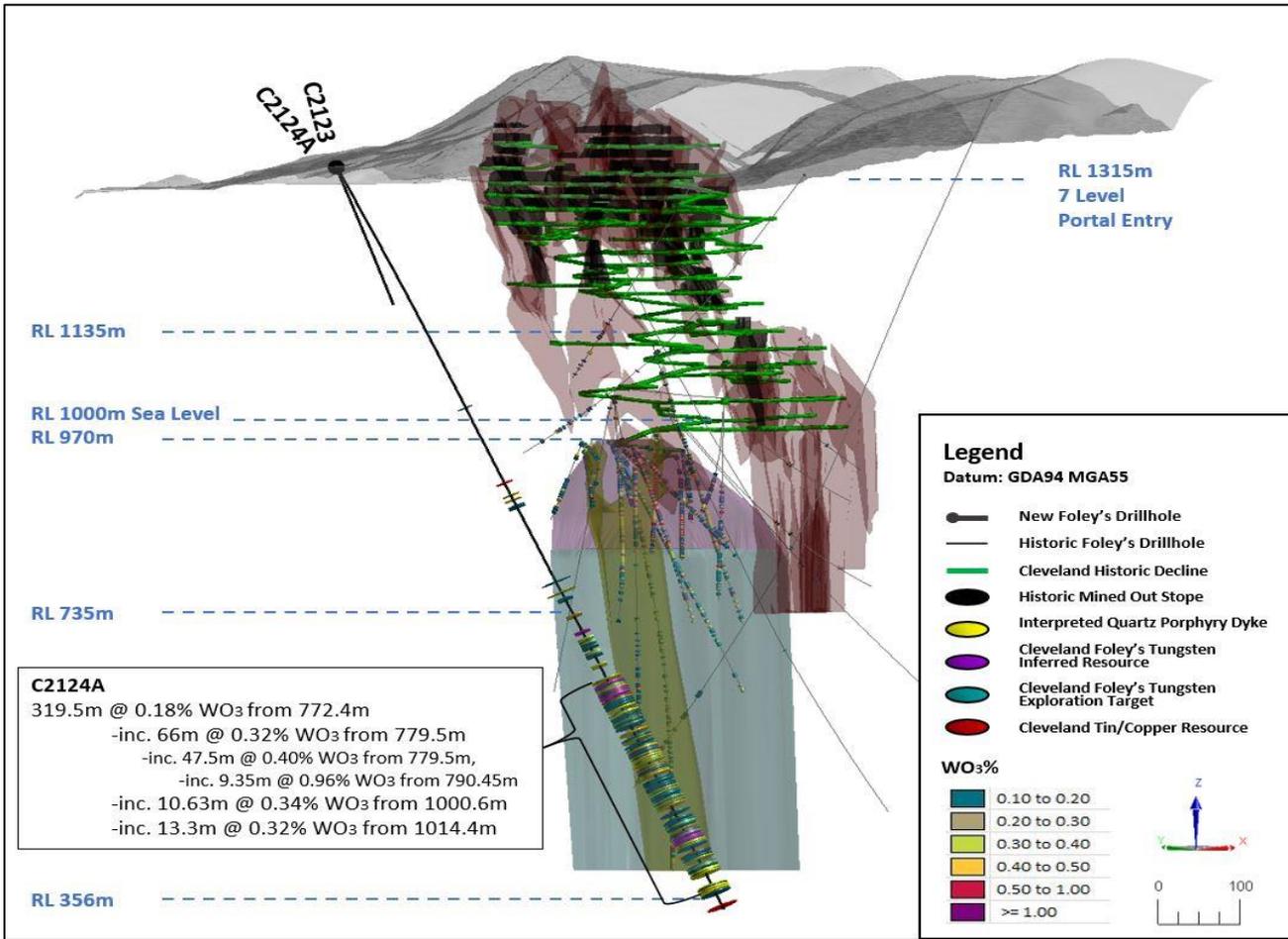


Figure 8. Cross-section depicting location of the WO<sub>3</sub> assay data for drill hole C2124/C2124A in relation to the known tungsten mineral resources and underground infrastructure at Cleveland (looking from the southwest)

