

31 January 2020

December 2019 - Quarterly Activities Report

The following is Great Western Exploration Limited's ("the Company", "Great Western", ASX: GTE) Activities Report for the quarter ending 31 December 2019.

Highlights:

Yandal West Gold Project

Harris Find

- RC drilling confirmed significant high-grade gold mineralisation including **2m @ 7.75 g/t gold (incl. 1m @ 15.1 g/t) from 20m.**
- These results validate the historical work that includes drilling and underground sampling that included 2m @ 15 g/t gold, 2m @ 6.55 g/t gold and 7m @ 4.31 g/t gold as well as 105 g/t, 10.6 g/t and 9.6 g/t **from** underground sampling.
- The results also indicate a second gold lode at depth in the footwall that returned **2m @ 1.38 g/t** from 52m.
- Drilling has only tested to a maximum depth of 40m and the mineralisation remains open in all directions
- Surface rock chip sampling up to **28 g/t gold** has also extended the trend further south, past the extents of the historical drilling, increasing the trend to at least 340m strike.
- The drilling at Harris Find intersected a sequence of chert, mafic & felsic volcanics with gold associated with micro veining and semi massive sulphides that is more typically associated with VMS style mineralisation. The Company is in the process of reviewing historical data in the context of potential VMS style mineralisation.
- Harris Find remains a high priority target and further work is being planned.

May Queen East

- At May Queen the 1m results have confirmed the continuation of high-grade near surface gold along the Harris Find Shear Zone ('HFSZ') target that include **2m @ 3.89 g/t (incl 1m @ 7.3 g/t) gold from 3m.**
- These results indicate at least 550m of continuous gold mineralisation from surface that remains open at depth and along strike. Further drilling is being planned.

New Target

- A new high-grade gold target has been identified 2km north along strike of Harris Find where rock chip sampling returned **23.5 g/t gold.**

Yandal West Gold Project

The Yandal West Gold project is located within Western Australia's world-class Yandal gold belt. The project is 55 km along strike to the northwest & north of the Bronzewing (~ 3M oz.) and Mt McClure (~ 1.2M oz.) gold deposits respectively and 60km southeast of the Jundee gold deposit (> 10M oz.) (**Fig 1**). The project comprises the 100% owned Ives Find, May Queen, and the 80% owned Harris Find tenements.

