Quarterly Report

31 October 2022



Quarterly Activities Report for the Quarter ended 30 September 2022

Summary

- Successful drilling campaign extends high-grade gold mineralisation at Harris' Find, located within the highly prospective Yandal Greenstone Belt, host to the multi-million-ounce Jundee and Bronzewing Gold Deposits.
- Significant results received from the Harris' Find drilling program include:
 - 12m @ 2.09g/t Au from 35m (GYWRC009), and
 - o 3m @ 3.10g/t Au from 53m (GYWRC010).
- The results validate and extends previous drilling with the mineralised structure open along strike and at depth down-plunge.
- Interpretation of magnetic and radiometric geophysics data and drill and rock-chip geochemical data defines and significantly extends the mineralised structure at least 3km north from Harris' Find ("Barwidgee Structure").
- A drilling programme to test Harris Find and the prospective Barwidgee Structure has been designed and final approvals sought.
- Helicopter-borne Electromagnetic (EM) geophysical survey to be undertaken over the highly prospective Fairbairn Nickel Project.
- Fairbairn is prospective for magmatic nickel-copper-platinum systems, located on the boundary
 of the Yilgarn Craton, host in a similar geological setting to the Julimar and Nova Deposits.
- Soil sampling completed at the Firebird Gold Project with results pending.
- Co-funding by the Western Department of Mines, Industry Regulation and Safety for diamond drilling at the Golden Corridor Project approved.

Great Western Exploration Limited (ASX: GTE) ("the Company", "Great Western") is pleased to provide its Quarterly Activities Report for the Quarter ended 30 September 2022 (September 2022 Quarter).

Yandal West Project

GTE 80% (E53/1612)

Significant assay results were returned from drilling completed in July 2022 at Harris' Find. Harris Find is a shallow drill defined gold mineralisation system within the highly prospective Yandal Greenstone Belt, host to the multi-million-ounce Jundee and Bronzewing Gold Deposits (Figure 1). The Company tested extensions to mineralisation below mid-1990s drilling that previously recorded 6m @ 4.91g/t Au (GTE ASX Announcement 11 November 2019). Three holes tested the Harris' Find Structure, with holes GYWRC009 and GYWRC010 recorded significant assay results, shown in Table 1, and Figure 2 and Figure 3 below (GTE ASX Announcement 31 August 2022).

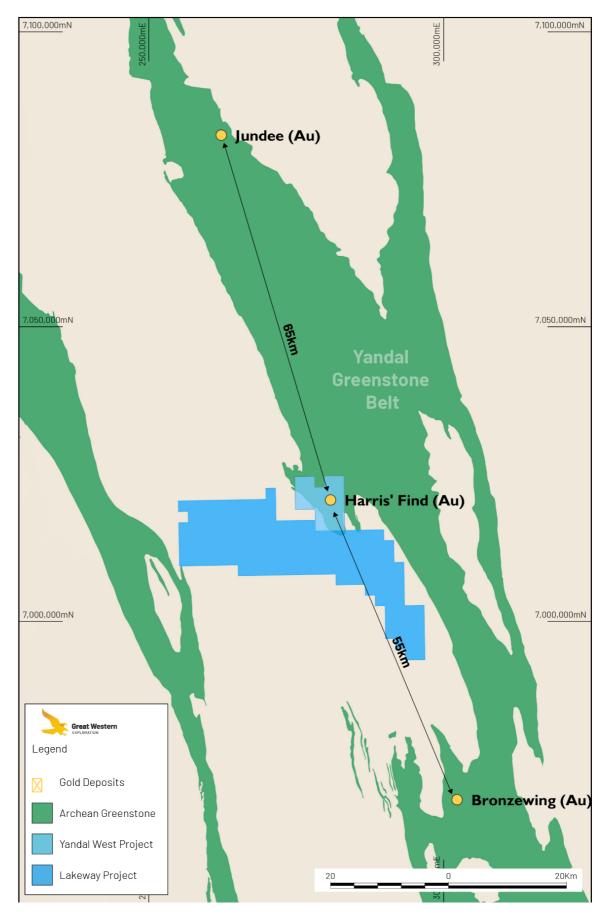


Figure 1:Location of the Yandal West Project in relation to the Jundee and Bronzewing Gold Deposits



Table 1: Significant Gold Assay Results from the Harris' Find Prospect. Only significant results (>0.5g/t Au) have been reported in this table.

