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EL7/2019 2M/2023

EXPLORATION DRILLING GRANT INITIATIVE

REPORT, 2026

SPERO MINING

MONTEZUMA Ag-Sb PROJECT

NW TASMANIA

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May 2026

EXECUTIVE SUMMARY

This report details drilling results to fulfil requirements of the Tasmanian Government's Exploration Drilling Grant Initiative Round 11 on EL7/2019 and internal mine lease 2M/2023. The EL and ML are held by Spero Mining.

The two proposed EDGI holes were designed on the southern boundary of 2M/2023 with EL7/2019. Both drill holes have intersected significant mineralisation, resulting in ongoing exploration of the area.

The Montezuma deposit consists of fissure vein hosted sulphide mineralisation associated with the north-south trending Montezuma fault and associated splay structures. The fault dips steeply east, with mineralisation drill defined over 250m strike length and 200m dip, remaining open in all directions. Two main lodes have been identified through diamond drilling, the Montezuma Lode and the Footwall Lode. The footwall Lode is a splay off the Montezuma lode trending North-Northwesterly and dipping steeply east. There are numerous subsidiary stockwork veins and breccia zones associated with main sulphide lodes.

Mineralisation is complex, consisting of an early-stage pyrite-arsenopyrite phase with associated tin and gold mineralisation. A later stage of jamesonite-tennantite-argentiferous galena and occasionally chalcopyrite crosscuts the pyrite-arsenopyrite. Mineralized widths are narrow but high value.

The two holes drilled a combined 545.3m. Direct drilling costs for the attributable to MZS17 and MZS27 was $109,636.30.

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1 INTRODUCTION

This report details exploration activities completed on EL7/2019 during the 2025-2026 year of tenure. The EL was purchased by Lode Resources with the acquisition of Spero Mining in 2025. Spero has been completing resource definition drilling and metallurgical testwork as part of a prefeasibility study of the Montezuma Ag-Sb project. The EL surrounds Spero's small ML 2M/2023 with exploration/extension drilling extending across the ML and EL.

1.1 Location and Tenure

Exploration Licence EL7/2019 is held by Spero Mining Pty Ltd, a subsidiary of Lode Resources. The term of the lease expires on 23th March 2026 and will require renewal. A renewal application was submitted with the annual report.

The small 4km^2 EL7/2019 and internal 0.5Km^2 ML 2M/2023 are located on the West Coast of Tasmania near Dundas. The tenements are adjacent to EL20/2020, recently acquired by Spero Mining (Figure 1).

The ML and most of the EL area are located on Crown Land available for exploration.

1.2 Exploration Rationale

Spero Mining (100% Australian owned) are primarily focused on exploring their Western Tasmanian tenements for high grade antimony-silver base metal sulphide mineralisation associated with Carboniferous granite intrusions. Spero aims to produce high value Sb-Ag concentrates with by product Pb, Cu and potentially Au-Sn within Western Tasmania.

The metal distribution of proximal Sn-W mineralisation with distal Pb-Zn-Ag mineralisation associated with Western Tasmania's Carboniferous granite has been well documented over the past century (Collin's et. al., 1981). The Zeehan-Dundas field hosted numerous small tonnage high grade Ag-Pb fissures lodes historically mined for silver.

The recent increase in Ag and specifically Sb, (classified as a critical mineral by the Australian and Tasmanian Governments) dramatically increases the value of this often-neglected exploration target in Western Tasmania.

Intensive exploration/infill drilling of the Montezuma Fault on Spero's Mine lease 2M/2023 and adjacent EL7/2019 during 2025 has identified low tonnage-high grade (high value) polymetallic sulphide lodes associated with the Montezuma Fault Structure. Several examples of typical intercepts from the 2025 drilling include:

MZS17 197.3 – 198.3m 1.0m @ 226g/t Ag, 1.0% Cu, 0.4% Pb, 0.2% Sb 0.8g/t Au and 0.2% Sn

MZS17 150.4.0 – 155.9 5.5m @ 196g/t Ag, 0.9% Cu, 0.2% Sb 0.9g/t Au 0.81%Sn

MZS27 226.3 – 230.2 3.9m @ 190g/t Ag, 1.8%Cu, 0.1% Sb, 0.8g/t Au, 0.2% Sn

Results of all drill holes are listed in Lode's ASX releases through 2025.

The polymetallic mineralisation and metal zonation in fissure lodes suggests telescoping of initial higher temperature arsenopyrite-pyrite-chalcopyrite Sn-Au

mineralisation by later, low temperature Pb-Sb-Ag jamesonite-galena-boulangerite-tetrahedrite mineralisation.

Spero has commenced metallurgical test work including flotation studies with ALS Burnie and leach tests with CORE Metallurgy Brisbane. Early results suggest a sulphide flotation concentrate can be produced with 70-80% recovery. Leach testing indicates downstream processing can produce high value pyro-antimonate or artificial stibnite products. Recoveries of Au and Sn are unknown at this stage with studies in progress.

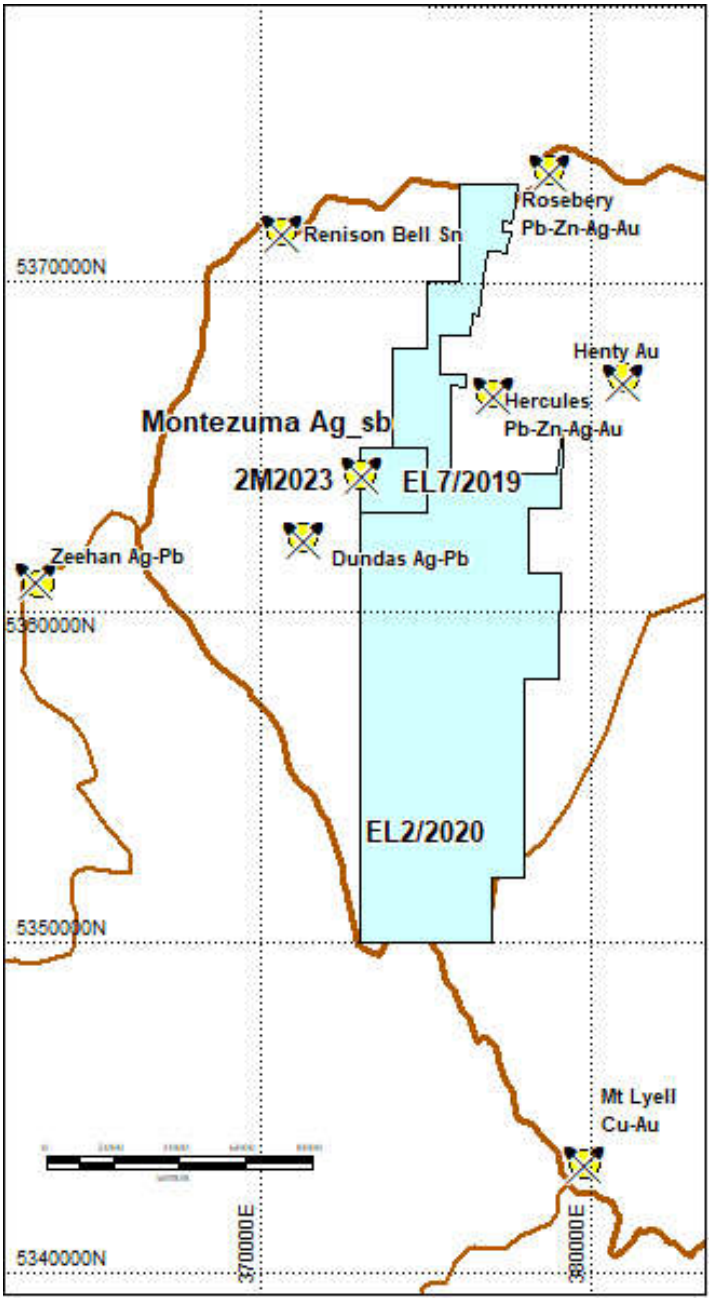

Figure 1. EL7/2019 Montezuma, EL2/2020 White Spur, and ML 2M/2023 location.

