

ASX:GUE
OTCQB:GUELF
ASX Announcement

15 May 2025

Exploration Program for the Flagship Pine Ridge Uranium Project in Wyoming's Prolific Powder River Basin

Priority Targets Identified, ~38,000m Drill Program Anticipated to Start in July 2025

Highlights

- Pine Ridge Uranium Project is an In-Situ Recovery (ISR) uranium project located in the Powder River Basin, Wyoming and primed for accelerated development.
- Powder River Basin, Wyoming is the leading uranium-producing region in the U.S., supported by a favourable regulatory environment and streamlined permitting processes.
- Utilising the existing 1,214 drill holes on the Project, the JV team is developing a complete geological model (that includes 335 km of redox boundaries) and developed a detailed exploration program to rapidly advance the Project.
- Drill program expected to start in July 2025 and will focus on numerous target areas and comprise of ~38,000m (125,000 ft).

Global Uranium and Enrichment Limited (ASX: GUE, OTCQB: GUELF) (Global Uranium, GUE or the Company) is pleased to announce that Powder River Basin LLC (Powder River) — a 50/50 joint venture between Global Uranium and Snow Lake Energy (NASDAQ: LITM), has developed an exploration program for the flagship Pine Ridge Uranium Project (Project), located in the Powder River Basin, Wyoming.

Mr. Andrew Ferrier, Managing Director of Global Uranium and Enrichment said: "Pine Ridge possesses all the geological and logistical fundamentals to become a tier-one uranium asset. Securing the Project was the result of over 12 months of dedicated effort by our team, who quickly recognised its transformational potential for Global Uranium.

"We are now focused on expediting key exploration activities over the coming months with the development of our exploration program at Pine Ridge being the key first step. Our team has reviewed the historical drilling completed by Conoco and Stakeholder along with assessing key geological features and have identified numerous priority targets for our maiden drill program at Pine Ridge.

"We have allocated ~38,000m of drilling to methodically test these priority areas and work toward unlocking a sizeable Exploration Target at Pine Ridge. The future is extremely exciting for Global Uranium and we look forward to keeping shareholders regularly updated through what is shaping to be our busiest 12 months ahead."



Exploration Program Overview

The Pine Ridge JV has consolidated the existing historical data on the project area and integrated it with available public information from nearby projects to develop a 3D model of the known mineralisation and potential mineralisation. The results of this data compilation and evaluation led to the staking of an additional 937 claims at Pine Ridge and increasing the Joint Venture's landholding, to a total of approximately 15,130 ha (37,387 acres).

In addition, the understanding and results from the data compilation and geological review have guided the prioritisation of drill targets in the area (shown in red below), with approximately 38,000m (125,000 ft) of drilling to be completed inside these areas during the initial exploration program.

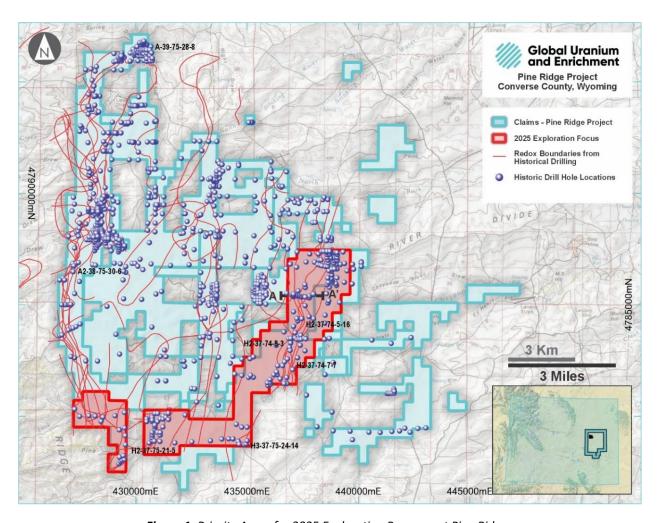


Figure 1: Priority Areas for 2025 Exploration Program at Pine Ridge

Conoco drilled 765 holes into the project area and Stakeholder Energy drilled an additional 449. Their drill campaigns were primarily designed to continue building on the geologic understanding of the project while testing key areas for uranium potential. The results from these drill campaigns allowed Stakeholder to develop a model that included 335 km of redox boundaries hosted in stacked horizons within the Tertiary sandstones. This interpretation is further supported by adjacent, ISR properties with published resources.

