

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 5
EL7/2005
Cleveland Project

Report Date: 22 July 2022

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ABSTRACT

Rockwell Minerals (Tasmania) Pty Ltd was successful in being awarded \$50,000 in Round 5 of the EDGI scheme being administered by MRT 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.

Three diamond drill holes for a total of 830m were completed by Edrill Pty Ltd, employing a UDR200D track mounted drilling rig. A fourth drill hole was planned but had to be abandoned due to the impact of inclement weather on the drill pad location making drilling operations unsafe.

The three completed drill holes were targeting Self-Potential (SP) anomalies from a geophysical survey carried out by the Bureau of Mineral Resources in 1954. The SP anomalies are located along strike to the northeast of the historical underground Cleveland tin mine. The Cleveland mineralisation was also detected by the same SP survey in 1954. The Cleveland Mine produced 5,645,000 tonnes at 0.74% tin and 0.28% copper between 1968 and 1986.

No significant mineralisation was intersected in the 3 drill holes. The drilling identified a prospective horizon for volcanogenic massive sulphide mineralisation, with minor exhalative pyrite encountered within a sequence of black shale and minor cherts within a sequence that included mafic volcanics, volcanoclastics and tuffs.

A planned downhole electromagnetic survey has had to be delayed due to persistent inclement weather making access for the survey equipment to the drill pads logistically very difficult.

The commencement of the drilling programme was delayed due to the ongoing impact of COVID-19 on workers due to the requirement to isolate once having tested positive. This was also a problem that continued during the programme.

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 west facing, steeply east to sub-vertically dipping 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.

