

## ASX Announcement

12<sup>th</sup> September 2024

### DRILLING SUCCESS EXPANDS MINERALISED TRENDS AT LO HERMA

#### HIGHLIGHTS

- GTI has now **completed 66 resource estimate development drill holes** of 76 planned at the Lo Herma ISR uranium project during the 2024 drill program
- Drilling to date **confirms that uranium mineralisation continues north** from the current mineral resource area with strong mineralised intercepts over good thicknesses encountered **stretching at least 2km north** along projected trends
- Best mineralised intercepts reported include **6.0ft at 0.123% (1,230ppm) eU<sub>3</sub>O<sub>8</sub>** in drill hole LH-24-028, and **11.0 ft at 0.054% (540ppm) eU<sub>3</sub>O<sub>8</sub>** in drill hole LH-24-063

GTI Energy Ltd (**GTI** or **Company**) is pleased to advise that a total of 66 mud rotary drill holes have now been completed at its 100% owned Lo Herma ISR Uranium Project (**Lo Herma**), located in Wyoming's prolific Powder River Basin (**Figures 1 & 2**). GTI has now completed 13,405m (43,980 ft) of drilling at Lo Herma this summer representing ~87% of the planned 76-hole program.

This news release follows on from the Company's 31 July 2024 news release which reported results from the first ten (10) drill holes of the 2024 drill program. The results from the next fifty-six (56) drill holes (**Table 2**) include several highlights:

- Drill hole LH-24-028 returned the highest-grade intercept at **6.0ft of 0.123% eU<sub>3</sub>O<sub>8</sub>**, and a total hole grade thickness (**GT**) of **0.903\***.
- 45 of 56 drill holes have intercepted on trend mineralisation.
- Mineralisation continues across multiple sandstone units as GTI expands the mineralised trends to the north, as demonstrated by drill hole LH-24-03 which encountered **11ft of 0.054% eU<sub>3</sub>O<sub>8</sub> (0.594 GT)** and **6.5ft of 0.043% eU<sub>3</sub>O<sub>8</sub> (0.280 GT)** from different sand units.

\* Typical economically viable ISR grade and GT cut-offs are: 0.02% (200ppm) U<sub>3</sub>O<sub>8</sub> and 0.2GT i.e., 10 ft (3 m) @ .02% (200ppm) U<sub>3</sub>O<sub>8</sub>.

**GTI Executive Director & CEO Bruce Lane commented** "Drilling to date at Lo Herma has been very successful in demonstrating extensions of mineralisation, with strong GT numbers to the north of the project area and at depth in the sands of the lower Wasatch formation. Results so far give us great confidence that we can grow the global uranium resource estimate and upgrade a material portion to the indicated category. Drilling is currently running to schedule with operations now moved to the east of the project area to test for deeper mineralisation in the Fort Union formation. The sand units of the lower Wasatch formations are showing reliable continuity and mineralisation far along trend to the north so we are now excited to see what the deeper Fort Union formation sands may hold as we move to our final exploration area for this phase of drilling."

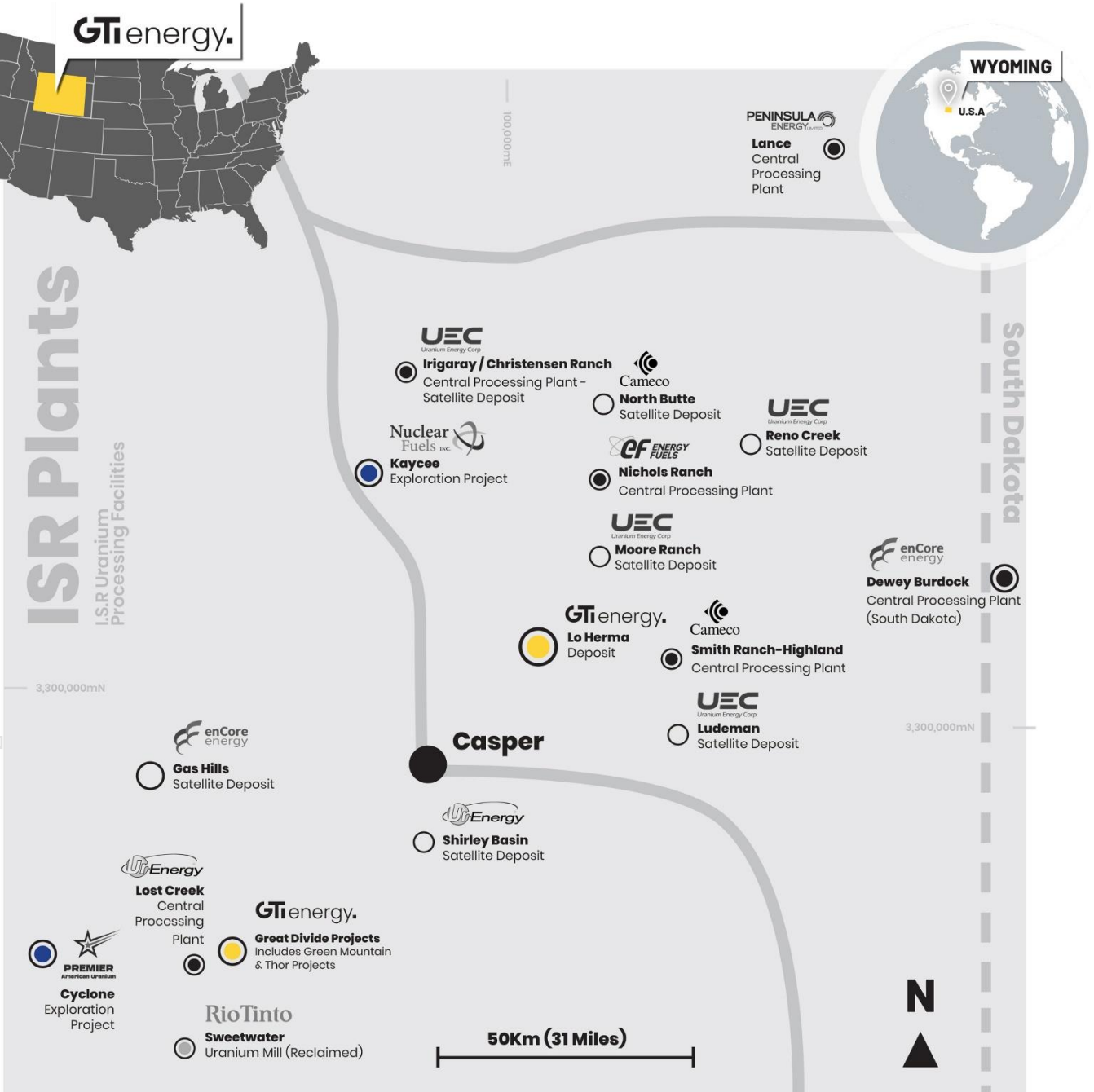
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## LO HERMA URANIUM PROJECT – LOCATION & BACKGROUND

