Global Uranium and Enrichment

ASX:GUE
OTCQB:GUELF
ASX Announcement

5 September 2024

Flagship Tallahassee Uranium Project JORC Resource Increased to 52.2 Mlbs U_3O_8

Highlights

- **The JORC Resource at the high-grade Hansen Deposit (situated within the flagship Tallahassee Uranium Project) has increased by 11% to 22.9 Mlbs U_3O_8 (from 20.5 Mlbs).**
- **Total Tallahassee Mineral Resource Estimate now stands at 44.8 million tonnes at 530ppm U_3O_8, for 52.2 million lbs U_3O_8 using a 250ppm cut-off grade.**
- **The JORC Resource at Hansen was updated following the completion of a highly successful drill program in June 2024 and acquisition of two additional mineral leases.**
- **Hansen is a high-grade and shallow uranium deposit and one of the largest undeveloped uranium deposits in the U.S.A.**
- **Tallahassee Scoping Study advancing well and on track for completion in the coming months.**

Global Uranium and Enrichment Limited (**ASX:GUE, OTCQB: GUELF, the Company**) is pleased to announce the completion of a revised JORC Mineral Resource Estimate (**MRE**) for the Hansen Uranium Deposit (**Hansen**), which is part of the Company's flagship Tallahassee Uranium Project (**Tallahassee** or the **Project**), located in Colorado, United States. The Company recently completed a highly successful drill program at and acquired some additional mineral leases at Hansen, which led to the updated MRE, which was prepared by Tetra Tech of Lakewood Colorado USA.

Hansen, which is situated within Tallahassee, now boasts a JORC (2012) Mineral Resource of **22.9 million pounds U_3O_8 at 570 ppm U_3O_8** (100% of which is attributable to GUE via its 51% mineral interest).

Following the increase at Hansen, the Company's updated JORC (2012) MRE for Tallahassee now stands at **44.8 million tonnes at 530ppm for 52.2 million pounds U_3O_8**, representing a 5% increase to the size of GUE's existing JORC (2012) Mineral Resource. The Company is continuing to assess other opportunities within the district to further consolidate its landholdings and expand in size and scale.

In June 2024, the Company completed a highly successful drill program at Hansen, which demonstrated the cohesive and continuous high-grade core of the Deposit. Drilling generated thick and high-grade results, which were highlighted by **53.6m at 0.157% U_3O_8** in TC2405, **66.8m at 0.127% U_3O_8** in TC2406, **32.9m at 0.100% U_3O_8** in TC2407 and **7.9m at 0.067% U_3O_8** in TC2408.[1]

[1] Refer to ASX announcements dated 5th and 19th June 2024 for the full details of the results including the JORC tables.

Global Uranium's Managing Director, Mr. Andrew Ferrier said:

"Following the success of our drill program which was completed in June 2024 and generated excellent high-grade results, we are excited to announce the delivery of a revised Mineral Resource Estimate, which increases Global Uranium's 51% attributable share of the Hansen Deposit Resource from 20.5 million pounds of U_3O_8 to 22.9 million pounds U_3O_8. The increased resource at Hansen increases the overall resources at the Tallahassee Uranium Project to 52.2 million pounds U_3O_8.

"With our drill core samples already in the laboratories for further analysis, we are excited about the progress of our Scoping Study. Additionally, we are looking forward to an active exploration schedule across our portfolio, with drilling occurring at the high-grade Maybell Uranium Project over the coming months. With the support of increasingly prevalent supply constraints, a strong commodity price and the growing recognition of importance in securing domestic supply chains, Global Uranium is well-positioned for an exciting future."

JORC Compliant Resource

Subsequent to the acquisition of two new mineral leases and completion of the Company's drilling program at Tallahassee, the updated JORC (2012) Mineral Resource for Tallahassee has increased to **44.8Mt at 530ppm U_3O_8** for **52.2 million pounds of U_3O_8** using a 250ppm cut-off grade.

The updated MRE reflects Global Uranium's new ownership interest in the district, which is a 100% mineral interest in Taylor, Boyer and High Park deposits and a 51% mineral interest in Hansen and Picnic Tree deposits.

JORC 2012 Mineral Resource Estimate for the Tallahassee Uranium Project												
Deposit	Measured			Indicated			Inferred			Total		
	Tonnes (000)	Grade U_3O_8 (ppm)	lbs U_3O_8 (000)	Tonnes (000)	Grade U_3O_8 (ppm)	lbs U_3O_8 (000)	Tonnes (000)	Grade U_3O_8 (ppm)	lbs U_3O_8 (000)	Tonnes (000)	Grade U_3O_8 (ppm)	lbs U_3O_8 (000)
Hansen	-	-	-	7,074	700	10,862	11,228	490	12,058	18,302	570	22,920
Picnic Tree	-	-	-	869	740	1,418	172	620	235	1,041	720	1,653
Taylor & Boyer	-	-	-	7,641	520	8,705	14,866	460	15,172	22,507	480	23,877
High Park	2,450	550	2,960	24	570	30	434	770	734	2,908	580	3,724
Total	**2,450**	**550**	**2,960**	**15,607**	**610**	**21,014**	**26,700**	**480**	**28,199**	**44,757**	**530**	**52,174**

Table 1: Tallahassee Uranium Resource Estimate by Deposit

Notes: Figures for Hansen represent 51% of the total JORC Resource for these deposits reflecting GUE's 51% ownership interest. Calculated applying a cut-off grade of 250ppm U_3O_8. Numbers may not sum due to rounding. Grade rounded to nearest 10ppm.