Geologists for the previous vendors of the Project measured 350 sandstone outcrops on the south and west sides of the project area under the direction of Dr. Kent Sundell, Geology Professor Emeritus at Casper College. The purpose of the exercise was to better understand the geologic characteristics of the stacked sandstones and the paleo-river system that deposited the sands.



SOLA Project Services will be contracted by the Company to provide technical and project support. A Principal with SOLA, Mr. Bryan Soliz has significant experience and expertise in the region, highlighted by more than 25 years of exploration and production work in the Powder River Basin, including at the adjacent Smith Ranch-Highland project operated by Cameco.

The selection of drill contractors and geophysical contractors is currently underway. Permit approvals are expected in late June and the drill program will commence shortly after the permit is received.

Pine Ridge Overview

The Pine Ridge Uranium Project is an In-Situ Recovery (ISR) uranium project located in the southwestern Powder River Basin of Wyoming, the premier U.S. uranium basin. Historically, the Powder River Basin is the most significant area for uranium production in U.S. primarily via ISR production methods.

The Project is surrounded by existing uranium projects held by UEC and Cameco and is also located only $^{\sim}15$ km from Cameco's Smith Ranch Mill which has licensed capacity of 5.5Mlbs U $_{3}O_{8}$ p.a. The Smith Ranch mill is one of the largest uranium production facilities in the U.S.

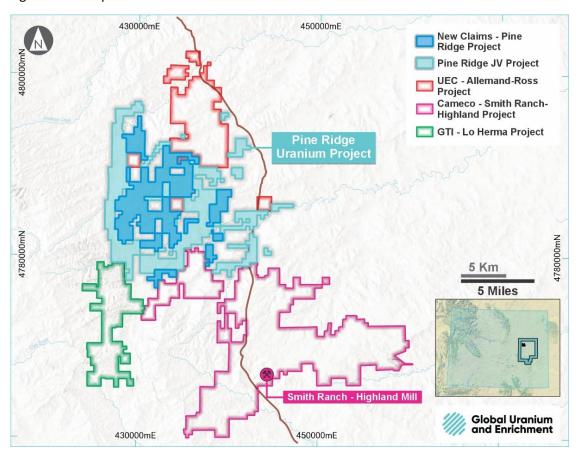


Figure 2: Pine Ridge Uranium Project and Adjacent Properties

Pine Ridge has an established Exploration Target range of 24.4 - 51.3 Mlbs U_3O_8 , at an average grade of 0.031% - 0.040% U_3O_8 (100% basis). The Project has been significantly de-risked through historic drilling and has an ideal geological foundation to be developed into a production asset.

The potential quantity and grade of Pine Ridge's Exploration Target Range is conceptual in nature. Insufficient modern exploration has been conducted to estimate a JORC compliant Mineral Resource and it is uncertain whether future exploration will lead to the estimation of a Mineral Resource in the defined areas. (Refer to Appendix A for more information).



This announcement has been authorised on behalf of Global Uranium and Enrichment Limited by the Board of Directors.

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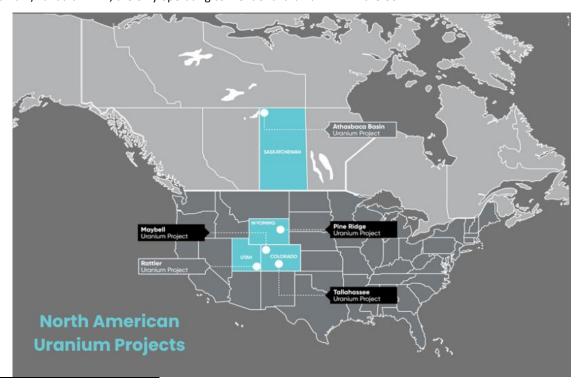


An Emerging Uranium Powerhouse

Global Uranium and Enrichment Limited is an Australian public listed company providing unique exposure to not only uranium exploration and development but 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:

- Pine Ridge Uranium Project (Wyoming, USA): Located in premier uranium mining region with an Exploration Target range established. More than 1,200 holes have been drilled on the property which identified over 140 miles of redox fronts with potential to define a substantial In-Situ Recovery uranium resource base.
- Tallahassee Uranium Project (Colorado, USA): JORC 2012 Mineral Resource estimate of 52.2 Mlbs U₃O₈ at a grade of 530ppm U₃O₈¹ with significant exploration upside. Located in Colorado's Tallahassee Creek Uranium District, host to more than 100 Mlbs U₃O₈.
- 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 U₃O₈ in historic drilling and the Middle Lake Project with boulder-trains with grades of up to 16.9% U₃O₈.²
- 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.³ Historical production of 5.3 million pounds of U₃O₈ (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.



