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YAMARNA PROJECT

CO-FUNDED DRILLING FINAL REPORT

Pebble Beach Komatiite

for Tenement

E38/2507

Application number DAG2020/00122742

MT. MARGARET MINERAL FIELD

Western Australia

Date:	October 2021
Tenement Holder:	Gold Road Resources Limited
Operator:	Gold Road Resources Limited
Prepared By:	Clayton Davy's
Authorised By:	Clayton Davy's
Map Reference:	Throssell (SG5115) 1:250,000 sheet Yamarna (3642) 1:100,000 sheet
Distribution:	Department of Mines, Industry Regulation and Safety Gold Road Resources Limited
Report no:	

BIBLIOGRAPHIC DATA SHEET

Project Name:	SOUTH YAMARNA
Combined Reporting No:	**C185/220**
Tenement Numbers:	E38/2507
Tenement Operators:	Gold Road Resources Limited
Tenement Holders:	Gold Road Resources Limited
Report Type:	Co-Funded Drilling Interim
Report Title:	Yamarna Project, Co-funded Drilling Interim Report, Pebble Beach Komatiite, for Tenement E38/2507, Application number DAG2020/00122742
Report Period:	July-December 2020
Author:	Clayton Davy's
Date:	October 2021
1:250 000 Map Sheet:	Throssell (SG5115)
1:100 000 Map Sheet:	Yamarna (3642)
Target Commodity:	Ni, Cu, PGE, Au
Keywords:	EIS, Pebble Beach, DD, ultramafic
Prospects Drilled:	Pebble Beach
List of Assays:	N/A

ABSTRACT

Location:	The Pebble Beach project area is located in the southern part of the Yamarna Greenstone Belt within the Yamarna Terrane, approximately 900km NE of Perth, 140km E of Laverton, in the Yilgarn Block of Western Australia.
Geology:	The Yamarna Greenstone Belt in the vicinity of the EIS drilling is a thick sequence of Ti-rich mod-Th basalt (Muirfield Mafic) and intermediate to felsic provenance volcano-sedimentary units intruded by feldspar porphyries, doleritic sills and granitoids. The target is an ultramafic unit situated within the Muirfield Mafic formation. The region is covered by a sequence of Quaternary and Cenozoic sands and silts, and the glacial derived Paterson Formation.
Work Completed:	Two diamond holes (20PQDD0005A and 20PQDD0006), to a total depth of 1009.65m
Results and Conclusions:	Ultramafic represents a single intrusive body. Some results remain pending. No indication of sulphide associated Ni or Cu mineralisation. Max values (pXRF) within ultramafic of 1832ppm Ni and 105ppm Cu. Max Au is 0.084ppm.

Results and Conclusions:

The two diamond holes were drilled into what is interpreted to be the hangingwall and foot wall contacts of an approximately 400m thick ultramafic intrusion hosted within the greater Muirfield basaltic sequence. The ultramafic intrusion is primarily a thick body of low to moderate MgO (20 to 35% MgO) talc-carbonate altered peridotite with a relatively thin upper differentiated zone of pyroxenite and gabbro.

There was no results indicative of nickel-copper mineralisation or gold mineralisation within the intrusion. No sulphide associated elevated Ni was evident and Ni vs MgO data (4AD/fusion) plots on the expected Ni in olivine trend or as slightly Ni-depleted. From the pXRF data maximum values within the ultramafic were 1832ppm Ni and 105ppm Cu. There were no coincident anomalous Ni-Cu values. The maximum gold assay within the two holes was 0.084 ppm Au.

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The ultramafic intrusion is Al-undepleted and has a slightly light REE depleted chondrite normalised REE signature that approaches chondritic values for the higher MgO samples and is consistent with Munro-Type 2.7Ga komatiites (Arndt, 2003). Exploration to date in the Yamarna Terrane has not identified any komatiitic volcanics and only minor additional thin intrusions with a similar signature.

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Appendix 1: Verification Listing Form

1 Summary

Two diamond (DD) holes for a total of 1009.65m were completed at the Pebble Beach prospect as a part of a co-funded agreement with the Department of Mines, Industry Regulation and Safety of Western Australia (DMIRS) under the Exploration Incentive Scheme (EIS). Initially a single hole was planned to test the nature and extent of an ultramafic body intersected in as part of Gold Road's gold exploration in February 2020.

The initial hole (20PQDD0005A) was drilled toward the east to a depth of 663.95m and drilled through to the upper contact of a thick differentiated ultramafic intrusion. A second diamond hole (20PQDD0006) was then drilled to a depth of 327.4m toward the west and intersected the western and interpreted basal contact of the intrusion. The ultramafic intrusion is interpreted to be approximately 400m thick and comprises dominantly a zone of low to moderate MgO (20 to 35% MgO) talc-carbonate altered peridotite with a relatively thin upper differentiated zone of pyroxenite and gabbro.

