



5 July 2023

# **ASX Announcement**

## MAIDEN URANIUM RESOURCE & EXPLORATION TARGET UPDATE AT LO HERMA ISR PROJECT

- Inferred Mineral Resource Estimate of 5.71 Mlbs U<sub>3</sub>O<sub>8</sub> at average 630ppm for Lo Herma
- Lo Herma is ~10 miles from the US's largest ISR U<sub>3</sub>O<sub>8</sub> production plant at **Cameco's Smith Ranch-Hyland** & ~60 miles from **UEC's Irigaray** & **Energy Fuels' Reno Creek**.
- GTI's combined Wyoming Inferred Mineral Resources now 7.37 Mlbs U<sub>3</sub>O<sub>8</sub>
- Exploration target range updated & increased by ~25% for Lo Herma Project
- Permitting in progress for Lo Herma drill program targeting late 2023/H2 2024

GTI Energy Ltd (**GTI** or **Company**) is pleased to declare an initial Inferred Mineral Resource Estimate (**MRE**) at the Lo Herma Project located in Wyoming's prolific Powder River Basin uranium production district. The MRE assumes mining by In-Situ Recovery (**ISR**) methods and is reported at a cut-off grade of 200 ppm  $U_3O_8$  and a minimum grade thickness (**GT**) of 0.2 per mineralised horizon as:

4.12 million tonnes of mineralisation at an average grade of 630 ppm  $U_3O_8$  for 5.71 million pounds (MIbs) of  $U_3O_8$  contained metal.

In addition, the initial Lo Herma Exploration Target range is updated & increased (**Table 1**) since it was reported to ASX on 05 March 2023. The updated Exploration Target Range for the **Lo Herma Project** is between 5.3 to 6.7 million additional tonnes at a grade range of between 500 ppm to 700 ppm U<sub>3</sub>O<sub>8</sub> containing an estimated **5.9** to **10.3** million pounds of U<sub>3</sub>O<sub>8</sub>. The potential quantity and grade of the Exploration Target 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.

**GTI Executive Director Bruce Lane commented** "We are very pleased to declare an initial JORC inferred  $U_3O_8$  mineral resource estimate with an updated exploration target at Lo Herma in the Powder River Basin. The reported estimates are based solely on significant historical drilling information. This initial MRE highlights the exciting potential at Lo Herma with an initial inferred resource of 5.7 Mlbs at average grade of 630 ppm. The exploration target for the project has also been updated with an additional 5.87 to 10.26 Mlbs potential at average grade of 500 – 700 ppm. This initial resource validates our belief that Lo Herma, which is located within 60 miles of ISR production plants owned by Cameco, UEC & Energy Fuels, holds real potential to become a producing deposit. GTI's immediate goal is to integrate the results of our ariel geophysics survey into the exploration targeting model and to secure approvals for a drilling program timed for late 2023 or H2 of 2024. Drilling will aim to verify, upgrade and extend the resource. As highlighted by the exploration target, there appears to be material potential to increase the resource along trend but also possibly at depth within the highly productive Fort Union formation."

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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 within ~60 miles of five (5) 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) and satellite deposits (Figures 1 & 2). The Powder River Basin has been the backbone of Wyoming uranium production since the 1970s.



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

<sup>&</sup>lt;sup>1</sup> Data sources are detailed on Page 13. ISR uranium deposits & plant locations are approximated. Dewey Burdock is on the South Dakota Border

#### FIGURE 2. WYOMING ISR URANIUM DEPOSITS<sup>2</sup>



	COMPANY	ISR URANIUM DEPOSIT NAME	~MILES FROM GTI	MLBS U <sub>3</sub> O <sub>8</sub> (MEASURED, INDICATE & INFERRED)	GRADE AVE PPM U <sub>3</sub> O <sub>8</sub>	MLBS U <sub>3</sub> O <sub>8</sub> EXPLORATION TARGET
	GTI	Lo Herma		5.7	630	5.9 - 10.3 (500-700PPM U <sub>3</sub> O <sub>8</sub> )
	CAMECO	Smith Ranch-Highland	10	4.1	800	-
	UEC	Barge	10	4.3	510	-
D.	UEC	Ludeman	15	9.7	910	-
Ba	UEC	Allemand-Ross	15	0.5	830	-
Ver	UEC	Moore Ranch	30	3.2	600	-
Sr Ri	EFR	Nichols Ranch (incl. Hank & Jane Dough)	45	7.2	1000 - 1300	-
vde	CAMECO	North Butte-Brown Ranch	45	36	300	-
Po	UEC	Reno Creek	50	26	410	-
	UEC	Irigaray	55	5.9	760	-
	UEC	Christensen Ranch	55	9.6	730	-
	UEC	Charlie	55	3.1	1230	-
	ENCORE	Dewey Burdock	100	18	655	-
	PEN	Lance/Ross	110	53.7	480	104-163 (426-530PPM U <sub>3</sub> O <sub>8</sub> )
OB	GTI	Great Divide Basin (GDB)		1.7	570	6.1 - 9.5 (420-530PPM U <sub>3</sub> O <sub>8</sub> )
0	UEC	Jab	5	4	730	-
	URE	Lost Soldier	10	14	650	-
	URE	Lost Creek	15	18	460	-
	URE	Shirley Basin	50	8.8	2300	-

<sup>2</sup> Data sources are detailed on Page 13. ISR uranium deposits & plant locations are approximated. Dewey Burdock is on the South Dakota Border

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 pertaining to the Lo Herma region. The original drill data has been used to prepare an inferred mineral resource estimate for the Lo Herma Project using the original exploration results.

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. The additional redox trend interpretations allowed for an update of the previously reported Lo Herma exploration target to be announced herein (**Table 1**).

