Cosmos Commences Exploration at High-Grade Thelon Uranium Projects

Early-stage community engagement and prospecting activities underway at Fenix, Angilak West and Nut Lake South

Key points:

- Community engagement meetings with local stakeholders have commenced, with permission granted for early-stage prospecting and exploration activities.
- Site access and prospecting activities underway at Fenix, Angilak West and Nut Lake South Uranium Projects.
- Work is being led by Company's technical director, Mr. Leo Horn and Exploration Manager Mr Kristian Hendricksen.
- Early works include establishing access to the sites and conducting prospecting activities designed to validate previous work.
- Cosmos has three main projects in the Thelon Basin called Fenix, Angilak West and nut Lake South.



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.

Cosmos Exploration Limited (ASX: C1X) ("**Cosmos**" or "**the Company**") is pleased to announce that community engagement, site access and prosepecting has begun across its highly prospective high-grade uranium project; Fenix, **Angilak West** and **Nut Lake South**, located in the emerging uranium mining district of the Thelon Basin, Nunavut, Canada.

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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: *"It is good to see we are on the ground in such short order after acquiring these projects within the last few months. The initial phase is designed to establish stakeholder relationships, establish modes of access and confirm previous works undertaken in the area with a view to returning asap. We look forward to continuing to update the markets as the results come in"*

WORK UNDERWAY

Cosmos has recently arrived in Baker Lake and secured permission from local stakeholders to access the Fenix, Angilak West and Nut Lake South projects. The team will use Baker Lake as a base camp for prospecting and future exploration activities supported by local groups. Initial works involve establishing access to the various sites of interest by helicopter where necessary before commencing prospecting activities.

Prospecting activities led by the company's technical director Mr Leo Horn and Exploration Manager Mr Kristian Hendricksen will focus on areas with historic uranium occurrences.

Summaries of the various projects are located by below but for more detail please refer to ASX release dated:

• 15th May 2024 - Cosmos to acquire highly prospective Fenix Uranium Project – Thelon Basin, Canada

• 25th June 2014 - Cosmos secures 2 two additional highly prospective Uranium Projects – Thelon Basin, Canada

THE FENIX PROJECT

The Fenix Project is situated approximately 100km north of the Kiggavik deposit and 50km southwest of the Amer Lake uranium deposit (**20M lb U308**⁷) within the Amer Group belt, which is a group of basement rocks that have been subject to complex folding and faulting. The Amer deposit is hosted at the contact between the Showing Lake and Oora Lake formation, however many uranium occurrences are known to occur with other stratigraphic horizons, such as the base of the Resort Lake Formation which is known to contain graphitic horizons (Figure 2) that are commonly associated with uranium deposits in the Athabasca Basin. The Fenix project contains all stratigraphic horizons including the upper Tahiraatuaq group which also contains graphitic horizons, as well as the underlying Woodburn Lake group that hosts Kiggavik (Figure 2).

The majority of previous work completed at Fenix comprises primarily of reconnaissance ground prospecting work, with the primary focus on identifying radioactive boulder trains created by glacial activity on Uranium deposits. Field programs were conducted sporadically first in 1981 by Westmin/Geoterrex, then much later in 2006 and 2007 by the Titan/Mega JV, utilising a handheld scintillometer to estimate radioactivity and laboratory assays on select samples. This work was extremely successful in the identification of at least six significant highly radioactive boulder trains (RAD-1 to 6), whereby glaciers in the last ice age are interpreted to move radioactive rock in a primarily northwest direction (Figure 3). These boulder trains extend for distances varying from 500m to as long as 3km and are defined by scintillometer readings >1000 and **up to 15,000 counts per second (cps)*.** Select assays on radioactive boulders submitted for lab assay indicate high grades of uranium in places with highlights:

- Up to 6.0% U308 at RAD2;
- Up to 3.95% U3O8 at RAD1;
- Up to **0.57% U3O8** at RAD6; and
- Up to 0.53% U308 at RAD4;

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Figure 3: Map of the Fenix Project showing simplified bedrock geology and boulder scintillometer and assay results.

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 **U308 at 0.69% U308**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 4).

Cosmos has acquired highly prospective ground to the west of Angilak along the same key mineralising northwest cross structures, containing several significant geological parameters (Figure 4):

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Figure 4: 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.

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

<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.

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

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About Cosmos Exploration

Cosmos Exploration Limited (ASX: C1X) is an ASX listed International critical minerals Company focussed on making world class discoveries across all its properties including the Thelon Basin Uranium properties in Nunavut Province in Canada, the 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.

The Company's primary priority is advancing the highly prospective Thelon Basin Uranium properties which include the Fenix Project, the Angilak West Project and the Nut Lake South Project all of which have historic high grade uranium occurrences noted by previous explorers. The Thelon basin is one the world premier addresses to explore for high grade unconformity related uranium deposits with striking similarities to the nearby Athabasca Basin, a major producer of uranium globally. The Thelon basin is home to the world class Kiggavik deposit (133mlbs at 0.69% U3O8).

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.

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Appendix Two – JORC Code, 2012 Edition – Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
	• Nature and quality of	 Not Applicable – no sample results
Criteria Sampling techniques	 JORC Code explanation 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 is barent compliant and the spendiament 	• Not Applicable – no sample results reported.
	Unusual commodities or	
	mineralisation types (ea	
	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.

Criteria	JORC Code explanation	Commentary
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 sampled. 	Not Applicable – no geochemical results 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, 	 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.

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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.

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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	JORC Code explanation	Commentary
	reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	
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.