

29 April 2024

# Quarterly Activities and Cashflow Report for the Period Ended 31 March 2024

Base metals explorer Zinc of Ireland NL (ASX: ZMI) ("**ZMI**" or the "**Company**") presents its Quarterly Activities and Cashflow report for the Quarter ended 31 March 2024.

## Highlights During Quarter:

#### Rathdowney Trend, Ireland (Zn-Pb)

#### Q1 Highlights:

- The Company commenced deep overburden ("DOB") geochemical sampling at certain PLs forming part of its Littleton PL Block late in the Quarter with the programme approximately 10% complete at the time of reporting.
- At the Freshford Block, five (5) PLs were surrendered in February as part of the Company's ongoing technical review of its Rathdowney Trend assets. In addition, a further eighteen (of twenty-three) and four (of eight) PLs were identified at the Portarlington and Littleton Blocks respectively, for final technical analyses prior to likely surrender in Q2.
- The Freshford PL surrenders along with those recommended at Portarlington and Littleton are in line with the Company's long term Rathdowney Trend GIS data compilation, target-generation, desktop studies and fieldwork activities. These remain ongoing. The Company is now poised to refine and focus its tenure within the Rathdowney Trend, based on data driven technical analysis.
- As a consequence, the Company expects its PL optimisation to result in a reduction of approximately twenty-seven (27) PLs of lesser prospectivity from the seventy- three (73) held at the end of 2023.

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#### Cascade Project, Western Australia (REE)

Zinc of Ireland NL (ASX: ZMI) entered into a binding tenement sale agreement (**Agreement**) with Syndicate Minerals Pty Ltd (ACN 124 140 889) (**Seller**) and Gneiss Results (ABN 15 721 611 229) (**Gneiss**) during Q2, 2023 to acquire the legal and beneficial ownership of two (2) granted exploration licences, being E74/690 and E74/691, which, together cover an area of 183km<sup>2</sup> located 70km northwest of Esperance, Western Australia (refer ZMI announcement dated 26 May 2023).

The Company subsequently engaged WA based geological consultants Sahara Operations Pty Ltd ("Sahara") to provide exploration services in support of the Cascade Project.

## Q1 Highlights:

- Sahara continued to engagement with local and traditional landowners and other key stakeholders with respect to access during the Quarter.
- A Heritage Survey was a finalised with Esperance Tjaltjraak Native Title Aboriginal Corporation (ETNTAC) based on a Desktop Review of ZMI's proposed auger drilling sites.
- Sahara submitted two Programme of Works (PoW) applications to DMIRs with one granted during the Quarter. DMIRs has asked Sahara for additional landowner access information for one of the PoWs and that PoW was resubmitted but remained pending at the end of the period.
- Sahara has previously worked with the Company to design a geochemical power-auger programme suitable for drill testing two large REE anomalies which have been identified by previous explorers. Sahara are now expected to implement the power-auger programme early in Q2 as soon as the outstanding PoW is granted by DMIRs.

#### Superior LCT Project (SLCTP), Manitoba, Canada (Li).

ZMI has continued to assess and accumulate LCT pegmatite exploration opportunities in Manitoba, Canada during the Quarter. The Company made an announcement regarding its staking activities in the province on March 6<sup>th</sup> (refer Company announcement dated March 6<sup>th</sup> www.zincofireland.com.au).

## Q1 Highlights:

- The Superior LCT Project (SLCTP) is focussed on eight separate areas within the Archean aged western portion of the Lake Superior Craton in eastern MB, an area of known pegmatite endowment that has received unprecedented attention from exploration companies in recent months, including a subsidiary of Fortescue Metals Group (ASX:FMG).
- At the end of Q1 the Company has been formally granted eight MELs with a further two pending along with seven granted Mining Claims (MCs). This includes four MELs that were applied for and granted during the current Quarter comprised of single MELs at both Hunting Lake and Utik Lakes and two contiguous MELs at Logan and Robinson Lakes. ZMI through its 100% owned subsidiary Avignon Resources Pty Ltd (ARPL) had previously (in Q4 2023), applied for:
  - Seven Mining Claims (MCs) covering 1792 Ha, 40km west of the Tanco LCT (lithium, caesium, tantalum) Mine, which has been in operation for over 50 years<sup>1</sup>.
     All seven claims were granted during Q4.
  - Six Mineral Exploration Licences (MELs), four of which were granted with two pending at the end of Q4.
- Apex Geoscience Ltd (AGL) were commissioned during the Quarter to assist ARPL with GIS data compilation and satellite assisted target generation which is aimed at identifying outcropping pegmatites as well as delineating structural and lithological regimes suitable to their emplacement. This remained ongoing at the end of the Q1. AGL were also asked to assist ARPL with First Nation's engagement and with field exploration which is anticipated to commence during the 2024 field season via the deployment of geology teams to conduct ground truthing, mapping and sampling of Priority 1 targets in order to delineate targets for drill testing.
- The newly staked project areas are largely unexplored in terms of lithium exploration but occur within close proximity of operating mines (Tanco<sup>1</sup>), along strike from known LCT occurrences in western Ontario, (e.g. projects within the so-called *Electric Avenue*)

or adjacent to known LCT resources, as is the case at God's Lake where Vision Lithium (TSX:VLI) have previously referred to an estimated historical (non-compliant informal *'resource'*) of 9.4MT @ 1.2% Li<sub>2</sub>O<sup>2</sup>.

- First Nations engagement has commenced with ARPL reaching out to all relevant First Nations partners via Letters of Introduction, emails and phone calls.
- 1. https://tancomine.com
- 2. (refer TSX:VLI announcement dated 18 February 2021, <u>www.visionlithium.com</u>).

#### Rathdowney Project - Ireland

ZMI (via Raptor Resources Ltd and Centenary Resources Ltd – 100% Group owned companies) controls 68 Prospecting Licenses (PL's) covering an area of 2,350km<sup>2</sup> containing 130km of prospective strike on the Rathdowney Trend.

The Rathdowney Trend hosts the previously mined Lisheen and Galmoy Zn-Pb deposits as well as the Company's flagship Kildare deposit and a number of other prospects. An updated Inferred Mineral Resource Estimate for the Kildare Project was reported by the Company to the ASX on 8 September 2020 with resources standing at: 11.3 Mt @ 9.0% Zn+Pb (7.8% Zn and 1.2% Pb) at a 5.0% Zn equivalent cut off.

The Company has for several years been in control of arguably one of the most prospective exploration land packages for high grade, large tonnage, Zn/Pb deposits in the world (Figure 1) and following on from a comprehensive data compilation programme is now enacting an optimization of its holdings by shedding less geologically prospective areas in H1 2024

- The Company total tenement holdings in Ireland reduced from 73 to 68 PL's during the Quarter as five licences making up the Freshford Block, were surrendered.
- Similarly, twenty-two additional PLs were identified for likely surrender in early Q2, subject to a final technical review (refer Figure 1).
- The Littleton Block currently consists of eight licences. It is envisaged that the company will reduce this by half to a total of four licences covering the region immediately south of the Lisheen deposit and the area around the structurally controlled Littleton ABL inlier.

- A programme of deep overburden (DOB) geochemical sampling commenced at the end of the Quarter at Littleton with forty-nine samples collected from an expected total of 439 sites within those four PLs earmarked for retention by ZMI (refer to Figures 2 and 3).
- In addition, a strategic review of the Portarlington Block of PLs was also carried out during the Quarter. The Block currently consists of twenty-three PLs. This review identified five PLs that ZMI intend to renew with the remaining eighteen slated for surrender in Q2, subject to a final technical review. The five PLs most likely to be retained cover a region along the structurally controlled Portarlington Trough which is located between the Kilmeague and Woodbrook Fault Zones. The Company has planned a 532 sample DOB geochemical sampling programme during Q1 for execution in Q2 with field crews expected to switch to Portarlington as soon as the Littleton sampling is complete (refer Figure 4).

#### Next Steps Rathdowney Trend Ireland

The PL review process has allowed ZMI to shed/identify a number of less geologically prospective PLs allowing greater focus of resources on technically superior targets.

In accordance with this approach, geochemical sampling for the Littleton and Portarlington PL blocks has commenced with the resultant sample collection programmes expected to continue until June 2024. A total of approximately 971 samples (Figures 3 and 4) are expected to be collected across both PL blocks with 49 samples having been collected at Littleton at the end of Q1.

