

EL43/1992  
Melba Flats

## 2023-2024 Annual Report

R Lockley



Tenement Holder: Allegiance Mining Pty Ltd (Voluntary Administrators Appointed,  
Receivers and Managers Appointed)

Tenement Operator: Avebury (Operating) Pty Ltd (Voluntary Administrators Appointed,  
Receivers and Managers Appointed)

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Datum for all listed coordinates: GDA94

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## ABSTRACT

This Annual Report for EL43/1992 Melba Flats, covers the period from 17 April 2023 to 16 April 2024. The tenement is currently held as a combined tenement package by Allegiance Mining Pty Ltd (Voluntary Administrators Appointed, Receivers and Managers Appointed).

The area is prospective for narrow, but in some cases extremely high-grade Ni-Cu-Au-PGE mineralization hosted in and around gabbro dykes and sills. It is theorised that there may be a deeper, undiscovered source of the gabbro and extensive mineralization at depth.

Work completed during the reporting period has included:

- A total of 88 soil samples were collected at the Nevada prospect between 24 Jan to 8 Feb 2024 completed at 20m X 20m spacing utilizing a hand auger. The soil sampling survey was conducted with the dual purpose of replicating historic soil anomalies, and to expand geochemistry knowledge for the region adjacent to drill hole MF116 that was incorporated in the March 2023 DHEM survey. Internal analysis of the samples has been conducted onsite via pXRF, with preliminary results discussed in section 3.1.
- In 2023 Mitre geophysics was engaged to rank, compile, stitch and interpret detailed historic magnetic datasets in the region of Melba Flats (four contiguous Avebury tenements) to produce one dataset at the best possible resolution. The work compiled eight individual aeromagnetic surveys over EL43/1992 with analysis discussed in section 3.2.
- Interpretation of results following the delivery of Mitre Geophysics Report in April 2023 of the DHEM completed on drill hole MF116 is discussed in section 6.3.2. The survey between Nickel Reward and Nevada prospects was considered overall poor quality and inconclusive with further work required.
- Reconnaissance of prospective target area in western EL43/1992 generated from 2022-2023 target review.

An exemption from the conditions of exploration on EL43/1992 was granted on 14 March 2024 incorporating the period 24 January 2024 to 16 April 2024. The exemption was requested due to prolonged administration and subsequent move of Avebury Nickel Mine into Care and Maintenance and reduced department staffing and resources. As a result, many work programs have been suspended pending further budget approvals.

A large proportion of proposed expenditure during 2024 was to be attributed to regional exploration with an airborne gravity (AGG) survey proposed to cover all Avebury tenements as a critical tool to increase lithological understanding and progress target generation. The gravity survey will be conducted at the earliest opportunity following budget approval.

Total expenditure on EL43/1992 for the reporting period was \$40,964.

A one-year extension application for EL43/1992 Melba Flats was submitted 12<sup>th</sup> April 2024.

Expenditure for proposed work programs for the 2024 – 2025 period total \$60,000.

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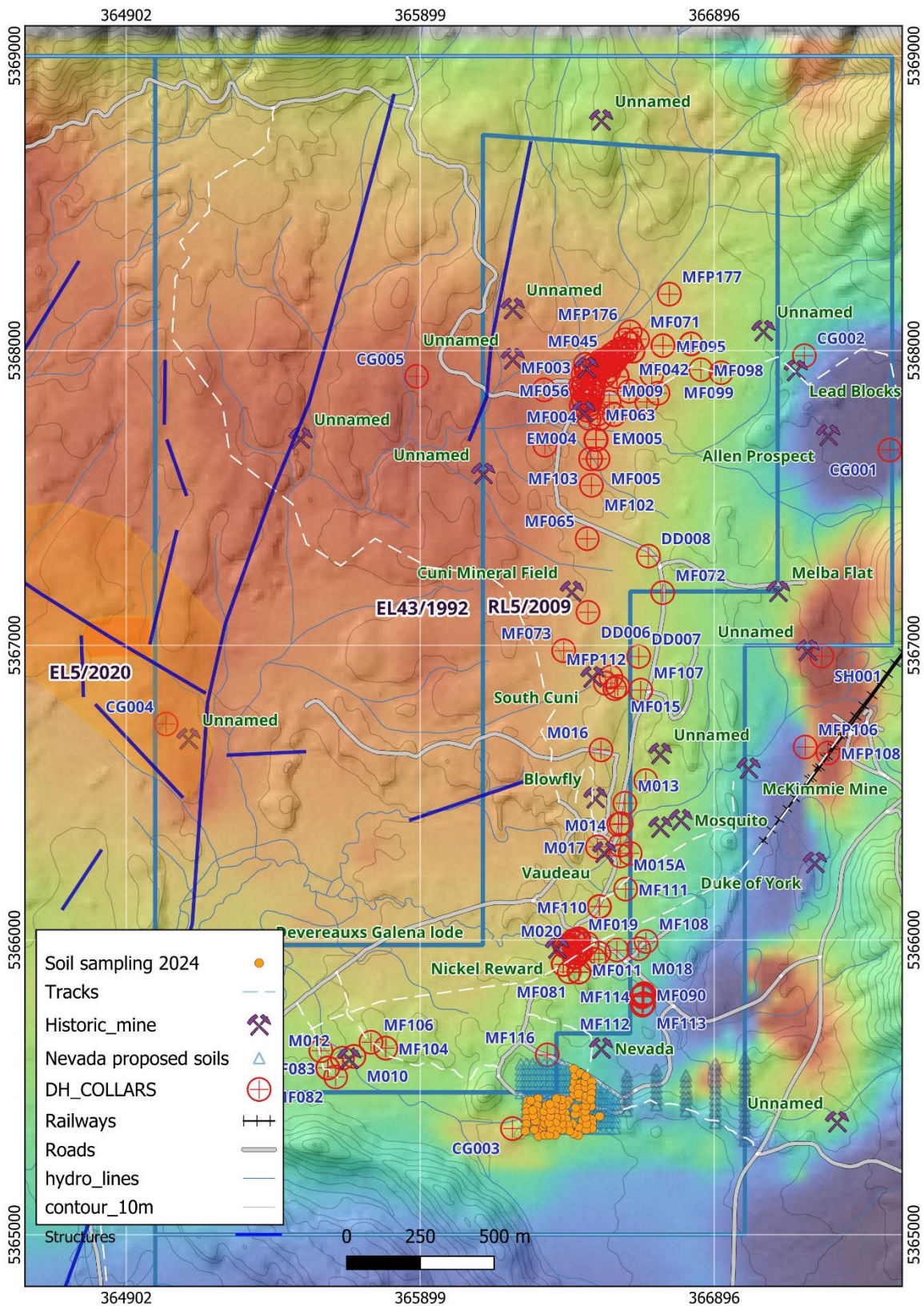
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Appendix B.	Mitre Geophysics MF116 DHEM Results Report.pdf
Appendix C.	EL431992_202404_02_SL_1.xls
Appendix D.	EL431992_202404_03_LithogyCodes.xls
Appendix E.	EL431992_ MFsoils_2024_pXRF.csv
Appendix F.	Summary of Previous Work Prior to Current Tenement

Figure 1. Tenement/ Reporting Period Activities Overview Map



## 1 INTRODUCTION

### 1.1 Exploration Rationale

The primary objective of Mallee Resources (as primary operant of Avebury (Operating) Pty Ltd.'s tenements) is to add to their nickel inventories as part of the Avebury Nickel Mine re-start project. This objective has not changed despite the Mine being placed in Care and Maintenance. A secondary objective, now of increasing importance given the low price of nickel, is to extend the resource to other commodities. The Melba Flats area is prospective for narrow, but in some cases extremely high-grade Ni-Cu-Au-PGE mineralization hosted in and around gabbro dykes and sills. It is theorised that there may be a deeper, undiscovered source of the gabbro and extensive mineralization at depth.

### 1.2 Regional Geology

Rocks in the general area consist of Precambrian - Cambrian sediments with Cambrian basic intrusive overlain by Upper Palaeozoic sediments. Precambrian Quartzites and Shales of the Oonah Quartzite Formation are conformably overlain by rocks of the Crimson Creek Formation (Cambrian shales, quartzites and minor Volcanics). During the Cambrian, basic igneous rocks were intruded, and partly altered to serpentinites by subsequent regional deformation. Silurian and Devonian sediments unconformably overlie the older rocks. Recent alluvium occurs along the river valleys.

Rocks in the area show evidence of structural deformation folding and faulting. Several faults occur in the area, the major one being the Dunkley Fault.

