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ASX Announcement
17 October 2024

MULTIPLE URANIUM TARGETS IDENTIFIED BY DETAILED EM SURVEYS AT CLUFF LAKE PROJECT

MobileMT survey results support and refine previously identified drill targets.

Highlights

- Interpretation completed of the recent detailed MobileMT airborne magnetotelluric survey over the Cluff Lake Uranium Project, located in Canada's Athabasca Basin.
- Multiple basement conductors delineated by the survey, identifying potentially favourable geological settings for uranium mineralisation.
- Several low conductivity zones were also delineated at or near the interpreted unconformity, which may indicate zones of intense hydrothermal alteration.
- Results from the survey support and refine the previous drill targets and depth to unconformity defined from gravity, magnetics and historical MegaTEM data
- Most of the drill targets are only 200-300m deep with the southernmost targets (Douglas River area) being potentially accessible by road.
- Final drilling proposal is currently being determined based on these results. Various funding options are being considered.

Thunderbird Resources Limited ("Thunderbird" or "the Company") (ASX: THB) is pleased to report interpreted results from a major electromagnetic (EM) survey that was completed over its Cluff Lake Uranium Project (the Project) in April this year. Cluff Lake is located in a highly prospective area 7km east of the Cluff Lake uranium deposits and 8km north-east of the Shea Creek uranium deposits on the western flank of Canada's world-class Athabasca Basin (Figure 9).

The survey has delineated several basement conductors, which are potential pathways for uranium mineralising fluids. In the Douglas River area, two high-priority drill target areas (see Figures 1 and 2) have been defined just 5km and 14km north-east of the Shea Creek uranium deposits. Importantly, these targets are interpreted to be only 100-300m below surface.

The southernmost target area (DR-01) defined by the MobileMT survey is also coincident with a previously defined gravity/EM target. Further to the north-east a new high-priority target area (DR-02) has been defined by the survey. Both DR-01 and DR-02 are located within an interpreted structural corridor which trends north-northeast from the Shea Creek uranium deposits.

In the Moose Lake area, three high-priority drill target areas have been defined by the MobileMT survey, one of which is coincident with a previously defined gravity/EM target. These targets are

located within an interpreted structural corridor which extends north-northeast from the Cluff Lake Uranium deposits (Figure 1, Figure 3, Figure 4).

Expert Geophysics were contracted to fly the airborne EM survey, using MobileMT (airborne magnetotelluric) technology to help further refine and prioritise the current drilling targets within the Company's tenements. Consulting geophysics group, Terra Resources, were engaged to complete the interpretation of the survey results.

Drill targets have previously been defined based on airborne gravity, magnetics and historical MegaTEM data combined with geological, geochemical and structural interpretation. Details of the previous drill targets were provided in the ASX announcement dated 8th February 2023 titled "Final priority drill targets selected for Cluff Lake Uranium Project field season".

Management Comment

Thunderbird Executive Chairman George Bauk said: *"The MobileMT survey has further increased our confidence in the high-quality exploration targets already identified within our tenement holding at Cluff Lake. Our interpretation is that the drill targets along strike from Shea Creek sit around 100-300m below surface, presenting an outstanding exploration target that is significantly shallower than the Shea Creek deposits. We are now finalising a drill program to test these targets. We are looking at a variety of funding options including JV partners to fund the activities at Cluff Lake including the maiden drill program. The southern targets at Douglas River are potentially accessible by road."*

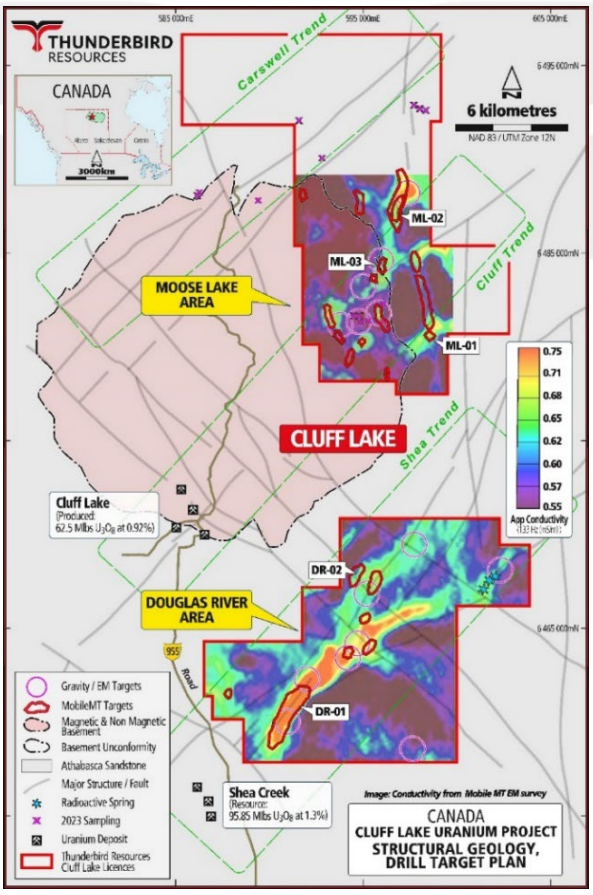

Figure 1: MobileMT targets at the Cluff Lake Uranium Project.