The Lo Herma ISR Uranium Project (**Lo Herma**) is located in Converse County, Powder River Basin (**PRB**), Wyoming (**WY**). The Project lies approximately 15 miles north of the town of Glenrock and close to seven (7) permitted ISR uranium production facilities. These facilities include UEC's producing Willow Creek (Irigaray & Christensen Ranch) & idled Reno Creek ISR plants, Cameco's idled Smith Ranch-Highland ISR facilities and Energy Fuels idled Nichols Ranch ISR plant (**Figure 1**).

The Powder River Basin has extensive ISR uranium production history with numerous defined ISR uranium resources, central processing plants (**CPP**) & satellite deposits (**Figure 1**). The Powder River Basin has been the backbone of Wyoming U<sub>3</sub>O<sub>8</sub> production since the 1970s.

**FIGURE 1. WYOMING IS URANIUM PROCESSING PLANTS & GTI PROJECT LOCATIONS<sup>1</sup>**



- GTI Energy Deposit
- Central Processing Plant I.S.R. Facility
- Satellite Deposit
- Conventional Mill Processing Facility
- Exploration Project

<sup>1</sup> Data sources are detailed on Page 11. ISR uranium deposits, plant locations & exploration projects are approximated.

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As reported to ASX on 14 March 2023, a comprehensive historical data package, with an estimated replacement value of ~\$15m, was purchased for Lo Herma in March of 2023. The data package includes original drill data for roughly 1,771 drill holes, from the 1970's and 1980's, pertaining to the Lo Herma region. A total of 1,391 original drill hole logs were digitised for gamma count per second (CPS) data and converted to eU<sub>3</sub>O<sub>8</sub>% grades.

833 of these historical drill holes are located on GTI's land position and were used to prepare the maiden MRE. 21 additional drill holes are located in an expanded area of additional claims that were subsequently staked across Section 4 of Township 36N, Range 75W. Along with the 26 drill holes completed in the initial 2023 drill program, GTI holds data from 880 drill holes within the current Lo Herma mineral holdings prior to the current 76 hole drill campaign.

An initial Exploration Target for the Lo Herma project was previously announced to the ASX on 4 April 2023. An additional data package, containing previously unavailable drill maps with geologically interpreted redox trends, was subsequently secured by GTI, as announced to the ASX on 27 June 2023 (refer to **Table 1**).

Whilst additional redox trends were interpolated based on the 2023 drilling and acquisition of the newly located mineral claims, the Exploration Target has not yet been updated. GTI plans to update the mineral resource and exploration target estimates following completion of the current 2024 drilling campaign.

### TABLE 1: SUMMARY OF LO HERMA INFERRED MRE AND EXPLORATION TARGETS

(Advised to ASX on 5/7/23 & 20/12/23)

INFERRED RESOURCE	TONNES (MILLIONS)		AVERAGE GRADE (PPM U <sub>3</sub> O <sub>8</sub> )		CONTAINED U <sub>3</sub> O <sub>8</sub> (MILLION POUNDS)	
	MIN TONNES (MN TONNES)	MAX TONNES (MN TONNES)	MIN GRADE (ppm U <sub>3</sub> O <sub>8</sub> )	MAX GRADE (ppm U <sub>3</sub> O <sub>8</sub> )	MIN MN LBS U <sub>3</sub> O <sub>8</sub>	MAX MN LBS U <sub>3</sub> O <sub>8</sub>
LO HERMA INFERRED MRE	4.11		630		5.71	
EXPLORATION TARGET	5.32	6.65	500	700	5.87	10.26

*The potential quantity and grade of the Exploration Targets is conceptual in nature and there has been insufficient exploration to estimate a JORC-compliant Mineral Resource Estimate. It is uncertain if further exploration will result in the estimation of a Mineral Resource in the defined exploration target areas. The Exploration Targets have been estimated based on historical drill maps, drill hole data and drilling by GTI conducted during 2023 to verify the historical drilling information. There are now 880 drill holes in the Lo Herma project area and the Company conducted ariel geophysics at the project as reported during 2023. The Lo Herma drill program conducted during 2023 and the drill program now underway are designed, in part, to test the Lo Herma Exploration Target.*

### DRILLING RESULTS

Drilling commenced at Lo Herma on Wednesday, 24 July 2024. Over the first three days of drilling, ten (10) drill holes were completed for a total of 1,908m (6,260 ft) of drilling. Results of those drill holes were previously announced to the ASX on 30 July 2024.

GTI has now completed an additional 56 holes for a total of 66 drill holes in the 2024 drill program at Lo Herma. The results of the additional 56 drill holes are reported here.

The current drill program is designed to further expand the mineral resource, upgrade the classification of a portion of the current inferred mineral resource, and collect additional geochemical and hydrogeologic data necessary to advance a potential scoping study for Lo Herma. To date, all drilling has focused on resource expansion in the west and northern sections of the project area.

Of the fifty-six (56) drill holes reported here, thirteen (13) drill holes exceeded the minimum grade cutoff of 200 ppm eU<sub>3</sub>O<sub>8</sub> and the total hole grade-thickness (GT) cutoff of 0.2 GT, and an additional fourteen (14) drill holes exceeded the minimum grade cutoff, but not the minimum GT cutoff. Nineteen (19) drill holes demonstrated trace mineralisation but did not meet the grade cutoff. Nine (9) drill holes were barren of any indication of mineralisation.

All drill holes completed were beneficial in determining the lateral geometry of the sinuous roll front type uranium deposits present at Lo Herma across multiple sandstone units.

The best mineralised intercept was encountered in drill hole LH-24-028 which encountered 6.0 ft of 0.123% (1,230 ppm) eU<sub>3</sub>O<sub>8</sub> from a depth of 400.5 ft, providing a 0.738 GT for the intercept.

