Cosmos secures two additional highly prospective Uranium Projects – Thelon Basin, Canada

Projects located near the emerging Angilak Discovery 43Mlbs in Nunavut

Key points:

- Cosmos has secured a 100% interest in the Angilak West and Nut Lake South Uranium Projects.
- These acquisitions significantly enhance Cosmos' uranium exploration portfolio in the Thelon Basin, Nunavut, an area poised to become a premier high grade uranium mining district with striking similarities to the Athabasca Basin, Saskatchewan.
- Cosmos has acquired a substantial new land position totalling 193.72km², containing multiple uranium pitchblende occurrences, complementing its existing Fenix Uranium Project.
- Angilak West project is strategically located along structural extensions that control the mineralisation at the Angilak Uranium Deposit (Atha Energy).
- Cosmos' Nut Lake South project is in close proximity, just 3km to the south of Greenridge Exploration's Nut Lake uranium discovery who announced previous high grade uranium drill intersections of up 9ft of 0.69% U3O8 including 4.9% U3O8 over 1ft from 8ft depth.



Figure 1: Map of Canada showing location of Cosmos Uranium Projects relative to the Proterozoic aged Athabasca and Thelon Basins, which are the most renowned districts for unconformity-related uranium deposits in Canada.

CCSMOS

Cosmos Exploration Limited (ASX: C1X) ("**Cosmos**" or "**the Company**") is pleased to announce it has secured two additional highly prospective uranium projects, **Angilak West** and **Nut Lake South**, located in the emerging uranium mining district of the Thelon Basin, Nunavut, Canada. The projects have been secured through direct staking.



Figure 2: Simplified geology map of the Thelon Basin showing the Cosmos Uranium Projects in relation to the three known uranium deposits discovered to date^{1,2,3,4}

Cosmos Executive Chairman, Jeremy Robinson, said: *"These projects complement and enhance our existing position in Thelon Basin, the fact they already have many uranium occurrences noted on them in this world class uranium province provides for some exciting exploration opportunities for Cosmos. We look forward to getting on the ground as soon as possible."*

ANGILAK WEST PROJECT

Cosmos' Angilak West project is located 30 km's west of Atha Energy's Angilak deposit. The Angilak deposit is the second largest uranium deposit in the Thelon District containing **43.3 million pounds** of **U3O8 at 0.69% U3O8**³ held by Atha Energy. It is recognised for its substantial expansion potential and ranks among the highest grade uranium resources globally outside of the Athabasca Basin (See TSX:SASK announcement June 3 2024).

The uranium mineralisation at Angilak is primarily controlled by northeast and key northwest cross structures³ (Figure 3).

Cosmos has staked highly prospective ground to the west of Angilak along the same key mineralising northwest cross structures, containing several significant geological parameters (Figure 3):

CCSMOS

- 1. Extensions of Northwest-Trending Structures from the Angilak deposit: Airborne magnetic imagery indicates key northwest trending cross-structures that extend westward from Angilak to Cosmos' Angilak West project. These fluid pathway structures are interpreted to be critical for ore formation at Angilak.
- 2. Radioactive Occurrences: A series of radioactive occurrences were reported by Kivalliq Energy Corp. in 2012³, in addition to radioactive occurrences in the geological survey database.
- 3. Proximity to the Snowbird Tectonic Zone: The selected area is in close proximity to a major crustalscale structure known as the Snowbird Tectonic Zone, which is favourable structure for ore formation and runs parallel to the prospective unconformity defining the Archean/Paleoproterozoic basement and overlying Proterozoic sediments of the Yathkyed Basin.



Figure 3: Simplified geology map surrounding the Angikuni and Yathkyed Sedimentary Sub-basins showing the location of Cosmos' new projects in relation to the Angilak uranium deposit³ and Nut Lake discovery

NUT LAKE SOUTH PROJECT

Cosmos' Nut Lake South project is situated 3km to the south of Greenridge Exploration's (CSE:GXP) Nut Lake uranium discovery. The Nut Lake Project is centred around the 1979 discovery made by Pan Ocean Oil Ltd., featuring a significant intersection of **9ft of 0.7% U3O8** including an impressive **4.90% U3O8 over 1ft** from a depth of 8ft (See CSE:GXP announcement April 4 2024).

Recognising the high prospectivity of the area for Uranium, Cosmos has acquired two parcels of land to the south of Nut Lake containing key mineralising northwest-trending structures analogous to those identified at Angilak which extend into Greenridge's Nut Lake Project.

Cosmos Exploration Limited Level 1, 338 Barker Road Subiaco WA 6008 Email: info@cosmosx.com.au www.cosmosx.com.au

CCSMOS

The project is also adjacent to the significant crustal scale Snowbird Tectonic Zone, considered favourable for ore formation.