Douglas River Area

The Douglas River area includes several drill targets (Figure 2), two of which are high-priority targets as defined by the MobileMT survey, located 5km and 15km north-east of the Shea Creek uranium deposits. The Shea Creek deposits collectively host a total Indicated Resource of 2.056Mt grading 1.49% U_3O_8 for 67.57Mlbs of contained U_3O_8 and an Inferred Resource of 1.254Mt grading 1.02% U_3O_8 for 28.06Mlbs of contained U_3O_8 and, together, represent one of the largest undeveloped uranium resources in the Athabasca Basin[1].

The targets in the Douglas River area are unconformity-related, similar in style to the Shea Creek deposits, but interpreted to be only 100-200m below surface. The basement has been interpreted as being uplifted by faulting in this area with the new MobileMT data indicating conductors in the basement and potential alteration in the overlying sandstone (Figure 3).

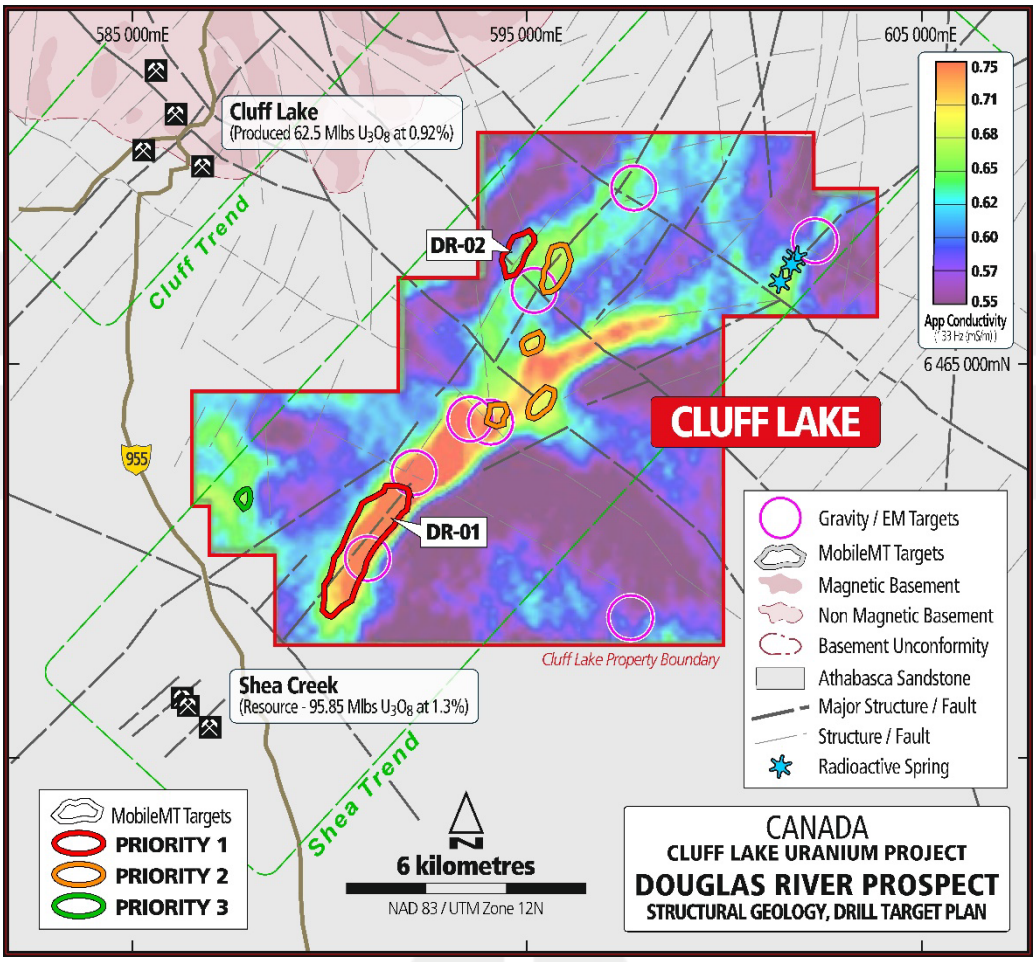

Figure 2: Douglas River area – MobileMT and gravity/EM targets

The MobileMT target DR-01 is a large target area around 2km in strike length, located just 5km north-east of the Shea Creek uranium deposits. The target is defined by a strong basement conductor which trends north-east, parallel to a structural corridor, which includes the Shea Creek uranium deposits. The unconformity is interpreted to shallow to approximately 300m depth (see Figure 3).