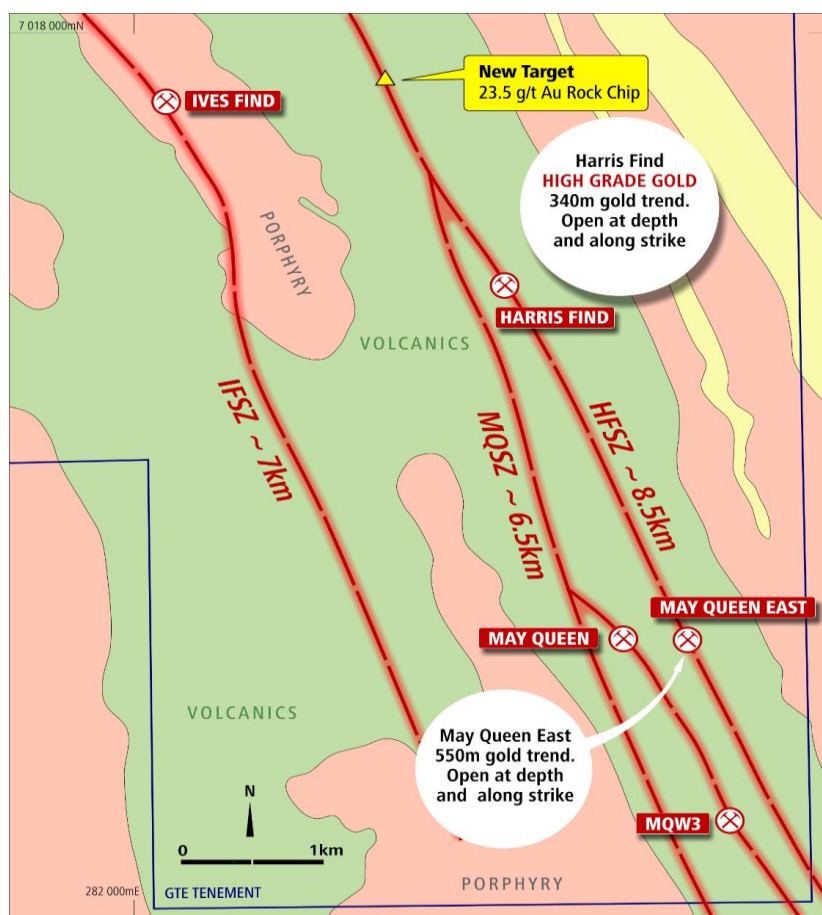


Figure 1. Location of the Ives Find and May Queen Prospects at the Yandal West Gold project.

During the quarter Great Western Exploration Limited completed 6 RC holes for 420m. Three RC holes were completed at Harris Find and three holes were completed at May Queen (**Fig 1**).

Harris Find

At Harris Find the drilling completed during the quarter confirmed the high-grade nature of the prospect, validated the historical drill results and identified previously unknown gold mineralisation at depth in the footwall. In addition, rock chip sampling extended the surface gold trend past the limit of the historical drilling to 340m strike (**Fig 2**).

Three RC holes were completed with two holes (HFRC102 & HFRC103) intersecting the main target zone gold mineralisation to the south (Fig 2 & 3). Hole HFRC102 also intersected a second previously unknown gold mineralised zone at depth in the footwall. The results included:

HFRC102: **2m @ 7.75 g/t gold** from 20m and **2m @ 1.38 g/t** from 52m

HFRC103: **4m @ 0.54 g/t gold** from 28m

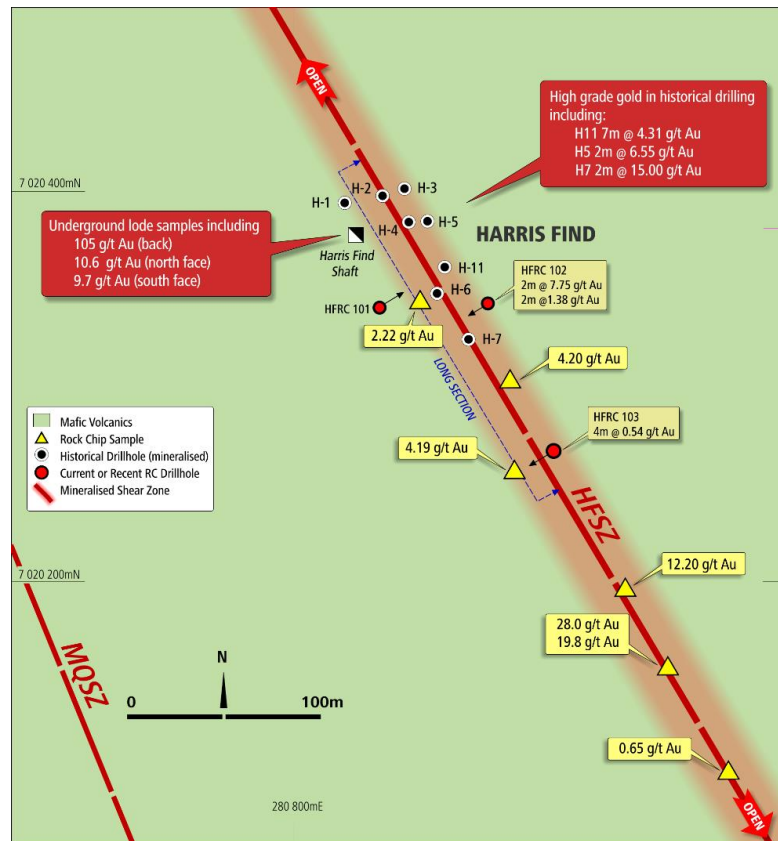


Figure 2. Harris Find plan showing the drilling and continuation of high-grade gold at surface past the limits of drilling. The gold mineralisation intersected in both the historical and current drilling remains open in all directions.

