

# Quarterly Activities Report

FOR THE PERIOD ENDING 30 SEPTEMBER 2023

## Key Highlights:

- Spodumene identified in pegmatites on NickelSearch's Carlingup Project.
- Technical collaboration with Allkem Limited (ASX:**AKE**), owner and operator of the Mt Cattlin lithium mine, 10km from the Carlingup Nickel Project.
- \$1.2 million raised post Quarter-end to focus on advancing lithium strategy at Carlingup.
- Mapping and soil sampling program due to commence on four priority targets in November 2023.

NickelSearch Limited (ASX:**NIS**) ("**NickelSearch**" or "**the Company**") is pleased to present its Quarterly Report for the period 1 July 2023 to 30 September 2023 (the "**Quarter**").

## Exploration Activities

### Lithium Potential Confirmed<sup>1,2</sup>

During the Quarter, NickelSearch was pleased to announce a technical collaboration\* with Allkem Limited ("**Allkem**"), in respect to the lithium prospectivity at the Company's Carlingup Project near Ravensthorpe in Western Australia.

Allkem are the owners and operators of the Mt Cattlin lithium mine, located just 10km west of the Carlingup Project (*Figure 1*). The Mt Cattlin lithium mine operations produced 131kt of spodumene concentrate in FY2023, announced a 4-5 year mine life extension via open-pit methods and commenced studies for an underground mining option.

The technical collaboration involves Allkem reviewing all lithium-related data for Carlingup and providing further advice on target generation and prioritisation. NickelSearch's lithium prospectivity was identified through an independent geochemical review by the Company, which studied results of ultra-fine soil sampling<sup>3</sup> conducted over parts of the Carlingup Trend, in addition to analysis of soil sampling completed by previous owners (*Figure 2*).

\*Note that the arrangement is not yet at the level of a formal lithium joint venture and there is no guarantee that the technical collaboration will lead to a formal agreement in the future. NickelSearch will provide updates to the market if the nature of the technical collaboration changes in the future, as per continuous reporting obligations.

<sup>1</sup> ASX Announcement 12 September 2023 – Allkem Technical Collaboration on Lithium Potential

<sup>2</sup> ASX Announcement 26 September 2023 – Spodumene in Pegmatites Identified on Carlingup Project

<sup>3</sup> ASX Announcement 5 April 2023 – Lithium and VHMS Potential Identified at Carlingup

