

ASX Announcement

13 December 2021



Drilling Complete at Thunder

Highlights

- Reverse Circulation ('RC') drilling has now been completed at the Thunder Copper-Gold Target
- Drilling at Thunder has intersected broad zones of hydrothermal alteration within pyritic black shale. Hydrothermal alteration was found in all 11 RC drill holes in downhole intervals
- Assays are expected in February 2022

Note: Information provided is based on field observations of drill chips only which are inherently uncertain due to the very fine-grained nature of the rock type encountered and are not a proxy for assay results.

Great Western Exploration Limited (ASX: GTE) ("Great Western" or "the Company") is pleased to announce that it has completed the initial drill programme at the Thunder Copper-Gold Target.

Thunder Copper-Gold Target (100% Great Western)

Great Western has completed 11 RC holes for 1,452 metres drilled to an average depth of 132 metres to test the EM anomaly at Thunder and the Ultra Fine + soil anomalies. Samples are now on their way to ALS Laboratory for multi element analysis.

The drilling at Thunder intersected broad zones of hydrothermal alteration comprising mostly of hematite, silica and \pm pyrite ("alteration").

The very fine-grained nature of the alteration makes it difficult to confidently identify each separate mineral and quantify in the field however, pyrite was recognised. Further detailed microscopy and petrological studies are planned to assist in identifying other potential alteration minerals.

The following table lists the drill holes and their corresponding downhole intervals of alteration¹. Mineralisation, if any, within these intervals will only be determined by assays.

Table 1. Field Estimated Downhole Intervals of Hydrothermal Alteration

Hole No	Hole Depth	From	To	Interval (m)
GTHR001	120	27	85	58
GTHR002	120	24	79	55
GTHR003	120	17	74	57
GTHR004	120	22	120	98
GTHR005	102	35	102	67
GTHR006	180	50	180	130
GTHR007	108	38	108	70
GTHR008	120	28	120	92
GTHR009	180	11	180	169
GTHR010	162	19	162	143
GTHR011	120	17	120	103

Generally, the alteration comprises of 5m – 10m of weak to strong hematite alteration in the hanging wall transitioning to moderate to strong silica alteration for the remainder of the altered zone, that appears to be strata bound and shallow dipping.

The drilling has also demonstrated the alteration is widespread with approximately 2.2 km² already delineated and correlates with the Ultrafine + copper and gold soil anomalies. The alteration appears to get stronger towards the southwest where the accompanying increase in pyrite is interpreted to be the source of the EM anomaly (Figure 1).

Proterozoic Setting

The alteration seen in the drilling is occurring in Proterozoic aged rocks and postdates the formation of the host shale (epigenetic) which is also believed to be Proterozoic in age. The alteration is hosted in the Maralouu formation within the Yerrida Proterozoic Basin.

The Company believes the rock types and geological setting at Thunder are similar to those that host the Zambia Copperbelts² and is encouraged that it has intersected broad zones of alteration. The Company has interpreted the alteration as evidence that processes that can lead to the formation of sediment – hosted base metal mineralisation may also be occurring within this setting.

