

# **Acquisition of highly sought-after Newnham** Lake Uranium Project,

## Athabasca Basin, Canada

## Highlights

- Binding agreement to acquire 100% of the highly sought-after Newnham Lake Uranium Project, located in Canada's Athabasca Basin, one of the world's premier uranium districts
- Newnham Lake is near to the northeast margin of the Athabasca Basin and is just 56km northwest of IsoEnergy Ltd's (TSX.V: ISO) Hurricane Deposit (Indicated Resource of 48.6Mlbs of U<sub>3</sub>O<sub>8</sub> based on 63,800 tonnes grading 34.5% U<sub>3</sub>O<sub>8</sub>)<sup>1</sup>
- Modern uranium discoveries in the Athabasca Basin highlight the potential for 'basement-hosted' mineralisation, where large, high-grade deposits occur below the unconformity, such NexGen's Arrow Deposit (Resource of 337.4Mlbs @ 1.8% U<sub>3</sub>O<sub>8</sub>)<sup>2</sup>
- Recharge Metals is targeting this style of basement-hosted uranium deposit, and has identified priority targets based on:
  - Significant alteration identified in basement rocks in recent drilling
  - Strong, wide conductive zone trending east-west across the entirety of the Newnham Lake Uranium Project, with coincident low resistivity and anomalous radon
  - o Historical drilling demonstrated anomalous uranium at the unconformity, with very limited testing of underlying basement rocks
- Newnham Lake provides an outstanding opportunity for Recharge to make a new uranium discovery against the backdrop of a strong uranium price
- Recharge's established Canadian footprint, in-country relationships, and focus on green energy make this a logical as well as a highly value accretive addition to Recharge's portfolio
- Firm commitments received for A\$1.44m share placement to fund the acquisition and accelerate exploration activities at Newnham Lake Uranium Project; with an additional A\$50k to be placed to Directors, subject to shareholder approval

<sup>&</sup>lt;sup>2</sup> NexGen Energy Ltd (TSX: NXE, NYSE: NXE, ASX: NXG) NI43-101 Technical Report on Feasibility Study, Arrow Deposit Rook I Project, Saskatchewan, 22 February 2021 (See Appendix 4)



<sup>&</sup>lt;sup>1</sup> IsoEnergy Ltd (TSX.V: ISO) announcement released 18 July 2022 (See Appendix 4)

Recharge Metals Limited (ASX: **REC**, **Recharge** or **the Company**) is pleased to announce that it has entered into a binding agreement to acquire 100% ownership of a granted mineral disposition located in the world's premier high-grade uranium district, the Athabasca Basin, Canada, referred to as the **Newnham Lake Uranium Project** (the **Acquisition**).

# Commenting on the Acquisition, Recharge's Managing Director, Felicity Repacholi, said:

"The ongoing collaboration between Recharge and DGRM, which vended our Express Lithium Project, has forged a strong working relationship over the last year, resulting in the valuable opportunity for Recharge to successfully bid for the highly sought after Newnham Lake Uranium project in the Athabasca Basin. This acquisition is a complementary and highly value-accretive addition to Recharge's portfolio.

The Athabasca Basin has some of the world's largest and highest-grade uranium deposits and is the source of around 20% of global uranium production annually. It is also still regarded as one of the hottest jurisdictions for uranium exploration, with significant new discoveries being made, such as IsoEnergy's world-class Hurricane Resource, which is just 56km from Newnham Lake.

Historical drilling at Newnham Lake has confirmed the presence of uranium in the system. However, drilling has only focused on the shallow Athabasca Basin unconformity, with minimal drilling done in the underlying basement rocks. Advancements in the understanding of basement-hosted mineralisation has helped uncover some spectacular deposits, such as NexGen's Arrow Deposit. This basement-hosted geological model adds weight to the prospectivity of Newnham Lake, as does the scale of the coincident low resistivity anomaly which is analogous to Arrow, and will be Recharge's primary target".

The Newnham Lake Uranium Project covers an area of 15.84km<sup>2</sup> and is proximal to the northeast margin of the Athabasca Basin. Newnham Lake lies 56km to the north-west of IsoEnergy's Hurricane Zone, which has an Indicated Resource of 48.6Mlbs of  $U_3O_8$  based on 63,800 tonnes grading 34.5%  $U_3O_8$  including 43.9 Mlbs of  $U_3O_8$  at an average grade of 52.1%  $U_3O_8$  within the high-grade domain<sup>3</sup>.

Historical drilling at the Newnham Lake Uranium Project in the 1970s and 1980s identified anomalous uranium mineralisation in the vicinity of the unconformity at shallow depths. Drilling intersections include 488 ppm  $U_3O_8$  over 2.2 metres including 2,260  $U_3O_8$  over 0.13 metres from 82.9m (refer Appendix 2). This intersection was from drillhole BL-146, and was immediately below the unconformity, the drillhole was terminated at 113.7 metres, with limited testing of the underlying basement rocks.

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<sup>&</sup>lt;sup>3</sup> IsoEnergy Ltd (TSX.V: ISO) announcement released 18 July 2022 (See Appendix 4)

Due to the exploration model being pursued at the time, the focus was purely on unconformity-hosted uranium mineralisation, hence most drill holes were less than 100 metres in length and did not test the underlying basement rocks.

Two deeper drillholes were completed by ALX Uranium Corp in 2018. These drillholes confirmed the presence of uranium mineralisation over significant widths, as well as visible pitchblende, intense faulting and strong hydrothermal alteration deep in the basement, indicating potential basement hosted uranium mineralisation.

Notable examples of this style of uranium mineralisation within the Athabasca Basin are highlighted by the more recent discoveries at Arrow and Triple R (Patterson Lake South).

- NexGen's Arrow Deposit was discovered in 2014, with a Resource<sup>4</sup> of 337.41Mlbs @ 1.9% U<sub>3</sub>O<sub>8</sub> it currently stands as the largest, highest-grade undeveloped uranium deposit in Canada.
- Fission Uranium Corp's Triple R Deposit was discovered in 2012, currently has a Resource<sup>5</sup> of 135.1Mlbs @ 1.8% U<sub>3</sub>O<sub>8</sub>.
- Eagle Point, part of Cameco's Rabbit Lake Operation which entered production in the 1990s is an older discovery of a basement-hosted uranium deposit.