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	
GDB INFERRED MRE	1.32		570		1.66	
TOTAL INFERRED RESOURCES	5.43				7.37	
EXPLORATION TARGETS	MIN TONNES (MN TONNES)	MAX TONNES (MN TONNES)	MIN GRADE (ppm U₃O₀)	MAX GRADE (ppm U₃Oଃ)	MIN MN LBS U3O8	MAX MN LBS U3O8
GDB EXPLORATION TARGET	6.55	8.11	420	530	6.10	9.53
LO HERMA EXPLORATION TARGET	5.32	6.65	500	700	5.87	10.26
TOTAL EXPLORATION TARGET	11.87	14.76			11.97	19.79

#### TABLE 1: SUMMARY OF INFERRED MRE & EXPLORATION TARGETS (REFER TABLES 2 & 3)

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.

A cut-off grade of 200 ppm  $eU_3O_8$  and a grade thickness (**GT**) cut-off of 0.2%ft was used in preparation of the estimation. The cut-off parameters are typical of ISR uranium industry standards within the Powder River Basin and the Wyoming ISR Uranium industry at large. A sensitivity analysis was conducted holding the grade cut-off at 200 ppm while varying the GT cut-off (Table 1A). The 0.2%ft GT cutoff is the preferred cut-off for the mineral resource estimate when considering the available knowledge at this stage of project development.

### TABLE 1A: SENSITIVITY ANALYSIS OF RESOURCE AT VARIED GT CUTOFFS

GRADE THICKNESS (GT) CUTOFF (200 PPM GRADE CUTOFF)	TONNES (MILLIONS)	AVERAGE SUM THICKNESS (FT)	AVERAGE GRADE (PPM eU <sub>3</sub> O <sub>8</sub> )	POUNDS eU <sub>3</sub> O <sub>8</sub> (MILLIONS)
0.1%FT GT CUTOFF	6.11	4.12	590	7.91
0.2%FT GT CUTOFF*	4.12	5.74	630	5.71
0.4%FT GT CUTOFF	2.10	8.23	660	3.07

\*Preferred scenario for prospective economic extraction

#### LO HERMA INFERRED RESOURCE ESTIMATE

The Lo Herma prospect is situated on the southern end of the west flank of the Powder River Basin, a regional asymmetric synclinal basin hosting a sedimentary rock sequence of about 15,000 feet in the deeper portions of the basin. The basin is bounded by the Bighorn Mountains on the west, the Black Hills to the east, and the Casper Arch, Laramie Mountains, and Hartville Uplift along the southern margin. Along the edges of the basin, progressively older sedimentary units outcrop at the surface as you move away from the synclinal axis of the basin.

The Lo Herma Project is located in and around the contact of the Eocene Wasatch Formation and the Paleocene Fort Union Formation. In this area, the corresponding fluvial and paludal depositional settings of the two formations are similar, and the unconformable contact is poorly defined. Both formations consist of sedimentary sequences of sandstones, siltstones, claystones, and coal – creating a favourable geologic environment for uranium roll-front deposits in the permeable sandstone units.

The gently north-east dipping host sandstones of the Lo Herma Project lie stratigraphically below the prominent Badger and School House coal seams, and likely represent some of the lowest Wasatch sandstones and the uppermost Fort Union sandstones. The lower sandstone units of the Fort Union formation represent an underexplored potential for additional uranium mineralisation on the property.



#### FIGURE 3. LO HERMA PROJECT SAND HORIZON CROSS SECTION

Uranium mineralisation occurs as roll front type uranium deposits hosted within sandstone horizons. The formation of roll front deposits is a geochemical groundwater 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. Mineralised roll-front zones along a redox interface vary considerably in size, shape, and amount of mineralisation. Individual roll front trends may extend sinuously for several miles. Frequently, trends will consist of several vertically stacked roll fronts within a single or multiple sand units.

The known mineralised sand horizons at the Lo Herma project are named by convention from the original explorers in the 1970's. The sands are labelled A, B, C, and D, with A being the stratigraphic lowest sand and D being the uppermost. At times the sands split into sub-sand units, most prominently the C1, C2, and C3 sub-sands which also merge into consolidated sand units. For the purposes of the resource modelling, sub sand units were composited due to their stratigraphic proximity.

The Lo Herma Project area was originally explored in the 1970's and 1980's by Pioneer Nuclear Inc. along with joint venture partners. GTI acquired a comprehensive data package of original Pioneer Nuclear drilling data, including data for approximately 1,771 drill holes. 1,391 original drill hole logs were digitised for gamma count per second (CPS) data and converted to  $eU_3O_8\%$  grades. 845 of the drill holes were located on GTI's current land position and used in the preparation of the Mineral Resource Estimate.

The Lo Herma Inferred Mineral Resource Estimate (**estimation**) is reported as an Inferred Mineral Resource in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC Code). Refer to details in Appendix 1 for information relating to data collection and resource estimation.



FIGURE 4. LO HERMA PROJECT COLLAR LOCATIONS AND MINERAL RESOURCE AREAS



#### FIGURE 5. LO HERMA PROJECT RESOURCE AREAS & REDOX TRENDS BY SAND HORIZON

The GT contour method was used to model the mineral resources and is well accepted within the uranium industry. The estimation assumes mining by In-Situ recovery (**ISR**) methods with testing of water table levels and hydrologic conditions to be considered as part of the first phase of exploration. A cut-off grade of 200 ppm  $eU_3O_8$  and a grade thickness (GT) cut-off of 0.2 GT was used in preparation of the estimate. Drill Hole intercepts down to a value of 0.1 GT were considered in developing the GT contour models. However, resource areas with a value less than 0.2 GT were not included in the resource estimation calculations. Certain assumptions were incorporated throughout the calculations and are discussed in Appendix 1.

The historical exploration work at Lo Herma, on which the Mineral Resource Estimate is based, was initially focused on exploring for conventional uranium resources. As exploration continued, the focus shifted towards ISR style deposits. Due to the initial focus on shallower deposits, many of the deeper sand units across the property remain underexplored, leaving a distinct exploration potential at greater depths.