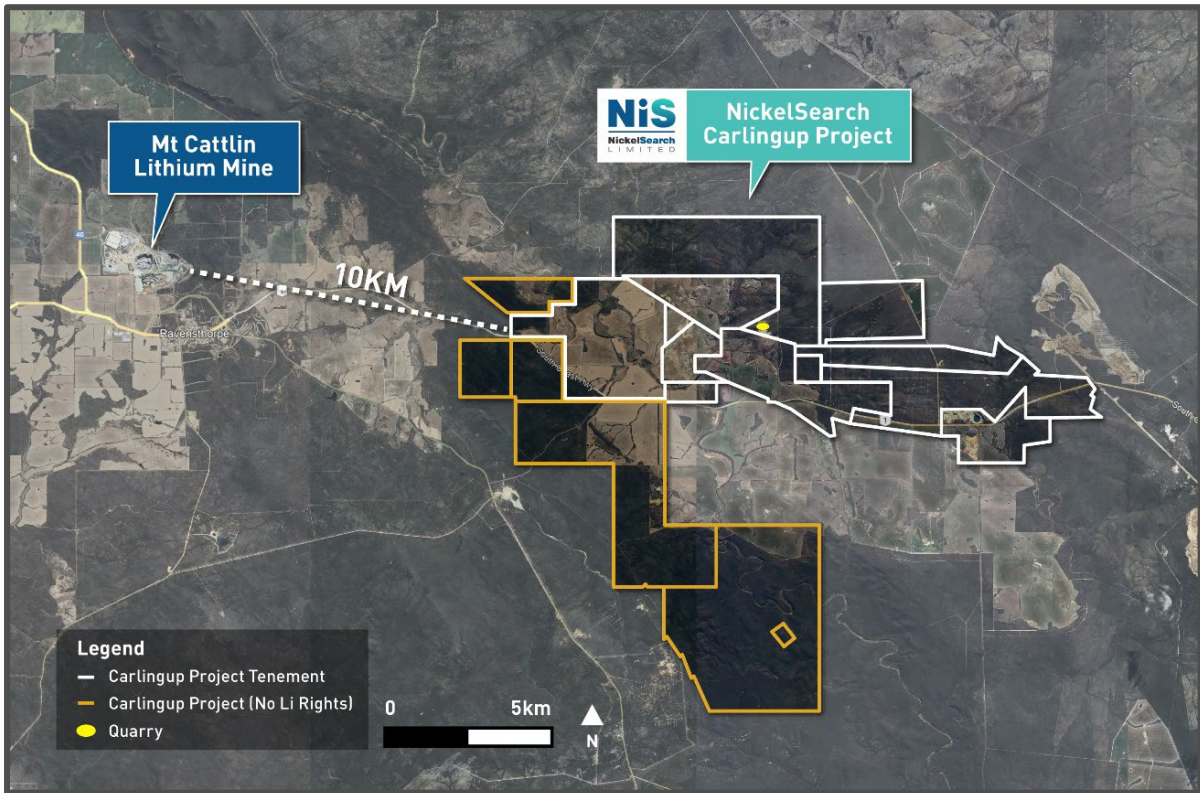


Figure 1: Map of Ravensthorpe area showing Allkem's Mt Cattlin and NIS' Carlingup.