2 PREVIOUS EXPLORATION

The Zeehan-Dundas-Rosebery district has seen continuous mining and exploration activity since the 1880's.

Alluvial gold and tin were found in the Ring River as early as 1890, leading to the discovery of the Hercules and Rosebery Pb-Zn-Ag-Au massive sulphide mineralisation and the Renison Bell Tin fields. The Rosebery and Renison Bell Mines are still in operation.

Galena-sphalerite was first discovered at Dundas in 1887, and this led to the development of several important silver-lead mines in the Dundas area. Mining had practically ceased by 1913, by which time the Dundas Field had achieved a recorded total production of 25,050 tons of lead, 629.5 tons of zinc and 1,815,592 ounces of silver.

Historic data and company exploration reports are available from the MRT database. Modern exploration, including extensive gridding, soil and stream geochemistry, airborne and ground geophysics and diamond drilling have occurred since the 1970's.

Modern exploration of the Montezuma Mine area commenced in 1974 with geophoto completing gridding over the Montezuma-South Comet district followed by drilling of the Kominsky and Comet areas.

EZ/Getty Joint venture recut the CGFA grid over the Montezuma mine and completed soil sampling and stream sediment sampling surveys (Sainty, 1982). The soil sampling identified a strong tin anomaly over the Montezuma mine workings (Figure 4).

EZ drilled diamond holes MZP144 and MZP145a targeting the Maestries Dolomitic conglomerate for potential replacement Sn sulphide mineralisation in 1983 (Sainty, 1983). MZP145a intersected the Montezuma lode with significant Ag rich sulphide mineralisation. MZP144 collared west of the lode and drilled west and intersected the footwall lode with Ag rich sulphides and a small Ag rich sulphide band in the Maestries conglomerate.

A third hole (MZP160) as drilled by EZ in 1984. The hole was not analysed.

There has been a significant pause in exploration activity between the early 1980's and the present. Exploration of the Montezuma Mone resumed when Spero acquired EL9/2019 in 2019.

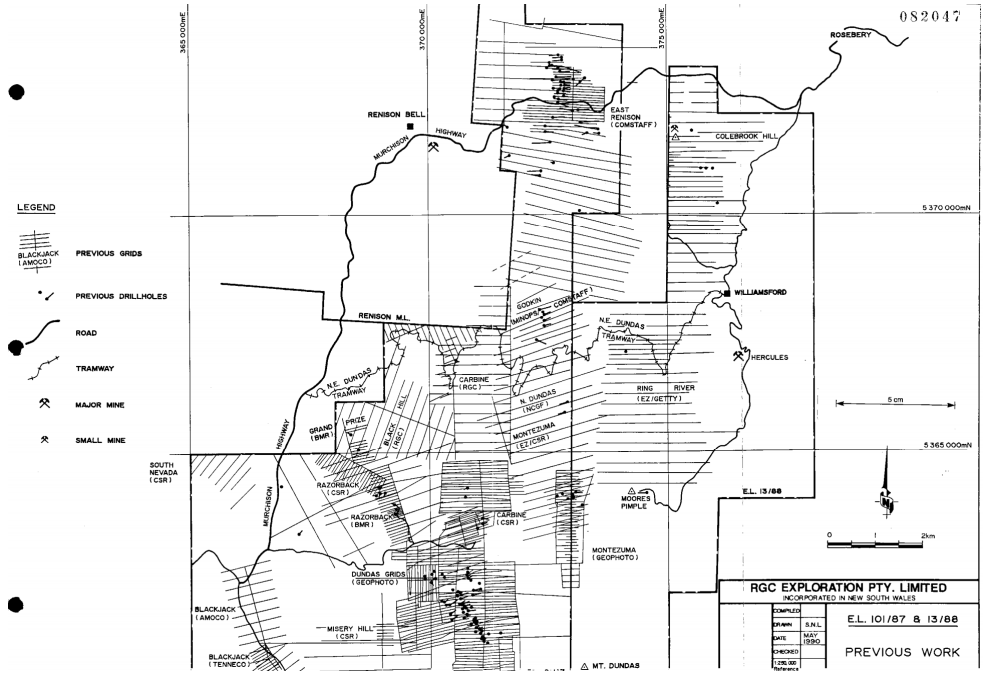

Figure 2. Historic gridding, North Dundas area.

Spero applied for a small ML within the EL in 2023 to permit bulk sampling. Since granting of 2M/2023 Spero have established a box cut/portal and obtained a bulk sample of the Montezuma mineralisation for metallurgical test work including leaching (CORE) and flotation testwork (ALS).

In addition a short drilling program of 12 short drillholes over a 25m strike by 20m depth adjacent to the box cut was completed in 2022. All the drill holes intersected high grade antimony-silver mineralisation (Figure 3).

