

Quarterly Report

29 July 2022



Great Western
EXPLORATION

Quarterly Activities Report for the Quarter ended 30 June 2022

Summary

- Drilling commenced at the Yandal West Project, testing electromagnetic geophysical targets and interpreted structural gold lodes, with drilling completed subsequent to the end of the June 2022 Quarter.
- Multiple drill intersections of sulphide mineralisation validated the prospectivity of Yandal West's electromagnetic (EM) targets.
- Yandal West sulphides recorded as semi-massive and disseminated, and are prospective for nickel, copper, platinum, and gold.
- Drilling at the Company's Harris' Find Prospect has been interpreted to have intersected a gold mineralised structure.
- A new and highly prospective Nickel-PGE Target, Ready1, was defined on Great Western's 100% owned Golden Corridor Project.
- The new Ready1 Target has coincident Nickel-PGE geochemical and geophysical anomalism and is located on interpreted major geological structures. Ready1 is a 4km long by 1km wide NW-SE striking Ultrafine+ Ni-PGE anomaly.
- Two discrete parallel anomalous Nickel-PGE trends were identified immediately west of Ready1.
- Infill Ultrafine+ soil sampling has already been completed at Ready1, with planning for refined geophysical survey currently underway, followed by drill testing.

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

Yandal West Project

GTE 80% (E53/1612)

The Yandal West Project is located within the world class Yandal greenstone belt, approximately 55km north of the Bronzewing Gold Mine and 60km south of the Jundee Gold Mine.

Drilling commenced during the June 2022 Quarter on several electromagnetic geophysical targets, interpreted as potential metal rich VMS style sulphide accumulations (Figure 1). Additionally, interpreted structural gold lodes targets at the Harris' Find Prospect were tested.

Subsequent to the end of the June 2022 Quarter, the Company announced that drilling at the Yandal West Project has been completed. Drilling of 12 holes, for 1,610m (Figure 1), tested a number of Xcite



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electromagnetic (EM) geophysical targets (see ASX announcement 21 July 2022), and at the Harris' Find gold prospect.