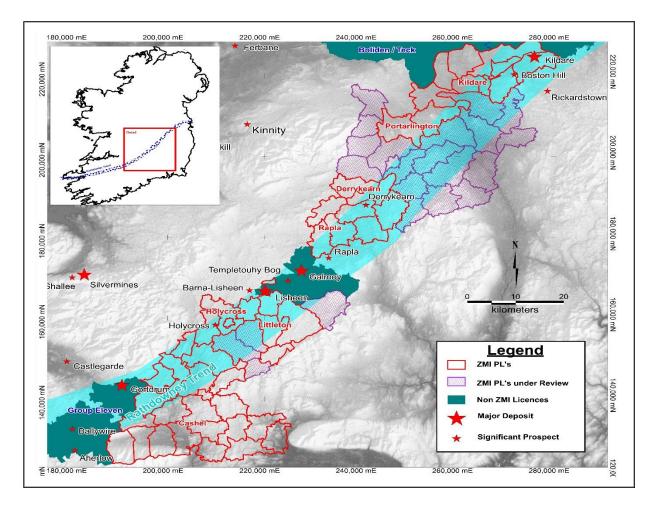


Figure 1. ZMI Licence position on the Rathdowney Trend

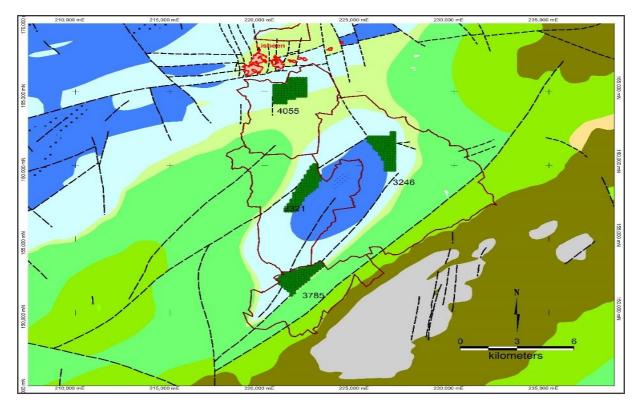


Figure 2: Planned DOB grids – Littleton Block

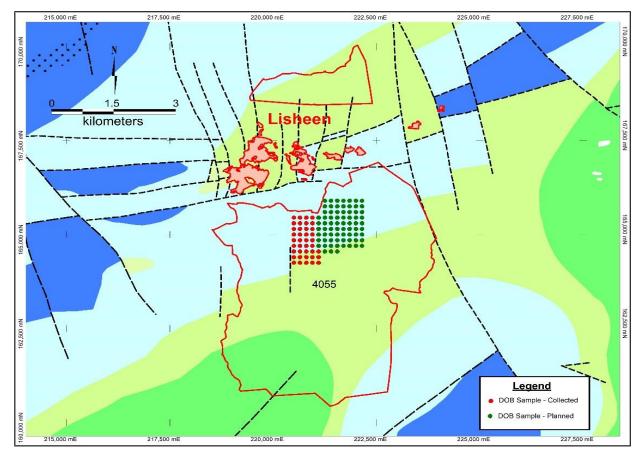


Figure 3: DOB sampling on PL 4055 of the Littleton Block

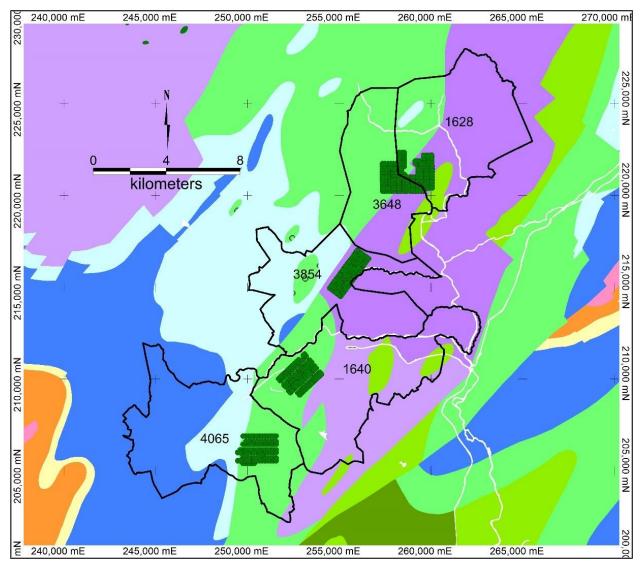


Figure 4: Planned DOB grids – Portarlington Block

#### Cascade REE Project, Munglinup, WA.

The Cascade Project (Figure 5) covers significant areas of TREO enrichment in regolith as defined by shallow (0-3m) auger drill traversing by AngloGold Ashanti Australia Ltd (**AngloGold**) during gold exploration in 2010-2012 (Figure 6).<sup>3</sup> This historical auger drilling encountered near surface enrichment in REE's with widespread anomalism (up to 1031ppm TREO) over a considerable area.<sup>3</sup> AngloGold only sampled to a maximum depth of ~3m and targeted the most calcretised pedogenic horizon. The resultant TREO auger anomalies generated, may therefore under-represent potential underlying REE mineralisation.

For the purposes of assessing the AngloGold geochemical data ZMI calculated TREO from the original multi element REE assays using public domain element-to-stoichiometric-oxide conversion factors (refer to: <u>https://www.jcu.edu.au/advanced-analytical-centre/resources/element-to-stoichiometric-oxide-conversion-factors</u>), which were applied to a basket containing La, Ce, Nd, Pr, Sm, Eu, Gd, Tb, Dy, Ho, Tm, Er, Yb, Y and Lu.<sup>4</sup> ZMI will endeavor to determine saprolite and upper bedrock REE levels with a low cost drill program as soon as possible.

The AngloGold auger results on E74/691 show a large coherent 6km by 3km anomaly while E74/690 hosts similarly anomalous TREO enrichment along a 5km road traverse. Both areas represent encouraging targets for the discovery of deeper mineralisation and will be subject to drill testing as soon as PoW permits are granted.

<sup>3</sup> Refer to Combined Annual Report to DMIRS for the Viking 4 project, C3/2010 (E63/1313, E63/1338, E63/1352, E63/1417, E63/1487, E63/1535, E74/426, E74/430 & E74/432–34), for the period 1/10/2011 to 30/9/2012.

<sup>4</sup> Lu results were not reported for all AngloGold samples.

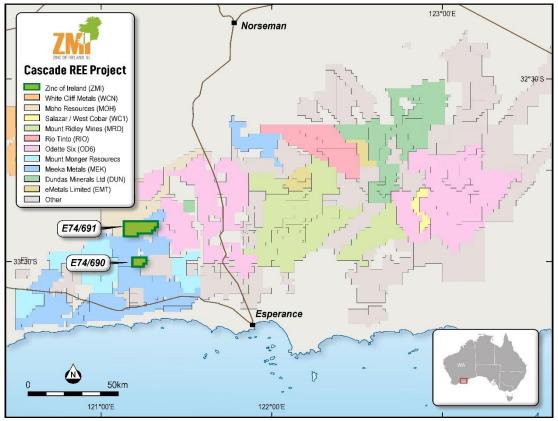


Figure 5. ZMI's Cascade Project Location

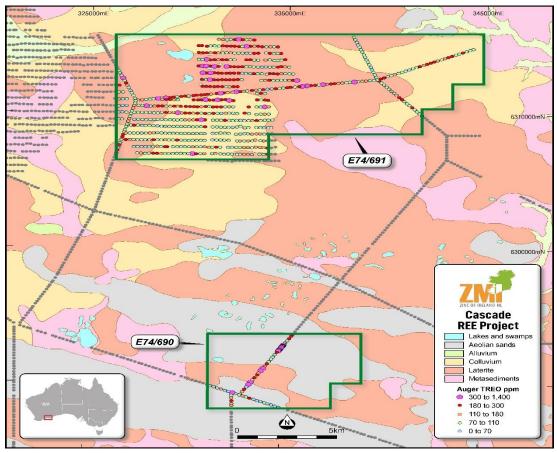


Figure 6. TREO anomalism calculated from AngloGold auger Au-multi element sample results (max drill depth of  $\sim$ 3m)

• The Company expects Programme of Works documentation to be granted in April and is committed to the implementation of a motorized-auger drillhole programme to test known REE anomalies as soon as possible. Clay mineralogy test work may also be conducted as warranted by assay results.