### 1.3 Prospect Geology

The dominant lithology of the area is Crimson Creek turbidite sequence of mudstones, siltstones, sandstones and volcanoclastics of Cambrian age. Strike is generally north-south with a moderate 45° to 50° dip to the east. Further north towards Genet's Winze, the strike trends towards the northeast and the dip becomes more south-easterly, the change relatively abrupt and may be due to faulting. These sediments are intruded by gabbroic sills or dykes genetically associated with the Serpentine Hill and Razorback Ultramafic bodies to the east, and dip approximately 50° to the east. They often exhibit chilled and brecciated margins. To the south near Nickel Reward and Deveraux becoming more complex, where orientation is uncertain.

### 1.4 Prospect Mineralisation

Mineralisation is principally pentlandite-millerite-chalcopyrite-pyrite. Significant cobalt, gold and PGEs are associated with either (or both) nickel and copper sulphides. Late-stage carbonate alteration and veining are accompanied by coarse galena-sphalerite-chalcopyrite occurrences. The body of existing petrologic data suggests the Melba Flats sulphides are hydrothermal replacement deposits, derived from a larger magmatic source (McGilvray, 2012).

Mineralisation largely occurs as disseminated Ni and Cu sulphides within lenses 0.5 to 5m thick situated in the lower levels of some of the gabbro sills, however some of the earlier drilling by CRA was remarkable for some outstanding intercepts of massive sulphide, which later drilling has failed to intercept. Reasons given were drill placement and proximity to, but this would indicate the poddy nature of sulphide mineralisation at Melba Flats. Notably the concentration of sulphides appears to increase towards the west i.e., up dip. Previous mining

and drilling indicate that the lenses may have limited depth extent, however, due to the likelihood the sulphides are hydrothermal in origin, a larger magmatic source at depth has been suggested (Crawford, 2010).

Other reports suggest the mineralisation is associated with gabbro dykes and persistent to greater depths than previously interpreted. It is also mentioned that Au, Pt, Pd and Co accompany and vary in accordance with the Ni-Cu tenor (Wighton, 2010).

## 2 LICENCE

### 2.1 Regional Exploration Licence Package

EL43/1992 is a category 1 Exploration Licence, in a combined tenement package of four Exploration Licences, one Retention Licence, and one Mine Lease, held by Allegiance Mining Pty Ltd, which was acquired by Mallee Resources in 2022. Since September 2023, Allegiance Mining Pty Ltd has been operating under Voluntary Administrators Appointed, Receivers and Managers Appointed. Currently Avebury Nickel Mine is in a period of Care and Maintenance effective since 28 March 2024.

The tenement was originally granted to CRA Exploration in 1992 and was acquired by Allegiance Mining Pty Ltd in 1997. In 2008, Zinifex Ltd. acquired the tenement through the take-over of Allegiance, and later that year merged with Oxiana to become OZ Minerals, who in turn sold the tenement to MMG Limited in 2009. Dundas Mining Pty Ltd acquired the tenement in 2018, with receivers and managers appointed in 2022. Subsequently, Mallee Resources acquired the Avebury Nickel Mine and all associated tenements.

### 2.2 Exploration Licence Summary

Tenement number:	EL43/1992
Tenement name:	MELBA FLATS
Tenement area:	6km <sup>2</sup>
Tenement location:	EL43/1992 covers 6 square kilometres and is located approximately 6km to the northeast of Zeehan. The license area can be accessed by the Murchison Highway located immediately east of the tenement, and by a series of gravel roads and forestry tracks within the tenement (Figure 2).
Tenement land status:	Land usage within the tenement area is classified as Permanent Timber Production Land Zone managed by Sustainable Timber Tasmania. Refer to Figure 3
Reporting period:	17 April 2023 to 16 April 2024
Tenement holder:	Allegiance Mining Pty Ltd (Voluntary Administrators Appointed, Receivers and Managers Appointed)

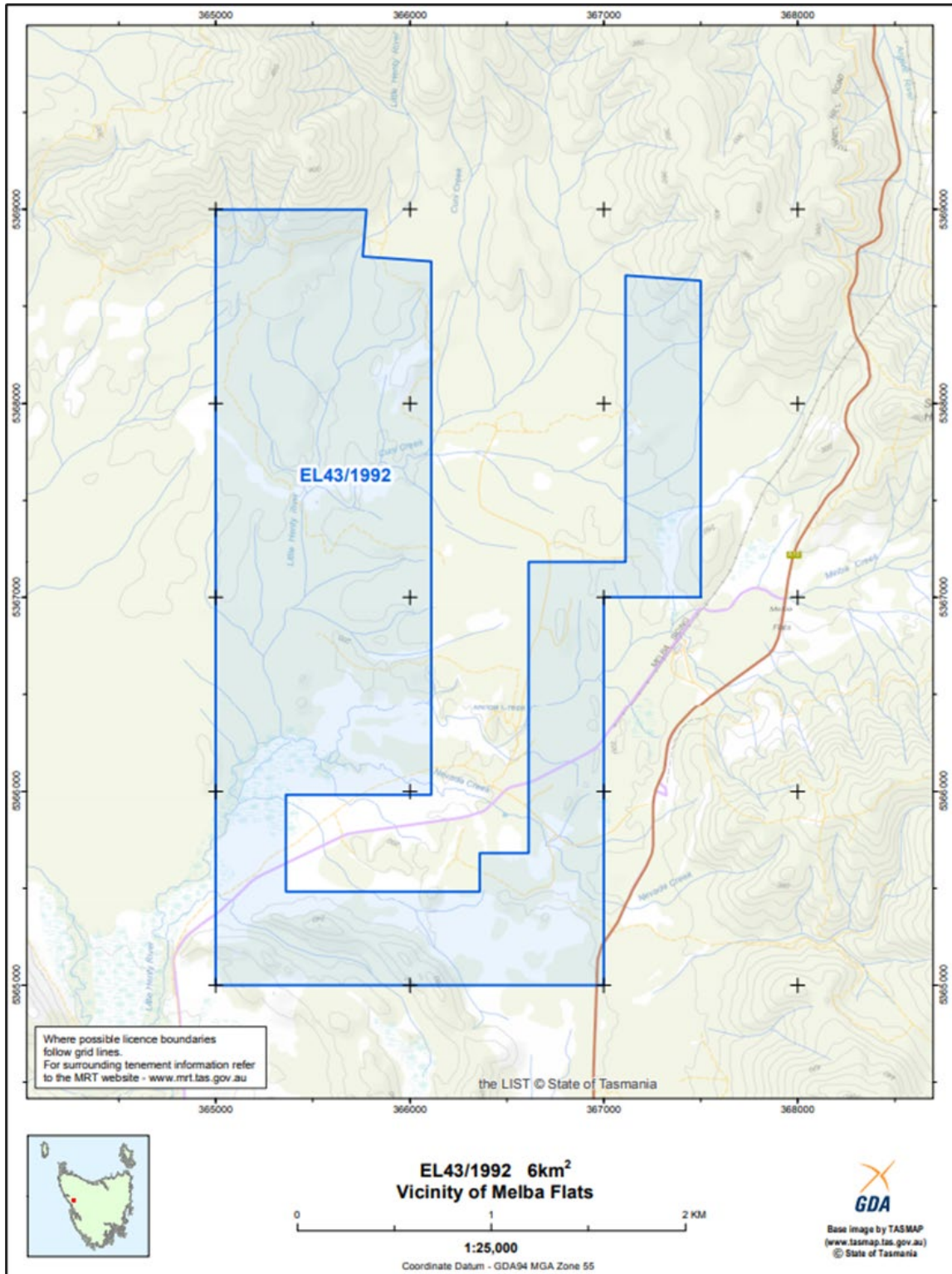


Figure 2. EL 12/2020 Location Plan (MRT issue)

