



ATHA ENERGY IDENTIFIES NUMEROUS OUTCROPS HOSTING HIGH-GRADE URANIUM MINERALIZATION

HIGHLIGHTS

- Surficial mapping was conducted as part of the 2024 Angilak Exploration Program that focused on areas strictly proximal to the Lac 50 Deposit and achieved its objective of discovering high-grade uranium mineralization on surface beyond the extents of the Lac 50 Deposit's Exploration Target Model;
- High-grade surficial uranium mineralization was identified between Lac 48, Lac 50, Lac 52, and Lac 54 trends, collectively known as the Lac 50 Deposit, along prospective new parallel trends;
- Discovery of outlined outcrops containing high-grade uranium mineralization along strike from the Lac 50 Deposit provide basis for future exploration and significantly de-risk expansion efforts;
- A zone of extensive bedrock outcrop with radioactivity up to >60,000 counts per second (cps) – >10,000 cps is indicative of high-grade uranium mineralization – was identified over a 3-kilometre strike length. The new discovery is located between the Mushroom Lake zone on the Lac 52 trend and the Hot zone on the Lac 54 trend and has not been drill tested, nor was it included in the 2024 Exploration Target Model;
- Results from the surficial outcrop mapping further demonstrate the robust metal endowment present, not only at the Lac 50 Deposit area, but throughout the entire Angilak Project. The Lac 50 Deposit remains open along strike and at depth and is highly prospective for the discovery of additional parallel mineralized horizons. Additionally, numerous uranium surficial showings – such as the Dipole and Nine Iron showings (Figure 1) – have been made at the Angilak Project outside of the Lac 50 Deposit area, demonstrating further unrealized prospectivity at Angilak;
- An extensive surficial sampling program was completed within the Lac 50 Deposit area in 2024, the Company is anticipating receiving geochemical analytical results in Q1 of 2025
- Conclusions from a third-party updated Technical Report (with an effective date November 25, 2024) establish a baseline Exploration Target Model for the Lac 50 Deposit, ranging between 60.8M lbs U3O8 and 98.2M lbs U3O8, with an average grade range of 0.37% U3O8 and 0.48% U3O8 (Table 1);
- The Exploration Target Model is restricted to drill results from the Lac 48, 50, 52, and 54 mineralized trends (known as the “Lac 50 Deposit”) (Figures 2a & 2b). The Lac 50 Deposit area is

prospective to host uranium mineralization in excess of the Exploration Target Model. To date, approximately 24% of the Lac 48, 50, 52, and 54 trends have been drill tested; and

- Based on the early signs of success of the 2024 Angilak Exploration Program and historical showings, ATHA staked an additional 69,704 hectares in September 2024, and now controls the entirety of the Angikuni Basin.

Vancouver, British Columbia, December 5th, 2024 – ATHA Energy Corp. (TSX.V: SASK) (FRA: X5U) (OTCQB: SASKF) (“ATHA” or the “Company”), holder of the largest uranium exploration portfolio in two of the highest-grade uranium districts globally, is pleased to announce results from its surficial mapping program at its 100%-owned Angilak Uranium Project (the “**Project**”) in Nunavut, Canada.

Surficial mapping was completed as part of the 2024 Angilak Exploration Program (the “**Mapping Program**”), which also included expansion-focused diamond drilling and geophysics. The Mapping Program has successfully achieved its objective by discovering high-grade uranium mineralization on surface beyond the extents of the Lac 50 Deposit’s exploration target model (the “**Exploration Target Model**”), as defined in the updated 2024 Technical Report in accordance with the guidelines set forth in the National Instrument NI 43-101. The Technical Report establishes a baseline exploration target for the Lac 50 Deposit ranging between 60.8M lbs U3O8 and 98.2M lbs U3O8, with an average grade range between 0.37% U3O8 and 0.48% U3O8 (the “**Exploration Target**”) (Table 1) and is notably restricted to drill results from the Lac 48, 50, 52, and 54 mineralized trends (the “**Lac 50 Deposit**”) (Figures 2a & 2b).

Results from the Mapping Program support the conclusions of the updated 2024 Technical Report and significantly derisk future expansion drilling at the Lac 50 Deposit, demonstrating high-prospectivity of additional discoveries parallel to the current mineralized trends, and more broadly, across the entire Angilak Uranium Project.

