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THOR ENERGY PLC

**ASX:** THR

**ASX Announcement**
29 February 2024

**High Grade Uranium and Vanadium Assays**
Wedding Bell and Radium Mountain Projects, USA

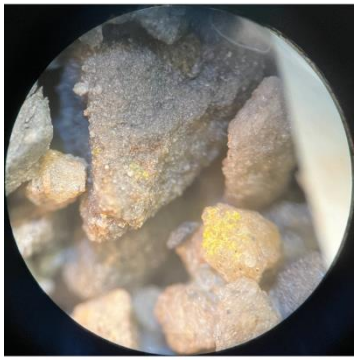
The directors of Thor Energy Plc ("Thor") (AIM, ASX: THR, OTCQB: THORF) are pleased to provide an update on the uranium and vanadium assay results from the recently completed reverse circulation ("RC") drilling program on the Company's 100% owned Wedding Bell and Radium Mountain Projects, located in the uranium-vanadium mining district of the Uravan Mineral Belt, southwest Colorado, USA (**Figure 1**).

**Highlights:**

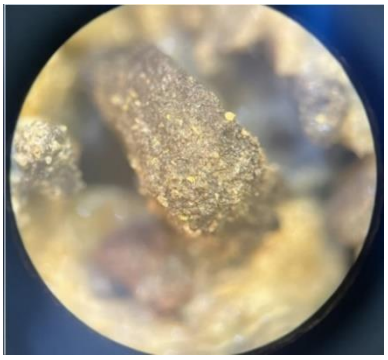
- Assays return up to **3,0348 ppm (3.0%)** $V_2O_5$ vanadium pentoxide, with uranium assay grades up to **6,250ppm (0.63%) $U_3O_8$**, consistent with the high-grade downhole gamma uranium results (ASX/AIM: 4 December 2023) (**Figure 5**).
- Significant uranium and vanadium assay results include:

| | |
|---|---|
| **23WBR020:** | **4.9m @ 1199ppm (0.12%) $U_3O_8$ and 6306ppm (0.63%) $V_2O_5$ from 82m,** |
| *Including,* | 0.6m @ 6250ppm (0.63%) $U_3O_8$ and 30348ppm (3.0%) $V_2O_5$ from 82.6m |
| *Including,* | 1.8m @ 2999ppm (0.3%) $U_3O_8$ and 14912ppm (1.5%) V2O5 from 82m. |
| **23WBR011:** | **6.1m @ 563ppm (0.06%) $U_3O_8$ and 9100ppm (0.9%) $V_2O_5$ from 74.7m** |
| *Including,* | 1.5m @ 1624ppm (0.16%) $U_3O_8$ and 19637ppm (2.0%) $V_2O_5$ from 76.2m. |
| **23WBR016:** | **3m @ 636ppm (0.06%) $U_3O_8$ and 4677ppm (0.5%) $V_2O_5$ from 67.0m** |
| *Including,* | 1.5m @ 1044ppm (0.1%) $U_3O_8$ and 4677ppm (0.5%) $V_2O_5$ from 67.0m. |
| **23WBR019:** | **1.2m @ 1112ppm (0.11%) $U_3O_8$ and 3744ppm (0.4%) $V_2O_5$ from 90.8m,** |

- Vanadium mineralisation forms broad zones adjacent to the uranium mineralisation, with an average vanadium-to-uranium ratio of 10:1, which is typical of the Uravan Mineral Belt.
- Preparations have commenced for 2024 resource drilling (infill and extension) at Rim Rock and Groundhog mine areas, with additional prospects also to be assessed for drilling including Edna May and Babe Ruth/Diana Mine areas **(Figure 2)**.



**6250ppm (0.6%) $U_3O_8$ and 17852ppm (1.8%) $V_2O_5$**
23WBRA020: 82-83m Uraninite with carnotite (yellow) on surface (20x. Field view 1cm)



**1044ppm (0.1%) $U_3O_8$ and 4677ppm (0.5%) $V_2O_5$**
23WBRA016: 67-68.6m Uraninite with tyuyamunite (yellowish green) (20x. Field view 1cm)

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**AIM & ASX Listings**
**Shares:** THR

**OTCQB Listing**
**Shares:** THORF

**Directors:**
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**Key Projects:**
**USA**
Uranium / Vanadium
*Wedding Bell, Colorado*
*Radium Mountain, Colorado*
*Vanadium King, Utah*
**Australia**
Gold
*Ragged Range, Pilbara, WA*
Copper
*Alford East, SA*

**Nicole Galloway Warland, Managing Director of Thor Energy, commented:**

*"The high-grade uranium (up to 0.6%) and vanadium (1.8%) assay results confirm the high-grade nature of the Saltwash style sandstone uranium systems, within the prolific Uravan Mineral Belt. The assay results also confirm the presence of wide intervals of high-grade uranium mineralisation within a halo of vanadium mineralisation.*

*"Whilst these 100% owned projects are uranium assets, the 10:1 vanadium-to-uranium confirms the rich vanadium endowment.*

*"This drilling program stepped out from the 2022 drill program, with drilling around the Groundhog and Rim Rock mines confirming mineralisation remains open along strike from historic workings.*

*"Preparations are now underway for a larger RC program and diamond drilling at Groundhog and Rim Rock prospects, chasing high-grade mineralisation along strike, as well as infill drilling for Resource definition."*

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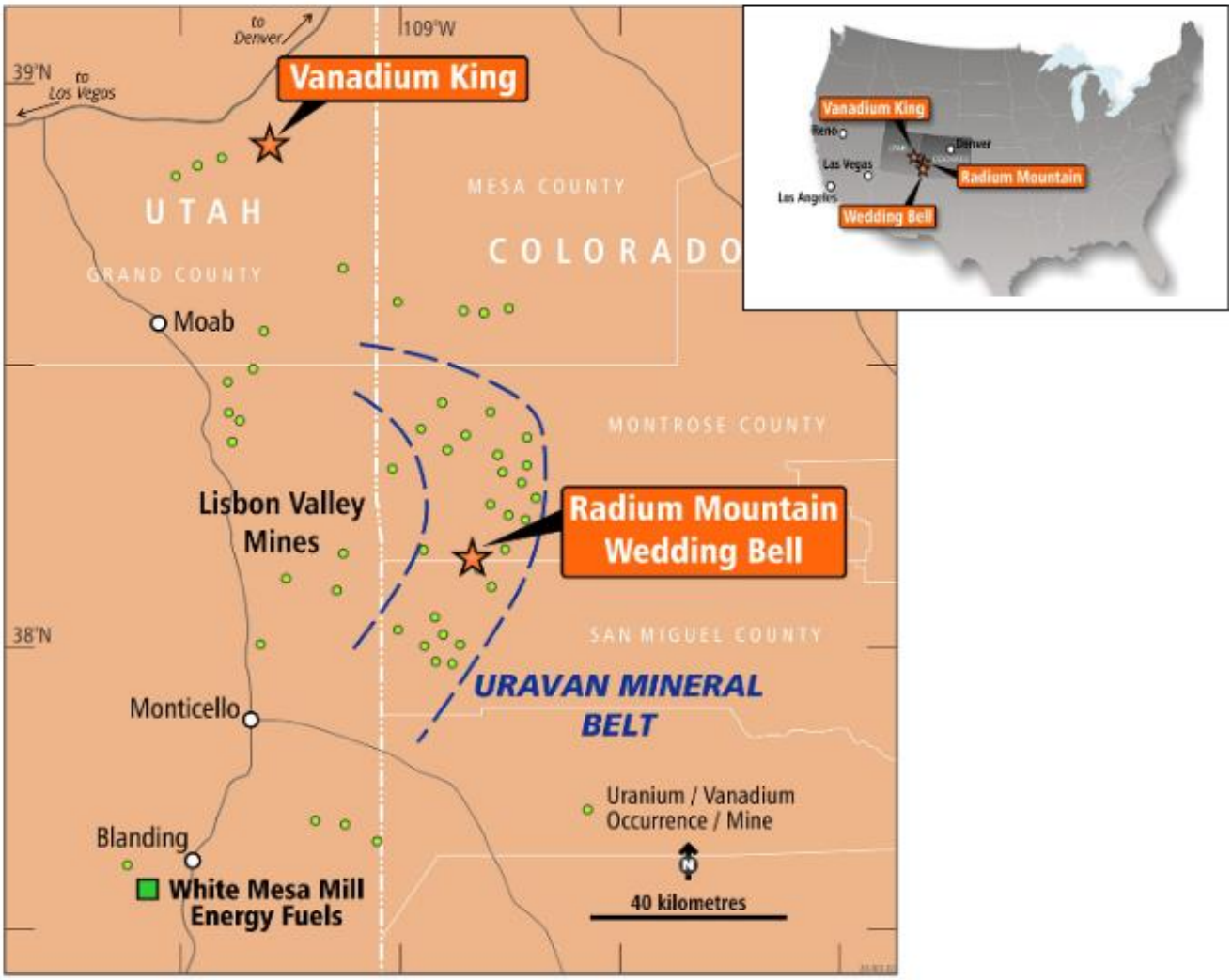