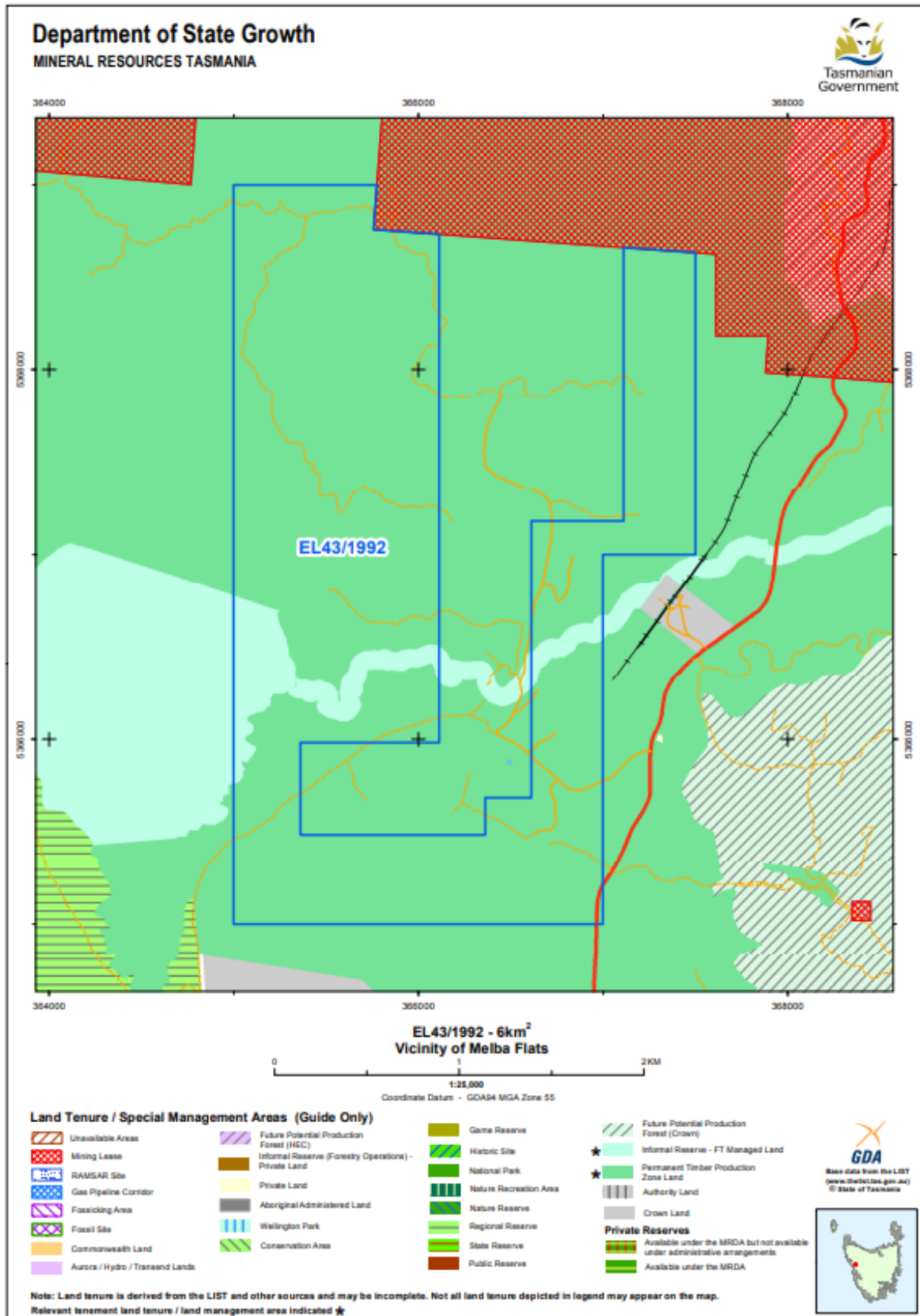


Figure 3. EL 12/2020 Land Tenure Map (MRT issue)

### **3 EXPLORATION EXEMPTIONS**

#### **3.1 Approved**

An exemption from the conditions of exploration on EL43/1992 was granted on 14 March 2024 incorporating the period 24 January 2024 to 16 April 2024. The exemption was requested due to prolonged administration and subsequent move of Avebury Nickel Mine into Care and Maintenance and reduced department staffing and resources since 8 February 2024.

#### **3.2 Applications Pending**

An application for exemption of commitments outlined in the Grant of Extension of Term for Retention Licence No. RL5/2009 was submitted 21 February 2024. The exemption was submitted to cover the period 1 March 2024 through to 1 December 2024. The application remains pending.

### **4 REVIEW OF PREVIOUS WORK**

#### **4.1 Historic Summary**

Complete examinations of the historic work carried out on the tenement area have been outlined in previous reports. Due to the extensiveness of the works completed, a summary table of historic exploration has been provided in Appendix F.

### **5 EXPLORATION COMPLETED DURING REPORTING PERIOD**

#### **5.1 Regional Exploration Activities**

##### **5.1.1 Proposed Gravity Survey**

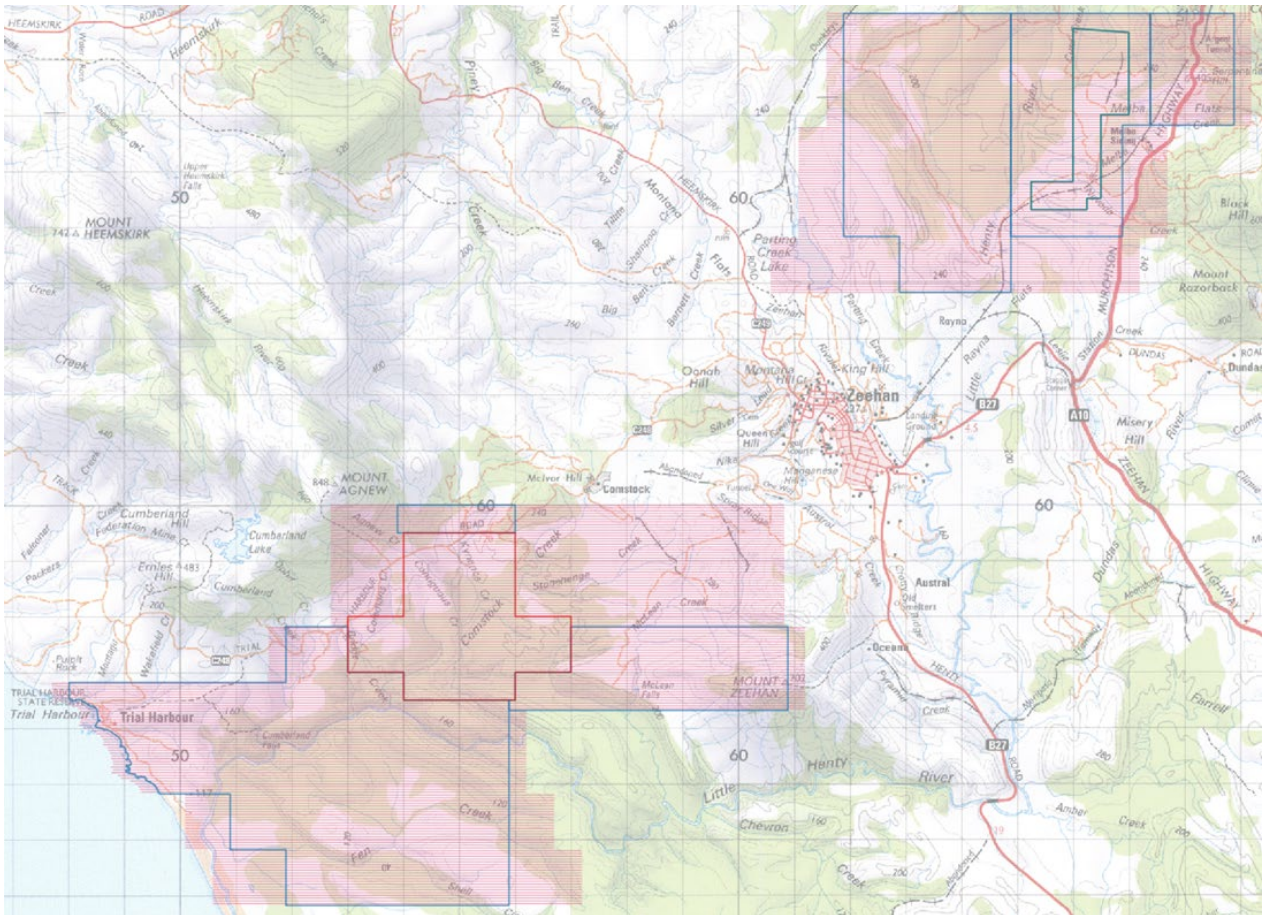
A quote was received from Xcalibur Multiphysics in August 2023, to conduct an airborne gravity (AGG) survey. The survey is planned to utilize the HeliFalcon® AGG with a flight path east – west at 50m line spacing, conducted over 2 areas incorporating all Avebury tenements as a critical tool to increase lithological understanding and progress target generation. The survey areas are shown in Figure 4 with the flight paths highlighted red.

The exploration rationale for the survey and Xcalibur Multiphysics recommendations to utilize the HeliFalcon® being that there is evidence that Avebury mineralisation may have been sourced from a hydrothermal ‘plumbing system’ leaching minerals from sources at depth, and there is potential that there may be significant magmatic Ni-Cu- (PGE) sulphide mineralisation at depth beneath the current Avebury Ni deposit. Falcon AGG will detect the density variation associated with mafic/ultramafic lithologies and intrusives in the area and the proposed 50m line-spacing will have high enough resolution to map key structure (the plumbing system) within the survey area. Gravity (and gradiometry data) need to be measured as close to the source of the gravity anomaly as possible. Using a helicopter platform allows Xcalibur to drape the terrain accurately and provide high quality gravity gradient data in quick time and in any terrain.