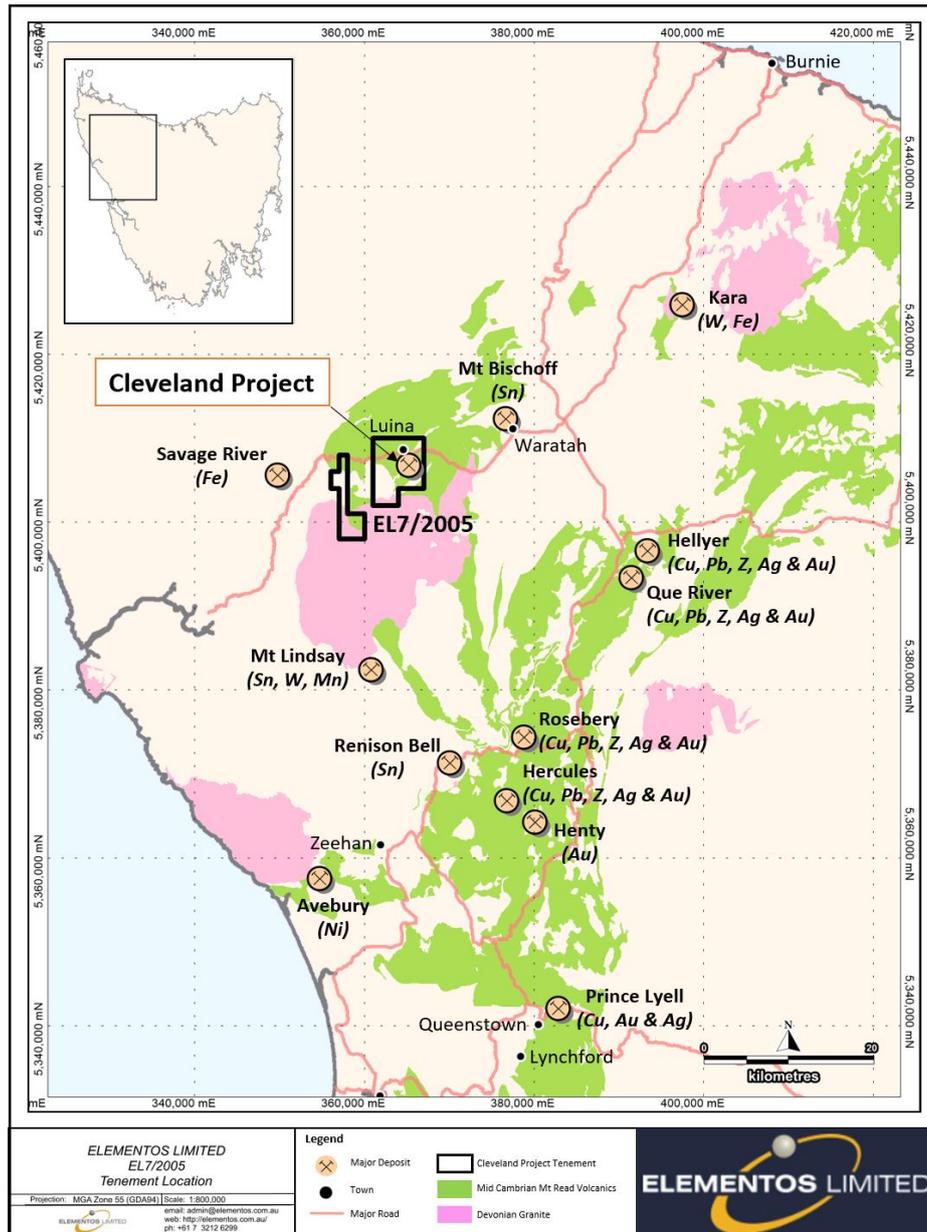


Figure 1. Location plan for EL7/2005

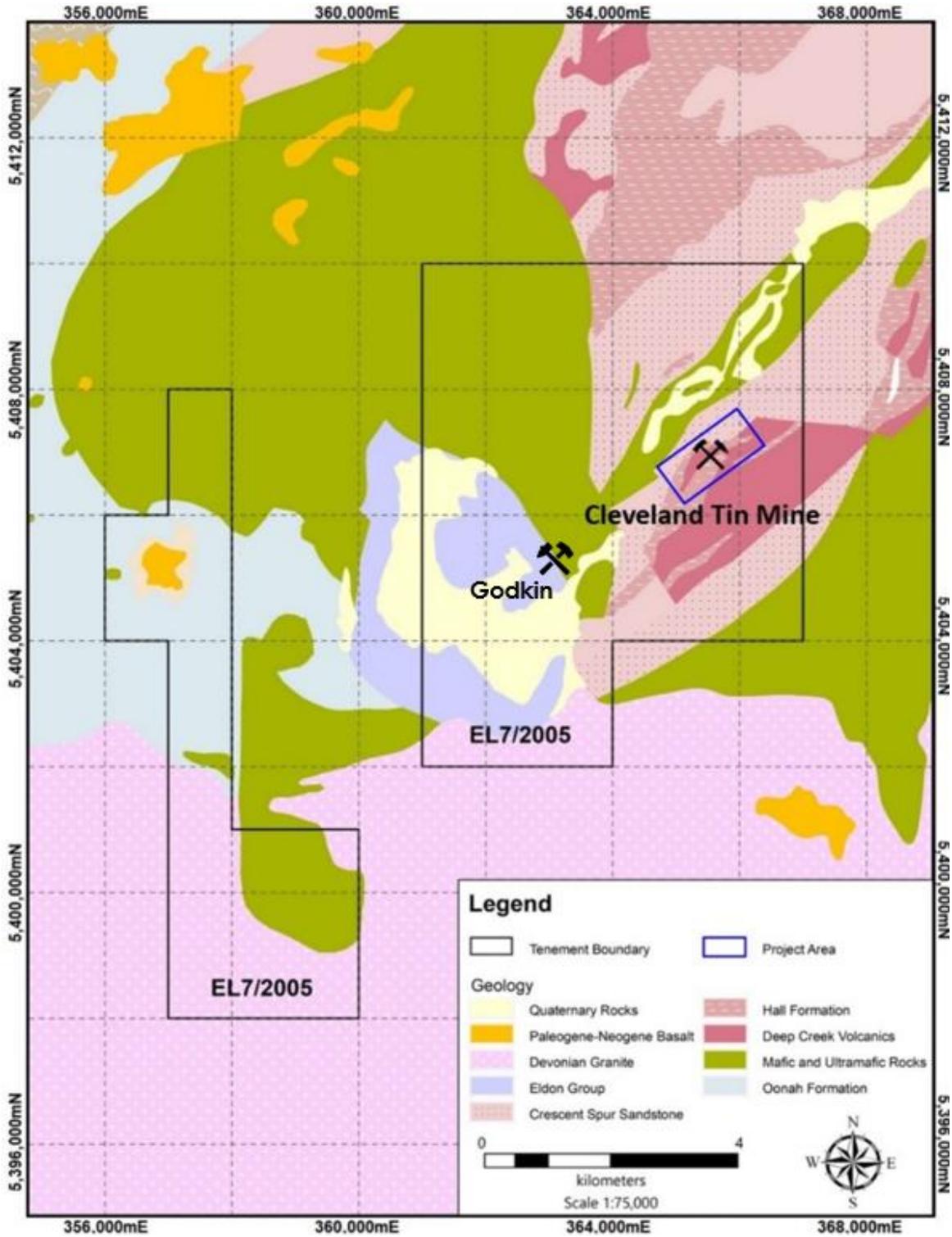


Figure 2. EL7/2005 Regional geology

Within the area of interest of the EDGI grant drilling programme the Deep Creek Volcanics are represented by a sequence of magnetic mafic lavas (pillow lava structures are present), overlain by very fine grained mafic tuffs, and minor mafic volcanoclastics. The upper boundary of the Deep Creek Volcanics within the area of interest are represented by soft sediment slump textures and minor mass flows.

The equivalent of the Hall's Formation within the area of interest is represented by a sequence of finely to moderately laminated black shales, siltstones, sandstones, cherts and minor calcareous fine-grained sediments. Bedding parallel thin bands of pyrite occur within a sequence of black shale, siltstone and chert. These pyritic bands are interpreted to be exhalative due to their syn-sedimentary nature.

The Crescent Spur Formation predominantly consists of massive fine-grained sandstone with lesser interbedded siltstones and shales. Pervasive carbonate alteration occurs throughout the sandstones.

EDGI Grant 5 Drill Programme Report

Three diamond drill holes for a total of 830m were completed by Edrill Pty Ltd, employing a UDR200D track mounted drilling rig. A fourth drill hole was planned but had to be abandoned due to the impact of inclement weather on the drill pad location making drilling operations unsafe (Table 1).

HOLE	EAST_GDA94	NORTH_GDA94	RL	Depth	DIP	MAG AZIMUTH
C2120	365622	5407023	425.2	280	-50	348
C2121	365975	5407247	430.9	250	-47	298
C2122	365975	5407247	430.9	300	-65	278
C2123	365501	5407226	425.2	100	-50	354

Table 1. Drill holes approved for EDGI Grant 5 for Rockwell Minerals (C2123 abandoned)

The total amount approved for the grant was \$50,000.