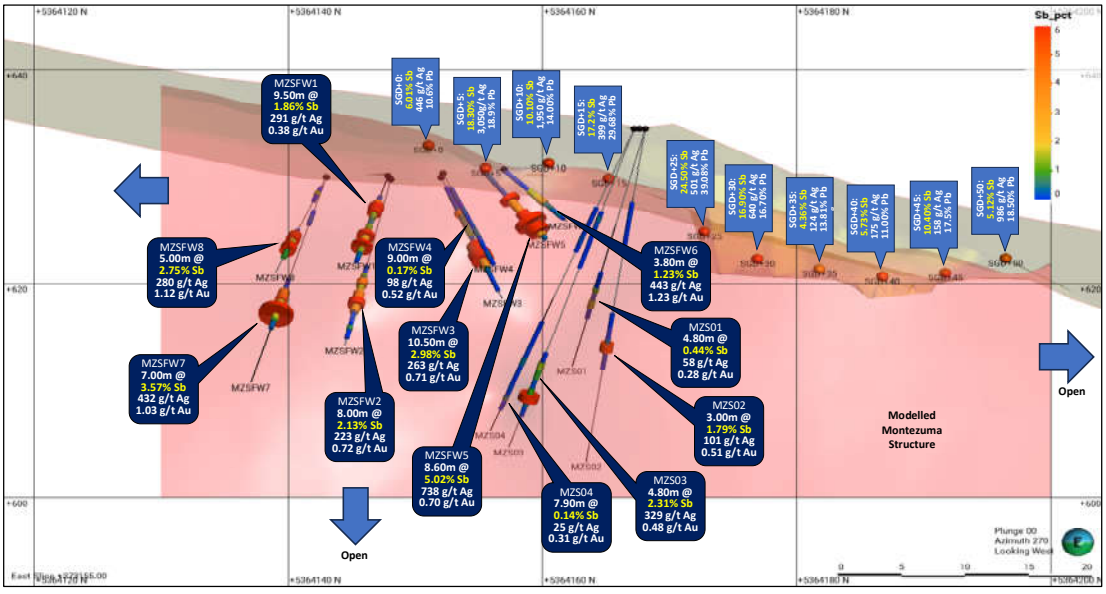

Figure 3. Spero previous drilling and face sampling

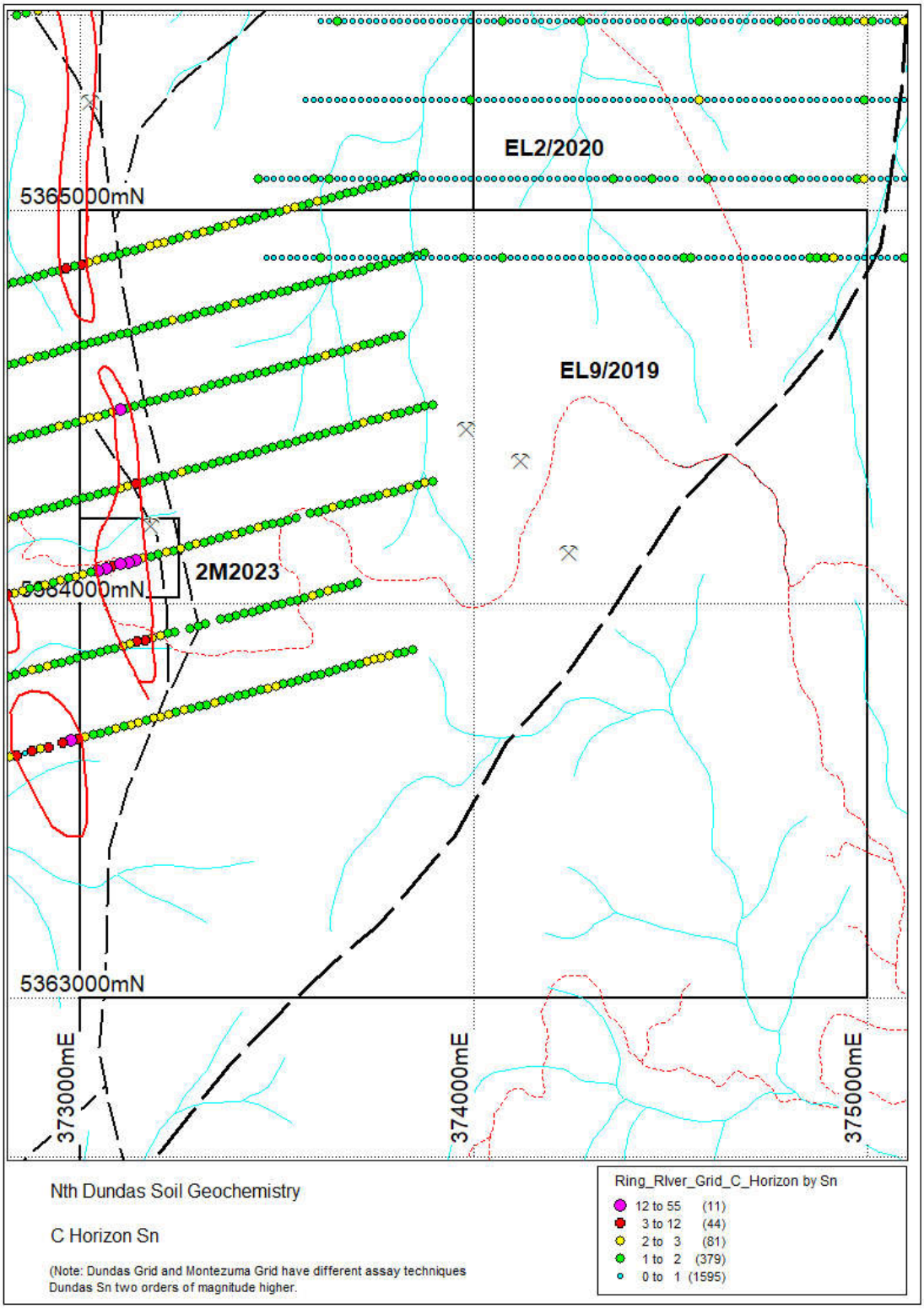

Figure 4. Montezuma Sn c-horizon soil sampling

3 GEOLOGY

3.1 Local Geology

The geology of EL9/2019 (2M/2023) is split by a major thrust, the east dipping Rosebery Fault, separating the Cambrian Mt Read Volcanics in the east from the Cambrian Dundas Group/Rosebery Group to the northwest (Figures 5 and 6). The MRV are north-south trending with open folding in the south of the tenement increasing to steeply east dipping isoclinal folding adjacent to the Rosebery Fault in the north. The local geology in the north Dundas area has been modified from MRT 1:25k mapping, RGC company mapping (Cartwright, 1989) and the author's mapping and observations in the Rosebery, Natone Creek, Exe Valley, and Dundas areas (Figure 5).

3.1.1 Mt Read Volcanics

The Cambrian MRV on EL9/2019 are dominated by the White Spur Formation (WSF) felsic volcaniclastics, shale and rhyolitic intrusives in the southeast of the EL. The WSF form the immediate hangingwall to the Rosebery and Hercules deposits with a prominent black shale often forming the base. The bottom of the WSF contains serval large polymictic felsic mass flow breccias/greywackes with interbedded siltstones, felsic crystal sandstones and slate.

3.1.2 Dundas Group/Rosebery Group

Immediately west of the Rosebery Fault is a Complex sequence of Cambrian siliciclastic and volcanic rocks of the Dundas/Rosebery Group. The stratigraphy and relationships of the Dundas/Rosebery Group are poorly understood with correlations from the Dundas-Renison area to the Natone Creek-Rosebery region difficult. Age dating and stratigraphic relationships are limited compared to the information available east of the Rosebery Fault.

The Dundas/Rosebery Group strikes north south and dips steeply east near the Rosebery Fault. It is folded into a series of north trending tight to open folds defined by facing reversals.