#### Superior LCT Project (SLCTP), Manitoba, Canada (Li).

Zinc of Ireland NL (ASX:"**ZMI**" or the "**Company**") via its subsidiary Avignon Resources Pty Ltd was awarded four Mineral Exploration Licences in Manitoba (Figures 7 and 8 and Table 1); during the Quarter.

Target generation and First Nations engagement have commenced with a view to the deployment of field teams to Priority One target areas during the 2024 Canadian field season beginning in May/June.

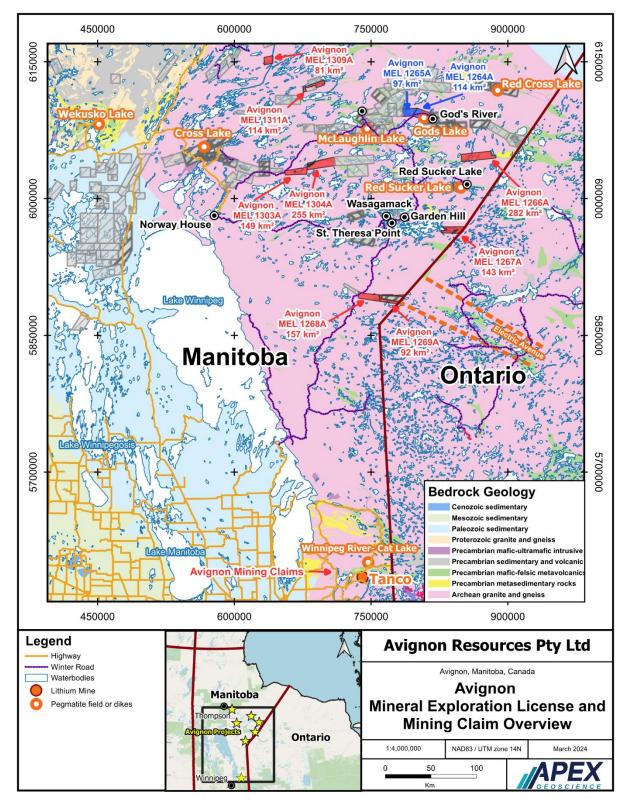


Figure 7. ARPL Mineral Dispositions, Manitoba March 2024

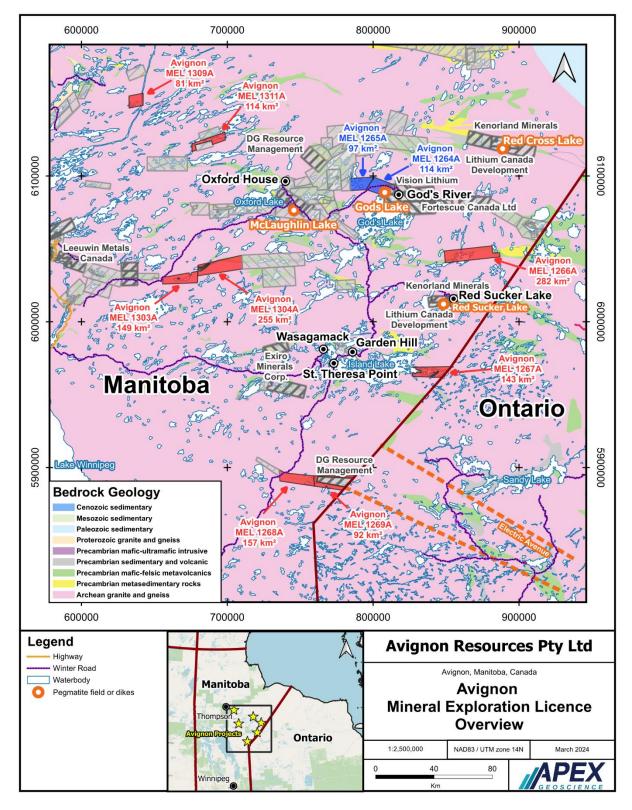


Figure 8. ARPL Mineral Dispositions, Manitoba March 2024.

Manitoba minera	I dispositions held 100% by Avigno	n Resources Pty Ltd									
DISPOSITION NUMBER	DISPOSITION R NAME	DISPOSITION/ LEASE TYPE	AREA (HA)	AREA (KM2)	PART OF NTS SHEETS	STATUS	ISSUED	GOOD TO	TERM Expiry	GEOLOGICAL SETTING	LOGISTICS AND ACCESS
1264A	Gods Lake North 1 (Kapuskaykamak Lake)	Mineral Exploration Licence	11620	116	53L15, 53L16	Pending				Greenstone belt flanked by granitoids;	Gods River airport; Gods River lodge;
1265A	Gods Lake North 2	Mineral Exploration Licence	9803	98	53L16	Pending				near Godslith Li pegmatite (Vision Lithium)	helicopter access
1266A	Makataysipi (Sharpe Lake)	Mineral Exploration Licence	28181	282	53K05, 53K06	Active	2023-12-19	2024-12-19	2025-03-19	Greenstone belt flanked by granitoids along regional suture (subprovince boundary)	Red Sucker Lake airport
1267A	Island Lake (Weesakachak)	Mineral Exploration Licence	14784	148	53E09, 53E16, 53F12, 53F13	Active	2023-12-19	2024-12-19	2025-03-19	Greenstone belt flanked by granitoids	Island Lake airports and communities
1268A	Hudwin Lake 1	Mineral Exploration Licence	15656	157	53E03	Active	2023-12-19	2024-12-19	2025-03-19	Greenstone belt flanked by granitoids; Gorman-Azure lakes pegmatite;	Island Lake airports: Cobham River lodge
1269A	Hudwin Lake 2	Mineral Exploration Licence	9224	92	53E02, 53E03	Active	2023-12-19	2024-12-19	2025-03-19	along-strike of "electric avenue" in Ontario	isianu Lake airpons, Coonani River looge
1303A	Robinson Lake (Hayes River 1)	Mineral Exploration Licence	14619	146	63107, 63108	Active	2024-01-23	2025-01-23	2025-04-23	Greenstone belt flanked by granitoids near	Road access to Cross Lake and Norway
1304A	Logan-Milton lakes (Hayes River 2)	Mineral Exploration Licence	24292	243	63108, 53L05, 53L12	Active	2024-01-23	2025-01-23	2025-04-23	regional suture (subprovince boundary)	House; Molson Lake lodge
1309A	Hunting Lake (Nelson River)	Mineral Exploration Licence	8145	81	63P07, 63P10	Active	2024-03-05	2025-03-05	2025-06-03	Greenstone belt flanked by granitoids; pegmatite drill intercepts	Float plane or helicopter access from Thompson; nearby rail and power lines
1311A	Utik Lake	Mineral Exploration Licence	8659	87	63P01, 53M04, 53M05	Active	2024-03-05	2025-03-05	2025-06-03	Greenstone belt flanked by granitoids; regional structures and mapped pegmatites	Air strip and lodge on Utik Lake; boat, float plane and/or helicopter access
SV14616 to SV14622	TCGF04, -06, -07, -08, -09, -16, -17	Mining Claims	1651	17	62108NE	Active	2023-10-05	2025-10-05	2025-12-04	West extension of Bird River pegmatite belt; near Lucky No. 3 pegmatites	Road and hydro access; nearby town of Lac du Bonnet

Table 1. ARPL Mineral Dispositions, Manitoba March 2024.

#### **Geological Setting**

Avignon's MEL applications are located within the western Superior Province (Figure 9). The Superior Province is comprised of an assemblage of neo-archean aged granite-greenstone basement units which extend from central Manitoba, though central Ontario to Quebec in the east, and to northern Minnesota in the south.