There were no results indicative of nickel-copper mineralisation or gold mineralisation within the intrusion. No sulphide associated elevated Ni was evident and Ni vs MgO data (4AD/fusion) plots on the expected Ni in olivine trend or as slightly Ni-depleted. From the pXRF data maximum values within the ultramafic were 1832ppm Ni and 105ppm Cu. There were no coincident anomalous Ni-Cu values. The maximum gold assay within the two holes was 0.084 ppm Au.

The ultramafic intrusion is Al-undepleted and has a slightly light REE depleted chondrite normalised REE signature that approaches chondritic values for the higher MgO samples and is consistent with Munro-Type 2.7Ga komatiites (Arndt, 2003). Exploration to date in the Yamarna Terrane has not identified any komatiitic volcanics and only minor additional thin intrusions with a similar signature.

The work completed has been summarised below in Table 1 and its location shown on the Exploration Index Map (Figure 1).

Table 1: Exploration Activities

Tenement	# DD holes	DD meters	DD samples
E38/207	2	1009.65	802

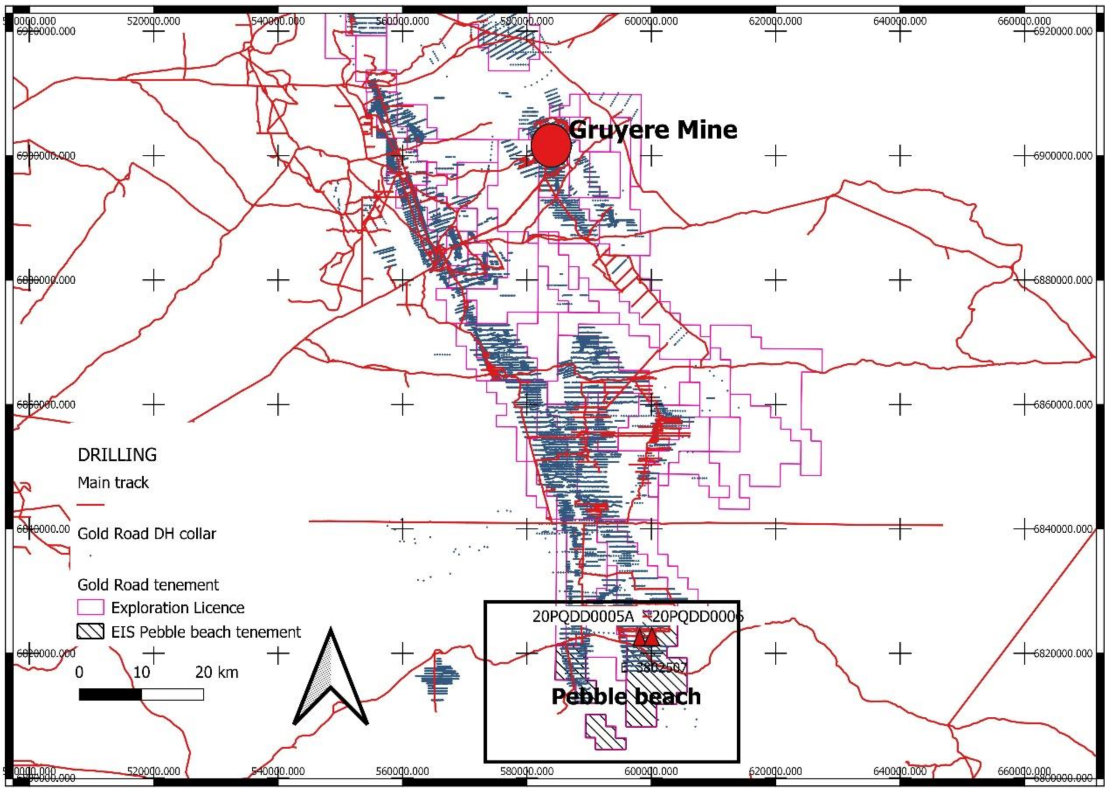

Figure 1: Exploration Index Map with tenement and diamond collar locations

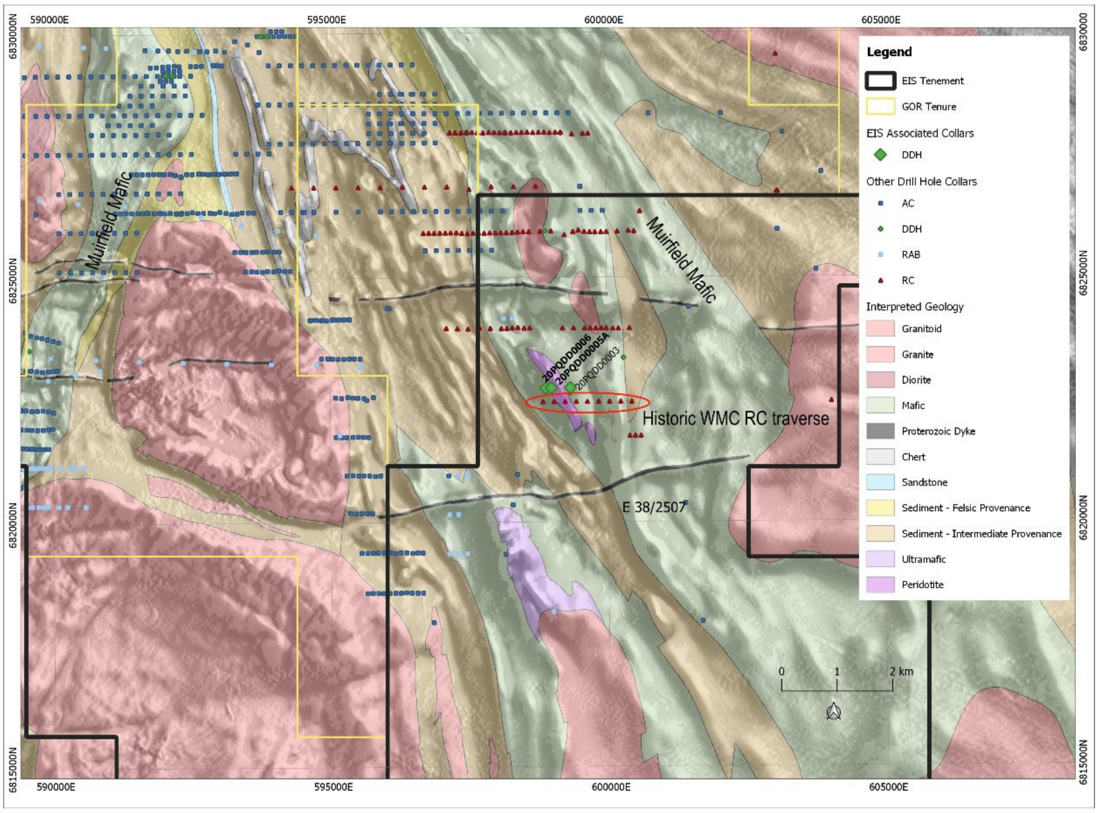

Figure 2: 2020 EIS hole locations displayed with 2VD grey scale aeromagnetic image and 20k geological interpretation showing the Muirfield Mafic and historic WMC RC collars.

2 Introduction