**Rubidium intercepts above a cut-off grade of 0.1% Rb<sub>2</sub>O)**

- 76.75m @ 0.15% Rb<sub>2</sub>O from 840.35m,
- 25.6m @ 0.12% Rb<sub>2</sub>O from 808.0m,
- 21.0m @ 0.13% Rb<sub>2</sub>O from 1061.0m,
- Additionally:
- 6.08m @ 0.14% Rb<sub>2</sub>O from 651.78m
- 4.36m @ 0.15% Rb<sub>2</sub>O from 679.34m
- 12.4m @ 0.11% Rb<sub>2</sub>O from 700.6m
- 2.0m @ 0.11% Rb<sub>2</sub>O from 721.0m
- 2.1m @ 0.11% Rb<sub>2</sub>O from 762.0m
- 2.8m @ 0.12% Rb<sub>2</sub>O from 768.0m
- 4.95m @ 0.13% Rb<sub>2</sub>O from 799.8m
- 3.4m @ 0.12% Rb<sub>2</sub>O from 936.7m
- 11.8m @ 0.13% Rb<sub>2</sub>O from 947.0m
- 7.8m @ 0.11% Rb<sub>2</sub>O from 963.8m

- 13.7m @ 0.12% Rb<sub>2</sub>O from 975.0m
- 1.1m @ 0.23% Rb<sub>2</sub>O from 992.45m
- 12.0m @ 0.13% Rb<sub>2</sub>O from 997.0m
- 1.7m @ 0.11% Rb<sub>2</sub>O from 1090.2m
- 0.7m @ 0.17% Rb<sub>2</sub>O from 1111.4m