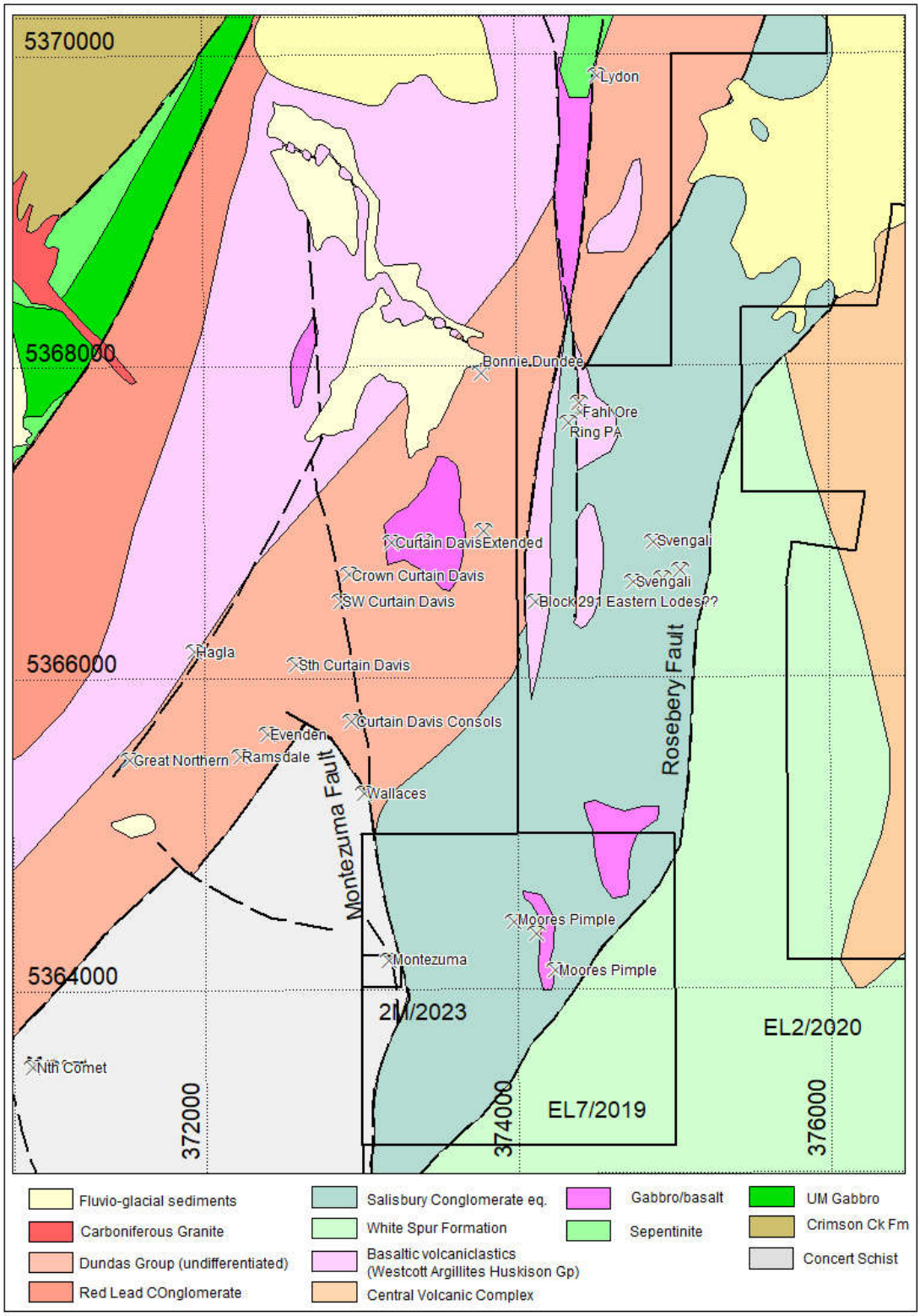

Figure 5. Geology of the Moore's Pimple - Ring River area, (EL2/2020, EL7/2019 and ML 2M/2023.

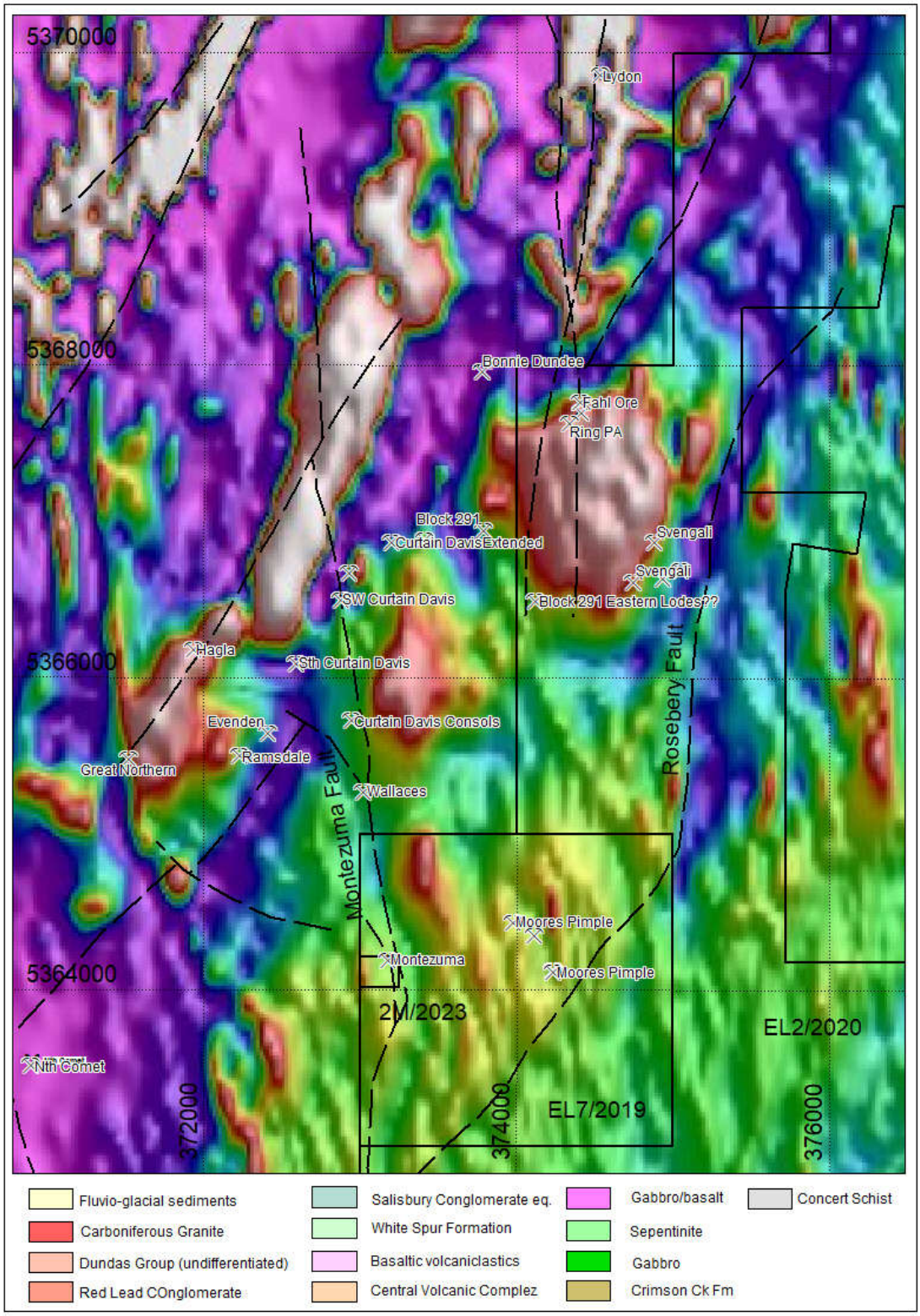

Figure 6. 1VD TMI image of the Moore's Pimple-Ring River area, (EL2/2020, EL7/2019 and ML 2M/2023.

The Dundas Group unconformably overlies the 515Ma allochthonous Mafic-ultramafic complex tectonically emplaced over the <550Ma Crimson Creek Formation located west and northwest of the EL. Structural or basement highs of mafic - ultramafic rocks are located near Moore's Pimple, immediately east of the Rosebery Fault. The Ultramafic-mafic rocks have a complex relationship with the younger Dundas Group Salisbury Conglomerate and Red Lead Conglomerate.