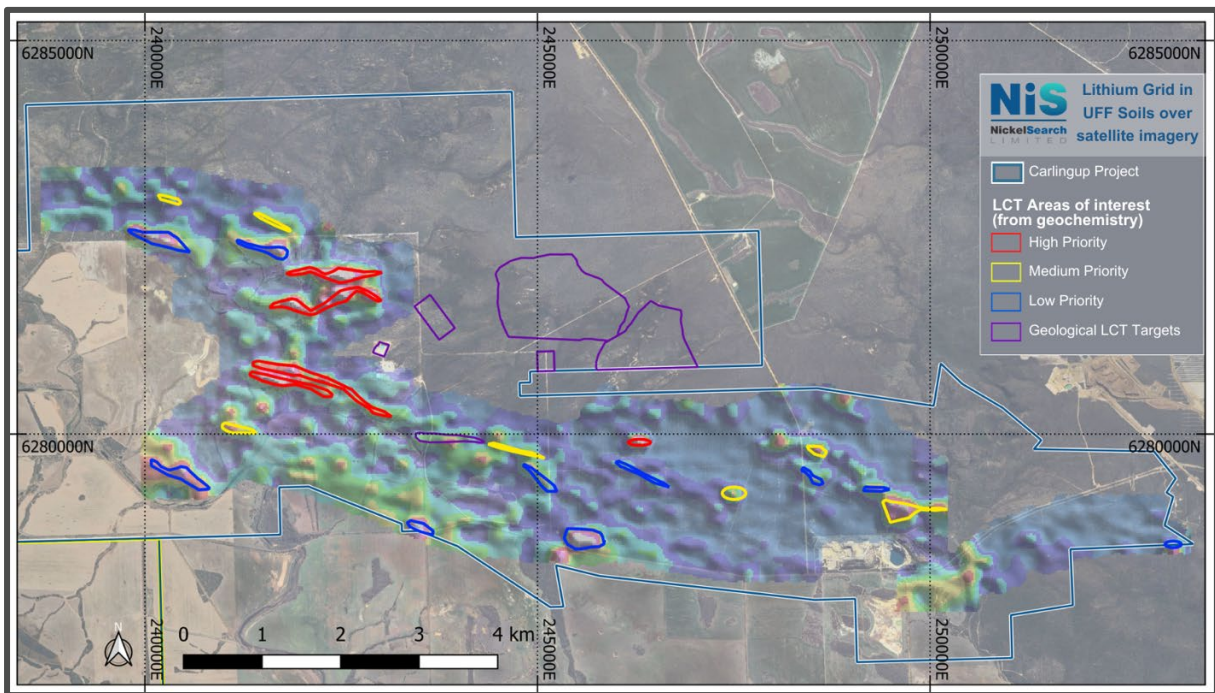
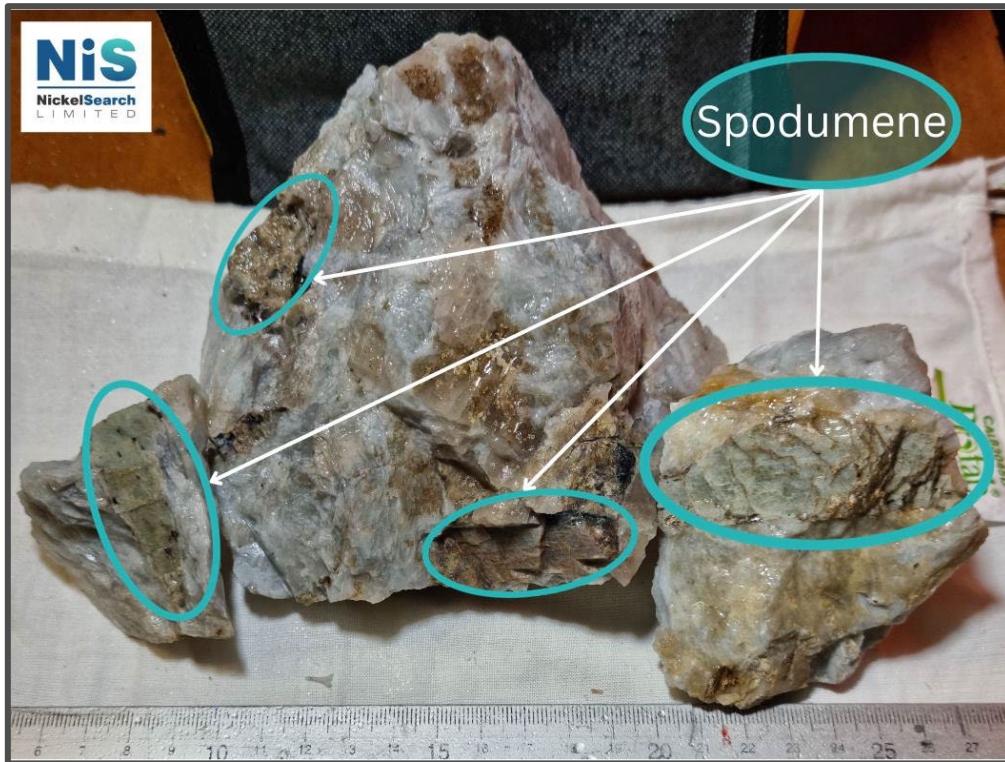


Figure 2: Priority lithium target areas (derived from coincident Li, Cs, Nb, Be anomalous soils) shown in red, overlying a heatmap image of Lithium results. Drilling in area denoted by black dotted outline is subject to the final consent and compensation agreement being executed.



In September 2023, NickelSearch announced that spodumene was identified in pegmatites, identified during an inspection and grab sampling program conducted at prospective target sites. The NickelSearch team was accompanied by Allkem geologists at the Carlingup quarry site.

Grab samples were collected at the quarry from a boulder containing multiple visually identified spodumene bearing pegmatites (*Figure 3*).