Drill hole	Drill Type	From	То	Drill Intercept
GYWRC009	RC	35	49	12m @ 2.1 g/t Au
	Including	38	40	2m @ 4.7 g/t Au
	and	43	45	2m @ 3.6 g/t Au
GYWRC010	RC	53	57	3m @ 3.1 g/t Au
	Including	54	55	Im @ 5.0 g/t Au
GYWRC011	RC	124	125	Im @ I.5 g/t Au

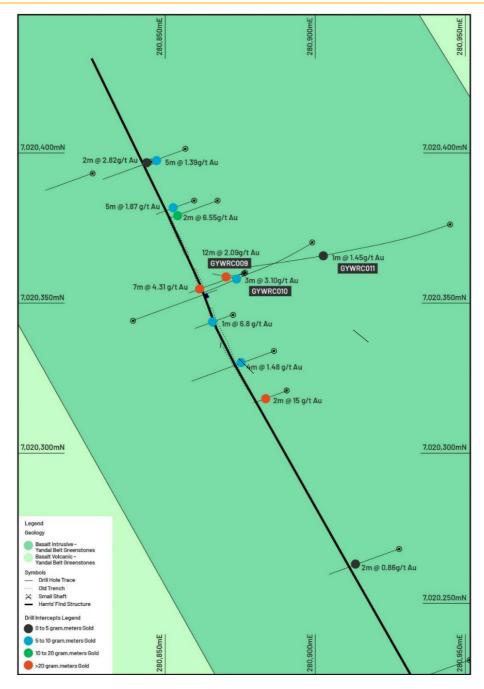


Figure 2: Location of reported drill-holes at Harris' Find and Electromagnetic targets



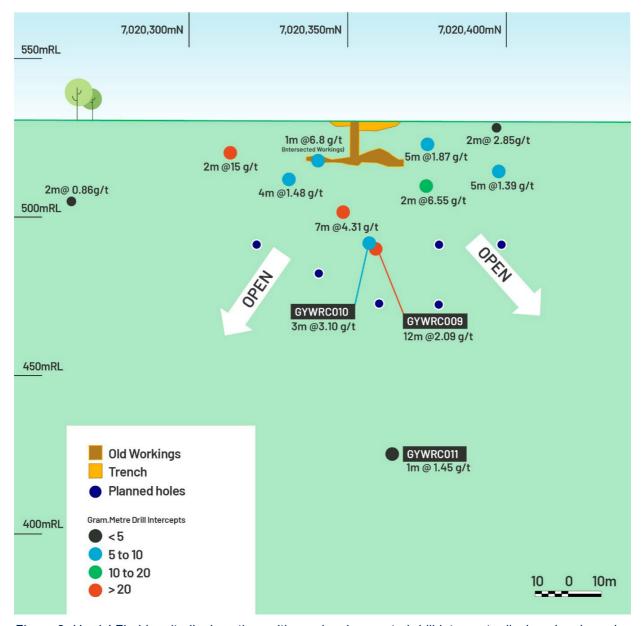


Figure 3: Harris' Find longitudinal section, with previously reported drill intercepts displayed, coloured by gold grams x drilled metres. Hole GYWRC010 was designed to at least 20m below hole GYWRC009, but unfortunately deviated significantly and intersected the structure in a similar position as hole GYWRC009.

Since the successful drilling campaign that confirmed and extended high-grade mineralisation at Harris' Find (12m @ 2.09g/t from 35m and 3m @ 3.10g/t from 53m), the Company has undertaken a review and interpretation of magnetic and radiometric geophysics data and drill and rock-chip geochemical data and defined the "Barwidgee Structure". This highly prospective structure hosts mineralisation at Harris' Find and the Company interprets that the structure extends at least 3km to the north from this location.

This discrete structure is largely untested with anomalous Rotary Air Blast (RAB) drilling and high-grade rock-chip (including 23.5g/t Au – GTE ASX Announcement 5 July 2017) results recorded in the northern defined extremities of the feature (Figure 4). The RAB holes were drilled in the late-1990s and returned anomalous gold results. However, while these holes demonstrate the fertility of the structure, the holes are considered not to have adequately tested the structure at these locations, due to the drill-holes positions relative to the structure.