In the Dundas to Exe Creek region the Red Lead Conglomerate immediately overlies the ultramafic complex, consisting of variable quantities of rounded, polymict mafic and silicic clasts, chert and hematite altered quartzite. A sequence of shale and mafic volcaniclastic turbidites and mafic volcanics overlies the red lead conglomerate.

The Salisbury Conglomerate overlies the Exe Creek mafic volcaniclastics and basalt/gabbro to the east towards EL7/2019. The conglomerate varies along strike but generally consists of rounded polymict clasts of quartz phyric rhyolite, mafic volcanics, chert, phyllite slate and diagnostic fuchsite altered chromite grains. Interbedded with the Salisbury Conglomerate are lenses of dolomite, graphitic shale and siliciclastic/volcaniclastic greywacke. The Salisbury conglomerate is located east of the Montezuma deposit, in faulted contact with the Proterozoic Concert Schist.

3.1.3 Proterozoic Concert Schist

The Concert Schist, hosting the Montezuma deposit consists of tightly folded laminated to thinly bedded siliciclastic turbidite and graphitic shale. A distinctive dolomitic conglomerate (Maestries Conglomerate) is located within the Concert Schist just east of the Montezuma Deposit.

3.1.4 Carboniferous Granite.

The Pine Hill Granite outcrops 5km northwest of EL7/2019. Gravity Modelling (Leeman and Richardson, 2003), alteration and mineralisation mapping and limited diamond drilling indicate that a ridge of granite extends from the Heemskirk Batholith in the west to Granite Tor in the east, extending below the Spero tenements (Figure 7). This ridge of granite and the Pine Hill granite is responsible for the mineralisation of Renison Bell Tin Mine and the extensive Ag-Pb fissure vein mineralisation of the Zeehan-Dundas Mineral fields. High grade Pb-Zn-Ag-Sb fissure vein mineralization occurs in haloes around granite bodies (Collins et. al. 1981). Although high grade, Pb-Zn-Ag-Sb lodes are typically small (1-100kt) such as the numerous deposits of the Zeehan-Dundas field. The two largest Carboniferous granite related Pb-Zn-Ag fissure vein deposits occur outside the Zeehan - Dundas Field but highlight the potential of the mineralisation style:

Mt Farrell Mine	0.91Mt @ 12.5% Pb, 2.5% Zn and 408g/t Ag
Magnet Mine	0.63Mt @ 7.3% Pb, 7.3% Zn and 427g/t Ag.

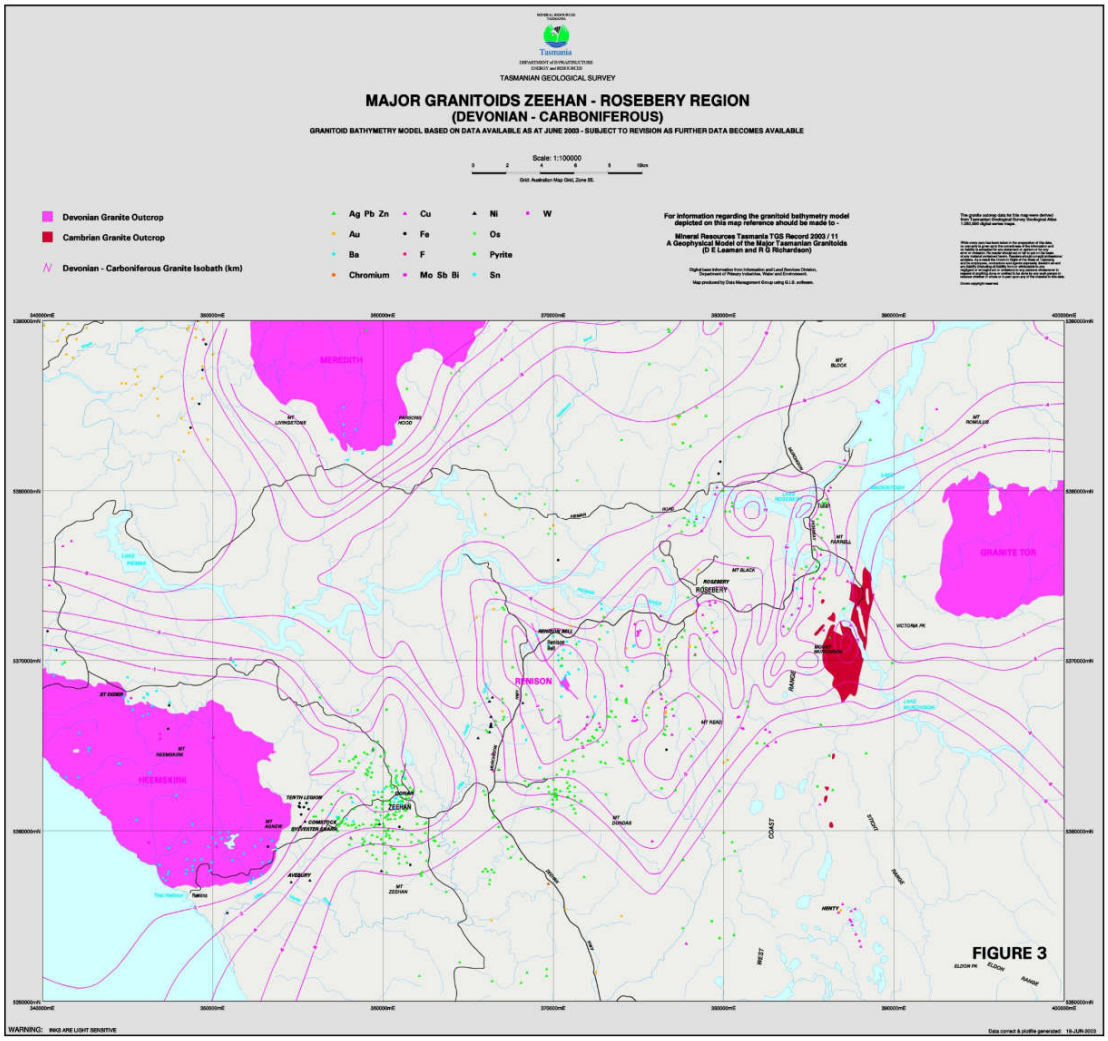

Figure 7. Western Tasmanian Carboniferous Granites and mineral deposits with sub surface modelled granite contours (Leeman and Richardson, 2003).

3.1.5 Mineralisation

EL7/2019 and 2M/2023 and the surrounding area hosts numerous historic mineral deposits related to the Carboniferous granite with multiple commodities including Ag-Pb-Zn fissure loads with critical mineral associations of Sb, Bi, Sn and W.

The Montezuma deposit consists of fissure vein hosted sulphide mineralisation associated with the north-south trending Montezuma fault and associated splay structures. The Montezuma Fault dips steeply east, with drill defined mineralisation extending over 250m strike length and 200m dip, remaining open in all directions. Two main lodes have been identified through the 2025 drilling program, the Montezuma Lode and the Footwall Lode (Figure 8). The footwall Lode is a splay off the Montezuma lode trending north northwesterly and dipping steeply east. There are numerous subsidiary mineralised structures and breccia zones between the two main mineralised lodes.