**Figure 1:** USA Uranium and Vanadium Project Location Map within the Uravan Mineral Belt

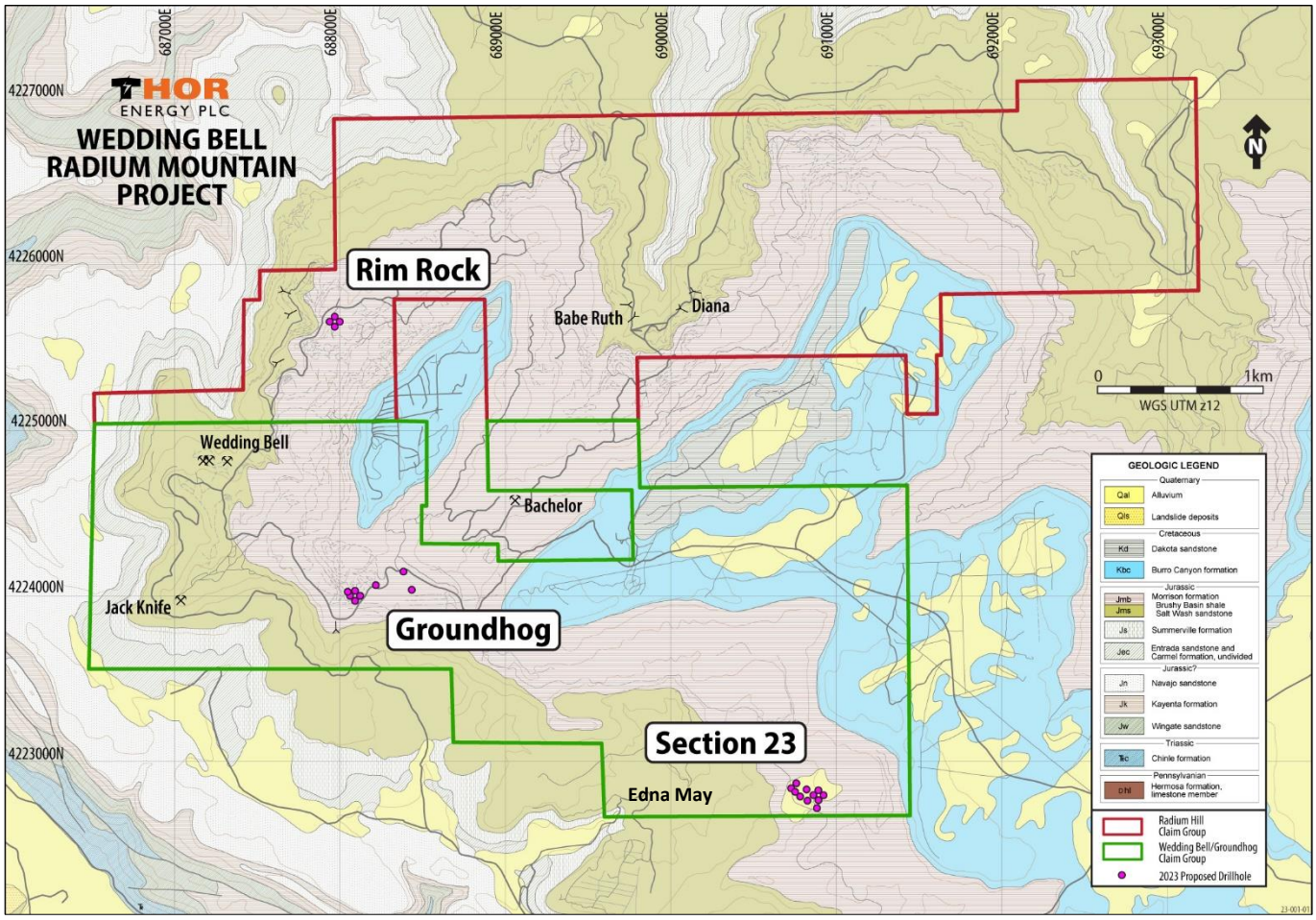


**Figure 2:** Drillhole location plan, Wedding Bell and Radium Mountain Projects, Colorado

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**Upcoming News Flow:**

- Detailed mineralisation and geological interpretations combining the 2022 and 2023 drilling results
- 2024 RC and diamond resource drilling (infill and extension) at Rim Rock and Groundhog mine areas
- RC Prospect drilling
- Maiden drilling at Vanadium King, Utah

**Wedding Bell and Radium Mountain Project, Colorado:**

The chemical assay results relate to the recently completed RC drill program at the Wedding Bell Project, comprised 23 shallow drillholes, totalling 2,737m (ASX/AIM: 4 December 2023) (**Figure 2**).

The program successfully identified shallow (maximum depth is 125m at Section 23 and above 100m at Rim Rock and Groundhog), uranium and vanadium mineralisation in all holes; drilled at Section 23, Rim Rock Mine and Groundhog Mine **(Figure 2, Table A** and **B)**. Uranium mineralisation is hosted within reduced sandstones close to the oxidation/reduction contact (redox front) within the Salt Wash Sandstone (**Figure 3** and **Photo 2)** of the Jurassic Morrison Formation (**Figure 1** and **Figure 5**). The Salt Wash Sandstone comprises four distinct massive, laterally continuous, ledge-forming sandstone layers (locally called "rims"), interbedded by thin siltstone and clay layers. This

is the primary lithology for historic uranium and vanadium production in the Uravan Mineral Belt.

The vanadium mineralisation forms extensive broader zones or haloes, adjacent to the uranium mineralisation. The vanadium-to-uranium ratio averages roughly 10:1, which is typical of the Uravan Mineral Belt. The exploration focus is on defining uranium mineralisation, with vanadium as a secondary endowment.

Copper (Cu), base metals (Pb, Zn), Molybdenum (Mo) and Selenium (Se) are path-finder elements associated with the uranium and vanadium mineralisation and can be used to determine the direction of the roll front of the uranium mineralising system (**Figure 3, Figure 4,** and **Photo 2**). **Copper values are up to 0.82% Cu and silver reported up to 55ppm Ag**.

Chemical assays reported:

**23WBRA015:** 0.61m @ 190ppm $U_3O_8$, 3963ppm $V_2O_5$, 55.2g/t Ag and 8260ppm Cu from 58.83m

**Groundhog Mine area** drilling, comprising seven drillholes was designed to test areas along strike of historic mine workings predominately in the second and third sandstone rim (above 100m depth). 23WBRA020 returned the highest uranium and vanadium intercepts of **0.91m @ 0.69% $eU_3O_8$ uranium (downhole gamma) and 0.6m @ 0.62% $U_3O_8$ uranium (assay) and 1.8% $V_2O_5$ vanadium** within a grey reduced sandstone (**Figure 2** and **6**). Further work is required to correlate these results with historic mine working levels and the 2022 drilling.

Chemical assays reported:

| | |
|---|---|
| **23WBR020:** | **4.9m @ 1199ppm (0.12%) $U_3O_8$ and 6306ppm (0.63%) $V_2O_5$ from 82m,** |
| *Including*, | 0.6m @ 6250ppm (0.63%) $U_3O_8$ and 30348ppm (3.0%) $V_2O_5$ from 82.6m |
| *Including,* | 1.8m @ 2999ppm (0.3%) $U_3O_8$ and 14912ppm (1.5%) V2O5 from 82m |

Drilling at **Rim Rock Mine area** (seven drillholes) has identified high-grade zones of up to **0.32% $eU_3O_8$** uranium and up to **1.8% $V_2O_5$** vanadium adjacent to, as well as along strike from the historic workings (**Figure 3** and **7**). Uranium and vanadium mineralisation appears to be concentrated in the third sandstone rim of the Salt Wash Sandstone, approximately 60m below surface. Further work is required to correlate these results with historic mine workings and the 2022 drilling, to delineate mineral resources.