INFERRED MINERAL RESOURCE SAND HORIZON	TONNES (MILLION TONNES)	AVERAGE GRADE (PPM U <sub>3</sub> O <sub>8</sub> )	CONTAINED U <sub>3</sub> O <sub>8</sub> (MILLION POUNDS)
A SAND HORIZON	0.02	660	0.03
B SAND HORIZON	1.06	620	1.43
C SAND HORIZON	2.84	630	3.95
D SAND HORIZON	0.21	640	0.29
Total	4.12	630	5.71

**TABLE 2: LO HERMA INFERRED RESOURCE ESTIMATE JUNE 2023** 

### LO HERMA EXPLORATION TARGET UPDATE

An initial Exploration Target for the Lo Herma Project was announced to the ASX on 4 April 2023. The Exploration Target range for Lo Herma project has been updated to provide the market with an assessment of the potential scale of the Lo Herma prospect.

On 14 March 2023 GTI announced the acquisition of a historical exploration data package related to the Lo Herma Project. The data package includes several maps showing drill holes, intercept values, and interpreted redox trends. Individual roll-front redox trends were traced across the maps and categorized by the four host sands. A small subset of the corresponding drill hole gamma logs were visually verified to sample the efficacy of the historical geologic interpretations.

An additional data acquisition related to Lo Herma, announced to the ASX on 27 June 2023, included a suite of additional interpreted redox trend maps. The maps were of the same series from the original data package and included additional redox trend interpretations that were not included with the original data package. The additional interpreted trend maps allowed for an increased update to the original exploration targets, less the areas delineated as inferred resources.

The exploration target range was estimated by mapping the redox trend lengths across the Lo Herma Project area and applying low to high range mineralisation parameters over the length of the trends. The average grades and mineralised dimensions were derived from the average grades and dimensions of the inferred resource areas. The ranges of estimated results are tabulated by individual sand horizons in **Table 3**, and a plan map of the interpreted trends by sand horizon are shown in **Figure 5**.

#### **TABLE 3: LO HERMA EXPLORATION TARGET SUMMARY**

LO HERMA HOST SAND HORIZON	MIN TONNES (Mn TONNES)	MAX TONNES (Mn TONNES)	MIN GRADE (ppm U <sub>3</sub> O <sub>8</sub> )	MAX GRADE (ppm U₃Oଃ)	MIN MIbs U <sub>3</sub> O <sub>8</sub>	MAX MIbs U <sub>3</sub> O <sub>8</sub>
A SAND	0.99	1.24	500	700	1.09	1.91
B SAND	1.37	1.71	500	700	1.51	2.63
C SAND	2.44	3.05	500	700	2.69	4.71
D SAND	0.52	0.65	500	700	0.57	1.01
Total	5.32	6.65	500	700	5.87	10.26

The potential quantity and grade of the Exploration Target 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 target was calculated by applying average parameters from the inferred resource areas across the length of the corresponding redox trends. The trends were adjusted down to 80% lengths for the low range parameter and the average grades were dropped to 500 ppm to account for potential low-grade gaps in the redox systems. The width and thickness values were derived from average dimensions of the 0.2 GT Cut-off inferred resource areas. The width values were derived from the lower widths of the resource areas, ranging from 80 - 100.

An exploration and verification drilling program is proposed to take place in the later part of 2023 or the second half of 2024. Drilling targets have been developed now that the resource areas have been defined. Testing of water table levels and hydrologic conditions will be considered as part of the first phase of exploration. Rock core recovery to test for formation density, porosity, transmissivity, leachability, and radiometric equilibrium is a priority for in-field exploration. The exploration permitting process is underway with environmental consultants scheduled to conduct clearance surveys of the drilling target sites in the coming weeks.

An airborne geophysical survey suite has commenced deployment and preliminary data should be available within the next two weeks. The final geophysical map products will take upwards of eight weeks for delivery.

Much of the historical drilling was limited to 400 feet or so in depth, which indicates historical exploration targeted shallower mineralisation for conventional mining methods. This leaves the deeper sands of the Fort Union (**Figure 6**) as an underexplored target for potential additional roll front systems across the project area.

#### FIGURE 6. LO HERMA GEOLOGICAL SETTING - WASATCH & FORT UNION FORMATIONS



#### **RESOURCE CLASSIFICATION**

The Resource has been classified in the Inferred category in accordance with the 2012 Australasian Code for Reporting for Mineral Resources and Ore Reserves (2012 JORC Code). A range of criteria has been considered in determining this classification including data quality, drill hole spacing, the Grade Thickness (GT) contour modelling technique and In-Situ recovery (ISR) methods.

#### **SAMPLE QUALITY**

Historic logging was collected onto analog paper gamma log charts. The original log charts were digitized for CPS gamma data. The digital gamma data was spot checked against the original charts for validation. The validated Gamma values were converted to equivalent uranium grade percent ( $eU_3O_8\%$ ). The CP has reviewed and approved the methods used to calculate  $eU_3O_8\%$ , which adheres to industry standard methods.

A database of mineral intercepts was manually constructed into excel. Outlier values were checked for validity and no major transcription errors were discovered. The competent person and additional staff performed additional visual validation by reviewing the original drillhole logs in comparison to the mineral intercept values.

A comparison audit of grade and grade thickness intercepts was conducted using the 1978 intercept database that was included with the data package. The database intercepts were first verified using hand calculation methods. Intercepts from the modern digitization effort were compared to those in the historical database to confirm correlation between the results. The results of the audit are further discussed in Table 1.1 *Verification of sampling and assaying.* The original

raw data is retained for further review and validation. The competent person visited the site before acquisition of the data package was completed. Additional site visits have been performed by the CP and staff to assess drill site accessibility and search for historical drilling locations.

#### **GEOLOGICAL INTERPRETATION**

The geologic model applied to the mineral deposit is interpreted to be a sandstone hosted roll front style Uranium deposits are prevalent within the geologic setting. The character of the observed mineralization fits the geologic model. The Competent Person has extensive knowledge and over 45 years of direct experience with roll-front uranium mineralization, which includes several projects in the same geologic formations within the Powder River Basin.