Troy Boisjoli, CEO added: “Under the backdrop of a bifurcated uranium market, the need for scalable uranium projects within the North American sphere has never been greater. The advancements throughout 2024 continue to support Angilak as a uranium exploration project with Teir 1 scaling potential. This is supported by a historic resource of 43M lbs U3O8, an exploration target ranging from 60.8M lbs to 98.2M lbs U3O8, and undrilled surface mineralization over kilometers in strike length – all within the Lac 50 Deposit footprint.”

Cliff Revering, VP Exploration added: “The results of the surficial sampling and mapping campaign completed as part of the 2024 Exploration Program is yet more evidence to demonstrate the significant potential of the Lac 50 Deposit and Angilak Project. The geological data gathered as part of the 2024 surface program has not only identified additional mineralized trends but has allowed us to further define and characterize the mineralization controls within the Lac 50 Deposit area, which will be used to guide our future exploration and targeting campaigns.”

ANGILAK PROJECT – NUNAVUT

The Angilak Uranium Project is situated within the Angikuni Basin, approximately 225 km southwest of Baker Lake in the Kivalliq Region of Nunavut (Figure 1). The Project notably hosts the Lac 50 Uranium Deposit, which has a historical mineral resource estimate of 43.3M lbs at an average grade of 0.69% U3O8.¹ and a 2024 Exploration Target for the Lac 50 Deposit ranging between 60.8M lbs U3O8 and 98.2M lbs U3O8, with an average grade range between 0.37% U3O8 and 0.48% U3O8 (Table 1) - restricted to

drill results from the Lac 48, 50, 52, and 54 mineralized trends. Additionally, numerous regional discoveries of uranium mineralization have been made outside of the Lac 50 Deposit area, both within the Angikuni Basin as well as along its rim – demonstrating many similarities to high-grade uranium discoveries in the Athabasca Basin, Saskatchewan. One such prominent regional discovery within the Angilak Project area is the Dipole Showing, located along the western rim of the Angikuni Basin 25 km to the southwest of the Lac 50 Corridor. Previous operators of the Project completed 24 diamond drill holes in the Dipole Showing and intersected grades of up to 5.53% U3O8 over 0.5 m.