Initial plans were to complete the programme with a downhole EM survey on each of the drillholes. Persistent rainfall in the weeks before the planned survey made access for the survey equipment to the drill holes too difficult, which resulted in the programme being delayed until there are more suitable ground conditions to safely carry out the survey. All drill holes have pvc pipe in place and transmitter loops have been constructed.

The three 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 have been submitted to ALS Burnie for analysis. The results for the samples had not been received at the time of reporting and will be forwarded to MRT upon receipt from ALS.

The targets for the drilling programme were Self Potential (SP) anomalies originally identified in a survey completed in 1954 by the then Bureau of Mineral Resources. Three SP anomalies were targeted for testing for potential Cleveland style tin-copper mineralisation. The Cleveland ore body was also identified by the BMR SP survey in 1954 before detailed exploration was commenced by Cleveland Tin (Aberfoyle) prior to the mines' underground development in 1968. The three SP target anomalies are located along strike and to the northeast of the historical Cleveland mine workings and have been interpreted to be located within the Cleveland geological mine sequence. The three SP anomalies had not been drill tested during previous exploration drilling campaigns.

All three drill holes have intersected black shales (conductive) from within the Hall's Formation in addition to similar lithologies (yellow/red/purple shales, chert, sandstones and minor calcareous

sediments) that occur in the geological mine sequence at the Cleveland Mine. The black shales contain disseminated sulphides and sulphide laminations (possibly exhalative) at the interpreted location of the SP anomalies at depth (targets).