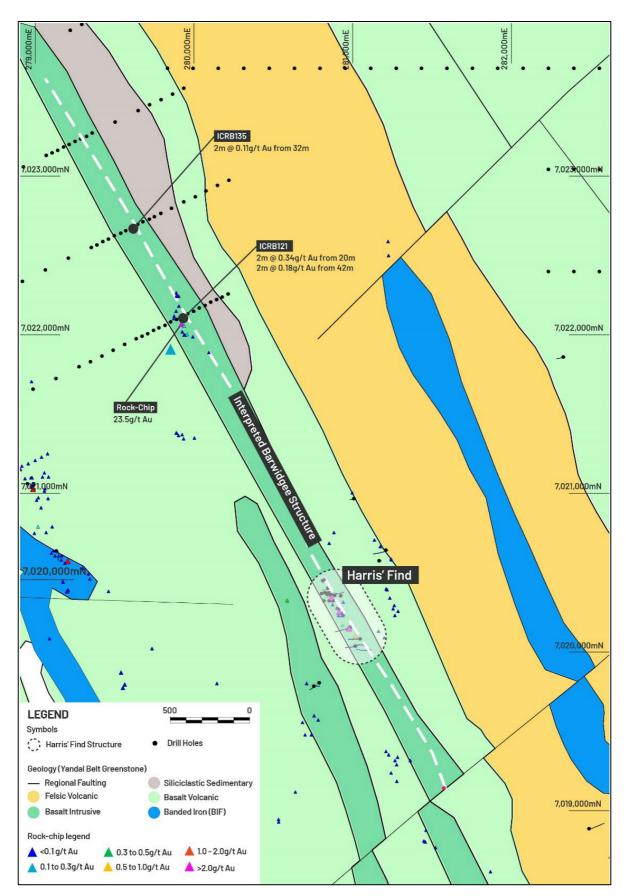


Figure 4: Plan section of interpreted Barwidgee Structure and location of anomalous RAB and rock-chip results, overlaid on Geological Survey of Western Australia 1:500,000 Geological Map.



Great Western plans to complete an extensive drilling programme along the Barwidgee Structure from Harris' Find as a matter of priority, to define and extend gold mineralisation, once final approvals for the drilling programme are in place.

Drilling of the electromagnetic (EM) targets Huntsman, Wolf Spider, Daddy Long-Legs, and Redback all intersected sulphide mineralisation at the modelled EM Conductor positions, with sulphides most prominent at Huntsman and Wolf Spider. No significant assays were returned with the sulphide zones, with only anomalous results from these intercepts received.

Table 2: Attributes of the reported drill-holes drilled at Yandal West (GTE ASX Announcement 31 August 2022)

Drillhole	Prospect	Easting GDA94_51S	Northing GDA94_51S	RL	Dip	Azimuth	Depth	Drill Type
GYWRC001	Huntsman	281030	7020034	525	-60	260	130	RC
GYWRC002	Huntsman	281089	7020044	526	-60	260	170	RC
GYWRC003	Huntsman	281059	7020080	527	-60	260	170	RC
GYWRC004	Huntsman	281117	7020009	525	-55	260	180	RC
GYWRC005	Wolf Spider	281180	7020576	533	-60	255	50	RC
GYWRC006	Wolf Spider	281222	7020640	534	-60	255	180	RC
GYWRC007	Redback	281020	7020964	545	-60	255	80	RC
GYWRC008	Daddy Long Legs	282339	7021860	554	-60	255	100	RC
GYWRC009	Harris' Find	280877	7020360	531	-80	240	90	RC
GYWRC010	Harris' Find	280899	7020370	533	-65	240	82	RC
GYWRC011	Harris' Find	280945	7020376	540	-65	240	198	RC
GYWRC012	Harris' Find	281000	7020156	530	-60	255	180	RC

Fairbairn Nickel Project

GTE 100% (E69/3443)

The Fairbairn Nickel Project is located 900km north-east of Perth, on the northern margin of the Yilgarn Craton and within the Earaheedy Basin. The Craton margin is highly prospective for base metal deposits, described below and as demonstrated by the discovery of Julimar and Nova, also located on the craton margin (Figure 5). The Company plans to undertake a helicopter-borne VTEM electromagnetic (EM) geophysics survey within a demonstrated highly prospective portion of the project (Figure 6) to define magmatic Ni-PGE-Cu targets.

The Company recognised the prospectivity of the Fairbairn Nickel Project and staked a strategic tenement land position in line with Geoscience Australia's 2016 report 'Potential for intrusion-hosted Ni-Cu-PGE sulphide deposits'. This publication proposed that the margin of the Yilgarn Craton had significant potential to host magmatic Ni-Cu-PGM deposits, published prior to the discovery of the globally significant Nova and Julimar Deposits.

The Geoscience Australia report interpreted that where major crustal structures extend into the craton margin, the thinner margin crust at these locations would allow these structures to more easily "tap" the mantle, resulting in metal rich fluids to ascend and potential form economic metal accumulations. The Company interprets that the Ockerburry Fault (Figure 5) that flanks the Fairbairn Project is an example of one of these features, with high potential for magmatic Ni-Cu-PGM style mineralisation to have formed within the Fairbairn Project.



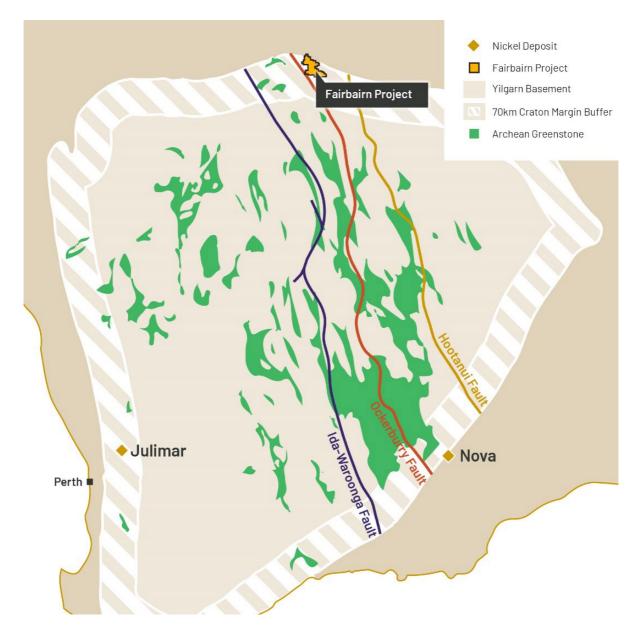


Figure 5: Location of the Fairbairn Base Metal Project on the margin of the Yilgarn Craton, and the interpreted "mantle tapping" Ockerburry Fault, a potential conduit for metal deposit formation.