The nature of the data used is original historical exploration results. The data appears to adhere to industry standard Uranium practices of the 1970's. No representative measurements of radiometric disequilibrium conditions were available which could affect the equivalent  $U_3O_8$  percent grade calculations used to determine grade. An assumed disequilibrium factor of 1 was used in preparation of this inferred resource. Based on the geologic setting and knowledge of similar deposits, the CP feels that this assumption is appropriate for this phase of the project.

All drill holes were intended to be vertical, no direct downhole deviation measurements exist for the historical data. The drill holes are all assumed to be vertical or near vertical for purposes of the mineral resource estimate. Mineralization and geologic strata are relatively flat lying. Measured drill hole intercept lengths are assumed to be true measurements of thickness. No alternative interpretations were made in producing the Inferred Mineral Resource Estimate.

Uranium mineralisation in the Wasatch and Fort Union formations occurs as roll front type uranium deposits hosted 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.

Geologic interpretation for uranium mineralisation within the Lo Herma Prospect and Powder River Basin at large consists of roll-front style deposits which occur in long, sinuous bodies which are found adjacent and parallel to geochemical redox fronts. Continuity of mineralization is largely controlled by continuity of the permeable host deposits and the continuity of reducing conditions within the host deposit. Local variations in the amounts of reducing materials or variability in the permeability of the host deposit can affect the continuity of grade and dimensions of the deposit.

### EXTENT AND VARIABILITY OF THE MINERAL RESOURCE

The interpreted length along strike is largely controlled by drill hole density. Drill hole data meeting the minimum cutoffs were projected along a general NE-SW oriented anisotropy and at an average range of 600 feet as indicated by semivariography. Where the drill hole data and redox trend interpretations supported further projection, it was limited to no further than 1,000 feet.

The width of the mineral resource is largely controlled by drill hole density, but in no case is projected further than 600 feet. The projection distance is supported by semivariography and covariance geostatistical models using ordinary kriging. It is of the CP's opinion that 600 feet is a conservative projection distance for an inferred mineral resource estimate in this geologic setting.

The depth below surface of the upper and lower limits of the mineral resources vary significantly based on the stratigraphic position of the host sandstone horizon, position relative to dip, and overburden topography. In general, the D sand horizon is the shallowest mineral resource area, with the upper limit of the deposit being 139 feet below the ground surface. The A sand horizon is

generally the deepest mineralized horizon, however, the lower limit of mineralization within the defined resource areas is at 640 feet below the ground surface in the B sand horizon due to the areas far east location, down dip of other resource areas.

The depth to mineralisation histogram in Table 1.2 *Drill hole Information* represents all of the known mineralized intercepts on the property, which does not represent only the subset of intercepts considered in defining the Mineral Resource areas.

### **GRADE THICKNESS (GT) MODELLING**

The Grade Thickness (GT) contour method was used to estimate the inferred mineral resources and is well accepted within the uranium industry. Intercepts down to a value of 0.1 GT were considered in developing the GT contour models. Multiple intercepts within the same drillhole with values of 0.1 GT or greater were summed when located within 25 vertical feet and were reliably interpreted as being within a continuous sandstone horizon.

A cut-off grade of 200 ppm  $eU_3O_8$  and a grade thickness (GT) cut-off of 0.2%ft was used in preparation of the estimation, which is consistent with ISR Uranium industry standards within the Powder River Basin and the Wyoming ISR Uranium industry at large.

Resource areas with a value less than 0.2%ft GT are not considered to be reasonably economically extractable at this time. Autocad Civil3D software was used to assist with the GT contour method of estimation. Constraining GT contours were manually interpreted to honor geologic continuity between datapoints. Resulting contours were adjusted to honor an inverse distance squared relationship between GT values.

No assumptions regarding recovery of by-products or deleterious elements were used. The geological interpretation favoured continuity of mineralisation along the interpreted redox trend directions.

A grade cutoff of 200 ppm  $eU_3O_8$  was used. Any grade values below 200 ppm were considered a zero value for resource estimation. Trace mineralised intercept values were considered only for indications of possible extensions of mineralization. The input data used to generate the model was correlated using cross sectional 3D analysis of intercept hole data to check for continuity of sand horizons and mineralisation. The tonnages are calculated and reported on a dry basis.

#### **CUT-OFF PARAMETERS**

A cut-off grade of 200 ppm  $eU_3O_8$  and a grade thickness (GT) cut-off of 0.2%ft was used in preparation of the estimation. The cut-off parameters are typical of ISR uranium industry standards within the Powder River Basin and the Wyoming ISR Uranium industry at large.

A sensitivity analysis was conducted holding the grade cut-off at 200 ppm while varying the GT cut-off. The results of which are shown in the following table. The 0.2%ft GT cutoff is the preferred cut-off for the mineral resource estimate when considering the available knowledge at this stage of project development.

GT Cutoff (200 PPM Grade Cutoff)	Tonnes (Millions)	Average Sum Thickness (ft)	Average Grade (ppm eU <sub>3</sub> O <sub>8</sub> )	Pounds eU₃O₅ (Millions)
0.1%ft GT Cutoff	6.11	4.12	590	7.91
0.2%ft GT Cutoff*	4.12	5.74	630	5.71
0.4%ft GT Cutoff	2.10	8.23	660	3.07

 Table 4: Sensitivity Analysis of Resource at varied GT cutoffs

\*Preferred scenario for prospective economic extraction.

The estimation assumes mining by In-Situ recovery (ISR) methods. In order to be amendable to ISR mining methods, all resources must occur below the static water table and the permeability and transmissivity of the host deposit must allow for adequate flow of lixiviant. The hydrogeologic data across the property is very limited. No representative measurements of formation porosity or transmissivity are available at this time to fully support ISR as a mining method. ISR methods have been shown to be effective in similar deposits within the same geologic region. The lack of representative and supporting static groundwater information, leachability, density, and radiometric disequilibrium data is a factor in maintaining.

