

## ASX Announcement

20<sup>th</sup> December 2023

### DRILLING SUCCESSFULLY VERIFIES HISTORICAL DATA & CONFIRMS EXPLORATION POTENTIAL AT LO HERMA ISR URANIUM PROJECT

- **Initial 26-hole drilling program completed on time & on budget at Lo Herma**
- **Results have successfully verified the historical Lo Herma drill hole database**
- **Exploration potential confirmed along trend in the Wasatch Formation and at depth in the Fort Union Formation**
- **New claims staked** at Lo Herma show promising **exploration potential** in the deeper Fort Union Formation which Cameco produces from ~10 miles east.
- **Planning in progress for expanded 2024 drill program** targeting resource expansion, upgrade of current resource classification & hydrogeologic data collection

GTI Energy Ltd (**GTI** or **Company**) is pleased to advise that the initial drilling program has been completed at its 100% owned Lo Herma ISR Uranium Project (**Lo Herma**), located in Wyoming's prolific Powder River Basin (**Figures 1 & 2**). Twenty-six (26) drillholes were advanced, totalling 4,250m (14,000 ft), with operations finalised on 11 December 2023.

This initial drill program successfully validated the historical data package, used in preparing the Mineral Resource Estimate (**MRE**) for Lo Herma, through comparative analysis of stratigraphy & mineralised intercepts from new drill holes collocated with historical drill holes. Additional drill hole locations tested extensions of known mineralised trends and informed on redox conditions across several host sands to help refine and develop an expanded drill program planned at Lo Herma for 2024. These exploration holes confirmed the previously interpreted exploration potential at Lo Herma.

In addition, the Lo Herma land package was expanded through staking of 28 additional claims in December to cover extensions of interpreted trends as defined by the acquired historical data package. The historical data package includes several drill holes within the 28 new claims which contain mineralisation in a deeper Fort Union formation host sand. GTI is currently evaluating how the new claims and data impact the exploration target for the property and 2024 drill plans.

**GTI Executive Director & CEO Bruce Lane commented** "We are very pleased that initial drilling has successfully verified the large body of historical data used to prepare the Lo Herma JORC inferred resource. In addition, the drilling confirmed exploration potential along trend in the Wasatch formation and at depth in the Fort Union formation. The program was completed on time & budget with the data generated to be used to refine follow-up drilling in 2024. The drilling in 2024 is expected to upgrade the category of portions of the mineral resource & ultimately support a preliminary economic assessment for the project."

#### GTI Energy Ltd

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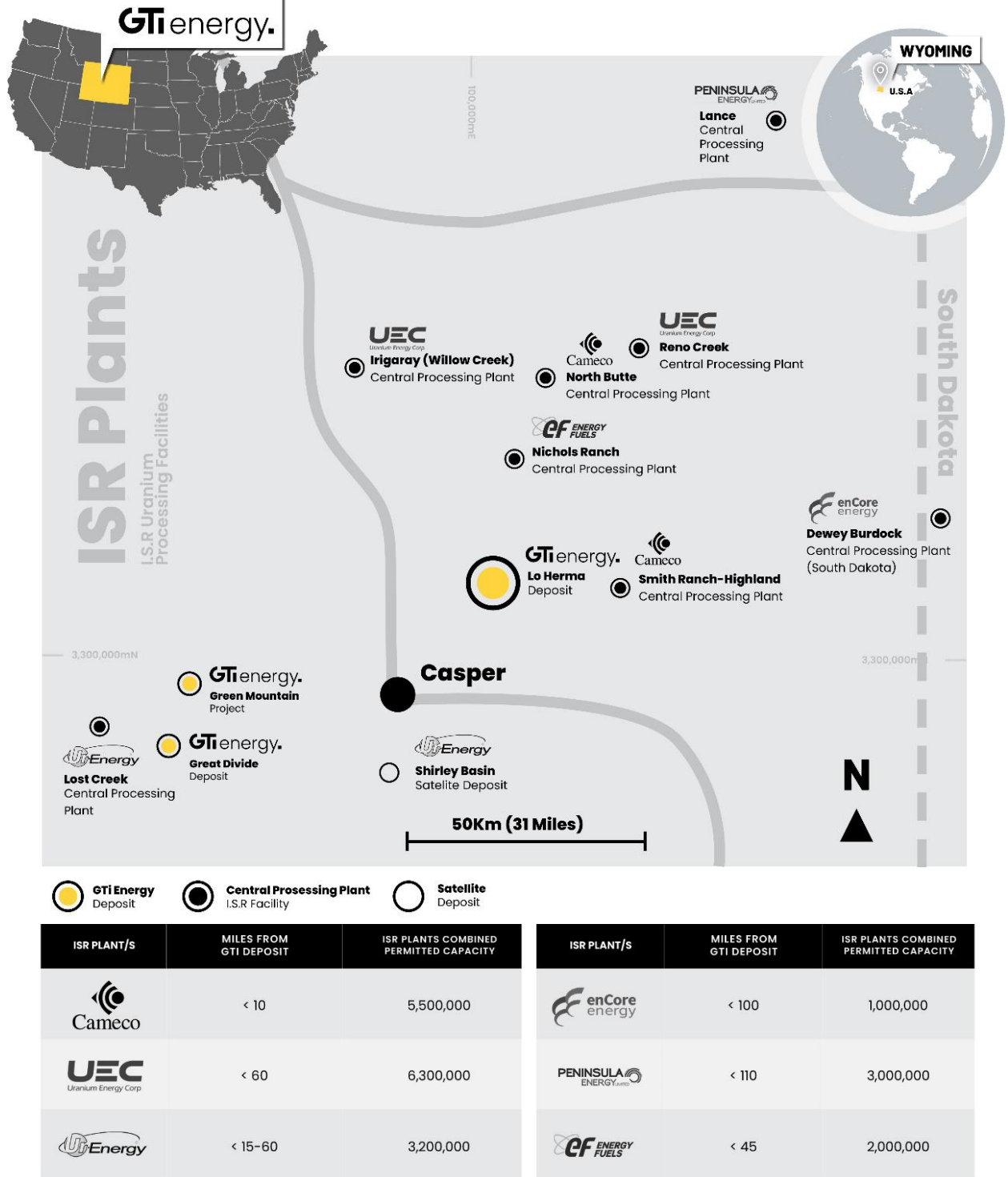
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## LO HERMA URANIUM PROJECT – LOCATION & BACKGROUND