Little previous exploration has been completed at Fairbairn with work completed during the 1980s and early-1990s focussed on diamond exploration, with limited assaying for base and precious metals previously completed. The Company reviewed the assay results available and found two anomalous holes coincident with magnetic highs recorded (Figure 6). These were previously reported (GTE ASX Announcement 21 March 2022) and included:

- 12m @ 1,835ppm Ni from 22m (M018), including a maximum assay of 2,130ppm Ni, and
- 20m @ 1,214ppm Ni from 28m (M017).

The Company interprets the magnetic highs represent mafic-ultramafic sequences below shallow cover, representing highly prospective targets for Julimar and Nova style magmatic Ni-PGE-Cu deposits. Great Western intends to complete a helicopter-borne EM geophysics survey over these anomalous drill-holes with coincident magnetic highs (Figure 6), with the survey expected to commence late-October/November 2022.



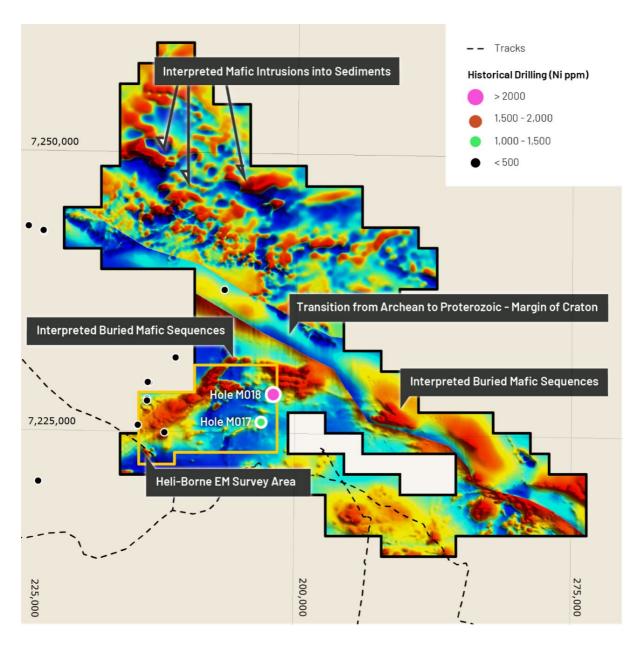


Figure 6: Previously drilled exploration holes assayed for nickel, overlayed on 40m State aeromagnetic data. Red magnetic highs are interpreted to be shallowly covered Archean mafic and ultramafic units, prospective for magmatic Ni-Cu-PGE deposits. Orange polygon is the upcoming electromagnetic survey covering anomalous drill-holes and coincident magnetic highs.

Golden Corriodor Project

GTE 100%

Subsequent to the end of the September Quarter, the Company announced approval for the Golden Corridor Project diamond drilling programme co-funding by the Western Australian Department of Mines, Industry Regulation and Safety (DMIRS) under the Exploration Incentive Scheme. This incentive funds 50% of drilling costs to a maximum of \$110,000, with the funds to be utilised to diamond drill modelled Archean Wiluna-Norseman Greenstone Belt below Yerrida Basin Cover (Figure 7).



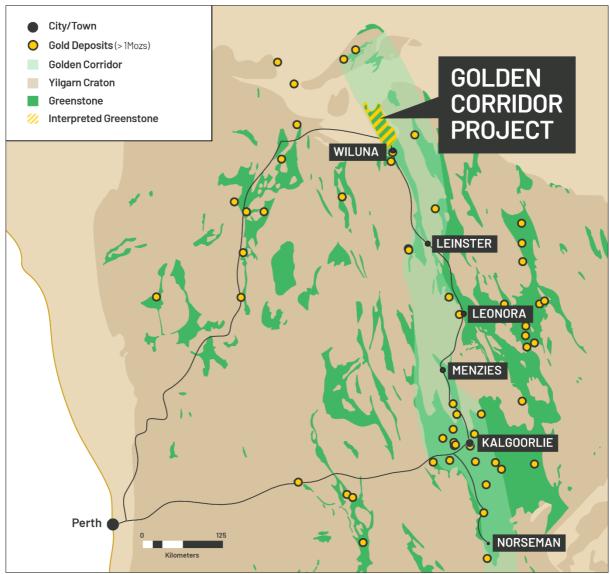


Figure 7: The Golden Corridor is Australia's most important gold terrane and host to many of Australia's largest gold deposits.