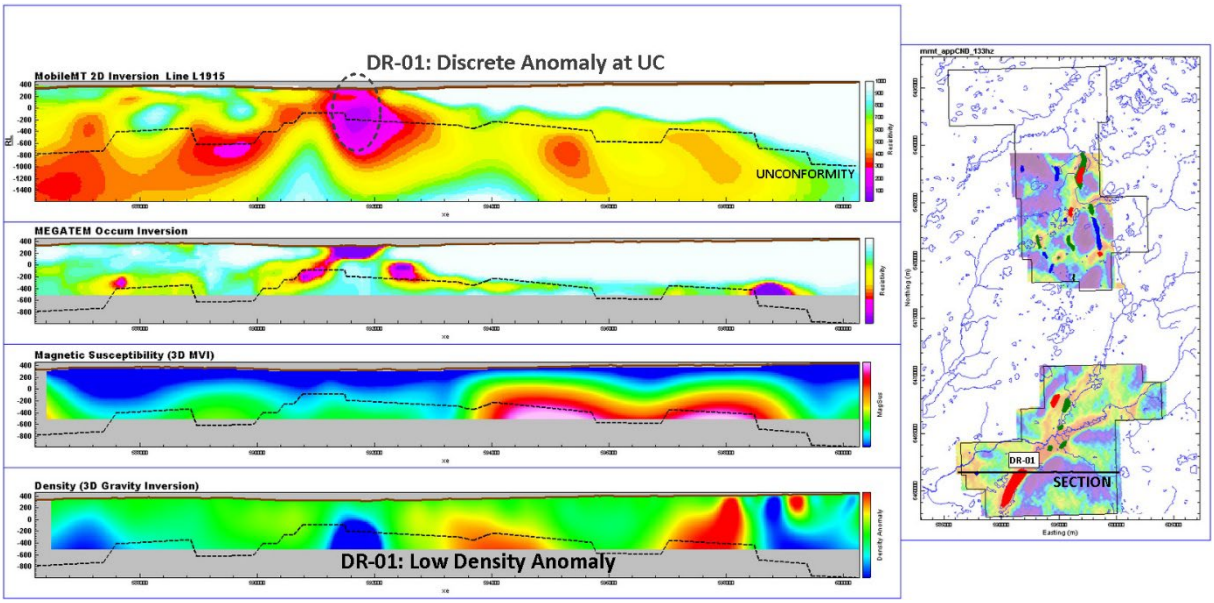

Figure 3: Douglas River area – Geophysics cross sections through high-priority target DR-01

The MobileMT target DR-02 is an unconformity-related target, located around 14km north-east of the Shea Creek uranium deposits. The target is defined by a basement conductor which trends north-east, parallel to the Shea structural corridor and the unconformity is interpreted to shallow to approximately 200m depth (Figure 4).

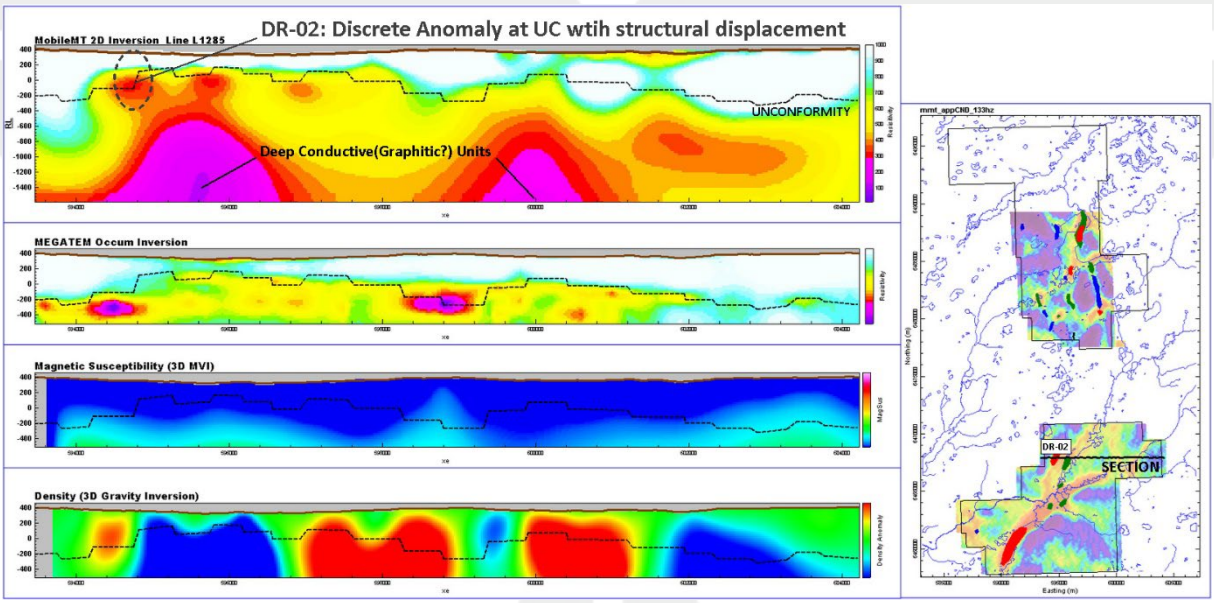

Figure 4: Douglas River area – Geophysics cross sections through high-priority target DR-02

Moose Lake area

The Moose Lake targets are located both within the Carswell structure and just outside it, around 12km north-east along a structural corridor from the historical Cluff Lake uranium mine, which produced around 62.5Mlbs of U_3O_8[1].