Mineralisation is complex, consisting of an early-stage pyrite-arsenopyrite phase with associated tin and gold mineralisation. A later stage of jamesonite-tennantite-argentiferous galena and occasionally chalcopyrite crosscuts the pyrite-arsenopyrite.

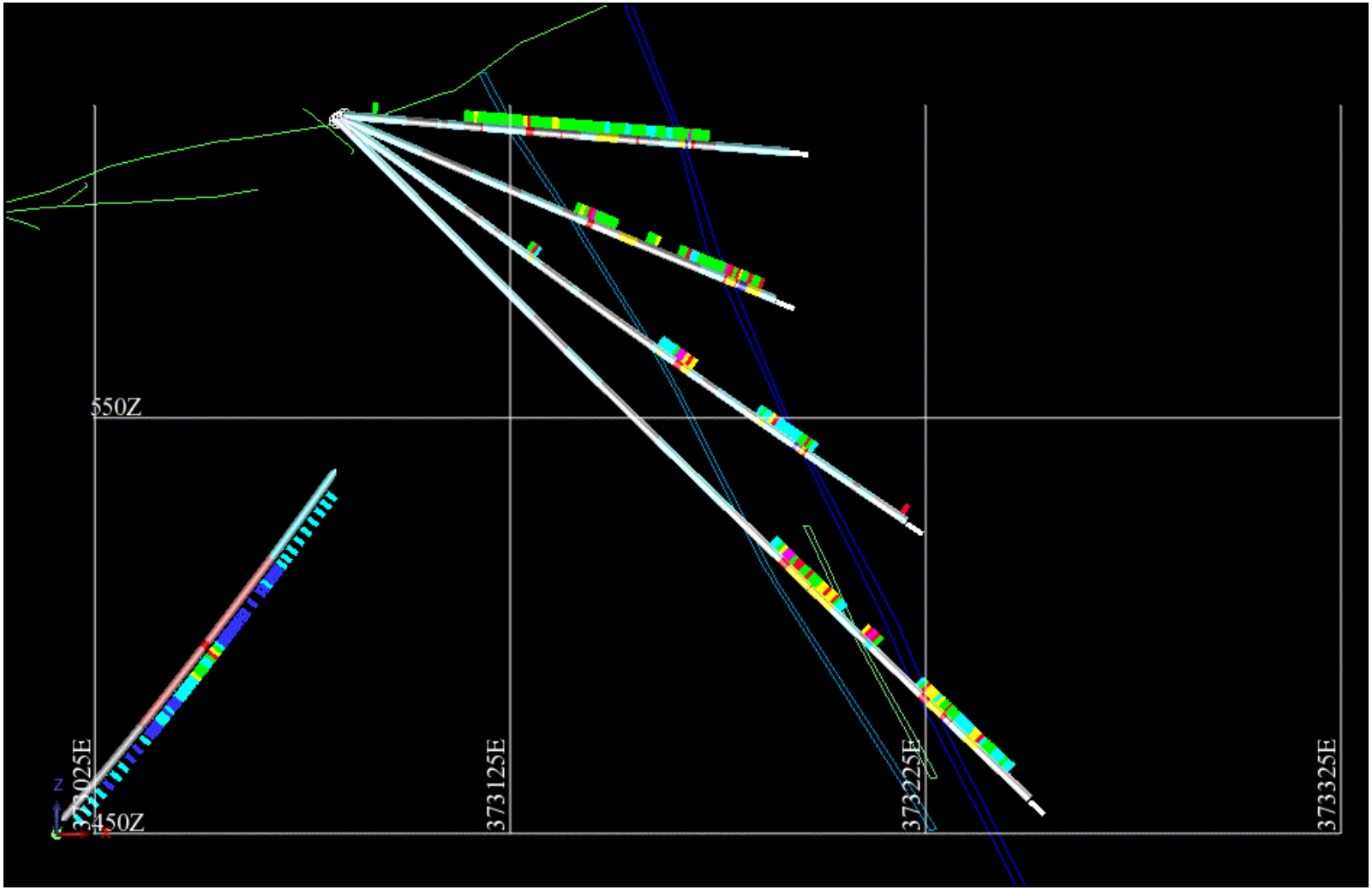

Figure 8. Montezuma Section 5364090N with Footwall Fault and Montezuma Fault. MZS17 lowest hole.

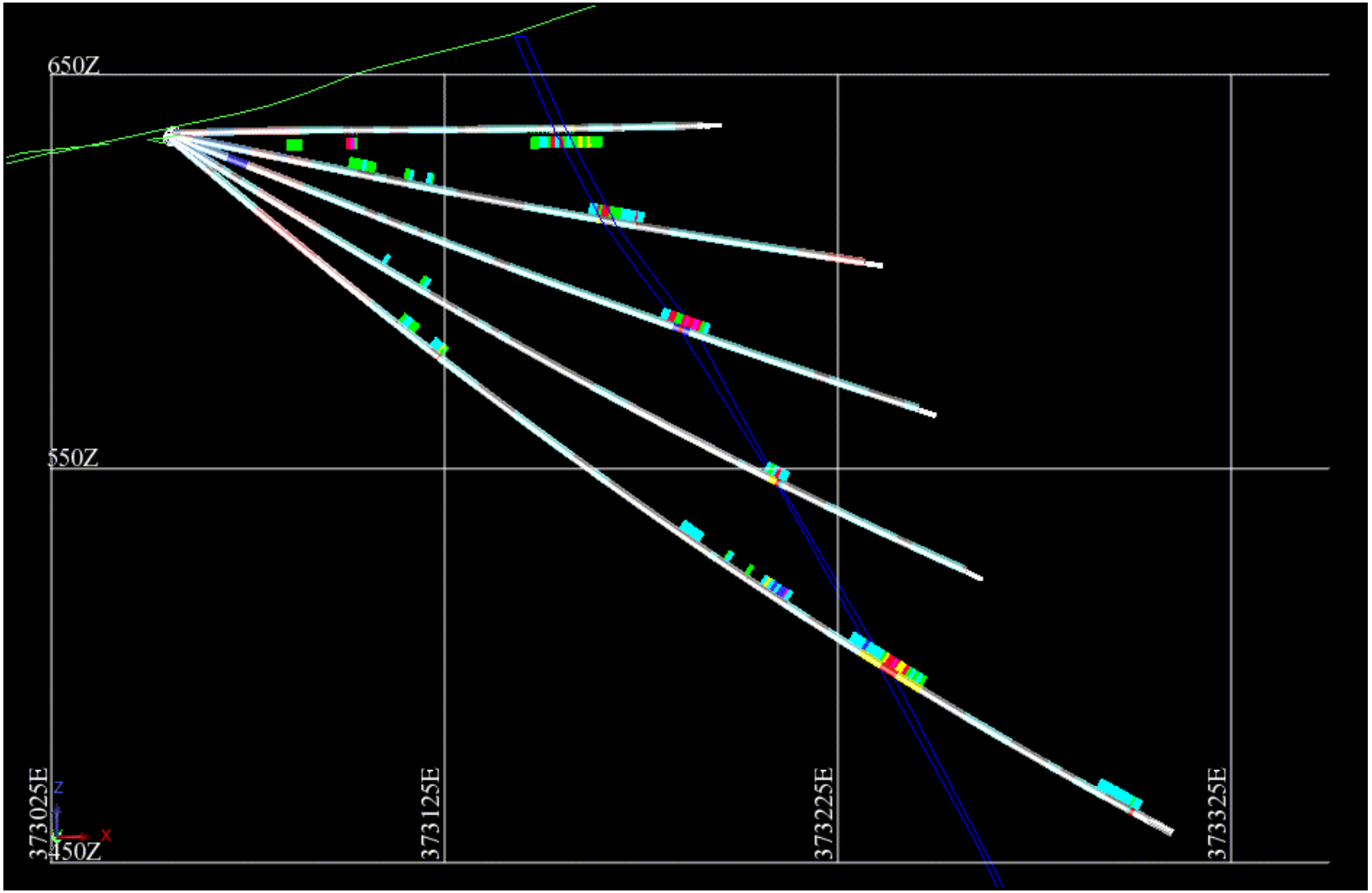

Figure 9. Montezuma Section 5364000N with Footwall Fault and Montezuma Fault. MZS27 lowest hole.