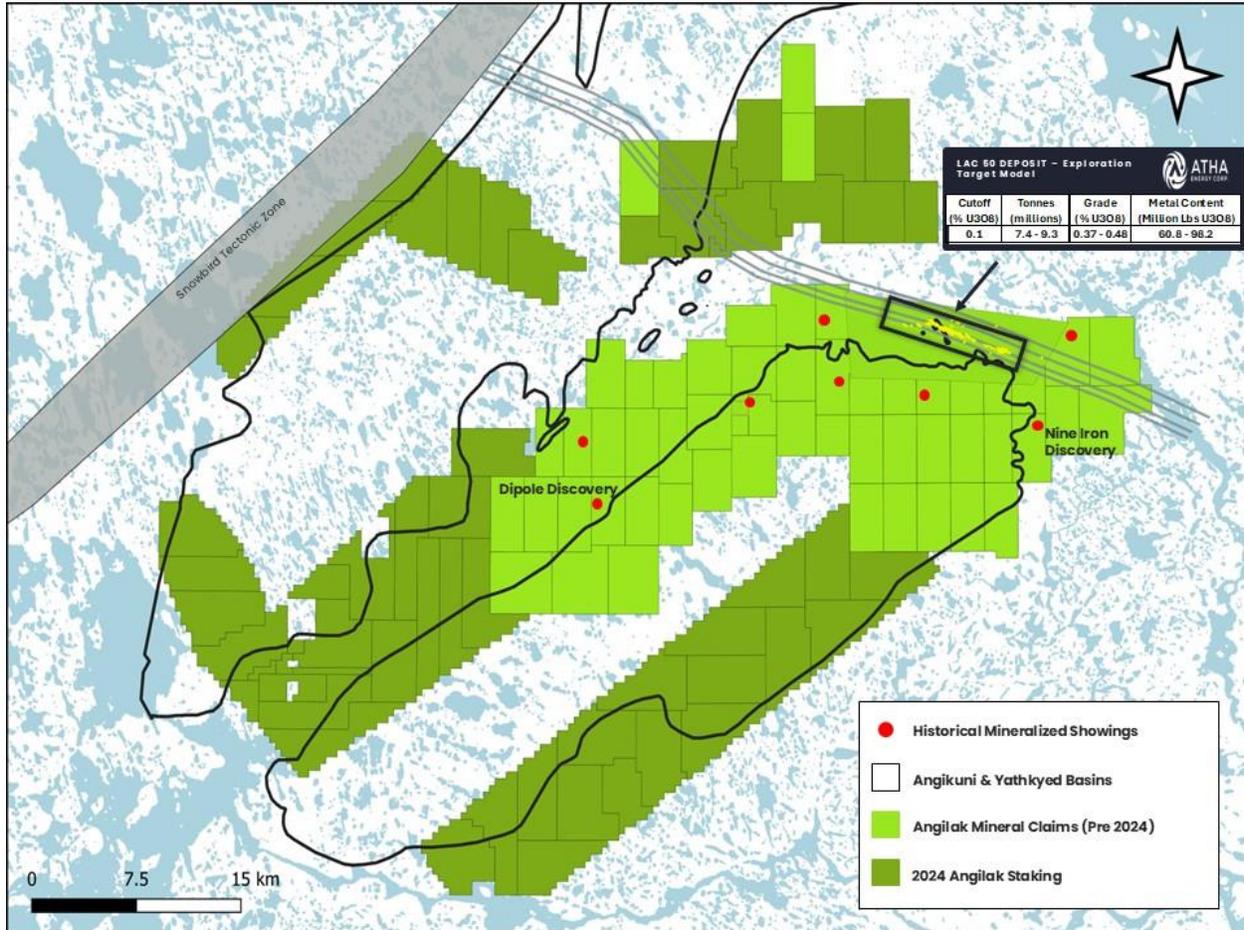


Figure 1: Plan Map detailing Lac 50 Deposit location with the Angilak Uranium Project

Table 1: Lac 50 Deposit Exploration Target Model

Lac 50 Deposit Exploration Target Model			
Cutoff (% U3O8)	Tonnes (millions)	Grade (% U3O8)	Metal Content (Million Lbs U3O8)
0.1	7.4 - 9.3	0.37 - 0.48	60.8 - 98.2

*Notes - The stated potential quantity and grade is conceptual in nature, and there has not been sufficient exploration to define a mineral resource, and it is uncertain if further exploration will result in the target being delineated as a mineral resource.

Significant digits have been rounded to the nearest decimal. *The ranges were derived from a block model approach using interpreted vein wireframes, drill core assays, grade interpolation via Ordinary Kriging, and applied uncertainty bandwidths.