 $^{^{1}}$ 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 Mlbs U₃O₈". Measured 2.96Mlbs of 550 ppm U₃O₈, Indicated 21.01Mlbs of 610 ppm U₃O₈, Inferred 28.2Mlbs of 480 ppm U₃O₈ calculated applying a cut-off grade of 250ppm U₃O₈. 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.

² 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.

³ 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.



Appendix A – Exploration Target Information – Pine Ridge Uranium Project

An Exploration Target range of 24.4-51.3 Mlbs U_3O_8 at a grade range of 310-400ppm U_3O_8 for the Pine Ridge Uranium Project was established. The Exploration Target was defined following an extensive data review including 765 historical holes drilled by Conoco and 449 holes drilled by Stakeholder Energy LLC. Further data reviewed includes the lithological and geophysical logs for all drill holes, 204 cross sections that correlate stratigraphy through the Stakeholder drill holes, 22 cross sections with geologic interpretations of uranium roll fronts, Stakeholder Arc GIS database, maps and digitised historical date.

The deposits are epigenetic uranium roll-fronts. Project is located on the western flank of the Powder River structural basin. The uranium deposits are hosted in the Eocene aged Wasatch Formation and the Paleocene aged Fort Union Formation. The host sandstones generally dip shallowly toward the east-northeast towards the synclinal axis of the basin.

Global Uranium's Exploration Target Range is conceptual in nature. Insufficient modern exploration has been conducted to estimate a JORC compliant Mineral Resource and it is uncertain whether future exploration will lead to the estimation of a Mineral Resource in the defined areas.

The Exploration Target Range is an estimate only, in accordance with JORC 2012, and has been estimated based on following parameters assumptions:

- Exploration Target Range is based only on Stakeholder drilling data with formation characteristics being uniform across the Project
- There are 140 miles of redox trend currently exist on the Project with an average mineralized width
 of 300 ft being applied to the redox trends. This width is an assumption, and the true width will be
 determined with additional exploration and delineation drilling
- The bulk density of the Project is 16.6 ft3/ton based on public data from the neighbouring Reynolds Ranch Project
- Grade and thickness cut offs of 0.02% U308 and 2.0 feet were applied to mineral intercepts
- The 25th percentile (1st quartile) intercept thickness and grade were 2.9 feet and 0.031% respectively
- An average intercept grade was found to be 0.037%, with an intercept thickness of 4.4 feet

Data Verification and QA/QC efforts include:

- Verified calibration records for the geophysical logging tolls used during Stakeholder's three phases of drilling. No calibration data are available for previous exploration efforts
- Spot-checked 10% of the mineral intercept table against the geophysical logs
- Cross-checked geophysical logs against the cross sections
- Reviewed the interpretation of the stratigraphic units in correlation cross sections Next Steps: Several steps will be taken to test the validity of the Exploration Target and rapidly advance the Project. These steps include:
- Prioritize exploration areas and generate drill targets based on completed data evaluation
- Acquire necessary permits from regulatory agencies
- Initial exploration drilling program this year to generate a resource model targeting up to eight highly
 prospective areas which historical and recent drilling has indicated substantial potential to develop a
 significant resource in the near term
- Evaluation of results and maiden Mineral Resource Estimates (MRE) followed by a Scoping Study



Estimation Method

The upper estimate of Exploration potential was calculated as shown in Equation 1 and the lower estimate was calculated as shown in Equation 2.

Equation 1.

Tonnes =
$$\frac{5280 \; \frac{ft}{mile} * 140 \; miles * 4.8 \; ft * 300 \; ft * 120.5 \; \frac{lbs}{ft^3}}{2204.6 \; \frac{lbs}{tonne}}$$

Tonnes = 58.2 million tonnes

5,280 ft/mile = Mile to feet conversion factor

140 miles = Redox trend length

4.8 feet = 75th percentile intercept thickness

300 feet = Redox trend width 120.5 lbs/ft³ = Bulk density

2204.6 lbs/tonne = Pounds to metric tonne conversion factor

Equation 2.