#### **METALLURGICAL METHODS**

The metallurgical amenability of the resource extraction has not been evaluated in sufficient detail at this point. Metallurgical testing of drilled core would be required to determine the metallurgical amenability of the resource areas. The lack of metallurgical data was a consideration in keeping the mineral resource areas categorised as inferred resources where the drilling density could lend to defining an indicated resource.

#### -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.

#### **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 Figures 1 & 2

- https://www.eia.gov/uranium/production/quarterly/qupdtable4.php
- https://www.sec.gov/Archives/edgar/data/1334933/000143774922022435/ex\_423213.htm
- 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
- <u>http://static1.1.sqspcon.com/static/i/su3515/5/53362/1266121044317/L0st+Soldier+43-</u>
   <u>https://wcsecure.weblink.com.au/pdf/PEN/02664858.pdf</u>
- https://www.sec.gov/Archives/edgar/data/1385849/000127956917000321/ex991.pdf

## **GTI ENERGY LTD – PROJECT PORTFOLIO**

#### POWDER RIVER BASIN, ISR URANIUM,

#### WYOMING, USA

GTI holds 100% of ~13,300 acres (~5,400 hectares) over a group of strategically located mineral lode claims (Claims) & 4 state leases (Leases) highly prospective for sandstone hosted uranium. The Lo Herma Project (Lo Herma) is located in Converse County, Powder River Basin, Wyoming. The project lies approximately ~15 miles north of Glenrock and within ~60 miles of 5 permitted ISR uranium production facilities & several satellite ISR uranium deposits. These facilities include UEC's Willow Creek (Irigaray & Reno creek) ISR plant, Cameco's Smith & Hyland Ranch ISR plants and Nichols Ranch ISR plant owned by Energy Fuels Inc. The Powder River Basin has an extensive ISR uranium production history and has been the backbone of the Wyoming uranium production business since the 1970s.

#### GREAT DIVIDE BASIN & GREEN MOUNTAIN ISR URANIUM, WYOMING, USA

GTI Energy holds 100% of ~34,000 acres (~13,500 hectares) over several groups of strategically located and underexplored mineral lode claims (**Claims**) & 2 state leases (**Leases**), prospective for sandstone hosted uranium that is amenable to low cost, low environmental impact ISR mining. The properties are located in the Great Divide Basin (**GDB**) and at Green Mountain<sup>3</sup>, Wyoming, USA. The properties are located in proximity to UR-Energy's (**URE**) operating Lost Creek ISR Facility the GDB roll front REDOX boundary. The Green Mountain Project contains a number of uranium mineralised





roll fronts hosted in the Battle Springs formation near several major uranium deposits held by Rio Tinto.

### HENRY MOUNTAINS CONVENTIONAL URANIUM/VANADIUM, UTAH, USA

The Company has ~1,800 hectares of land holdings in the Henry Mountains region of Utah, within Garfield & Wayne Counties. Exploration has focused on approximately 5kms of mineralised trend that extends between the Rat Nest & Jeffrey claim groups & includes the Section 36 state lease block. Uranium & vanadium mineralisation in this location is generally shallow at 20-30m average depth. The region forms part of the Colorado Plateau. Sandstone hosted ores have been mined here since 1904 and the mining region has produced over 17.5Mt @ 2,400ppm U<sub>3</sub>O<sub>8</sub> (92Mlbs U<sub>3</sub>O<sub>8</sub>) & 12,500ppm V<sub>2</sub>O<sub>5</sub> (482Mlbs V<sub>2</sub>O<sub>5</sub>)<sup>4</sup>.



<sup>&</sup>lt;sup>3</sup> https://www.asx.com.au/asxpdf/20220406/pdf/457rgrxcdh0v8p.pdf

<sup>&</sup>lt;sup>4</sup> Geology and recognition criteria uranium deposits of the salt wash types, Colorado Plateau Province, Union Carbine Corp, 1981, page 33

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

## 1.1 Section I Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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> <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 mineralisation, and to create a drill hole database. The original downhole 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 mineralised intercepts.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Drilling consisted of vertical drill holes, approximately 4 – 6 inches in diameter. The drilling method employed was standard circulation mud rotary drilling using conventional, truck mounted drilling rigs.</li> </ul>
Drill sample recovery	<ul> <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> <li>Cuttings samples were taken at regular and recorded on lithological log sheets which are included with several of the drill hole records.</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> <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> </ul>	<ul> <li>Lithologic logs completed by geologists are available for several of the holes.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <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> <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. The factors applied to convert the CPS data to grades and thicknesses can be qualitative in nature, for example the selected discretization intervals of the data and other modifying factors discussed in the</li> <li>The entire lengths of the drill holes were logged. Where the Natural Gamma CPS curves exceeded the logging scale, the high gamma intervals were re-logged at a greater CPS logging scale to measure the full amplitude of the gamma measurements.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <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> <li>No core is included as part of the database package.</li> <li>Natural Gamma was interpreted on half-foot intervals which is standard for the U.S. uranium industry.</li> <li>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 laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <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>	<ul> <li>The data is limited to eU<sub>3</sub>O<sub>8</sub> calculations based on data supplied by a downhole gamma sonde.</li> <li>Calibration factors are included with the geophysical logs.</li> <li>eU<sub>3</sub>O<sub>8</sub> grade is considered to be an equivalent assay value in the U.S. uranium industry.</li> <li>Verification twinning of a subset of the historic drill holes will be completed as part of the future exploration plans.</li> <li>Only a very limited amount of measurements of radiometric disequilibrium are available which are only representative of one sand in one part of the project, which 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 and 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</li> </ul>

Criteria	JORC Code explanation	Commentary	
		industry standard parameters based on the host geologic formation and standard across other projects in the same geologic setting.	
Verification of sampling and assaying	<ul> <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> <li>All referenced data was reviewed by the CP and the personnel working under the direction of the CP.</li> <li>The newly calculated intersections based on the digitized gamma logs were compared to historical intercept values included with the data package. The historical database include 27 intercepts from holes with available logs. The newly interpreted grade thickness (calculations correlated linearly with the historical GT interpretation)</li> </ul>	
		GIData Correlation 0.8000 0.7000 0.6000 0.5000 0.5000 0.3000 0.3000 0.2000 0.	