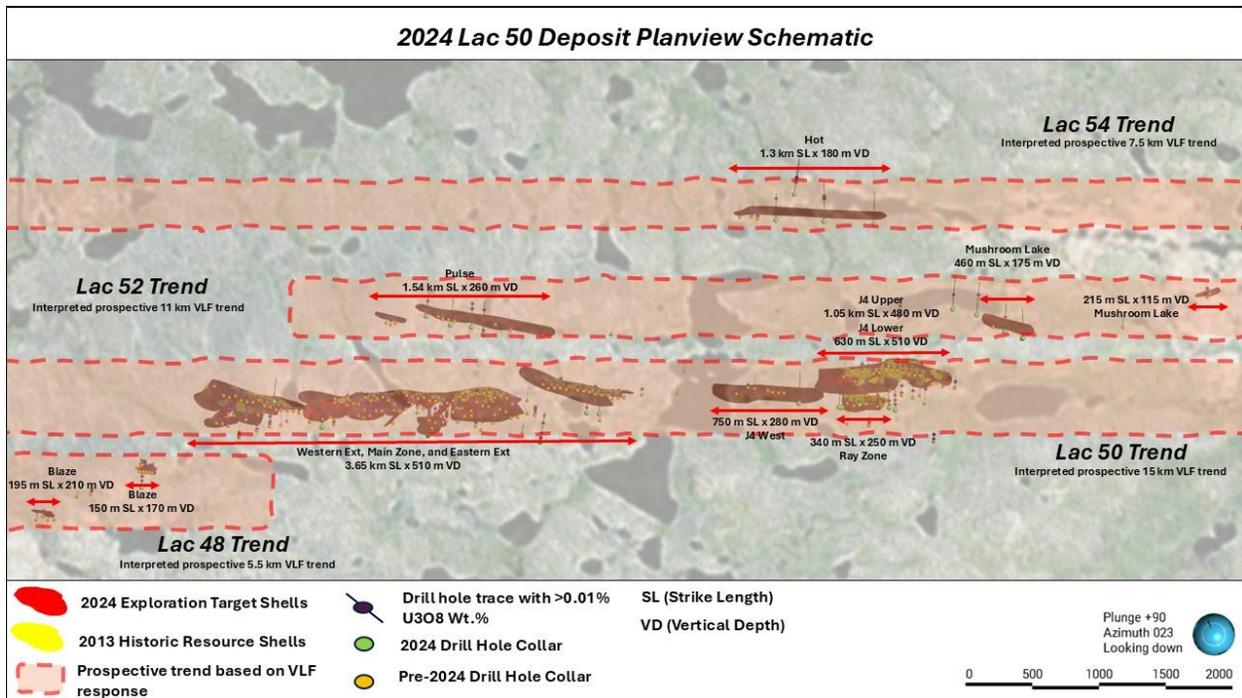


Figure 2a: 2024 Lac 50 Deposit Planview Schematic

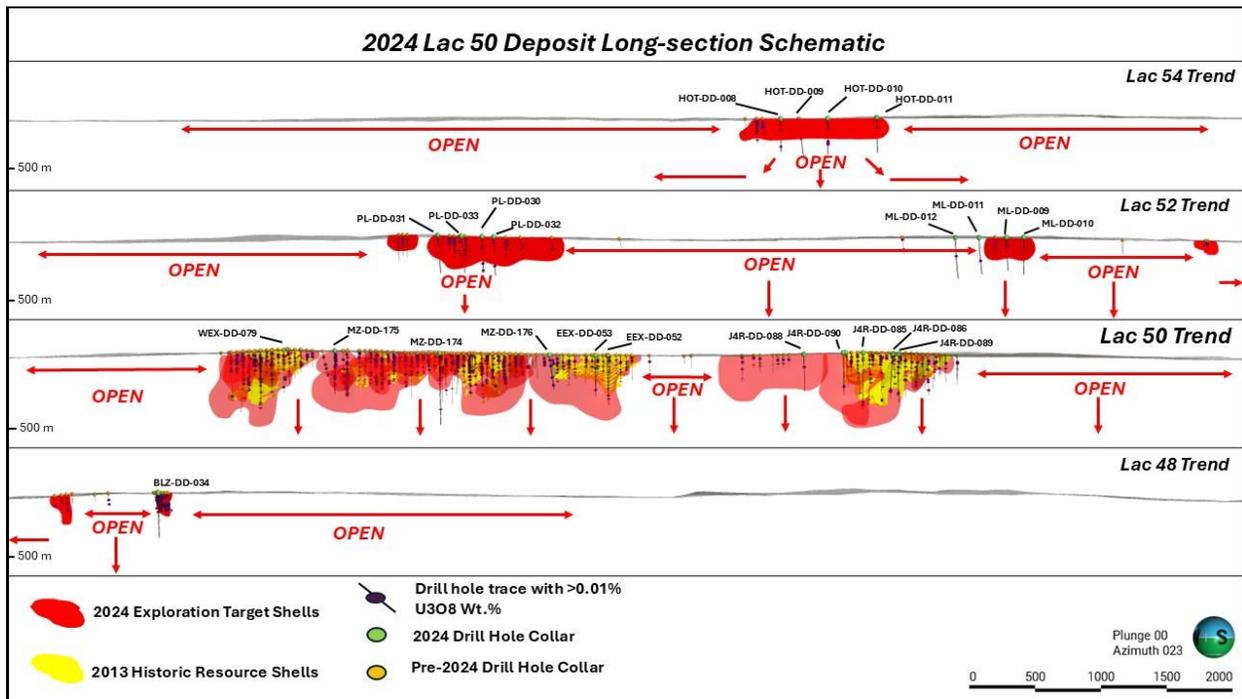


Figure 2b: 2024 Lac 50 Deposit Long-section Schematic

SURFICIAL MAPPING AND SAMPLING 2024 ANGILAK EXPLORATION PROGRAM

The surficial Mapping Program was conducted through the month of August and consisted of soil and outcrop sampling, collection of structural measurements, and recording of radioactivity. The primary

objective of the program was to identify and derisk targets for future drill testing, as well as the collection of structural and geochemical data to advance the Company's understanding in controls of mineralization. The areas of interest for the program were restricted to targets proximal to the Lac 50 Deposit, but which fell outside of the 2024 Exploration Target Model area.

The Mapping Program successfully identified numerous outcrops between Lac 48, Lac 50, Lac 52, and Lac 54 trends that host surficial high-grade uranium mineralization (Figure 3). The outcrops were mapped along strike lengths ranging from 10 m through to 3 km, and typically hosted vein style uranium mineralization with numerous occurrences. The identification of these veins in parallel horizons to the Lac 48, Lac 50, Lac 52, and Lac 54 trends demonstrates the high-prospectivity of the Lac 50 Deposit to host additional mineralized trends. Further, the Mapping Program outlined outcrops along the Lac 52 and Lac 54 trends, containing high-grade uranium mineralization along strike from the Exploration Target Model, which significantly derisks future expansion.