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 Willow Creek (Irigaray & Christensen Ranch) & Reno Creek ISR plants, Cameco’s Smith Ranch-Highland ISR facilities and Energy Fuels 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>**



<sup>1</sup> Data sources are detailed on Page 7. ISR uranium deposits and plant locations are approximated. Dewey Burdock is on the South Dakota Border

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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 the Lo Herma project 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 drill holes were located on GTI's land position & used to prepare the MRE. 21 additional drill holes are located in the newly claimed area in Section 4 of Township 36N, Range 75W. Along with the 26 drill holes completed in this initial program, GTI now holds data from 880 drill holes within the current Lo Herma mineral holdings.

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**). Additional redox trends can now be interpolated based on the recent drilling and acquisition of the newly located mineral claims, however the Exploration Target has not been updated. GTI plans to update the mineral resource and exploration target estimates following execution of planned & permitted drilling during 2024.

**TABLE 1: SUMMARY OF LO HERMA INFERRED MRE & EXPLORATION TARGETS**

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)	
LO HERMA INFERRED MRE	4.11		630		5.71	
EXPLORATION TARGET	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 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.*

## DRILLING RESULTS

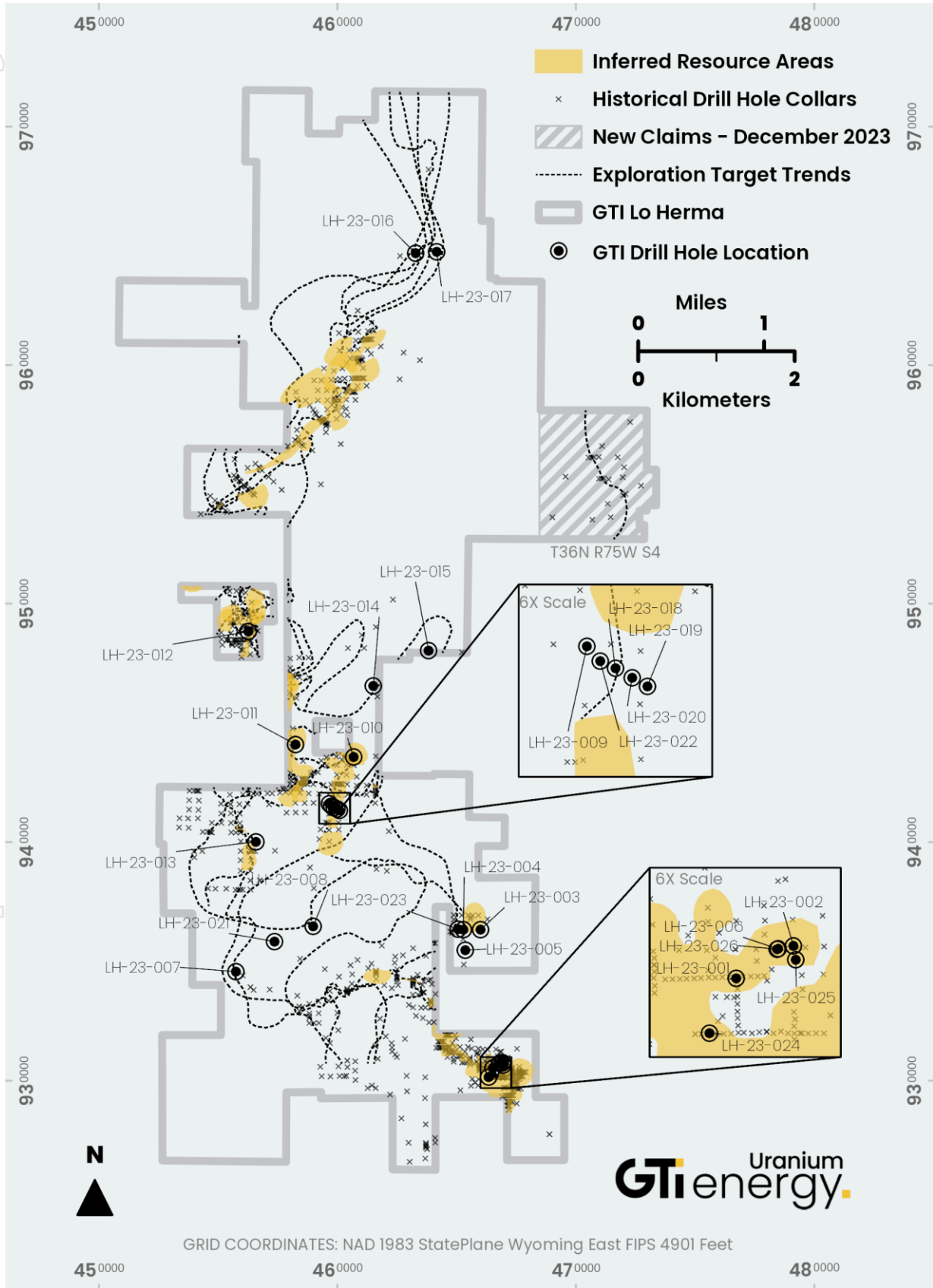
The initial drilling program was completed 11 December 2023, with 26 mud rotary drill holes totalling 4,250m (14,000 ft). The drill targets were designed for verification of the historical drilling data, to test extensions of the mineralised redox trends, and explore the stratigraphic and oxidation conditions of the host sands in underexplored portions of the Lo Herma property.

Of 26 holes drilled, 6 holes met the minimum grade cutoff of 200 ppm eU<sub>3</sub>O<sub>8</sub> & the total hole grade-thickness (GT) target of minimum 0.2 GT. Two drill holes met the minimum grade cutoff, but not the minimum GT. Fourteen (14) drill holes demonstrated trace mineralization but did not meet the grade cutoff. Four (4) drill holes were barren of any indication of mineralization. The best mineralized intercept was encountered in hole LH-23-006, with 19.0 feet with an average of 390 ppm eU<sub>3</sub>O<sub>8</sub> for a total intercept grade-thickness of 0.741. The highest-grade intercept was encountered in hole LH-23-025, with 3.5 feet with an average of 800 ppm eU<sub>3</sub>O<sub>8</sub>, containing an internal 0.5 ft (~15 cm) interval of 1,890 ppm eU<sub>3</sub>O<sub>8</sub>.

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. 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.

The drill hole collars are displayed on the project map in **Figure 2**. Collar location coordinates are tabulated in **Table 2**. **Table 3** shows drill hole specific data including mineralised intercepts.