Chemical assays reported:

| | |
|---|---|
| **23WBR011:** | **6.1m @ 563ppm (0.06%) $U_3O_8$ and 9100ppm (0.9%) $V_2O_5$ from 74.7m,** |
| *Including*, | 1.5m @ 1624ppm (0.16%) $U_3O_8$ and 19637ppm (2.0%) $V_2O_5$ from 76.2m |

**Section 23** is an underexplored area with no historic workings. The drilling (nine drillholes) was designed to test stratigraphic extensions to mineralisation in the Salt Wash Sandstone, targeting the uranium mineralisation identified from the first pass drilling program in 2022, as well as testing a portion of the airborne radiometric anomalies (**Figure 8**). The initial data review of the drilling has identified uranium mineralisation in all four sandstone rims within the Salt Wash Sandstone Member, increasing the potential for multiple mineralised zones in this area. Pathfinder geochemistry in 23WBRA009 and 23WBRA005 indicates roll front fluid pathway, which identifies the uranium mineralisation potential in the southwest.

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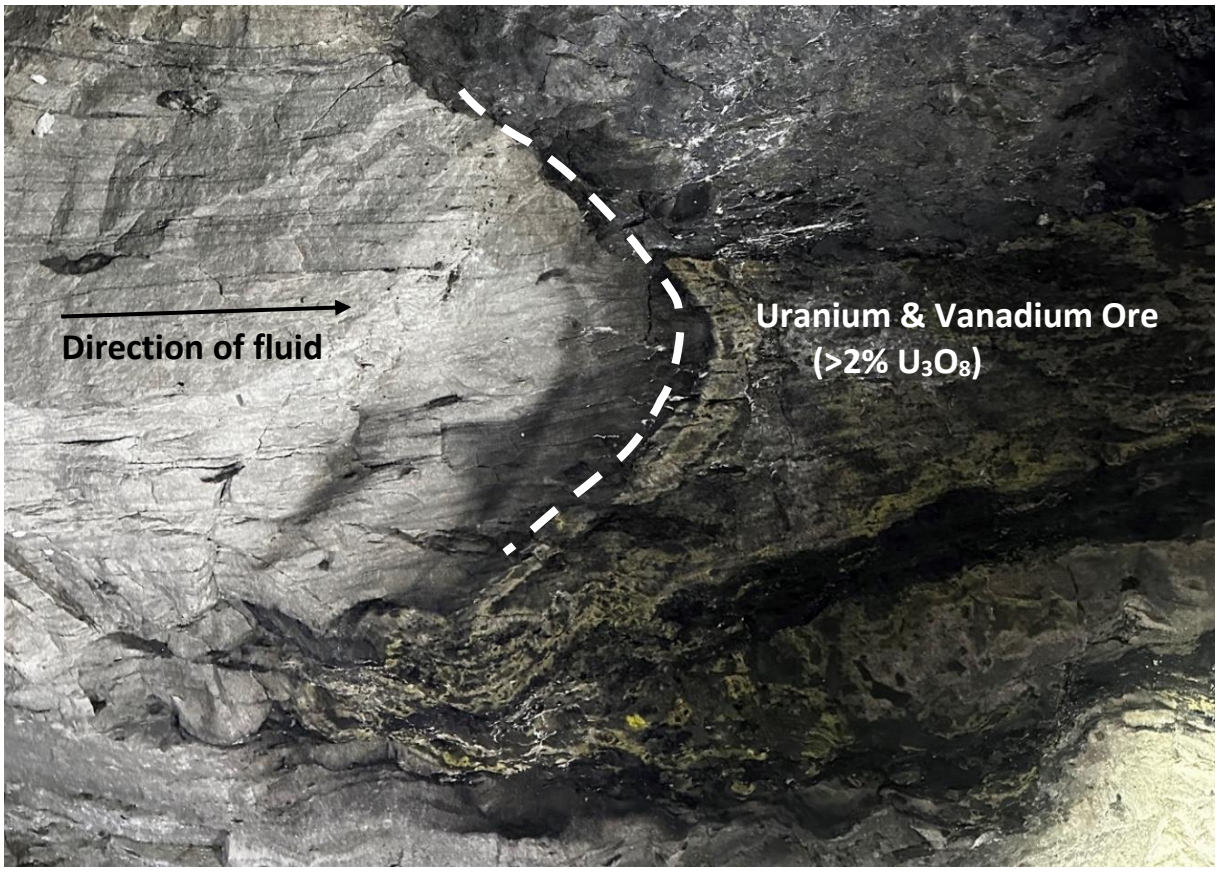


**Photo 1:** Uranium-Vanadium roll front in Salt Wash Sandstone at Sunday Complex Mine, Uravan Mineral Belt
Photo *taken by Nicole Galloway Warland, with permission to use from Western Uranium and Vanadium LLC*