*Figure 3: Grab samples from pegmatite containing coarse spodumene. Ruler graduations in centimetres.*

The rock chips collected during the sampling program were assayed, with the results (announced subsequent to Quarter end<sup>4</sup>) confirming the presence of high-grade lithium within the spodumene-bearing pegmatites (including NSR04389: **5.19% Li<sub>2</sub>O** and NSR04388: **4.99% Li<sub>2</sub>O**). In consultation with Allkem’s Geological team, NickelSearch has commenced a broad programme of geological mapping, further rock chip sampling, soil sampling and stream sediment sampling across the Company’s lithium tenements.

#### **DHEM Surveys & Diamond Drilling at Sexton<sup>5,6</sup>**

During the period the Company also conducted exploration activities at its prospective nickel sulphide targets at Sexton and B1.

Downhole electromagnetic (“**DHEM**”) surveys from two diamond drillholes (23NRD028 and 23NDD030) at the Sexton Nickel Prospect confirmed the extent of previously modelled plates. The conductance of the models ranged up to 30,000 Siemens and extended to the survey limits both up and down plunge.

<sup>4</sup> ASX Announcement 16 October 2023 – Assays over 5% Lithium Oxide (Li<sub>2</sub>O) at Carlingup

<sup>5</sup> ASX Announcement 7 August 2023 – Massive Sulphide Mineralisation Extends to DHEM Survey Limits at Sexton

<sup>6</sup> ASX Announcement 28 August 2023 – Massive Nickel Sulphide Mineralisation Confirmed at Sexton

These results, along with a previous two holes surveyed with DHEM, defined three conductive horizons that dip shallowly to the south-east (*Figure 4*), and also demonstrated the mineralisation corridor to be roughly 80m wide.

Assay results from two diamond drillholes at Sexton were returned in August 2023, confirming the nickel, copper and platinum group element content of the massive nickel sulphides (*Figure 4*). Significant results included:

- 23NRD028: **1m at 1.26% Ni, 0.19% Cu** from 132.5m, and
- 23NDD030: **1m at 0.76% Ni, 0.23% Cu** from 148.5m.

NickelSearch interprets Sexton to be a remobilisation of mineralisation, likely from a primary nickel sulphide source, so these drill results combined with geophysics will be used as a vectoring tool for follow-up drilling targeting such main source, when market conditions improve.