More recent basement-hosted discoveries include 92 Energy Ltd's (ASX: 92E) Gemini discovery<sup>6</sup> and neighbouring Baselode Energy Corp's (TSX.V: FIND) ACKIO discovery<sup>7</sup>.

Basement-hosted uranium mineralisation is relatively untested within the project area, as previous explorers concentrated on the "up-dip" expression of uranium mineralisation at the unconformity between the overlying sandstone and the basement rocks.

Recharge believes that the potential for uranium mineralisation within the Newnham Lake Property exists along the conductive structures deeper in the basement rocks. Geophysical surveys (tested by ALX) have demonstrated an exceptionally large scale, hydrothermal system extending to depth, beneath the conductive lithologies at Newnham Lake. It is anticipated that a ground gravity survey will be undertaken to expand upon the existing data, which will help confirm drill targets selected from previous geophysical data set, which included:

- ZTEM Geophysics
- IP Resistivity
- Airborne Gravity

<sup>&</sup>lt;sup>4</sup> NexGen Energy Ltd (TSX: NXE, NYSE: NXE, ASX: NXG) NI43-101 Technical Report on Feasibility Study, Arrow Deposit Rook I Project, Saskatchewan, 22 February 2021 (See Appendix 4)

<sup>&</sup>lt;sup>5</sup> Fission (TSX: FCU) announcement released 12 September 2022 (See Appendix 4)

<sup>&</sup>lt;sup>6</sup> 92Energy Ltd (ASX: 92E) announcement released 25 August 2022

<sup>&</sup>lt;sup>7</sup> Baselode Energy Corp (TSX.V: FIND) announcement released 20 September 2022

#### **NEWNHAM LAKE URANIUM PROJECT**

#### Location

The Newnham Lake Uranium Project comprises a single mineral disposition covering an area of 15.84km² proximal to the north-eastern margin of the Athabasca Basin, Saskatchewan, Canada. It is approximately 75km southeast of the community of Stony Rapids and 800km north of Saskatoon, the largest city in Saskatchewan.

Details of the mineral disposition are included in Appendix 1.

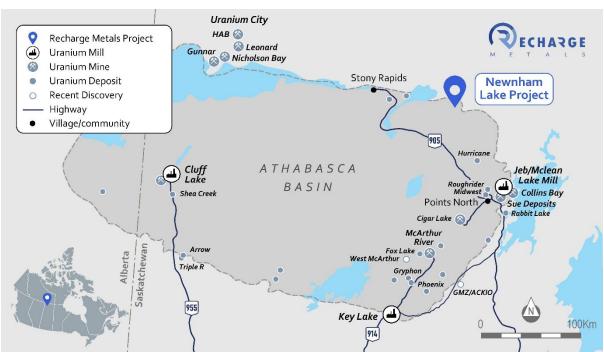


Figure 1: Newnham Lake Project location within Athabasca Basin, Saskatchewan

## **Geology and Uranium Mineralisation**

The Athabasca Basin is ovoid in shape elongated in an east-west direction covering approximately 100,000km² in northern Saskatchewan and into Alberta, refer Figure 1. The Athabasca Group comprises a sedimentary package that is up to 2,200 metres thick consisting of a sequence of mature, quartzose sandstones and conglomerates. The Athabasca Basin unconformably overlies both the Hearne and Rae Archean Provinces and the slightly younger Wollaston Domain. Uranium mineralisation occurs in both the Athabasca Group and the underlying basement domains which defines the two dominant styles of mineralisation in the Athabasca Basin.

The Project is located on the northeast margin of the Athabasca Basin. The area is underlain by the northeast trending Mudjatik Lithostructural Domain, a series of folded and faulted Aphebian metasedimentary belts within a felsic infrastructure of granitic gneisses. Much of this crystalline basement is unconformity overlain by



sandstones and conglomerates of the fluviatile Helikan Athabasca Group. Often partially preserved is a well-developed regolith on the Aphebian unconformity surface.

The Athabasca Basin is a premier uranium district, home to the world's largest and highest-grade uranium mines, including Cameco's McArthur River and Cigar Lake uranium mines which contain total Mineral Reserves of 380.5Mlbs @ 6.7% U<sub>3</sub>O<sub>8</sub> and 208.6Mlbs @ 17.0% U<sub>3</sub>O<sub>8</sub> respectively<sup>8</sup>.

Other advanced, significant uranium projects in the Athabasca Basin include:

- NexGen Energy's Arrow Deposit (TSX: NXE) which has a current Mineral Resource of 337.4Mlbs of  $U_3O_8$  @ 1.9%  $U_3O_8$
- Fission Uranium Corp's Triple R Deposit (TSX: FCU) which has a current Mineral Resource<sup>10</sup> of 135.1Mlbs  $U_3O_8$  @ 1.8%  $U_3O_8$
- IsoEnergy's Hurricane Deposit (TSX.V: ISO) which has a current Mineral Resource<sup>11</sup> of 48.6Mlbs of  $U_3O_8$  based on 63,800 tonnes grading 34.5%  $U_3O_8$

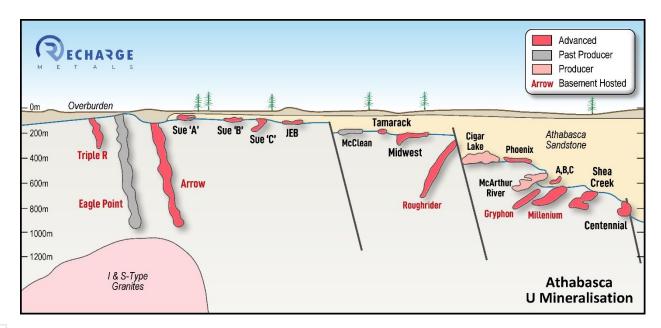


Figure 2: Hypothetical cross-section of the Athabasca Basin, uranium deposits and recent discoveries



<sup>8</sup> Cameco website, as at December 31, 2023 (see Appendix 4)

<sup>&</sup>lt;sup>9</sup> NexGen Energy Ltd (TSX: NXE, NYSE: NXE, ASX: NXG) NI43-101 Technical Report on Feasibility Study, Arrow Deposit Rook I Project, Saskatchewan, 22 February 2021 (See Appendix 4)

<sup>&</sup>lt;sup>10</sup> Fission (TSX: FCU) announcement released 12 September 2022 (See Appendix 4)

<sup>&</sup>lt;sup>11</sup> IsoEnergy Ltd (TSX.V: ISO) announcement released 18 July 2022 (See Appendix 4)

#### **Previous Exploration**

Drilling within the Newnham Lake Uranium Project has primarily focused on shallow unconformity hosted uranium mineralisation. Historical drilling at the Newnham Lake Uranium Project in the 1970s and 1980s identified anomalous uranium mineralisation in the vicinity of the unconformity at shallow depths (refer Appendix 2).