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

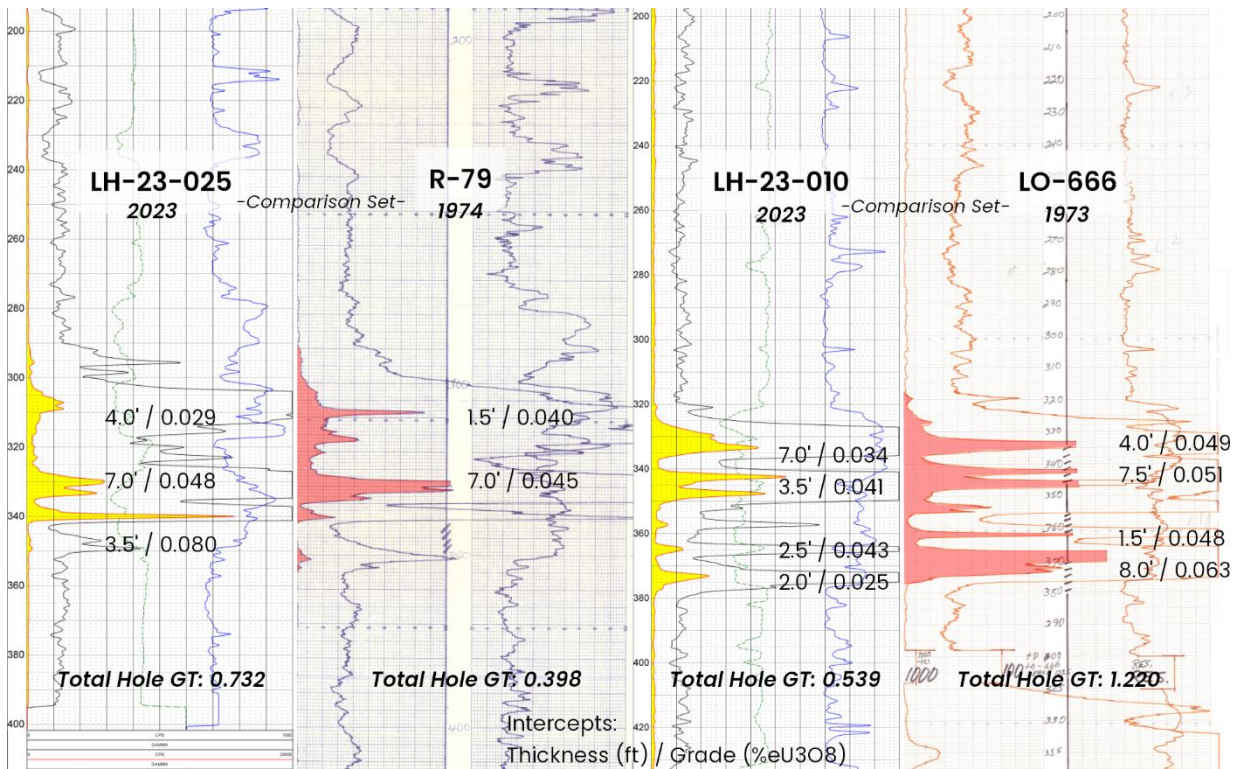




Of the 26 total drill holes completed, 8 were designated as verification drill holes. The verification drill holes were designed to duplicate historical drill hole locations used in preparing the MRE to validate the quality of the historical drilling data. The distances between the verification drill hole collars surveyed locations and the mapped locations of the historical drill hole collars ranged from 1.55m to 7.10m. The assay values of the verification intercepts are shown in **Tables 4 & 5**.

A “side by side” comparison of geophysical drill hole logs are shown in **Figure 3**, comparing two of the modern 2023 drillholes with their historical target counterparts. Variance between the historical drill hole logs and the verification drill hole logs was experienced but of limited magnitude. These limited differences in grade, thickness, and depth of mineralised intercepts across the verification drill holes still demonstrated strong correlation between historical and verification drill holes. It is the CP’s opinion that the close stratigraphic correlations and the prevalence of mineralization of similar tenor and character provides a high level of confidence in the quality and validity of the historical drill hole database.

**FIGURE 3. GEOPHYSICAL LOG INTERCEPT COMPARISON OF VERIFICATION DRILL HOLES**



### EXPLORATION POTENTIAL

The remaining 18 holes were used to target several locations across the nearly 12,000-acre project, testing projected extensions of redox trends and sampling the oxidation status of several host sands within underexplored portions of the project.