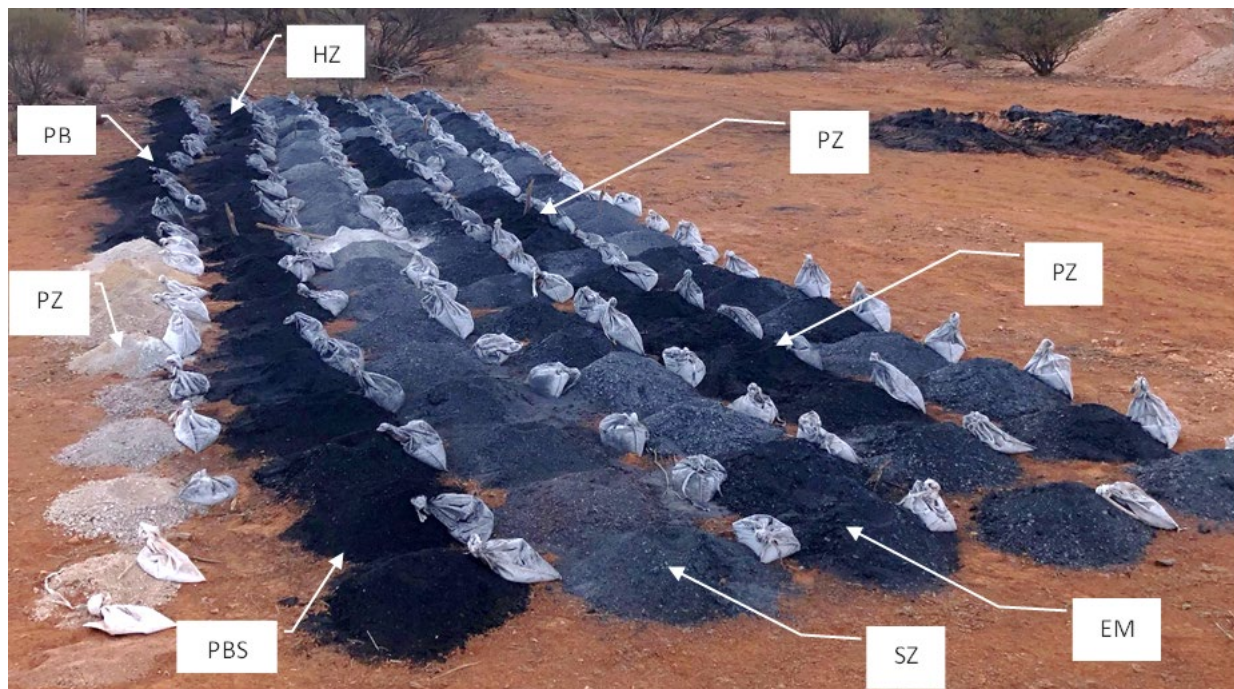


Figure 1: Hole GTHR009 the Company believes intersected the EM anomaly. PZ: pallid zone; PBS: pyritic black shale; HZ: hematite zone; SZ: silica zone \pm pyrite (pale grey zone); EM: ~10% veining with semi-massive pyrite interpreted as the main source of EM conductor; PZ: intervals of increased pyrite up to disseminated 5% (black)



Figure 2: Drilling was completed by Hagstrom Drilling at the Thunder Copper-Gold Target

Great Western considers these preliminary observations to be promising and indicative of a potentially large hydrothermal system, but it will only be on receipt and analysis of assays that the outcome of the drilling programme at Thunder can be accurately assessed.

The next stage of exploration across the Thunder Copper-Gold Target area will be planned once assay results have been received. The Company looks forward to providing further updates as results become available.

Authorised for release by the board of directors of Great Western Exploration Limited.

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Competent Person Statement

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr. Jordan Luckett who is a member of the Australian Institute of Mining and Metallurgy. Mr. Luckett is an employee of Great Western Exploration Limited and owns shares and Employee Options in Great Western Exploration Limited. Mr Luckett has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Luckett consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Related Announcements

27 October 2021	Thunder Copper Gold Target Enhanced, Drilling Imminent
18 May 2021	New Copper-Gold Target Defined

References

1. Alteration intersections are defined for this report as the zones of weak to strong hematite and silica alteration which are ubiquitous within which there appears to be variations in concentrations of pyrite as well as possible chlorite, sericite and other unidentified minerals and veining.
2. USGS Sediment Hosted Cu Deposits Model 30b; Cox 1986 and USGS Sediment-Hosted Copper Deposits of the World: Deposit Models and Database; Cox et al 2007