Tallahassee Uranium Project

Tallahassee is hosted in favourable sandstones with the Hansen Deposit being significantly drilled in the past (as demonstrated in Figure 1 below), with a relatively tight drill spacing of 200 feet (60m).

The greater Tallahassee Creek Uranium District hosts more than 100 million pounds of U_3O_8 with opportunities to further expand the existing resource base by acquiring additional complementary assets in the district.

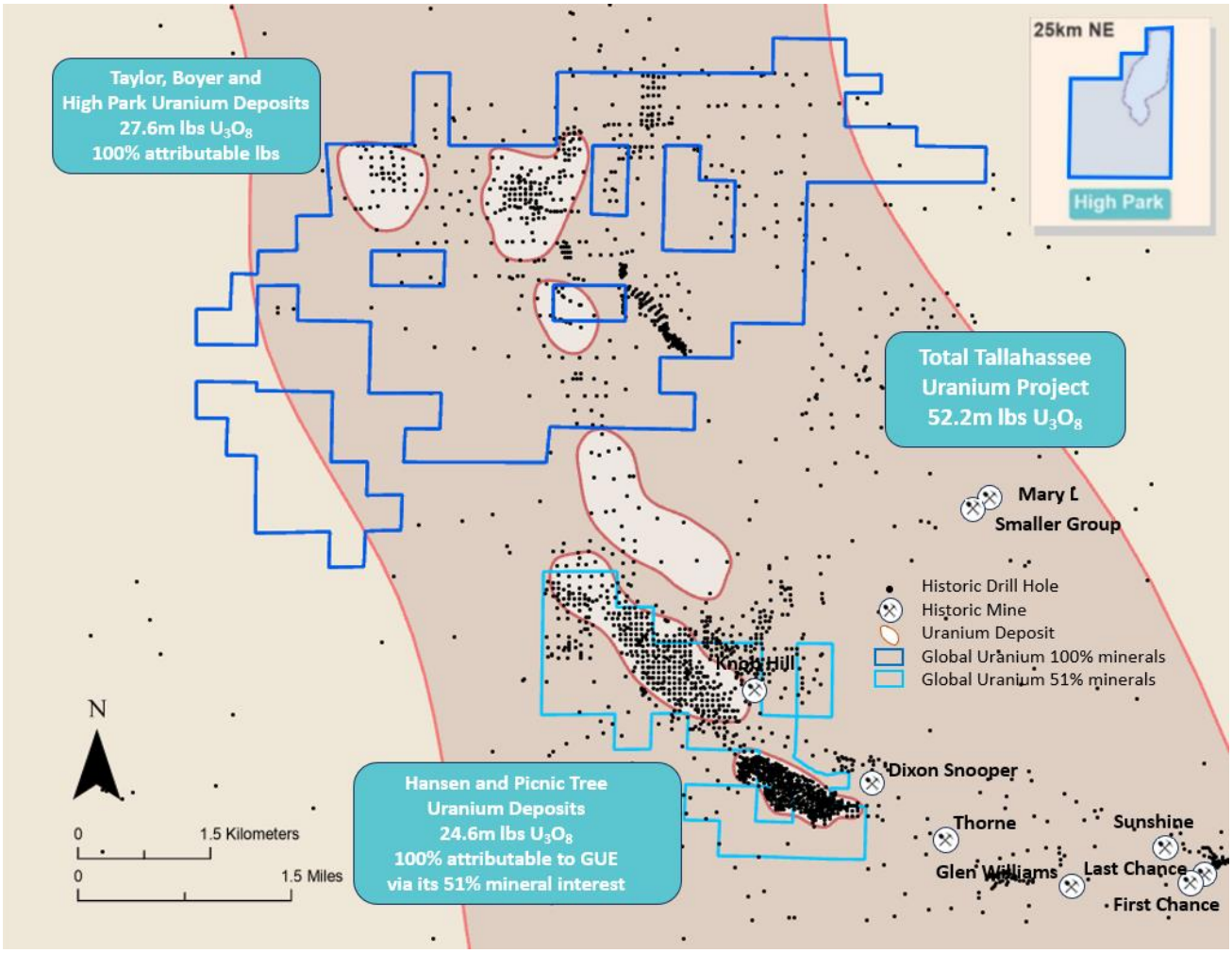

Figure 1: Tallahassee Uranium Project

Hansen was discovered in 1977 which has some of the highest grades and widths in the district contained within flat-lying tabular horizons up to 70 metres thick and at a depth of between 150m and 200m, as shown in the long section in Figure 2.

Approximately 1,000 drill holes have been completed across both the Hansen and Picnic Tree Uranium Deposits. The sandstone was deposited in a fluvial-braided stream environment, infilling a paleochannel. Deposition occurred when uranium-bearing ground water moved through the sandstone layers and depositing uranium minerals in areas enriched with carbonaceous material.

Diamond Drill Program

The eight hole, 1,764m diamond drill program completed at Tallahassee in June was a huge success, with seven of the eight holes delivering thick and consistently high-grade results and expanding the potentially mineable high-grade core of the Hansen Deposit.

Figure 2 shows a long section of Hansen, focusing on the core of the high-grade shell to illustrate how large, cohesive and continuous the shell is, measuring approximately 1,400m long and 400m across, with an average thickness of approximately 20m.

Drilling generated thick and high-grade results, which were highlighted by holes TC2405, which intersected **53.6m at 0.157% U_3O_8** and TC2406 intersecting **66.8m at 0.127% U_3O_8.** The final two drill holes have returned further outstanding, high-grade intercepts including **32.9m at 0.100% U_3O_8** in TC2407 and **7.9m at 0.067% U_3O_8** in TC2408.