Importantly, a zone of extensive bedrock outcrop with radioactivity up to >60,000 counts per second (cps) – indicative of high-grade uranium mineralization – was identified over a 3-kilometre strike length. The new discovery is located between the Mushroom Lake zone on the Lac 52 trend and the Hot zone on the Lac 54 trend and consists of vein style high-grade uranium with visible pitchblende, up to 30 cm thick, hosted within basalt. This area has not been drill tested to date and is not included within the 2024 Exploration Target Model.

Results from the surficial outcrop mapping further demonstrate the robust metal endowment, not only within the Lac 50 Deposit area, but across the entire Angilak Project area. These results also show the Lac 50 Deposit remains open along strike and at depth, suggesting the corridor is highly prospective for the discovery of additional parallel mineralized horizons. Additionally, numerous uranium showings – such as the Dipole and Nine Iron showings (Figure 1) – have been made at the Angilak Project, outside of the Lac 50 Deposit area, demonstrating further unrealized prospectivity at Angilak.

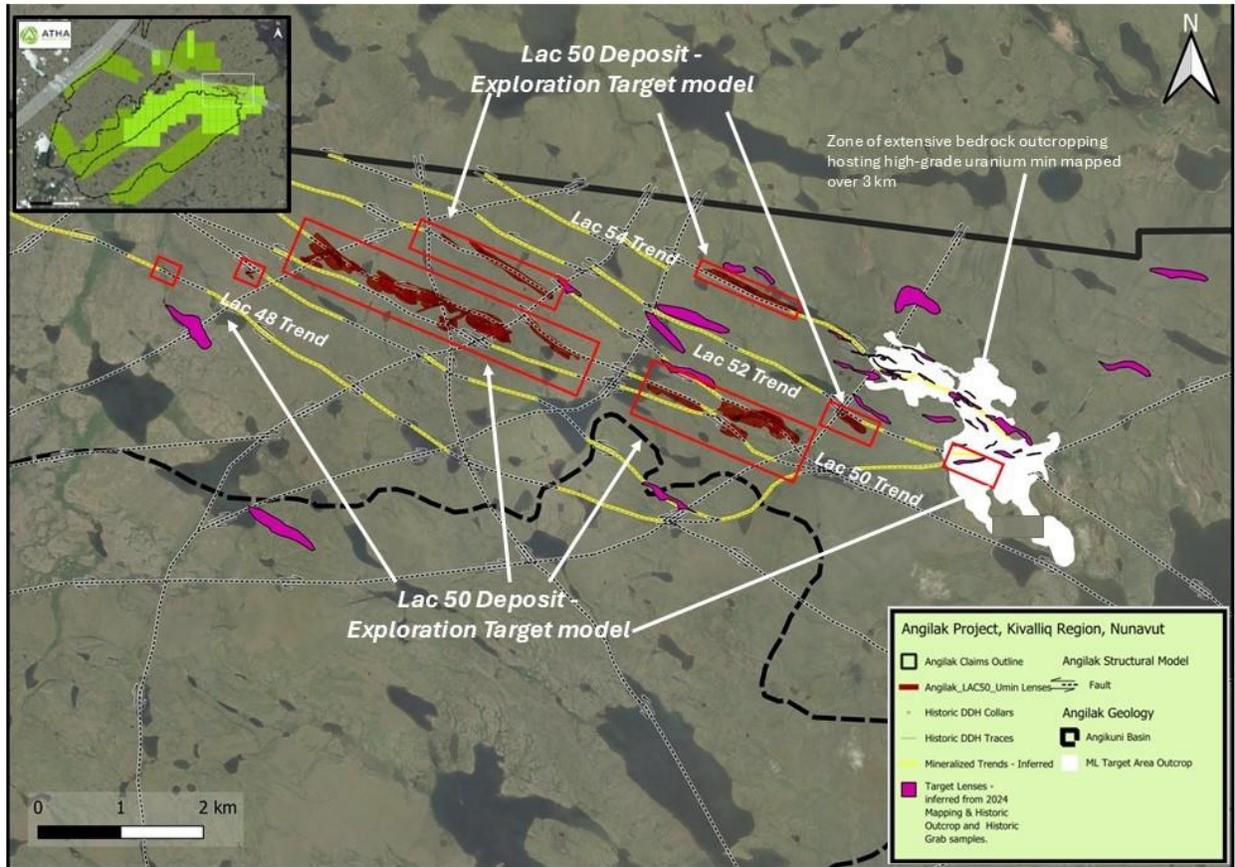


Figure 3: 2024 Lac 50 Deposit Area and Mapped Mineralized Outcrops

NOVEMBER 2024 ANGILAK PROJECT TECHNICAL REPORT

Understood Mineral Resources Ltd. (“UMR”) provided ATHA with ranges for potential uranium quantity and grade as a target for further exploration on Angilak's Lac 50 Deposit. The ranges were derived from a block model approach using interpreted vein wireframes, drill core assays, grade interpolation via Ordinary Kriging, and applied uncertainty bandwidths.

The wireframes were modelled using a grade intercept limit equal to or greater than a minimum grade of 0.01% U₃O₈, although lower grades were incorporated in places to maintain continuity and represent the structural setting and continuity of the mineralized system. Extension distance for the mineralized wireframes was halfway to the next hole, or 200 m in areas of no drilling, representing the potential at the deposit.

Assays were composited to 4 metre lengths within the mineralized boundaries, capped at 5% U₃O₈, and used for variography. The blocks within the wireframes were interpolated with grade values using the composites, variography, ordinary kriging (OK), and a High Yield Limit set at 2.5% U₃O₈ (50% of search range).

UMR applied an uncertainty bandwidth to define a range for potential uranium using the block model as the midpoint. The well-informed portions of the wireframes with < 50 m drill hole spacing used a bandwidth of ± 5% tonnes and ± 15% metal content. An uncertainty bandwidth of ± 10% tonnes and ±

30% metal content was used for the remaining wireframes with drill hole spacing greater than 50 m. The stated potential quantity and grade is conceptual in nature, and there has not been sufficient exploration to define a mineral resource, and it is uncertain if further exploration will result in the target being delineated as a mineral resource.

Qualified Person