This Final EIS Report covers the drilling and results of the R20 programme comprising a two hole diamond drilling program to assess the nature of a newly identified ultramafic system within the Yamarna Terrane. The two drill holes, 20PQDD0005A and 20PQDD0006 were drilled for a total of 1,009.65 metres and were completed during September 2020. The drilling was co-funded by the Western Australian Government Exploration Incentive Scheme (EIS).

The report was compiled by Gold Road Resources Specialist-Geology Clayton Davy's from review of drill core, internal reports, assays and geological logs. Contributions by all geologists involved in the logging of the core are gratefully acknowledged.

3 Location, access and topography

The Yamarna Project is situated approximately 900 kilometres north east of Perth and 140 kilometres east of Laverton in central Western Australia. Direct access to the project from Laverton is via the unsealed Laverton-Warburton road (Great Central Road), turning south approximately 64 kilometres east of Cosmo Newberry, and then 36 kilometres to the Yamarna Camp. An alternate route is via the unsealed Laverton-White Cliffs-Yamarna road.

Access to the southern tenement holdings is via the White Cliffs Road and south along the Mt Fleming road to existing baselines and exploration tracks. Topography is generally flat with drifted sand and east-west trending sand dune systems. Permian breakaway ridges provide local relief with Archaean outcrop not present.

4 Tenement Details

Tenement E38/2507 is held by Gold Road (South Yamarna), a subsidiary of Gold Road Resources Limited ("Gold Road") (Table 2, Figures 1 and 2).