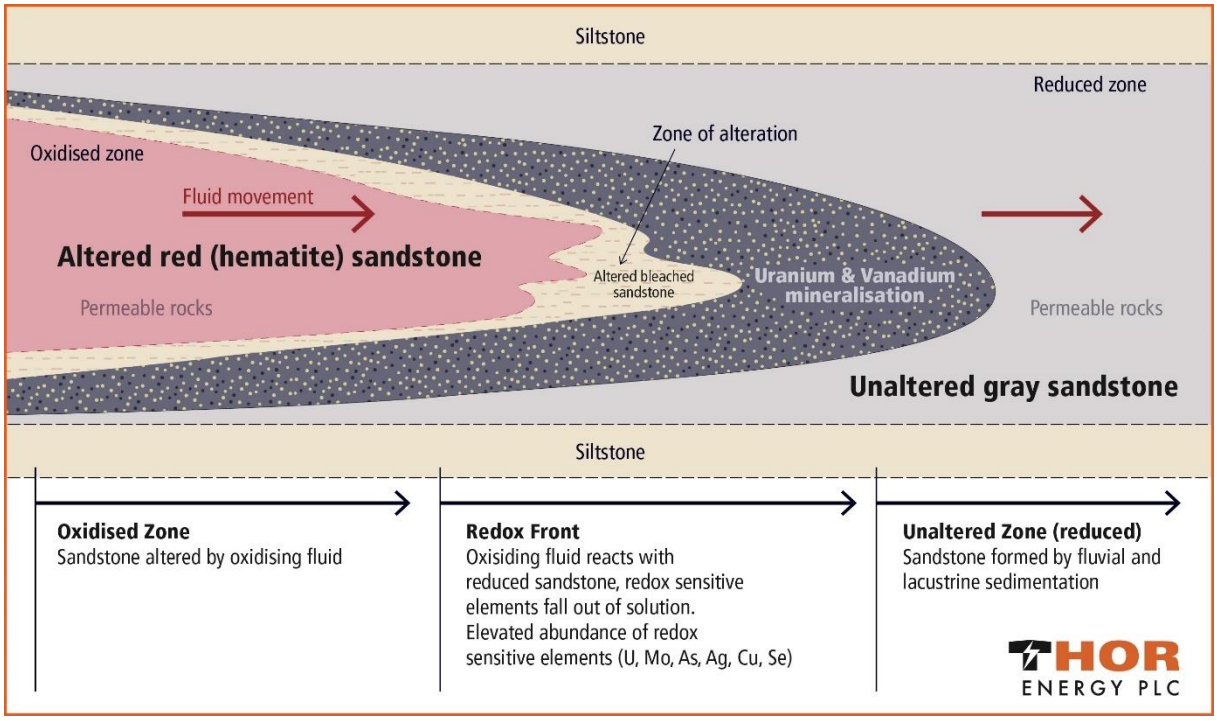


**Figure 3**: Schematic cross-section of a sandstone-hosted roll front associated with the redox conditions.

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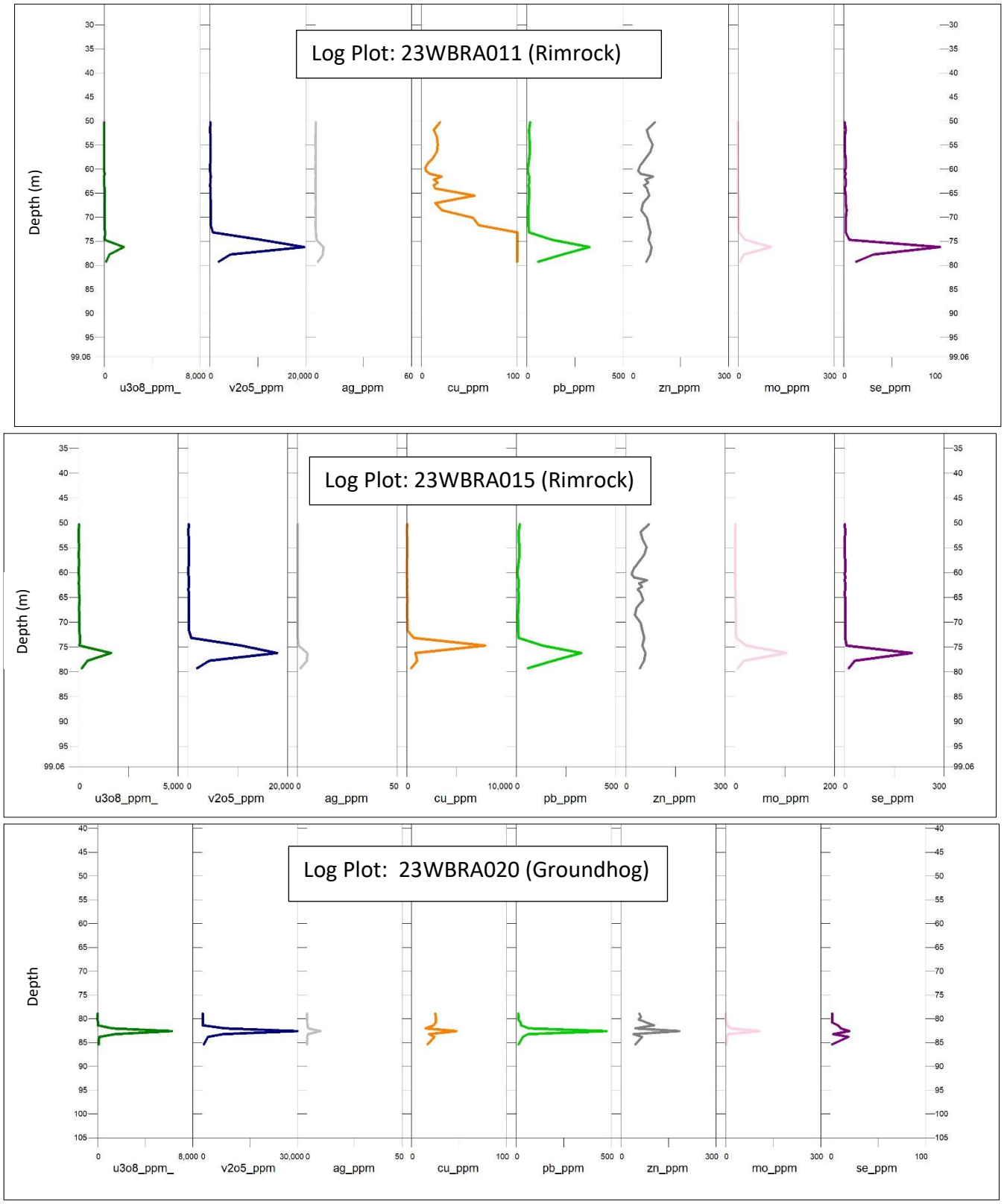


**Figure 4:** Drillhole Log Plots for 23WBRA011, 23WBRA015 and 23WBR020 showing uranium and vanadium mineralisation with elevated pathfinder (redox-sensitive) elements - Copper (Cu), Lead (Pb), Zinc (Zn), Molybdenum (Mo) & Selenium (Se)

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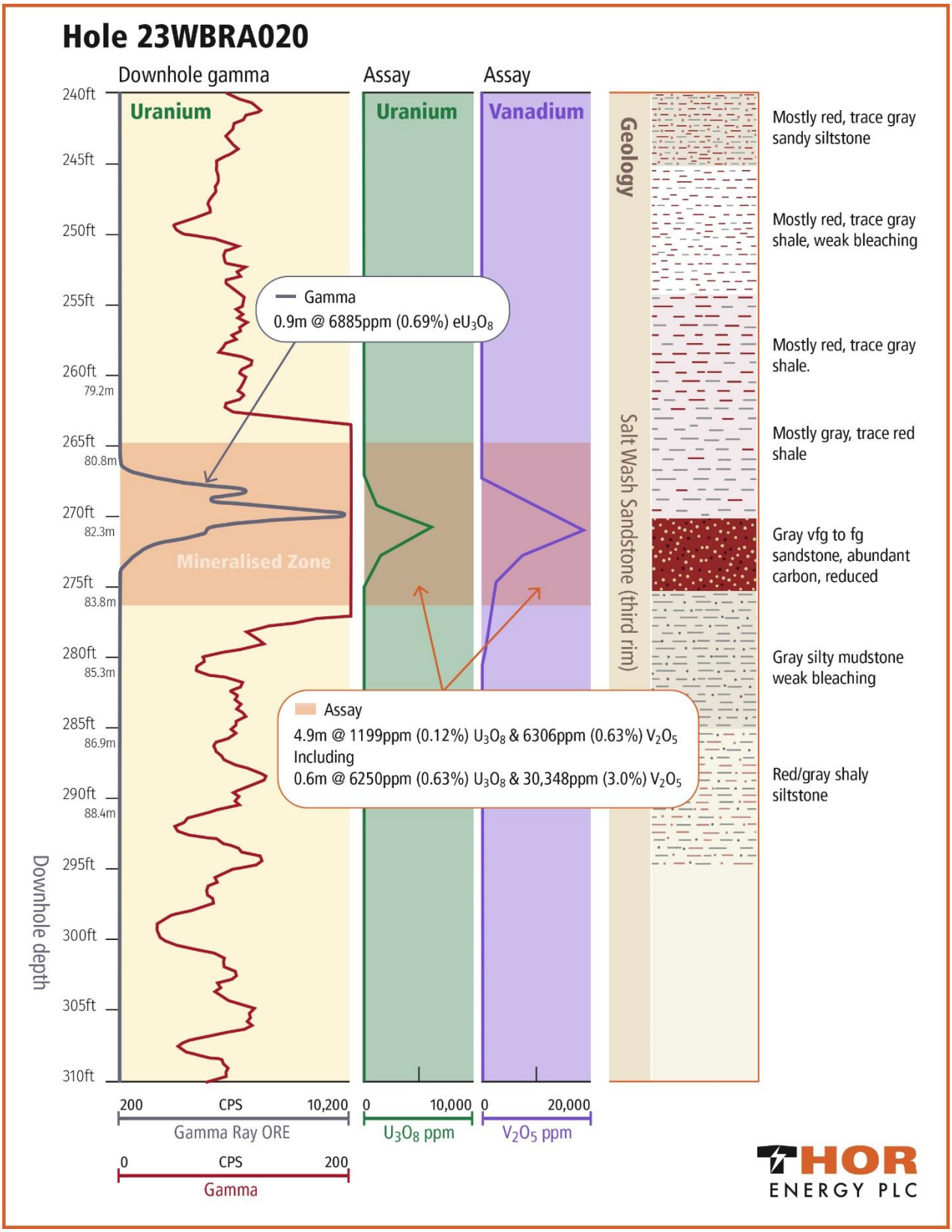


**Figure 5:** 23WBRA020 showing consistency of downhole gamma uranium readings next to assay results for uranium and vanadium with geology.