Tonnes =
$$\frac{5280 \frac{ft}{mile} * 140 \text{ miles} * 2.9 \text{ ft} * 300 \text{ ft} * 120.5 \frac{lbs}{ft^3}}{2204.6 \frac{lbs}{tonne}}$$

Tonnes = 35.2 million tonnes

5,280 ft/mile = Mile to feet conversion factor

140 miles = Redox trend length

2.9 feet = 25th percentile intercept thickness

300 feet = Redox trend width 120.5 lbs/ft³ = Bulk density

2204.6 lbs/tonne = Pounds to metric tonne conversion factor

A percentile-based analysis of the Stakeholder drilling data was used to estimate the exploration potential to reduce the influence of outliers on the average intercept thickness and grade. Using the 25th and 75th percentile brackets the average and provides a conservative lower estimate that is below the average of drilling data and an upper estimate that accounts for the limited objectives of the drilling programs and the higher GT values found when drilling intercepted the noses of roll fronts.

These estimates are preliminary in nature, rely heavily on assumptions and it is uncertain if further exploration will result in the estimation of a mineral resource.

Table 1 presents the 10 highest grade x thickness (GT) mineral intercepts from the Stakeholder drilling programs.



Table 1: Highest GT Mineral Intercepts

BHID	E (83_13)	N (83_13)	Elev (m)	Azimuth	Dip	TD(m)	From (m)	To (m)	Thickness (m)	U3O8 (%)	GxT (ft%)
24-14	434757	4778632	1,631	0	-90	305	270.7	280.3	9.6	0.051	1.61
8-3	436825	4783195	1,622	0	-90	366	216.7	218.4	1.7	0.158	0.87
30-6	427040	4786643	1,703	0	-90	488	417.3	422.5	5.2	0.041	0.70
32-3	437849	4785368	1,701	0	-90	457	386.8	391.7	4.9	0.040	0.64
28-8	430333	4796330	1,634	0	-90	122	71.3	73.9	2.6	0.065	0.55
32-1	436949	4785325	1,666	0	-90	457	388.3	393.2	4.9	0.034	0.54
7-7	436681	4782473	1,657	0	-90	378	221.9	225.6	3.7	0.044	0.52
30-6	427040	4786643	1,703	0	-90	488	372.2	376.6	4.4	0.035	0.51
5-16	437325	4784284	1,648	0	-90	396	378.3	382.2	4.0	0.039	0.51
21-5	429407	4778623	1,694	0	-90	463	454.5	458.0	3.5	0.040	0.46
32-14	437061	4785306	1,670	0	-90	408	372.5	374.1	1.7	0.055	0.30
32-16	437252	4785264	1,679	0	-90	408	350.8	351.9	1.1	0.049	0.17
32-3	437849	4785368	1,701	0	-90	457	394.4	395.9	1.5	0.035	0.18
32-2	437347	4785255	1,682	0	-90	457	363.3	364.5	1.2	0.035	0.14
32-7	436948	4785265	1,667	0	-90	427	294.7	295.5	0.8	0.032	0.08
32-17	437481	4785257	1,688	0	-90	408	385.9	386.3	0.5	0.033	0.05

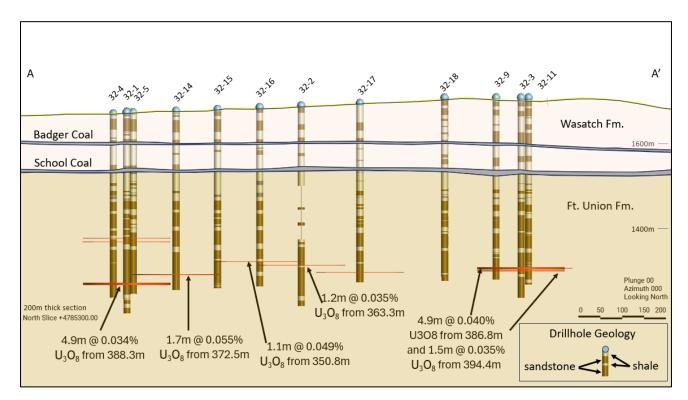


Figure 2. Pine Ridge Project Cross Section on highest GT mineral intercepts.