The drilling also validated the historical work that includes drilling and underground sampling that included 2m @ 15 g/t gold, 2m @ 6.55 g/t gold and 7m @ 4.31 g/t gold as well as 105 g/t, 10.6 g/t and 9.6 g/t from the underground sampling.

Rock chips indicate the gold trend continues south past the limits of the historical drilling, increasing the gold trend to approximately 340m strike. New rock chip results include **28 g/t gold, 19.8 g/t gold and 0.65 g/t gold** as well as previously announced results of 2.2 g/t gold, 4.2 g/t gold, 4.19 g/t gold and 12.2 g/t gold (Fig 2).

Drilling has only tested to a maximum depth of 40m and the gold mineralisation remains open along strike and down dip. Furthermore, wider zones of lower grade mineralisation in the footwall past the main target zone may indicate increasing intensity at depth.

The Company is currently planning a follow up drilling campaign.

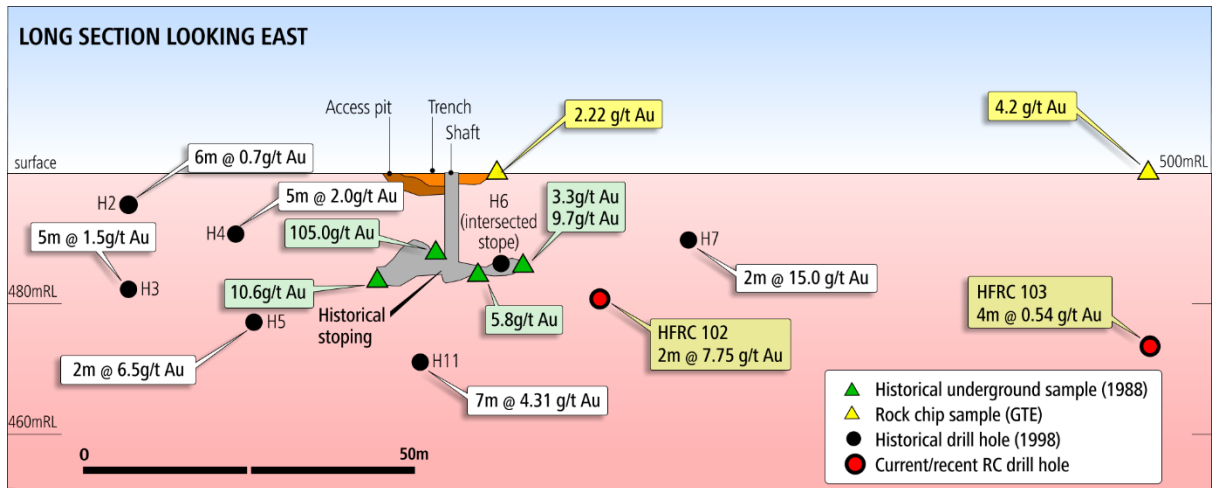


Figure 3. Harris Find long section demonstrates the main gold zone is continuous and remains open in all directions. Furthermore, the drilling is only to 30m vertical depth and the gold mineralisation appears to be intensifying at depth under and around the old workings.

May Queen East

At May Queen East the drilling along the HFSZ provided further evidence of a significant drill indicated gold trend at least approximately 550m long that remains open along strike and at depth.