In early April 2023, the proposed regional exploration goals and rationale gained support from investors and the board for this program, and the survey was planned for summer 2023 – 2024. In September 2023, Avebury Nickel Mine was moved into voluntary administration and

receivership, following which the prolonged administration and subsequent move of into Care and Maintenance at the beginning of 2024 has resulted in reduced department staffing and resources.

A large proportion of proposed expenditure during 2024 was to be attributed to regional exploration with the airborne gravity (AGG) survey which has currently been suspended pending budget approval. The survey remains as a very high priority work program with the intention to gain budget approval to conduct the works during the calendar year of 2024.



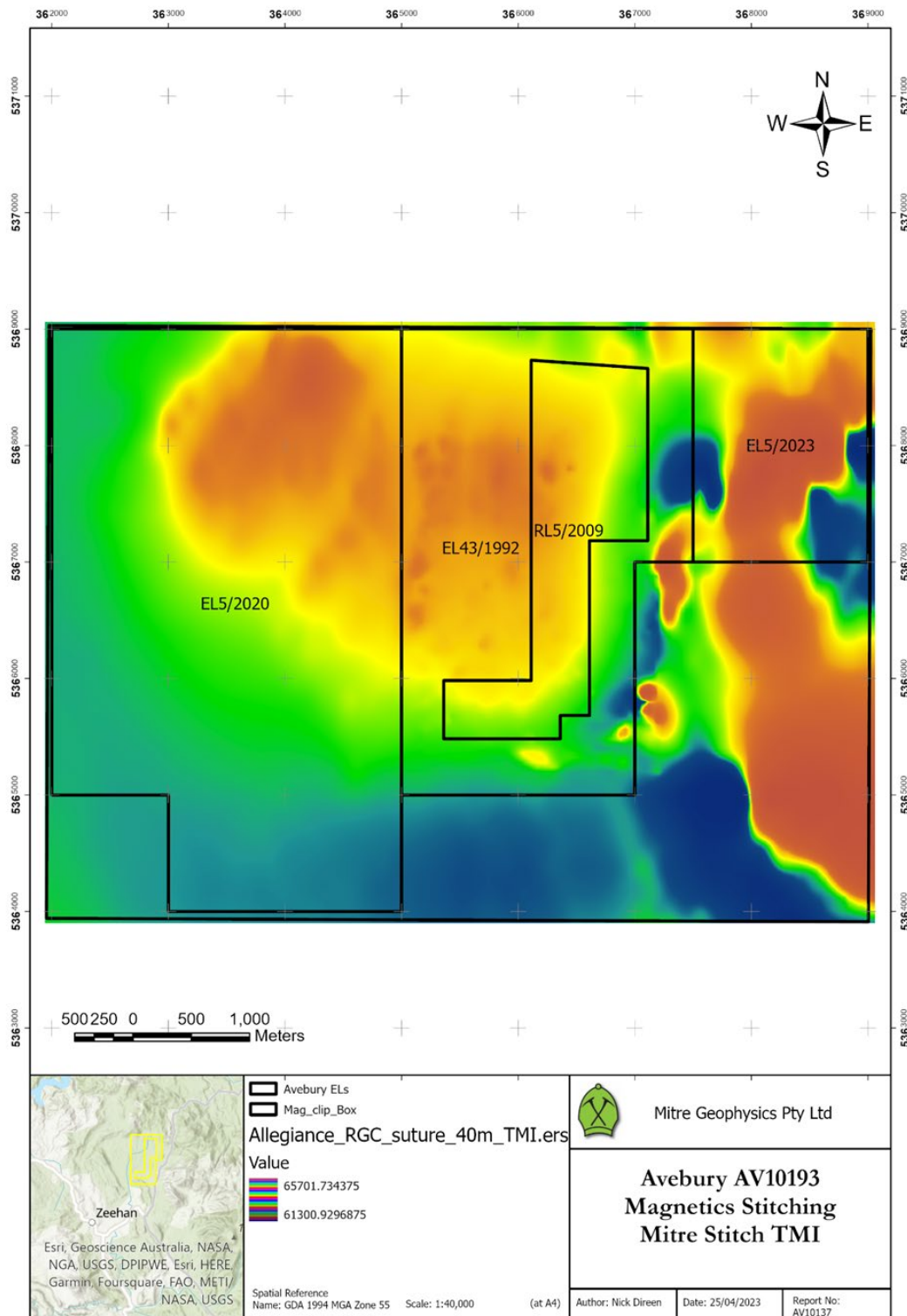
**Figure 4. HeliFalcon AGG flight lines with Avebury Tenements overlain topography.**

### 5.1.2 Compilation of Magnetic Data Melba Flats Region

Mitre Geophysics was engaged to rank, compile, stitch and interpret detailed historic magnetic datasets in the region of Melba Flats (four contiguous Avebury tenements) to produce one dataset at the best possible resolution. Four surveys were evaluated, with the final grid stich composing of the Allegiance Melba Flats and the RGC Zeehan surveys acquired in 2000 and 1989 respectively. Filtering of the grids produced vertical, horizontal and tilt derivatives, ZS filter and analytic signal products. The final ERS grids were provided by Mitre Geophysics in GDA94/MGA55 ERS with a cell size of 40m. Figure 5, shows the total magnetic intensity for the new stitched grid.

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A description of the datasets used and the process of compiling the data is outlined in the summary report provided by Mitre Geophysics in August 2023, digital appendix A and discussed in section 6.3.1.



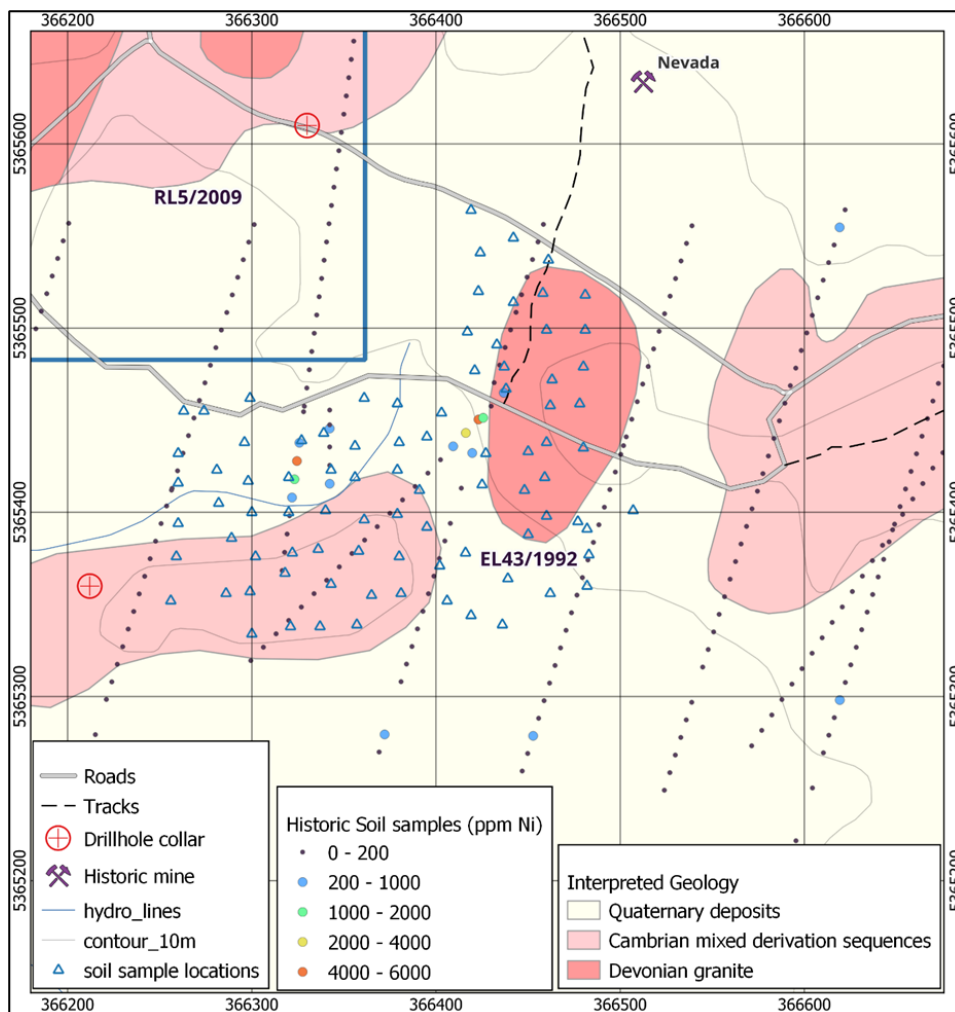
**Figure 5. Mitre Geophysics stitched datasets showing total magnetic intensity.**

## 5.2 Prospect Based Exploration Activities

### 5.2.1 Soil Sampling

Prospectivity analysis of EL43/1992 and RL5/2009 during 2022 – 2023, identified three target areas on the adjoining tenements that would benefit from additional surface geochemical data. The initial exploration programs selected localised areas over three prospects, Nevada, Deveraux and McKimmies for close spaced soil sampling programs, with priority 1 allocated to the Nevada prospect.