Due to the exploration model envisaged at the time the focus was purely on unconformity-hosted uranium deposits and hence most drill holes were less than 100 metres in length.

An example of this, is drillhole BL-146, completed in 1983, which intersected 488 ppm  $U_3O_8$  over 2.2 metres including 2,260 ppm  $U_3O_8$  over 0.13 metres from 82.9m (refer Appendix 2). This intersection occurs in a metapelite immediately below the unconformity. The hole only tested the basement rocks to a depth 50.06 metres below the unconformity and was terminated in graphitic basement rocks at a depth of 113.7 metres.

Similar encouraging uranium intersections by previous operators were returned along this faulted, conductive trend (refer Figure 2), with drillholes focused almost entirely on unconformity-hosted targets. Details of the historical drilling is currently being compiled by Dahrouge Geological Consulting in consultation with Recharge.

ALX Uranium Corp (TSX.V: AL) completed a modest diamond drilling program during 2018<sup>12</sup>. Two drillholes were completed on what now forms Recharge's Newnham Lake Project. The drillholes were designed to target conductive structures located deeper below shallow, Athabascan Basin sediments, where historical drilling intersected anomalous uranium at the unconformity.

- Drillhole NL18-002 encountered a fault zone just above the unconformity consisting of highly brecciated, broken and rubbly core with elevated radioactivity; A strongly hematised red zone in the basement rocks just below the fault zone also shows elevated radioactivity. Geochemical sampling of the fault zone and upper portion of the red zone returned anomalous uranium (up to 202 ppm U), nickel (up to 74 ppm Ni) and boron (up to 207 ppm B)
- Drillhole NL18-003 intersected a large fault zone approximately 62 metres wide deep in the basement rocks with brecciation, fracturing and evidence of strong hydrothermal alteration. Drill hole NL18-003 was drilled approximately 200 metres along strike to the northwest of historical drill hole BL-146, summarised above. Geochemical sampling of the fault zone returned elevated uranium (up to 94 ppm U), nickel (up to 126 ppm Ni), cobalt

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<sup>&</sup>lt;sup>12</sup> ALX Uranium Corp (TSX.V: AL) announcement released 23 April 2018

(up to 361 ppm Co), vanadium (up to 136 ppm V) and boron (up to 362 ppm B)

The presence of uranium mineralisation over significant widths in the two drillholes completed by ALX, as well as visible pitchblende, intense faulting and strong hydrothermal alteration deep in the basement indicates the potential of a fertile mineralising environment for uranium and the presence of the key elements of the basement-hosted uranium model<sup>13</sup>.

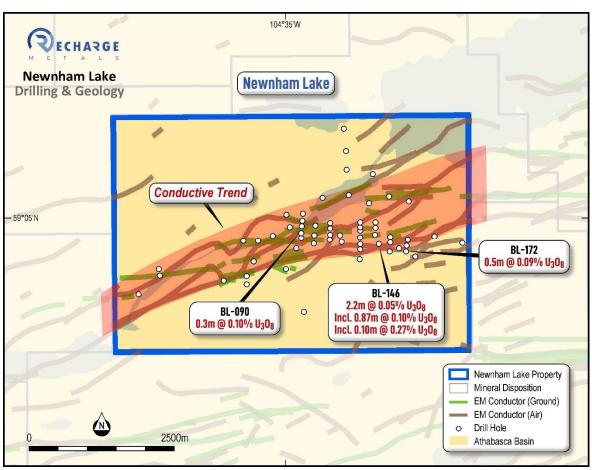


Figure 3: Newnham Lake Uranium Project Conductive Trend and Historic Drillholes

A wide range of geophysical techniques have been completed at Newnham Lake as outlined previously. The work completed shows that the Project sits along a strong east-west trending conductivity zone which is coincident with a zone of low resistivity (refer Figures 3 and 4). This conductor has been the focus of shallow drilling (average 100m), with multiple anomalous uranium intersections (refer Appendix 2). A radon gas survey completed in 2015 defined clear zone of anomalous readings which correlates to this target area<sup>14</sup>.

<sup>&</sup>lt;sup>13</sup> ALX Uranium Corp (TSX.V: AL) announcement released 14 May 2018 and 6 September 2018

 $<sup>^{14}</sup>$  ALX Uranium Corp (TSX.V: AL) announcement released 19 November 2015

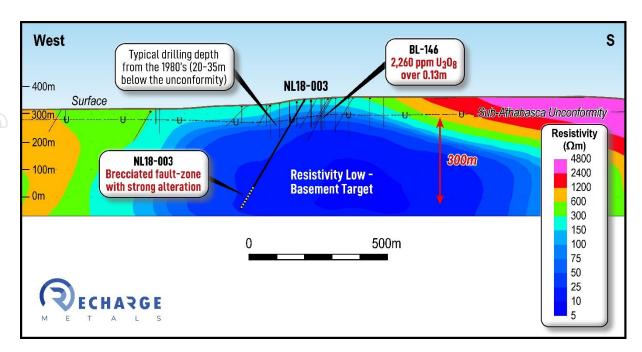


Figure 4: Resistivity Low on Sections 8400mE

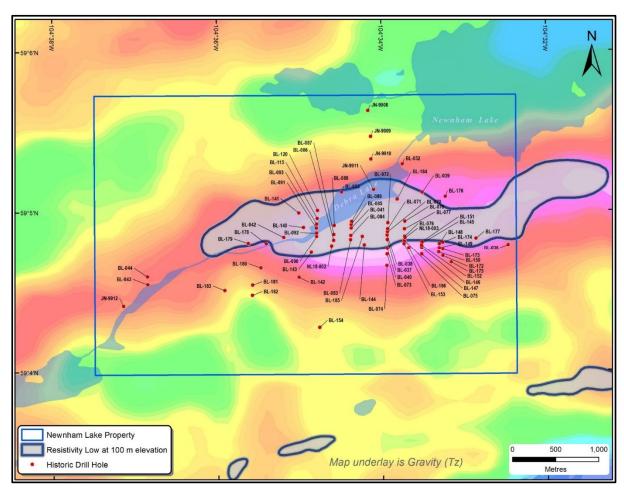


Figure 5: Resistivity Low underlain by Airborne Gravity (Tz)