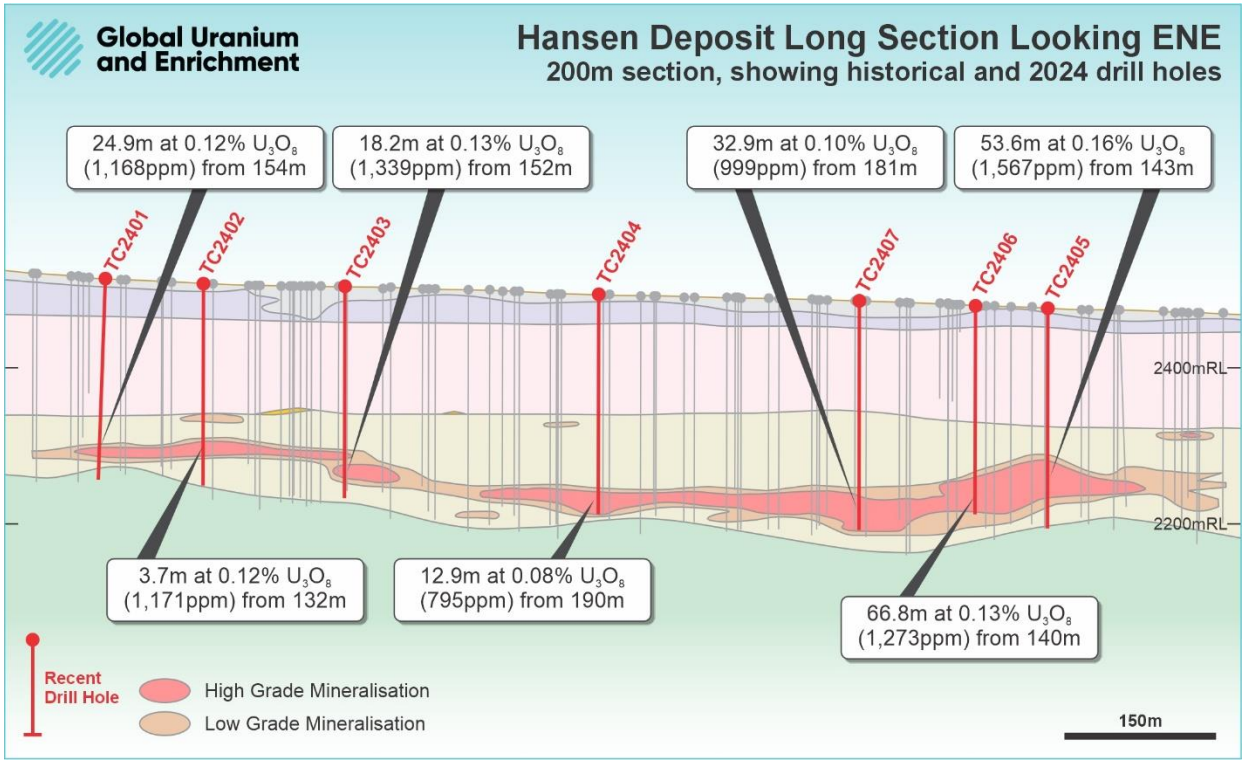

Figure 2: Oblique Cross Section through the Hansen Deposit

This announcement has been authorised for release by the board of Global Uranium and Enrichment Limited.

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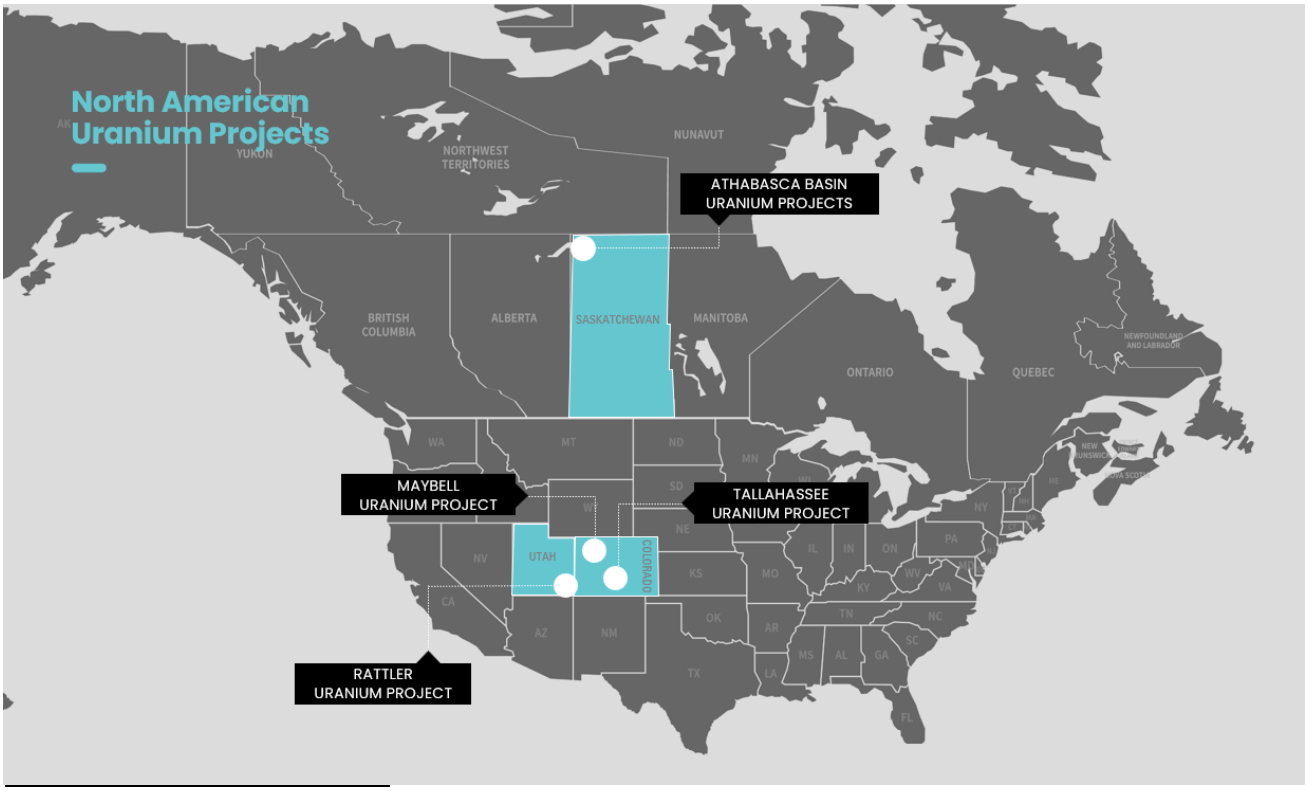
An Emerging Uranium Powerhouse