The Wiluna-Norseman Greenstone Belt hosts several multi-million-ounce deposits south of the Golden Corridor Project before being obscured by the Yerrida Basin within the Company's tenure (Figure 7). Several gold in soil anomalies have previously been identified by the Company (GTE ASX Announcement 3 March 2022 - Figure 8), that are potential leakage of mineralised Archean Wiluna Greenstone basement through cover.

Company modelling indicates basin cover at this location is shallower than previously predicted by regional government mapping interpretation. No drilling has previously been completed testing basement along the eastern basin margin, representing compelling targets.



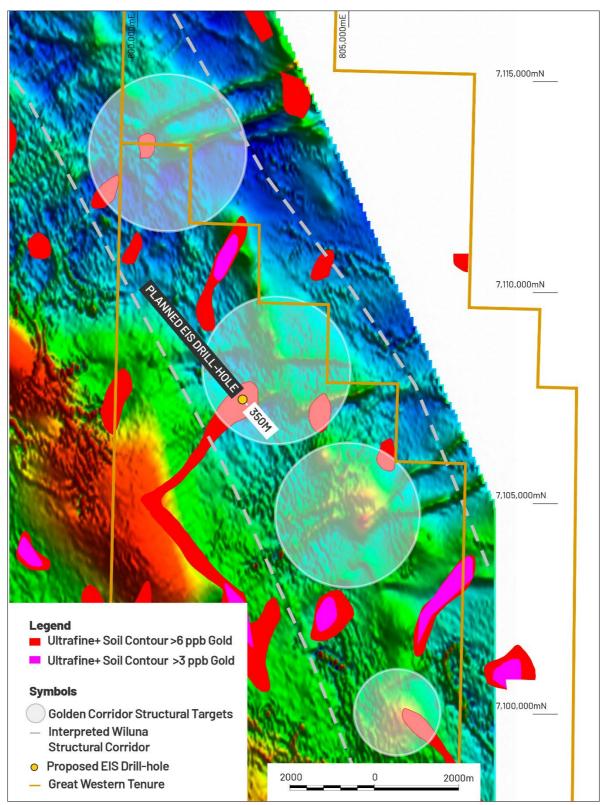


Figure 8: GC1 to GC4 aeromagnetic structural targets in relation to the anomalous gold contours (modified after GTE ASX Announcement 3 March 2022).

A Moving Loop Electromagnetic Survey (MLEM) was completed at the Ready1 Target and the Platinum-Nickel Anomaly 1 (shown in Figure 9) during the quarter. While both targets returned anomalous results, it was interpreted the recorded response was not consistent with the targeted magmatic nickel-platinum sulphide system. This downgrades the potential of these targets, with future



lower-priority field work to focus on understanding the nickel and platinum geochemical anomalism at both locations.

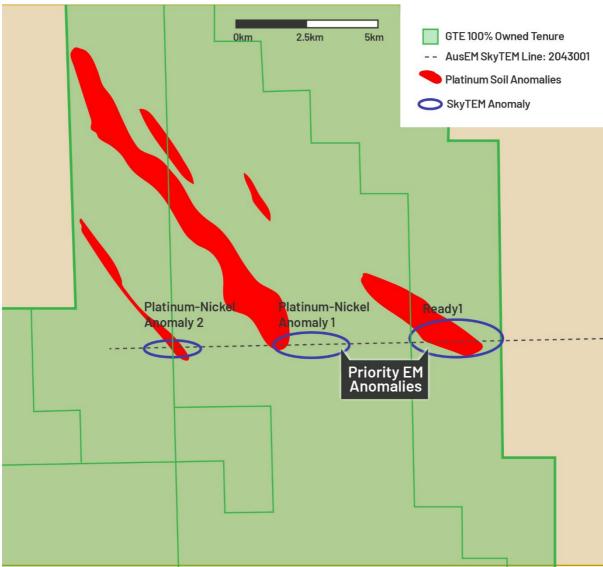


Figure 9: Ready1 and Platinum Anomalies at the Golden Corridor Project.

Firebird Gold Project

GTE 100% (E53/1894, E53/2027) and GTE Earning up to 80% (E53/2129)

As previously reported, the Company's Firebird Project contains a large gold in-soil anomaly that extends 2.1km x 350m wide (Figure 10), completed prior to Great Western's holding of tenure (GTE ASX Announcement 23 August 2021). The anomaly is hosted by the prospective Joyners Find Greenstone Sequence, located 4kms east of Western Gold Resources (ASX:WGR) Duke Project. During the September Quarter Ultrafine+ soil sampling to further define the soil anomalism was undertaken, with the intent to generate targets for drill testing.

Results are pending and are expected to be received during the December Quarter.