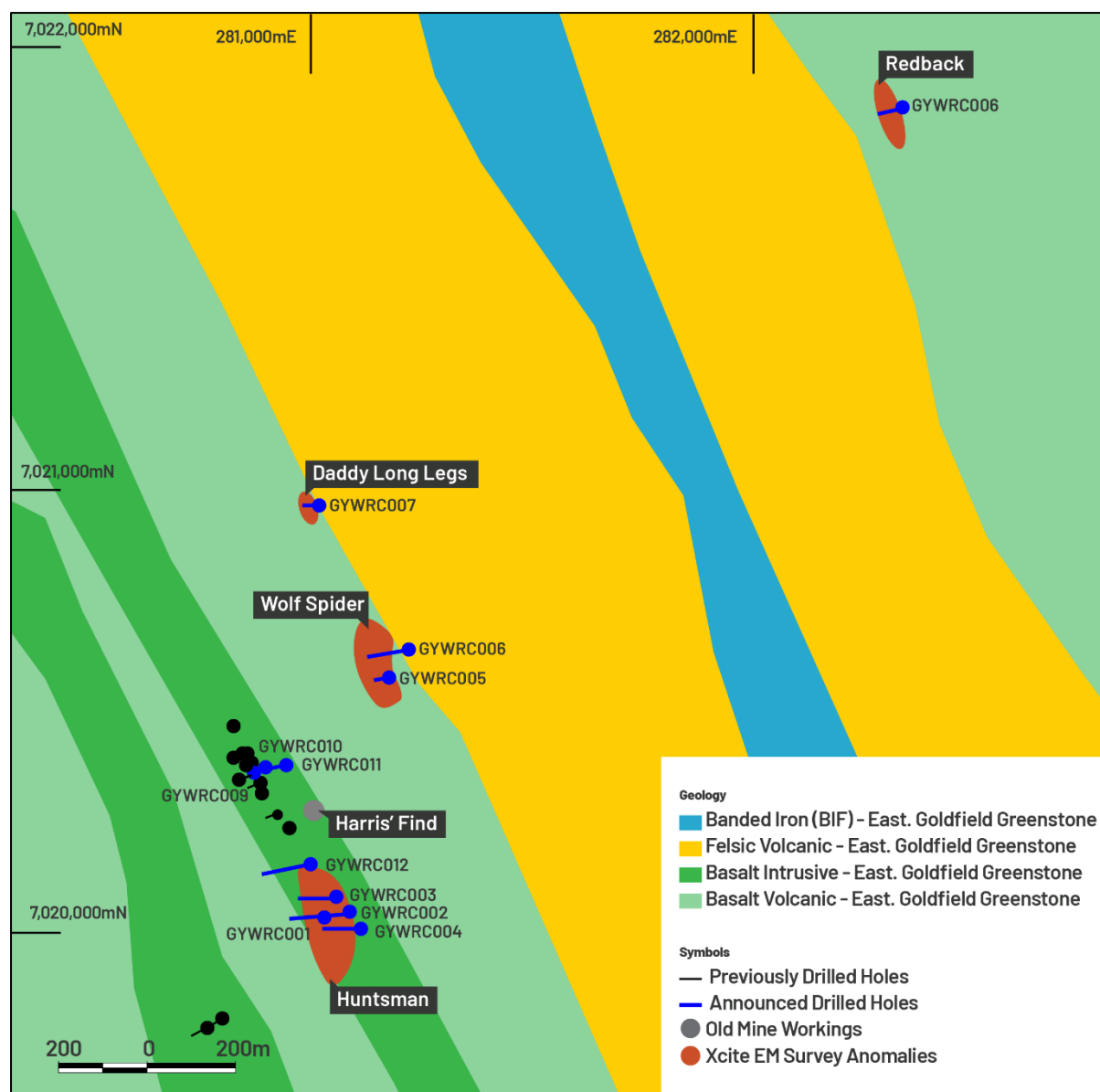


Figure 1: Location of EM anomalies over interpreted geology, with latest drilled holes displayed in blue.

The highly prospective EM targets Huntsman, Wolf Spider, Redback and Daddy Long-Legs were prioritised for drill testing, with the intersection of sulphide mineralisation in all holes validating the XCite EM conductor targets. Sulphide mineralisation is often a key component for metal rich geological systems, and the Company interprets the intercepts to have strong potential for accumulations of nickel, copper, gold, and platinum. Semi-massive and disseminated sulphide mineralisation was most pronounced at the Huntsman and Wolf Spider prospects, shown in Figure 2 and Figure 3.

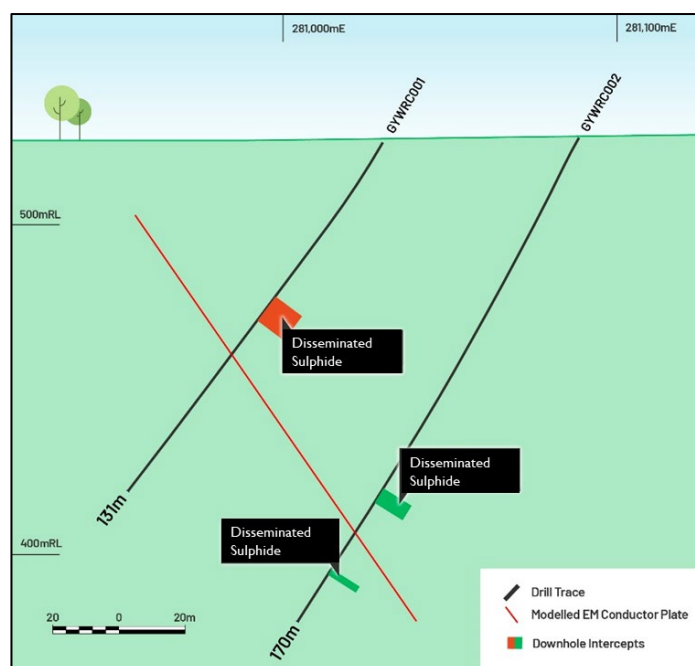


Figure 2: Cross-Section of Great Western drilling and associated significant sulphide intersections at the Huntsman Prospect, displaying good correlation with the modelled EM conductor plate.

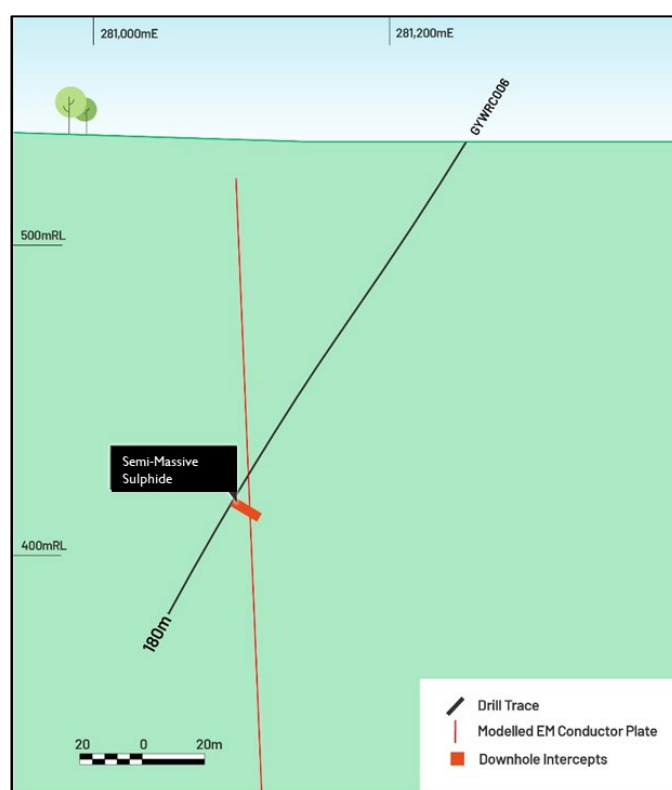


Figure 3: Cross-section of Great Western drilling and associated sulphide intercept at the Wolf Spider Prospect displaying good correlation with the modelled EM conductor plate.