Uranium assay values were obtained by probing the drill holes with a wireline geophysical sonde which includes a calibrated gamma detector, spontaneous potential, resistivity, and downhole drift detectors. The gamma detector senses natural gamma radiation emanations from the rock formations intercepted by the drill hole.

The gamma levels are recorded on the geophysical logs. Using calibration, correction, and conversion factors, the measured gamma radiation is converted to an equivalent uranium ore grade (eU<sub>3</sub>O<sub>8</sub>) and compiled into uranium intercepts based on a minimum cutoff grade of 200 ppm eU<sub>3</sub>O<sub>8</sub> in half-foot intervals.

This is the industry standard method for uranium exploration in the US and is discussed in further detail in the JORC tables appended. The reader is cautioned that the reported uranium grades may not reflect actual uranium concentrations due to the potential for disequilibrium between uranium and its gamma emitting daughter products.

In addition to the eU<sub>3</sub>O<sub>8</sub> assay data, GTI has successfully collected rock core from the mineralised interval in multiple drill holes. This material will be reviewed, sampled for assay, and utilized for radiometric equilibrium studies. GTI will report on this data as it becomes available.

## **FUTURE DRILL PROGRAM ACTIVITIES**

There are at present (ten) 10 drill holes remaining in the 2024 drill program at the Lo Herma project. Many of the remaining exploration drill holes will be utilized to test deeper mineralisation in the Fort Union formation in the eastern areas of the project.

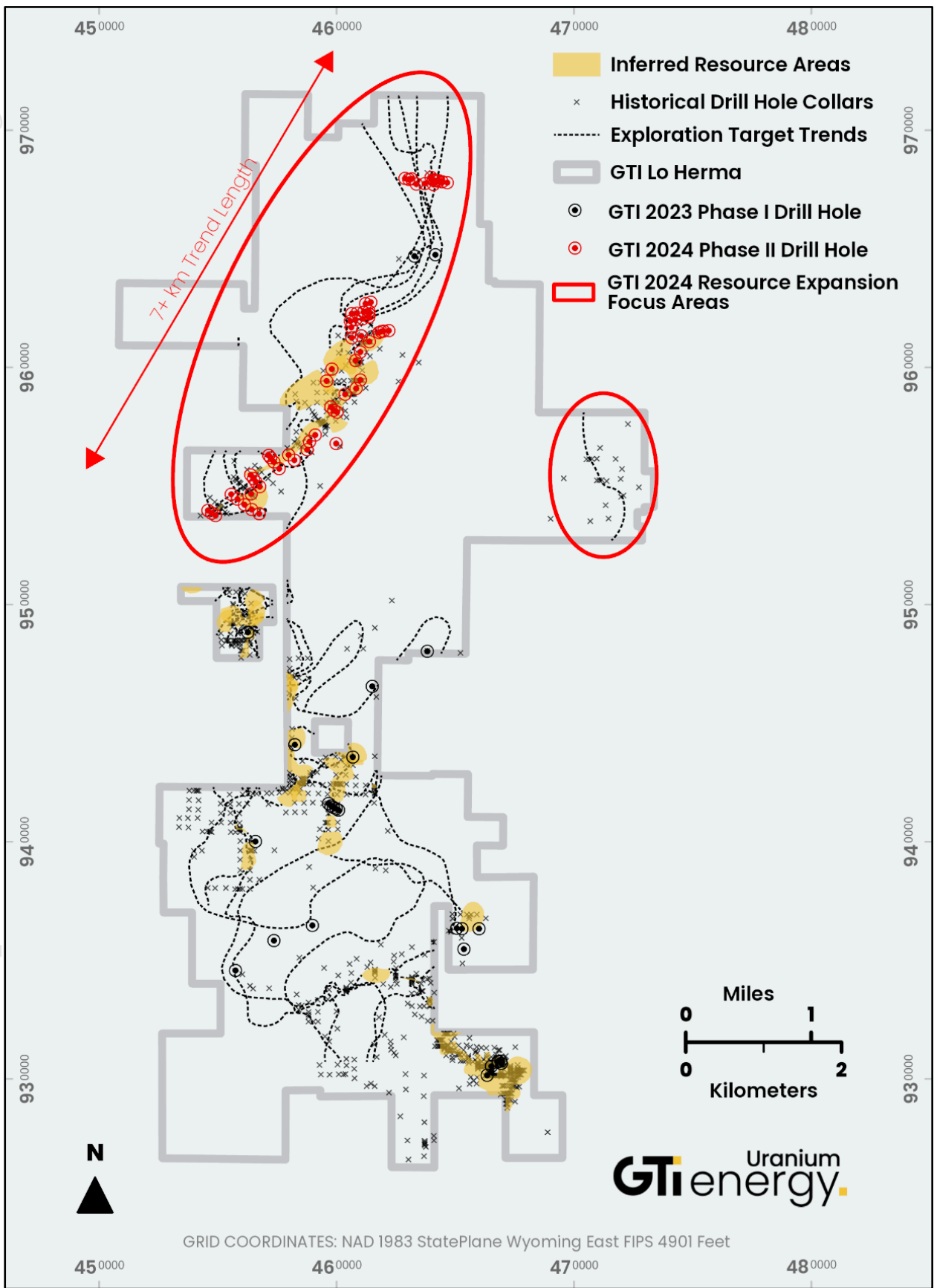
GTI will also be utilising several of the remaining drill holes to complete groundwater monitoring wells across the project.

The drill hole collars are displayed on the project map in **Figure 2** overleaf, with further detail provided in **Figure 3** which also highlights some of the better drill hole results and total hole GTs.

Collar location coordinates are tabulated in **Table 2**.