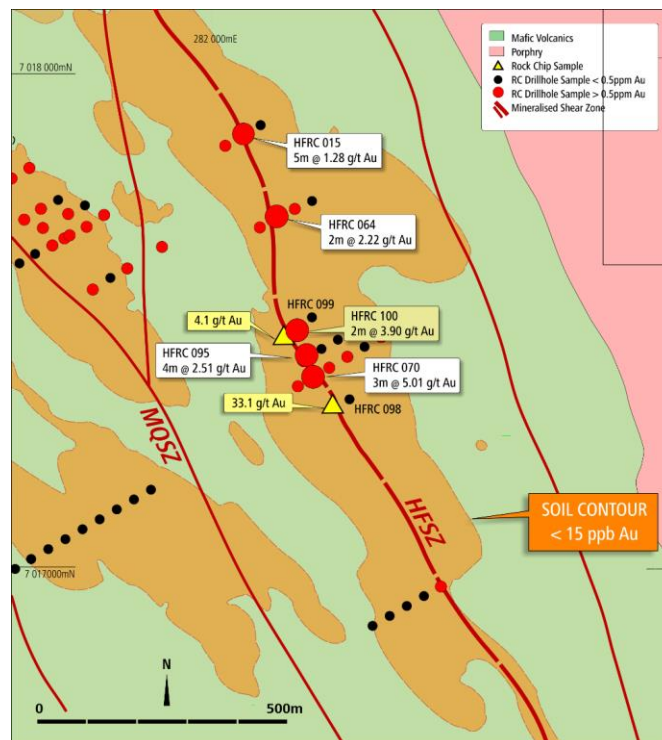


Figure 4. May Queen East plan showing drilling that has consistently intersected significant gold mineralisation over at least 550m and remains open. The drilling has been designed to test the strike of near surface mineralisation and no drilling has been completed to date to test the gold system at depth.

Two holes that were drilled to test under a 4.19 g/t gold rock chip intersected near surface high grade gold that included 2m @ 3.89 g/t (incl 1m @ 7.3 g/t) gold from 3m. The third hole was drilled to test the outcropping 31.1 g/t gold mineralisation located approximately 50m south of drill hole HFRC070 (3m @ 5.01 g/t gold). This hole did not intersect significant mineralisation however the Company believes that it was located too far east and failed to reach the main trend.

Planning for follow-up drilling is underway.

New High-Grade Target

The Company has identified a further gold target along the HFSZ approximately 2km north of Harris Find where it encountered a high-grade rock chip in veining of 23.5 g/t gold (**Fig 1**).

VMS Potential

In addition to positive gold results, drilling during the quarter encountered stratigraphy and semi-massive sulphide mineralisation (**Fig 5**) that is typically associated with VMS style mineralisation. There was anomalous gold associated with these sulphides that provided further support for this type of mineralisation.

The company is continuing its assessment of VMS potential across the Yandal West project and will provide a separate update in due course.



Figure 5. Semi massive sulphide and micro veining within gold mineralised zone at Harris Find. This is more typically associated with a feeder zone related to VMS mineralisation.

Yerrida Project (100%)

The Company believes the Yerrida basin is highly prospective for vanadium, copper, lead and zinc with several possible deposit styles that include sedimentary hosted, laterite hosted, vanadium hematite and hydrothermal sulphide mineralisation.

Previously the Company reported widespread vanadium mineralisation including numerous gossans with **high grade vanadium in rock chip samples up to 1.6% V_2O_5 (Fig 6)**. In addition to the gossans, the Company also reported that it has located large areas of laterite with surface sampling between 0.3% to 1.0% V_2O_5 .