The targets in this area are both basement-hosted, similar to the Cluff Lake deposits, and unconformity-related (Figure 5). Previous drill targets have been defined by gravity lows with coincident interpreted structures and/or lithological contacts. An example of an unconformity-related target is ML-02 (Figure 7), where a strong basement conductor has been identified and the unconformity is interpreted to be around 200-300m deep.

Surface sampling from a historical trench proximal to the drill targets, conducted by Thunderbird in 2022, returned assays of up to 9.15% TREO, 112ppm U and 1570ppm Pb (Figure 5) (see VAL:ASX announcement dated 8th February 2023 titled *"Final priority drill targets selected for Cluff Lake Uranium Project field season"*). Several gravity/EM targets were previously defined in the vicinity of these samples, one of which is coincident with high-priority MobileMT target ML-03 (Figure 8).

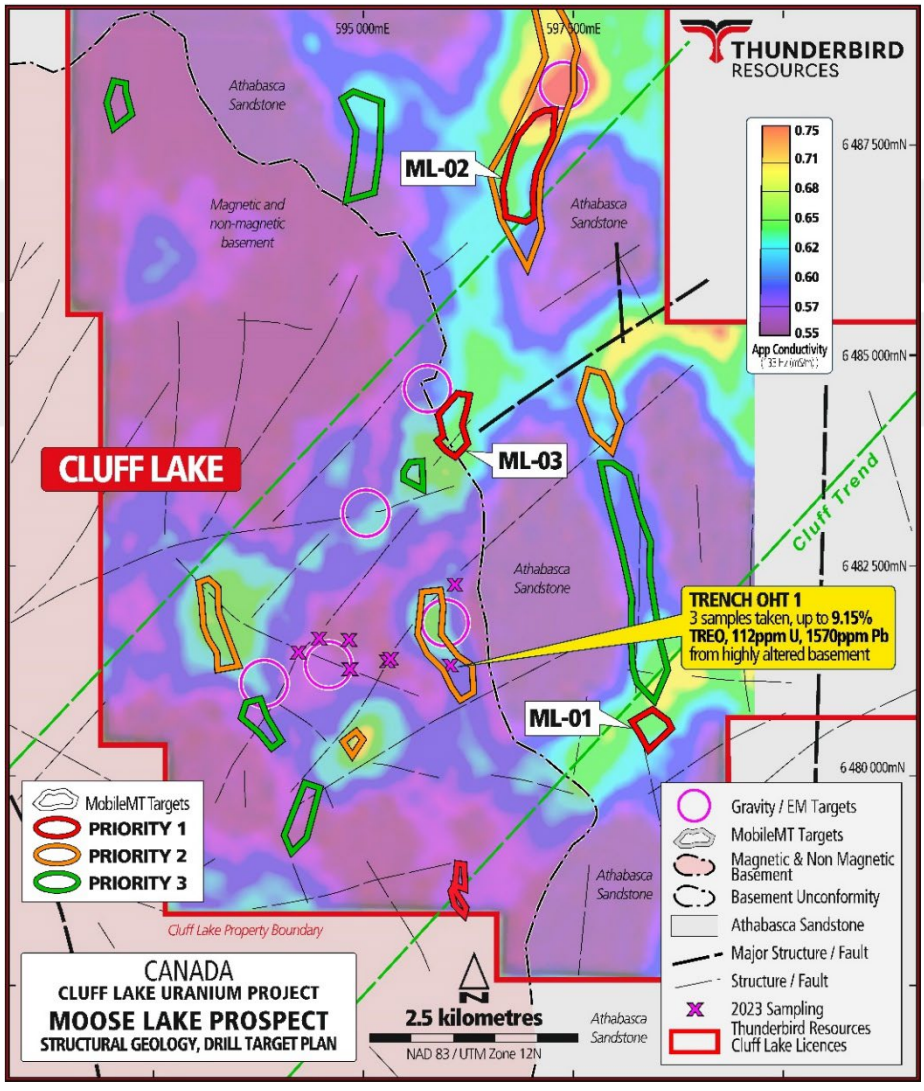

Figure 5: Moose Lake area – MobileMT and gravity/EM targets

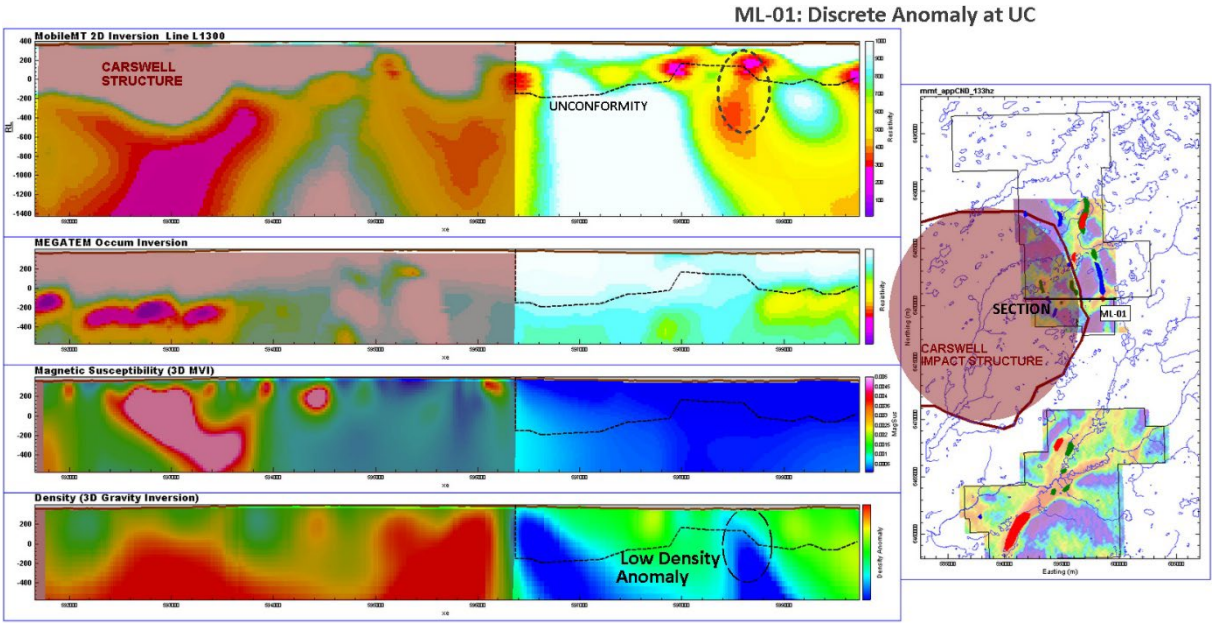

Figure 6: Moose Lake area – Geophysics cross sections through high-priority target ML-01

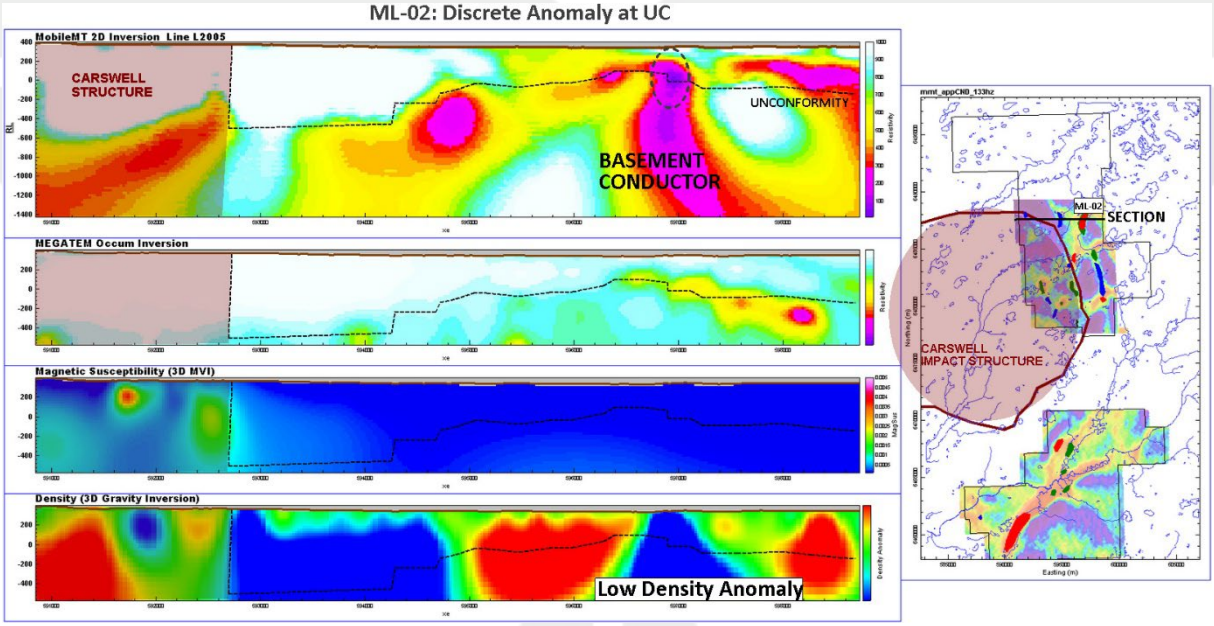

Figure 7: Moose Lake area – Geophysics cross sections through high-priority target ML-02