**Figure 6:** Groundhog drillhole location map showing uranium grade distribution.

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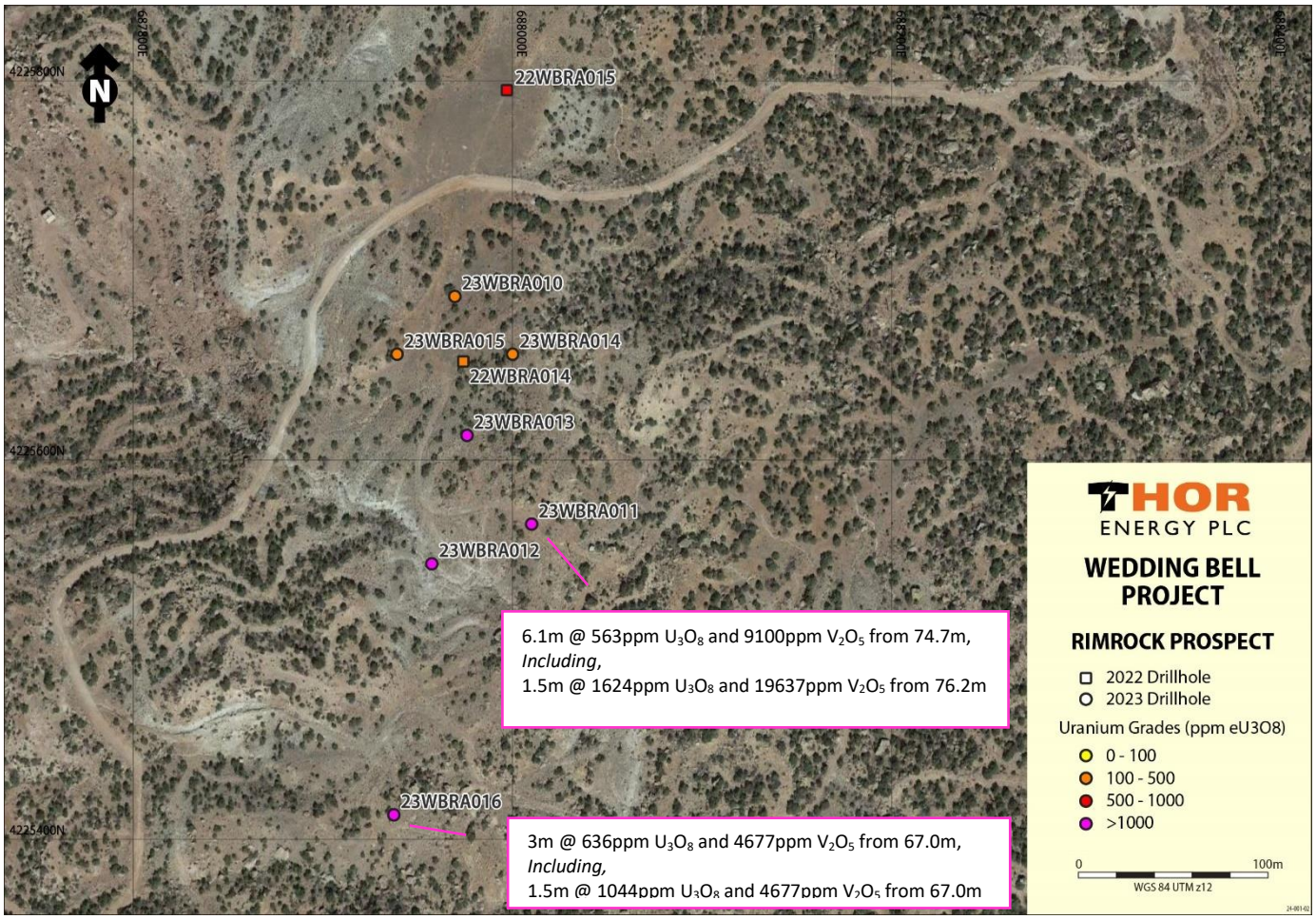


**Figure 7:** Rimrock Drillhole Location Map showing uranium grade distribution.

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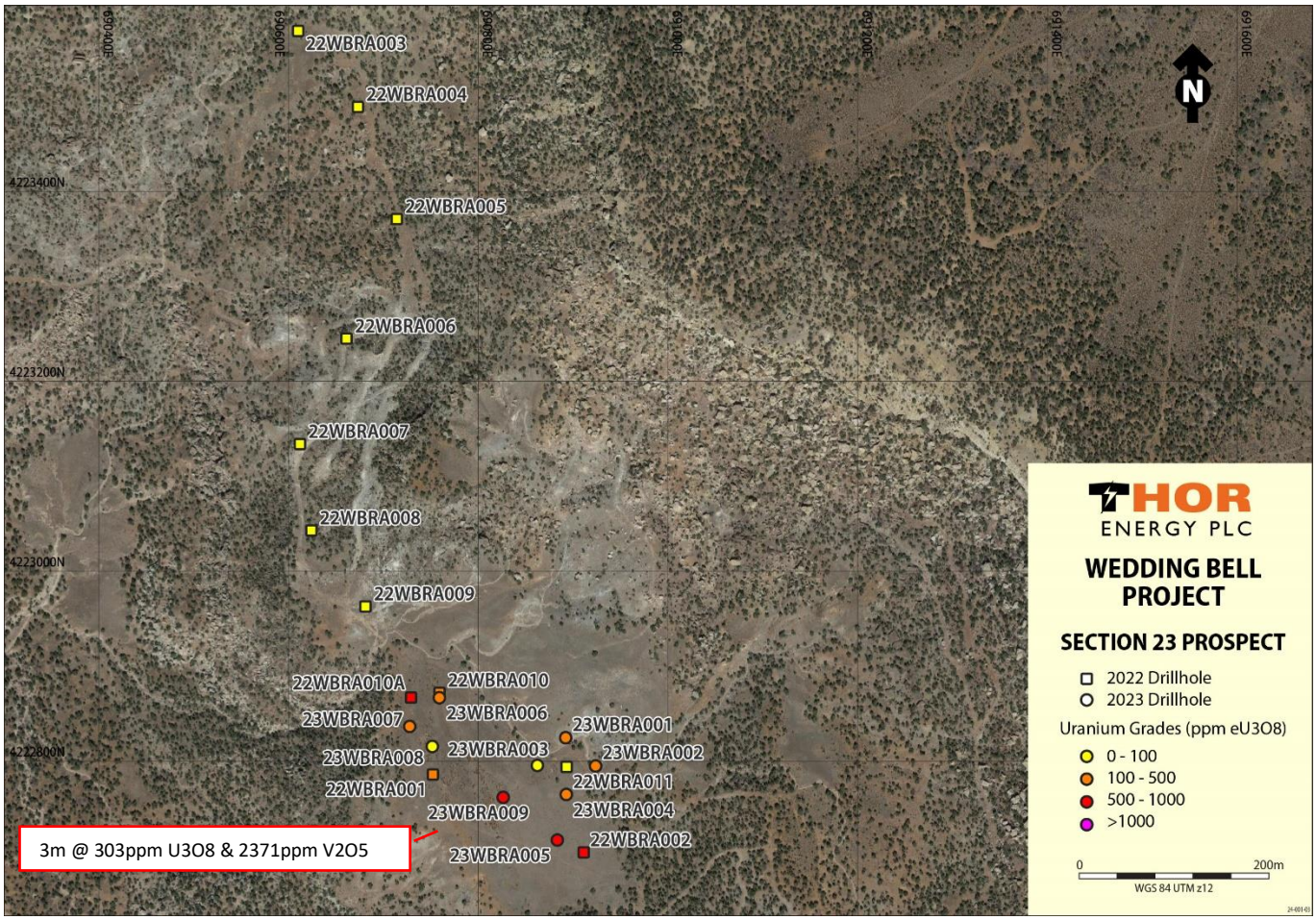


**Figure 8:** Groundhog Drillhole Location Map showing uranium grade distribution.

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**Uranium Outlook**

Favourable long-term fundamentals continue to drive the uranium spot price up **(Figure 2)**. Key drivers include:

- Nuclear Energy: Sentiment around reliable baseload clean nuclear energy has increased, with 24 countries pledging to triple nuclear capacity by 2050.
- Geopolitical instability and national supply security: Russian invasion of Ukraine, Niger Coup d'état and Kazakhstan production uncertainty reiterate the significance of national supply security.
- Supply-demand deficit: Utilities are expected to self-sanction and refrain from signing contracts, with Russian entities accompanied by government legislation, current supply below reactor demands, with uncertainty around production forecasts **(Figure 3)**.