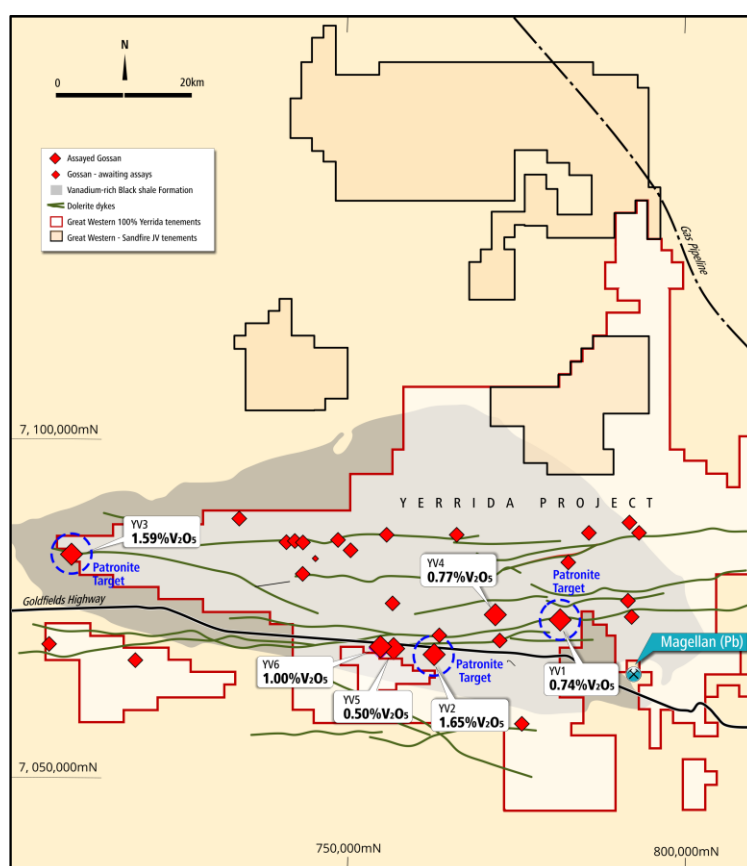


Figure 6. Location of vanadium gossans found using XRF, with Assays and patronite targets. The aeromagnetic image shows the many dykes intruding into the Maraloou vanadium rich black shale. It is the areas around the dykes that are prospective for patronite (at least 250km combined strike). Assays shown are % V_2O_5

Yerrida North JV (Sandfire earning 70%)

The Company has entered into an Earn-In agreement with Sandfire Resources Limited ("Sandfire") whereby they can earn 70% of the Company's northern Yerrida tenements (**Fig 7**) by funding exploration.

Sandfire has reported that the compilation of a comprehensive geological mapping programme continued during the quarter. The aim of the programme was to provide detailed geological mapping through the south

of the basin to better constrain the geology and enable comparison with prospective Bryah basin, VMS-host stratigraphy.

Previously Sandfire reported that early indications suggest there are some direct analogies observed between the Yerrida and Bryah geology and that the Yerrida is significantly more structurally complex than has been previously appreciated. Sandfire also reported that lithogeochemical and petrographic work is ongoing to identify specific areas of Bryah-like VMS-host lithologies.