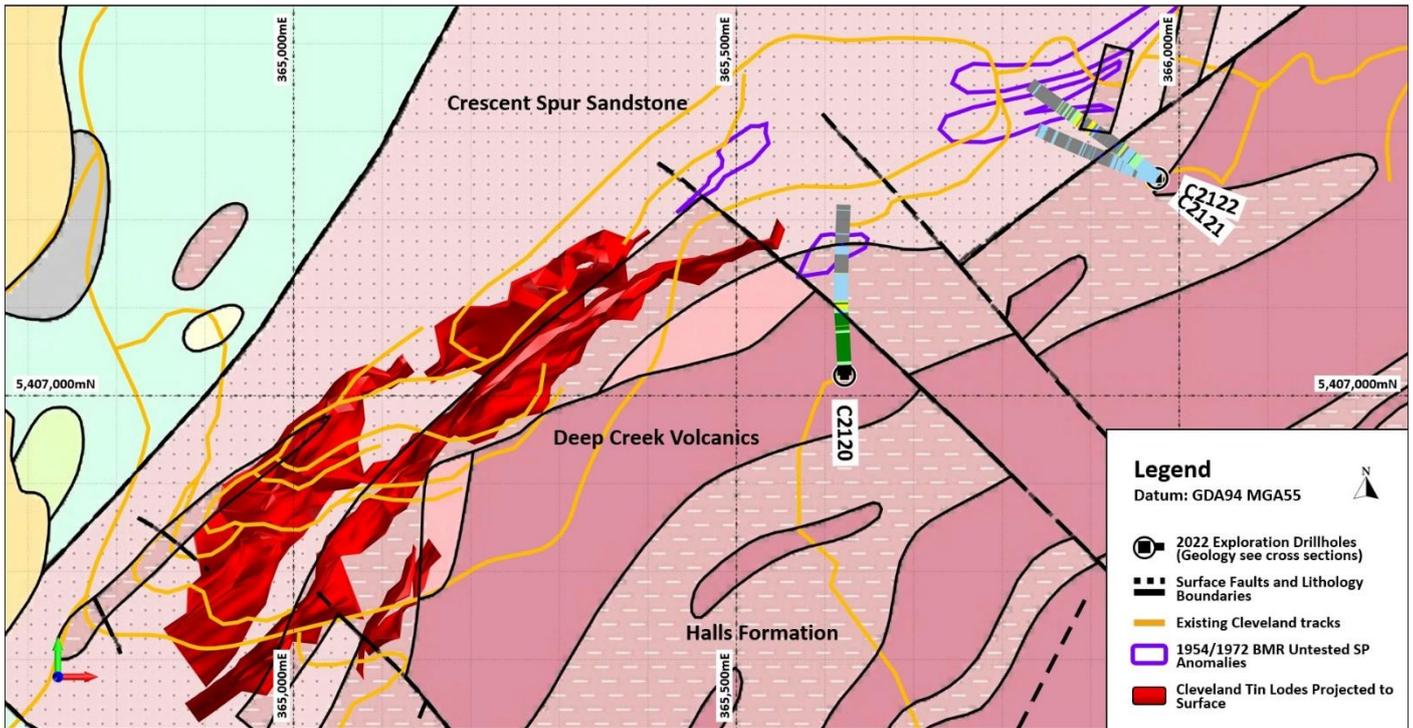


Figure 3. Location plan of EDGI Round 5 drill holes

C2120

Drill hole C2120 was targeting an SP anomaly approximately 100m along strike and to the northeast of the historical 9 level underground workings. A locally significant north-south fault with dextral displacement had been interpreted from historical data as cutting off the mineralisation at Cleveland at this location. The geological mine sequence comprising shale, chert and sandstone was intersected from approximately 125m depth down hole. A zone of carbonate and silica alteration containing 2-3% disseminated pyrite, chalcopyrite, sphalerite and pyrrhotite was intersected from 168.6m – 172.8m. Carbonate rich rocks are synonymous with sulphide/cassiterite mineralisation at the Cleveland Mine.

Sections of drill core that displayed visible mineralisation were sampled by diamond saw with half core samples sent for analysis at ALS Burnie. Significant assay data from this drill hole is shown in Figure 5.