The scientific and technical information contained in this news release have been reviewed and approved by Cliff Revering, P.Eng., Vice President, Exploration of ATHA, who is a "qualified person" as defined under National Instrument 43-101 – *Standards of Disclosure for Mineral Projects*.

The ranges for potential uranium quantity and grade for the Lac 50 Deposit were completed by Mr. Matthew Batty, MSc, P.Geo of Understood Mineral Resources Ltd. Mr. Batty is an independent Qualified Persons in accordance with the requirements of National Instrument (NI) 43-101 and he has approved the disclosure herein.

About Understood Mineral Resources Ltd.

Understood Mineral Resources Ltd. is a small, well-trained team with experience in numerous commodities and geologic environments, specializing in project development, geological modeling, deterministic and probabilistic mineral resource estimation, production reconciliation, grade control, and mine planning. UMR's academic training gives them the unique skills to generate probabilistic resource modelling products in conjunction with more conventional techniques such as ordinary kriging. Understood's primary objective is to bring high-quality, reliable, auditable resource models to all mining companies using the latest geostatistical techniques and strategies.

About ATHA

ATHA is a Canadian mineral company engaged in the acquisition, exploration, and development of uranium assets in the pursuit of a clean energy future. With a strategically balanced portfolio including three 100%-owned post discovery uranium projects (the Angilak Project located in Nunavut, and CMB Discoveries in Labrador hosting historical resource estimates of 43.3 million lbs and 14.5 million lbs U3O8 respectively, and the newly discovered basement hosted GMZ high-grade uranium discovery located in the Athabasca Basin). In addition, the Company holds the largest cumulative prospective exploration land package (7.3 million acres) in two of the world's most prominent basins for uranium discoveries - ATHA is well positioned to drive value. ATHA also holds a 10% carried interest in key Athabasca Basin exploration projects operated by NexGen Energy Ltd. and IsoEnergy Ltd. For more information visit www.athaenergy.com.^{1,2,3.}

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Historical Mineral Resource Estimates

All mineral resources estimates presented in this news release are considered to be “historical estimates” as defined under NI 43-101, and have been derived from the following (See notes below). In each instance, the historical estimate is reported using the categories of mineral resources and mineral reserves as defined by the CIM Definition Standards for Mineral Reserves, and mineral reserves at that time, and these “historical estimates” are not considered by ATHA to be current. In each instance, the reliability of the historical estimate is considered reasonable, but a Qualified Person has not done sufficient work to classify the historical estimate as a current mineral resource, and ATHA is not treating the historical estimate as a current mineral resource. The historical information provides an indication of the exploration potential of the properties but may not be representative of expected results.