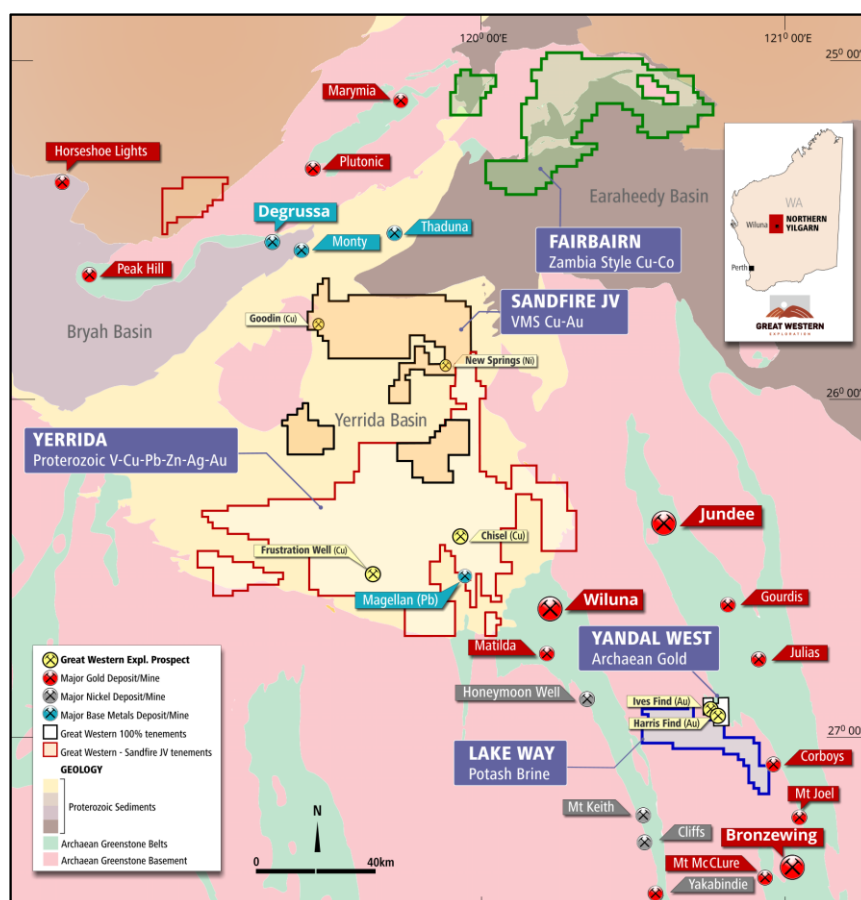


Figure 7. Location of Great Western's Northern Yilgarn projects

Lake Way Potash and Lithium Brine Project

The Company's 100% owned Lake Way Potash Project comprises an area of 415km² covering the south-eastern extension of the Lake Way Salt Lake located near Wiluna, Western Australia. The Project was originally acquired following Geoscience Australia research that identified the area as potentially prospective for lithium brines.

Lake Way is emerging as one of Australia's premium potash districts following the discovery of very high-grade potash brines by Salt Lake Potash Limited ("SO4") in their adjoining project. SO4 have reported that the results from their Bankable Feasibility Study released during the quarter demonstrated that the Lake Way potash brine has exceptional economics.

Great Western's Lake Way project is the downstream continuation of the main basal channel that SO4 is targeting and which they show extending approximately 9km into the Company's project. Historical drilling indicates that the potash brine within the channel remains high grade as it enters the project area. The Company believes that the channel continues at least a further 40km in the Project area (**Fig 8**).

During the quarter the Company finalised the Native Title negotiations that cover the area of Lake Way where the basal channel enters the project area.