**Table 3** overleaf shows drill hole specific data including mineralised intercepts.

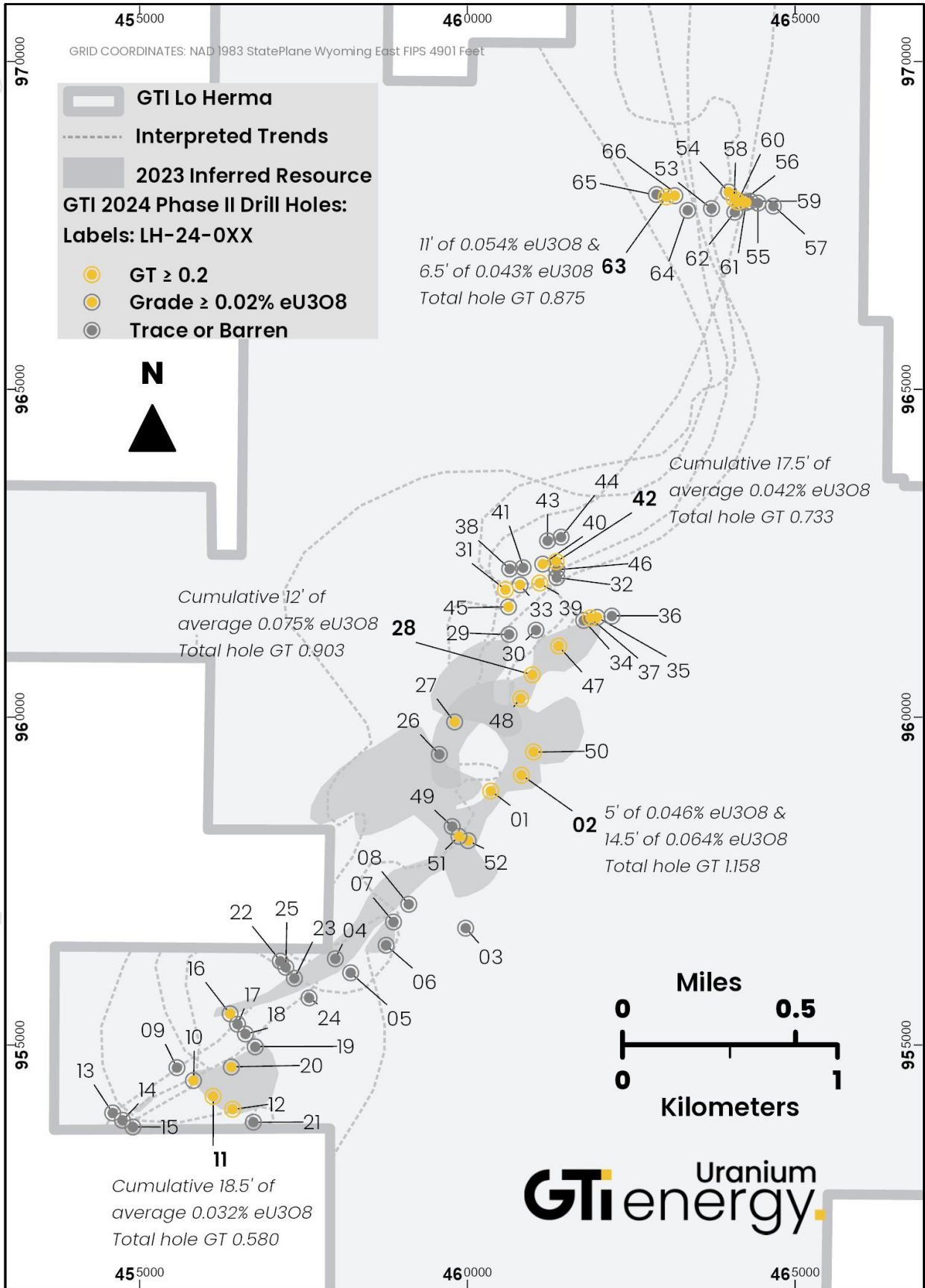
**FIGURE 2. LO HERMA ISR URANIUM PROJECT DETAIL, POWDER RIVER BASIN, WYOMING**



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**FIGURE 3. 2024 DRILL HOLE LOCATIONS, AND NOTABLE TOTAL DRILL HOLE GRADE THICKNESSES**



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**TABLE 2. LO HERMA DRILL HOLE COLLAR LOCATIONS**

Hole ID	Date Drilled	Collar Easting*	Collar Northing*	Collar Elevation (feet)*
LH-24-011	7/29/2024	456123	954217	5797
LH-24-012	7/29/2024	456418	954016	5833
LH-24-013	7/30/2024	454589	953963	5754
LH-24-014	7/30/2024	454740	953849	5764
LH-24-015	7/30/2024	454894	953752	5779
LH-24-016	7/31/2024	456377	955477	5747
LH-24-017	7/31/2024	456497	955315	5746
LH-24-018	7/31/2024	456610	955163	5758
LH-24-019	8/1/2024	456767	954976	5777
LH-24-020	8/1/2024	456404	954666	5765
LH-24-021	8/1/2024	456740	953821	5856
LH-24-022	8/2/2024	457147	956282	5715
LH-24-023	8/2/2024	457362	956018	5734
LH-24-024	8/2/2024	457586	955721	5758
LH-24-025	8/5/2024	457231	956182	5720
LH-24-026	8/5/2024	459576	959430	5623
LH-24-027	8/5/2024	459802	959926	5639
LH-24-028	8/6/2024	460995	960646	5587
LH-24-029	8/6/2024	460641	961259	5606
LH-24-030	8/6/2024	461045	961329	5610
LH-24-031	8/7/2024	460581	961946	5671
LH-24-032	8/7/2024	461364	962130	5656
LH-24-033	8/7/2024	460803	962017	5687
LH-24-034	8/8/2024	461775	961478	5609
LH-24-035	8/8/2024	461984	961522	5607
LH-24-036	8/9/2024	462204	961546	5606
LH-24-037	8/9/2024	461878	961510	5609
LH-24-038	8/9/2024	460644	962265	5707
LH-24-039	8/12/2024	461099	962042	5664
LH-24-040	8/12/2024	461146	962333	5674
LH-24-041	8/13/2024	460855	962282	5710
LH-24-042	8/13/2024	461357	962370	5669
LH-24-043	8/13/2024	461224	962686	5686
LH-24-044	8/14/2024	461434	962750	5711
LH-24-045	8/14/2024	460623	961685	5641
LH-24-046	8/14/2024	461364	962249	5660
LH-24-047	8/15/2024	461392	961083	5595
LH-24-048	8/16/2024	460811	960286	5635
LH-24-049	8/16/2024	459770	958334	5693
LH-24-050	8/19/2024	461007	959466	5658
LH-24-051	8/20/2024	459875	958184	5707
LH-24-052	8/20/2024	460014	958113	5718
LH-24-053	8/23/2024	463723	967759	5621
LH-24-054	8/23/2024	463988	968013	5634
LH-24-055	8/26/2024	464433	967839	5629
LH-24-056	8/26/2024	464185	967861	5631