Above Figure: Linear regression comparing the historical database GT intercepts (X-Axis) and the corresponding newly interpreted GT intercepts (Y-Axis) from the digitized gamma data.

y = 1.1592x - 0.038  $R^2 = 0.974$ 

0.0000 0.2000 0.4000 0.6000 0.8000 Database GT

- Verification twinning of a subset of the historic drill holes will be completed as part of the future exploration plans to further validate the data.
- The primary drillhole data (geophysical logs) were scanned and digitized by a third party service. Each original log was spot checked against the digitized gamma output for accuracy. The original logs

0.1000 0.0000

Criteria	JORC Code explanation	Commentary
		<ul> <li>are stored at GTI's Wyoming office (BRS Engineering). The scanned original log rasters, .LAS digitized log files, grade interpretation database, and intercept databases are all stored electronically on BRS's servers which include data backup protocols.</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 original water factors, K-Factors, and deadtime gamma value adjustments.</li> </ul>
Location of data points	<ul> <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> <li>Drill hole locations are based on map picks from 1"=50' scale and 1"=200' scale geo-rectified drilling maps.</li> <li>A 1978 paper format drill hole collar database was included as part of the data package. 171 collar locations included in the collar database were cross checked with coordinates from the drill hole map picks. The difference between the database values and the map picks was determined to range from 0.01 – 18.75 feet, averaging 2.74 feet with a standard deviation of 2.90. Reported as absolute values.</li> </ul>
		Map Picks vs Database Coordinates
		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
		Above Figure: Scatterplot showing Northing and Easting differences in feet between the Drill Hole map picks and the historical collar database.
		<ul> <li>If historical drill sites are discovered in the field, any locatable drillholes will be surveyed with a sub-meter GPS for further validation analysis.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>Location data will be collected in latitude and longitude as well as State Plane coordinates.</li> <li>The drill hole maps and paper database use the NAD27 StatePlane Wyoming East FIPS 4901 (US Feet) coordinate system. Coordinates were converted to and stored in NAD 1983 StatePlane Wyoming East FIPS 4901 (US Feet).</li> <li>The resolution of the topographic elevation control is 1/3 Arc Second (approximately 10 meters). This is an adequate level of detail for this stage of the exploration project.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <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>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>Downhole gamma logging data was interpreted on 0.1 and 0.5 foot (0.03m and 0.15m) intervals following standard uranium industry practice in the U.S.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <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> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>The 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
		No physical drill samples are available.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>All of the digitized gamma data was reviewed for quality and accuracy by project personnel.</li> <li>A comparison audit of grade and grade thickness intercepts was conducted using the 1978 intercept and collar database that was included with the data package. The database intercepts were first verified using hand calculation methods. Intercepts from the modern digitization effort were compared to those in the historical database to confirm correlation between the results, the results of which are discussed in the <i>Verification of sampling &amp; assaying</i> section of this table.</li> <li>The calibration data and grade calculation methods were reviewed and verified by the CP.</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> <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> <li>The Lo Herma Project is located on unpatented mining lode claims and State of Wyoming Mineral Lease lands in Converse County, Wyoming.</li> <li>The Lo Herma mining lode claims cover 11,074 acres with 595 total claims. At the time of this release, 32 of the claims (620 acres) are pending filing but are exclusively held for location by GTI under a NOITL. The company intends to stake these claims as soon as surface access agreements are in place. However, these claims do not materially affect the mineral resources or exploration targets stated herein.</li> <li>The State of Wyoming Mineral Leases consists of 4 uranium lease agreements covering 3.5 sections of land totaling 2,240 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>

Criteria	JORC Code explanation	Commentary
		GTI LODE CLAIMS
		ーT035N·R077WT035N/R076W
		Above Figure: GTI Lo Herma Lode Claim Areas and Lease Areas
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <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	• Deposit type, geological setting and style of mineralization.	<ul> <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 sedimentary sequences, lacking a distinctive marker bed in this part of the basin. Geologic mapping shows most of the project to be</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>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.</li> <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>
Drill hole Information	<ul> <li>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: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul> <li>The historical drilling database contains 1,391 unique digitized drill holes and is too large to include in this table.</li> <li>845 of the historical drill holes were used in creation of the resource model and the collar locations of these holes are depicted on the summary map (Figure 4).</li> <li>All holes were drilled vertically.</li> <li>The thicknesses and grades of the drill hole intercepts are summarized in the following figures:         <ul> <li><sup>30</sup>/<sub>20</sub></li> <li><sup>31</sup>/<sub>20</sub></li> <li><sup></sup></li></ul></li></ul>

Criteria	JORC Code explanation	Commentary
		Above Figure: Intercept Thickness Histogram
		• Mean: 355.49 • Mean: 344 • Mean: 344 • Mean: 345.49 • Mean: 345.49 • Mean: 344 • Mean: 344 • Mean: 345 • Mean: 344 •
Data aggregation methods	<ul> <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> <li>Raw gamma-log data was composited into half-foot composites (6 inch, or ~0.15m).</li> <li>A minimum grade of 0.02 % eU<sub>3</sub>O<sub>8</sub> was applied to define mineralized intercepts with a corresponding minimum intercept thickness resulting in a minimum grade thickness (GT) of 0.1.</li> <li>The same cut-off criteria was used in preparing the mineral resource estimate and is discussed in more detail in Section 3 JORC table.</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> <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> <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> <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> <li>All of the appropriate and relevant diagrams have been included in this announcement.</li> <li>A scatterplot of the intercept Grades and Thicknesses is included below.</li> </ul>