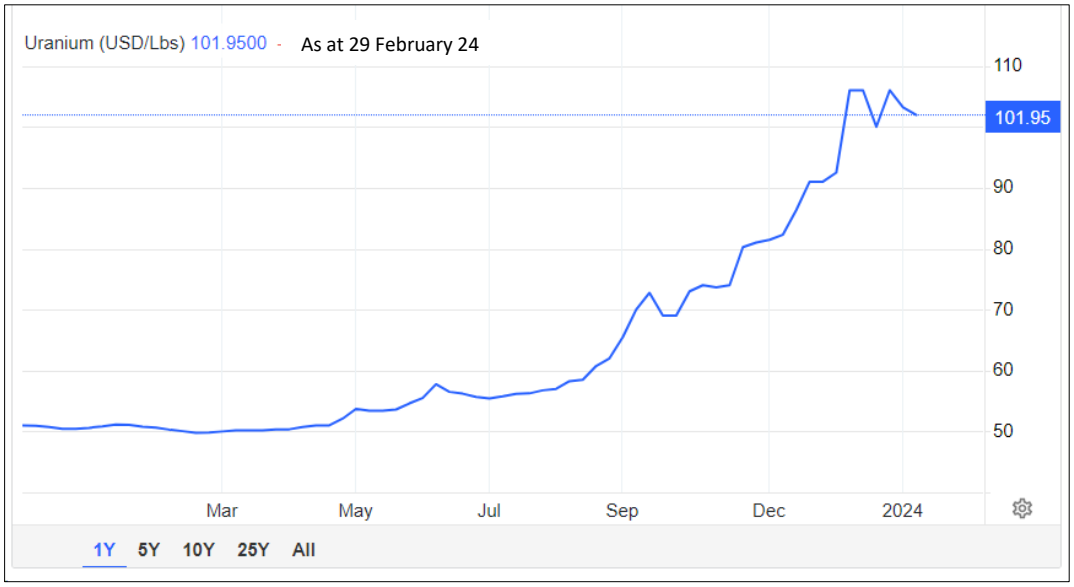


**Figure 9:** Uranium Spot Price. Source: https://tradingeconomics.com/commodity/uranium

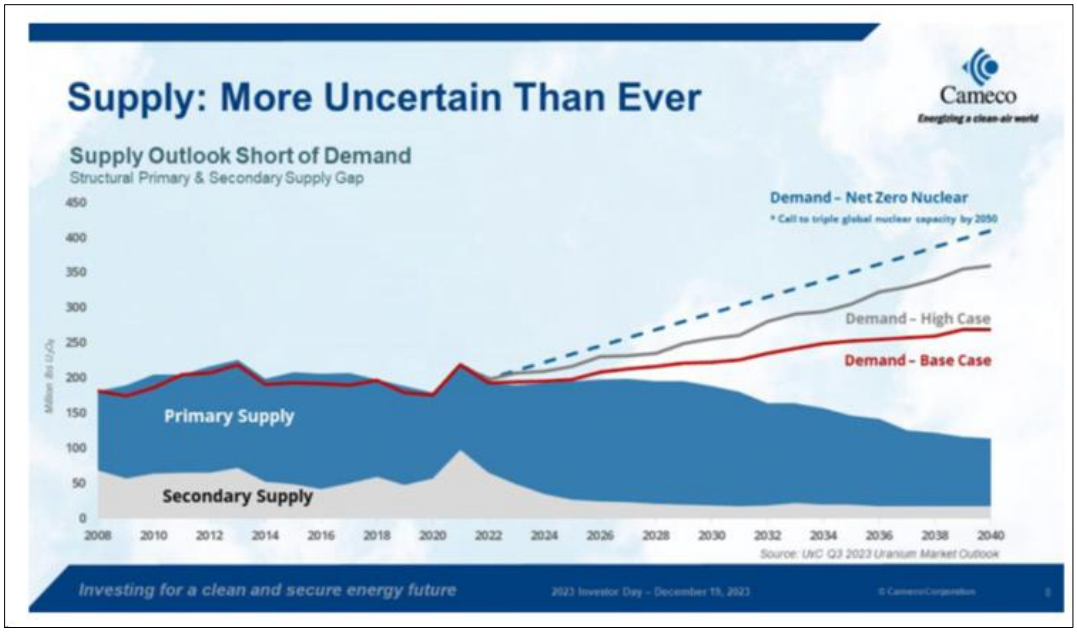


**Figure 10:** Supply-Demand Deficit. Source: https://www.cameco.com/invest/markets/supply-demand

**Table A:** Uranium and vanadium Intercepts above 100ppm $U_3O_8$

| Prospect | Drill Hole | Depth from | Depth To m | Interval m | $U_3O_8$ ppm | $V_2O_5$ ppm |
|---|---|---|---|---|---|---|
| Section 23 | 23WBRA001 | *No Significant intercepts* | | | | |
| Section 23 | 23WBRA002 | 101 | 102.11 | 1.52 | 118 | 712 |
| Section 23 | 23WBRA003 | 99 | 99.67 | 0.61 | 60 | 666 |
| **Section 23** | **23WBRA004** | **101** | **102.41** | **1.22** | **176** | **1550** |
| **Section 23** | **including** | **101.19** | **101.80** | **0.61** | **248** | **2169** |
| **Section 23** | **23WBRA005** | **101.19** | **101.80** | **0.61** | **565** | **1350** |
| **Section 23** | **23WBRA006** | **121.92** | **125.27** | **3.35** | **79** | **1513** |
| Section 23 | 23WBRA007 | 121.92 | 123.44 | 1.52 | 69 | 843 |
| Section 23 | and | 124.05 | 124.66 | 0.61 | 94 | 766 |
| Section 23 | 23WBRA008 | *No significant intercepts* | | | | |
| **Section 23** | **23WBRA009** | **123.44** | **126.49** | **3** | **303** | **2371** |
| **Rim Rock** | **23WBRA0010** | **51.82** | **54.86** | **3** | **163** | **1148** |
| **Rim Rock** | **including** | **53.34** | **54.86** | **1.5** | **212** | **1316** |
| **Rim Rock** | **23WBRA0011** | **73.15** | **80.77** | **7.6** | **463** | **7404** |
| **Rim Rock** | **including** | **74.68** | **80.77** | **6.1** | **563** | **9100** |
| **Rim Rock** | **including** | **76.20** | **77.72** | **1.5** | **1621** | **19637** |
| Rim Rock | 23WBRA0012 | 62.48 | 65.84 | 3.4 | 514 | 454 |
| Rim Rock | including | 62.48 | 64.01 | 1.5 | 952 | 98 |
| **Rim Rock** | **and** | **65.23** | **65.84** | **0.6** | **100** | **2392** |
| Rim Rock | 23WBRA0013 | 60.96 | 62.48 | 1.5 | 745 | 1392 |
| Rim Rock | and | 65.23 | 66.45 | 1.2 | 241 | 1861 |
| **Rim Rock** | **23WBRA0014** | **56.39** | **59.74** | **3.4** | **250** | **1801** |
| **Rim Rock** | **including** | **58.52** | **59.13** | **0.6** | **522** | **5124** |
| **Rim Rock** | **23WBRA0015** | **57.61** | **59.44** | **1.8** | **218** | **3371** |
| **Rim Rock** | **23WBRA0016** | **67.06** | **70.1** | **3.0** | **636** | **4677** |
| **Rim Rock** | **including** | **67.06** | **68.58** | **1.5** | **1044** | **7141** |
| Groundhog | 23WBRA0017 | 88.39 | 91.44 | 3.0 | 154 | 586 |
| **Groundhog** | **23WBRA0018** | **89.61** | **90.22** | **0.6** | **1179** | **8426** |
| **Groundhog** | **and** | **90.83** | **91.44** | **0.6** | **38** | **3071** |
| **Groundhog** | **23WBRA0019** | **90.83** | **92.05** | **1.2** | **1112** | **3744** |
| **Groundhog** | **23WBRA0020** | **81.99** | **86.87** | **4.9** | **1199** | **6306** |
| **Groundhog** | **including** | **81.99** | **83.82** | **1.8** | **2999** | **1,4912** |
| **Groundhog** | **including** | **82.60** | **83.21** | **0.6** | **6250** | **3,0348** |
| Groundhog | 23WBRA0021 | 80.77 | 82.60 | 1.2 | 90 | 503 |
| **Groundhog** | **23WBRA0022** | **82.30** | **88.39** | **6.1** | **280** | **3866** |
| **Groundhog** | **including** | **83.82** | **86.87** | **3.0** | **466** | **5945** |
| Groundhog | 23WBRA0023 | *Not sampled* | | | | |