## **Next Steps – Exploration Objectives**

Historical drilling at Newnham Lake has demonstrated that uranium is in the system but is predominantly untested in a basement style mineralisation setting. More recent exploration of the basement structures across the Athabasca Basin has yielded exceptionally large and high-grade deposits, such as NexGen's Arrow Deposit, Fission Uranium's Triple R Deposit, Cameco's Millenium Deposit and Denison Mines' Gryphon Deposit as well as the most recent Gemini zone and ACKIO discoveries, by 92 Energy and Baselode, respectively.

Limited historical work has been undertaken to explore for deeper basement style mineralisation within the Newnham Lake Project despite extensive alteration, anomalous geochemistry, and favourable rock types. Most historical drill holes have continued less than 25 metres beyond the Athabasca unconformity.

The most recent drilling completed by ALX (two drillholes) showed the presence of uranium mineralisation over significant widths, as well as visible pitchblende, intense faulting, and strong hydrothermal alteration deep in the basement. These two drillholes indicate the potential of a fertile mineralising environment for uranium and the presence of the key elements of the basement-hosted uranium model.

The opportunity for Recharge, is the potential for basement-style uranium mineralisation. Mineralisation within basement hosted deposits is generally much higher-grade in comparison to unconformity hosted deposits. Mineralisation is generally controlled by steeply dipping shear zones with extensive down dip mineralisation potential.

The depth to the Athabasca Basin unconformity within the Newnham Lake Project is approximately 100m deep. This shallow depth mitigates the need to drill deep drillholes and reduces exploration costs.

Dahrouge Geological Consulting in collaboration with Recharge will complete compilation, interpretation and 3D modelling of all historical data from the Newnham Lake Uranium Project. Final drill planning will follow the results of the historical data review.

Negotiation of land access agreements will be done concurrently with the data review to ensure all required permits are in place prior to drill testing.

## **Material terms of Acquisition**

Recharge has entered into a binding agreement with DG Resource Management and Kalt Industries Ltd. (**Vendors**) under which it has agreed to acquire 100% ownership of the **Newnham Lake Uranium Project** on the terms set out below:



## (a) **Consideration**:

- (i) C\$300,000;
- (ii) C\$200,000 worth of fully paid ordinary shares in Recharge at a deemed issue price of A\$0.06 per share (**Consideration Shares**).

The Consideration Shares will be issued utilising available placement capacity under ASX Listing Rule 7.1.

## (b) **Conditions**:

- Recharge having completed legal, technical and geological due diligence on the Newnham Lake Uranium Project to its sole satisfaction;
- (ii) Recharge receiving binding commitments for a share placement to raise not less than A\$1 million (before costs); and
- (iii) Recharge having obtained all necessary shareholder, third-party and regulatory approvals required to complete the acquisition.

## (c) **GSR Royalty**:

(i) Recharge will grant to each of the Vendors a 1.00% gross overriding return (GOR) royalty from revenue generated from the Newnham Lake Uranium Project.

The Company expects to complete the Acquisition on or about 15 March 2024. The conditions must be satisfied no later than 28 March 2024.

Recharge made payment to the Government of Saskatchewan of C\$23,757.21, corresponding to a forward term renewal of MC00001333.

The acquisition is not a related party transaction, and the Board negotiated the terms of the acquisition on arms' length terms. The Company has received confirmation that ASX Listing Rule 10.1 does not apply to the Acquisition. There are no introduction and/or facilitation fees payable to any person for the Acquisition.

#### **Share Placement**

Recharge has received firm commitments for a share placement to raise A\$1.44 million via the issue of 24,063,994 fully paid ordinary shares at an issue price at A\$0.06 per share to sophisticated and professional investors (**Placement**). The Placement shares will be issued utilising available placement capacity under ASX Listing Rule 7.1 (16,702,796 shares) and 7.1A (11,135,197 shares). Subject to completion of the Acquisition, the Placement shares are expected to be allotted on 15 March 2024 and commence trading on the ASX on 16 March 2024.

The issue price of the Placement shares represents a discount of 15% to the last close price of A\$0.071 (28 February 2024).

The Directors of Recharge intend to subscribe for up to A\$50,000 worth of shares in the Placement (subject to the required shareholder approvals being obtained).

Pamplona Capital Pty Ltd acted as Lead Manager of the Placement and will be paid 6% of the proceeds of the Placement. Funds raised under the Placement will be applied toward the cash consideration payable for the Acquisition and undertaking Recharge's exploration objectives at the Newnham Lake Uranium Project.

-ENDS-

This announcement has been authorised for release by the Board of Recharge Metals Limited.

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#### **About Recharge Metals**

Recharge Metals Limited (ASX: REC) is a well-structured exploration company, with the recently acquired Newnham Lake Uranium Project located in the northeastern Athabasca Basin, two lithium projects in the world class James Bay lithium district in Canada, namely the Express Lithium Project and the Wapistan Lithium Project as well as progressing the copper-focused Brandy Hill South Project in Western Australia.



Figure 6: Location of Recharge Metal's Canadian green energy projects

#### **Competent Person Statement**

The information in this announcement that relates to Exploration Results is based on information compiled or reviewed by Ms Felicity Repacholi, a Competent Person who is a Director of the Company. Ms Repacholi is a Member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ms Repacholi consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

#### Forward looking statements

This document contains "forward-looking statements" and "forward-looking information", including statements and forecasts which include without limitation, expectations regarding future performance, costs, production levels or rates, mineral reserves and resources, the financial position of the Company, industry growth and other trend projections. Often, but not always, forward-looking information can be identified by the use of words such as "plans", "expects", "is expected", "is expecting", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might", or "will" be taken, occur or be achieved. Such information is based on assumptions and judgements of management regarding future events and results. The purpose of forward-looking information is to provide the audience with information about management's expectations and plans. Readers are cautioned that forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the

actual results, performance or achievements of the Company and/or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, among others, changes in market conditions, future prices of minerals/commodities, the actual results of current production, development and/or exploration activities, changes in project parameters as plans continue to be refined, variations in grade or recovery rates, plant and/or equipment failure and the possibility of cost overruns.