Global Uranium and Enrichment Limited in an Australian public listed company providing unique exposure to not only uranium exploration and development but also the uranium enrichment space. Amid a nuclear energy renaissance, Global Uranium is developing a portfolio of advanced, high grade uranium assets in prolific uranium districts in the U.S. and Canada, and has established a cornerstone position in Ubaryon, an Australian uranium enrichment technology.

Asset Portfolio:

- **Tallahassee Uranium Project (Colorado, USA)**: JORC 2012 Mineral Resource estimate of 52.2Mlbs U_3O_8 at a grade of 530ppm U_3O_8[2] with significant exploration upside. Located in Colorado's Tallahassee Creek Uranium District, host to more than 100 Mlbs U_3O_8.
- **Athabasca Basin Projects (Saskatchewan, Canada)**: Portfolio of six high-grade exploration assets in the Athabasca Basin, home to the world's largest and highest-grade uranium mines. Portfolio includes the Newnham Lake Project with grades of up to 1,953ppm U_3O_8 in historic drilling and the Middle Lake Project with boulder-trains with grades of up to 16.9% U_3O_8.[3]
- **Ubaryon Investment (Australia):** Cornerstone position in Ubaryon, an Australian uranium enrichment technology.
- **Maybell Uranium Project (Colorado, USA)**: High grade Exploration Target established at the project.[4] Historical production of 5.3 million pounds of U_3O_8 (average grade 1,300ppm).
- **Rattler Uranium Project (Utah, USA)**: Located within La Sal Uranium District, Utah, 85km north of White Mesa Uranium/Vanadium mill, the only operating conventional uranium mill in the USA.



[2] Competent Persons Statement - Information on the Mineral Resources presented, together with JORC Table 1 information, is contained in the ASX announcement dated 5 September 2024 and titled "Tallahassee Uranium Project JORC Resource increased to 52.2 Mlb U_3O_8". Measured 2.96MLbs of 550 ppm U_3O_8, Indicated 21.01MLbs of 610 ppm U_3O_8, Inferred 28.2MLbs of 480 ppm U_3O_8 calculated applying a cut-off grade of 250ppm U_3O_8. Numbers may not sum due to rounding. Grade rounded to nearest 10ppm.
The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant market announcements, and that the form and context in which the Competent Persons findings are presented have not been materially modified from the original announcements. Where the Company refers to Mineral Resources in this announcement (referencing previous releases made to the ASX), it confirms that it is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimate with that announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not materially changed from the original announcement.

[3] Refer to the Company's ASX announcement dated 9 November 2021 for the JORC details of the Athabasca Projects and other historical information. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement of 9 November 2021.

[4] Refer to the Company's ASX announcement dated 14 December 2023 for the Exploration Target and JORC details. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement of 14 December 2023. Historical production data has been sourced of an article in Rocky Mountain Association of Geologists (1986) titled "Geology and Production History of the Uranium Deposits in the Maybell, Colorado Area" from W. L. Chenoweth.

Competent Person's Consent Form

Pursuant to the requirements of ASX Listing Rules 5.6, 5.22 and 5.24 and
Clause 9 of the JORC Code 2012 Edition (Written Consent Statement)

Independent Technical Report

Prepared by Tetra Tech; Lakewood, Colorado

Tallahassee Uranium Project, Fremont County, Colorado, USA.

March 25, 2022 and Hansen Deposit Update, August 2024.

Statement

I, Kira L. Johnson, confirm that I am a Competent Person for the Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having more than five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.
- I am a Member or Fellow of *The Australasian Institute of Mining and Metallurgy* or the *Australian Institute of Geoscientists* or a 'Recognised Professional Organisation' (RPO) included in a list promulgated by ASX from time to time.
- I have reviewed the Report to which this Consent Statement applies.

I am a full time employee of Tetra Tech, Inc. and have been engaged by Global Uranium and Enrichment to prepare the documentation for the Tallahassee Uranium Project on which the Report is based, for the period ended August 27, 2024.

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest.

I verify that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Exploration Targets, Exploration Results and Mineral Resources.

Summary of Information for Mineral Resources Estimate

Geology and geological interpretation

The deposits that make up the Project are tabular sandstone deposits associated with redox interfaces. The mineralisation is hosted in Tertiary sandstones and/or clay bearing conglomerates within an extinct braided stream, fluvial system or paleochannel. Mineralisation occurred post sediment deposition when oxygenated uraniferous groundwater moving through the host rocks came into contact with redox interfaces, the resultant chemical change caused the precipitation of uranium oxides. The most common cause of redox interfaces is the presence of carbonaceous material that was deposited simultaneously with the host sediments. In parts of the Project the paleochannel has been covered by Tertiary volcanic rocks and throughout the Project basement consists of Pre Cambrian plutonic and metamorphic rocks. The volcanic and Pre-Cambrian rocks are believed to be contributing sources of the uranium.