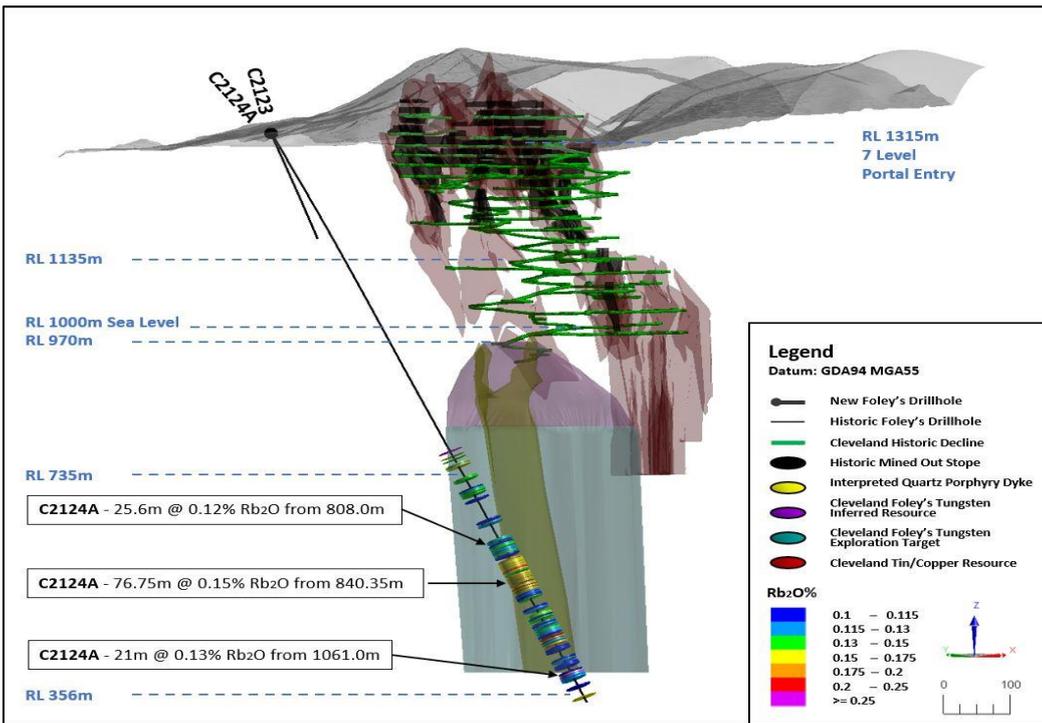


Figure 9. Cross-section depicting location of the Rb<sub>2</sub>O assay data for drill hole C2124/C2124A in relation to the known tungsten mineral resources and underground infrastructure at Cleveland (looking from the southwest)

### **Molybdenum intercepts above a cut-off grade of 0.05% Mo**

- 20.3m @ 0.09% Mo from 779.5m
- 1.85m @ 0.06% Mo from 809.4m
- 6.4m @ 0.06% Mo from 823.6m
- 36.95m @ 0.08% Mo from 879.15m
- 7.9m @ 0.06% Mo from 941.1m
- 1.9m @ 0.06% Mo from 1020.8m
- 1.0m @ 0.29% Mo from 1026.7m