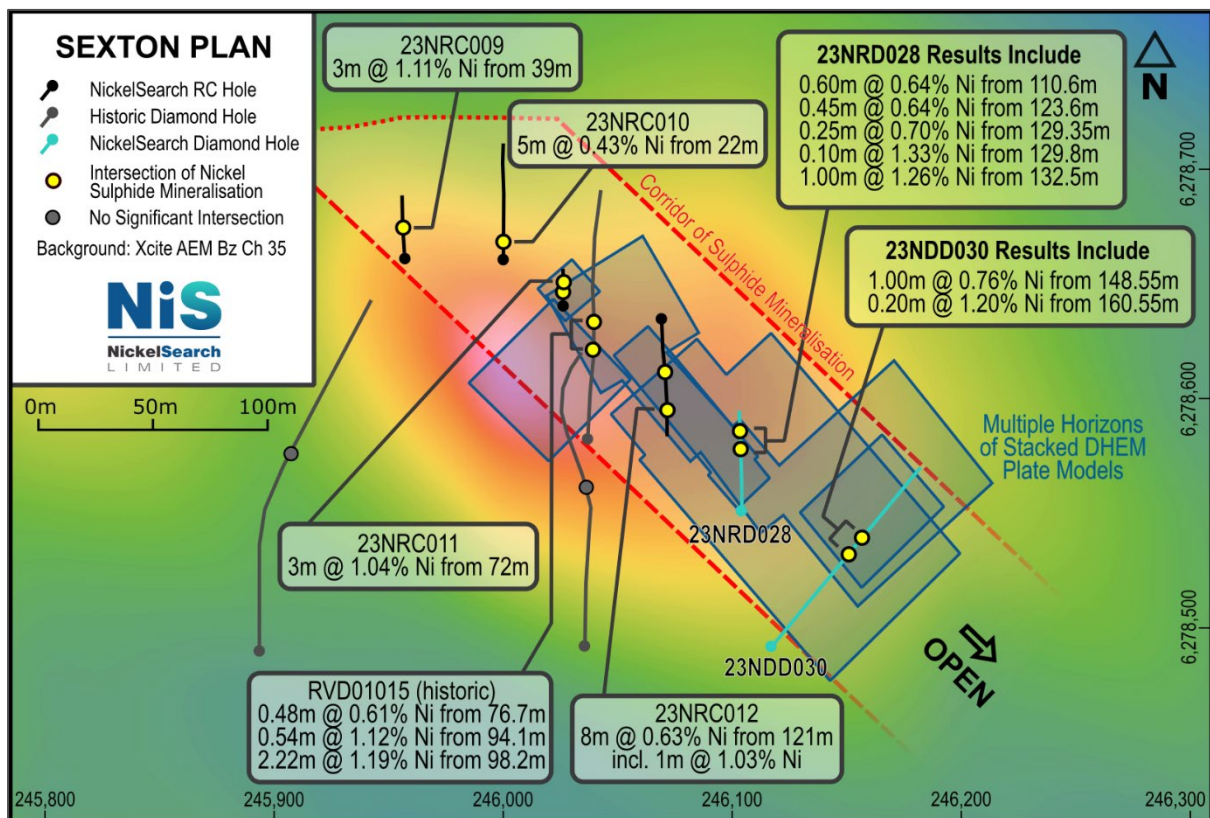


Figure 4: Plan of the Sexton area, with assay results showing nickel mineralisation.

### Drilling Results from B1<sup>7</sup>

Results were returned from drilling conducted earlier in the year, with all holes intersecting nickel sulphides. 1,108m of reverse circulation (“RC”) drilling effectively extended mineralisation, with assays including:

- 23NRC021: **7m at 0.73% Ni** from 109m
  - Including **3m at 1.05% Ni** from 109m
- 23NRC019: **7m at 0.67% Ni** from 48m
  - Including **3m at 0.97% Ni** from 52m, and
- 23NRC022: **7m at 0.51% Ni** from 68m

<sup>7</sup> ASX Announcement 27 July 2023 – NickelSearch Nickel Sulphides Continue Down Plunge at B1

- Including **3m at 0.60% Ni** from 68m

In July 2023, NickelSearch completed one diamond hole (23NDD031) for 342.9m. The hole intersected a 40m interval of mineralised ultramafic from 285.2m depth, which appeared to be the main cumulate body of this sequence. Although the mineralisation at the B1 prospect is relatively narrow, the B1 mineralised horizon continues for hundreds of metres, particularly to the southeast where weak mineralisation has been observed on the contact along strike. These factors indicate that the fertile flow is extensive, and the location of further shoots (or channels) along this horizon where sulphides can accumulate is possible. This mineralised horizon will be the subject of further exploration planning that may include further geochemical and geophysical work, and drilling, when market conditions improve.

## Corporate

### Securities Information

As at 30 September 2023, the Company had approximately 139.4M Ordinary fully paid shares on issue and 87.9M unquoted options granted at various vesting and expiration dates.

### Financial

As at 30 September 2023, NickelSearch held approximately \$0.89 million in cash, which was bolstered post Quarter end by a placement raising cash of \$1.2 million (before costs) (**Placement**) The Placement is conducted in two Tranches, with Tranche 1 raising \$0.94 million completed, and the remaining Tranche 2 raising of \$0.26 million, shares and all attaching options, to be concluded conditional upon shareholder approval being sought at the Company's Annual General Meeting on 28 November 2023.

The Company's cash movements during the Quarter can be found in the Company's Appendix 5B. Additional ASX Listing Rule disclosure matters are also detailed in Appendix 1 attached.