Drilling technique

The dominant drilling technique has been mud rotary drilling from surface with rotary air and conventional percussion hammer sometimes used to drill through the overburden and cover sequences. There have been two major phases of drilling, being the 1970's-80s and mid-2007-2009. Sample cuttings were generally collected on 5 foot (1.5m) intervals. Historically, a minimal amount of conventional core drilling was completed through the ore zones. Historic core collection typically involved rotary mud to the top of the ore zone and then a switch to core drilling for collection of the mineralised interval. Between 2010 and 2012, 10 historic holes were twinned with diamond core on Hansen. In 2024, an eight hole diamond drilling program totalling 1,764m was conducted on Hansen.

Sampling, sub-sampling method and sample analysis

The equivalent U_3O_8 (eU_3O_8) grades obtained from the drilling during the 2000's were calculated by Strata Data and Century Wireline Services, two geophysics and uranium logging companies based in Wyoming, USA. The uranium logging system used was truck mounted and measured both the radiometric and electric signals downhole. Two separate probe models, 9041 and 9057 were manufactured by Century Geophysics and each is capable of measuring total gamma count. The employed tools are regularly calibrated at a United States Department of Energy facility, following industry standards. Calibration of the tools allow for the calculation of eU_3O_8 directly from the total gamma count measured downhole. Calculated eU_3O_8 can be a reliable measure of uranium content, but on occasion can be subject to disequilibrium if radioactive elements other than uranium and its natural daughter isotopes are present. Historically, grade calculations were completed in a very similar manner although different probe models were used. Among the various geophysical logging companies to complete work historically at the Project, Century Geophysics were one of the preferred contractors for the original exploration. Due to the use of geophysics and uranium logging standards, sampling and sub-sampling methods associated with RC and core drilling were not required. Core obtained by the previous explorers has been subject to chemical analysis, but assays were not used in the resource calculation. Chemical assays were used to confirm the probe data and the deposit equilibrium conditions and it was determined at the time that no adjustment to the logged values were required.

COLOG Inc., Lakewood, Colorado, calibrated their survey tool in Grand Junction, Colorado and conducted the surveys for the 2024 program. Tilt, azimuth along with the counts per second were collected on all eight holes.

Criteria for classification

Ordinary kriging, which accounts for sample spatial variability and closeness, has been chosen as a basis for categorising confidence in the mineral resource. Classification has taken into account relevant factors that affect confidence and appropriately reflect the Competent Person's view of the deposit and is reasonable given the drill spacing and spatial variability suggested by variogram analysis.

Estimation methodology

Commonly accepted multi-pass kriging methods were used in the estimation of the mineral resources. Uranium mineralisation was modelled using wireframe solids, resources were quantified outside solids with drastically reduced search ranges. Estimates were checked and compared to historic estimates. No recovery has been applied at the resource stage. Blocks have been sized as a trade-off between mineralised shapes and general mining selectivity. The block heights are four to six times the 0.5 foot sample collection but block lengths and widths are several times smaller than the drill spacing in order to adequately fit the mineralised shapes. The model used is a single variable with only U_3O_8 mineralisation confined to sedimentary rock units and mineral horizons assessed. Block search anisotropy was also fit to the stratigraphy with the shortest axis being across dip, or horizon thickness. No grade capping was applied as the high-end portion of the grade distribution was sufficiently uniform after compositing. Resource models were visually inspected in cross-section by multiple individuals. Any issues were flagged and corrected before finalisation of the model. The populations of grades, composites and blocks were reviewed for continuity and moderation of grade toward final estimation.

Cut-off grade(s), including the basis for the selected cut-off grade(s)

Mineral resources are being publicly quoted at a cut-off grade of 0.025 % U_3O_8. The Resource cutoff is 0.025% U_3O_8 and Resources are reported to reflect the 51% of the property ownership rights from the option to purchase agreement. The 0.025% U_3O_8 cutoff grade is based on a uranium oxide price of US$50 per lb. The populations of grades, composites, and blocks were reviewed for continuity and moderation of grade toward final estimation.

Block size has been selected as 2ft (0.61m) thick for the High Park deposit, and 3ft (0.691m) for the Taylor Ranch, Boyer and Hansen deposits. These selections balance deposit thickness and reasonable selectivity. Once further information is known regarding mining methods, the mineral resource estimate may need to be revised. Metallurgical parameters were not considered for the purposes of the mineral resource estimate.

Deposit	Drill Hole	E (83_13)	N (83_13)	Elev. (m)	Azi.	Dip	Depth (m)
Hansen	**TC-2401**	451263	4267635	2512	0	-90	198.8
Hansen	**TC-2402**	451318	4267528	2509	0	-90	211.1
Hansen	**TC-2403**	451388	4267409	2520	0	-90	212.3
Hansen	**TC-2404**	451544	4267201	2509	0	-90	221.6
Hansen	**TC-2405**	451923	4266956	2501	0	-90	228.6
Hansen	**TC-2406**	451941	4267087	2509	0	-90	215.8
Hansen	**TC-2407**	451842	4267139	2510	0	-90	243.8
Hansen	**TC-2408**	451805	4267276	2519	0	-90	221.6

Table 2: *Collar information for drill holes completed in 2024 Tallahassee Uranium Project drilling program*

Mining and metallurgical methods and parameters, and other material modifying factors considered to date

Mining methods, metallurgical parameters and other material modifying factors were not considered for this resource calculation.