**Minor rounding errors from feet to metre conversion*

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**Table B:** Drill Collar Details (WGS84 Zone 12)

| Prospect | Hole ID | Easting | Northing | Elevation (m) | Azimuth | Dip | Hole Depth (m) |
|---|---|---|---|---|---|---|---|
| Section 23 | 23WBRA001 | 690892 | 4222825 | 2043 | 360 | -90 | 148 |
| Section 23 | 23WBRA002 | 690924 | 4222795 | 2044 | 360 | -90 | 142 |
| Section 23 | 23WBRA003 | 690862 | 4222796 | 2043 | 360 | -90 | 142 |
| Section 23 | 23WBRA004 | 690893 | 4222765 | 2046 | 360 | -90 | 145 |
| Section 23 | 23WBRA005 | 690883 | 4222717 | 2048 | 360 | -90 | 142 |
| Section 23 | 23WBRA006 | 690759 | 4222867 | 2039 | 360 | -90 | 142 |
| Section 23 | 23WBRA007 | 690728 | 4222837 | 2042 | 360 | -90 | 142 |
| Section 23 | 23WBRA008 | 690751 | 4222815 | 2042 | 360 | -90 | 142 |
| Section 23 | 23WBRA009 | 690826 | 4222762 | 2043 | 360 | -90 | 142 |
| Rim Rock | 23WBRA010 | 687970 | 4225686 | 2022 | 360 | -90 | 57 |
| Rim Rock | 23WBRA011 | 688010 | 4225566 | 2038 | 360 | -90 | 99 |
| Rim Rock | 23WBRA012 | 687957 | 4225545 | 2030 | 360 | -90 | 94 |
| Rim Rock | 23WBRA013 | 687976 | 4225613 | 2030 | 360 | -90 | 99 |
| Rim Rock | 23WBRA014 | 688000 | 4225656 | 2026 | 360 | -90 | 99 |
| Rim Rock | 23WBRA015 | 687939 | 4225656 | 2022 | 360 | -90 | 99 |
| Rim Rock | 23WBRA016 | 687937 | 4225413 | 2040 | 360 | -90 | 148 |
| Groundhog | 23WBRA017 | 688089 | 4224022 | 2098 | 360 | -90 | 104 |
| Groundhog | 23WBRA018 | 688051 | 4224007 | 2100 | 360 | -90 | 104 |
| Groundhog | 23WBRA019 | 688047 | 4224017 | 2102 | 360 | -90 | 105 |
| Groundhog | 23WBRA020 | 688093 | 4223969 | 2092 | 360 | -90 | 105 |
| Groundhog | 23WBRA021 | 688123 | 4223999 | 2092 | 360 | -90 | 99 |
| Groundhog | 23WBRA022 | 688218 | 4224064 | 2089 | 360 | -90 | 105 |
| Groundhog | 23WBRA023 | 688435 | 4224036 | 2091 | 360 | -90 | 136 |

The Board of Thor Energy Plc has approved this announcement and authorised its release.

For further information, please contact:

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***Competent Person Statement***

*The information in this report that relates to Geological interpretation and Exploration Results is based on information compiled by Nicole Galloway Warland, who holds a BSc Applied geology (HONS) and who is a Member of The Australian Institute of Geoscientists. Ms Galloway Warland is an employee of Thor Energy PLC. She has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she 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'. Nicole Galloway Warland consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.*

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Updates on the Company's activities are regularly posted on Thor's website https://thorenergyplc.com which includes a facility to register to receive these updates by email, and on the Company's X page @thorenergyplc

**About Thor Energy Plc**

The Company is focused on uranium and energy metals that are crucial in the shift to a 'green' energy economy. Thor has a number of highly prospective projects that give shareholders exposure to uranium, nickel, copper, lithium and gold. Our projects are located in Australia and the USA.

Thor holds 100% interest in three uranium and vanadium projects (Wedding Bell, Radium Mountain and Vanadium King) in the Uravan Belt in Colorado and Utah, USA with historical high-grade uranium and vanadium drilling and production results.

At Alford East in South Australia, Thor has earnt an 80% interest in oxide copper deposits considered amenable to extraction via In Situ Recovery techniques (ISR). In January 2021, Thor announced an Inferred Mineral Resource Estimate[1].

Thor also holds a 26.3% interest in Australian copper development company EnviroCopper Limited (ECL), which in turn holds rights to earn up to a 75% interest in the mineral rights and claims over the resource on the portion of the historic Kapunda copper mine and the Alford West copper project, both situated in South Australia, and both considered amenable to recovery by way of ISR.[2,3] Alligator Energy recently invested A$0.9M for a 7.8% interest in ECL with the rights to gain a 50.1% interest by investing a further A$10.1m over four years.

Thor holds 100% of the advanced Molyhil tungsten project, including measured, indicated and inferred resources[4], in the Northern Territory of Australia, which was awarded Major Project Status by the Northern Territory government in July 2020. Thor executed a A$8m Farm-in and Funding Agreement with Investigator Resources Limited (ASX: IVR) to accelerate exploration at the Molyhil Project on 24 November 2022.[6]

Adjacent to Molyhil, at Bonya, Thor holds a 40% interest in deposits of tungsten, copper, and vanadium, including Inferred resource estimates for the Bonya copper deposit, and the White Violet and Samarkand tungsten deposits.[5] Thor's interest in the Bonya tenement EL29701 is planned to be divested as part of the Farm-in and Funding agreement with Investigator Resources Limited.[6]

Thor owns 100% of the Ragged Range Project, comprising 92 $km^2$ of exploration licences with highly encouraging early-stage gold and nickel results in the Pilbara region of Western Australia.

*Notes*

[1] https://thorenergyplc.com/investor-updates/maiden-copper-gold-mineral-resource-estimate-alford-east-copper-gold-isr-project/

[2] www.thorenergyplc.com/sites/thormining/media/pdf/asx-announcements/20172018/20180222-clarification-kapunda-copper-resource-estimate.pdf

[3] www.thorenergyplc.com/sites/thormining/media/aim-report/20190815-initial-copper-resource-estimate---moonta-project---rns---london-stock-exchange.pdf
[4] https://thorenergyplc.com/investor-updates/molyhil-project-mineral-resource-estimate-updated/
[5] www.thorenergyplc.com/sites/thormining/media/pdf/asx-announcements/20200129-mineral-resource-estimates---bonya-tungsten--copper.pdf
[6] https://thorenergyplc.com/wp-content/uploads/2022/11/20221124-8M-Farm-in-Funding-Agreement.pdf

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## 1 JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Sampling techniques* | • *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.* | Reverse circulation drill samples were collected off the cyclone at 5ft (1.5m) intervals and split to 3kg (with 2ft samples collected through mineralised zones.<br>An pXRF (Olympus Vanta Series C) and spectrometer (Mt. Sopris SC-132 ) reading was taken for each sample.<br>All the holes were electric-logged (e-logged), on a call-out basis, by Jet West of Farmington, New Mexico. Jet West followed industry standards for probing holes on uranium properties. They calibrate their gamma probes at the Department of Energy test pits located in Grants, New Mexico. Logs run were natural gamma, single point resistivity (SPR), self-potential (SP), deep and medium induction resistivity (DIR and MIR), and selected holes had directional surveys done. First-pass logging speeds were 35 ft (10.7m)/minute and for gamma reruns, logging rates were 10 ft (3.05m)/minute. On first-pass runs gamma readings were taken every 0.3 ft (10cm), and for reruns, every 0.1 ft (3.0cm).<br>Anomalous samples were sent to ALS Canada for analysis –4 acid multi element ICP-MS +Uranium (ME-MS61U) |
| *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* | Track mounted reverse circulation rig (5.5inches).<br><br>All vertical holes |