**This announcement has been approved for release by the Board of NickelSearch Limited.**

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## Competent Persons Statement

### Mineral Resource Estimate

The information contained within this announcement on the Nickel Sulphide Resources at Carlingup is extracted from the ASX announcement titled "Significant Upgrade of Nickel Sulphide Indicated Resources" released 30 March 2023, which is available to view on [www.nickelsearch.com](http://www.nickelsearch.com). The Company 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 Resource estimates in the

market announcement 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.

### Exploration and Targeting

The information in this report is extracted from the ASX Announcements listed in the table below, which are also available on the Company's website at [www.nickelsearch.com](http://www.nickelsearch.com) and the ASX website [www.asx.com](http://www.asx.com) under the code NIS.

26 October 2023	Lithium Mapping and Rock Chip Sampling Program at Carlingup
16 October 2023	Assays over 5% Lithium Oxide (Li <sub>2</sub> O) at Carlingup
26 September 2023	Spodumene in Pegmatites Identified on Carlingup Project
26 September 2023	Historical Drilling Results
12 September 2023	Allkem Technical Collaboration on Lithium Potential
28 August 2023	Massive Nickel Sulphide Mineralisation Confirmed at Sexton
7 August 2023	Massive Sulphide Mineralisation Extends to DHEM Survey Limit
27 July 2023	NickelSearch Nickel Sulphides Continue Down Plunge at B1

The Company 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 results and estimates in the 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.

## APPENDIX 1 – ADDITIONAL ASX LISTING RULE DISCLOSURES

**ASX Listing Rule 5.3.1**, the Company advises that payments for exploration, evaluation and development during the Quarter totalled approximately \$998,000. Material developments, changes in exploration activities and details of exploration activities undertaken during the Quarter are described above and in this section.

**ASX Listing Rule 5.3.2**, the Company confirms there were no mining production and development activities undertaken during the Quarter.

**ASX Listing Rule 5.3.5**, the Company confirms payment to Directors of NickelSearch during the Quarter totalled approximately \$121,000. The payments were in respect of Directors salaries, fees and superannuation.

**ASX Listing Rule 5.3.4**, the Company provides below its actual expenditure on the individual items in the 2 year "Use of Funds" statement in the IPO prospectus (dated 23 August 2021) (Prospectus) since the date of its admission to the ASX's Official List (being 18 October 2021) against the estimated expenditure on those items and an explanation of any material differences.



The table below includes the impact of funds received from the Entitlement Offer completed in June 2023 which was not contemplated at the time of the initial listing.

Use of Funds	Prospectus estimate (2 years) (i) \$ million	Actual use from 18 October 2021 to Quarter end \$ million	Variance (ii) \$ million
Nickel Sulphide Exploration	1.88	4.58	(2.70)
Nickel Sulphide Drilling	4.14	2.47	1.67
Technical & Metallurgical Studies	1.31	1.05	0.26
Transaction Costs	0.21	0.05	0.16
Expenses of Offers and Listing Costs	1.08	1.24	(0.16)
Working Capital	2.18	2.55	(0.37)
Proceeds from subsequent Entitlement Offer (net of costs)	-	(2.20)	2.20
<b>TOTAL</b>	<b>10.80</b>	<b>9.74</b>	<b>1.06</b>