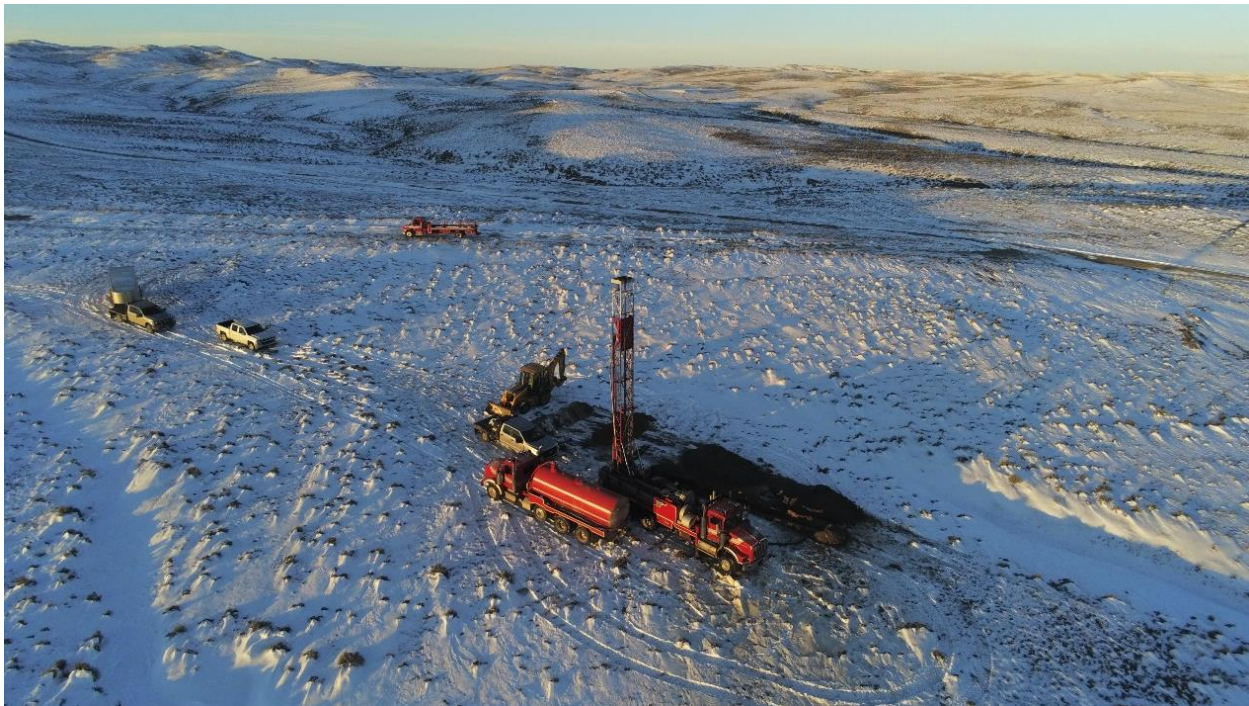
Of particular interest, drill holes LH-23-016 and LH-23-017, targeting the far north trend extensions, bracket oxidation/reduction in multiple sands of the Wasatch and Fort Union Formations. Hole LH-23-016 to the west shows oxidation with trace mineralisation indicative of the “Tails” portion of roll fronts while hole LH-23-017 shows reduced conditions in correlated sand units. Mineralisation occurs at depths from approximately 650 to 870 feet. These holes were spaced nearly 1,000 feet apart. The limited drill program and permit conditions did not allow offsets to be completed at this time.

Similarly, holes LH-23-004, LH-23-005, LH-23-003, and LH-23-023 show trace mineralisation in the deeper B sand and A sand of the Wasatch, at depths ranging from 500 to 600 feet. These deeper sands were not targeted extensively by the previous exploration in the 1970s and 1980s

(see **Figure 5**). These initial indications of mineralisation encountered in these previously overlooked sand units demonstrate an exciting potential to grow the ISR resource at Lo Herma.

The project's exploration potential (**Table 1**) includes interpreted roll front trends identified from historical drill results and trend maps. Much of the historical drilling targeted shallower mineralisation for conventional mining methods within the Wasatch formation, which is the basis for the exploration target range. A number of drill holes both within and outside the Lo Herma project area have identified mineralisation at depth within what is interpreted to be the Fort Union Formation. This leaves the deeper sands of the Fort Union (**Figure 5**) as a significant, currently unquantified, exploration target across the project area. The MRE and Exploration Target range do not currently include any estimated contained resource within the Fort Union formation, the lower sands of the Wasatch formation or the 28 new claims in Section 4.