The Harris' Find Prospect is a structural gold lode target, marked by a small shaft that was mined in the 1930s. A small number of drill holes tested the target in the mid-1990s, with the most significant intercept reported as 6m @ 4.91g/t Au (Great Western Exploration ASX Announcement 11 November 2019), and open at depth. The Company tested for extensions to the mineralisation below this high-grade intercept (Figure 4), with a structure intercepted with similar alteration and sulphide mineralisation as previously recorded in the 1990s drill-holes.

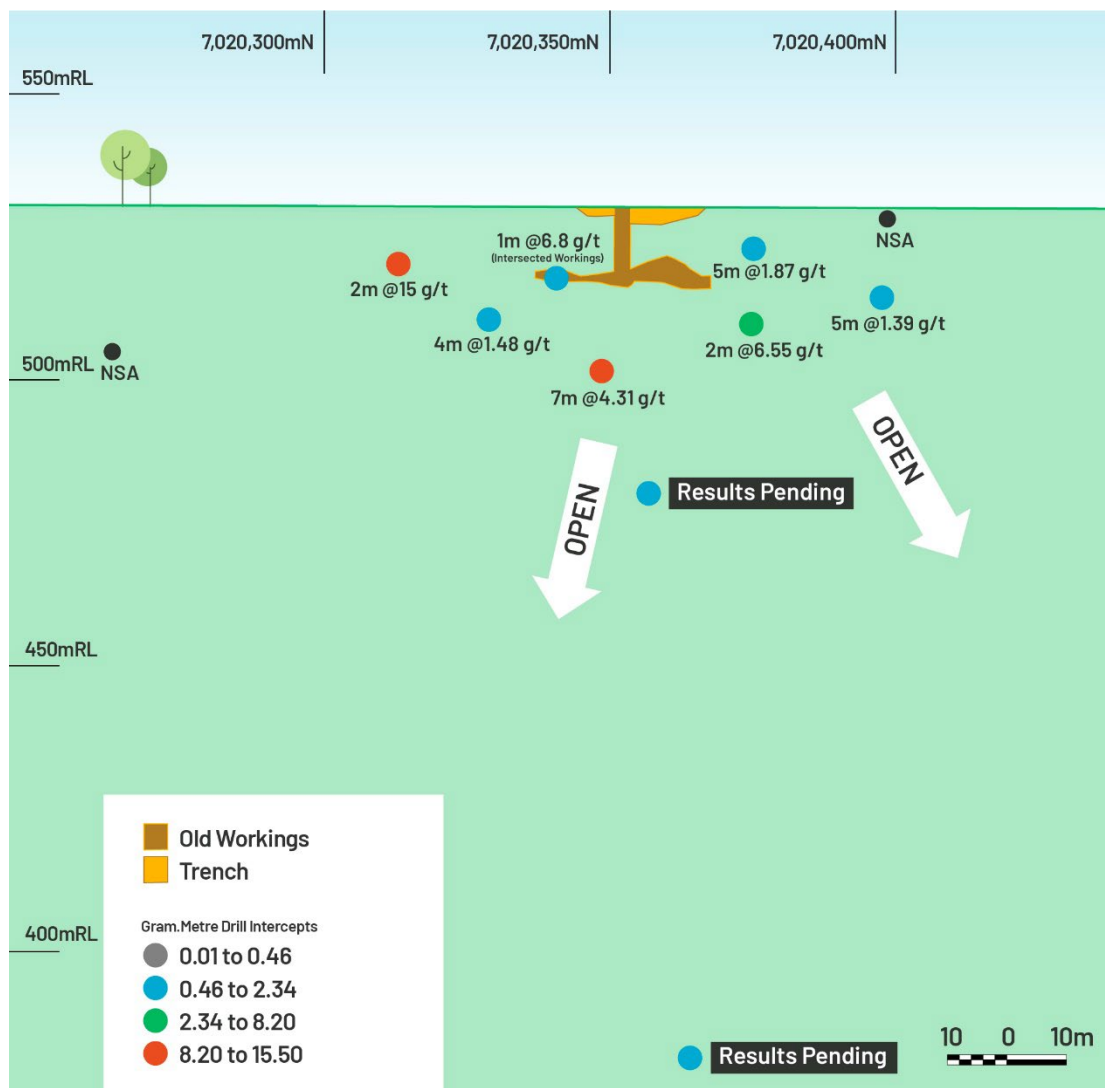


Figure 4: Harris' Find longitudinal section, with previously reported drill intercepts displayed, coloured by gold grams x drilled metres (GTE ASX Announcement 11 November 2019²). The latest Great Western Exploration intercepts are coloured blue with results pending.

Great Western looks forward to updating shareholders with the assay results from the Yandal West Project drilling campaign.