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| | *if so, by what method, etc).* | |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | Sample recovery was good with no variation within mineralised zones. Each drill cutting pile size is logged and any deviation from expected was raised with the driller, and if undersize, to check for blockages.<br>No sample biases expected, and no relationship is known to exist between sample recovery and grade. |
| *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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | All chip samples are qualitatively geologically logged (lithology, structure, alteration, mineralisation (based on scintillometer cps for each interval), weathering, colour and other features).<br>No mineral resource estimation, mining studies or metallurgical studies have been conducted at this stage, but samples have been logged in sufficient detail to use for this function.<br>During the logging process representative samples are stored in chip trays for future reference. The RC chip trays are photographed and electronically stored. |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>*For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>*Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>*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.*<br>*Whether sample sizes are appropriate to the grain size of the material being sampled.* | Samples were collected as described in the above sampling technique section.<br>All holes e-logged by Jet West.<br>Based on elogging gamma results a selection of samples were sent to ALS Canada for analysis<br>Samples were collected as described in the above sampling technique section.<br>Sampling is carried out using standard protocols and QAQC procedures as per industry practice.<br>Field QAQC procedures for drilling involved the use of a certified standard, blank and field duplicate sample submitted These are routinely checked against originals. |

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| | | X samples (including QAQC samples) were sent to ALS Laboratories, Vancouver. Sample preparation includes sorting, drying, followed by pulverising (PUL32).<br>Sample preparation included sorting, drying, followed by pulverising.<br>Analysis was 4 acid multi element ICP-MS +Uranium (ME-MS61U) |
| *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.*<br>• *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.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.* | All the holes were electric-logged (e-logged), probes are calibrated at the Department of Energy test pits located in Grants, New Mexico. Logs run were natural gamma, single point resistivity (SPR), self-potential (SP), deep and medium induction resistivity (DIR and MIR), and selected holes had directional surveys done. First-pass logging speeds were 35 ft (10.7m)/minute and for gamma reruns, logging rates were 15 ft (4.6m)/minute. On first-pass runs gamma readings were taken every 0.3 ft (10cm), and for reruns, every 0.1 ft (3.0cm).<br>Handheld pXRF readings<br>readings are taken on -2mm sieved samples on every drill sample interval, using an Olympus Vanta Series C with a 40 second reading time.<br>Instrument is calibrated at start of each day, along with QAQC of 1 standard and 1 blank. External instrument calibration completed annually.<br>64 samples (plus QAQC samples) were sent to ALS Laboratory Vancouver, Canada for 48 element four acid digest ICP-MS (ME-MS61U). |

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| *Verification of sampling and assaying* | *The verification of significant intersections by either independent or alternative company personnel.*<br>*The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>*Discuss any adjustment to assay data.* | All significant intersections have been verified by an onsite geologist.<br>There are no twinned drillholes.<br>All drilling data is collected in a series of templates in excel including geological logging, sample information, collar and survey information.<br>All data is digitally recorded in the company's electronic database, managed by external database company utilising Datashed5 software. |
| *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.*<br>*Specification of the grid system used.*<br>*Quality and adequacy of topographic control.* | Drill collars were surveyed using a handheld Garmin 64 GPS with an accuracy of +/-3m. Grid system is WGS84 UTM zone 12.<br>All holes were vertical<br>Topographic control using the GPS is suitable for early- stage exploration. |
| *Data spacing and distribution* | *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>*Whether sample compositing has been applied.* | Data spacing for preliminary exploration work is deemed sufficient on a first-pass basis to assess areas of potential. Such areas of potential may be further assessed by more detailed work. |
| *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.*<br>• *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.* | Orientational bias is not applicable to the drilling at this stage but samples and drill lines were orientated approximately perpendicular to the assumed strike of mineralisation. The vertical holes were oriented approximately perpendicular to the very gently (-4degree) NE dipping stratabound mineralization. |
| *Sample security* | *The measures taken to ensure sample security.* | Samples are kept in a secure facility.<br>Sample Security levels are considered appropriate for RC Drilling. |

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| *Audits or reviews* | *The results of any audits or reviews of sampling techniques and data.* | None undertaken. Thor's sampling procedure conforms to industry standard practice and each assay program is reviewed internally for any discrepancies. |

**Section 2: Reporting of Exploration Results**

| Criteria | JORC Code explanation | Commentary |
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| *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.*<br>• *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.* | Mineral rights are held by the U.S. Government, who transfers those rights to holders of valid mining claims located on open ground through the General Mining Law of 1872, as amended by other Federal, State and County regulations. Claim holders, with a few exceptions that don't apply to this project, must make annual payments to the government to maintain their rights. Holder of valid claims can transfer their rights to others. Surface ownership is also by the U.S. and managed by the Bureau of Land Management.<br>Thor's property position consists of 199 unpatented mining claims (approx. 1,663Ha), leased from underlying owners.<br>If Thor meets its' contractual obligations and keeps the claims in good standing with the US, then the security of tenure should be good.<br>Depending on the location of the drill holes, the license to operate in the area is a function of permitting at differing levels of government (Local, State and Federal). The holes were in two contiguous Counties (San Miguel and Montrose). In addition to the normally required State and Federal permitting, San Miguel County imposes its' own set of regulations. Montrose County, |

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| | | on the other hand, is content to defer to the State and Federal governments. To date, Thor has met those permitting requirements. |
| *Exploration done by other parties* | *Acknowledgment and appraisal of exploration by other parties.* | There are no systems of consistent data archiving for mineral exploration or exploitation done under the Mining Law on Federal or on other lands within the State of Colorado. Furthermore, with some exceptions, there was not, nor is not, a requirement that explorers provide copies of their data to governmental agencies. That data was retained by private entities. It now exists in a piecemeal manner, with the data having been discarded, abandoned or available by vendors that managed to acquire and store some of it over the years.<br><br>Thor's properties have bountiful surface evidence of historic drill exploration, and in some cases, mining exploitation, which appears to be mostly from the 1950's through the early 1970's. There are several mines located in the western portion of the property. Unpublished reports list these mines as producing, in aggregate, over 700,000 lbs (318,181 kg) of uranium. To the author's knowledge, very little of the historic drilling or mining data is available to Thor, and certainly not enough to help guide an exploration program. Anecdotal evidence suggests that some of the work on the property was done by Union Carbide (now defunct), the largest company that worked in |

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| | | the Uravan Mineral Belt. |
| *Geology* | *Deposit type, geological setting and style of mineralisation.* | According to the USGS Bulletin 1693 (Cox, D.P., and Singer, D. A., eds., 1986), the Deposit Model for the project is Sandstone Uranium – Tabular subtype. |
| *Drill hole Information* | *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>*easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.* | Tables, plans and sections summarising significant drill results are included in the report |
| *Data aggregation methods* | *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>• *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.*<br>*assumptions used for any reporting of metal equivalent*<br>*The values should be clearly stated.* | Gamma data was aggregated to determine equivalent uranium oxide grades (% eU3O8), thicknesses and base of mineralization. Uranium grades and thicknesses were based on the "Uravan Method", originally devised by the AEC, which is a manual graphic method based on the shape of the gamma curve on an e-log. It consists of, for a single peak, determining the cps for the peak, and using one-half that value to determine the upper mineralization boundary. Successive cps picks on 0.5 ft (15.2cm) intervals are taken until the last interval drops below the one-half peak value. This is the lower mineralization boundary. These boundary values, plus the intervening 0.5 ft (15.2cm) interval values, are used, in |

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| | | conjunction with parameters such as hole diameter, whether or not the hole is dry or water-filled, if the hole is probed in an open or cased or through drill steel, gamma detector dead time and tool specific K factors, to arrive at a grade in %eU3O8, thickness and the base of mineralization, of each peak. Slight modifications to the method are made if more than one peak occurs close together. |
| *Relationship between mineralisation widths and intercept lengths* | *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').* | All results are assumed to be true width but is not definitively known at this stage. |
| *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 sections are included in the report. |
| *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 results have been reported |
| *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.* | No meaningful or material information has been omitted from this release. |
| *Further work* | *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step- out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this* | The drill results suggest that several areas of potentially economic mineralization could be investigated in greater detail. A couple of these areas have had historic mining in the vicinity. Maps of where they mined are |

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| *information is not commercially sensitive.* | scarce, so any delineation work needs to be cognisant of that mining |

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