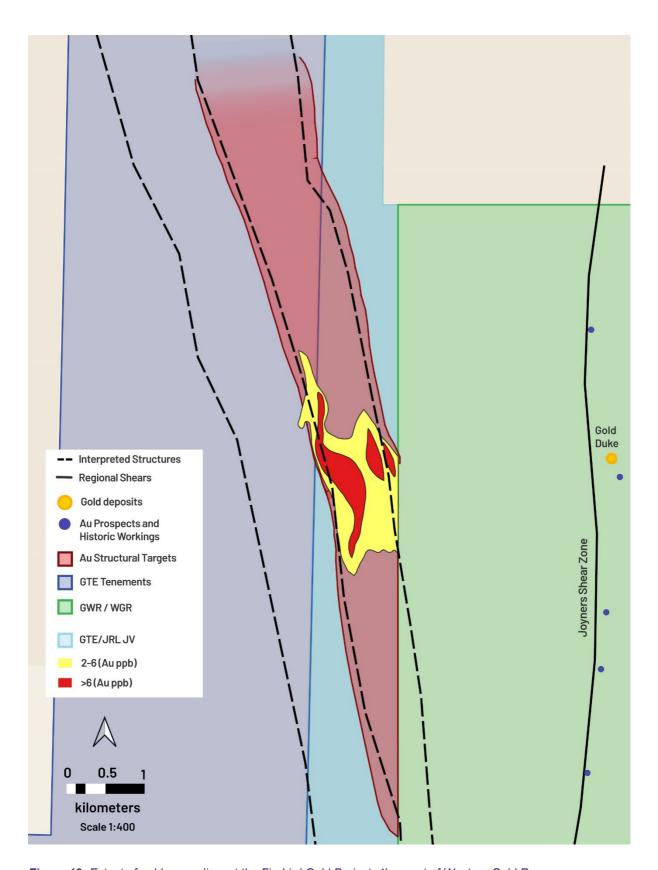


Figure 10: Extent of gold anomalism at the Firebird Gold Project, 4km east of Western Gold Resources (ASX:WGR) Duke Project (GTE ASX Announcement 23 August 2021).



Yerrida North JV (Sandfire Resources earning 70%)

New targets were identified by Sandfire Resource through structural and stratigraphic basin interpretation for potential shear hosted copper deposits (SHCD) and volcanic hosted massive sulphide (VHMS) mineralisation in the Yerrida basin. The interpretation focused on the northern tenure of the basin. This interpretation identified three new prospects for testing: Enclave, F8 Flank, and F5 West. A sampling programme is planned at these prospects, with a geochemical programme comprising 577 samples on a 400m x 400m grid. Figure 11 below shows the new soil sampling locations, with interpreted geology.

As previously advised, Sandfire reached its minimum expenditure commitment in late 2019, by spending \$1.7 million over three years. Great Western looks forward to the continued exploration being undertaken by Sandfire under the JV, where field works continue prior to potential drill testing.

Under the terms of the joint venture, Sandfire can earn a 70% interest by sole funding exploration to define a mineral resource of at least 50,000 tonnes of contained copper or copper equivalent under the JORC 2012 code. Great Western is free carried until that time. Sandfire can then choose to earn a further 10% by sole funding the completion of a Feasibility Study (as that term is defined in the JORC Code 2012 Edition) sufficient to justify a decision to mine.

Pursuant to the joint venture agreement, Sandfire's earn-in is subject to it maintaining the joint venture tenements in good standing and meeting all statutory expenditure conditions relating to the joint venture tenements. During the September Quarter 2021, Sandfire advised the Company that eight of the joint venture tenements (see Appendix 1: Tenement Schedule at 30 September 2022) are the subject of a plaint application by a third party in the Warden's Court. The outcome of this plaint application is unknown at the date of this report. The Company, with the support of Sandfire, intends to seek orders in the Warden's court for the dismissal of the plaint applications.

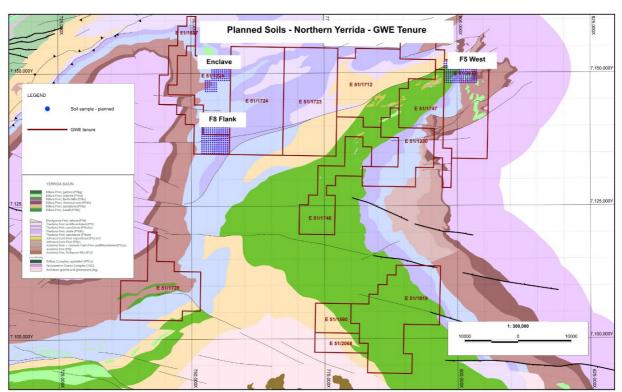


Figure 11: Gavin Daneel's regional geological map overlain with soil samples taken during the quarter in blue.