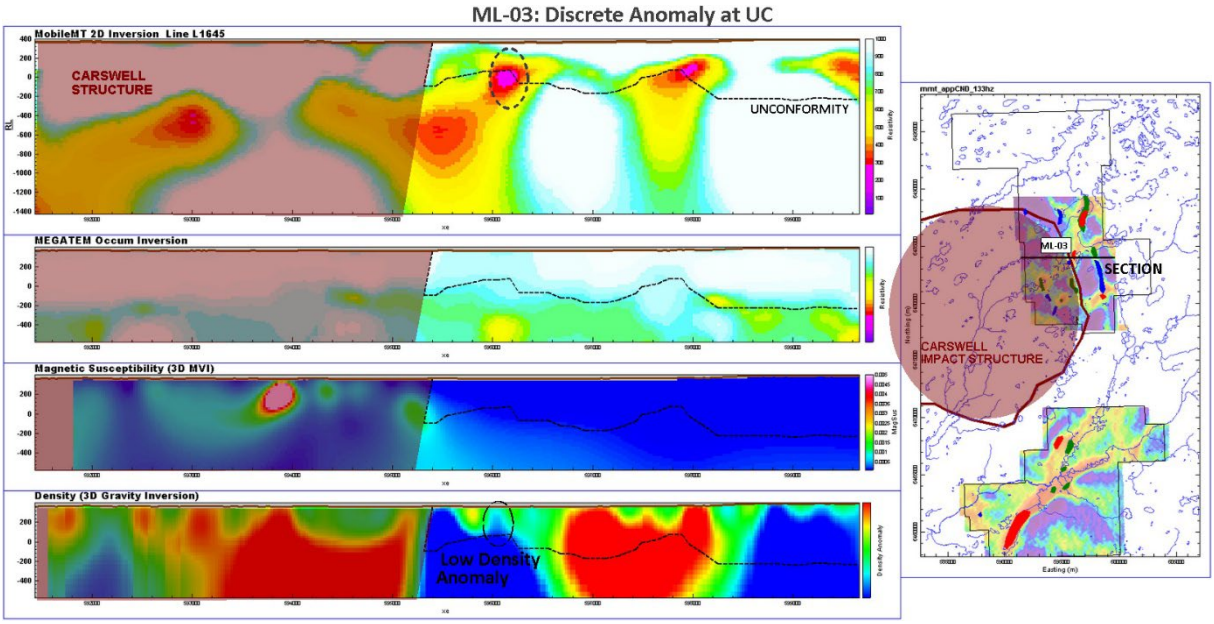

Figure 8: Moose Lake area – Geophysics cross sections through high-priority target ML-03

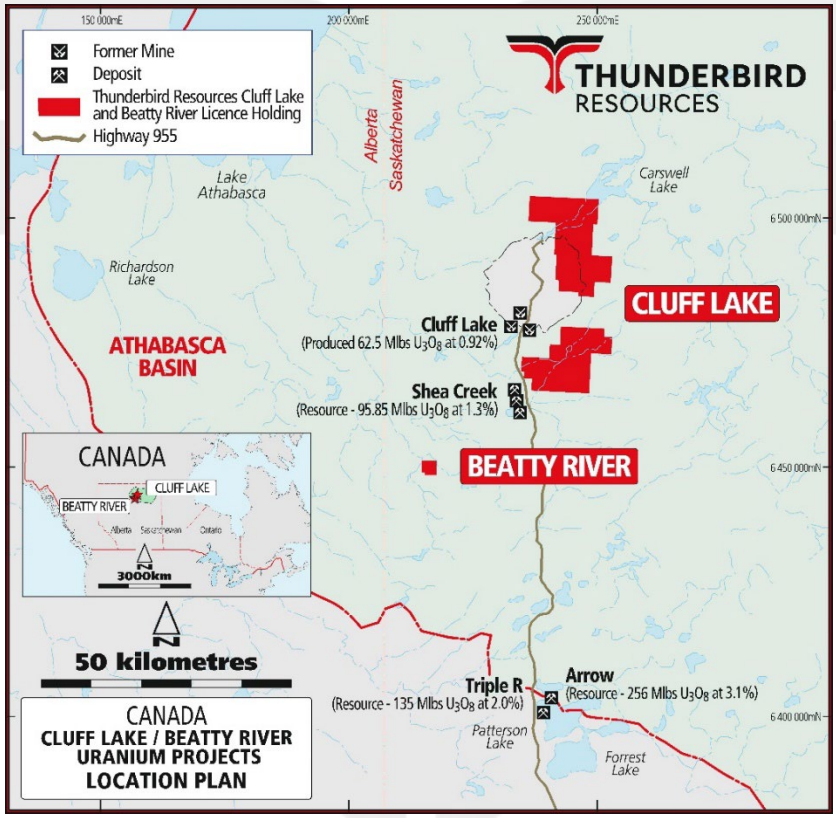

Figure 9: Cluff Lake Project Location

Deposit	Owner	Status	Category	Tonnes	Lbs U_3O_8	Grade (% U_3O_8)	Cut-off (% U_3O_8)	Source
Cluff Lake	Orano	Past-Production	-	-	62,500,000	0.92	-	Saskatchewan Mining Association – Uranium in Saskatchewan – Fact Sheet, 2017
Shea Creek	Orano (51%), UEX Corp. (49%)	Advanced Project	Inferred	1,272,200	28,192,000	1.01	0.3	Technical Report on Shea Creek Property, Northern Saskatchewan, with an Updated Mineral Resource Estimate, UEX Corporation May 31, 2013
			Indicated	2,067,900	67,663,000	1.48		
			Measured	-	-	-		
			Total	3,340,100	95,855,000	1.3		
			Indicated	566,000	10,800,000	0.87		

This announcement has been authorised for release by the Board of Directors.