Competent Persons Statement

The information in this announcement that relates to Mineral Resources at the Project is based on information compiled by Ms. Kira Johnson who is a Qualified Professional member of the Mining and Metallurgical Society of America, a Recognised Professional Organisation (RPO) for JORC Competent Persons. Ms. Johnson compiled this information in her capacity as a Senior Geological Engineer of Tetra Tech. Ms. Johnson has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that 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". Ms. Kira Johnson consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Please refer to ASX announcements date 22nd and 30th May 2024, 5th and 19th June 2024 for all the drilling results and JORC tables relating to 2024 drilling program at the Tallahassee Uranium Project referred in this announcement. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements.

JORC Code, 2012 Edition – Table 1 Report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	Commentary
Sampling techniques	• Equivalent U_3O_8 (eU_3O_8) grades during the summer of 2024 were calculated by Colog Wireline Services, based in Colorado, USA. • The equivalent U_3O_8 (eU_3O_8) grades obtained from the 2007-2012 phases of drilling were calculated by Strata Data and Century Wireline Services, two geophysics and uranium logging companies based in Wyoming, USA. The uranium logging system used was truck mounted and measured both the radiometric and electric signals downhole. Two separate probe models, 9041 and 9057 were manufactured by Century Geophysics and each is capable of measuring total gamma count. The employed tools are regularly calibrated at a United States Department of Energy facility, following industry standards. Calibration of the tools allow for the calculation of eU_3O_8 directly from the total gamma count measured downhole. Calculated eU_3O_8 can be a reliable measure of uranium content, but on occasion can be subject to disequilibrium if radioactive elements other than uranium and its natural daughter isotopes are present. Historically, grade calculations were completed in a very similar manner although different probe models were used. Among the various geophysical logging companies to complete work historically at the Project, Century Geophysics were one of the preferred contractors for the original exploration.
Drilling techniques	• The Company employed HQ core drilling during the 2024 field program. • The dominant drilling technique used historically has been rotary mud drilling from surface with rotary air and conventional percussion hammer sometimes used to drill through the overburden. Sample cuttings were collected and observed on 5 foot (1.5m) intervals. Historically a limited amount of conventional core drilling was completed through the ore zones. Historic core collection typically involved rotary mud to the top of the ore zone and then a switch to core drilling for collection of the mineralized interval. • NQ3 and HQ3 core drilling was completed in the 2010's by Black Range Minerals on the Hansen deposit.
Drill sample recovery	• The 2024 core drilling program exhibited excellent core recoveries that averaged 90% overall. • Mud rotary drilling is a common drilling technique used when drilling soft or poorly consolidated sediments, as the mud cakes on the borehole wall holding the hole open, allowing down hole logging in an open hole. No mud rotary samples have been sent to the lab for analysis as part of the mineral resource estimate. • Sample recovery has not been documented for rotary mud drilling as downhole logging works on the material present on the open borehole wall.
Logging	• During the 2024 program, core was logged for lithologic characteristics, RQD, oxidation, alteration and mineralisation. • In addition, e-logging for gamma ray was conducted to generate eU_3O_8 values on a 0.1 foot intervals. Intercepts were then compiled for zones exceeding the 0.025% cutoff. • The geological characteristics of historical rotary cuttings have been visually logged every 5ft (1.5m). Downhole gamma, electric and caliper logs were used to assist in the identification of lithology boundaries. The logs are best described as quantitative. • Core was logged in a qualitative nature and all core was photographed.
Sub-sampling techniques and sample preparation	• Core testing in 2024 consisted of geotechnical parameters, including USC Stress/Strain; Brazilian Tensile Strength, Slake Durability, Moisture, and Density. • In addition, planned testing included mineralized core disaggregation using hydraulic cutting tooling. • Hydraulic cutting of samples for geochemical and radiological analysis across various size fractions will be conducted. Geochemical analyses will be compared to eU_3O_8 results. • Core drilled was completed at Hansen in 2010's. Select samples were analysed for uranium and other elements. However, the downhole gamma calculations of eU_3O_8 were used in the resource calculation. • Non-core material was not submitted to the laboratory for any analysis so there was no conventional quality control and splitting.