A total of 88 soil samples were collected at the Nevada prospect between 24 Jan to 8 Feb 2024 (Figure 6). Sampling was completed on a 20m X 20m spacing (approximately) utilizing a hand auger to C horizon, (between 10 and 90cm below surface). The sampling survey was conducted with the dual purpose of replicating historic soil anomalies (1982 CRA soil survey) and to expand geochemistry knowledge for the region adjacent to drill hole MF116 that was incorporated in the March 2023 DHEM survey, overall considered a near-miss requiring additional data for a more informed geological understanding. The locations and field observations are provided as digital Appendix C EL431992\_202404\_02\_SL\_1, with the lithology codes used for recording listed in Appendix D EL431992\_202404\_03\_LithogyCodes.



**Figure 6. Locations of soil samples collected at the Nevada prospect EL43/1992**

### 5.2.2 Rock Chip Sampling and Historic Working Validations

During the soil sampling program, historic workings were located of what appeared to be a costean or trench, 265m south-west of the known mineral occurrence of Nevada (Figure 7).

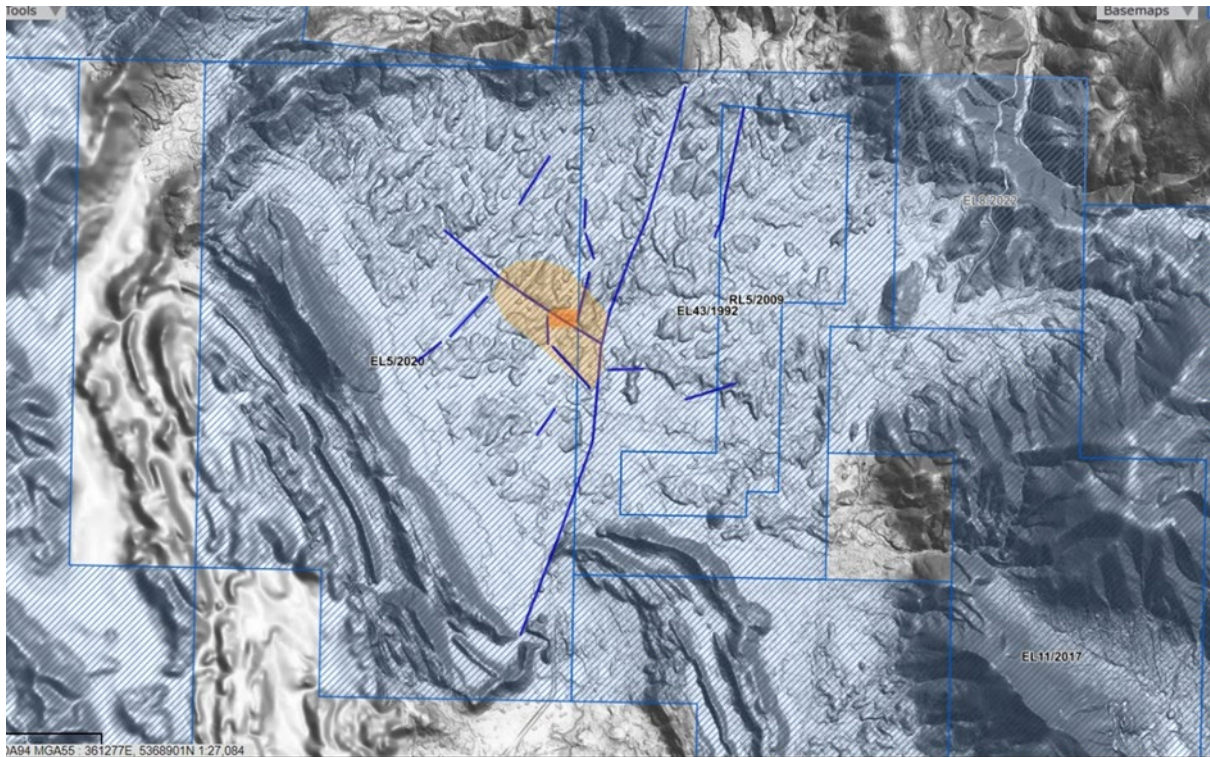
Two rock chip samples were collected from the wall of the trench identified as highly oxidised/gossanous material. The area remains a high priority for follow up reconnaissance and literature review.



*Figure 7. Historic workings – A trench located, possibly of Nevada.*

### 5.2.3 Reconnaissance of New Prospects

As part of a regional Avebury tenement desktop targeting project during 2022 – 2023, a new potential prospect was identified on the western boundary of EL43/1992 and trending north-west into EL5/2020. This prospectivity is based on structures interpreted from topographic imagery, and aerial magnetic data. Reconnaissance for access into this area was undertaken, with several track locations confirmed prior to vegetation preventing further progress (Figure 9). Ongoing work in this area is currently suspended pending budget approval. Figure 8 below shows the area of interest, overlain on hill shade grey scale stitched magnetic imagery, with the interpreted structures shown.



**Figure 8. Interpreted structures on stitched magnetics, with tracks traversed.**



**Figure 9. Typical vegetation of the area – Dense, head high bauera common.**

## 5.2.4 Down Hole Electromagnetics

A DHEM survey was conducted on drillhole MF116 (located on RL5/2009) with Mitre Geophysics consulting for the design and interpretation of the results. The survey was conducted between March 24-25, over a 300m X 300m loop around MF116, and spanned the southeast corner of RL5/2009 and adjacent EL43/1992. The location of the loop and drill hole MF116 with tenement border is shown in Figure 10.

Interpreted by Mitre Geophysics, the findings had not been returned in time for previous reporting period with a geophysics report provided 17/4/23. Review of the Mitre geophysics interpretation was conducted during this reporting period with findings and conclusion discussed in section 6.3.1 and attached as digital appendix B. A summary was also provided in the November 2023 RL5/2009 Annual Technical Report.