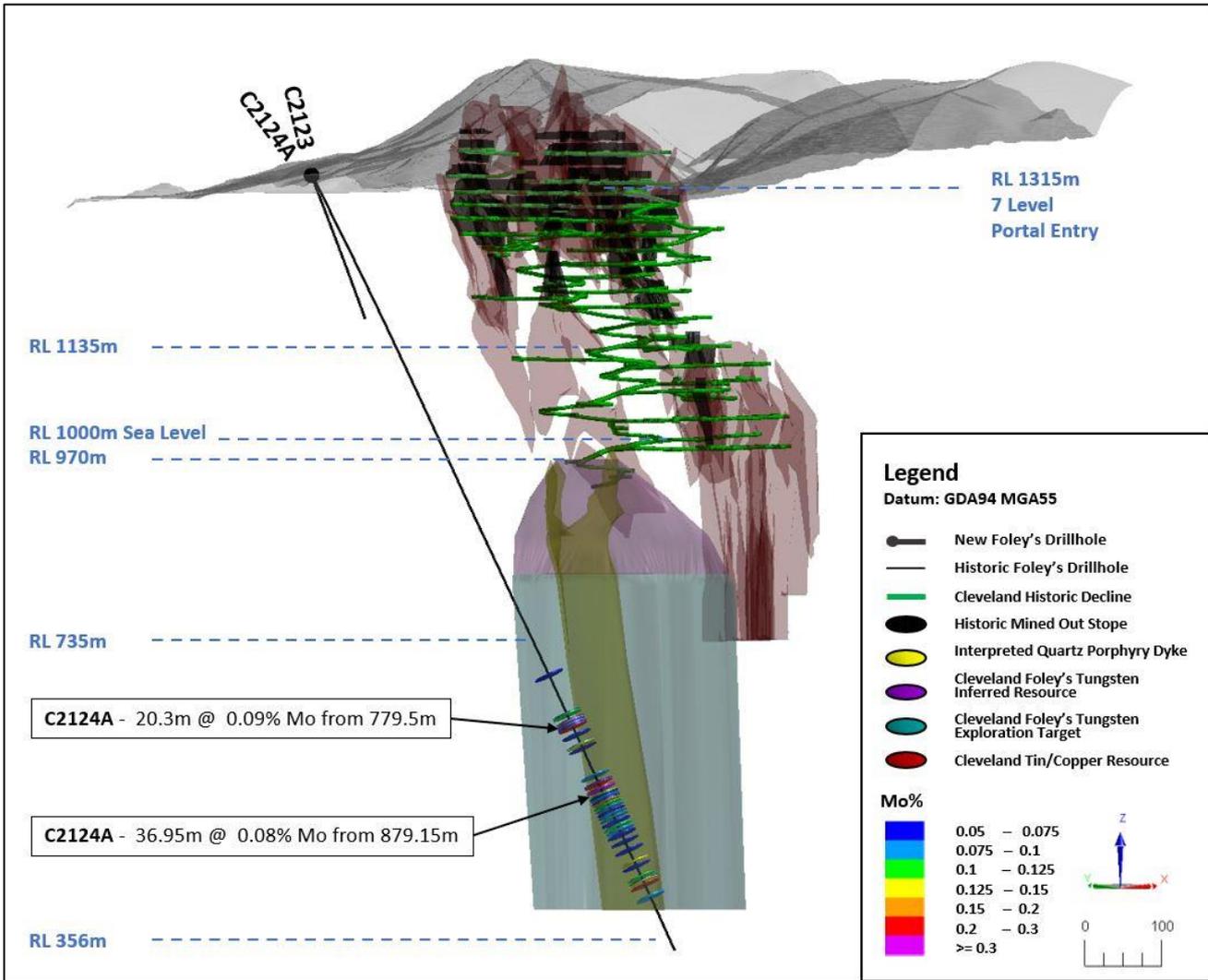


Figure 10. Cross-section depicting location of the Mo assay data for drill hole C2124/C2124A in relation to the known tungsten mineral resources and underground infrastructure at Cleveland (looking from the southwest)

### **Bismuth intercepts above a cut-off grade of 0.05% Bi**

- 16.93m @ 0.07% Bi from 651.78m
- 6.0m @ 0.06% Bi from 713.0m
- 2.15m @ 0.6% Mo from 737.0m
- 2.1m @ 0.05% Bi from 762.0m
- 20.3m @ 0.1% Bi from 779.5m
- 1.0m @ 0.05% Bi from 887.0m
- 3.0m @ 0.09% Bi from 942.1m
- 0.8m @ 0.06% Bi from 956.0m
- 1.0m @ 0.09% Bi from 961.8m
- 0.95m @ 0.05% Bi from 1006.5m
- 13.6m @ 0.09% Bi from 1015.4m