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**TABLE 2 (CONT). LO HERMA DRILL HOLE COLLAR LOCATIONS**

Hole ID	Date Drilled	Collar Easting*	Collar Northing*	Collar Elevation (feet)*
LH-24-057	8/27/2024	464671	967799	5617
LH-24-058	8/27/2024	464072	967904	5626
LH-24-059	8/28/2024	464311	967869	5632
LH-24-060	8/28/2024	464126	967863	5629
LH-24-061	8/29/2024	464254	967851	5630
LH-24-062	8/29/2024	464081	967704	5609
LH-24-063	8/30/2024	463034	967935	5645
LH-24-064	9/3/2024	463360	967727	5637
LH-24-065	9/4/2024	462891	967969	5657
LH-24-066	9/4/2024	463170	967958	5656

Coordinate System: NAD 1983 StatePlane Wyoming East FIPS 4901 US Feet

\*Coordinates are preliminary and may reflect approximately 10m positional error

**TABLE 3. LO HERMA DRILL HOLE INTERCEPTS**

Hole ID	Total Depth Drilled (ft)	Top Intercept Depth (ft bgs)	Bottom Intercept Depth (ft bgs)	Intercept Thickness (ft)	Grade %eU <sub>3</sub> O <sub>8</sub>	GT*	Total Hole GT*	Comment
LH-24-011	640	512.0	515.5	3.5	0.028	0.098	<b>0.580</b>	
		517.5	524.5	7.0	0.036	0.252		
		525.5	527.0	1.5	0.022	0.033		
		551.0	554.5	3.5	0.034	0.119		
		558.5	560.5	2.0	0.025	0.050		
		568.5	569.5	1.0	0.028	0.028		
LH-24-012	680	543.5	548.5	5	0.036	0.180	<b>0.273</b>	
		583.0	586.0	3.0	0.031	0.093		
LH-24-013	660							Trace 355-375
LH-24-014	640							Barren
LH-24-015	660	348.0	350.5	2.5	0.021	0.053		
LH-24-016	620	326.5	327.5	1.0	0.028	0.028	<b>0.039</b>	
		423.0	423.5	0.5	0.021	0.011		
LH-24-017	580							Trace 415-425'
LH-24-018	620							Trace 550-555'
LH-24-019	600							Barren
LH-24-020	600	583.5	587.0	3.5	0.038	0.133	<b>0.133</b>	Trace 530-540', 555-560'
LH-24-021	660							Barren
LH-24-022	580	289.0	291.0	2.0	0.026	0.052	<b>0.052</b>	Trace 300-305'
LH-24-023	560							Barren
LH-24-024	500							Barren
LH-24-025	500							Trace 250-260', 400-410'
LH-24-026	680							Trace 340-355'
LH-24-027	540	391.5	393.0	1.5	0.023	0.035	<b>0.035</b>	Trace 445-450'
LH-24-028	660	380.5	386.0	5.5	0.028	0.154	<b>0.903</b>	Trace 330-380'
		394.5	400.5	6.0	0.123	0.738		
		448.0	448.5	0.5	0.022	0.011		
LH-24-029	600							Trace 505-515'
LH-24-030	600							Barren



**TABLE 3 (CONT). LO HERMA DRILL HOLE INTERCEPTS**

Hole ID	Total Depth Drilled (ft)	Top Intercept Depth (ft bgs)	Bottom Intercept Depth (ft bgs)	Intercept Thickness (ft)	Grade %eU <sub>3</sub> O <sub>8</sub>	GT*	Total Hole GT*	Comment
LH-24-031	680	584.0	585.0	1.0	0.021	0.021	<b>0.299</b>	
		586.0	588.0	2.0	0.028	0.056		
		590.0	592.5	2.5	0.023	0.058		
		626.0	627.5	1.5	0.029	0.044		
		635.5	637.0	1.5	0.027	0.041		
		637.5	640.0	2.5	0.032	0.080		
LH-24-032	680							Trace 575-585', 595-605'
LH-24-033	700	666.0	667.5	1.5	0.024	0.036	<b>0.164</b>	
		689.5	692.0	2.5	0.051	0.128		
LH-24-034	640							Trace 465-470', 595-605'
LH-24-035	680	509.0	515.0	6.0	0.023	0.138	<b>0.182</b>	
		515.5	517.5	2.0	0.022	0.044		
LH-24-036								Barren
LH-24-037	640	498	513	15	0.035	0.525	<b>0.525</b>	Trace 460-470'
LH-24-038	740							Trace 625-635'
LH-24-039	700	465	467.5	2.5	0.03	0.075	<b>0.345</b>	Trace 490-500'
		571	576	5	0.054	0.27		
LH-24-040	740	569.5	573.5	4	0.029	0.116	<b>0.116</b>	Trace 450-460', 520-530, 590-600'
LH-24-041	680							Trace 650-670'
LH-24-042	640	458.5	462.5	4.0	0.074	0.296	<b>0.733</b>	Trace 570-575'
		470.5	473.5	3.0	0.049	0.147		
		477.5	480.0	2.5	0.026	0.065		
		503.5	504.0	0.5	0.021	0.011		
		510.0	512.5	2.5	0.031	0.078		
		518.0	521.5	3.5	0.025	0.088		
		526.0	527.5	1.5	0.033	0.050		
LH-24-043	660							Trace 575-590', 630-635'
LH-24-044	720							Trace 610-615'
LH-24-045	660	546.5	547.5	1	0.022	0.022	0.022	Trace 465-470', 575-585'
LH-24-046	640							Trace 475-485', 505-510', 545-550'
LH-24-047	540	463.5	465.0	1.5	0.025	0.038	<b>0.664</b>	
		470.0	471.5	1.5	0.024	0.036		
		473.0	473.5	0.5	0.022	0.011		
		474.5	486.0	11.5	0.025	0.288		
		487.0	488.5	1.5	0.021	0.032		
		495.5	497.5	2.0	0.027	0.054		
		501.0	504.5	3.5	0.023	0.081		
505.5	510.0	4.5	0.028	0.126				
LH-24-048	500	405.5	407.5	2.0	0.024	0.048	<b>0.458</b>	
		412.5	417.0	4.5	0.029	0.131		
		474.5	481.0	6.5	0.043	0.280		
LH-24-049	560							Trace 460-470'
LH-24-050	520	422.5	425.5	3.0	0.031	0.093	<b>0.369</b>	
		427.0	431.5	4.5	0.036	0.162		
		437.0	440.0	3.0	0.038	0.114		
LH-24-051	560	476.0	477.5	1.5	0.026	0.039	<b>0.039</b>	Trace 450-460'
LH-24-052	560	443.5	445.5	2.0	0.047	0.094	<b>0.094</b>	Trace 420-425'