**FIGURE 4. MUD ROTARY DRILLING AT GTI'S LO HERMA PROJECT**



### **NEW CLAIMS**

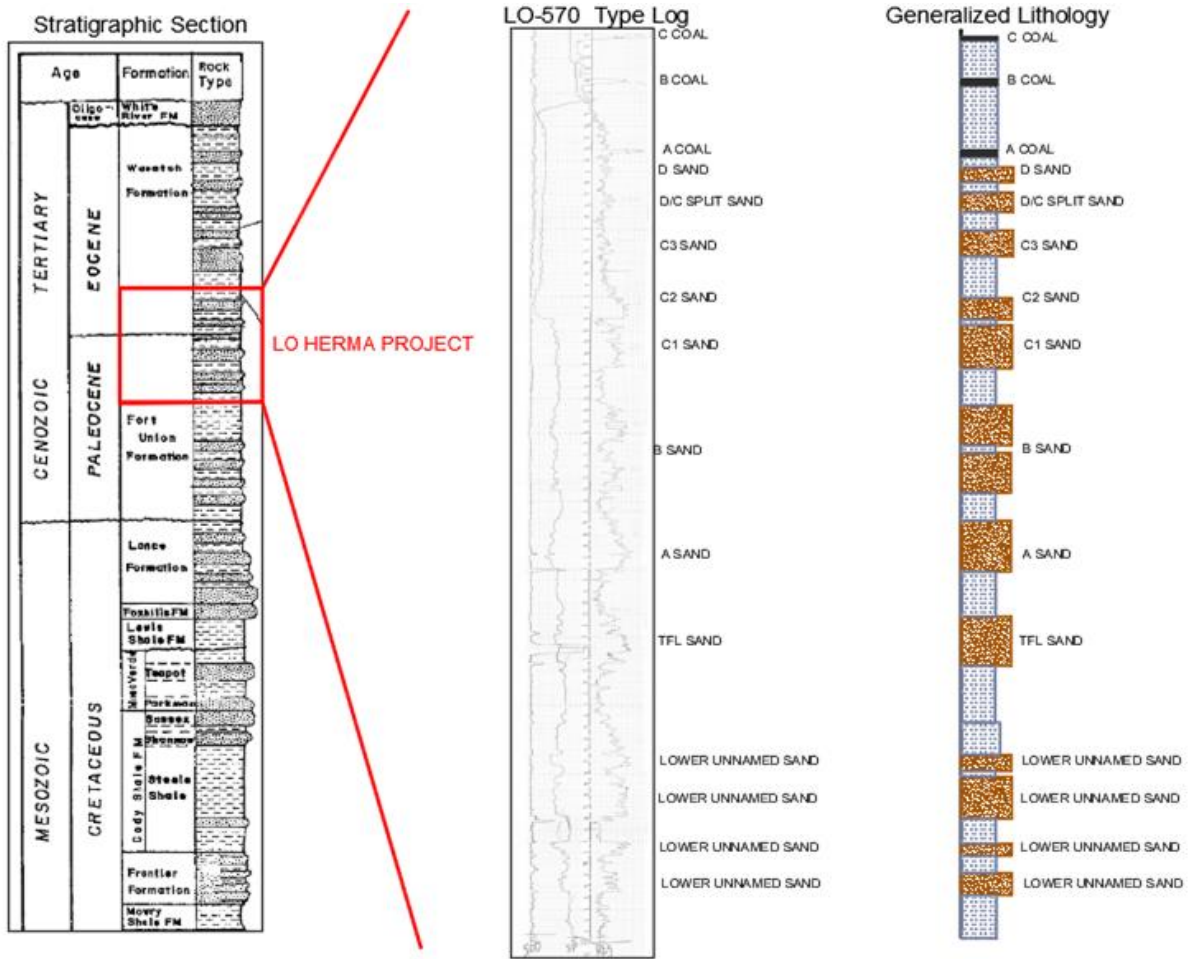
The newly staked claim area presented in **Figure 2** is comprised of 28 new federal lode mining claims (approximately 566 acres) at Lo Herma. The potential of this area came to GTI's attention during a review of the historical data package, indicating that these claims contain mineralisation in a deeper sand unit (1200–1400 ft deep) belonging to the Fort Union formation. This new area is contiguous with the main body of claims & represents low-cost, accretive project growth – demonstrating the ongoing value of the historical drill data. GTI is currently evaluating how this may impact the exploration target for the property and 2024 exploration activities.

### **CONTINUED EXPLORATION**

A total of 42 drill holes remain permitted and undrilled at Lo Herma, providing a set path to return to field for further drill testing in 2024. This permitted drill program will be refined and may be augmented and expanded in due course prior to execution during 2024. The near-term exploration effort at Lo Herma will be focused on expanding the resource areas and upgrading the current mineral resource classification. Collection of important data including groundwater aquifer conditions and collection of rock core samples for metallurgical testing will be also prioritised in the near-term exploration efforts. GTI is currently developing a detailed 2024 exploration plan at Lo Herma and this plan will be integrated into the broader exploration program for all of GTI's Wyoming projects.