Criteria	JORC Code explanation	Commentary
		0.11 0.09 0.08 0.07 0.06 0.05 0.04 0.02 0.2 4.6 8.10 12 14.16 18.20 22 24.26 28.30 32 Intercept Thickness
		Above Figure: Scatterplot showing intercept thickness (feet) and intercept grade (%eU₃O₅).
Balanced reporting	<ul> <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> <li>All available drill hole locations from the drill hole maps within the project property are shown on the included drill hole collar map (Figure 4). The drillholes collars represent all known drillholes including barren holes.</li> </ul>
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>Redox trend interpretations by sand horizon were shown on drilling maps included with the data package and represent many aggregated years of work by the original exploration geologists. The interpretations honor the drilling data and agree with the geologic model applied to the deposit.</li> <li>The original redox trend interpretations were geo-rectified, traced, mapped for plan-view lengths to use in the calculation of the exploration target range.</li> <li>Width, thickness, and grade values were assumed from average results from the corresponding mineral resource estimate areas by sandstone horizon.</li> </ul>
Further work	<ul> <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> <li>An airborne radiometric survey has commenced at Lo Herma .</li> <li>An exploration and verification drilling program is being planned to twin a subset of the historical holes as well as target areas of limited data and explore extensions of the interpreted mineralization.</li> <li>A limited number of core holes are planned to obtain direct measurements of leachability, host rock density, and radiometric disequilibrium.</li> </ul>

## 1.3 Section 3 Estimation and reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database Integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Historic logging was collected onto analog paper gamma log charts. The original log charts were digitized for CPS gamma data. The digital gamma data was spot checked against the original charts for validation. The validated Gamma values were converted to equivalent uranium grade percent (eU<sub>3</sub>O<sub>8</sub>%). The CP has reviewed and approved the methods used to calculate eU<sub>3</sub>O<sub>8</sub>%, which adheres to industry standard methods.</li> <li>A database of mineral intercepts was manually constructed into excel. Outlier values were checked for validity and no major transcription errors were discovered.</li> <li>The competent person and additional staff performed additional visual validation by reviewing the original drillhole logs in comparison to the mineral intercept values.</li> <li>A comparison audit of grade and grade thickness intercepts was conducted using the 1978 intercept database that was included with the data package. The database intercepts were first verified using hand calculation methods. Intercepts from the modern digitization effort were compared to those in the historical database to confirm correlation between the results. The results of the audit are further discussed in Table 1.1 <i>Verification of sampling and assaying</i>.</li> <li>The original raw data is retained for further review and validation.</li> </ul>
Site Visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	• The competent person visited the site before acquisition of the data package was completed. Additional site visits have been performed by the CP and staff to assess drill site accessibility and search for historical drilling locations.
Geological Interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The CP has a high level of confidence in the geologic model applied to the mineral deposit. Sandstone hosted roll front style Uranium deposits are prevalent within the geologic setting. The character of the observed mineralization fits the geologic model. The CP has extensive knowledge and over 45 years of direct experience with roll-front uranium mineralization, which includes several projects in the same geologic formations within the Powder River Basin.</li> <li>The nature of the data used is original historical exploration results. The data appears to adhere to industry standard Uranium practices of the 1970's.</li> <li>No representative measurements of radiometric disequilibrium conditions were available which could affect the equivalent U<sub>3</sub>O<sub>8</sub> percent grade calculations used to determine grade. An assumed disequilibrium factor of 1 was used in</li> </ul>

Criteria	JORC Code explanation	Commentary	
		<ul> <li>preparation of this inferred resource. Based on the geologic setting and knowledge of similar deposits, the CP feels that this assumption is appropriate for this phase of the project.</li> <li>All drill holes were intended to be vertical, no direct downhole deviation measurements exist for the historical data. The drill holes are all assumed to be vertical or near vertical for purposes of the mineral resource estimate. Mineralization and geologic strata are relatively flat lying. Measured drill hole intercept lengths are assumed to be true measurements of thickness.</li> <li>No alternative interpretations were made in producing the Inferred Mineral Resource Estimate.</li> <li>Uranium mineralization in the Wasatch and Fort Union formations occurs as roll front type uranium deposits hosted 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 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.</li> <li>Geologic interpretation for uranium mineralization within the Lo Herma Prospect and Powder River Basin at large consists of roll-front style deposits which occur in long, sinuous bodies which are found adjacent and parallel to geochemical redox fronts. Continuity of the permeable host deposits and the continuity of reducing conditions within the host deposit. Local variabilits and the continuity of reducing materials or variability in the permeability of the host deposit can affect the continuity of grade and dimensions of the deposit.</li> </ul>	
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>The extents and variability are presented in Figures 4 and 5 in plan view.</li> <li>The interpreted length along strike is largely controlled by drill hole density. Drill hole data meeting the minimum cutoffs were projected along a general NE-SW oriented anisotropy and at an average range of 600 feet as indicated by semivariography. Where the drill hole data and redox trend interpretations supported further projection, it was limited to no further than 1,000 feet.</li> <li>The width of the mineral resource is largely controlled by drill hole density, but in no case is projected further than 600 feet.</li> <li>The projection distance is supported by semivariography and covariance geostatistical models using ordinary kriging. It is of the CP's opinion that 600 feet is a conservative projection distance for an inferred mineral resource estimate in this geologic setting.</li> </ul>	