Golden Corridor Project (100% Great Western)

The Ready1 Nickel-PGE target was defined by Ultrafine+ soil sampling and an anomalous electromagnetic response from Geoscience Western Australia's SkyTem (AEM) survey. Interpretation of the AEM survey by Great Western and in conjunction with geophysical consultant Newexco, revealed stacked, conductive structures that strongly correlate to a 4km long by 1km wide NW-SE striking Ultrafine+ Ni-PGE anomaly (Figure 5).

The identification of an unexplored greenstone sequence with large regional scale faults, under relatively shallow cover that coincides with anomalous gold in Ultrafine+ soils is a strong indication that the sequence is highly prospective for significant gold mineralisation.

Great Western's field investigation of the Ready1 Target gives further encouragement of the target's potential. A mineralised basalt outcrop was identified, with a petrological study identifying the outcrop

as a tholeiitic basalt/dolerite, mineralised with minor pyrite and trace magnetite and chalcopyrite. It is interpreted that this mineralised mafic outcrop and associated Ni-PGE anomalism is prospective for Norilsk (Siberia) style deposits, one of the world's largest nickel deposits.

Additionally, two parallel trending and discrete platinum anomalies were identified immediately west of Ready1, also with coincident anomalous electromagnetic response (shown in Figure 5). The most continuous of these anomalies measured near 10km along strike.

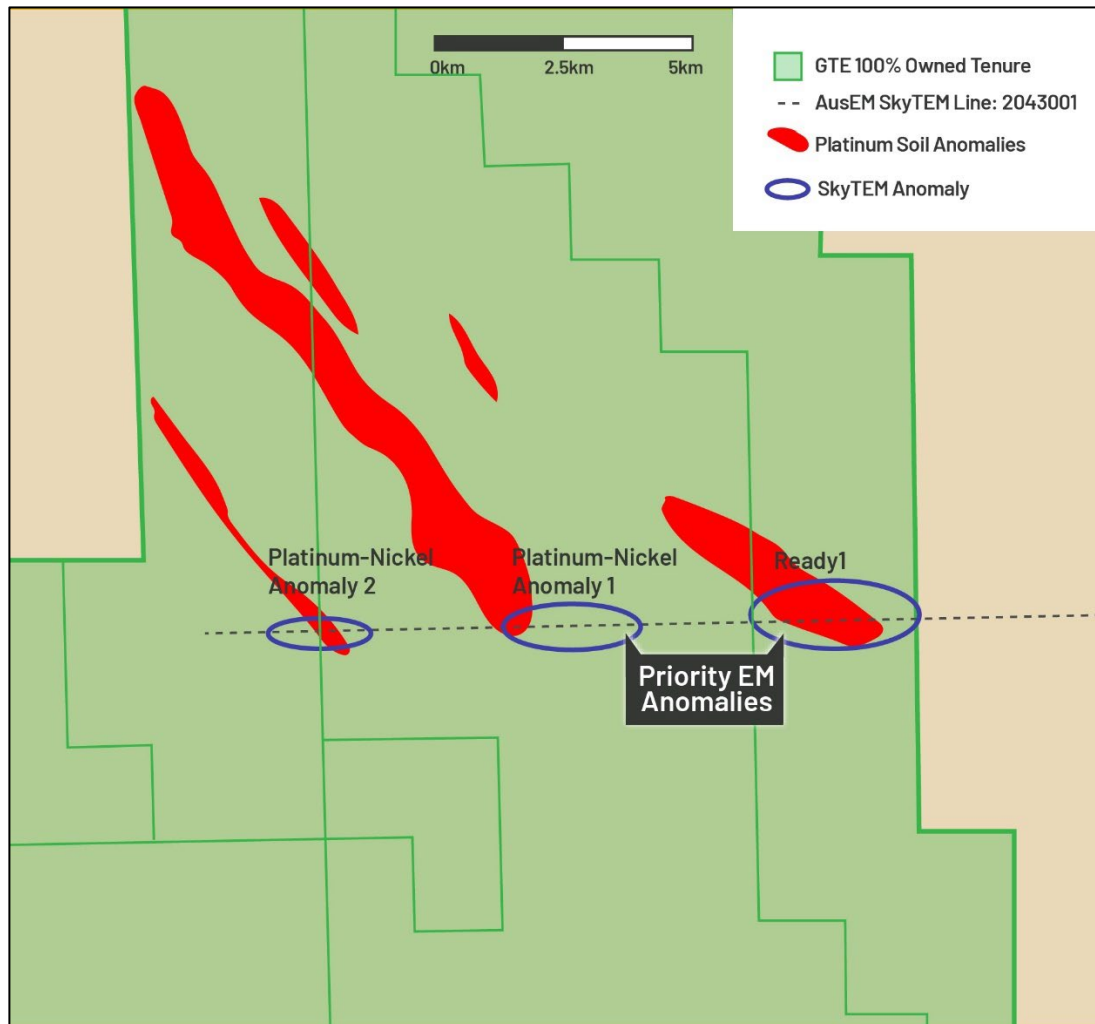


Figure 5: Ready1 Anomalous Nickel-Platinum soil and electromagnetic anomaly and parallel discrete anomalism west of this target

Exploration is being prioritised for the Ready1 target and the nearby parallel Ni-PGE anomalies. Infill Ultrafine+ soil sampling has already been completed and geophysical methods will be utilised and followed by drill testing.