Fieldwork Summary

Great Western is currently progressing several field work programmes across areas of the Company's substantial tenure, that the Company expects will result in some prospects evolving into drill ready targets. This work includes:

- Soil sampling at a number of areas considered prospective for copper, nickel and/or gold;
- Follow up drilling at the Yandal West Project, testing Harris Find and the Barwidgee Structure once approvals are completed (refer ASX announcement 15/09/2022); and
- Airborne EM survey at the Fairbairn Project targeting magmatic nickel sulphides (refer ASX announcement 28 September 2022).
- Soil sample assays received from the Firebird Gold Project, with the company anticipating interpretation of results to generate targets for drill testing.
- Golden Corridor diamond drilling programme, testing gold in soil anomalies and modelled basement targets (refer ASX announcement 25 September 2022).

Great Western looks forward to keeping the market updated and providing results of the exploration programmes in due course.

Corporate

Junior Mineral Exploration Incentive

During the September 2022 Quarter, the Company was successful in its application for participation in the Federal Government's Junior Mineral Exploration Incentive ("JMEI") Scheme for the 2022/2023 tax year. Great Western has received an allocation of up to \$1,140,000 in JMEI credits for the 2022/2023 tax year.

The Federal Government's JMEI scheme encourages investment in exploration companies that undertake greenfields mineral exploration in Australia, by allowing these exploration companies to forgo a portion of their carried forward tax losses that have arisen from allowable expenditure on "greenfield" exploration for potential distribution to eligible investors. Great Western wish to acknowledge the support of the Federal Government in making the JMEI available.

ASX Additional Information

- ASX Listing Rule 5.3.1: Exploration & Evaluation Expenditure during the September 2022 Quarter was \$773,000. Full details of exploration activity during the September 2022 Quarter are in this report.
- ASX Listing Rule 5.3.2: There were no substantive mining production and development activities during the September 2022 Quarter.
- ASX Listing Rule 5.3.5: Payments to related parties of the Company and their associates during the September 2022 Quarter: \$96,000 in aggregate is for executive directors' salaries only.

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

Tony Walsh Company Secretary Great Western Exploration Limited

Tel: 08 6311 2852

Email: enquiries@greatwestex.com.au



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. Shane Pike who is a member of the Australian Institute of Mining and Metallurgy. Mr. Pike 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. Pike consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Company's Exploration Results is a compilation of Results previously released to ASX by Great Western Exploration (5 July 2017, 11 November 2019, 23 August 2021, 3 March 2022, 21 March 2022, 15 August 2022, 31 August 2022, 28 September 2022, and 25 October 2022) Mr. Shane Pike consents to the inclusion of these Results in this report. Mr. Pike has advised that this consent remains in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters in the market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.