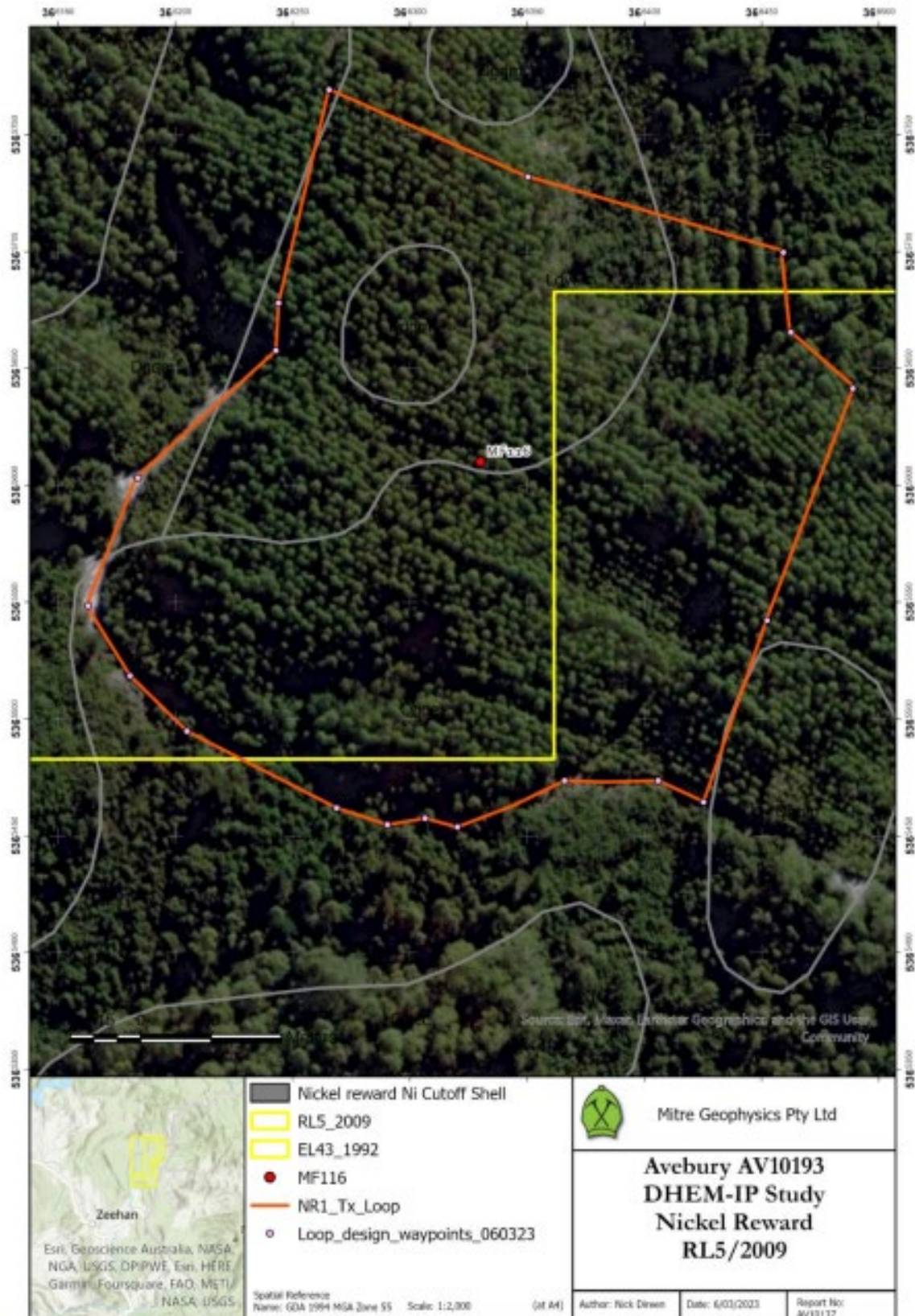
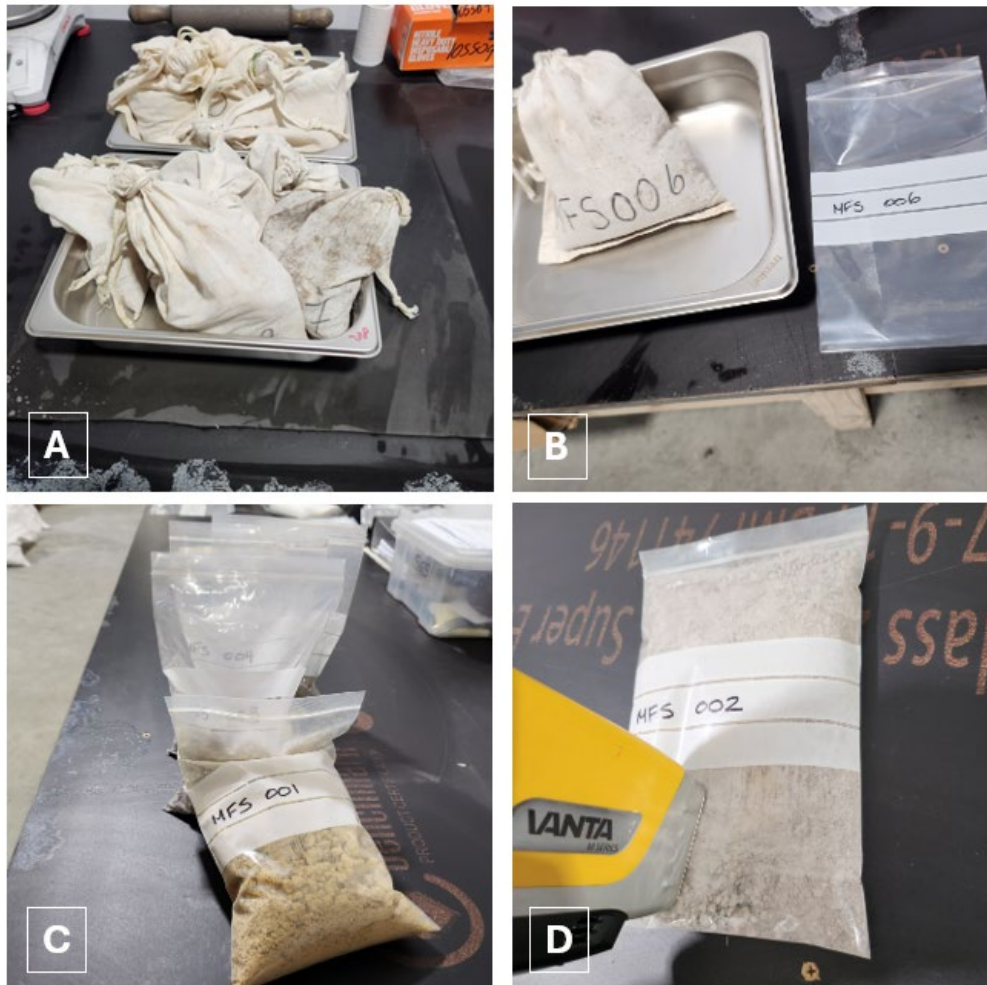


Figure 10. 300 x300m loop – existing tracks, grey – geology boundaries (Dundas), yellow boundary depicting RL5/2009 to the north-west, EL43/1992 to the south-east.

## 6 DISCUSSION OF RESULTS

### 6.1 Surface Geochemistry

88 Soil samples had preliminary analysis completed with a handheld pXRF on site at the Avebury Metallurgy preparation laboratory. The samples were each removed from their calico bags and transferred into a clear, labelled plastic bag. Any large fragments were crushed to the best of ability. Each of the sample bags had a minimum of 3 readings taken at random positions through the plastic to prevent contamination. See Figure 11 for a summary of sampling methodology.



**Figure 11. Methodology used for in house analysis of Melba Flats soil samples.**

A: Count and sort calico bags, B: Sample transferred to labelled plastic bag, C: Clay particles rolled/crushed to promote best homogeneity, D: pXRF readings on each bag through plastic to limit contamination.

Overall results were underwhelming with samples unable to fulfil the project purpose of replicating historic values. Due to the inability to completely homogenise the sample, and that readings were taken on a handheld pXRF, results are a guide only. It is strongly encouraged that once a budget is approved, that the samples are prepped and analysed through a certified laboratory. It is considered until this is completed that these soil results are overall

inconclusive at this stage. An excerpt of the pXRF data has been provided as digital Appendix E EL431992\_MFsoils\_2024\_pXRF.csv.

### 6.2 Desktop Targeting and Reconnaissance of New Prospects

Due to the Avebury Nickel Mine currently in care and maintenance with heavily limited exploration resources, additional reconnaissance is suspended pending budget approval. No results are available for discussion currently.

### 6.3 Geophysics

#### 6.3.1 Compilation of Magnetic Data

In total, Mitre Geophysics produced 32 datasets for Avebury to peruse. Stitching the 2000 25m Allegiance grid into a clipped version of the 1989 40m RGC grid gave the most usable results, and Mitre created various filters of this. Detailed explanation of the compilation of this data was included in the EL5/2020 2022 – 2023 report.

The scope for this exploration project was for the aeromagnetic dataset to be interrogated in conjunction with the new gravity gradiometry of the same area, to define exploration targets. Pending budget approval and flying of the AGG survey (discussed section 5.1.1), current results are deemed inconclusive, with the project considered ongoing.

#### 6.3.2 Down Hole Electromagnetics

The DHEM survey conducted on drill hole MF116, March 2023, was located at the Nickel Reward prospect on the southeast corner of RL5/2009, adjacent to EL43/1992. The survey loop conducted over 300 x 300m incorporated existing tracks and part track cut over a section of both tenements. Sectional views showing MF116, and existing Nickel Reward mineralisation is shown Figure 13. The DHEM interpretation provided by Mitre Geophysics has previously been included in the RL52009, Nov 2023 Annual Technical Report, and is supplied as digital Appendix B.

In summary, initial interrogation of the data found:

- The DHEM from MF116 shows no anomalies indicative of a confined basement conductor. The estimate range of investigation/sterilisation is, conservatively, 100m, but for a much larger or NiS zone it could be up to 200m.
- The logged carbonaceous shales do not appear to be conductive.
- The weak sulphides (po+py) intersected between 270m and 310m appear to generate a strong magnetic field and thus may be traceable on an appropriately filtered version of the aerial magnetics that removes the gradient effect of the serpentinite sheet to the east (Figure 12).
- There is no conductive overburden, so the depth of investigation of EM method in general should be particularly good.

- The EM profiles do not decay to zero. This may be a calibration error with the DHEM equipment of the half-space response, but it may also be an exceptionally large, highly conductive zone far away.
- DHEM profile does show a temporal anomaly (EM fields not decaying to zero but overall elevated background signal). This is considered to be due more to a calibration error on digiAtlantis probe, than a very large and distant highly conductive zone far beyond end of hole.