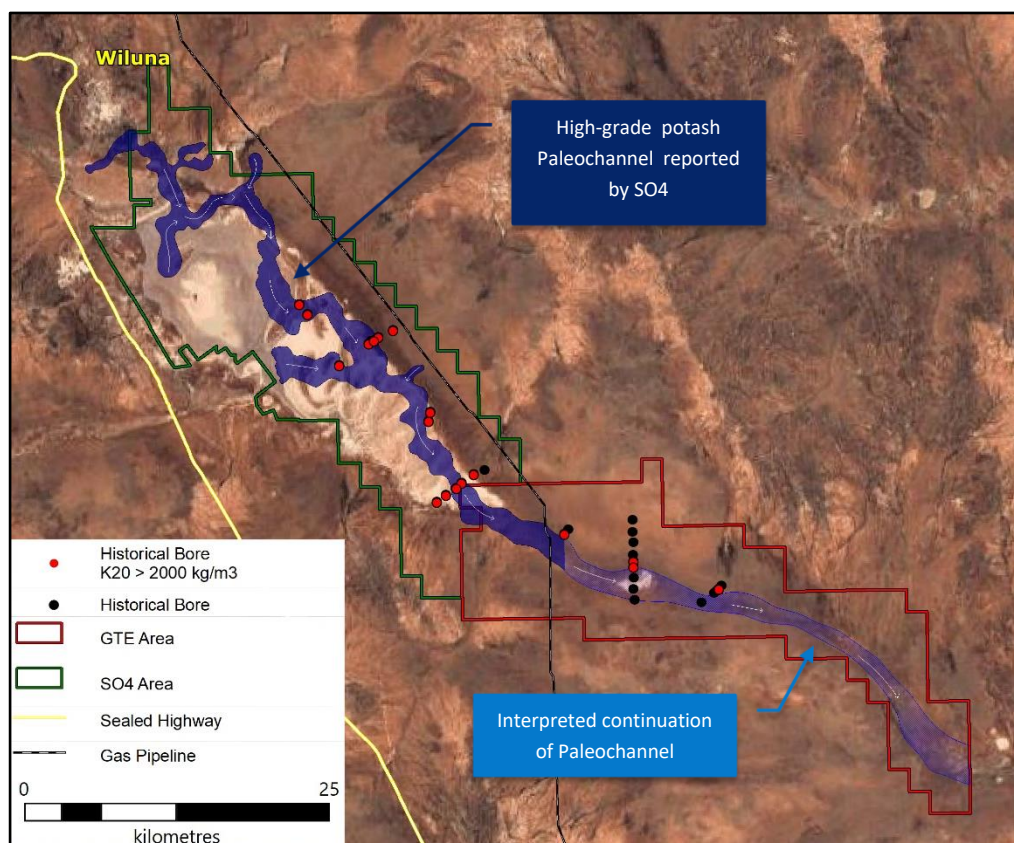


Figure 8. SO4 mapping shows the high-grade potash paleochannel resource continues downstream into GTE's area. Historical drilling at boundary indicates high grade potash (K) within the paleochannel as it enters the Project area. Aerial photography indicates the paleochannel continues approximately a further 40km through the project area.

Corporate

During the quarter, Great Western relocated to new offices at Level 3, 30 Richardson Street, West Perth.

Mr Rimantas Kairaitis also did not seek re-election at the Company's Annual General Meeting due to increased commitments required with his other corporate roles.

References

ASX Releases

20 December 2019 Further High-Grade Gold Intersected at Yandal West

| | |
|------------------|---|
| 27 November 2019 | Further Gold Intersected at Yandal West and VMS Potential |
| 11 November 2019 | Harris Find High Grade Gold Target |
| 31 October 2019 | High Grade Gold Outcropping at Yandal West |

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 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.

ASX ANNOUNCEMENT

ASX: GTE



Tenement Schedule

| Project | Tenement | Status | Holder | Ownership | Comments |
|------------------|-----------|-----------|------------------------------------|-----------|---------------------------------|
| Yandal West | E 53/1369 | Live | Vanguard Exploration Ltd | 100% | |
| Yandal West | E 53/1612 | Live | Diversified Asset Holdings Pty Ltd | 80% | Diversified free carried to BFS |
| Yandal West | E 53/1816 | Live | Diversified Asset Holdings Pty Ltd | 80% | Diversified free carried to BFS |
| Yandal West | E 53/1949 | Live | Great Western Exploration Limited | 100% | |
| Yerrida | E 51/1727 | Live | Great Western Exploration Limited | 100% | |
| Yerrida | E 51/1807 | Live | Great Western Exploration Limited | 100% | |
| Yerrida | E 51/1855 | Live | Great Western Exploration Limited | 100% | |
| Yerrida | E 51/1856 | Live | Great Western Exploration Limited | 100% | |
| Yerrida | E 53/1713 | Live | Great Western Exploration Limited | 100% | |
| Yerrida | E 53/1730 | Live | Great Western Exploration Limited | 100% | |
| Yerrida | E51/1732 | Live | Great Western Exploration Limited | 100% | Acquired from Stella Resources |
| Yerrida | E51/1733 | Live | Great Western Exploration Limited | 100% | Acquired from Stella Resources |
| Yerrida | E51/1734 | Live | Great Western Exploration Limited | 100% | Acquired from Stella Resources |
| Yerrida | E 53/1740 | Live | Great Western Exploration Limited | 100% | |
| Yerrida | E51/1755 | Live | Great Western Exploration Limited | 100% | Acquired from Metalicity Ltd |
| Yerrida | E51/1756 | Live | Great Western Exploration Limited | 100% | Acquired from Metalicity Ltd |
| Yerrida | E53/1894 | Live | Great Western Exploration Limited | 100% | Acquired from Metalicity Ltd |
| Yerrida | E 53/1917 | Live | Great Western Exploration Limited | 100% | |
| Yerrida | E 53/1948 | Live | Great Western Exploration Limited | 100% | |
| Yerrida North JV | E 51/1324 | Live | Great Western Exploration Limited | 100% | Sandfire earning 70% |
| Yerrida North JV | E 51/1330 | Live | Great Western Exploration Limited | 100% | Sandfire earning 70% |
| Yerrida North JV | E 51/1560 | Live | Great Western Exploration Limited | 100% | Sandfire earning 70% |
| Yerrida North JV | E 51/1712 | Live | Great Western Exploration Limited | 100% | Sandfire earning 70% |
| Yerrida North JV | E 51/1723 | Live | Great Western Exploration Limited | 100% | Sandfire earning 70% |
| Yerrida North JV | E 51/1724 | Live | Great Western Exploration Limited | 100% | Sandfire earning 70% |
| Yerrida North JV | E 51/1728 | Live | Great Western Exploration Limited | 100% | Sandfire earning 70% |
| Yerrida North JV | E 51/1746 | Live | Great Western Exploration Limited | 100% | Sandfire earning 70% |
| Yerrida North JV | E 51/1747 | Live | Great Western Exploration Limited | 100% | Sandfire earning 70% |
| Yerrida North JV | E 51/1819 | Live | Great Western Exploration Limited | 100% | Sandfire earning 70% |
| Yerrida North JV | E 51/1827 | Live | Great Western Exploration Limited | 100% | Sandfire earning 70% |
| Fairbairn | E 52/2517 | Live | Aus Diamond Mining Group Pty Ltd | 0% | 100% of all Non-Diamond Rights |
| Fairbairn | E 69/3193 | Live | Aus Diamond Mining Group Pty Ltd | 0% | 100% of all Non-Diamond Rights |
| Fairbairn | E 69/3442 | Live | Vanguard Exploration Ltd | 100% | |
| Fairbairn | E 69/3443 | Live | Vanguard Exploration Ltd | 100% | |
| Fairbairn | E 69/3496 | Withdrawn | Great Western Exploration Limited | 100% | Withdrawn during the quarter |
| Fairbairn | E 69/3499 | Withdrawn | Great Western Exploration Limited | 100% | Withdrawn during the quarter |