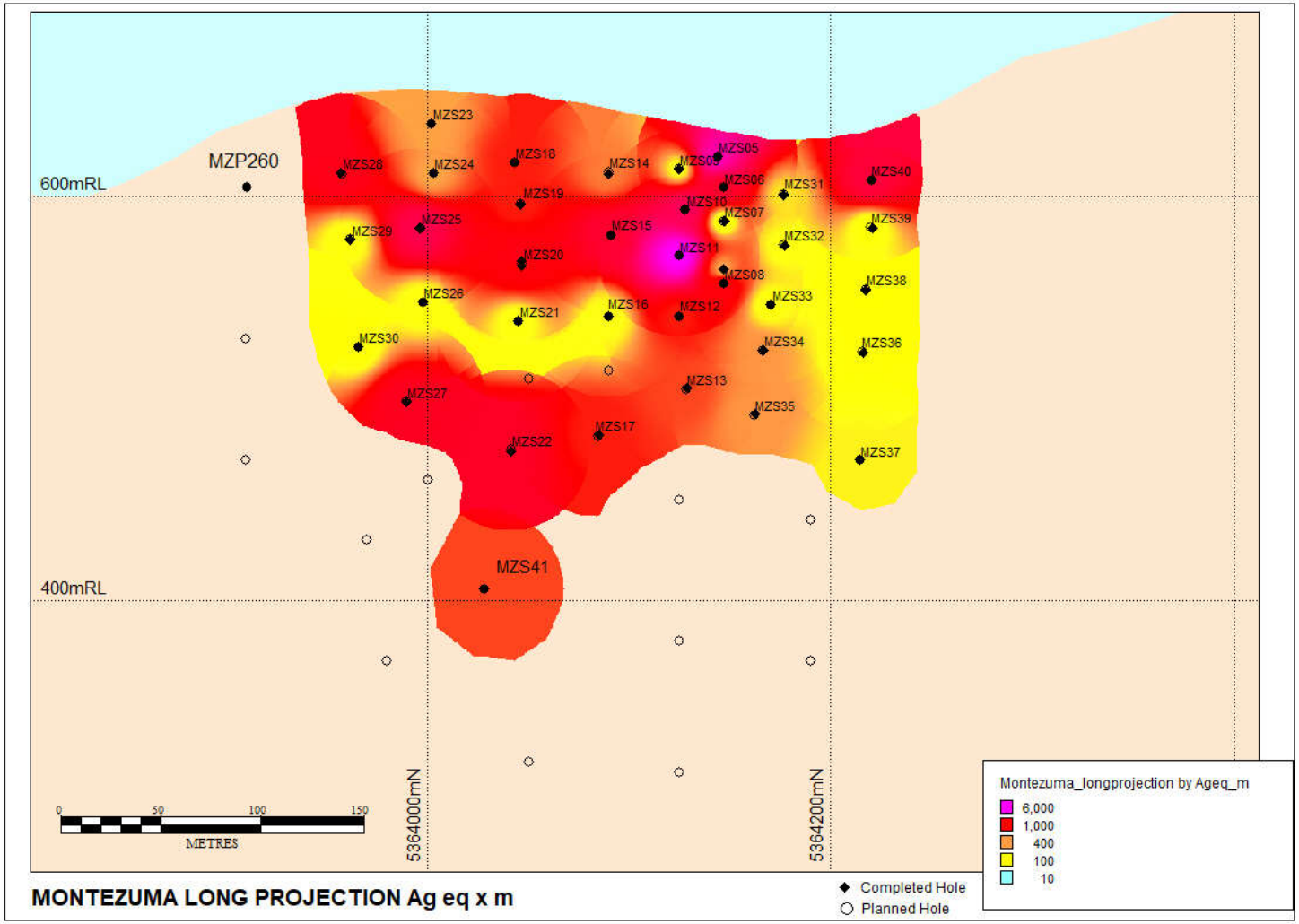

Figure 10. Montezuma Long projection Ag eq x m.