As reported in the March 2022 Quarter, a number of gold in-soil anomalies have been defined coincident with the GC1 to GC4 structural targets (Figure 6). The gold anomalism correlates strongly with structural breaks within the Golden Corridor trend, that runs NNW from Wiluna, and areas of shallower interpreted Proterozoic cover. The gold anomalism highlighted within the soils is significant given the interpreted cover over the Archaean bedrock targets, and that this cover may subdue any geochemical signature of the underlying Archaean bedrock targets.

The identification of an unexplored greenstone sequence with large regional scale faults, under relatively shallow cover that coincides with anomalous gold in Ultrafine+ soils is a strong indication that the sequence is highly prospective for significant gold mineralisation. The Company intends to

undertake further field work focusing on the GC1 to GC4 target areas, where the Company has already acquired detailed aeromagnetic and preliminary passive seismic HVSR data.

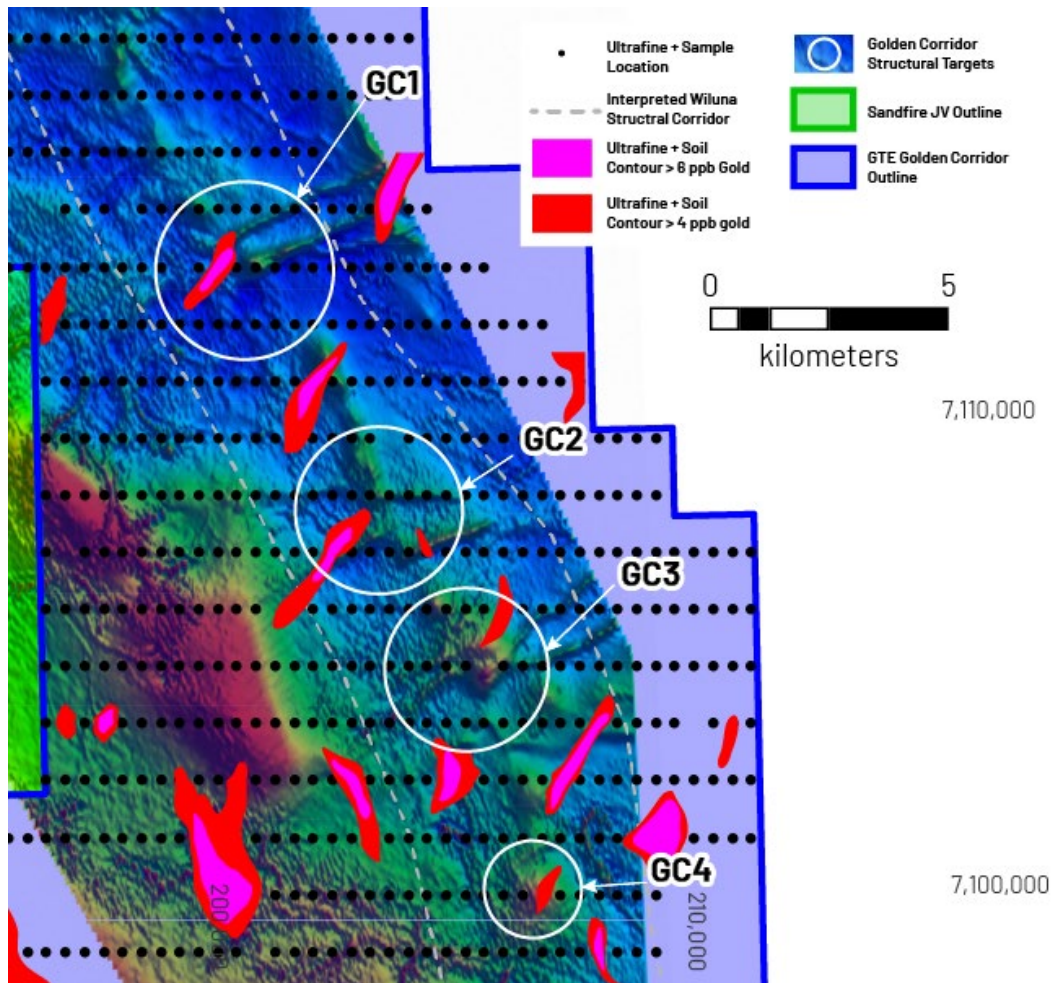


Figure 6: The upgraded GC1 to GC4 aeromagnetic structural targets in relation to the anomalous gold contours. These coincident areas will be the initial focus of follow-up work.