Figure 4. C2120–Carbonate and silica alteration within laminated sediments of the Hall's Formation containing 2-3% disseminated pyrite, chalcopyrite, sphalerite and pyrrhotite intersected from 168.6m – 172.8m. (red arrows identify sample intervals)

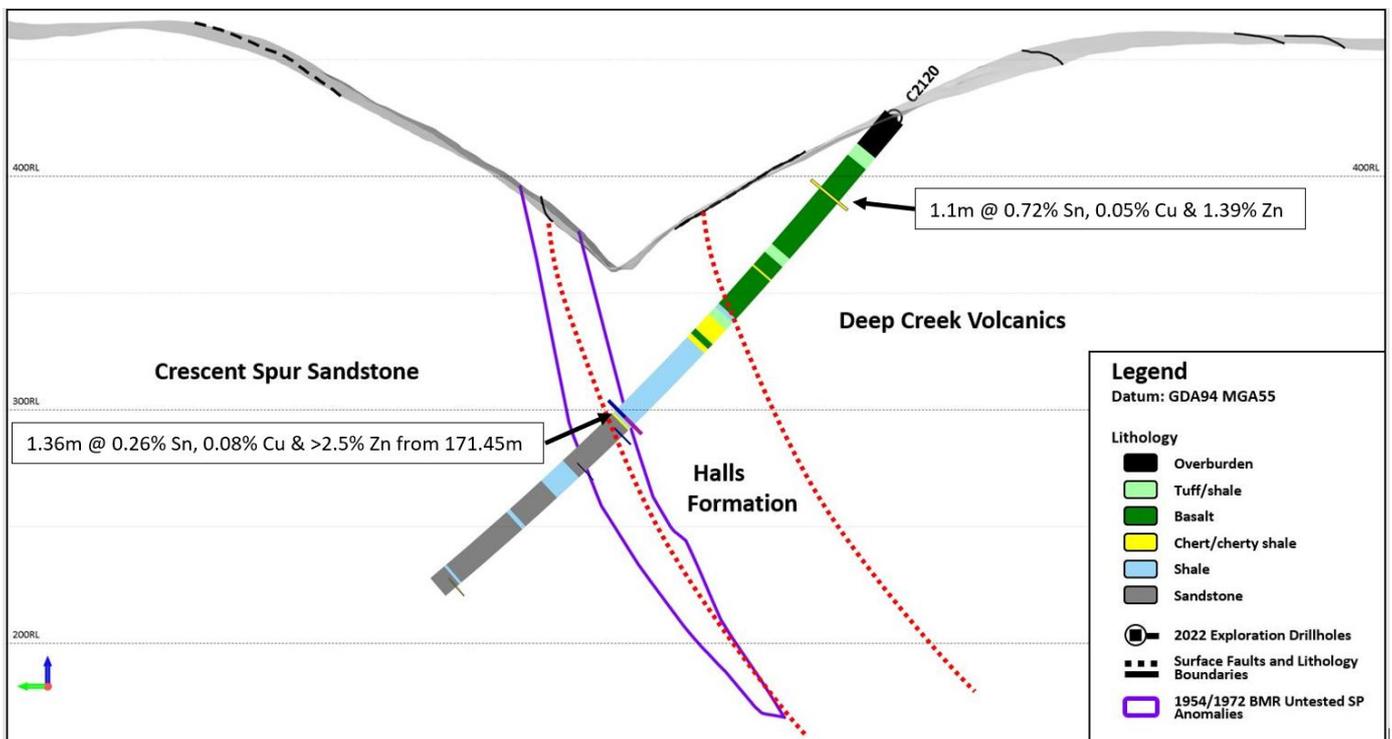


Figure 5. Cross section of drill hole C2120

C2121 & C2122

Drill holes C2121/C2122 were targeted at two separate but parallel SP anomalies approximately 500m along strike and to the northeast of the historical underground workings at Cleveland. The drill holes intersected the Hall's Formation and Crescent Spur Formation, confirming the steep sub-vertical dip of the lithology in this region. The Deep Creek Volcanics were not intersected in these drill holes.

Syn-sedimentary pyrite mineralisation was observed within black shale/chert/pale shale laminated sequences within the Hall's Formation, corresponding to the modelled location of the SP anomalies. Significant assays from these two drill holes are shown in Figure 7.