Criteria	Commentary
	• As described in "Sampling Techniques" gamma probes were used to calculate the eU_3O_8 values used in the mineral resource estimation. The gamma probes were regularly calibrated.
Quality of assay data and laboratory tests	• As described in "Sampling Techniques", gamma probes were used. The calibration of the tool allows for the calculation of eU_3O_8 directly from the total gamma count. eU_30_8 can be a reliable measure of uranium content, but on occasion can be subject to disequilibrium if radioactive elements other than uranium are present. • Core was submitted for chemical assay historically and then chemical data were used to confirm probe data and equilibrium conditions. • As a quality control check, a second gamma survey using a second gamma probe was completed on one of the core holes drilled in 2024. Results between the two surveys were very close.
Verification of sampling and assaying	• The 2024 drill holes were not drilled as "twins", but were instead located within the ~220 foot x 220 foot grid in the high grade core of the mineralization at Hansen. • Between 2007 and 2010 six historical holes were twinned with rotary mud drilling and a recent rotary mud hole was twinned with a core hole to verify results. Ten historical rotary mud holes were twinned with HQ core holes. The core hole twin holes were within the Hansen deposit and the six mud rotary twins were within the Taylor – Boyer leases. • Between 2007-2010 the downhole surveyor provided data to the Company in electronic and hard copy format, which is imported into the Company's database. • Disequilibrium studies in the 1970's and 80's concluded that no adjustments are required for the gamma calculated eU_3O_8 values.
Location of data points	• The more recent drill collar coordinates have been determined using a handheld survey station GPS. Locations were verified by GPS during the site visit in August 2024 with reasonable accuracy for a study of this level. • Historic holes were professionally surveyed in the late 1970's and 1980's. • The datum used was US State Plane, Colorado Central 1927, Feet, this is the system used for surveying in the 1970's and 80's. All the post-2006 GPS data were collected in UTM NAD83 and converted to US State Plane. The accuracy of the conversions and historic data were investigated using known holes with surveyed coordinates and was considered less than the GPS error.
Data spacing and distribution	• Spacing of the drill holes in the 2024 program ranged from approximately 300 feet to 800 feet apart from each other in the high-grade core of mineralisation. The holes ranged from 50 to 150 feet from nearby historical drill holes. • Drill spacing is variable across different areas of the Project, spacing is as broad as 800 feet (243m) and typically across the Boyer & Taylor leases is not less than 200 feet (61m). Spacing in the Hansen and Picnic tree area drilled at 100 foot spacing. Whereas at High Park the deposit is drilled out at 100 feet (30.5m) spaces and in some areas 50 feet (15m). The drill spacing has been factored into the classification of the mineral resource. • The downhole logging data were provided to the resource geologist on 0.5ft (0.15m) intervals. These were composited to 3ft (0.91) for the Boyer-Taylor, Hansen and Picnic Tree models and 2 ft intervals (0.61m) for the High Park model.
Orientation of data in relation to geological structure	• Vertical drilling has exclusively been used as the target strata is sub-horizontal in a Tertiary paleochannel. Therefore, drilling intercepted the target strata very close to perpendicular.
Sample security	• Wireline logging effectively replaces sampling, so sample security was not an issue.
Audits or reviews	• The Company's CP has reviewed the data.

Section 2 Reporting of Exploration Results

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

Criteria	Commentary
Mineral tenement and land tenure status	• Within the Tallahassee Project area, there are five private Mineral Leases (STB Minerals, Cook and Lack related to the Hansen deposit, and Taylor and Boyer ranches) whereby the company has leased the privately owned mineral interests along with the right to explore and develop these minerals. • The Company has entered an "Option to Purchase" agreement with STB Minerals who own 51% of the private Mineral Interests covering parts of the Hansen and Picnic Tree deposits.
Exploration done by other parties	• Cyprus Mines Corp (Cyprus) conducted an extensive amount of drilling in the region from 1976 through until 1983. They drilled over 1,250 drill holes for in excess of 110,000 meters with the majority within the Okapi controlled Project areas. Black Range Minerals drilled 64 holes for over 20,000 metres on the Okapi Leases between 2007 and 2009 and 10 core holes during 2010. Cyprus also conducted 3 feasibility studies at the Hansen Project, including mine designs, process designs and had all permits in place to commence mining in 1982.
Geology	• The deposits that make up the Project are tabular sandstone deposits associated with redox interfaces. The mineralisation is hosted in Tertiary sandstones and/or clay bearing conglomerates within an extinct braided stream, fluvial system or paleochannel. Mineralisation occurred post deposition when oxygenated uraniferous groundwater moving through the host rocks came into contact with redox interfaces, the resultant chemical change caused the precipitation of uranium oxides. The most common cause of redox interfaces is the presence of carbonaceous material that was deposited simultaneously with the host sediments. In parts of the Project the paleochannel has been covered by Tertiary volcanics and throughout the basement consists of Pre-Cambrian plutonic and metamorphic rocks. The volcanic and Pre-Cambrian rocks are believed to be the source of the uranium.
Drill hole Information	• The Company has tabulated the drill hole result information for those holes reported in the announcement only. • A total of 553 holes were used for the actual estimation inside the block model extents.
Data aggregation methods	• The majority of drilling results were aggregated using a simple average as the assay lengths are consistent and equal for all the reported drill holes. • For some of the drill holes, the full interval data is not available and the intersections were aggregated by a previous operator, the aggregation method is unknown.
Relationship between mineralisation widths and intercept lengths	• All drill holes at the Project are vertical and intersecting sub-horizontal, tabular mineralisation and therefore reported intersections are close to true widths.
Diagrams	• The Company has included a Tallahassee project-wide map showing the distribution of all drilling • The Company has also included a single cross section to give an indication of the geometry, thickness and grades of mineralisation through the centre of the Hansen Deposit.
Balanced reporting	• The Company is reporting a Project wide resource which is calculated from over 1300 drill holes and each hole contributes to the resource estimation. • The Company has selected a single cross section through the middle of the Hansen Deposit to indicate what the geometry, thickness and the grade of the mineralisation looks like in the central portion including the most of the new core holes from 2024. The reporting of drill results is not balanced as it is a single cross section, but the resource calculation is a balanced representation of all drilling.
Other substantive exploration data	• The Company is reporting a JORC 2012 resource therefore there is a significant amount of other data that is discussed in section 1 of this Table. Hansen is an advanced Project that was permitted for mining in the 1980's and has received over 750 drill holes and 3 Feasibility Studies.
Further work	• The Company has completed a 2024 drill program and is in the process of completing testing on the core to support a Scoping Study of mining methods. • The Company is undertaking permitting activities and planning of future drilling activities at its Boyer and Taylor Leases. • The Company intends to issue a Scoping Study and then consider technical programs that will help develop a pathway to production and guide future exploration and development activities.