Yerrida South Project (100% GTE)

Promising Ni-PGE-Cu anomalism was identified at the Yerrida South Project, located 50km south-south-east of Sandfire's (ASX: SFR) DeGrussa copper-gold operation (Figure 7). A total of 2,079 assays from a 3,108 Ultrafine Sampling program were received, identifying several anomalous zones. Great Western anticipates that the forthcoming further work on this anomalism will result in a number of compelling drill targets being defined.

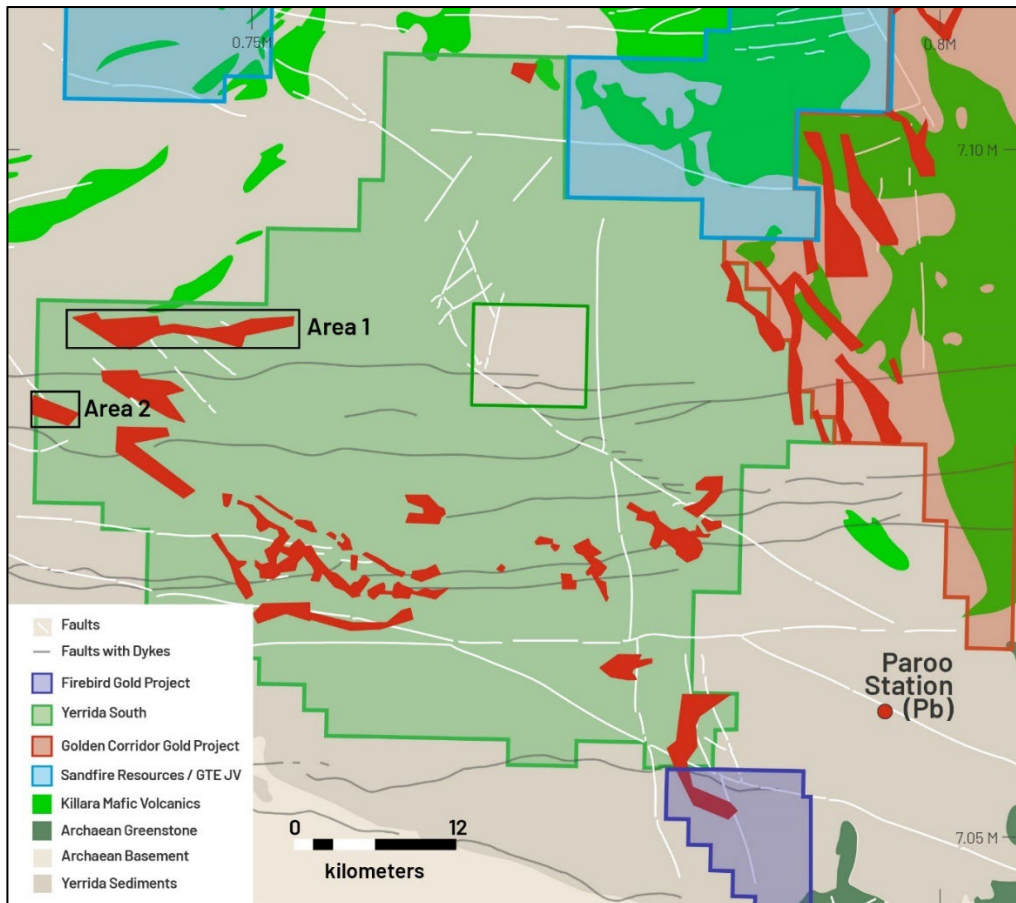


Figure 7: Yerrida South Ni-PGE-Cu anomalous areas of interest.

Fairbairn Base Metal Project (100% Great Western)

Great Western has a very large 960 sq.km strategic land position in the rapidly evolving Earraheedy Basin, the 100% owned “Fairbairn Base Metal Project”. Great Western has long held the view that the Fairbairn Project on the margin of the Yilgarn Craton is highly prospective for base metals and established its initial land position in the region prior to the discovery at Julimar by Chalice Mining Ltd (ASX:CHN). The Fairbairn Base Metal Project is situated near the northern boundary of the Yilgarn Craton approximately 900km north-east of Perth (see Figure 8).

The majority of previous exploration completed at the Fairbairn Project was undertaken from the late 1980s to the mid-1990s, primarily exploring for diamonds. This exploration included magnetic surveys, surface sampling, RC drilling, diamond drilling and petrology. Anomalous nickel results were recorded from drilling within sheared and altered ultramafic rocks, prospective for magmatic sulphide style deposits such as Julimar.

During the June 2022 Quarter further review of previously exploration was undertaken, including interpretation of airborne electromagnetic data completed by Geoscience Australia (AusAem). This interpretation completed by geophysics consultants Newexco, identified a number of anomalous peaks requiring further investigation. An airborne electromagnetic survey is planned for October 2022 to better delineate targets.