Criteria	JORC Code explanation	Commentary
		<ul> <li>The depth below surface of the upper and lower limits of the mineral resources vary significantly based on the stratigraphic position of the host sandstone horizon, position relative to dip, and overburden topography. In general, the D sand horizon is the shallowest mineral resource area, with the upper limit of the deposit being 139 feet below the ground surface. The A sand horizon is generally the deepest mineralized horizon, however, the lower limit of mineralization within the defined resource areas is at 640 feet below the ground surface in the B sand horizon due to the areas far east location, down dip of other resource areas.</li> <li>The depth to mineralization histogram in Table 1.2 <i>Drill hole Information</i> represents all of the known mineralized intercepts on the property, which does not represent only the subset of intercepts considered in defining the Mineral Resource areas.</li> </ul>
Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> </ul>	<ul> <li>The Grade Thickness (GT) contour method was used to estimate the inferred mineral resources and is well accepted within the uranium industry. Intercepts down to a value of 0.1 GT were considered in developing the GT contour models. Multiple intercepts within the same drillhole with values of 0.1 GT or greater were summed when located within 25 vertical feet and were reliably interpreted as being within a continuous sandstone horizon.</li> <li>A cut-off grade of 200 ppm eU<sub>3</sub>O<sub>8</sub> and a grade thickness (GT) cut-off of 0.2%ft was used in preparation of the estimation, which is consistent with ISR Uranium industry standards within the Powder River Basin and the Wyoming ISR Uranium industry at large.</li> <li>Resource areas with a value less than 0.2%ft GT are not considered to be reasonably economically extractable at this time.</li> <li>Autocad Civil3D software was used to assist with the GT contour method of estimation. Constraining GT contours were manually interpreted to honor geologic continuity between datapoints. Resulting contours were adjusted to honor an inverse distance squared relationship between GT values.</li> <li>No assumptions regarding recovery of by-products or deleterious elements were used.</li> <li>The geological interpretation favored continuity of mineralization along the interpreted redox trend directions.</li> <li>A grade cutoff of 200 ppm eU<sub>3</sub>O<sub>8</sub> was used. Any grade values below 200 ppm were considered a zero value for resource estimation. Trace mineralized intercept values were considered only for indications of possible extensions of mineralization.</li> <li>The input data used to generate the model was correlated using cross sectional 3D analysis of intercept hole data to check for continuity of sand horizons and mineralization.</li> </ul>

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	<ul> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>						
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	The tonnages are	calculated	and reported on	a dry basis.		
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>A cut-off grade of was used in prepa</li> <li>The cut-off param Powder River Bas</li> <li>A sensitivity analy varying the GT cu 0.2%ft GT cutoff i considering the an</li> </ul>	200 ppm e aration of th neters are ty sin and the vsis was co ut-off. The us s the prefer vailable know	$U_3O_8$ and a grad re estimation. /pical of ISR uran Wyoming ISR U nducted holding results of which a red cut-off for th owledge at this s	le thickness (GT) of nium industry stan ranium industry at the grade cut-off a are shown in the for e mineral resource tage of project dev	cut-off of 0.2%ft dards within the large. at 200 ppm whil pllowing table. e estimate when velopment.	t e le The n
		Below Table: Sens	itivity Ana	ysis of Resourc	ce at varied GT c	utoffs	_
		GT Cutoff (200 PPM Grade Cutoff)	Tonnes (Millions)	Average Sum Thickness (ft)	Average Grade (ppm eU <sub>3</sub> O <sub>8</sub> )	Pounds eU₃O₅ (Millions)	
		0.1%ft GT Cutoff	6.11	4.12	2 590	7.91	
		0.2%ft GT Cutoff*	4.12	5.74	630	5.71	
		0.4%ft GT Cutoff	2.10	8.23	660	3.07	,
		*Preferred scenario f	or prospect	ive economic ex	traction.		
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul> <li>The estimation as</li> <li>In order to be and the static water ta must allow for add</li> <li>The hydrogeologi measurements of fully support ISR a</li> <li>ISR methods hav geologic region.</li> <li>The lack of repres leachability, dens</li> </ul>	ssumes min endable to able and the equate flow c data acro formation ( as a mining e been sho sentative ar ity, and rad	ing by In-Situ red ISR mining meth permeability an of lixiviant. ss the property is porosity or transr method. wn to be effectiv nd supporting sta iometric disequil	covery (ISR) meth ods, all resources d transmissivity of s very limited. No missivity are availa e in similar deposi atic groundwater ir ibrium data is a fa	ods. must occur be the host depose representative able at this time its within the sa formation, ctor in maintain	low sit to ame

Criteria	JORC Code explanation	Commentary
		the resource areas as an inferred category, even where higher density drill spacing would typically be sufficient to estimate an indicated resource.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>The metallurgical amenability of the resource extraction has not been evaluated in sufficient detail at this point. Metallurgical testing of drilled core would be required to determine the metallurgical amenability of the resource areas.</li> <li>The lack of metallurgical data was a consideration in keeping the mineral resource areas categorized as inferred resources where the drilling density could lend to defining an indicated resource.</li> </ul>
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul> <li>The mineral resources do have risks similar in nature to mineral resources on other mineral projects in general and uranium projects in particular. Lo Herma is a greenfields project and study of the potential environmental impacts are not well advanced.</li> <li>Environmental, social, and political acceptance of the project could cause delays in conducting work or increase the costs.</li> <li>Wyoming is typified as a pro energy development state and the project is in proximity to active oil and gas operations.</li> <li>Typical ISR mining operations require deep disposal wells for limited amounts of fluids that cannot be returned to production aquifers.</li> </ul>
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> </ul>	<ul> <li>A dry bulk density value of 16 cubic feet per short ton is assumed for the deposit. This is a typical dry bulk density value used in estimating resources within the geological context of the deposit and region. At this phase of project development, the CP feels that the assumed bulk density value is appropriate.</li> <li>Representative density testing of recovered core is to be part of future development activities of the property.</li> <li>The lack of direct bulk density measurements was a consideration in maintaining the resource in the inferred category where spacing of drill holes could lend to an indicated level of resource.</li> </ul>

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	<ul> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>No audits or outside reviews have been conducted of the Inferred Mineral Resource estimate.</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The Inferred Mineral Resource is a global estimate and reflects the wide spaced drilling where the geological evidence is sufficient to imply but not verify geological and grade continuity, thus it is considered not necessary to assess the relative uncertainty in tonnage and grade.</li> <li>There is no production data available.</li> </ul>