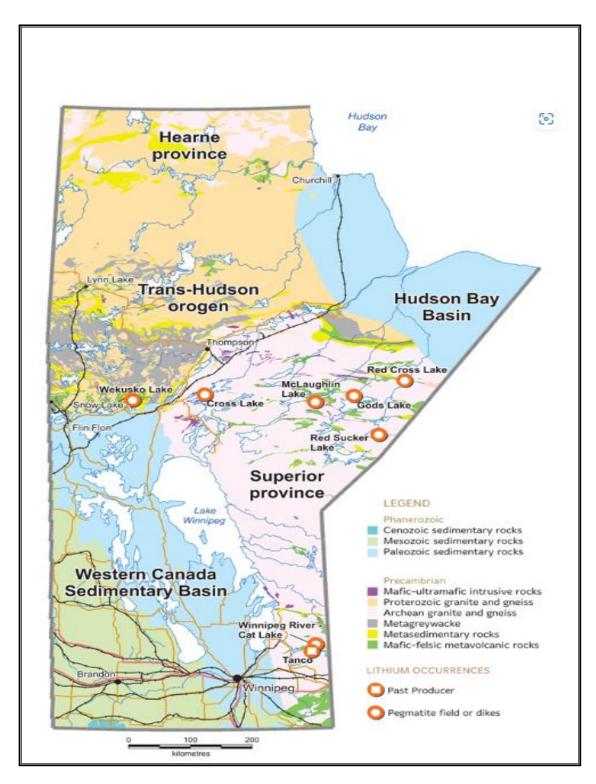


Figure 9. Geological map of Manitoba<sup>5</sup>

Geochronological programmes suggest that three fault bounded terranes divide the northern Superior Province.

These terranes (Figure 10.) are described<sup>5</sup>, from south to north as the Munro Lake, Oxford Lake-Stull Lake and Northern Superior:

- The Munro Lake terrane (Molson Domain) comprises mainly plutonic rocks intruded between 2.84 and 2.72 Ga. The isotopic signature of these plutonic rocks shows that they have recycled older crust, probably Mesoarchean granitoid basement and <2.86 Ga platformal sediments and komatiites of the reworked margin of the North Caribou terrane (Island Lake and Berens River domains). For this reason, the Munroe Lake terrane is suggested to be a product of recycling of the older North Caribou margin and continental growth on its north margin.
- 2. The **Oxford Lake-Stull Lake terrane** (Gods Lake Domain) consists of 2.83 Ga submarine, depleted tholeiitic basalts, formed in a predominantly juvenile oceanic environment, and an isotopically juvenile, 2.73 Ga continental margin arc. The continental margin arc is interpreted to have been formed during crustal accretion and thrusting of the Oxford Lake-Stull Lake terrane over the Munroe Lake terrane prior to 2.73 Ga.
- 3. The Northern Superior superterrane (Northern Superior and part of Pikwitonei Domains, also includes the Orr Lake and Split Lake blocks), on the north side of the northwest-trending North Kenyon fault, comprises mainly 2.84-2.71 Ga plutonic rocks that have much older isotopic ages and contain inherited zircons as old as 3.57 Ga. Docking of this reworked Paleoarchean crust with the Oxford Lake - Stull Lake terrane resulted in continued 2.73-2.72 Ga arc volcanism.

Eruption of synorogenic <2.71 Ga alkaline and shoshonitic lavas and subsequent deposition of continental sediments with a vast range of detrital zircons that mimic the regional ages from all three terranes (3.6 to 2.71 Ga), reflect amalgamation of the three terranes during a ca. 2.7 Ga orogenic event.

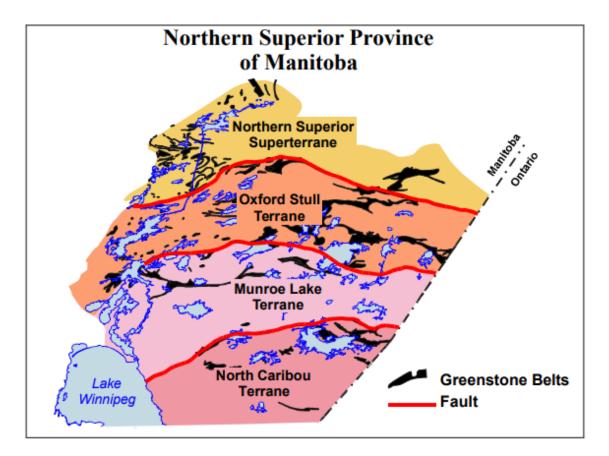


Figure 10. Northern Superior Province of Manitoba<sup>5</sup>

5. (Superior Craton description and maps courtesy of MB Department of Economic Development, Investment, Trade and Natural Resources website)

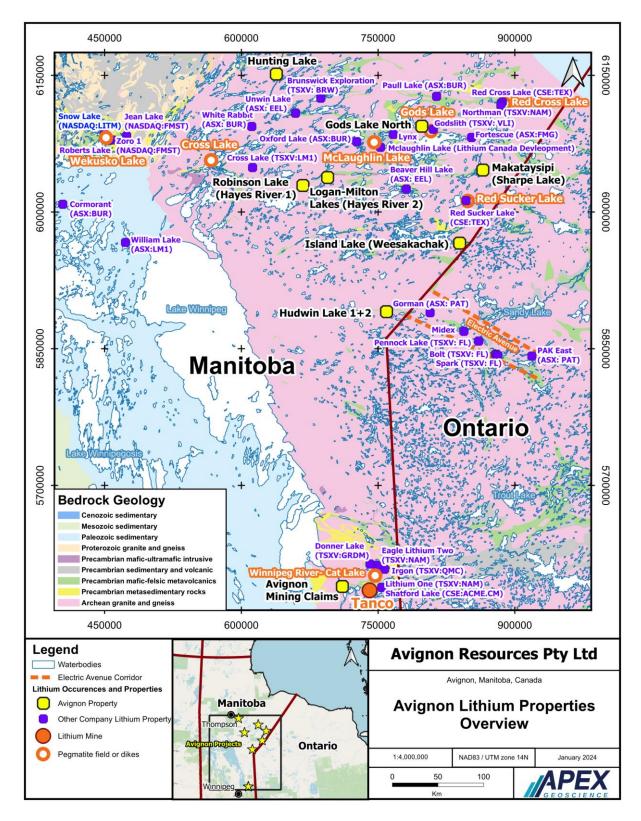


Figure 11. ARPL Mineral Dispositions proximal to known lithium projects, Manitoba March 2024.

Avignon's MELs (eight granted applications and two pending) cover a combined area of approximately 1,380km<sup>2</sup> which are located within four distinct areas (refer Figures 7, 8 and 11).

The Company has in each case focused on an exploration rationale that prioritizes:

- The encapsulation of supracrustal greenstone units and associated greenstone/granite contacts along, or adjacent to, interpreted subterrane boundaries or other deep-seated structures.
- Areas that have had little or no previous LCT focussed exploration.
- Proximity to known specific Li resources or occurrences (eg Tanco, Godslith) within broader pegmatite fields.
- Access suitable for conducting reconnaissance or grassroots exploration.

#### Hudwin Lake Project (two MELs: granted)

The Hudwin Lake Project (Figure 12) is comprised of two MELs covering a combined area of 249km<sup>2</sup>.

The project MELs hosts east-west to west-northwest trending Proterozoic supracrustal greenstone units within Archean granites and granodiorites.

Hudwin Lake is located along strike from the so called *'electric avenue'* lithium exploration corridor in northwest Ontario where Frontier Lithium (TSX.V:FL) have completed a PFS for their PAK Project citing a pre-tax NPV of USD\$2.6 billion<sup>6</sup> and also hosts Patriot Lithium's (ASX:PAT) Gorman Project where PAT has identified numerous pegmatite outcrops within a 200m wide corridor (www.patriot-lithium.com refer Investor Presentation, dated November 2023). Previous exploration appears limited to early-stage geochemical surveys targeting base metals along the granite-greenstone assemblages and airborne geophysical prospecting targeting uranium.

6. (www.frontierlithium.com/news; refer company announcement dated 31 May 2023).