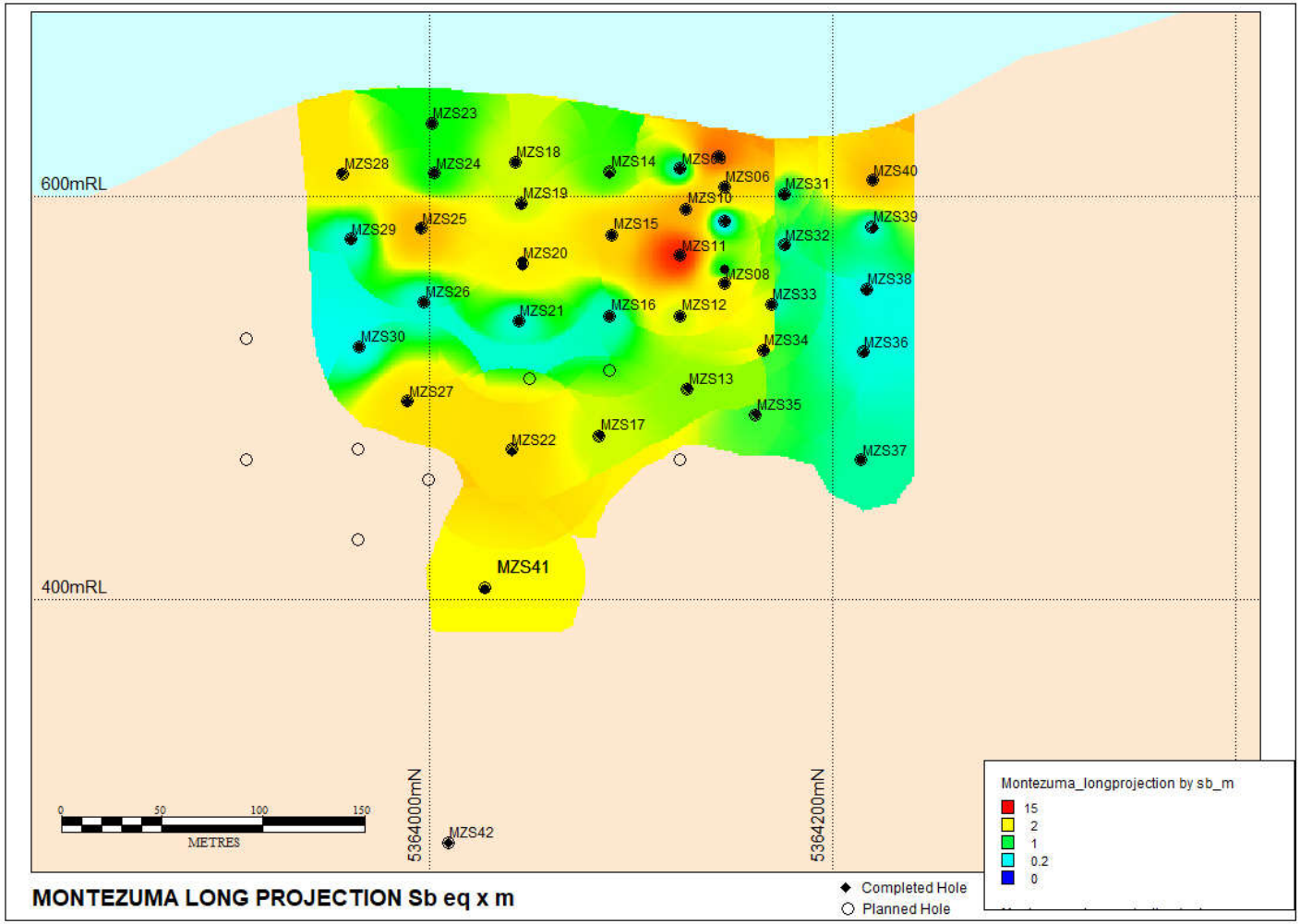

Figure 11. Montezuma Long projection Sb eq x m.

4 WORK COMPLETED

Local contractors E-Drill were contracted to complete exploration/ drilling of the Montezuma deposit including two planned EDGI funded exploration drillholes. Drilling successfully identified Ag-Sb-Cu-pb rich sulphide mineralisation associated with the Montezuma Fault and drilling continued.

E Drill have provided a skid mounted Diamec drill rig used for underground drilling. The rig allows flexibility as the majority of holes are at shallow angles to improve intersection angles and coverage. The rig also allows multiple holes to be drilled off one site, significantly reducing environmental impacts and drilling costs.

Two holes were completed for 545.3m total (Table1).

Table 1. Drill collar details 2025 – 2026

Hole_ID	X_GDA	Y_GDA	RL_MSL	Azm	Dip	Length m
MZS17	373083.52	5364083.08	621.52	90.3	-45.4	233.6
MZS27	373055.34	5364000.80	633.74	90.0	-40.0	311.7

Drill collars are located by licensed contract surveyors Peacock Darcy and Anderson. Down hole surveys were completed with a Longyear Tru-shot digital survey instrument.

Drill core was transported to Spero's Zeehan Core storage facility. Core was reconstituted, marked up, measured for recovery and RQD and photographed. Core logging was completed by an experienced geologist on MX_Deposits software. Drill core for assaying was marked up and cut with a diamond saw, with half core bagged and ticketed. Minimum lengths of 0.5m and maximums of 1.0m were used for sample intervals.

Bagged samples were transported to ALS laboratories in Burnie by Spero staff and contractors.

Sample preparation at ALS involved weighing, drying and crushing to 85% passing 2mm. A 3kg split was pulverized to 85% passing 75um. After a four-acid digest multi element analysis was completed by ICP-AES, Au analyses by 30g fire assay and Sn and Antimony by fused disc XRF.

QAQC measures included pulp or coarse crush duplicates every 20 samples, the insertion of certified reference material every 20 samples and blanks after high grade mineralisation. All CRM and duplicates performed within acceptable limits.

All drill collar details of drill holes MZS17 to MZS27, down hole surveys, lithological logs, RQD, and analytical data is located in the appendices of this report.

Significant intersections are listed in Table 2.

Table 2. Results MZS17 and MZS27

Montezuma Fault Structure											
BHID	From m	To m	Length m	Ag ppm	As %	Cu %	Pb %	Zn %	Sb %	Au ppm	Sn_pct
MZS17	197.3	198.3	1.0	226	7.2	1.0	0.4	0.2	0.2	0.79	0.22
MZS27	226.3	230.2	3.9	190	5.4	1.8	0.1	0.0	0.1	0.80	0.22
Footwall Lode											
BHID	From m	To m	Length m	Ag ppm	As %	Cu %	Pb %	Zn %	Sb %	Au ppm	Sn_pct
MZS17	150.4	155.9	5.5	196	6.3	0.9	0.2	0.4	0.2	0.93	0.80
	150.4	152.9	2.5	371	12.0	1.8	0.3	0.8	0.4	1.69	1.41
Other Veins/Structures											
BHID	From m	To m	Length m	Ag ppm	As %	Cu %	Pb %	Zn %	Sb %	Au ppm	Sn_pct
MZS17	178.0	181.0	3.0	161	0.2	1.1	1.2	0.7	0.4	0.16	0.09
MZS17	205.0	205.5	0.5	197	4.4	1.5	0.1	0.1	0.1	0.61	0.09
MZS17	215.0	216.0	1.0	146	0.6	0.5	0.8	1.9	0.4	0.26	0.06
MZS27	196.0	196.5	0.5	170	5.9	2.4	0.8	0.1	0.4	1.21	1.98

5 PROPOSED WORK

Work proposed for 2M/2023 and adjacent EL7/2019 for the 2026 year include:

- Continue resource definition and exploration drilling on 25 x 25 to 50 x 50m pattern.
- Feasibility studies including mining, geotechnical, metallurgy, marketing and infrastructure.

6 ENVIRONMENTAL AND REHABILITATION

Environmental baseline studies guided by consultants FINN Environmental and are ongoing. Preclearance reports for drilling were completed by FINN Environmental.

Drilling permits have been granted by MRT (WPA_25) with various amendments for additional work during the year.

Drill sites and access roads have been constructed, mostly on previously disturbed tracks in accordance with Mineral Resources Tasmania's exploration code of practice.

Drill holes are being capped on completion.

The Montezuma access track has been maintained during operations with drainage grips and culverts maintained to avoid erosion.

The access road has historical gorse infestation that is being monitored and controlled with seasonal spraying.

7 EXPENDITURE

Direct drilling expenditure for drill holes MZS17 and MZS27 is summarised in Table 3. Additional costs include core preparation, assaying, logging and supervision.

Table 3. Direct Drilling Expenditure MZS17 and MZS27

MZS27	Drilling	1-100m	100-200m	200-300m	Downtime Hrs	Deisel
	Metres	100	100	111.7	20.5	2850
	Rate	$ 135.00	$ 145.00	$ 155.00	$ 400.00	$ 1.70
	Sub total	$ 13,500.00	$ 14,500.00	$ 17,313.50	$ 8,200.00	$ 4,845.00
					Total MZS27	**$ 58,358.50**
MZS17	**Drilling**	**1-100m**	**100-200m**	**200-300m**	**Downtime**	**Deisel**
	Metres	100	100	33.6	37.1	1900
	Rate	$ 135.00	$ 145.00	$ 155.00	$ 400.00	$ 1.70
	Sub total	$ 13,500.00	$ 14,500.00	$ 5,208.00	$ 14,840.00	$ 3,230.00
					Total MZS17	**$ 51,278.00**
					Total	**$ 109,636.50**

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