**FIGURE 5. LO HERMA GEOLOGICAL SETTING – WASATCH & FORT UNION FORMATIONS**



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

Hole ID	Date Drilled	Collar Easting	Collar Northing	Collar Elevation	Hole ID	Date Drilled	Collar Easting	Collar Northing	Collar Elevation
LH-23-001	11/13/2023	466525.05	930534.59	5669.6	LH-23-014	11/20/2023	461509.07	946555.49	5669.5
LH-23-002	11/13/2023	466925.72	930754.93	5671.3	LH-23-015	11/20/2023	463827.60	948037.85	5614.2
LH-23-003	11/14/2023	465998.05	936326.67	5800.7	LH-23-016	11/21/2023	463266.17	964676.40	5844.7
LH-23-004	11/14/2023	465270.84	936361.63	5786.3	LH-23-017	11/29/2023	464158.36	964737.95	5836.2
LH-23-005	11/14/2023	465365.13	935476.70	5767.7	LH-23-018	11/30/2023	459868.92	941452.91	5784.3
LH-23-006	11/15/2023	466820.76	930737.54	5673.0	LH-23-019	11/30/2023	460103.30	941354.75	5783.0
LH-23-007	11/15/2023	455750.77	934586.83	5995.3	LH-23-020	11/30/2023	460001.00	941397.39	5783.4
LH-23-008	11/15/2023	459005.34	936466.78	6036.5	LH-23-021	12/4/2023	457372.29	935846.71	6086.0
LH-23-009	11/16/2023	459678.54	941603.33	5785.2	LH-23-022	12/4/2023	459775.29	941495.36	5786.7
LH-23-010	11/16/2023	460681.57	943565.32	5709.8	LH-23-023	12/5/2023	465064.57	936347.04	5780.8
LH-23-011	11/16/2023	458230.13	944093.65	5744.9	LH-23-024	12/5/2023	466333.83	930146.31	5659.1
LH-23-012	11/17/2023	456273.05	948841.05	5780.9	LH-23-025	12/8/2023	466938.31	930659.93	5668.4
LH-23-013	11/17/2023	456591.25	940032.43	5822.7	LH-23-026	12/8/2023	466814.76	930736.54	5672.9

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

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

Hole ID	Total Depth* Drilled	Top Intercept Depth*	Bottom Intercept Depth*	Intercept Thickness (ft)	Grade %eU3O8	GT**	Total Hole GT**	Comment
LH-23-001	400	291.5	296.5	5	0.029	0.145	<b>0.145</b>	
LH-23-002	600	319.5	321.5	2	0.026	0.052	<b>0.1705</b>	
		334	334.5	0.5	0.02	0.01		
		338	341.5	3.5	0.031	0.1085		
LH-23-003	620							Trace
LH-23-004	600							Trace
LH-23-005	560							Trace
LH-23-006	360	313	332	19	0.039	0.741	<b>0.741</b>	
LH-23-007	520							Barren
LH-23-008	500							Barren
LH-23-009	520	333.5	334	0.5	0.022	0.011	<b>0.011</b>	Trace
LH-23-010	520	328.5	335.5	7	0.034	0.238	<b>0.539</b>	
		341.5	345	3.5	0.041	0.1435		
		346.5	349	2.5	0.043	0.1075		
		372.5	374.5	2	0.025	0.05		
LH-23-011	500							Trace
LH-23-012	620	286	290	4	0.032	0.128	<b>0.128</b>	
LH-23-013	320							Trace
LH-23-014	620							Barren
LH-23-015	760							Trace
LH-23-016	900							Trace
LH-23-017	920							Barren
LH-23-018	520							Trace
LH-23-019	540							Trace
LH-23-020	520							Trace
LH-23-021	520							Trace
LH-23-022	540							Trace
LH-23-023	640							Trace
LH-23-024	460	266	275	9	0.039	0.351	<b>0.351</b>	
LH-23-025	400	306	310	4	0.029	0.116	<b>0.732</b>	
		328	335	7	0.048	0.336		
		338	341.5	3.5	0.08	0.28		
LH-23-026	360	308	309.5	1.5	0.022	0.033	<b>0.576</b>	
		313	322	9	0.035	0.315		
		322.5	323.5	1	0.022	0.022		
		325	329	4	0.049	0.196		
		332.5	333	0.5	0.02	0.01		