Appendix 1. Drill Plan and Summary

Table 2. Thunder Drillhole details

Hole No	Easting	Northing	Depth	Dip	Azimuth
GTHR001	782803	7072605	120	-60	90
GTHR002	782010	7072605	120	-60	90
GTHR003	785012	7172197	120	-60	90
GTHR004	781210	7073002	120	-60	90
GTHR005	780922	7072166	102	-60	90
GTHR006	780842	7072168	180	-60	90
GTHR007	781004	7072049	108	-60	90
GTHR008	780906	7072044	120	-60	90
GTHR009	780828	7072042	180	-60	90
GTHR010	781076	7071820	162	-60	90
GTHR011	782867	7071411	120	-60	90

Co-ordinate Grid: GDA94 Zone 50

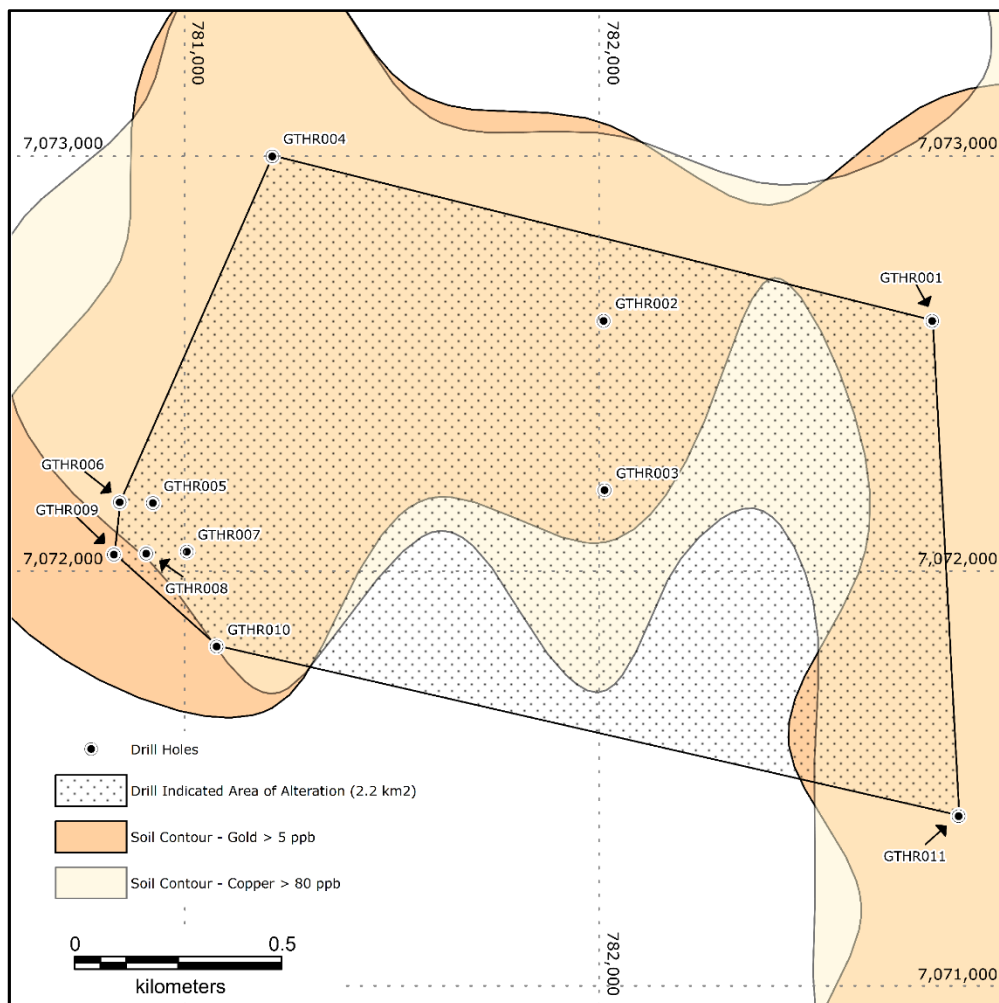


Figure 3. Drill Hole Location plan – Thunder Prospect

Appendix 2.