ASX ANNOUNCEMENT

ASX: GTE



GREAT WESTERN
EXPLORATION

| Project | Tenement | Status | Holder | Ownership | Comments |
|-----------------|-----------|-----------|-----------------------------------|-----------|------------------------------|
| Fairbairn | E 69/3534 | Withdrawn | Great Western Exploration Limited | 100% | Withdrawn during the quarter |
| North Yilgarn | E 51/1877 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E 51/1878 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E 51/1879 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E 51/1880 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E 51/1881 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E 51/1882 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E 51/1903 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E 52/3610 | Withdrawn | Great Western Exploration Limited | 100% | Withdrawn during the quarter |
| North Yilgarn | E 52/3611 | Withdrawn | Great Western Exploration Limited | 100% | Withdrawn during the quarter |
| North Yilgarn | E 52/3647 | Withdrawn | Great Western Exploration Limited | 100% | Withdrawn during the quarter |
| North Yilgarn | E 52/3652 | Live | Great Western Exploration Limited | 100% | |
| North Yilgarn | E 53/1982 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E 53/1983 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E 53/1987 | Live | Great Western Exploration Limited | 100% | |
| North Yilgarn | E 53/1988 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E 69/3582 | Withdrawn | Great Western Exploration Limited | 100% | Withdrawn during the quarter |
| North Yilgarn | E51/1893 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E53/2017 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E53/2026 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E53/2028 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E53/2029 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E53/2027 | Live | Great Western Exploration Limited | 100% | |
| North Yilgarn | E57/1131 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E57/1130 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E53/2077 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E51/1925 | Pending | Great Western Exploration Limited | 100% | |
| North Yilgarn | E36/975 | Pending | Great Western Exploration Limited | 100% | New Application |
| North Yilgarn | E36/977 | Pending | Great Western Exploration Limited | 100% | New Application |
| North Yilgarn | E36/978 | Pending | Great Western Exploration Limited | 100% | New Application |
| North Yilgarn | E69/3747 | Pending | Great Western Exploration Limited | 100% | New Application |
| North Yilgarn | E52/3752 | Pending | Great Western Exploration Limited | 100% | New Application |
| Doolgunna North | E 52/3527 | Live | Great Western Exploration Limited | 100% | |