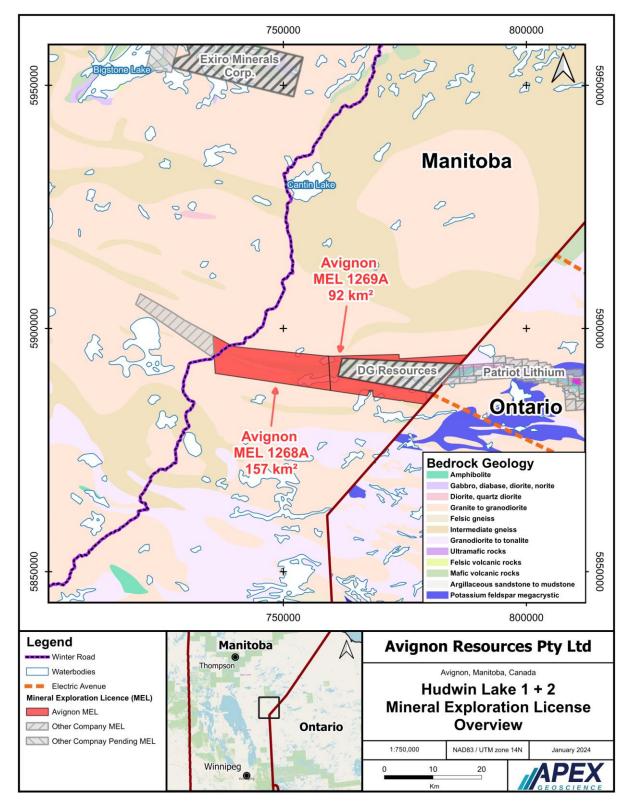


Figure 12. ARPL Mineral Dispositions, Hudwin Lake, Manitoba March 2024.

#### Island Lake Project (one MEL: granted)

The Island Lake (Weesakachak) Project MEL (Figure 13) covers an area of 143km<sup>2</sup>.

The Island Lake MEL is underlain by Lower Hayes River Group lithologies of the Superior Province which are locally expressed as dark green, massive to schistose mafic volcanic units with subordinate interbedded metasediments<sup>7</sup>.

Historical exploration at Island Lake is limited to early-stage geochemical surveys, and both airborne and ground geophysical surveys.

Access to the project will be reliant on airport infrastructure hosted by Island Lake communities.

7. (refer N.R. Newson, 1996, Geological Survey of Manitoba Assessment File 94480)

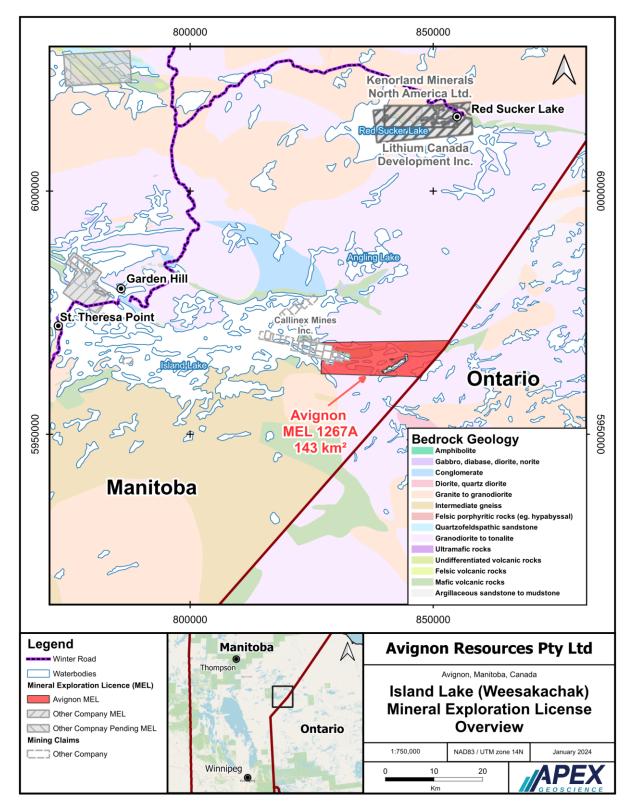


Figure 13. ARPL Mineral Dispositions, Island Lake, Manitoba March 2024.

#### Makataysipi Project (one MEL: granted)

The Makataysipi (Sharpe Lake) Project MEL (Figure 14) is located 550km north-east of Winnepeg and hosts supracrustal greenstones of the Sharpe Lake greenstone belt. The Sharpe Lake greenstone belt is flanked by granitoids along the boundary of the Oxford Lake and Munro Lake sub provinces of the western Superior Province. The Sharpe Lake greenstone belt has been described as a series of mafic to intermediate metavolcanics with minor interbeds. The Stull Lake-Wunnummin Fault Zone is interpreted to run along the Sharpe Lake greenstone belt within the MEL<sup>8</sup>.

The Project covers an area of 282km<sup>2</sup>.

Historical exploration at the Makataysipi project has focused on limited litho-geochemical sampling, geological mapping and airborne geophysical surveys.

ZMI anticipate that access to the project will be via Red Sucker Lake airport.

<sup>8.</sup> Geological Survey of Manitoba Assessment File 74312, Gossan Resources Ltd, Company Report, J.C. Pedersen, 2005.

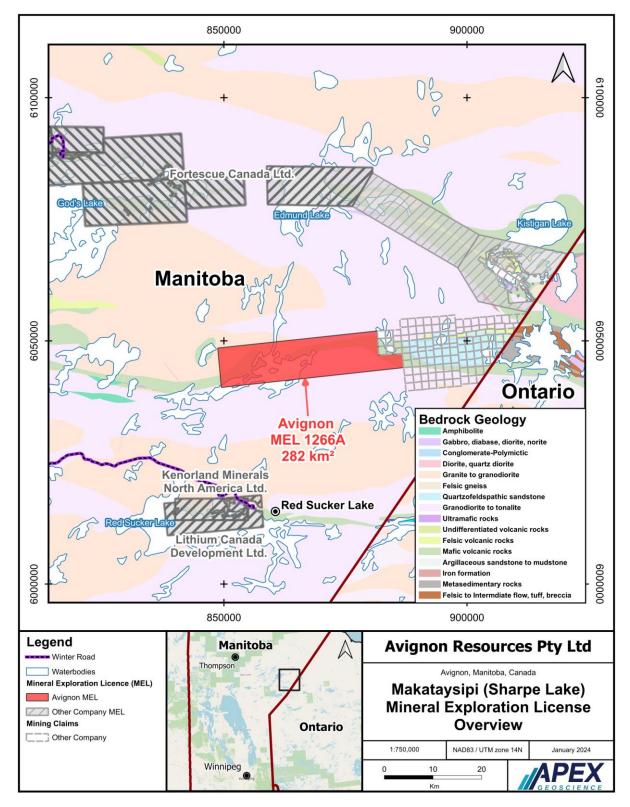


Figure 14. ARPL Mineral Dispositions, Makataysipi Lake, Manitoba March 2024.

## God's Lake North Project (two MELs: applications pending)

The God's Lake North Project (Figure 15) consists of two contiguous MEL applications, centred approximately 25km northwest of God's River, Manitoba. The applications cover a combined area of approximately 211km<sup>2</sup>.

The applications are underlain by supracrustal greenstone belts flanked by granitoids along strike from the Godslith pegmatite (Vision Lithium). The lithium bearing mineralization has been the subject of historical (and informal) resource estimates and is further described on the Company's website<sup>9</sup>.

ZMI confirm that no known lithium bearing mineralization has been identified at it's MEL applications and that there is no current evidence that the known LCT mineralization identified by Vision Lithium may extend to ZMI's application areas.

Historical exploration within the outline of the God's Lake applications is dominated by regional scale geophysical surveys.

ZMI anticipate that access to the project will be via God's River Airport and/or God's River Lodge utilizing helicopters and winter roads. The Company has commenced engagement with the God's Lake First Nation and Manto Sipi First Nation traditional owners.

9. (refer: https://visionlithium.com/godslith).

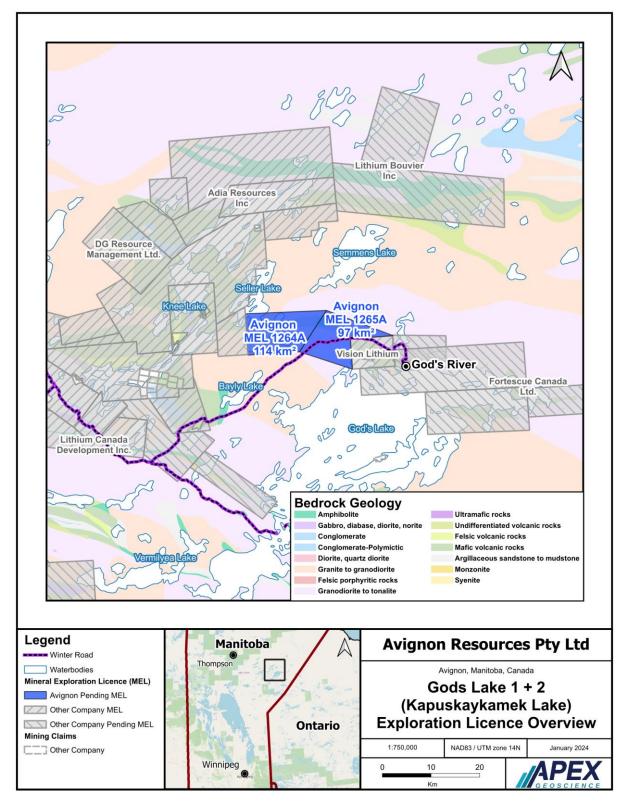


Figure 15. ARPL Mineral Dispositions (pending), God's Lake, Manitoba March 2024.