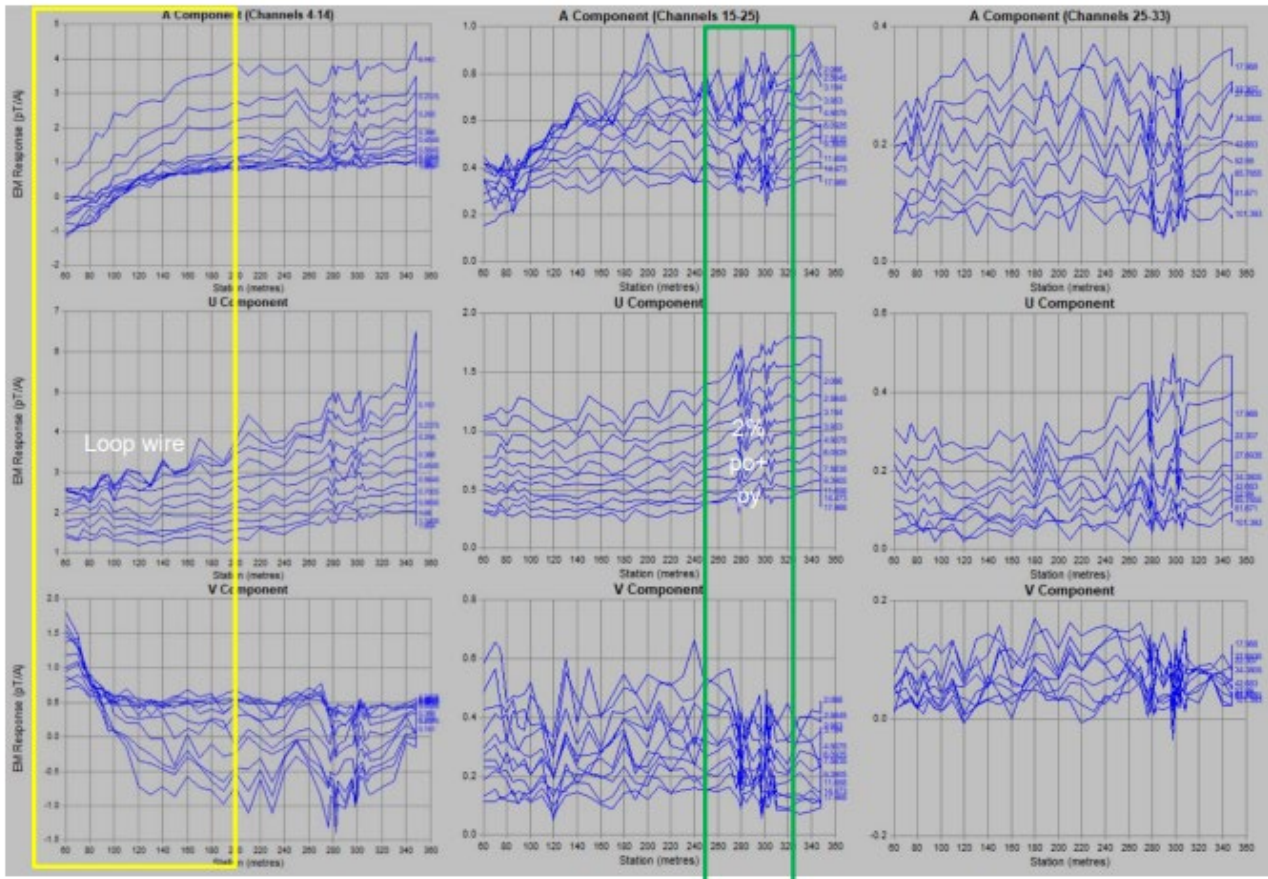


Figure 12. DHEM Profiles MF116 - Mitre Geophysics report 2023

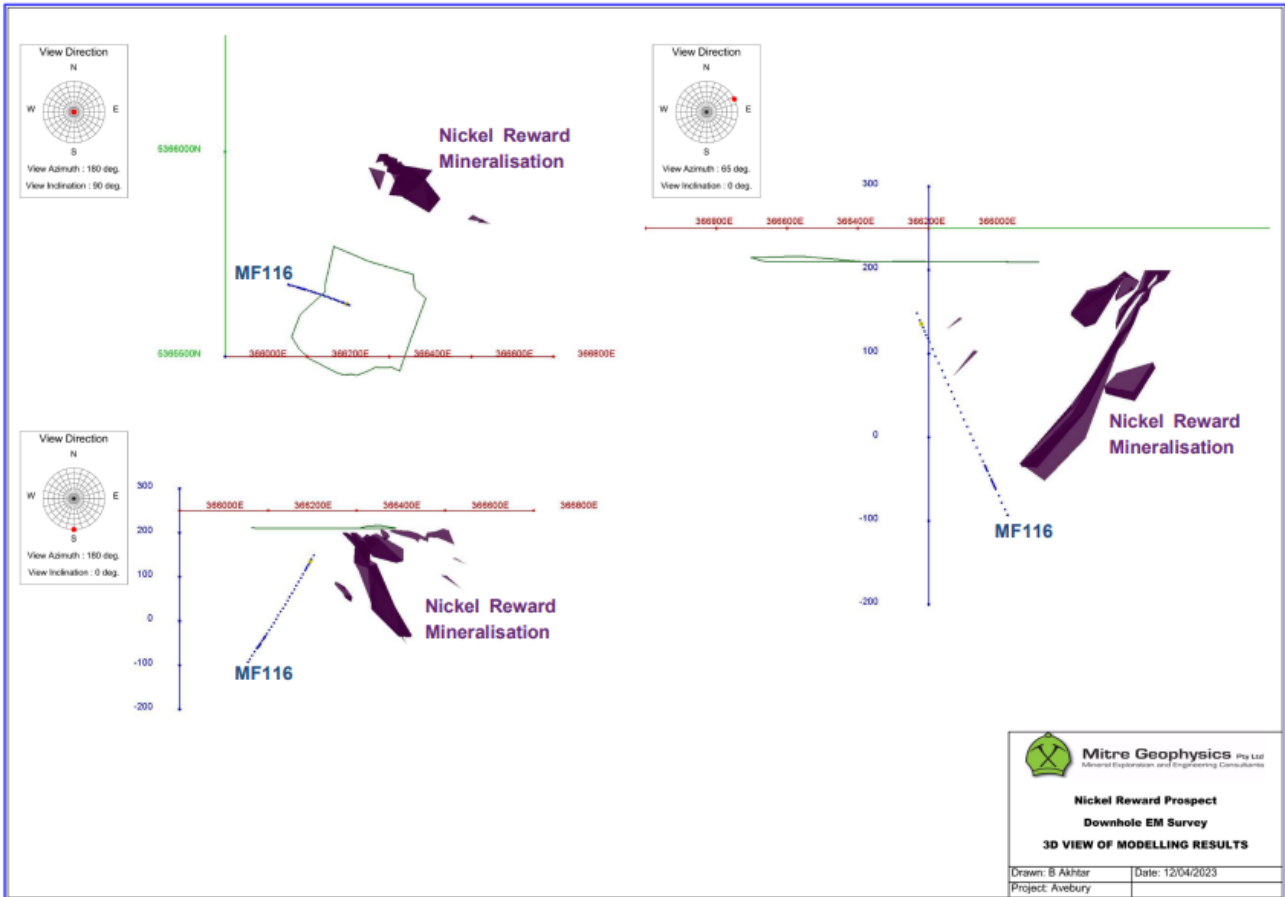


Figure 13. Sectional view showing MF116 and existing Nickel Reward mineralisation.

## **7 CONCLUSION**

### **7.1 Surface Geochemistry**

Project scope incomplete with no conclusions available at time of reporting.

### **7.2 Additional Targeting**

Project scope incomplete with no conclusions available at time of reporting.

### **7.3 Compilation of Magnetic Data**

Project scope incomplete with no conclusions available at time of reporting.

### **7.4 Down Hole Electromagnetics**

Scope of the project was to further identify and refine targets on both EL43/1922 and RL5/2009. As reported in the November RL5/2009 annual report, the data captured was overall of poor quality and would require extensive additional processing to provide an optimal dataset for interrogation. Based on this broad conclusion, there is a hesitation to downgrade/eliminate any proposed exploration projects based purely from this survey.

## **8 RECOMMENDATIONS FUTURE WORK PROGRAMS**

### **8.1 Proposed Work Program details 2024 - 2025**

An exemption from the conditions of exploration on EL43/1992 was granted on 14 March 2024 incorporating the period 24 January 2024 to 16 April 2024. The exemption was requested due to prolonged administration and subsequent move of Avebury Nickel Mine into Care and Maintenance and reduced department staffing and resources since 8 February 2024. As a result, many work programs have been suspended pending further budget approvals.