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**TABLE 3 (CONT). LO HERMA DRILL HOLE INTERCEPTS**

Hole ID	Total Depth Drilled (ft)	Top Intercept Depth (ft bgs)	Bottom Intercept Depth (ft bgs)	Intercept Thickness (ft)	Grade %eU <sub>3</sub> O <sub>8</sub>	GT*	Total Hole GT*	Comment
LH-24-053	840							Trace 780-790'
LH-24-054	840	796.5	798.0	1.5	0.025	0.038	<b>0.059</b>	
		799.0	800.0	1.0	0.021	0.021		
LH-24-055	860							Trace 745-760'
LH-24-056	840	735.5	736.5	1.0	0.026	0.026	<b>0.183</b>	Trace 815-820
		737.0	740.5	3.5	0.037	0.130		
		792.5	793.5	1.0	0.027	0.027		
LH-24-057	860							Barren
LH-24-058	840	810	813.5	3.5	0.056	0.196	<b>0.231</b>	
		818	819.5	1.5	0.023	0.035		
LH-24-059	840							Trace 740-750'
LH-24-060	840	741.5	744.5	3.0	0.049	0.147	<b>0.259</b>	
		825.0	828.5	3.5	0.032	0.112		
LH-24-061	840	791.5	792.5	1	0.023	0.023	<b>0.023</b>	Trace 740-745'
LH-24-062	840							Trace 780-790'
LH-24-063	980	731.5	742.5	11	0.054	0.594	<b>0.874</b>	
		755.5	762	6.5	0.043	0.280		
LH-24-064	980							Barren
LH-24-065	840							Trace 760-765', 800-805'
LH-24-066	860	780	780.5	0.5	0.02	0.01	<b>0.183</b>	
		808	808.5	0.5	0.022	0.011		
		810	814.5	4.5	0.036	0.162		
<i>Intercepts are reported at a 0.02 eU<sub>3</sub>O<sub>8</sub>% (200 ppm) grade cut-off</i>								
<i>*GT is calculated as: Grade x Thickness (ft)</i>								

**WEB BROADCAST**

GTI has provided a "Web Broadcast" video service, delivered directly to GTI's investors and stakeholders, to provide information about GTI's activities and in particular to accompany ASX market releases - it can be viewed at: [www.gtienenergy.au/web-broadcast/](http://www.gtienenergy.au/web-broadcast/)

**-ENDS-**

This ASX release was authorised by the Directors of GTI Energy Ltd. Bruce Lane, (Director), **GTI Energy Ltd**

**Competent Persons Statement**

*Information in this announcement relating to Exploration Results, Exploration Targets, and Mineral Resources is based on information compiled and fairly represents the exploration status of the project. Doug Beahm has reviewed the information and has approved the scientific and technical matters of this disclosure. Mr. Beahm is a Principal Engineer with BRS Engineering Inc. with over 45 years of experience in mineral exploration and project evaluation. Mr. Beahm is a Registered Member of the Society of Mining, Metallurgy and Exploration, and is a Professional Engineer (Wyoming, Utah, and Oregon) and a Professional Geologist (Wyoming). Mr Beahm has worked in uranium exploration, mining, and mine land reclamation in the Western US since 1975 and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and has reviewed the activity which has been undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of exploration results, Mineral Resources & Ore Reserves. Mr Beahm provides his consent to the information provided. The Company confirms that it is not aware of any new information or data that materially affects the information included in this announcement and, in the case of mineral resource estimates, that all material assumptions and technical parameters underpinning the estimates in this announcement continue to apply and have not materially changed.*

*The information in this release that relates to Mineral Resource Estimates at the GDB and Lo Herma deposits was prepared by BRS Engineering Inc and released on the ASX platform on 5 April 2023 and 5 July 2023 respectively. The Company confirms that it is not aware of any new information or data that materially affects the Mineral Resources in this publication. The Company confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the BRS Engineering Inc findings are presented have not been materially modified.*

## Caution Regarding Forward Looking Statements

*This announcement may contain forward looking statements which involve a number of risks and uncertainties. Forward-looking statements are expressed in good faith and are believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. The forward- looking statements are made as at the date of this announcement and the Company disclaims any intent or obligation to update publicly such forward looking statements, whether as the result of new information, future events or results or otherwise.*

## Data Source References for Figure 1

- <https://www.eia.gov/uranium/production/quarterly/qupdtable4.php>
- [https://www.sec.gov/Archives/edgar/data/1334933/000143774922022435/ex\\_423213.htm](https://www.sec.gov/Archives/edgar/data/1334933/000143774922022435/ex_423213.htm)
- <https://www.cameco.com/businesses/uranium-operations/suspended/smith-ranch-highland/reserves-resources>
- [https://d1io3yog0oux5.cloudfront.net/\\_0165d3b080b7dd266644acb9bb79777d/urenergy/db/640/5509/pdf/202306+June+Corp+Presentation.pdf](https://d1io3yog0oux5.cloudfront.net/_0165d3b080b7dd266644acb9bb79777d/urenergy/db/640/5509/pdf/202306+June+Corp+Presentation.pdf)
- <http://static1.1.sqspcdn.com/static/f/503515/5753362/1266121044317/Lost+Soldier+43-101.pdf>
- <https://wcsecure.weblink.com.au/pdf/PEN/02664858.pdf>
- <https://www.sec.gov/Archives/edgar/data/1385849/000127956917000321/ex991.pdf>
- <https://premierur.com/wp-content/uploads/2024/09/08302024-PUR-Corporate-Presentation.pdf>
- <https://nuclearfuels.energy/wp-content/uploads/2024/08/NF-Corporate-deck-Aug-27-final-PDF.pdf>