### Hayes River Project, Robinson and Logan Lakes (two MELs: granted).

The Hayes River Project (Figure 16) is comprised of two contiguous MELs covering an area of 404km<sup>2</sup>.

The licences are underlain by a portion of a linear belt of supracrustal greenstones between Cross Lake to the west and Goose Lake to the east, at the southern margin of the God's Lake Domain where it is in contact with granitoid rocks of the Molson Lake Domain<sup>10</sup>.

Historical exploration within the outline of the Hayes River applications is dominated by regional scale geophysical surveys.

Access is via road access to Norway House and Cross Lake or via floatplane to Molson Lodge.

10. (refer: Geological Survey of Manitoba Assessment File 92963, Catherine E Enterprises Ltd, Company Report, George Gale, 2012)

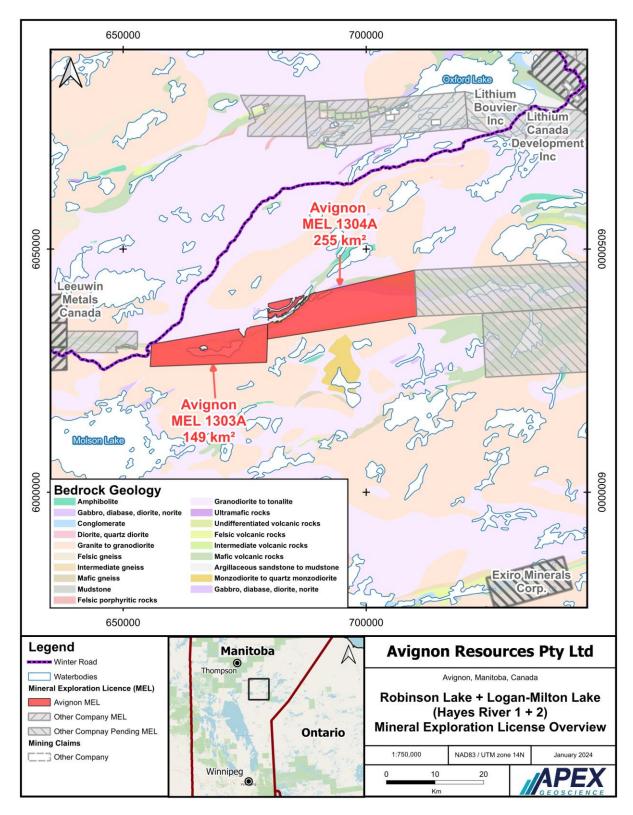


Figure 16. ARPL Mineral Dispositions, Hayes River, Manitoba March 2024.

## Hunting Lake (one MEL: granted).

The Hunting Lake MEL Hayes River Project (Figure 17) is comprised of a single MEL covering an area of 81km<sup>2</sup>.

The MEL is underlain by a portion folded supracrustal greenstones between Hunting Lake and Midnight Lake. Historical exploration within the outline of the Hunting Lake application is highlighted by regional scale geophysical and till geochemical surveys.

Access is expected to be via floatplane to Hunting Lake and Nelson River.

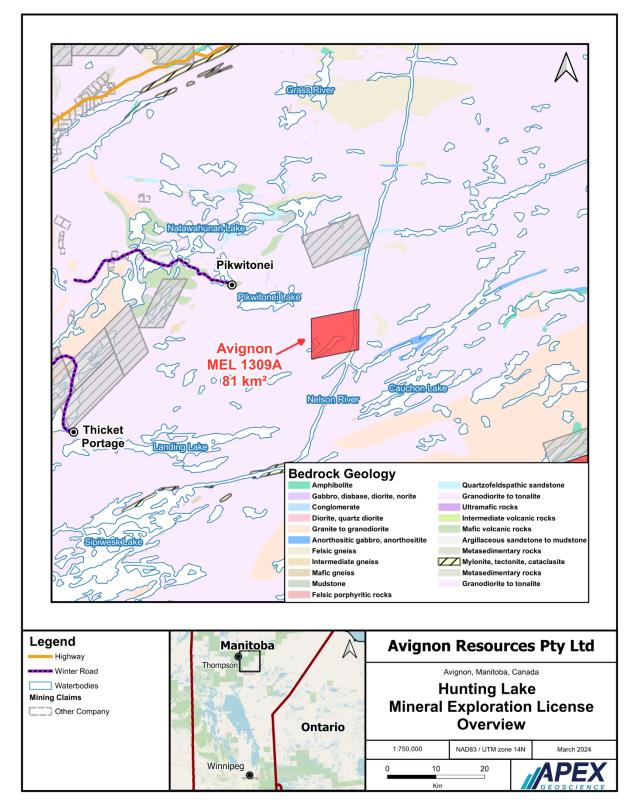


Figure 17. ARPL Mineral Dispositions, Hunting Lake, Manitoba March 2024.

#### Utik Lake (one MEL: granted).

The Utik Lake MEL area (Figure 18) is underlain by the Archean Utik Lake greenstone belt. The belt is up to 12km wide and consists of east to northeast trending panels of mafic metavolcanic and intrusive rocks separated by metasedimentary sequences. The metavolcanic rocks are similar to those found within the Hayes River Group while the area also contains felsic to intermediate rocks associated with the Oxford Lake Group<sup>11</sup>. The Utik Lake greenstone belt has been subjected to upper greenschist facies metamorphism increasing locally to amphibolite facies adjacent to bounding plutonic rock<sup>12</sup>.

Project access is expected to incorporate existing infrastructure including an airstrip and Lodge at Utik Lake as well as the employment of boats, float plane and/or helicopters.

12. Manitoba Assessment Files 94560, 94563, 94342.

Böhm, C.O., Kremer, P.D. and Syme, E.C. 2007: Nature, evolution and gold potential of the Utik Lake greenstone belt, Manitoba (parts of NTS 53M4, 5, 63P1, 8): preliminary field results; in Report of Activities 2007, Manitoba Science, Technology, Energy and Mines, Manitoba Geological Survey, p. 98–113.

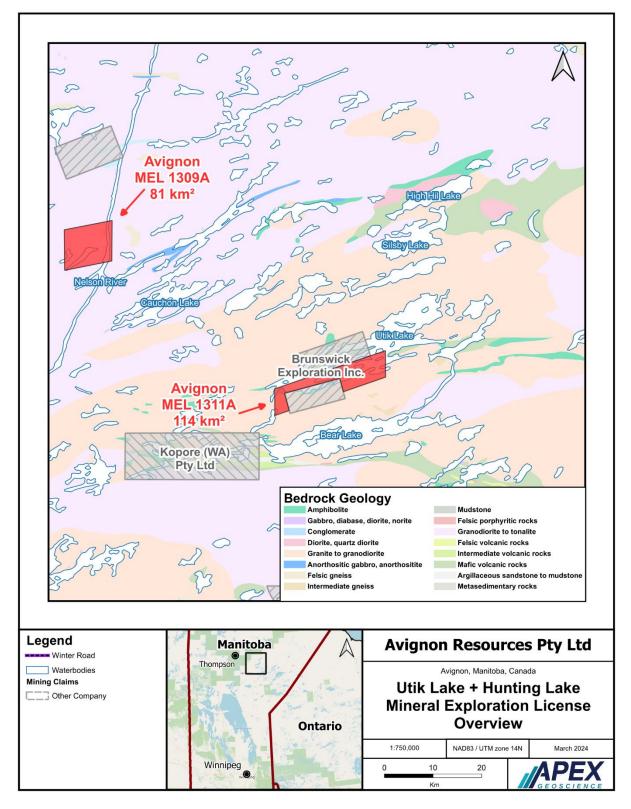


Figure 18. ARPL Mineral Dispositions, Utik Lake, Manitoba February 2024.