Importantly, The Geological Survey of Canada in 1979¹⁰ has documented a series of uranium prospects on the tenure, exhibiting visible uranium minerals including (Figure 3):

- **Short Haired Owl**: Evidence for pitchblende uranium minerals and chalcopyrite in a radiometric high area 150m by 60m within fractured gneiss near the contact with volcaniclastics;
- **Boo:** Pitchblende uranium minerals and chlorite alteration hosted in volcaniclastic rocks. Pitchblende-bearing veins within fractures observed in outcrop up to 0.5cm wide and extending for 1.4m parallel to an adjacent northwest-trending fault.
- **Nut Lake South**: Pitchblende uranium minerals and associated pervasive hematite and chlorite alteration hosted in basement gneiss. Pitchblende veinlets within fractures observed in outcrop, 1cm wide and extending for 3m, located 60m from the Yathkyed unconformity.

The characteristics of these uranium occurrences are similar to those of the Angilak deposit and require follow-up field work.

<u>Cautionary Statement on Previous Exploration Results</u>: The exploration results reported by Geological Survey of Canada in 1979 and Kivalliq Energy Corp 2012 are not reported in accordance with JORC (2012) Code. A Competent Person has not done sufficient work to classify the exploration results in accordance with JORC (2012) Code and following evaluation and/or further exploration work in these areas may be required to be able to report exploration results in accordance with JORC (2012) Code. The information in the market announcement is an accurate representation of the available data and studies completed to date.

Conclusions and Proposal for Further Work Programs at Angilak West and Nut Lake South

Cosmos believes that the structures surrounding the Yathkyed and Angikuni Sub Basins of the Thelon District are highly prospective for unconformity related uranium deposits, similar to those found on the Athabasca Basin in Saskatchewan. There are multiple compelling similarities of the basement host rocks, structures, alteration styles and mineralisation style documented at the Yathkyed and Angikuni Sub Basins and the emerging uranium discoveries at Angilak and Nut Lake further support this hypothesis. The geological and structural settings, along with associated uranium occurrences indicate that the newly secured Angilak West and Nut Lake South projects are highly favourable for the formation of uranium deposits. Cosmos intends to conduct exploration programs to unlock that potential.

Cosmos is securing land access to initiate exploration activities on the Angilk West and Nut Lake South Projects for the current 2024 summer exploration season. The Company plans to conduct rock and boulder sampling programs in accordance with JORC 2012 Code. These programs aim to evaluate and explore the highlights of previous results and investigate interpreted cross-cutting structures. This work is anticipated to commence in mid-July, pending availability of contractors and favourable weather conditions, with a goal of establishing drill targets.

Why Uranium in the Thelon Basin?

The Uranium price has seen a significant upward trend over the past several years. From a low point of approximately US\$20/lb in 2017-2018, the price has surged to over US\$100/lb in early 2024. This marks the first time since the last "uranium boom" in 2006, when prices peaked at US\$141/lb. In January 2024, forecasts by investment bank Citi predicted uranium prices to average \$US110/lb in 2025 as underinvestment in supply since 2011's Fukushima disaster leaves shortfalls⁵. Cosmos believes the forecast demand for uranium will be strong in the coming years presents a timely opportunity to discover high-grade uranium in world class terrains.

CCSMOS

- Unconformity-style uranium deposits are renowned for their exceptional grades making them the highest-grade uranium deposits in the world. On average, these unconformity uranium deposits have a grade around 1% U3O8 equivalent to 20 lbs U3O8 per tonne. These unique deposits are primarily found in three regions in the world:
 - The Athabasca Basin in Saskatchewan, Canada renowned for incredible deposits like McArthur River which has past production of **327.5Mlb U308** and Proven Total Reserves of 391.9 Mlb U308 as of 2018⁶;
 - The Greater McArthur Basin, Northern Territory, Australia renowned for the Jabiluka II deposit – 359M lb U3O8^{7,8}
 - The Thelon Basin, Nunavut, Canada though it has seen far less exploration, significant discoveries such as Kiggavik **133M lb U308**^{1,2} currently held by Orano have been made.

Cosmos believes the Thelon Basin uranium district holds substantial potential for new discoveries of worldclass unconformity-style uranium deposits. Other companies have also had significant recent success in the region which include Forum Energy Corp with the recent discovery intersection of **3.25% U3O8 over 7.6m** at Tatiggaq, including **13.8% U3O8 over 1.2m** (See TSX-V:FMC announcement November 7, 2023) and also Atha Energy who will commence a 10,000m drill program this year to expand their the Angilak Deposit (**43M lb U3O8**³; See TSX-V:SASK announcement March 20, 2024).