Forward-looking information and statements are based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date such statements are made, but which may prove to be incorrect. The Company believes that the assumptions and expectations reflected in such forward-looking statements and information are reasonable. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. The Company does not undertake to update any forward-looking information or statements, except in accordance with applicable securities laws.

## **Appendix 1: Newnham Lake Project Mineral Disposition**

Title No.	Area (ha)	Date of Registration
MC00001333	1584	30/12/2013

## **Appendix 2: Drill Intercepts**

## Table 1: Newnham Lake drillhole information

Hole ID	Year	Со	Core Size	X	Y	RL	Depth	Azi	Dip
				NAD83 / U	JTM Z13N	(m)	(m)	(°)	(°)
BL-036	1978	SMDC	BQ	526299.8	6549018.2	345	52.1	0	-90
BL-037	1978	SMDC	BQ	524896.4	6549078.3	351	92.4	0	-90
BL-038	1978	SMDC	BQ	524894.3	6549131.2	349	82.9	0	-90
BL-039	1978	SMDC	BQ	525300.7	6549628.6	322	59.8	0	-90
BL-040	1979	SMDC	BQ	524896.4	6548974.6	356	181.7	0	-60.5
BL-041	1979	SMDC	BQ	524476.8	6549210.1	326	56.7	0	-90
BL-042	1979	SMDC	BQ	523695.8	6549100.5	318	84.8	0	-90
BL-043	1979	SMDC	BQ	522119	6548547	324	105.2	0	-90
BL-044	1979	SMDC	BQ	522116.4	6548636.9	329	118	180	-60
BL-052	1979	SMDC	BQ	525070	6549954.6	317	47.3	0	-90
BL-053	1979	SMDC	BQ	524367.3	6549627.6	314	47.3	0	-90
BL-070	1979	SMDC	BQ	524898.6	6549169.3	340	125.9	0	-90
BL-071	1979	SMDC	BQ	524900.7	6549203.2	336	89.3	0	-60
BL-072	1979	SMDC	BQ	524902.8	6549273	332	106.1	0	-45
BL-073	1979	SMDC	BQ	524894.3	6548906.8	359	116.8	0	-90
BL-074	1979	SMDC	BQ	524892.2	6548773.5	363	110.7	0	-90
BL-075	1979	SMDC	BQ	525095.4	6549065.6	350	92.4	0	-90
BL-076	1979	SMDC	BQ	525097.5	6549116.4	346	89.3	0	-90
BL-077	1979	SMDC	BQ	525095.4	6549203.2	337	77.1	0	-90
BL-078	1979	SMDC	BQ	525099.7	6549292.1	333	60.7	0	-90
BL-083	1979	SMDC	BQ	524470.5	6549075.1	340	73.8	0	-90
BL-084	1979	SMDC	BQ	524473.6	6549124.3	336	67.7	0	-90
BL-085	1979	SMDC	BQ	524478.4	6549251.3	323	58.5	0	-90
BL-086	1979	SMDC	BQ	524275.2	6549067.2	334	61.3	0	-90
BL-087	1979	SMDC	BQ	524276.8	6549135.5	329	64.9	0	-90
BL-088	1980	SMDC	BQ	524281.6	6549240.2	317	46.3	0	-90
BL-089	1980	SMDC	BQ	524481.6	6549287.8	319	40.2	0	-90
BL-090	1980	SMDC	BQ	524076.8	6549113.2	319	95.4	0	-54
BL-091	1980	SMDC	BQ	524075.2	6549208.5	314	98.2	0	-45
BL-092	1980	SMDC	BQ	524078.4	6549151.3	315	90.2	0	-50
BL-093	1980	SMDC	BQ	524078.4	6549256.1	314	86	0	-45
BL-115	1980	SMDC	BQ	524084.7	6549321.2	317	110.2	0	-45

Hole ID	Year	Со	Core Size	X	Υ	RL	Depth	Azi	Dip
				NAD83 / U	JTM Z13N	(m)	(m)	(°)	(°)
BL-120	1980	SMDC	BQ	524087.9	6549414.8	318	86.2	180	-65
BL-140	1983	SMDC	NQ	523924.4	6549218	317	116.7	0	-90
BL-141	1983	SMDC	NQ	523870.4	6549384.7	320	101.5	0	-70
BL-142	1983	SMDC	NQ	523873.6	6548635.4	341	115.5	0	-90
BL-143	1983	SMDC	NQ	524016.4	6548925.9	327	101.5	0	-90
BL-144	1983	SMDC	NQ	524630.8	6549014.8	353	107.6	0	-60
BL-145	1983	SMDC	NQ	525296.5	6549034.9	351	125.9	0	-60
BL-146	1983	SMDC	NQ	525294.4	6548986.2	354	113.7	0	-60
BL-147	1983	SMDC	NQ	525296.5	6548905.8	357	135.1	0	-60
BL-148	1983	SMDC	NQ	525499.2	6549029.1	353	116.4	0	-90
BL-149	1983	SMDC	NQ	525499.2	6548979.9	354	125.6	0	-90
BL-150	1983	SMDC	NQ	525494.4	6548932.3	357	141.1	0	-90
BL-151	1983	SMDC	NQ	525298.6	6549055	349	110.6	0	-90
BL-152	1983	SMDC	NQ	525295.4	6549009.5	354	104.6	0	-90
BL-153	1983	SMDC	NQ	525091.2	6549029.6	352	110.6	0	-90
BL-154	1983	SMDC	NQ	524113.8	6548054.9	344	156.1	0	-90
BL-172	1984	SMDC	NQ	525543	6548890	356	130	0	-90
BL-173	1984	SMDC	NQ	525542	6548967	354	120.5	0	-90
BL-174	1984	SMDC	NQ	525540	6549046	353	100.5	0	-90
BL-175	1984	SMDC	NQ	525640	6548815	357	133	0	-90
BL-177	1984	SMDC	NQ	525925	6549094	351	49	0	-90
BL-176	1984	SMDC	NQ	525570	6549578	327	75.5	0	-90
BL-178	1984	SMDC	NQ	523493	6549026	317	91	0	-90
BL-179	1984	SMDC	NQ	523287	6549030	322	132.5	0	-90
BL-180	1984	SMDC	NQ	523431	6548744	327	126.5	0	-90
BL-181	1984	SMDC	NQ	523335	6548543	341	141.5	0	-90
BL-182	1984	SMDC	NQ	523333	6548426	335	148	0	-90
BL-183	1984	SMDC	NQ	523013	6548480	351	139.7	0	-90
BL-184	1984	SMDC	NQ	525011	6549547	317	86.5	0	-90
BL-185	1984	SMDC	NQ	524607	6549114	345	121	0	-90
BL-186	1984	SMDC	NQ	525147	6548981	353	141.5	0	-90
JN-9908	1999	JNR	BGM	524670.3	6550574.7	315	105.8	0	-60
JN-9909	1999	JNR	BGM	524702.1	6550273.1	325	85.4	0	-60
JN-9910	1999	JNR	BGM	524706	6550011.2	321	99.4	0	-60
JN-9911	1999	JNR	BGM	524737.8	6549657.9	314	122.3	0	-60
JN-9912	1999	JNR	BGM	521838.2	6548296.9	326	93.9	0	-60
NL18-002	2018	ALX	NQ	524252	6549002	334	351	0	-60
NL18-003	2018	ALX	NQ	525102	6549101	346	456	0	-60