JORC Code, 2012 Edition (Table 1) – Thunder exploration drilling

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"> <i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	Reverse circulation drilling was used to obtain 1 m samples from which geological logging was completed.
Drilling techniques	<ul style="list-style-type: none"> <i>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).</i> 	a) Reverse circulation drilling completed by Hagstrom Drilling, b) 5.5” diameter hole, c) Face sampling bit

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	Sample recovery was visually inspected, and intervals recorded where there was low recovery recorded by the geologist on site. The majority of samples appeared consistent for each metre downhole.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<p>a) 100% of the drill holes were quantitatively (geological) logged on site.</p> <p>b) Each 1m sample was sieved (both wet and dry) and logged for regolith, lithology, structure, veining, alteration and mineralisation by the qualified geologist on site.</p>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	Not applicable - No assays reported
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have 	Not applicable – No assays reported

Criteria	JORC Code explanation	Commentary
	<i>been established.</i>	
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	Not applicable – No assays reported
Location of data points	<ul style="list-style-type: none"> <i>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.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	a) Drill hole collars located using handheld GPS +/- 5m accuracy in plan b) Grid: UTM c) Datum: MGA94 d) Zone: 50
Data spacing and distribution	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <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> <i>Whether sample compositing has been applied.</i> 	a) ~120m x 80m testing the EM anomaly b) Regional scale ~ 1km spaced drilling to test the Ultrafine + soil anomalies.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <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> <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> 	a) Insufficient close spaced drilling to determine dip or true thickness of the zone.
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	Not Applicable – No assays reported
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	Not Applicable – No Assays Reported

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 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. 	<p>Tenement No: E53/1894</p> <p>Tenement Type: Exploration License</p> <p>Status: Granted - 24/05/2017</p> <p>Location: Wiluna</p> <p>Size (km2) 213</p> <p>Ownership: 100%</p> <p>Native Title: Prospect area covered by Determined Native Title claim; TMPAC; Regional Land Access Agreement executed</p> <p>Other Agreements: none</p> <p>Non-State Royalties: none</p> <p>Other Encumbrances: none</p> <p>National Parks: none</p> <p>Other Environmental: Paroo calcrete PEC covers a portion of the E53/1894 tenement, include some of the Thunder copper-gold target.</p>
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<p>There is limited previous exploration within the Project areas.</p> <p><u>Thunder copper gold Target</u></p> <p>2011: MMI sampling by Emergent Resources Limited was reported in WAMEX reports A91893 & A91898 and details of this historical work was disclosed in Company (GTE.ASX) announcements dated 30/11/2020 – Large Scale Copper-Gold Targets identified at Copper Ridge and 15/01/2021 Quarterly Activities Report for the Quarter ended 31 December 2020</p> <p>Ultrafine+ soil sampling completed by GTE and announced to the market dated 18/05/2021 - New Copper-Gold Target</p>

Criteria	JORC Code explanation	Commentary
		<p>Defined</p> <p>MLEM survey completed by GTE and announced to the market date 28/07/2021 - Large, Strong EM Anomaly Enhances Prospectivity of Thunder</p> <p>Large area of scrapings thought to be for gold prospecting according to the pastoralist, no public record to confirm this claim</p>
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	VMS, sedimentary Hosted Copper & Base Metals
Drill hole Information	<ul style="list-style-type: none"> <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"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <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> 	See Appendix 1 for drill hole collar summary and plan.
Data aggregation methods	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-</i> 	Not applicable – No assays reported

Criteria	JORC Code explanation	Commentary
	<p><i>off grades are usually Material and should be stated.</i></p> <ul style="list-style-type: none"> • <i>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.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>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').</i> 	Not applicable
Diagrams	<ul style="list-style-type: none"> • <i>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.</i> 	See body of announcement and Appendix 1.

Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul style="list-style-type: none"> 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. 	<p>The results from the Thunder RC drilling have been consolidated and summary statistics table is included Appendix 1.</p> <p>Maps showing all gold and copper soil assays included in Appendix 1</p>
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	Not applicable
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Further work to be determined once assays are received