**Notes:**

- (i) Use of Funds table as detailed in the Prospectus.
- (ii) Explanation of Material Variances:
  - a. The Use of Funds detailed in the Prospectus provided estimated expenditure for items in the above table, over the two-year period. NickelSearch was admitted to the ASX Official List on 18 October 2021. The expenditure for the period 18 October 2021 to 30 September 2023 represents 23.4 months post listing.
  - b. During the Quarter, NickelSearch continued to advance exploration at the wholly owned Carlingup Project. Activities undertaken by the Company are subject to continuous review and refinement as new data and information is returned from the most recent exploration programs. Certain exploration programs have been accelerated during the Quarter while other proposed work has been deferred due to either the emergence of new information or depending upon the timing of approvals, availability of drill rigs and other resources.
  - c. In the period subsequent to listing on the ASX, NickelSearch has completed the vast majority of exploration and drilling plans outlined in the Prospectus, in addition to the valuable evaluation and targeting programmes such as soil geochemical surveys, EM, FLEM and DHEM surveys that have guided the Company's drilling campaigns.
  - d. Metallurgical studies and other processing test work is ongoing with results being evaluated to determine the next steps going forwards.
  - e. Transaction costs only include fees paid to the Lead Manager for the pre-IPO seed capital raising.
  - f. Included in the "Expenses of Offers and Listing Costs" line item are costs incurred and paid prior to the date of admission to the Official List (being 18 October 2021). These were necessarily incurred to facilitate the preparation of the Prospectus, the due diligence process and ASX quotation.
  - g. The working capital variance results from the undrawn allowance for corporate operating costs and includes items such as: wages, office rent, consultant fees, audit and accounting fees, investor relations and marketing fees, amongst other administrative costs and other corporate overheads.
  - h. During the June 2023 Quarter, the Company successfully completed a capital raising of \$2.4 million (before costs) to fund further exploration at its wholly owned Carlingup project. Funds received from the capital raising have been utilised to fund exploration activities and that expenditure is included in the table above.

## Tenement Summary

The following information is provided pursuant to ASX Listing Rule 5.3.3 for the Quarter.

Tenement	Location	Nature of Interest	Interest at beginning of Quarter	Interest at end of the Quarter
<b>RAV1, RAV4, RAV4 West (i)</b>				
M74/82	Carlingup Project (WA)	Granted	100%	100%
M74/84	Carlingup Project (WA)	Granted	100%	100%
M74/106	Carlingup Project (WA)	Granted	100%	100%
<b>RAV8 (i)</b>				
M74/13	Carlingup Project (WA)	Granted	100%	100%
<b>John Ellis (ii)</b>				
M74/107	Carlingup Project (WA)	Granted	100%	100%
M74/85	Carlingup Project (WA)	Granted	100%	100%
M74/104	Carlingup Project (WA)	Granted	100%	100%
<b>Other (i)</b>				
E74/657	Carlingup Project (WA)	Granted	100%	100%
E74/675	Carlingup Project (WA)	Granted	100%	100%
E74/685	Carlingup Project (WA)	Granted	100%	100%
E74/777	Carlingup Project (WA)	Granted	100%	100%
<b>Mineral Rights Tenements (iii)</b>				
M74/83	Carlingup Project (WA)	Granted	See note(iii) below	0%
E74/602	Carlingup Project (WA)	Granted	See note(iii) below	0%
E74/638	Carlingup Project (WA)	Granted	See note(iii) below	0%
E74/656	Carlingup Project (WA)	Granted	See note(iii) below	0%
E74/683	Carlingup Project (WA)	Granted	See note(iii) below	0%

### Notes to Tenement Summary Schedule

- (i) The RAV1, RAV4, RAV4 West, RAV8 and Other tenements are all held by the Company's wholly owned subsidiary – AML (Ravensthorpe) Pty Ltd. The Mineral Rights (see note (iii) below) are also being exercised by AML (Ravensthorpe) Pty Ltd.
- (ii) The John Ellis tenement package is all held by the Company's wholly owned subsidiary – Phanerozoic Energy Pty Ltd.
- (iii) The Company (via its wholly owned subsidiary, AML (Ravensthorpe) Pty Ltd) secured an exclusive sub licence from MM8 to explore for and mine nickel, cobalt and platinum element group metals (being platinum, palladium, ruthenium, rhodium, osmium, and iridium) on all these tenements pursuant to a Mineral Rights Deed. Details of the Mineral Rights Deed are disclosed in the Prospectus.
- (iv) The Company did not enter into any farm-in or farm-out agreements during the Quarter.
- (v) The Company did not dispose of any tenements during the Quarter.