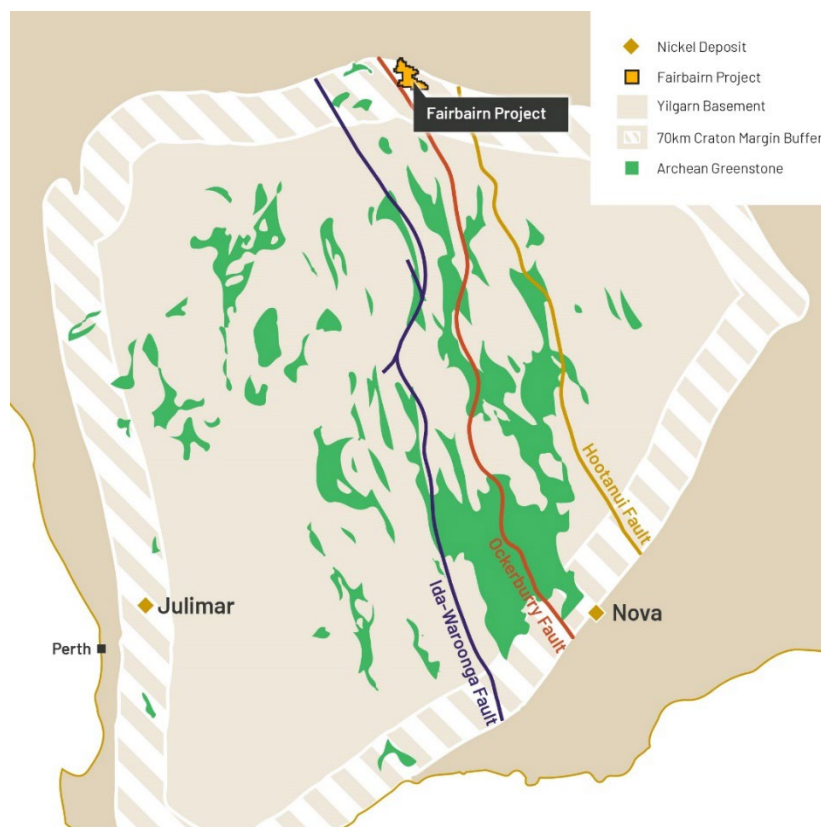


Figure 8: Fairbairn Project location is shown near to the interpreted margin of the Yilgarn Craton similar to Julimar in the west and Nova in the south-east.

Yerrida North JV (Sandfire Resources earning 70%)

During the June Quarter 2022, Sandfire Resources Limited (ASX: SFR) (“Sandfire”) reviewed 1,583 lag and 513 magnetic lag samples in respect to lithology, structure, and potential deposit type. Two areas were identified from this review as prospective for Zn-rich VMS mineralization and prioritised for further exploration, Chinook and Summit, shown in Figure 9. Further soil sampling on these targets was completed on a nominal 400m x 400m pattern, with 123 samples taken (42 at Chinook, 81 at Summit); results are pending.

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 June 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.