**Table 2: Significant drillhole intercepts** 

	Intersection				
Hole Id	From (m)	To (m)	Width (m)	U (ppm)	U3O8 (ppm)
BL-037	69.6	74.1	4.5	116	138
incl.	69.6	70.7	1.1	330	393
BL-040	88.1	88.3	0.2	190	226
BL-053	33	34	1	74	88
BL-071	66.1	66.9	0.8	101	120
BL-075	75.6	77.3	1.7	62	73
BL-083	39.8	41	1.2	55	65
and	44	45	1	68	81
BL-085	28	30.2	2.2	190	227
BL-087	30	30.5	0.5	94	112
and	43.8	47.8	4	118	140
BL-088	26.2	29.1	2.9	94	111
BL-090	74.2	74.5	0.3	855	1018
BL-091	56.7	57.9	1.2	198	236
BL-092	61.9	66.1	4.2	109	130
incl.	63.9	64.5	0.6	205	244
incl.	65.5	66.1	0.6	335	399
BL-093	53.4	53.9	0.5	65	77
BL-115	52.3	55.4	3.1	57	68
incl.	52.3	52.8	0.5	72	86
incl.	54.9	55.4	0.5	193	230
and	57.8	58.8	1	58	69
BL-120	53.5	54	0.5	78	93
BL-140	53	55	2	60	72
BL-146	82.9	85.1	2.2	410	488
incl.	82.9	83.77	0.87	809	963
BL-148	86.3	86.8	0.5	206	245
BL-149	100	100.5	0.5	53	63
BL-151	76.9	77.4	0.5	50	60
and	79	79.3	0.3	375	446
and	80.03	81.4	1.37	108	128
BL-152	70.2	70.7	0.5	50	60
and	72.7	73.73	1.03	88	105
BL-153	80.3	80.8	0.5	83	99

and	82.3	83.3	1	68	81
BL-172	82	83.9	1.9	255	304
Incl.	82.5	83	0.5	748	890
BL-174	50.7	51.2	0.5	262	312
and	55.2	55.7	0.5	92	110
BL-178	61.7	62.2	0.5	113	135
BL-179	83.6	85.1	1.5	119	142
NL18-002	30.3	31.25	0.95	144	171
and	51.5	52	0.5	93	111
NL18-003	272	272.5	0.5	54	64

## Notes:

Significant intercepts are reported under these criteria:

- Intercepts calculated on length-weighted average
- Final composite grade must be ≥50 ppm U
- Internal waste must be ≥ 15 ppm U (no external waste)
- Conversion: ppm U =  $0.840001 * ppm U_3O_8$

## **Appendix 3: Work Summary**

Year(s)	Assessment Report	Company	Survey(s) Performed
1967	74-0001	New Continental Oil Company Of Canada Ltd.	Geophysics: Airborne radiometric survey.
		Ensign Oils Ltd And	Drilling: 3 DDH records
1969	74P01-0001	Fort Reliance Minerals Ltd.	Geophysics: Airborne radiometric survey.
1969	74116-0004	Northwest Explorers Ltd.	Geophysics: Airborne radiometric survey
		213.	Photo-geology study.
1969	74P02-0004	Camok Ltd.	Reinterpretation of Govt. 1962 aeromagnetic survey, radiometric and geochemical reconnaissance.
1975	74P-0002	Government Of Saskatchewan	Ground investigation of airborne radiometric anomalies.
1976	74P-0004	SMDC	Geophysics: Airborne E M, magnetic and radiometric survey.
1977	74P-0005	SMDC	Prospecting, hound-dogging, geochemical and geophysical surveys, trenching and sampling (over 12 grids), lake sediment sampling report.
1977-78	74P01-0005	SMDC	Drilling: 29 DDH records and sections (# 1 to 29 - Claw, Cyprian, Marni and Sandra Lake grids).
1978	74P-0008	SMDC	Quaternary geology Athabasca unconformity and Cyprian grid.
			Drilling: 10 DDH records (# 30 to 39 - Newnham grid).
1978	74P-0007	SMDC	Lake sediment, soil, esker and till sampling, prospecting and hound-dogging Track Etch and E M surveys.
1978	74P-0006	SMDC	Geophysics: Airborne EM (INPUT) and magnetic survey.
1978-79	74P01-0008	SMDC	Drilling: 26 DDH records, geological & radiometric logs (# 30 to 55 -Newnham grids). Drilling report.
1978,80	74P-0010	SMDC	Photo-geological study report.
1979-80	74P02-0008	SMDC	Ground E M, I.P. and resistivity surveys.
1979	74P01-0010	SMDC	Geophysics: Ground EM surveys (Crone, DEEPEM, PEM, VEM). Comparison and appraisal.