Notes on the Historical Mineral Resource Estimate for the Angilak Deposit:

1. This estimate is considered to be a “historical estimate” under NI 43-101 and is not considered by any of to be current. See below for further details regarding the historical mineral resource estimate for the Angilak Property.
 - a. Mineral resources which are not mineral reserves do not have demonstrated economic viability.
 - b. The estimate of mineral resources may be materially affected by geology, environment, permitting, legal, title, taxation, sociopolitical, marketing or other relevant issues.
 - c. The quality and grade of the reported inferred resource in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred resources as an indicated or measured mineral resource, and it is uncertain if further exploration will result in upgrading them to an indicated or measured resource category.
 - d. Contained value metals may not add due to rounding.
 - e. A 0.2% U3O8 cut-off was used.
 - f. The mineral resource estimate contained in this press release is considered to be “historical estimates” as defined under NI 43-101 and is not considered to be current.
 - g. The “historical estimate” is derived from a Technical Report entitled “Technical Report and Resource Update For The Angilak Property, Kivalliq Region, Nunavut, Canada”, prepared by Michael Dufresne, M.Sc., P.Geol. of APEX Geosciences, Robert Sim, B.Sc., P.Geol. of SIM Geological Inc. and Bruce Davis, Ph.D., FAusIMM of BD Resource Consulting Inc., dated March 1, 2013 for ValOre Metals Corp.
 - h. As disclosed in the above noted technical report, the historical estimate was prepared under the direction of Robert Sim, P.Geol. with the assistance of Dr. Bruce Davis, FAusIMM, and consists of three-dimensional block models based on geostatistical applications using commercial mine planning software. The project limits area based in the UTM coordinate system (NAD83 Zone14) using nominal block sizes measuring 5x5x5m at Lac Cinquante and 5x3x3 m (LxWxH) at J4. Grade (assay) and geological information is derived from work conducted by Kivalliq during the 2009, 2010, 2011 and 2012 field seasons. A thorough review of all the 2013 resource information and drill data by a Qualified Person, along with the incorporation of subsequent exploration work and results, which includes some drilling around the edges of the historical resource subsequent to the publication of the 2013 technical report, would be required in order to verify the Angilak Property historical estimate as a current mineral resource.
 - i. The historical mineral resource estimate was calculated in accordance with NI 43-101 and CIM standards at the time of publication and predates the current CIM Definition Standards for Mineral Resources and Mineral Reserves (May, 2014) and CIM Estimation of Mineral Resources & Mineral Reserves Best Practices Guidelines (November, 2019).
 - j. A thorough review of all historical data performed by a Qualified Person, along with additional exploration work to confirm results would be required to produce a current mineral resource estimate prepared in accordance with NI 43-101.

2. Notes on the Historical Mineral Resource Estimate for the Moran Lake Deposit:

1. Jeffrey A. Morgan, P.Geol. and Gary H. Giroux, P.Eng. completed a NI 43-101 technical report titled “Form 43-101F1 Technical Report on the Central Mineral Belt (CMB) Uranium Project, Labrador, Canada, Prepared for Crosshair Exploration & Mining Corp.” and dated July 31, 2008, with an updated mineral resource estimate for the Moran Lake C-Zone along with initial mineral resources for the Armstrong and Area 1 deposits. They modelled three packages in the Moran Lake Upper C-Zone (the Upper C Main, Upper C Mylonite, and Upper C West), Moran Lake Lower C-Zone, two packages in Armstrong (Armstrong Z1 and Armstrong Z3), and Trout Pond. These mineral resources are based on 3D block models with ordinary kriging used to interpolate grades into 10 m x 10 m x 4 m blocks. A cut-off grade of 0.015% U3O8 was used for all zones other than the Lower C Zone which employed a cut-off grade of 0.035%. A thorough review of all historical data performed by a Qualified Person, along with additional exploration work to confirm results, would be required to produce a current mineral resource estimate prepared in accordance with NI 43-101 standards.

3. Notes on the Historical Mineral Resource Estimate for the Anna Lake Deposit:

1. The mineral resource estimate contained in this table is considered to be a “historical estimate” as defined under NI 43-101, and is not considered to be current and is not being treated as such. A Qualified Person has not done sufficient work to classify the historical estimate as current mineral resources. A qualified person would need to review and verify the scientific information and conduct an analysis and reconciliation of historical drill and geological data in order to verify the historical estimate as a current mineral resource.