1.66m @ 0.06% Bi from 1067.0m

4.13m @ 0.09% Bi from 1089.25m

0.75m @ 0.12% Bi from 1116.9m

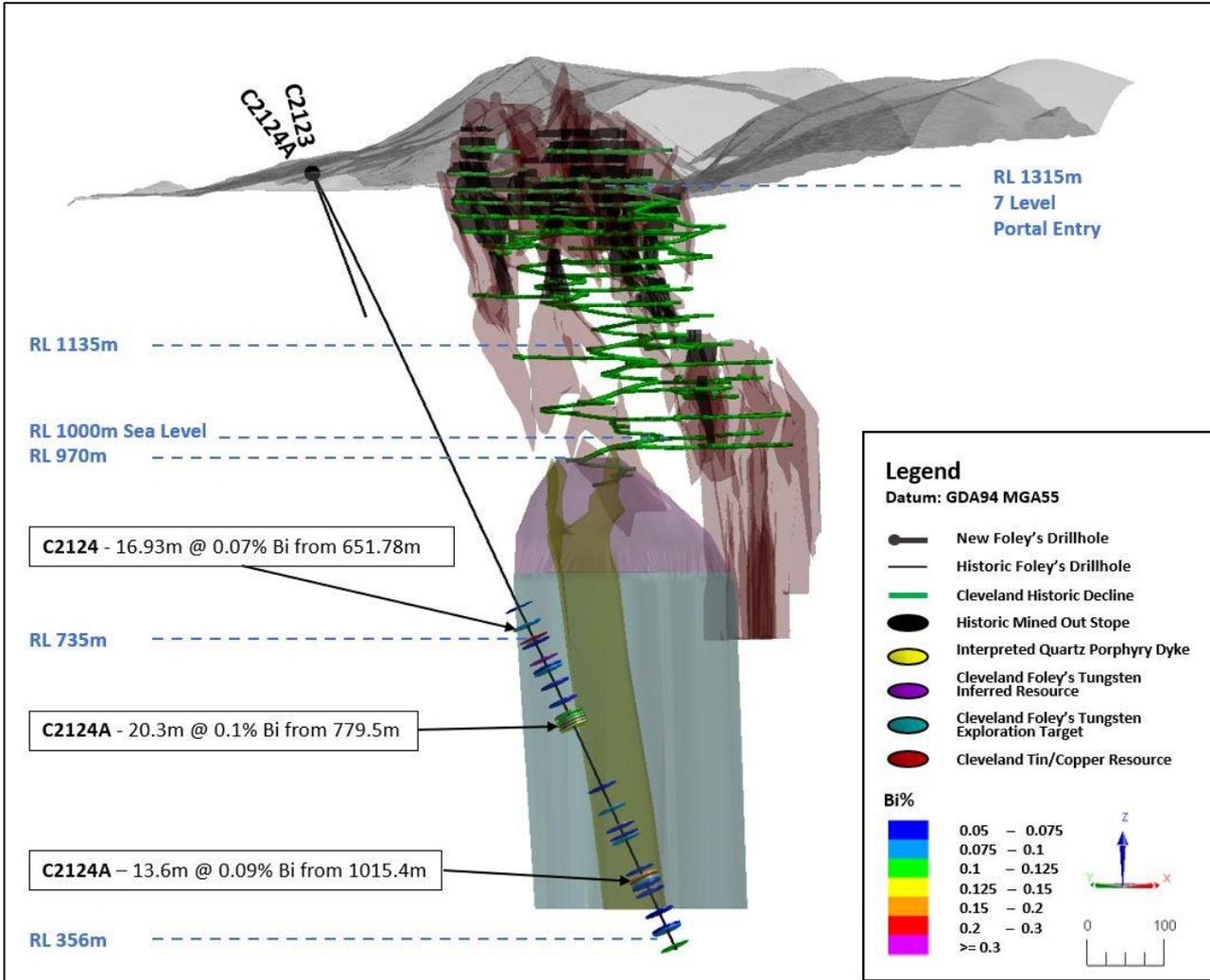


Figure 11. Cross-section depicting location of the Bi assay data for drill hole C2124/C2124A in relation to the known tungsten mineral resources and underground infrastructure at Cleveland (looking from the southwest)

**EXPENDITURE**

Total expenditure excluding GST on the drilling programme was \$463,817.34.

**CONCLUSIONS**

The drilling programme was successful in achieving its aim of extending the knowledge of the tungsten mineralisation contained within the Foleys Zone beneath the historical Cleveland tin/copper underground mine. A bonus from the drilling programme was the intersection of previously unknown disseminated to semi-massive sulphide copper-gold and tin-copper mineralisation to the west of the historical Cleveland tin-copper resource.

Initial future exploration work will consist of petrographical studies on selected drill core and the completion of a downhole electromagnetic survey on drill hole C2124A to determine if there are any off-hole extensions to the disseminated to semi massive sulphide mineralisation. This will be followed by drill testing of any interpreted EM targets.

The Foleys Zone tungsten mineralisation warrants additional exploration drilling to enable the determination of a JORC resource below the currently defined resource. Whether this is carried out from surface or from re-established underground workings is yet to be determined.

**References**

- Donseika, E.V. 1983. Geological Assessment of the Foley Zone Mineralisation at Cleveland Mine Tasmania (unpublished)
- Jackson. P, Changkakoti. A, Krouse. H.R, & Gray. J. 2000. The origin of greisen fluids of the Foleys Zone, Cleveland Tin Deposit, Tasmania, Australia. Economic Geology. Vol. 95 pp 227-236