Year(s)	Assessment Report	Company	Survey(s) Performed
1979	74P-0009	SMDC	Prospecting, geological mapping and ground geophysical surveys. Detail surveys and drilling - Newnham grid IP/resistivity surveys.
1979	74P01-0011	SMDC	Drilling: 32 DDH records, geochemical & radiometric logs (# 56 to 87 - Newnham grid).
1980	74P02-0011	SMDC	Prospecting (fault/lineaments, INPUT anomalies on the Newnham grid).
1980	74P02-0012	SMDC	Drilling: 35 DDH records, geochemical & radiometric logs (# 88 to 107, 111A to 125 - Newnham, Outlying grids), hydro-geochemistry report, and petrological notes.
1981	74P-0011	SMDC	Prospecting, compilation, age dating, till sampling and alteration study.
1981-82	74P-0013	SMDC	Petrographic study on Black Lake Project (core and outcrop).
1982	74P02-0018	SMDC	Geophysics: Elfast turam, magnetic and gravity surveys.
1983	74P-0015	SMDC	Geological investigations and prospecting.  Geophysics: Ground VLF-EM, HLEM, Max-Min, magnetic and gravity surveys.
			Drilling: 41 DDH (# BL-131 to 171), gamma logged lithogeochemical, petrographic, groundwater studies.  Drilling: 17 DDH (# BL-172 to 188): Newnham grid,
1984	74P02-0020	SMDC	gamma logged core petrographic study.  Geophysics: Ground VLF-EM, magnetic and HLEM surveys over the Newnham grid. Reinterpretation of airborne surveys report.
1997-98	74P-0016	JNR Resources Inc.	Drilling: 17 DDH (# J9801 to 05, JN98-01 to 07, JN99-08 to 12).  Geophysics: Airborne EM and magnetic survey, ground TDEM.  Geological mapping, prospecting, and soil, till, outcrop, and boulder sampling. Core and boulder reflectance spectroscopy report.
2006	74P01-0019	JNR Resources Inc.	Geophysics: Ground HLEM survey (Main and B grid).

Year(s)	Assessment Report	Company	Survey(s) Performed
2006	74P02-0021	JNR Resources Inc.	Geophysics: Helicopter-borne VTEM TDEM survey.
2006	74P02-0022	JNR Resources Inc.	Geophysics: Helicopter-borne DIGHEM electromagnetic/resistivity/magnetic survey.
2008	74P01-0020	JNR Resources Inc.	Geophysics: Airborne high resolution 3-axis magnetic gradiometer survey.
2009	74P01-0022	JNR Resources Inc.	Geophysics: 1547 km helicopter-borne high resolution aeromag survey.
2011	74P02-0025	JNR Resources Inc.	Geophysics: 1379 km airborne full tensor gravity gradiometry survey.
2015	MAW 1770	Lakeland Resources Inc. (predecessor to ALX Uranium Corp.)	Geophysics: Airborne full tensor gravity gradiometry survey.
2017	MAW 2151	ALX Uranium Corp.	Geophysics: DC-Resistivity (IP) 2D (Pseudo 3D) survey.
2018	MAW 2514	ALX Uranium Corp.	Drilling: 3 DDH (NL18-001 to NL18-003) totalling 1,164 m.

## Appendix 4: Athabasca Basin Uranium Resources and Reserves Referenced

## **Uranium Resources**

Deposit	Owner	Status	Category	Tonnes	Mlbs U₃O <sub>8</sub>	Grade % U₃O <sub>8</sub>	Cut-off
			Inferred	4,399,000	80.7	0.83	
Arrow	NexGen Energy	Deposit	Indicated	1,572,000	47.1	1.36	
7	Ltd	Beposit	Measured	2,183,000	209.6	4.35	
			Total	8,154,000	337.4	1.87	0.25%
		Fission Uranium Deposit	Inferred	1,221,000	32.8	1.22	
Triple R	Uranium		Indicated	2,216,000	102.4	2.1	
			Total	3,437,000	135.2	1.79	0.25%
			Inferred	54,300	2.7	2.2	
Hurricane	IsoEnergy	Deposit	Indicated	63,800	48.6	34.5	
			Total	118,100	51.27	32.82	1.00%

#### **Uranium Reserves**

Property	Owner	Stage	Category	Tonnes	Mlbs	Grade	Recovery
					$U_3O_8$	% U <sub>3</sub> O <sub>8</sub>	
0.			Proven	338,100	135	18.11	
Cigar Lake	Cameco	Production	Probable	217,500	73.7	15.36	
			Total	555,600	208.6	17.03	98.70%
			Proven	2,047,300	316.8	7.02	
McArthur River	Cameco	Production	Probable	520,700	63.8	5.55	
			Total	2,568,000	380.5	6.72	99.00%

#### Notes:

- Arrow Deposit, NexGen Energy Ltd (TSX: NXE, NYSE: NXE, ASX: NXG) NI43-101 Technical Report on Feasibility Study, Arrow Deposit Rook I Project, Saskatchewan, 22 February 2021
- Triple R Deposit, Fission (TSX: FCU) announcement released 12 September 2022
- Hurricane Deposi, IsoEnergy Ltd (TSX.V: ISO) announcement released 18 July 2022 t
- Cigar Lake Property from Cameco website: https://www.cameco.com/invest/overview/reservesresources/proven-probable as at December 31, 2023
- McArthur River Property from Cameco website: https://www.cameco.com/invest/overview/reservesresources/proven-probable as at December 31, 2023