2. Reported by Bayswater Uranium Corporation in a Technical Report entitled "Form 43-101 Technical Report on the Anna Lake Uranium Project, Central Mineral Belt, Labrador, Canada", prepared by R. Dean Fraser, P.Geo. and Gary H. Giroux, P.Eng., dated September 30, 2009.
3. A 3-dimensional geologic model of the deposit was created for the purpose of the resource estimate using the Gemcom/Surpac modeling software. A solid model was created using a minimum grade x thickness cutoff of 3 meters grading 0.03% U3O8. Intersections not meeting this cutoff were generally not incorporated into the model. The shell of this modeled zone was then used to constrain the mineralization for the purpose of the block model. Assay composites 2.5 meters in length that honoured the mineralized domains were used to interpolate grades into blocks using ordinary kriging. An average specific gravity of 2.93 was used to convert volumes to tonnes. The specific gravity data was acquired in-house and consisted of an average of seventeen samples collected from the mineralised section of the core. The resource was classified into Measured, Indicated or Inferred using semi-variogram ranges applied to search ellipses. All resources estimated at Anna Lake fall under the "Inferred" category due to the wide spaced drill density. An exploration program would need to be conducted, including twinning of historical drill holes in order to verify the Anna Lake Project estimate as a current mineral resource.

Cautionary Statement Regarding Forward-Looking Information

This press release contains "forward-looking information" within the meaning of applicable Canadian securities legislation. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or 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". These forward-looking statements or information may relate to ATHA's proposed exploration program, including statements with respect to the expected benefits of ATHA's proposed exploration program, any results that may be derived from ATHA's proposed exploration program, the timing, scope, nature, breadth and other information related to ATHA's proposed exploration program, any results that may be derived from the diversification of ATHA's portfolio, the successful integration of the businesses of ATHA, Latitude Uranium and 92 Energy, the prospects of ATHA's projects, including mineral resources estimates and mineralization of each project, the prospects of ATHA's business plans and any expectations with respect to defining mineral resources or mineral reserves on any of ATHA's projects, and any expectation with respect to any permitting, development or other work that may be required to bring any of the projects into development or production.

Forward-looking statements are necessarily based upon a number of assumptions that, while considered reasonable by management at the time, are inherently subject to business, market and economic risks, uncertainties and contingencies that may cause actual results, performance or achievements to be materially different from those expressed or implied by forward-looking statements. Such assumptions include, but are not limited to, assumptions that the anticipated benefits of ATHA's proposed exploration program will be realized, that no additional permit or licenses will be required in connection with ATHA's exploration programs, the ability of ATHA to complete its exploration activities as currently expected and on the current anticipated timelines, including ATHA's proposed exploration program, that ATHA will be able to execute on its current plans, that ATHA's proposed explorations will yield results as expected, the synergies between ATHA, 92 Energy and Latitude Uranium's assets, and that general business and economic conditions will not change in a material adverse manner. Although each of ATHA and 92E have attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information.

Such statements represent the current view of ATHA with respect to future events and are necessarily based upon a number of assumptions and estimates that, while considered reasonable by ATHA, are inherently subject to significant business, economic, competitive, political and social risks, contingencies and uncertainties. Risks and uncertainties include, but are not limited to the following: inability of ATHA to realize the benefits anticipated from the exploration and drilling targets described herein or elsewhere; inability of ATHA to complete current exploration plans as presently anticipated or at all; inability for ATHA to economically realize on the benefits, if any, derived from the exploration program; failure to complete business plans as it currently anticipated; overdiversification of ATHA's portfolio; failure to realize on benefits, if any, of a diversified portfolio; unanticipated changes in market price for ATHA shares; changes to ATHA's current and future business and exploration plans and the strategic alternatives available thereto; growth prospects and outlook of the business of ATHA; any impacts of COVID-19 on the business of ATHA and the ability to advance the Company projects and its proposed exploration program; risks inherent in mineral exploration including risks related worker safety, weather and other natural occurrences, accidents, availability of personnel and equipment, and other factors; aboriginal title; failure to obtain regulatory and permitting approvals; no known mineral resources/reserves; reliance on key management and other personnel; competition; changes in laws and regulations; uninsurable risks; delays in governmental and other approvals, community relations; stock market conditions generally; demand, supply and pricing for uranium; and general economic and political conditions in Canada, Australia and other jurisdictions where ATHA conducts business. Other factors which could materially affect such forward-looking information are described in the filings of ATHA with the Canadian securities regulators which are available on ATHA's profile on SEDAR+ at www.sedarplus.ca. ATHA does not undertake to update any forward-looking information, except in accordance with applicable securities laws.