A one-year extension application for EL43/1992 Melba Flats was submitted 12<sup>th</sup> April 2024. Recommendations for the following year exploration includes:

- Regional aerial gravity survey of Avebury tenements utilizing Xcalibur Multiphysics HeliFalcon®
- Continued interpretation of recently reprocessed and stitched regional aeromagnetic data. The scope of which requires completion of AGG for a combined dataset.
- Further Reconnaissance mapping, rock chip sampling and soil sampling of the potential new prospect identified on the western boundary of EL43/1992 and trending north-west into EL5/2020.
- Soil sampling programs at McKimmies and South Devereaux prospects. Further soil and rock chip sampling of the Nevada, including follow up reconnaissance and literature review of historic workings.
- Continued Interpretation of recent DHEM between Nickel Reward and Nevada prospects.

An expenditure of \$60,000 is proposed for the following tenement year.

## 9 ENVIRONMENTAL MANAGEMENT

### 9.1 Recommendations

A drilling program of the Scout Camp SP anomalies on EL43/1992 was completed during 2021-2022 with four drill holes completed from two drill pads. Rehabilitation of the access track and two drill pads occurred in April 2022, and were visited periodically and monitored for weeds. Progress photos following rehabilitation are shown in Figure 14 and Figure 15.

Gorse was found at two locations on the tenement and removed. These sites were flagged for further monitoring and followed up in March 2024.



**Figure 14. MF114, MF115 drill pad and access with 2<sup>nd</sup> year rehabilitation regrowth.**



**Figure 15. MF112 and MF113 pad with 2<sup>nd</sup> year rehabilitation regrowth.**

## 10 EXPENDITURE

### 10.1 Exploration Licence Expenditure

Expenditure on EL43/1992 during the reporting period from 17 April 2023 to 16 April 2024 is detailed in Table 1 below.

**Table 1. EL43/1992 Expenditure by MRT category for the reporting period**

<b>EL43/1992 2023 - 2024 Expenditure</b>		
<b>MRT Category</b>	<b>Description</b>	<b>Total</b>
<b>1.1</b>	Geology	\$33,907
<b>1.2</b>	Geochemistry	
<b>1.3</b>	Geophysics	\$1,100
<b>1.4</b>	Remote sensing	
<b>2.1</b>	Drilling - Gridding	
<b>2.2</b>	Drilling	
<b>3</b>	Land access	
<b>4</b>	Rehabilitation	\$235
<b>5</b>	FS costs	
<b>6</b>	Other costs	\$1,722
<b>7</b>	Administration/overheads	\$4,000
		<b>\$40,964</b>

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## 12 APPENDICES

- Appendix A. Mitre Geophysics Magnetics Processing Summary Report Nickel Reward Area.PDF (Uploaded to Department of State Growth File Upload).
- Appendix B. Mitre Geophysics MF116 DHEM Results Report.PDF (Uploaded to Department of State Growth File Upload).
- Appendix C. EL431992\_202404\_02\_SL\_1.xls (Uploaded to Department of State Growth File Upload).
- Appendix D. EL431992\_202404\_03\_LithogyCodes.xls (Uploaded to Department of State Growth File Upload).
- Appendix E. EL431992\_MFsoils\_2024\_pXRF.csv (Uploaded to Department of State Growth File Upload).
- Appendix F. Summary of Previous Work Prior to Current Tenement

**Table 2. Historic Exploration Summary**

Year	Company	Tenement	Activities
1893			Discovery
1894			Nickel Reward Workings
1912	Dundas-Cuni Mining Company		North Cuni Workings begun
	Copper-Nickel Prospecting Syndicate		Vaudeau workings begun
1914	Dundas-Cuni Mining Company		North Cuni Workings closed
	Copper-Nickel Prospecting Syndicate		South Cuni Workings closed
	Copper-Nickel Prospecting Syndicate		Blowfly workings closed
1926	Department of Mines and Explosives		Mosquito workings closed
1929			Vaudeau workings closed
1930	Copper-Nickel Mining Company		Investigating prospectivity
	Government Department		Genet's working opened
1931	Copper-Nickel Mining Company		North Cuni workings re-opened
1932	Copper-Nickel Mining Company		Drilling
1933	Government Department		Drilling Recommendations
			Genet's workings closed
			North Cuni works closed
1938	Australian Nickel N.L.		Summary Report
1940	Gold Mines of Australia		Work Proposal
1948	Lead Nickel Mining Company		Economic Evaluation
1951	Bureau of Mineral Resources		Vaudeau workings re-opened
1952	Government Department		Drilling
1953	Eagle Metals N.L.		Vaudeau workings closed
1955(?)	Montana Silver-Lead Company N.L.		Geophysical Surveys
1956	Government Department		Summary Report
1956 (?)	Montana Silver-Lead Company N.L.		Nickel revival
1957	Bureau of Mineral Resources		Drilling
	Government Department		Flotation Tests
	Government Department		Drilling Report
	Montana Silver-Lead Company N.L.		Flotation Tests
1957 (?)	Montana Silver-Lead Company N.L.		Geophysical Surveys
			Geological & Thin Section Report
			Core Logging Report
			Core Logging Report
			Core Logging Report
			Drilling
			Ore Investigation

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1958 (?)	Rio Tinto		Drilling Review
1960			Magnetometer Survey
			Aerial mag
			Soil Sampling
1965	EZ	EL2/1965	Magnetometer Survey
			Magnetic Susceptibility Tests
			Drilling
1966			Drilling
1967			Magnetometer Survey
			Drilling
1968			Magnetometer Survey
			Geochemical Surveys
1969			Petrology & Mineralogy
1970			IP-Resistivity Survey
1971			Detailed Geological Mapping
			Geochemical Soil Sampling
			Turam Electromagnetic Surveys
			Magnetometer Surveys
1972			Diamond Drilling
			Geochemical Survey
1973	Soil Survey		
	Magnetometer Survey		
1975		SPL127	Review of Cuni Deposits
1977	CSR	EL15/1976	Mineralogical/Geochemical Appraisal
			Drainage Sampling
1978			Mineralogical Examination and Petrographic survey
1979			Bedrock sampling (Auger)
			Soil Sampling
			Drainage Sampling
			Diamond Drilling
1980			Petrology
			Soil Sampling (Auger)
1982			Magnetics
			VLF-EM
			Infill aeromagnetics
			Soil Sampling
1983			Drainage Sampling
			Magnetics
			VLF-EM
			DIGHEM
1984			Reduction of Licence area
			Ground Magnetic Survey
			CSAMT
	VLF-EM Resistivity		
1985	Geochemistry		
	Fixed Wing Magnetic Survey		
	Ground Magnetic Survey		
	Diamond Drilling		
	Soil Sampling		
	IP Survey		
1986	Licence renewed		
1987	Relinquished Licence		

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			Minor thin section work
1988	Tas Dep Mines	SR1987 No 216	Gravity Survey
1993	CRAE	EL43/1992	Fixed Wing Airborne TEM (QUESTEM) Survey
			Review of Tasmanian Mines Department Gravity Data
			Soil Sampling
Rock Chip Sampling			
Petrology			
1994			Diamond Drilling
			Petrology
			Whole Rock Geochem (Dolerite)
			Rock Chip Sampling
			Soil and Bedrock sampling (Auger)
			Bedrock sampling (Wacker)
			Ground PROTEM Survey
1995			Ground Magnetic Survey
			IP-Resistivity Survey
			Heliborne magnetic and Radiometric Survey
	Drilling review		
	Diamond Drilling		
1997	Rio Tinto		Soil Sampling
			Honours Project (Phil Greenhill)
			Heliborne magnetic Survey
1998	MRT		Application for partial Licence surrender
1999			Joint Venture agreement with Allegiance
2000	Allegiance	EL43/1992	Archaeological Survey
			Diamond Drilling
			Downhole Geophysics
			Geophysics
			Geophysics Interpretation Report
			Petrology
			Aerial Photography
Photogrammetric Plans			
2001			Diamond Drilling
			Gradient Array IP Survey
			Grid Establishment
2002			Diamond Drilling
			Trenching
			Sampling
2003			
2004			
2005	Diamond Drilling		
	Resource Estimation		
	Petrology		
2006	Drill Hole Collar Surveys		
	Gradient Array IP Survey		
			Evaluation of Geophysical Data

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			Data Review
2007			Diamond Drilling
2007			Mining Lease Application
2008		EL43/1992, ML2/2007	Diamond Drilling
			Trenching
			Aerial Photography
2009	OZ		Diamond Drilling
	MMG	RL5/2009	Geochemical Investigation
2010		EL43/1992	3D Magnetic data Inversion
	CRH	EL20/2002	Soil Survey ("Melba Flats" South), Airborne EM
2011	GHD (MMG)	EL43/1992, RL5/2009	Botanical survey and fauna habitat assessment
		RL5/2009	Aerial LIDAR
2012		EL43/1992, RL5/2009	Aerial LIDAR
	MMG	EL43/1992	Minor geochemical work
2014			Aerial LIDAR
		EL43/1992, RL5/2009	Photogrammetric Survey
2015			Masters Project Completion