Table 2 shown below presents additional intercepts from the historical drilling on the Pine Ridge project. These additional intercepts are in addition to those shown in Table 2. The intervals shown are >0.9m thick and have a cutoff grade of 0.020% (200 ppm) U_3O_8 .

Table 2: Additional historical intercepts

BHID	E (83_13)	N (83_13)	Elev (m)	Azimuth	Dip	TD (m)	From (m)	To (m)	Thickness (m)	U3O8 (%)	GxT (ft%)
20-15	427749	4789078	1700.5	0	-90	518.2	483.4	484.3	0.9	0.062	0.186
28-20	429836	4796251	1651.7	0	-90	140.2	82.3	84.4	2.1	0.035	0.245
6-12	426813	4784909	1735.2	0	-90	487.7	413.3	415.4	2.1	0.031	0.217
20-1	427748	4789148	1699.0	0	-90	640.1	495.9	497.1	1.2	0.044	0.176
20-5	427283	4788215	1694.7	0	-90	640.1	450.5	452.9	2.4	0.043	0.344
28-5	428842	4788028	1726.7	0	-90	91.4	55.5	57.3	1.8	0.030	0.180
28-7	429710	4786764	1759.3	0	-90	457.2	452.9	454.8	1.8	0.066	0.396
29-3	428117	4787717	1734.6	0	-90	79.2	21.3	22.9	1.5	0.036	0.180
29-7	428595	4787880	1743.5	0	-90	91.4	66.4	67.7	1.2	0.071	0.284
28-5	430105	4796333	1635.9	0	-90	121.9	89.9	91.1	1.2	0.053	0.212
18-10	435908	4781430	1623.7	0	-90	274.3	174.3	176.2	1.8	0.026	0.156
18-8	436649	4781645	1622.1	0	-90	365.8	275.2	277.1	1.8	0.034	0.204
5-11	436922	4783407	1617.6	0	-90	370.3	328.0	329.8	1.8	0.068	0.408
5-12	437014	4783415	1615.4	0	-90	365.8	313.9	316.1	2.1	0.040	0.280
5-8	436957	4783932	1627.6	0	-90	365.8	239.0	240.5	1.5	0.084	0.420
8-1	436776	4782999	1636.2	0	-90	365.8	318.2	319.7	1.5	0.036	0.180
22-6	430707	4778788	1693.5	0	-90	304.8	253.6	254.8	1.2	0.038	0.152
20-4	428400	4779870	1689.8	0	-90	457.2	396.8	398.4	1.5	0.044	0.220
21-7	429133	4779297	1699.3	0	-90	493.8	202.7	205.4	2.7	0.036	0.324
22-11	430610	4779850	1676.1	0	-90	304.8	242.0	243.8	1.8	0.044	0.264
22-31	430608	4779060	1679.4	0	-90	304.8	250.2	252.1	1.8	0.026	0.156
18-3	436176	4781291	1618.8	0	-90	457.2	301.8	303.3	1.5	0.056	0.280
and							306.0	307.2	1.2	0.061	0.244
and							308.5	310.3	1.8	0.032	0.192
and							314.6	316.1	1.5	0.038	0.190
18-4	436532	4781371	1615.7	0	-90	365.8	238.4	239.6	1.2	0.074	0.296
21-3	438493	4789626	1642.3	0	-90	408.4	278.9	280.1	1.2	0.052	0.208
28-3	438582	4787313	1653.2	0	-90	378.0	318.5	320.0	1.5	0.041	0.205
28-5	438582	4787174	1662.7	0	-90	378.0	313.0	314.2	1.2	0.064	0.256
and							331.0	332.5	1.5	0.055	0.275
29-4	438057	4786708	1656.3	0	-90	378.0	348.4	351.4	3.0	0.030	0.300
29-9	438098	4786913	1649.9	0	-90	365.8	351.7	353.3	1.5	0.056	0.280
33-1	438650	4786400	1680.4	0	-90	365.8	339.5	342.6	3.0	0.035	0.350
18-4	436402	4790176	1658.1	0	-90	445.0	411.5	413.9	2.4	0.033	0.264
26-3	433425	4787112	1696.8	0	-90	469.4	459.0	462.1	3.0	0.037	0.370