The Thelon basin is also relatively well-serviced by mining related infrastructure. The town and inland port of Baker Lake servicing Agnico Eagle's large scale gold mines of Meadowbank and Amaruq that collectively produced over 400,000 ounces of gold last year and. Estimated resources of 2.7 million ounces of gold in 2017.⁹

This announcement has been authorised by the Board of Cosmos Exploration Limited.

For further information please contact:

Jeremy Robinson Executive Chairman Cosmos Exploration Limited jeremy@cosmosx.com.au

CCSMOS

Table 1: Details of uranium and radioactive mineral occurrences recorded within Cosmos newproperties

				Element		Gangue	
Name	Easting	Northing	Host Rock	Association	Ore Minerals	Minerals	Brief Description
Boo	545300	6985800	Volcaniclastic wacke	U	pitchblende	chlorite	Fracture 140cm by 0.5cm parallel to adjacent NW fault
					pitchblende,	calcite, pyrite,	Anomalous zone approximately 150m NW by 60m NE
Short Eared Owl	548450	6986600	Granitoid gneiss	U-Cu	chalcopyrite	hematite	within microfractured gneiss in fault contact with
						hematite,	Veinlet 3m by 1cm in chloritic gneiss, chlorite 60m from
Nut Lake (South)	534300	6987800	Granitoid gneiss	U	pitchblende	chlorite	basal Dubaut Group unconformity
Yu	483577	6957187	Felisic Geniss	U	unknown	unknown	Not recorded (Geological Survey of Canada)
unnamed	489223	6956300	Sandstone	U	unknown	unknown	Not recorded (Dufresne et. al., 2013)
unnamed	489191	6948619	Sandstone	U	unknown	unknown	Not recorded (Dufresne et. al., 2013)
unnamed	493811	6948763	Sandstone	U	unknown	unknown	Not recorded (Dufresne et. al., 2013)

CCSMOS

References:

¹AREVA, Kiggavik Project, Enironmental Impact Statement. Project Description and Assessment Basis. See Section 5 for resource stated under NI43-101 <u>https://makitanunavut.wordpress.com/wp-content/uploads/2012/05/deis-volume-2-project-description.pdf</u>

²World Nuclear Association. <u>https://world-nuclear.org/information-library/country-profiles/countries-a-f/canada-uranium.aspx</u>

³Dufresne, Sim and Davis., 2013.Technical Report and Resource Update for the Angilak Property, Kivalliq Region. Nunavut, Canada.

⁴Armitage and Sexton, 2012. Updated Resource Estimate on the Main Zone Uranium Deposit, Amer Lake Property. Nunavut, Canada. Uranium North Resources Corp.

⁵https://www.afr.com/markets/equity-markets/uranium-s-renaissance-brings-big-opportunities-for-investors-20240126-p5f08q

⁶Bray, Murdock and Renaud., 2018. McArthur River Operation Northern Saskatchewan, Canada. National Instrument 43-101. Cameco Corporation. <u>https://s3-us-west-2.amazonaws.com/assets-us-west-2/technical-report/cameco-2018-mcarthur-technical-report.pdf</u>

⁷Hancock, Maas and Wilde., 1990. Jabiluka Uranium-Gold Deposits. Australasian Institute of Mining and Metallurgy. <u>https://www.researchgate.net/publication/274728753_Jabiluka_Uranium-Gold_Deposits</u>

⁸McKay and Miezitis., 2001.Australian Uranium Resources, Geology and Development of Deposits. AGSO – Geoscience Australia. <u>https://web.archive.org/web/20121002233115/http://www.ga.gov.au/image_cache/GA9508.pdf</u>

⁹Bilodau, Badiu, McMullen and Leetman. Technical Report on the Mineral Resources and Mineral Reserves at Meadowbank Gold Complex including the Amaruq Satellite Mine Development, Nunavut, Canada as at December 31, 2017.

¹⁰LeCheminant, Miller, Booth, Murray and Jenner, 1979. Geology of the Tebesjuak Lake Map Area. A progress report with notes on the uranium and base metal mineralisation

CCSMOS

About Cosmos Exploration

Cosmos Exploration Limited (ASX: C1X) is an ASX listed International critical minerals company focussed on making world class discoveries at its highly prospective projects including Corvette Far East Lithium Project and the Lasalle Lithium Project in the James Bay region of Quebec, the Byro East REE & Ni-Cu-PGE Project located in Western Australia and Orange the East Gold Project located in New South Wales.

Corvette Far East and Lasalle Projects are located along strike from the world class Corvette lithium project owned by Patriot Metals with historically mentioned lithium bearing pegmatites. It is considered highly prospective for giant lithium pegmatite discoveries.

Byro East was identified by RareX prior to the Julimar Discovery and has potential for mafic-ultramafic intrusion related nickel-copper and PGE mineralisation as well as recent success identifying potential for REE deposits.