Figure 6. C2121–Laminated black shales and pyrite at the modelled intersection of the north-eastern SP anomaly. (red arrows identify sample intervals)

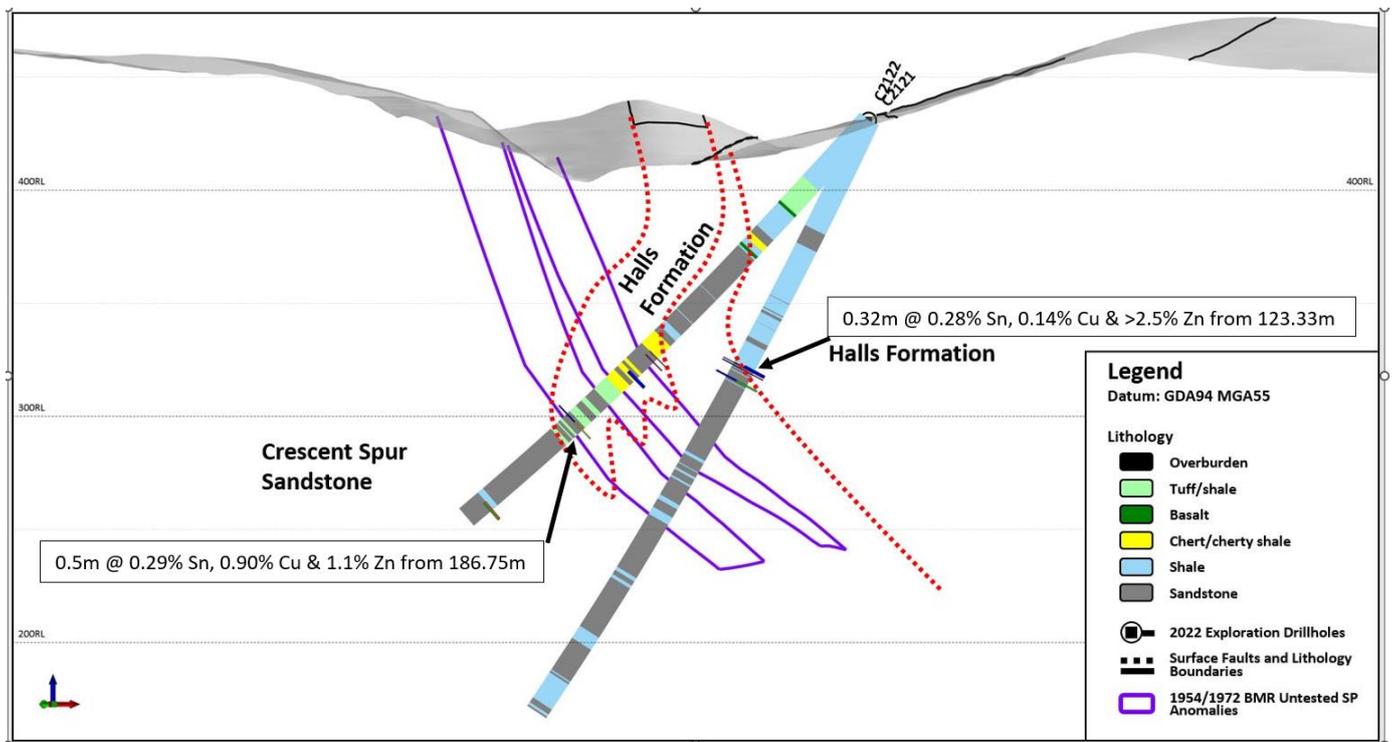


Figure 7. Cross section of drill holes C2121 & C2122

EXPENDITURE

Total expenditure excluding GST on the drilling programme was \$194,202.40 and \$203,423.23 (ex GST) including analytical data.

CONCLUSIONS

The drilling programme intersected the target Cleveland Mine geological sequence (Hall's Formation) along strike to the northeast of the historical mine workings. The geology of the Hall's Formation differs slightly from the sequence at the Cleveland Mine with black shales being more dominant than the interbedded yellow/red/purple shales, cherts, calcareous sediments and sandstones that are characteristic of the Cleveland Mine sequence. This increased abundance of black shales increased with increasing distance from the historical mine workings.

The SP anomalies can be explained by the black shale units (possibly conductive) that contained disseminated pyrite plus minor laminated pyrite lenses. The geological sequence intersected in this drilling programme does show some similarities to those encountered in volcanogenic massive sulphide hosted sequences. The planned downhole EM is recommended to be carried out when site access ground conditions improve.