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Competent Person Statement

The information in this documents that relates to Exploration Results is based on information compiled by Mr Robin Wilson who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Wilson is a consultant and Technical Director for Thunderbird Resources and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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' (the JORC Code). Mr Wilson consents to the inclusion of this information in the form and context in which it appears.

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ABOUT THUNDERBIRD RESOURCES

Thunderbird Resources (ASX:THB) ("Thunderbird" or "the Company") is an exploration company dedicated to creating shareholder value through uranium exploration activities. The Company is focused on its uranium portfolio of projects, in Canada.

- Strong track record of generating high-value projects
- Portfolio streamlined through the sale of Picha and Charaque Copper Projects in Peru to Firetail Resources (ASX: FTL) in 2023.
- Focus on high-potential, drill-ready uranium assets in Canada's Athabasca Basin at the right time in the Uranium cycle:

Hidden Bay (100%) Maiden drill program completed.

Cluff Lake (100%) 5 priority drill targets identified.

Surprise Creek Fault (100%) Mineralisation delineated over 500m of strike

Hook Lake (80%) Follow-up on 11 new targets

Beatty River (100%) Follow-up on historical HRE exploration results

Significant leverage to exploration success in Peru through 4.9% shareholding in Firetail plus retained 30% project interest – 5,000m diamond drilling program recently completed at Picha Project, Peru. Firetail has commenced drilling at their newly acquired Skyline Copper Project in Newfoundland, Canada.

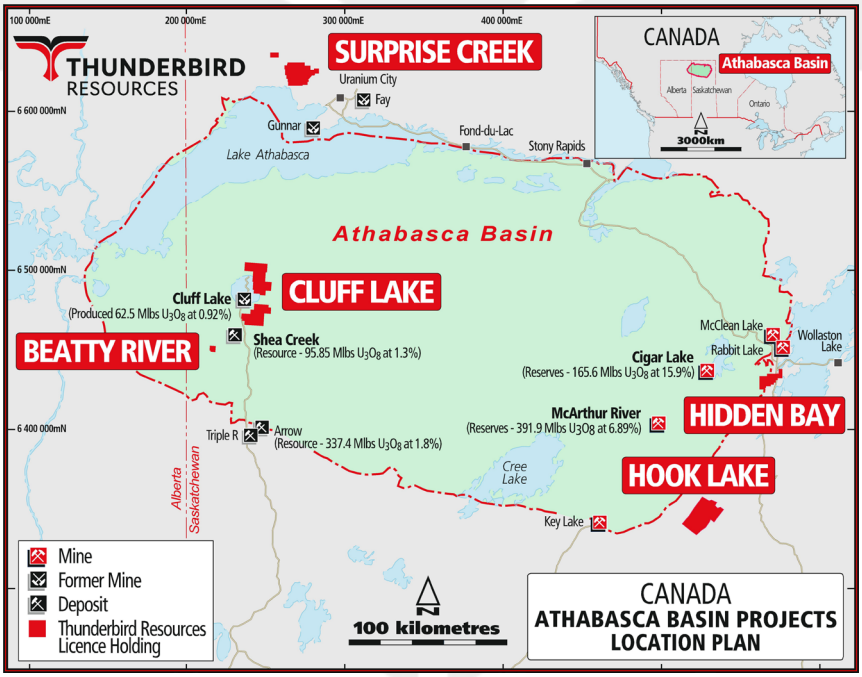

Figure 10: Thunderbird Project

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Appendix One

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.*	• Not applicable – no sampling reported. • Not applicable – no sampling reported. • Results reported herein relate to qualitative geological interpretation of MobileMT electromagnetic data. Expert Geophysics completed the Helicopter-borne MobileMT survey in April 2024. Two areas were covered by the survey, Douglas River and Moose Lake. At Douglas River a total of 1,012 line-kms were completed over an area of 155sq.km. At Moose Lake a total of 622 line-kms were flown over an area of 94 sq.km. Survey lines were oriented E-W at 150m line spacing. • Not applicable – no mineralisation reported.
Drilling techniques	• *Drill type and details*	• Not applicable – no drilling reported.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• Not applicable – no drilling reported. • Not applicable – no drilling reported.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation studies.* • *Whether logging is qualitative or quantitative in nature.* • *Core (or costean, channel, etc) photography.*	• Not applicable – no drilling reported. • Not applicable – no drilling reported. • Not applicable – no drilling reported.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• Not applicable – no sampling reported. • Not applicable – no sampling reported. • Not applicable – no sampling reported. • Not applicable – no sampling reported.

Criteria	JORC Code explanation	Commentary
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including field duplicate results.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Not applicable – no sampling reported. • Not applicable – no sampling reported.

Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*
		• Not applicable – no assays reported.
		• Mobile MT tow-bird:
		  • Three orthogonal induction coils (1.4 m diameter each) to measure naturally occurring magnetic fields in the frequency range 25 Hz – 20,000 Hz
		  • Geometrics G822A Cesium Magnetometer, installed in a separate towed-bird, 20 m above the **MobileMT** bird, sensitivity of 0.001 nT/10 Hz sampling
		  • GPS antenna, installed on the towed-bird with the magnetometer
		• Flight Lines were re-flown when not satisfying QC standards. Only accepted by QC lines data are included into the final databases. Acquired data quickly and efficiently checked for quality in the field on daily basis.

Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Not applicable – no sampling or assaying reported. • Not applicable – no drilling reported herein. • Full report on data acquisition, processing and inversion procedures, equipment and digital data specifications, and basic data analysis provided by Expert Geophysics. Geophysical survey results are presented by Expert Geophysics in the form of digital databases, maps, grids, sections, elevation slices and 3D voxels. • Not applicable – no assay data reported.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.*	• Not applicable – no drilling reported. • NAD83 UTM Zone 13N projected grid system was used.

Criteria	JORC Code explanation	Commentary
	• *Quality and adequacy of topographic control.*	• Differential GPS; Novatel OEMV-3G, line spacing 200m at 094/274 azimuth. Laser scanner Riegl VUX-1UAV (21.966475 Hz) with a King KRA405B Radar Altimeter (10 Hz) provide accurate DEM • MobileMT locations: proprietary GNSS receiver system utilizing RXM-GNSS-TM GPS Engines. The key features of the receiver are: o L1 1575.42MHz, C/A code o 33-channel satellite tracking o Position accuracy: 2.5m o 10 Hz update rate
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity* • *Whether sample compositing has been applied.*	• MobileMT: 150 m line spacing at 090/270 azimuth, drape= 65m • Line spacing is considered appropriate for early-stage exploration. • Not applicable – no sample compositing applied
Orientation of data in relation to geological structure	• *Whether the orientation of the sampling achieves unbiased sampling of possible structures.*	• E/W flight direction relative to a circular geological feature considered appropriate
Sample security	• *The measures taken to ensure sample security.*	• Not applicable – no sampling reported.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Not applicable for early-stage exploration.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Cluff Lake Project comprises 13 mineral claims covering 331.8km^2. Ownership is 100% by Thunderbird Resources wholly owned subsidiary 1255004 B.C. Ltd. • Mineral Claim is current. There are no objections by landowners or indigenous parties over the area of activity, no known environmental claims, no proclaimed or proposed wilderness areas and no known Impediments to operate.

Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Exploration was previously completed on the Cluff Lake Project by several companies since the 1970s including AMOK Ltd, Uranium North Resource Corp. and Marline Oil Company, this includes but is not limited to:
		  ○ Airborne Magnetic survey, Electromagnetic survey, Scintillometer prospecting.
		  ○ Geochemical sampling and prospecting: total of 4,518 samples recorded.
		  ○ Drilling: 82 diamond, 318 auger and 35 percussion drill holes since 1970.
		  ○ Radiometric survey

Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Cluff Lake Project is situated within the Western portion of the Athabasca Basin, a region of Mesoproterozoic Athabasca basin sandstones overlying Archean to Paleoproterozoic basement ortho- and paragneisses of the Rae Province. The project area is located on the eastern rim of the Carswell Structure, a circular structure of uplifted basement gneiss surrounded by an annular distribution of Proterozoic basin sediments, interpreted as being the eroded product of a Phanerozoic meteorite impact. Historically, the Athabasca Basin region has produced over 20% of the world's primary uranium supply. The exploration target is basement-hosted and Athabasca sandstone-hosted, unconformity-style uranium deposits.

Criteria	JORC Code explanation	Commentary
Drill hole Information	• *A summary of all material information including a tabulation of the following information for all Material drill holes:* ○ *Easting, northing and elevation of the drill hole collar* ○ *Dip, azimuth and depth of the hole* ○ *down hole length and interception depth*	• Not applicable – no drilling reported.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable – no drilling reported. • Not applicable - no metal equivalents reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If the True width is not known there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Not applicable – no drilling reported. • Not applicable – no drilling reported. • Not applicable – no drilling reported.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer to Figures in the body of the report above.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced.*	• All relevant results reported in the body of report above.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• No other relevant exploration data to report at this time. Previous relevant ASX announcements reported by Thunderbird Resources are as follows: ○ 7th June 2022: Uranium Targets identified at Cluff Lake Project ○ 8th February 2023: Final priority drill targets for Cluff Lake Uranium Project ○ 1st March 2024: EM Survey to commence at Cluff Lake Uranium Project ○ 9th April 2024: Detailed EM Survey commences at Cluff Lake Uranium Project

Criteria	JORC Code explanation	Commentary
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas.*	• Further work on the project likely to include the following: ○ Plan diamond drilling program based on the interpretation of airborne geophysics • Relevant diagrams are included in the body of the report above.

Sections 3, 4 and 5 do not apply to this report as there are no mineral resources, no ore reserves and no gemstones reported in this report.