Section 3 Estimation and Reporting of Mineral Resources

(The criteria listed in Section 1 and, where relevant, in Section 2, also apply to this Section)

Criteria	Commentary
Database integrity	• Collar details, interval grades and survey data were entered from hardcopy historical records. Electronic data were available for recent drilling. Several sections were double blind checked for accuracy verification. Outliers from initial data entry for collar locations and grade results were investigated and corrected. Grade populations and three-dimensional locations were visually inspected in cross-section and also visually compared with historic maps and sections. • Analytical values used for estimation of U_3O_8% are equivalent U_3O_8% (eU_3O_8%) values, which were obtained by down survey using calibrated geophysical instruments.
Site Visits	• Ms. Kira L. Johnson, the Competent Person for Mineral Resource Estimation and Reporting, visited the property on August 20, 2024.
Geological Interpretation	• There is high confidence in the geologic interpretation. The deposit is stratified and laterally consistent drill hole logging and surface mapping supports this conclusion. • The data source for geologic interpretation is primarily drill hole logs and surface mapping. The model currently assumes minimal post mineralisation faulting. • Deposit domains were confined by corresponding geologic units. • Continuity of geology is on a regional sedimentary scale and is regular. Grade continuity is subject to deposition of carbonaceous material and oxidation reduction interfaces of paleo-groundwater carrying mobilized uranium.
Dimensions	• The Hansen deposit has a strike length of 9,200 ft (2,800 meters) and a width of 2,700 ft (823 meters).
Estimation and modelling techniques	• The block model is comprised of 25x25x3 foot blocks. • Commonly accepted multi-pass ordinary kriging was used to estimate the mineral resources. • Uranium domains were modelled using wireframe solids. Composites values for estimation were also constrained by the wireframe. • Search passes of 100, 500, and 800 foot radii were used in the estimation. • A maximum of 4 samples were allowed per drill hole for the estimation process. • A maximum of 16 total samples was used for the 100 foot pass, while a maximum of 20 total samples was used for the 500 and 800 foot search estimations. • Estimates were checked and compared to historic estimates. Some historic surface mining was performed at the site. • No recovery has been applied for the purposes of the mineral resource estimate. • No deleterious elements (or credits) have been evaluated as part of the mineral resource estimate. • Blocks have been sized as a trade-off between mineralized shapes and general mining selectivity. • It is assumed that due to the soft sedimentary nature of the mineral zone good selectivity can be achieved. • The models are single variable, only U_3O_8. • Mineral domains were confined to sedimentary rock units and mineral horizons. Block search anisotropy was also fitted to the stratigraphy with the shortest axis being across dip, or horizon thickness. • Capping was not applied. The high-end portion of the grade distribution was sufficiently uniform after compositing. • Resource models were visually inspected in cross-section by multiple individuals. Any issues were flagged and corrected before finalisation of the model. The populations of grades, composites, and blocks were reviewed for continuity and moderation of grade toward final estimation. • Previous block model estimations compared well with the data obtained in the 2024 drilling program.
Moisture	• Tonnages are estimated on a dry basis. Moisture content has not been assessed as part of the mineral resource estimation.
Cut-off parameters	• The 0.025% U_3O_8 cutoff grade is based on a uranium oxide price of US$50 per lb..
Mining factors or assumptions	• At this stage limited mining assumptions have been considered. Block size has been chosen for

Criteria	Commentary
	the Hansen Deposit as 3 ft (0.91m), selected to balance deposit thickness and reasonable selectivity. When further information is known regarding mining methods block dimensioning should be re-evaluated. Dilution has not been applied. Blocks have been assigned as within or outside of the mineral domain and property based on the location of their centroid.
Metallurgical factors or assumptions	• Metallurgical amenability has not been considered for the mineral resource estimation. Reports covering metallurgy on the Hansen Deposit have been reviewed by the CP with no red flags.
Environmental factors or assumptions	• Environmental impacts have not been accounted for in the mineral resource estimation. Appropriate baseline environmental studies were commenced by Black Range but not completed.
Bulk density	• Density values have been sourced from the historic feasibility report titled *Mine Feasibility Study of the Hansen Project; Date: June 1980* commissioned by the previous explorer Cyprus. Density determinations were made from 40 core drill holes by reputable analytical laboratories, on a dry basis. • Density values are in line with expected values for sedimentary rocks of average porosity. Vugs have not been observed. • Density values have been measured by rock type. Block tonnages of different rock types were estimated using densities corresponding to rock types.
Classification	• Classification has taken into account relevant factors that affect confidence, such as drill hole count, distance to drill holes, and kriging error. • Blocks estimated in the 100-foot pass were classified as Indicated. Blocks from the 500- and 800-foot pass were classified as Inferred. Holes that were initially classified as Inferred were upgraded to Indicated where the estimation used 3 or more holes and had an average sample distance of less than 150 feet. • The classifications of confidence appropriately reflect the Competent Person's view of this deposit and are reasonable provided the drill spacing and spatial variability suggested by variogram analysis.
Audits or Reviews	• Review work undertaken in relation to the mineral resource estimate has included visual review of cross-sections comparing blocks to down hole grades. Populations of grades, composites and blocks and their general distribution have been reviewed to ensure no bias in estimation. In addition, confirmatory drilling has been conducted which reasonably supports the predictions made by the block model. Third party auditors have also inspected the cross-sections and mineral resource findings without issue.
Discussion of relative accuracy/confidence	• Accuracy and variability have been assessed through visual review of cross-sections, comparing blocks to drill hole grades. • This mineral resource estimation has reasonable global reliability, but local variability is subject to the nugget effect observed in variography. It is the Competent Person's opinion that indicated and inferred mineral resources are of sufficient reliability to support scoping level analysis. • No production data is available.