## **Appendix 5: JORC Code 2012 Table 1**

## **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections)

Criteria	Commentary
Sampling techniques	<ul> <li>The drilling data or full suite of geochemical data has not been fully reviewed, validated and incorporated into the Company's database as yet. There are limited references to drilling and sampling intervals throughout the Announcement and Appendix 2 shows all of the drillhole collar locations and the significant intercepts.</li> <li>All drilling on the Project was conventional diamond drilling.</li> <li>Hand-held scintillometers are of used to help select intervals for laboratory sampling. The scintillometers are not calibrated so they rely on geochemistry</li> <li>Sampling of the post-1999 core was typically half core, which is industry standard.</li> </ul>
Drilling techniques	<ul> <li>ALX Uranium Corp. (MAW2514)- Diamond drilling was conducted from April 22, 2018 to May 4, 2018 by Graham Brothers Drilling Ltd. of Fosston, SK utilising a Zinex A5 unitised hydraulic drill rig. The drill holes were all land-based for a total of 1,164.0 m of NQ coring. Downhole surveys were routinely collected on all holes using a REFLEX EZ-TRAC tool with a REFLEX EZ-COM II<sup>TM</sup> controller from just below the casing and at approximately 50 m intervals to the bottom of the hole. A REFLEX ACT III<sup>TM</sup> digital core orientation system was utilised in the spring 2018 drilling program and was added to the core barrel in all holes.</li> <li>Prior to 2018 – drilling techniques are poorly documented in publicly available assessment reports.</li> </ul>
Drill sample recovery	Core Recovery was measured by recording the rock sample returned per run (~3 m) in reference to driller's depth blocks, noting depth drilled.
Logging	<ul> <li>Specific logging procedures were not outlined in the publicly available data and reports. However, data from drill core was recorded from each hole including: lithologies and descriptions, sample intervals, and alteration/structure descriptions.</li> <li>2018 drill holes have downhole natural gamma completed to the end of hole with rods still in place.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>Significant intercept samples are split in half for laboratory chemical analysis.</li> <li>Proper handling techniques for uranium mineralised core sampling and transport are followed.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>Saskatchewan Mining Development Corporation (1978-1984) – Though analytical techniques and QAQC data are unavailable, SMDC is a predecessor to Orano Canada, a major uranium exploration company with a global presence. We trust that lab standards, blanks, replicates, etc. were utilised, and that certified reference materials, having a good range of values, were inserted blindly and randomly.</li> <li>JNR Resources Inc (1999) – Though analytical techniques and QAQC data are unavailable, JNR Resources, a highly regarded uranium exploration company, is a predecessor to Denison Mines, a major uranium exploration company. We trust that lab standards, blanks, replicates, etc. were utilised, and that certified reference materials, having a good range of values, were inserted blindly and randomly.</li> <li>ALX Uranium Corp. (2018) – All geochemical samples were analysed at the Saskatchewan Research Council (SRC) labs in Saskatoon using their Multi-Element Uranium Exploration Package, ICP1, which includes both Total and Partial Digestion using Inductively Coupled Plasma - Optical Emission Spectrometry ("ICP-OES"). Detailed list of QAQC samples are</li> </ul>

	<ul> <li>provided in assessment report MAW2514.</li> <li>2018 drilling utilised a Mount Sopris Model 4MXC/1000 1000 metre winch, a Mount Sopris MGX II Model 5MCA-1000 digital encoder and a Mount Sopris 2PGA-1000 stratigraphic natural gamma downhole probe, which produces a total count reading in counts per second (cps).</li> <li>Prior to 2018 make, model, and calibration factors for spectrometers and scintillometers were not provided in the publicly available assessment report data.</li> </ul>
Verification of sampling and assaying	<ul> <li>Where available, down-hole gamma surveys are used to identify and confirm the location and width of mineralised intercepts.</li> <li>In the absence of down-hole gamma data, hand-held scintillometer logs are used.</li> </ul>
Location of data points	<ul> <li>Drill hole coordinates are recorded in UTM (NAD83 – Z13N), specific survey tool is unknown.</li> <li>Topography is generally flat to rolling with ~60 meters of local relief. Surface features consists of glacial depositional features including outwash sand plains, drumlins, and eskers.</li> </ul>
Data spacing and distribution	Data spacing is variable due to broad regional exploration targets.
Orientation of data in relation to geological structure	No oriented data related to geological structures was gathered during the programs.
Sample security	<ul> <li>Prior to 2018 sample security is unknown</li> <li>2018: Drill core samples are bagged and stored in tamper-proof pails before shipment. Samples are delivered directly to analytical laboratories upon transport. Proper chain of custody maintained.</li> </ul>
Audits or reviews	Historical data is currently being compiled and reviewed by Dahrouge Geological Consulting in consultation with Recharge.

## **Section 2 Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section)

Criteria	Commentary
Mineral tenement and land tenure status	<ul> <li>Recharge Metals Limited has 100% ownership of the Newnham Lake Mineral Disposition as listed in Appendix 1 above.</li> <li>The Mineral Disposition is in good standing and all necessary permits for the current level of operations have been received.</li> <li>While the Mineral Dispositions are in good standing, additional permits/licences may be required to undertake specific (generally ground disturbing) activities such as surface exploration and underground development.</li> <li>Recharge is required to consult with First Nation and Métis, there are currently no Exploration Agreements in place for the Newnham Lake Project. Consultation is due to commence.</li> </ul>
Exploration done by other parties	Refer to Appendix 3.
Geology	<ul> <li>The Athabasca Basin consists of up to 2,200m of late Paleo- to Mesoproterozoic conglomeratic sandstone (Athabasca Group) overlying metamorphosed Archean and Proterozoic basement rocks</li> <li>Mineralisation typically occurs at or in close proximity to the unconformity, but recent discoveries have been made in the basement rocks including where there is no Athabasca sandstone overlying.</li> </ul>

Drill hole	<ul> <li>The exploration model for the Newnham Lake Project is primarily basement-hosted uranium mineralisation.</li> <li>Exploration efforts will focus on several high-priority target areas along several kilometres of untested conductors, coincident with cross-cutting faults and historical zones of elevated uranium, in addition to favourable geochemical anomalies</li> <li>Refer to Appendix 2.</li> </ul>
Information	
Data aggregation methods	No data aggregation methods were utilised in the reporting of historical mineral assays.
Relationship between mineralisation widths and intercept lengths	<ul> <li>Mineralisation on the Newnham Lake Project is poorly defined, and orientations are approximate.</li> <li>The relationship between true mineralisation widths and drilling widths is unknown.</li> <li>Any mineral intercept discussed is downhole and its relationship to the orientation of mineralisation is unknown</li> </ul>
Diagrams	All appropriate maps and figures are included in the body of text.
Balanced reporting	All significant and relevant intercepts have been reported.
Other substantive exploration data	<ul> <li>Exploration completed on the Project includes: airborne and ground EM surveys, airborne magnetics surveys, airborne and ground gravity survey, ground radon survey, prospecting, geochemical sampling and diamond drilling.</li> <li>All relevant exploration data is depicted in figures, body text, and included appendices.</li> </ul>
Further work	A discussion of further exploration work is outlined in the body of the report. Further exploration work is planned to include diamond drilling.