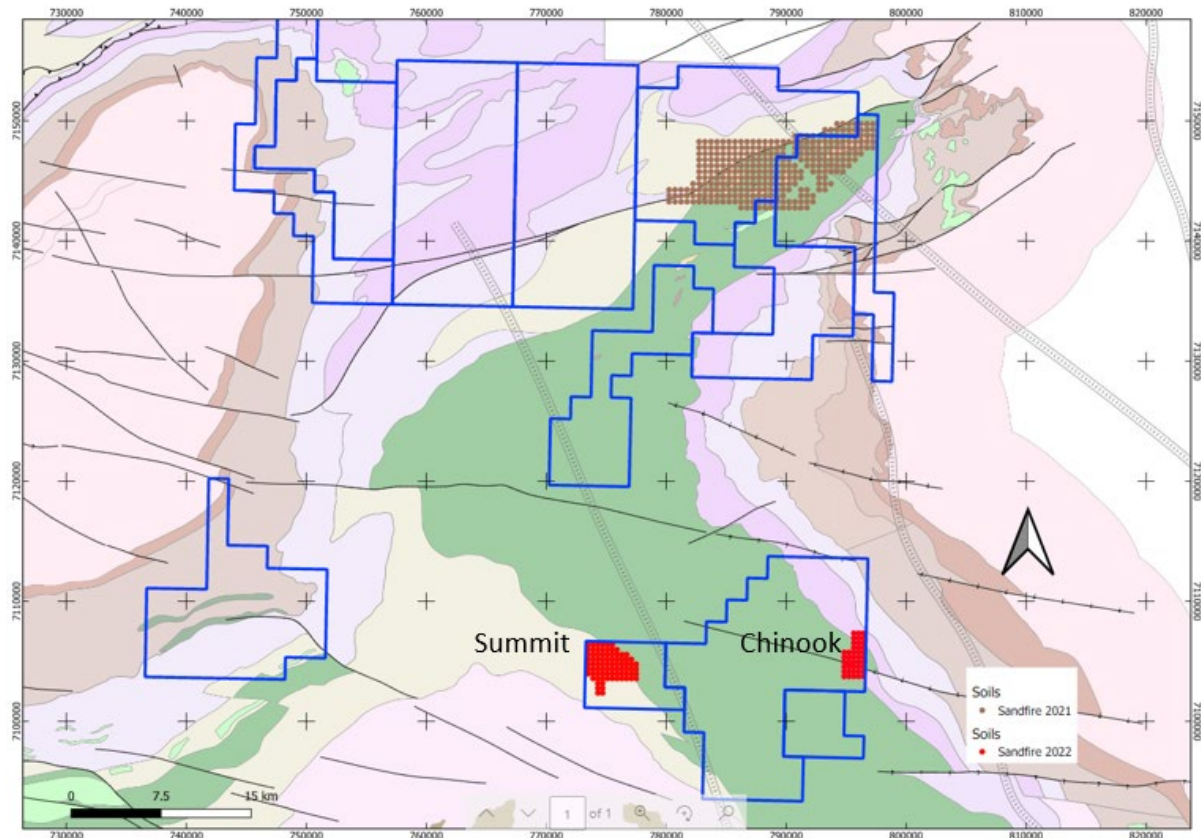


Figure 9: Gavin Daneel's regional geological map overlain with soil samples taken in 2021 (brown), and those taken in 2022 shown in blue.

Fieldwork Summary

Great Western is currently progressing a number of 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;
- Geophysical surveys;
- Completion of drilling at Yandal West (priority VMS or sulphide associated lode gold targets, refer ASX announcements 6/10/2021 and 25/10/2021); and
- A geophysical review of existing data and a targeting report, currently underway by Great Western's consultants Newexco across a number of the Company's Project areas.

Great Western looks forward to updating shareholders.

Corporate

Placement completed

During the June 2022 Quarter, the Company completed a fund raising of \$3.5 million (before costs) by way of a placement of 43,750,000 ordinary shares at an issue price of \$0.08 per share ("Placement") to professional and sophisticated investors. The Placement ensures that Great Western is fully funded for its exploration program.

Euroz Hartleys Limited and Peloton Capital acted as Joint Lead Managers for the Placement. Great Western directors, Kevin Somes, Ross Williams and Grey Egerton-Warburton participated in the Placement following shareholder approval at a General Meeting held on 20 June 2022.

Junior Mineral Exploration Incentive

Subsequent to the June 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.

Shane Pike joins Great Western

Early in the June 2022 Quarter experienced geologist, Mr Shane Pike joined Great Western as Managing Director, replacing Mr Tom Ridges. Mr Pike is a geologist with well over 20 years' of successful technical and management experience and proven track record in gold and base metals exploration, discovery, project development and in both open pit and underground mining. Mr Pike holds a Bachelor of Applied Science (Double Major Geology). Mr Pike was Exploration Manager (East Coast) for Evolution Mining Limited (ASX:EVN) (7 years), and Senior Exploration Geologist for Newcrest Mining Limited (ASX:NCM) (3 years) and Equigold NL (9 years). Mr Pike also served as Chief Executive Officer of Santana Minerals.

ASX Additional Information

- ASX Listing Rule 5.3.1: Exploration & Evaluation Expenditure during the June 2022 Quarter was \$827,000. Full details of exploration activity during the June 2022 Quarter are in this report.
- ASX Listing Rule 5.3.2: There were no substantive mining production and development activities during the June 2022 Quarter.
- ASX Listing Rule 5.3.5: Payments to related parties of the Company and their associates during the June 2022 Quarter: \$74,000 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

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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.

Appendix 1: Tenement Schedule at 31 March 2022

Project	Tenement	Status	Holder	Ownership	Comments
Atley	E 57/1130	Live	Great Western Exploration Limited	100%	
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%	
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
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

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%	Extension of Term pending
Copper Ridge	E53/2156	Pending	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	Pending	Great Western Exploration Limited	100%	
Calyerup	E 70/6032	Live	Great Western Exploration Limited	100%	
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%	
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%, Extension of Term pending
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%, Extension of Term pending
Yerrida North JV	E 51/1723	Live (2)	Great Western Exploration Limited	100%	Sandfire Earning 70%, Extension of Term pending
Yerrida North JV	E 51/1724	Live (2)	Great Western Exploration Limited	100%	Sandfire Earning 70%. Extension of Term pending
Yerrida North JV	E 51/1728	Live (2)	Great Western Exploration Limited	100%	Sandfire Earning 70%, Extension of Term pending
Yerrida North JV	E 51/1746	Live (2)	Great Western Exploration Limited	100%	Sandfire Earning 70%, Extension of Term pending
Yerrida North JV	E 51/1747	Live (2)	Great Western Exploration Limited	100%	Sandfire Earning 70%, Extension of Term pending
Yerrida North JV	E 51/1819	Live	Great Western Exploration Limited	100%	Sandfire Earning 70%

Project	Tenement	Status	Holder	Ownership	Comments
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	Pending	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.