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# 1. JORC CODE, 2012 EDITION – TABLE I REPORT TEMPLATE

## 1.1 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity &amp; the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Mud rotary drilling was used to obtain an open borehole for measurement by a down hole gamma sonde.</li> <li>A calibrated downhole sonde was utilized to measure natural gamma emission from the rock formation. The recorded natural gamma data was used to create a geophysical log and calculate eU<sub>3</sub>O<sub>8</sub> grades.</li> <li>Geophysical logging was completed by a third-party logging contractor (Hawkins CBM Logging). Prior to deployment in the field, the sonde was calibrated at the U.S. Department of Energy uranium logging test pits located in Casper, Wyoming, for the known ranges and uranium grades present at the Lo Herma project.</li> <li>The Lo Herma project has been sampled through drilling campaigns in the late 1970's and 1980's by Pioneer Nuclear Inc. GTI owns a comprehensive data package of original Pioneer Nuclear drilling data.</li> <li>Downhole instruments were utilized to measure natural gamma emission from the rock formation and produce downhole logs.</li> <li>Natural gamma data from a calibrated sonde was utilized to generate an analog record (log) of the drill hole.</li> <li>Gamma scales, K-factors, water factors, and deadtimes for the log gamma curves are available for the individual logs. The geophysical logging units were calibrated at the standard U.S. Department of Energy uranium logging test pits.</li> <li>Scanning, digitization of the analog gamma curves, and reinterpretation of the grades was performed to verify the grades, thicknesses, and depths of uranium mineralization, and to create a drill hole database. The original downhole gamma logs were scanned and vectorized to produce Natural Gamma CPS (counts per second) values. The CPS values were converted to eU<sub>3</sub>O<sub>8</sub> grades using industry standard methods to determine mineralized intercepts.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple</li> </ul>	<ul style="list-style-type: none"> <li>Drilling consisted of vertical mud rotary drill holes, approximately 5.5 inches in diameter.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	
Drill sample recovery	<ul style="list-style-type: none"> <li>• Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>• Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples were taken at 5-foot composite increments for lithological logging and have been preserved.</li> <li>• Mud rotary recoveries are considered immaterial to the resource estimation process as no physical samples are used for the resource estimation.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies &amp; metallurgical studies.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>• Lithologic logs completed by geologists are available for all drill holes.</li> <li>• Geophysical logs provide quantitative analyses of natural gamma counts per second (CPS) which are recorded at a sufficient level of detail to be used for eU<sub>3</sub>O<sub>8</sub> grade calculations.</li> <li>• The geophysical logs include natural gamma counts per second curves which are recorded at a sufficient level of detail to be used for eU<sub>3</sub>O<sub>8</sub> grade calculations over thickness intervals of 0.5 ft.</li> <li>• The factors applied to convert the CPS data to grades &amp; thicknesses can be qualitative in nature, for example the selected discretization intervals of the data and other modifying factors, as discussed in the Maiden MRE for Lo Herma announced to the ASX on 5 July 2023.</li> <li>• The entire length of the drill hole &amp; 100% of the relevant intersections are logged within the physical capabilities of the logging unit.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn &amp; whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• 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.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill core was collected from multiple drill holes. Assay of this material and radiometric equilibrium studies are pending.</li> <li>• Rotary samples were collected for lithological identification.</li> <li>• Natural Gamma was interpreted on half-foot intervals which is standard for the U.S. uranium industry. Calibration facilities for down hole gamma logging units have been standardized in the US since the early 1960's and have been maintained by the US Department of Energy or its predecessors continuously since that time.</li> </ul>
Quality of assay data and	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul style="list-style-type: none"> <li>• The data was limited to eU<sub>3</sub>O<sub>8</sub> calculations based on data supplied by a calibrated downhole gamma sonde.</li> <li>• The sonde used was a Natural Gamma, SP, RES logging tool manufactured by Century Geophysical, LLC (Series E Logging Tool –</li> </ul>

Criteria	JORC Code explanation	Commentary
laboratory tests	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<p>9057C). K-factors, deadtimes, mud factors, and calibration data are supplied with each geophysical log.</p> <ul style="list-style-type: none"> <li>Natural gamma counts per second (cps) data from the calibrated sonde was utilized to calculate equivalent percent uranium (eU<sub>3</sub>O<sub>8</sub> %) grades. The results are then reported in one-half foot increments.</li> <li>Geophysical logging was completed by Hawkins CBM of Wyoming utilizing a recently calibrated gamma ray sonde for measurement. Prior to deployment in the field, the sonde was calibrated at the U.S. Dept of Energy uranium logging test pits located in Casper Wyoming.</li> <li>eU<sub>3</sub>O<sub>8</sub> grade is considered to be an equivalent assay value.</li> <li>Only a very limited amount of measurements of radiometric disequilibrium are available at Lo Herma which are only representative of one sand in one part of the project. This is to be expected for this phase of project development. It is the opinion of the CP that based on knowledge of the geological model &amp; nearby areas that a disequilibrium factor of 1 is appropriate for eU<sub>3</sub>O<sub>8</sub> calculations.</li> <li>No modern laboratory procedures have been completed to test for formation permeability/transmissivity, radiometric disequilibrium, or bulk density. At this phase of the project, a lack of laboratory data is to be expected. Therefore, the CP has elected to assume industry standard parameters based on the host geologic formation and standard across other projects in the same geologic setting.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>All referenced data was reviewed by the CP and the personnel working under the direction of the CP.</li> <li>No adjustments were made to the raw gamma data, or to the calculated eU<sub>3</sub>O<sub>8</sub> values outside of industry standard grade calculation methods involving the water factors, K-Factors, and deadtime gamma value adjustments.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes were surveyed with a Trimble R8s RTK GPS unit, with sub cm accuracy for northing and easting.</li> <li>Location data was collected in NAD83 Stateplane Wyoming East FIPS 4901 (US FEET) Coordinate System.</li> <li>Topographic control (elevation) data is from publicly available digital elevation model files supplied by the USGS. The resolution of the topographic control is 1/3 Arc Second (approximately 10 meters). This is an adequate level of detail for this stage of the exploration project. The terrain of the project area is</li> </ul>



Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>relatively flat lying with only gradual changes of elevation change</p> <ul style="list-style-type: none"> <li>• The data spacing and distribution of drill holes within the identified mineral resource areas are sufficient to establish the degree of geological and grade continuity appropriate to create GT contour models of inferred and indicated resources. Due to the lack of available equilibrium, leachability, and verification data, the potential indicated areas will remain as inferred areas at this time until those values can be determined with modern testing.</li> <li>• The spatial distribution of drill holes varies across the project site. Where exploration target trends are identified, the data spacing can be quite far apart. Uranium roll front deposits tend to be laterally extensive. Where limited drilling data indicates the presence of a roll front system, geologic continuity can be used to project the system over large distances. The projected continuity of grade and geometries of the mineralized roll front systems must employ conservative values that are characteristic of known roll fronts in the same geologic setting.</li> <li>• Downhole gamma logging data was interpreted on 6-inch (0.15m) intervals following standard uranium industry practice in the U.S.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No bias was imparted on the downhole data collected. Mineralization is generally flat-laying and drill holes were vertical.</li> <li>• Mineralized thickness from gamma logs is considered to represent true thickness because the strata are near horizontal and the drill holes are vertical. Deviation data with future verification twin drill holes will be compared to the historical logs.</li> <li>• Drillhole patterns are designed in a manner which allows for the best determination of ore body width and average and peak ore grade along strike of the ore body. No sampling bias is believed to have been introduced via the spatial distribution of exploration holes.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Geophysical logging data was provided electronically to GTI and is stored on BRS local data server which has internal backup and offsite storage protocols in place. Printed geophysical logs and grade calculation sheets are stored at BRS as well.</li> <li>• The historical paper logs are securely stored at BRS' Wyoming office and are scanned into digital copies. Scanned electronic files are stored on BRS' local data server which has internal backup and offsite storage protocols in place.</li> </ul>

Criteria	JORC Code explanation	Commentary
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been undertaken on the downhole geophysical survey data.</li> <li>The calibration data &amp; methods were reviewed and verified by the Competent Person.</li> </ul>

## 1.2 Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Lo Herma mining lode claims cover 11,074 acres with 581 total claims.</li> <li>The State of Wyoming Mineral Leases consists of 2 uranium lease agreements covering approx. 1.5 sections of land totaling 944 acres.</li> <li>The mining claims will remain valid so long as annual assessment and recordation payments are made.</li> <li>The mineral leases will remain in place so long as annual lease payments are made.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration for uranium occurred in the 1970's and 1980's by Pioneer Nuclear Inc. and Joint Venture partners. GTI owns a comprehensive data package of Pioneer Nuclear Drilling data which constitutes the exploration results used to determine inferred resources and exploration targets.</li> <li>The drilling data is of a quality that indicates adherence to standard US uranium exploration practices of the 1970's.</li> <li>The drilling data includes all of the necessary information to develop a database suitable for preparation of a current mineral resource estimate.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralization.</li> </ul>	<ul style="list-style-type: none"> <li>Uranium deposits associated with fluvial channels and reducing environments within fluvial sandstones (sandstone hosted roll-front uranium deposits).</li> <li>The data package primarily corresponds to mineralization within the Eocene Wasatch formation and the underlying Paleocene Fort Union Formation of the Powder River Basin, a regional synclinal basin. The exact contact between the formations is subject to ongoing debate as both formations represent similar depositional environments and</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>sedimentary sequences, lacking a distinctive marker bed in this part of the basin. Geologic mapping shows most of the project to be located within the Fort Union, with definitive Wasatch formation strata to the east beyond (stratigraphically above) the outcrops of the prominent Badger and School House coal beds. The project is located on the west flank of the syncline where the bedding dips gently to the north-east. The Powder River Basin hosts a sedimentary rock sequence that has a maximum thickness of about 15,000 feet along the synclinal axis.</p> <ul style="list-style-type: none"> <li>Uranium mineralization in the Wasatch and Fort Union Formations of the Powder River Basin occur as roll front type uranium deposits within sandstone horizons. The formation of roll front deposits is a geochemical process where oxidizing ground water leaches uranium from a source rock, transports the uranium in low concentrations through the host formations, and then deposits the uranium along an oxidation/reduction (Redox) interface. Continued geochemical conditions of transport and deposition can lead to a significant concentration of uranium at the redox interfaces. Mineralized roll-front zones along a redox interface vary considerably in size, shape, and amount of mineralization. Individual roll front trends may extend sinuously for several miles. Frequently, trends will consist of several vertically stacked roll fronts within a single sand unit. Trends within distinct sand units may converge at a single location to create a section of multiple mineralized sand horizons.</li> </ul>
<p><i>Drill hole Information</i></p>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All historical sample data referred to in this announcement has been previously reported (see GTR ASX Announcement 5th July 2023).</li> <li>The new drill hole coordinates and elevations are reported in this announcement. The referenced exploration results provide the depth, thickness and equivalent grade of uranium summarized by intercepts data meeting a 0.02% eU<sub>3</sub>O<sub>8</sub> (200 ppm) cut off. Radiometric data is available in the standard US one half foot (6 inches or 15 cm) thicknesses.</li> <li>All drill holes are vertical with measured thicknesses interpreted to equal true thicknesses due to the flat lying nature of the deposits. Downhole drift data is available for all of the drill holes.</li> </ul>

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>In reporting exploration results, a minimum grade of 0.02 % eU<sub>3</sub>O<sub>8</sub> was applied to reporting of mineralized intercepts. Drill holes that did not meet the grade cut-off but contained elevated gamma signatures indicative of distal portions of roll-front mineralization were categorized as “Trace” holes.</li> <li>The assumptions applied to reporting metal equivalent grades are that the calibrated logging equipment is reporting the correct values and that the radiometric disequilibrium factor of the deposit is 1 (no disequilibrium).</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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’).</li> </ul>	<ul style="list-style-type: none"> <li>All drill holes were vertical.</li> <li>Mineralisation within the district is controlled in part by sedimentary bedding features within a relatively flat lying depositional unit. Therefore, downhole lengths (intercepts) are believed to accurately represent true widths.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All of the appropriate and relevant diagrams have been included in the body of this announcement.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All available drill holes within GTI’s property boundaries in the region relating to the mineral resource estimate and exploration target areas are included in the figures.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All meaningful and material data has been reported.</li> <li>Data relating to the MRE and Exploration Target Range can be found on the ASX Release dated 5 July 2023.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>The future exploration work has been discussed within the report.</li> </ul>