Appendix 1: Tenement Schedule at 30 September 2022

Appendix 1: Project	Appendix 1: Tenement Schedule at 30 September 2022 Project Tenement Status Holder Ownership Comments					
Atley	E 57/1130	Live	Great Western Exploration Limited	100%	Comments	
Atley	E 57/1131	Live	Great Western Exploration Limited	100%		
Atley	E 57/1160	Live	Great Western Exploration Limited	100%		
•						
Atley	E 57/1161	Live	Great Western Exploration Limited	100%		
Atley	E 57/1162	Live	Great Western Exploration Limited	100%		
Atley	E 57/1164	Live	Great Western Exploration Limited	100%		
Atley	E 57/1165	Live	Great Western Exploration Limited	100%		
Atley	E 57/1166	Live	Great Western Exploration Limited	100%		
Atley	E 57/1204	Pending	Great Western Exploration Limited	100%		
Fairbairn	E 69/3443	Live	Vanguard Exploration Ltd	100%	100% Owned Subsidiary	
Fairbairn	E 69/3810	Pending	Great Western Exploration Limited	100%		
Fairbairn	E 69/3899	Live	Great Western Exploration Limited	100%		
Fairbairn	E 69/3903	Pending	Great Western Exploration Limited	100%		
Fairbairn	E 69/3906	Live	Great Western Exploration Limited	100%		
Fairbairn	E 69/4065	Pending	Great Western Exploration Limited	100%	Reapplication of E 69/3903	
Forrestania South	E 74/603	Live	Western Areas Ltd	10%	Free Carried To PFS	
Firebird	E 53/2129	Live	Jindalee Resources Limited	0%	JV with Jindalee Resource Ltd, GTE Earning 80%	
Golden Corridor	E 51/1855	Live	Great Western Exploration Limited	100%		
Golden Corridor	E 51/2046	Live	Great Western Exploration Limited	100%		
Golden Corridor	E51/2010	Live	Great Western Exploration Limited	90%	Westex Resources Free Carried to BFS	
Golden Corridor	E 53/1983	Live	Great Western Exploration Limited	100%		
Golden Corridor	E 53/2124	Live	Great Western Exploration Limited	100%		
Golden Corridor	E 53/2138	Live	Great Western Exploration Limited	100%		
Golden Corridor	E 53/2139	Live	Great Western Exploration Limited	100%		
Golden Corridor	E 53/2141	Live	Great Western Exploration Limited	100%		
Golden Corridor	E 53/2142	Live	Great Western Exploration Limited	100%		
Lake Way Potash	E 53/1949	Live	Great Western Exploration Limited	100%		
Lake Way Potash	E 53/2017	Live	Great Western Exploration Limited	100%		
Lake Way Potash	E 53/2026	Live	Great Western Exploration Limited	100%		
Lake Way Potash	E 53/2146	Live	Great Western Exploration Limited	100%		
Yandal West	E 53/1369	Live	Vanguard Exploration Ltd	100%	100% Owned Subsidiary, Extension of Term pending	
Yandal West	E 53/1612	Live	Diversified Asset Holdings Pty Ltd	80%	Diversified Free Carried To BFS,	
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Project	Tenement	Status	Holder	Ownership	Comments
Yandal West	E 53/2206	Pending	Great Western Exploration Limited	100%	Competing Application, second drawn in ballot
Copper Ridge	E 51/1727	Live	Great Western Exploration Limited	100%	
Copper Ridge	E 51/1734	Live	Great Western Exploration Limited	100%	
Copper Ridge	E 51/1856	Live	Great Western Exploration Limited	100%	
Copper Ridge	E 53/1894	Live	Great Western Exploration Limited	100%	
Copper Ridge	E53/2156	Live	Great Western Exploration Limited	100%	
Yerrida South	E 51/1732	Live	Great Western Exploration Limited	100%	
Yerrida South	E 51/1733	Live	Great Western Exploration Limited	100%	
Yerrida South	E 51/1993	Live	Great Western Exploration Limited	100	
Yerrida South	E51/2062	Live	Great Western Exploration Limited	100%	
Yerrida South	E51/2063	Live	Great Western Exploration Limited	100%	
Yerrida South	E 53/2027	Live	Great Western Exploration Limited	100%	
Yerrida South	E 53/2077	Live	Great Western Exploration Limited	100%	
Yerrida South	E 53/2196	Live	Great Western Exploration Limited	100%	
Yerrida South	E 51/2078	Live	Great Western Exploration Limited	100%	
Yerrida	E 51/2127	Pending	Great Western Exploration Limited	100%	
Yerrida	E 51/2128	Pending	Great Western Exploration Limited	100%	
Yerrida	E 51/2129	Pending	Great Western Exploration Limited	100%	
Calyerup	E 70/6032	Live	Great Western Exploration Limited	100%	
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Weld Spring	E 69/4021	Pending	Great Western Exploration Limited	100%	
Weld Spring	E 69/4022	Pending	Great Western Exploration Limited	100%	
Weld Spring	E 69/4023	Pending	Great Western Exploration Limited	100%	
Weld Spring	E 69/4024	Pending	Great Western Exploration Limited	100%	
Weld Spring	E 69/4025	Pending	Great Western Exploration Limited	100%	
Weld Spring	E 69/4026	Pending	Great Western Exploration Limited	100%	
Weld Spring	E 69/4027	Pending	Great Western Exploration Limited	100%	
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Joint Venture with Sandfire Resources Limited (1)					
Yerrida North JV	E 51/1324	Live	Great Western Exploration Limited	100%	Sandfire Earning 70%
Yerrida North JV	E 51/1330	Live (2)	Great Western Exploration Limited	100%	Sandfire Earning 70%
Yerrida North JV	E 51/1560	Live (2)	Great Western Exploration Limited	100%	Sandfire Earning 70%
Yerrida North JV	E 51/1712	Live (2)	Great Western Exploration Limited	100%	Sandfire Earning 70%
Yerrida North JV	E 51/1723	Live (2)	Great Western Exploration Limited	100%	Sandfire Earning 70%
Yerrida North JV	E 51/1724	Live (2)	Great Western Exploration Limited	100%	Sandfire Earning 70%



Project	Tenement	Status	Holder	Ownership	Comments
Yerrida North JV	E 51/1728	Live (2)	Great Western Exploration Limited	100%	Sandfire Earning 70%
Yerrida North JV	E 51/1746	Live (2)	Great Western Exploration Limited	100%	Sandfire Earning 70%
Yerrida North JV	E 51/1747	Live (2)	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%
Yerrida North JV	E 51/2033	Live	Great Western Exploration Limited	100%	Sandfire Earning 70%
Yerrida North JV	E 51/2068	Live	Great Western Exploration Limited	100%	Sandfire Earning 70%

Notes

- (1) Pursuant to clause 3 (e) of the Farm-in Letter Agreement between Sandfire and the Company dated 10 April 2017, Sandfire's earn-in is subject to it maintaining the joint venture tenements in good standing and meeting all statutory expenditure conditions relating to the joint venture tenements.
- (2) These eight tenements are the subject of a plaint application by a third party in the Warden's Court. The outcome of this plaint application is unknown at the date of this report. The Company, with the support of Sandfire, intends to seek orders in the Warden's court for the dismissal of the plaint applications.