## Lac du Bonnet Project (seven Mining Claims: granted)

The Lac du Bonnet Project (Figure 19) is comprised of seven Mining Claims (17km<sup>2</sup> in total) located within 40km of the Tanco (Bernic Lake) LCT pegmatite deposit, a current producer of lithium, tantalum and caesium by underground mining.

Avignon's Mining Claims lie along the western extension of the Bird River Greenstone Belt, in a less explored and poorly mapped area of the Lac du Bonnet granite boundary, with undifferentiated metasedimentary, metavolcanic rocks and gneiss units along a regional structural trend containing the Tanco deposit to the east.

The project is easily accessible by road.

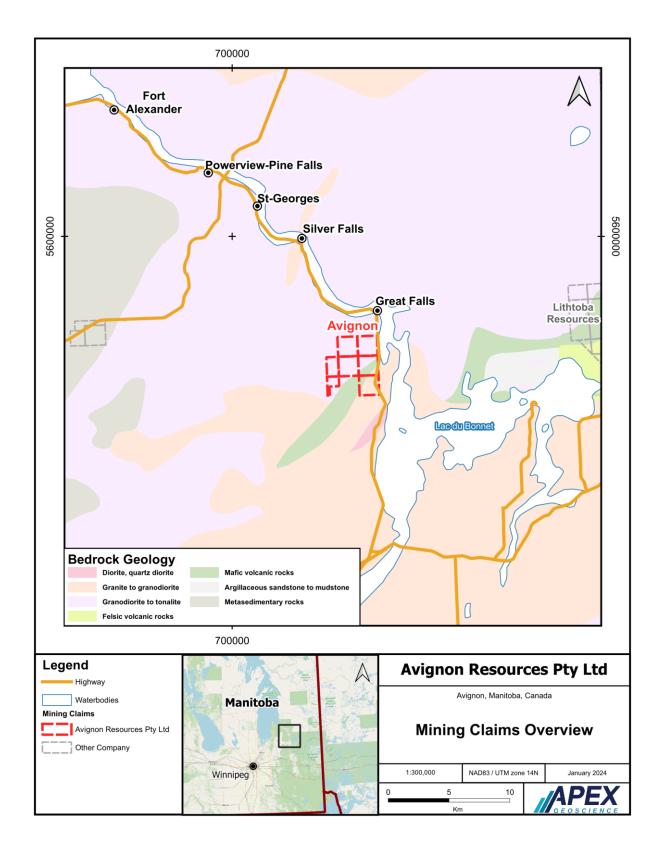


Figure 19. ARPL Mineral Dispositions, Lac du Bonnet, Manitoba March 2024.

#### Next Steps-Proposed Work Programme

The proposed Q2 2024 work programme is based on the following key components:

- First Nations engagement and desktop historical data compilation
- Satellite data interpretation and target generation
- Logistical Planning and field ground-truthing of Priority One targets.

The Company anticipates follow-up mapping and sampling and/or scout drilling of any significant LCT discoveries in Q3.

#### Other Matters – Corporate

The Company had cash on hand as at 31 March 2024 of approx. \$546k. During the quarter approx. A\$54K was paid to related parties for Director's fees and consultancy services provided to the Company, these fees were paid on normal commercial terms.

On 13 March 2024 the Company released its December 2023 Half Year audit reviewed accounts onto the ASX platform.

The Board of Directors of Zinc of Ireland NL have authorised this announcement for release to the market.

Yours faithfully,

1 philjich

Peter Huljich Non-Executive Chairman

Zinc of Ireland NL Investor Inquiries: Peter Huljich Tel: +61 8 9287 4600

#### **Competent Persons' Statements**

The information in this report that relates to exploration results at the Rathdowney, and Superior Projects is based on information compiled by Mr. Greg Hope, a Competent Person who is a member of the Australian Institute of Geoscientists (AIG) Mr. Hope has sufficient experience, which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral resources and Ore Reserves (JORC Code). Mr. Hope consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Cascade Project (geological mapping and interpretation) is based on information compiled and prepared by Mr Roland Gotthard, a Competent Person who is a Member of the Australasian Institute of Mining And Metallurgy and has been extracted from ZMI's announcement dated 26 May 2023 for which Mr Gotthard acted as the Competent Person. Mr Gotthard is an exploration geologist with sufficient experience relevant to the styles of mineralisation under consideration and to the style of activity being reported to qualify as a Competent Person as defined within the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Gotthard has verified the information contained within this announcement and agrees to its inclusion in the form and context in which it appears.

The information in this report that relates to the Mineral Resources at ZMI's Kildare Project is extracted from the report entitled (Increase in JORC Resource and Completion of Mining Study at the Kildare Zn/Pb Project Co. Kildare, Ireland) created on 8 September 2020 and is available to view on the ASX Platform in the Company announcements section. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

#### Disclaimer

Certain statements contained in this announcement, including information as to the future financial or operating performance of ZMI and its projects, are forward-looking statements that:

- may include, among other things, statements regarding targets, estimates and assumptions in respect
  of mineral reserves and mineral resources and anticipated grades and recovery rates, production and
  prices, recovery costs and results, capital expenditures, and are or may be based on assumptions and
  estimates related to future technical, economic, market, political, social and other conditions;
- are necessarily based upon a number of estimates and assumptions that, while considered reasonable by ZMI, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; and,
- involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.

# **Tenement Details**

Location	Project Name	County/Area	Tenement No.	Ownership	Title Holder
Ireland	Kildare	Kildare	4069	100%	Raptor Resources
Ireland	Kildare	Kildare	4070	100%	Raptor Resources
Ireland	Kildare	Offaly	890	100%	Raptor Resources
Ireland	Kildare	Kildare	3846	100%	Raptor Resources
Ireland	Kildare	Kildare	3866	100%	Raptor Resources
Ireland	Holycross	Tipperary	3318	100%	Centenary Resources
Ireland	Holycross	Tipperary	4035	100%	Centenary Resources
Ireland	Holycross	Tipperary	4510	100%	Centenary Resources
Ireland	Portarlington	Offaly	1628	100%	Raptor Resources
Ireland	Portarlington	Offaly	3648	100%	Raptor Resources
Ireland	Portarlington	Offaly	3854	100%	Raptor Resources
Ireland	Portarlington	Laois	4067	100%	Raptor Resources
Ireland	Portarlington	Laois	4066	100%	Raptor Resources
Ireland	Portarlington	Laois	4065	100%	Raptor Resources
Ireland	Portarlington	Laois	3674	100%	Raptor Resources
Ireland	Portarlington	Laois	3662	100%	Raptor Resources
Ireland	Portarlington	Laois	3322	100%	Raptor Resources
Ireland	Portarlington	Laois	2748	100%	Raptor Resources
Ireland	Portarlington	Laois	2627	100%	Raptor Resources
Ireland	Portarlington	Laois	2474	100%	Raptor Resources
Ireland	Portarlington	Laois	1640	100%	Raptor Resources
Ireland	Portarlington	Laois	1641	100%	Raptor Resources
Ireland	Portarlington	Laois	2219	100%	Raptor Resources
Ireland	Portarlington	Laois	2512	100%	Raptor Resources
Ireland	Portarlington	Kildare	2513	100%	Raptor Resources
Ireland	Portarlington	Kildare	2516	100%	Raptor Resources
Ireland	Portarlington	Kildare	3427	100%	Raptor Resources
Ireland	Portarlington	Kildare	3649	100%	Raptor Resources
Ireland	Portarlington	Laois	3675	100%	Raptor Resources
Ireland	Portarlington	Kildare	4071	100%	Raptor Resources
Ireland	Portarlington	Kildare	4356	100%	Raptor Resources
Ireland	Rapla	Laois	1652	100%	Raptor Resources
Ireland	Rapla	Laois	1653	100%	Raptor Resources
Ireland	Rapla	Laois	4041	100%	Raptor Resources
Ireland	Derrykearn	Laois	1650	100%	Raptor Resources
Ireland	Derrykearn	Laois	2625	100%	Raptor Resources
Ireland	Derrykearn	Laois	3158	100%	Raptor Resources
Ireland	Derrykearn	Laois	3160	100%	Raptor Resources
Ireland	Derrykearn	Laois	3263	100%	Raptor Resources
Ireland	Cashel	Tipperary	1575	100%	Raptor Resources
Ireland	Cashel	Tipperary	2026	100%	Raptor Resources
Ireland	Cashel	Tipperary	2027	100%	Raptor Resources