\*All depth units are Feet below drill hole collar. \*\*GT is calculated as: Grade x Thickness (ft)

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**TABLE 4. VERIFICATION INTERCEPTS COMPARISON**

2023 Hole ID	Top Intercept Depth*	Bottom Intercept Depth*	Intercept Thickness (ft)	Grade %eU3O8	GT**	Total Hole GT**	Target Offset Distance (ft)***	Target Historic Hole ID	Top Intercept Depth*	Bottom Intercept Depth*	Intercept Thickness (ft)	Grade %eU3O8	GT**	Total Hole GT**	
LH-23-001	291.5	296.5	5.0	0.0290	0.145	0.145	12.5	R-90	290.5	299.5	9.0	0.0521	0.469	0.469	
LH-23-002	319.5	321.5	2.0	0.0260	0.052	0.171	23.3	R-18	310.5	312.0	1.5	0.0270	0.040	0.619	
	334.0	334.5	0.5	0.0200	0.010					317.0	319.0	2.0	0.0227	0.045	
	338.0	341.5	3.5	0.0310	0.109					325.0	339.5	14.5	0.0322	0.467	
LH-23-006	313.0	332.0	19.0	0.0390	0.741	0.741	5.7	R-20	311.0	323.5	12.5	0.0456	0.570	0.896	
									324.0	330.5	6.5	0.0502	0.326		
LH-23-010	328.5	335.5	7.0	0.0340	0.238	0.539	12.5	LO-666	333.4	337.4	4.0	0.0488	0.200	1.220	
	341.5	345.0	3.5	0.0410	0.144					341.7	349.1	7.5	0.0514	0.386	
	346.5	349.0	2.5	0.0430	0.108					353.6	355.1	1.5	0.0265	0.042	
	372.5	374.5	2.0	0.0250	0.050					362.4	363.8	1.5	0.0486	0.073	
LH-23-012	286.0	290.0	4.0	0.0320	0.128	0.128	5.1	LO-1002	287.8	293.7	6.0	0.0685	0.411	0.411	
	LH-23-024	266.0	275.0	9.0	0.0390	0.351	0.351	9.3	R-5	233.5	234.5	1.0	0.0211	0.021	0.581
LH-23-025		306.0	310.0	4.0	0.0290	0.116	0.732	8.2	R-79	266.0	276.5	10.5	0.0534	0.560	
	328.0	335.0	7.0	0.0480	0.336					307.5	309.0	1.5	0.0401	0.060	0.398
LH-23-026	338.0	341.5	3.5	0.0800	0.280				315.5	316.5	1.0	0.0223	0.022		
	308.0	309.5	1.5	0.0220	0.033	0.576	5.3	R-20	327.0	334.0	7.0	0.0452	0.316		
	313.0	322.0	9.0	0.0350	0.315				311.0	323.5	12.5	0.0456	0.570	0.896	
	322.5	323.5	1.0	0.0220	0.022				324.0	330.5	6.5	0.0502	0.326		
	325.0	329.0	4.0	0.0490	0.196										
	332.5	333.0	0.5	0.0200	0.010										

\*All depth units are Feet below drill hole collar. \*\*GT is calculated as: Grade x Thickness (ft). \*\*\*Target Offset Distance is the calculated total difference in US Feet between the surveyed locations of 2023 drill hole collars and the mapped locations of targeted historic drill holes.

**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.gtienergy.au/web-broadcast/](http://www.gtienergy.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.

**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/gupdtable4.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://d1io3vog0oux5.cloudfront.net/0165d3b080b7dd266644acb9bb7977d/urenerg/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>

# 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>• No core was taken. Thus, no chemical assays are available. This is typical at the current exploration stage of the project. Further drilling programs will include coring to assess radiometric equilibrium conditions.</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 conducted 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. Future exploration activities will involve core sample collection for lab testing. 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</li> </ul>



Criteria	JORC Code explanation	Commentary
<p><i>Data spacing and distribution</i></p>	<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>stage of the exploration project. The terrain of the project area is 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>
<p><i>Orientation of data in relation to geological structure</i></p>	<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>
<p><i>Sample security</i></p>	<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</li> </ul>

Criteria	JORC Code explanation	Commentary
		stored on BRS' local data server which has internal backup and offsite storage protocols in place.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></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
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Lo Herma mining lode claims cover 10,802 acres with 617 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>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></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>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralization.</i></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</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>exact contact between the formations is subject to ongoing debate as both formations represent similar depositional environments and 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>