Orange East is an advanced exploration project located on the boundary between the Molong Arc and Hill End Trough within the Lachlan Fold Belt, a major mineral province, within a similar geological setting and along strike from the multi-million-ounce McPhillamys Gold Mine.

Competent Person Statement

The information in this report relates to previous exploration results reported by Geological Survey of Canada in 1979 and Kivalliq Energy Corp 2012. The exploration results are not reported in accordance with the JORC Code 2012 and a Competent Person (as defined by JORC Code 2012) has not done sufficient work to classify the Exploration Results in accordance with JOR C2012 Code. The information in this report relates to Exploration Results and is based on information compiled by Mr Leo Horn and represents an accurate representation of the available data and studies for the project. Mr Horn is a Member of the Australasian Institute of Geoscientists (AIG) and is a Non-Executive Director of Cosmos Exploration Ltd.

Mr Horn has sufficient experience relevant to the style of mineralisation 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. Accordingly, Mr Horn consents to the disclosure of this information based on the information compiled by him, in the form and context it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant ASX releases. The form and context of the announcement have not materially changed. This announcement has been authorised for release by the Board of Cosmos Exploration Ltd.

CCSMOS

Appendix Two – JORC Code, 2012 Edition – Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Criteria Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning 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. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg 	Commentary • Not Applicable – no sample results reported.
	submarine nodules) may warrant disclosure of	

Criteria	JORC Code explanation	Commentary
	detailed information.	
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	 Not Applicable – no drilling results 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. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Not Applicable – no drilling results reported.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Simple rock and minerals descriptions provided by Geological Survey of Canada in 1979¹⁰.

Cuiteuie		Commentant
Criteria Sub-sampling techniques and sample preparation	 JORC Code explanation If core, whether cut or sawn and whether quarter, half or 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. 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 for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being 	Commentary • Not Applicable – no geochemical results reported.
Quality of assay data and laboratory tests	 sampled. 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, 	 Not Applicable – no geochemical results reported.

Criteria	JORC Code explanation	Commentary
	duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	
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 drilling results reported.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Mineral occurrences documented by Geological Survey provided in NAD83 UTM (Zone 14N) Mineral occurrences documented by Kivalliq in 2013 estimated from a georegistered map (Figure 9.8¹⁰) See details in Table 1
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 appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 The data is not appropriate for use in estimating a Mineral Resource and is not intended for such use. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. No sample compositing was undertaken.

CCSMOS

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 The outcrops and boulders were recorded at selected sites based on their radioactivity measured with a scintillometer and it is unknown if these results are biased or unbiased. Selected outcrop descriptions are generally taken to be representative of the outcrop or boulder.
Sample security	• The measures taken to ensure sample security.	 No outcrops were sent to the lab for assay so not applicable
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	 No audits or reviews have been completed.

Section 2: Reporting of Exploration Results

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 such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 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. 	 Angilak West and Nut Lake South exploration claims comprise: 104540 to 104549, 104553, 104648, 104666 are currently held 100% by Trent Potts on behalf of Cosmos All above claims are in the process of being transferred to Cosmos. The tenures are located in Nunavut, Canada. There are no known impediments to operate in the area if all the correct provincial regulatory approvals are granted and the correct Inuit groups are consulted on the proposed work programs.

Cuitouia	IODC Code and another	Commente
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Information on uranium and radioactive occurrences on the Angilak West and Nut Lake South projects was recorded by Geological Survey of Canada in 1979¹⁰ and Kivalliq Energy Corporaton³
Geology	 Deposit type, geological setting and style of mineralisation. 	 Mineralisation style at Angilak West and Nut Lake South is not yet fully understood but interpreted to be grouped in the unconformity-related styles of mineralisation. Field work is required to establish this interpretation
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. 	 Not applicable – no assay results reported
Sub-sampling techniques and sample preparation	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 No metal equivalents are 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 it is not known and only the down hole lengths are 	 The orientation and true width of mineralised zones containing the recorded uranium minerals are not yet known and field work is required to establish this interpretation

Criteria	IORC Code explanation	Commentary
entenu	reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	connectury
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. 	 Appropriate maps and tables are included in this ASX announcement.
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 to avoid misleading reporting of Exploration Results.	 All available data has been reported in tables and figures
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. 	 Everything meaningful and material is disclosed in the body of the report. No bulk samples, metallurgical, bulk density, groundwater, geotechnical and/or comprehensive rock characteristic tests were carried out by previous explorers. There are no known potentially deleterious or contaminating substances. Exploration data for the project continues to be reviewed and assessed and new information will be reported if material.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling). Diagrams clearly highlighting 	 Further work is detailed in the body of the announcement. Given the prospectivity of the newly acquired project, the company plans to initiate exploration activities at Angilak West and

Criteria	JORC Code explanation	Commentary
	the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Nut Lake South, with a view to establishing new drill targets.