Ireland	Cashel	Tipperary	2717	100%	Raptor Resources
Ireland	Cashel	Tipperary	2718	100%	Raptor Resources
Ireland	Cashel	Tipperary	3316	100%	Raptor Resources
Ireland	Cashel	Tipperary	3317	100%	Raptor Resources
Ireland	Cashel	Tipperary	3319	100%	Raptor Resources
Ireland	Cashel	Tipperary	3320	100%	Raptor Resources
Ireland	Cashel	Tipperary	3358	100%	Raptor Resources
Ireland	Cashel	Tipperary	3421	100%	Raptor Resources
Ireland	Cashel	Tipperary	3689	100%	Raptor Resources
Ireland	Cashel	Tipperary	3827	100%	Raptor Resources
Ireland	Cashel	Tipperary	4112	100%	Raptor Resources
Ireland	Cashel	Tipperary	4113	100%	Raptor Resources
Ireland	Cashel	Tipperary	4117	100%	Raptor Resources
Ireland	Cashel	Tipperary	4481	100%	Raptor Resources
Ireland	Cashel	Tipperary	4482	100%	Raptor Resources
Ireland	Cashel	Tipperary	4483	100%	Raptor Resources
Ireland	Cashel	Tipperary	4480	100%	Raptor Resources
Ireland	Cashel	Tipperary	2604	100%	Raptor Resources
Ireland	Littleton	Tipperary	1577	100%	Raptor Resources
Ireland	Littleton	Tipperary	1578	100%	Raptor Resources
Ireland	Littleton	Tipperary	3246	100%	Raptor Resources
Ireland	Littleton	Tipperary	3321	100%	Raptor Resources
Ireland	Littleton	Tipperary	3404	100%	Raptor Resources
Ireland	Littleton	Tipperary	3785	100%	Raptor Resources
Ireland	Littleton	Tipperary	3786	100%	Raptor Resources
Ireland	Littleton	Tipperary	4055	100%	Raptor Resources
Australia	Cascade	Munglinup	E 74/690	100%	Blue Lagoon Pty Ltd
Australia	Cascade	Munglinup	E 74/691	100%	Blue Lagoon Pty Ltd
Canada	Superior	Hudwin Lake	1267A	100%	Avignon Resources Pty Ltd
Canada	Superior	Hudwin Lake	1269A	100%	Avignon Resources Pty Ltd
Canada	Superior	Makataysipi	1266A	100%	Avignon Resources Pty Ltd
Canada	Superior	Island Lake	1265A	100%	Avignon Resources Pty Ltd
Canada	Superior	Hayes River	1303A	100%	Avignon Resources Pty Ltd
Canada	Superior	Hayes River	1304A	100%	Avignon Resources Pty Ltd
Canada	Superior	Hunting Lake	1309A	100%	Avignon Resources Pty Ltd
Canada	Superior	Utik Lake	1311A	100%	Avignon Resources Pty Ltd
Canada	Lac du Bonnet	Bird River	TCGF04	100%	Avignon Resources Pty Ltd
Canada	Lac du Bonnet	Bird River	TCGF06	100%	Avignon Resources Pty Ltd
Canada	Lac du Bonnet	Bird River	TCGF07	100%	Avignon Resources Pty Ltd
Canada	Lac du Bonnet	Bird River	TCGF08	100%	Avignon Resources Pty Ltd
Canada	Lac du Bonnet	Bird River	TCGF09	100%	Avignon Resources Pty Ltd
Canada	Lac du Bonnet	Bird River	TCGF16	100%	Avignon Resources Pty Ltd
Canada	Lac du Bonnet	Bird River	TCGF17	100%	Avignon Resources Pty Ltd

• # Raptor Resources Ltd and Centenary Resources Limited are wholly-owned subsidiaries of Zinc Mines of Ireland Limited. Zinc Mines of Ireland Limited is a wholly-owned subsidiary of Zinc of Ireland NL (ZMI).

- Blue Lagoon Minerals Pty Ltd is a public unlisted company (ACN 663 985 475) and a wholly owned subsidiary of Zinc of Ireland NL (ZMI)
- Avignon Resources Pty Ltd (Canada) is a wholly owned subsidiary of Avignon Resources Pty Ltd Australia, both Companies are wholly owned subsidiaries of the Zinc of Ireland NL (ZMI) Group.

# Appendix 5B

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity	
Zinc of Ireland NL	
ABN	Quarter ended ("current quarter")
23 124 140 889	31 March 2024

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	-	-
	(e) administration and corporate costs	(103)	(368)
1.3	Dividends received	-	-
1.4	Interest received	-	-
Tene ment 1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	8
1.9	Net cash from / (used in) operating activities	(103)	(360)

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Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	(167)	(691)
	(e) investments	-	-
	(f) other non-current assets	-	-
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(167)	(691)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	-	-

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	817	1,600
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(103)	(361)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(167)	(692)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-
4.5	Effect of movement in exchange rates on cash held(	(1)	(1)
4.6	Cash and cash equivalents at end of period	546	546

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	526	797
5.2	Call deposits	20	20
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	546	817

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(54)*
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	f any amounts are shown in items 6.1 or 6.2, your quarterly activity report must inclu ation for, such payments.	de a description of, and an

<sup>\*\*</sup> Directors fees and consultancy services provided to the Company, paid on normal commercial terms.

7.	<b>Financing facilities</b> Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qu	arter end	
7.6	Include in the box below a description of eac rate, maturity date and whether it is secured facilities have been entered into or are propo include a note providing details of those facili	or unsecured. If any add sed to be entered into af	itional financing

8.	Estim	ated cash available for future operating activities	\$A'000
8.1	Net ca	sh from / (used in) operating activities (item 1.9)	(103)
8.2	· ·	ents for exploration & evaluation classified as investing es) (item 2.1(d))	(167)
8.3	Total r	elevant outgoings (item 8.1 + item 8.2)	(270)
8.4	Cash a	and cash equivalents at quarter end (item 4.6)	546
8.5	Unuse	d finance facilities available at quarter end (item 7.5)	-
8.6	Total a	vailable funding (item 8.4 + item 8.5)	546
8.7	item 8 Note: if t	ated quarters of funding available (item 8.6 divided by .3) The entity has reported positive relevant outgoings (ie a net cash inflow) in ite therwise, a figure for the estimated quarters of funding available must be inc	
8.8			
0.0	If item	8.7 is less than 2 quarters, please provide answers to the foll	owing questions:
0.0	If item 8.8.1	8.7 is less than 2 quarters, please provide answers to the foll Does the entity expect that it will continue to have the curren cash flows for the time being and, if not, why not?	0
0.0		Does the entity expect that it will continue to have the curren cash flows for the time being and, if not, why not?	0
0.0	8.8.1	Does the entity expect that it will continue to have the curren cash flows for the time being and, if not, why not?	nt level of net operating ny steps, to raise further
0.0	8.8.1 Answe	Does the entity expect that it will continue to have the current cash flows for the time being and, if not, why not? r: N/A Has the entity taken any steps, or does it propose to take and cash to fund its operations and, if so, what are those steps a believe that they will be successful?	nt level of net operating ny steps, to raise further
0.0	8.8.1 Answe 8.8.2	Does the entity expect that it will continue to have the current cash flows for the time being and, if not, why not? r: N/A Has the entity taken any steps, or does it propose to take and cash to fund its operations and, if so, what are those steps a believe that they will be successful?	nt level of net operating ny steps, to raise further and how likely does it
0.0	8.8.1 Answe 8.8.2 Answe	Does the entity expect that it will continue to have the current cash flows for the time being and, if not, why not? r: N/A Has the entity taken any steps, or does it propose to take and cash to fund its operations and, if so, what are those steps a believe that they will be successful? r: N/A Does the entity expect to be able to continue its operations objectives and, if so, on what basis?	nt level of net operating ny steps, to raise further and how likely does it

#### Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

#### Date: 29 April 2024

The Board of Directors of Zinc of Ireland NL have authorised this announcement for release to the market.

#### Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee e.g. Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.