Tenement E38/2507 is part of Combined Reporting Group C185/2020 and falls within the Nangaanya-ku native title claim that was accepted for registration on the 9th November 2018. Gold Road has an agreement with the Central Desert Native Title Services who act on behalf of the Nangaanya-ku native title claimants. This agreement allows exploration activities to be carried out in the project area

Table 2: Tenement Details

Lease	Holder	Blocks	Grant Date	Expiry Date	Status
E38/2507	Gold Road (South Yamarna)	67	05/07/2011	04/07/2021	live

5 Geology and Mineralisation

5.1 Regional Geology

The Yamarna Terrane defines the easternmost Terrane of the Archean Yilgarn Craton, the dominant host for gold mineralisation and mined gold production in Australia (Figure 3). The Yamarna Terrane is host to the Yamarna Greenstone Belt (YGB) on the western margin of the Terrane and Dorothy Hills Greenstone Belt (DHGB) approximately 25km to the east. The western margin of the terrane is marked by the 350-kilometre-long Yamarna Shear Zone (YSZ). Seismic data reveals the Yamarna Terrane extends beneath the Proterozoic sedimentary stratigraphy to the east (Korsch et al., 2013) with the eastern margin typically sheared against metagranitic rocks.

Reconnaissance mapping in the region by Gower and Boegli in 1977 identified the YSZ as a major structural feature. The 2001 Geoscience Australia Laverton-Leonora North-eastern Yilgarn seismic transect identified the YSZ to be a crustal-scale, east dipping, listric structure flooring into a detachment at 35 km depth. Cassidy et.al (2006) identified the YSZ as a domain bounding structure and Pawley et.al (2007) described the structural elements from the Mount Venn, Yamarna and Dorothy Hills greenstone belts.

Pawley et. al. (2012) released the results of geological mapping and geochronology conducted in the northeast Yilgarn Craton, which significantly changed the geological understanding of this region and separated the Yamarna Domain into a terrane in its own right. Geochronological dating from GSWA sampling and Gold Road internal dating has identified the YGB as being *ca* 2720-2663Ma and equivalent in age to the Kalgoorlie Terrane and the DHGB at *ca* 2840-2810Ma having a similar age to elements of the Younami and Burtville Terranes.

Outcrop is limited in the Yamarna Terrane, with less than 5% of the area exposed. The YGB is dominated by intermediate to dacitic volcanosedimentary basinal sequences and mafic volcanics and intrusives (Figure 3). Minor ultramafic, felsic volcanic and volcanoclastic, carbonaceous shales and chert units are also present. The mafic rocks are primarily basaltic, variably deformed to schists, with locally preserved pillows and flow top breccias. Dolerite and gabbro sills are noted throughout the succession and are more common in the southern part of the belt. Thin units of low-MgO ultramafic rock occur primarily on the western and eastern margins of the belt. On the very eastern edge of the YGB, extending for approximately 50 kilometres, is the Argus Igneous Complex that has been dated at 2,737 +/- 26 Ma (Wingate et. al. 2011) and it is interpreted to represent a fault slice of Mt Venn Belt.

The DHGB, which hosts the Gruyere Deposit, extends for an identified 90 kilometres and is poorly exposed over the entirety of its strike length. This north-northwest trending belt is dominated by a greenstone sequence comprising of predominantly foliated and metamorphosed, intermediate volcaniclastic, and mafic volcanic lithologies.

Three distinct basaltic groups were defined at Yamarna, based on geochemical characteristics, documented stratigraphy, and comparison to modern day tectonic settings (Barnes et al., 2012): low-Th basalts, high-Th siliceous basalts, and an intermediate-Th basalt.

Classification of the basalts in the Yamarna Terrane shows a distinct spatial distribution of similar basaltic types:

- Low-Th pillow basalts occur in the oldest stratigraphic succession at Dorothy Hills and in the Southern Yamarna area;
- High-Th siliceous variolitic basalts are situated in the most northern and central parts of the Yamarna belt, and in the western part of the Dorothy Hills Belt;
- and Intermediate-Th basalts generally proximal to the Low-Th basalts.

The Yamarna Terrane, including the Yamarna Greenstone Belt and the Dorothy Hills Greenstone Belt, is historically underexplored and highly prospective for gold mineralisation. Geologically similar to the prolific Kalgoorlie Gold Belt, within the Yamarna Terrane, orogenic gold mineralisation has been observed in all tectonostratigraphic groups and most rock types (Figure 4). Gold mineralisation styles identified to date occurs in a continuum from brittle to ductile settings and exhibits a range of alteration assemblages and metamorphic settings.

The Gruyere deposit, representing the brittle end of the spectrum within the Terrane is located in the DHGB and hosted entirely within the Gruyere Porphyry (Osborne 2015, 2017), a quartz monzonite intrusive situated within the regional scale Dorothy Hills Shear Zone (DHSZ) (Figure 4). The 5.8 Moz Au Gruyere deposit is the largest gold deposit discovered within the terrane to date. Within the YGB mineralisation is represented by the Golden Highway shear-hosted gold deposits of the 14 kilometre Attila-Alaric Trend and the recently discovered Gilmour gold deposit hosted within laminated quartz veining.

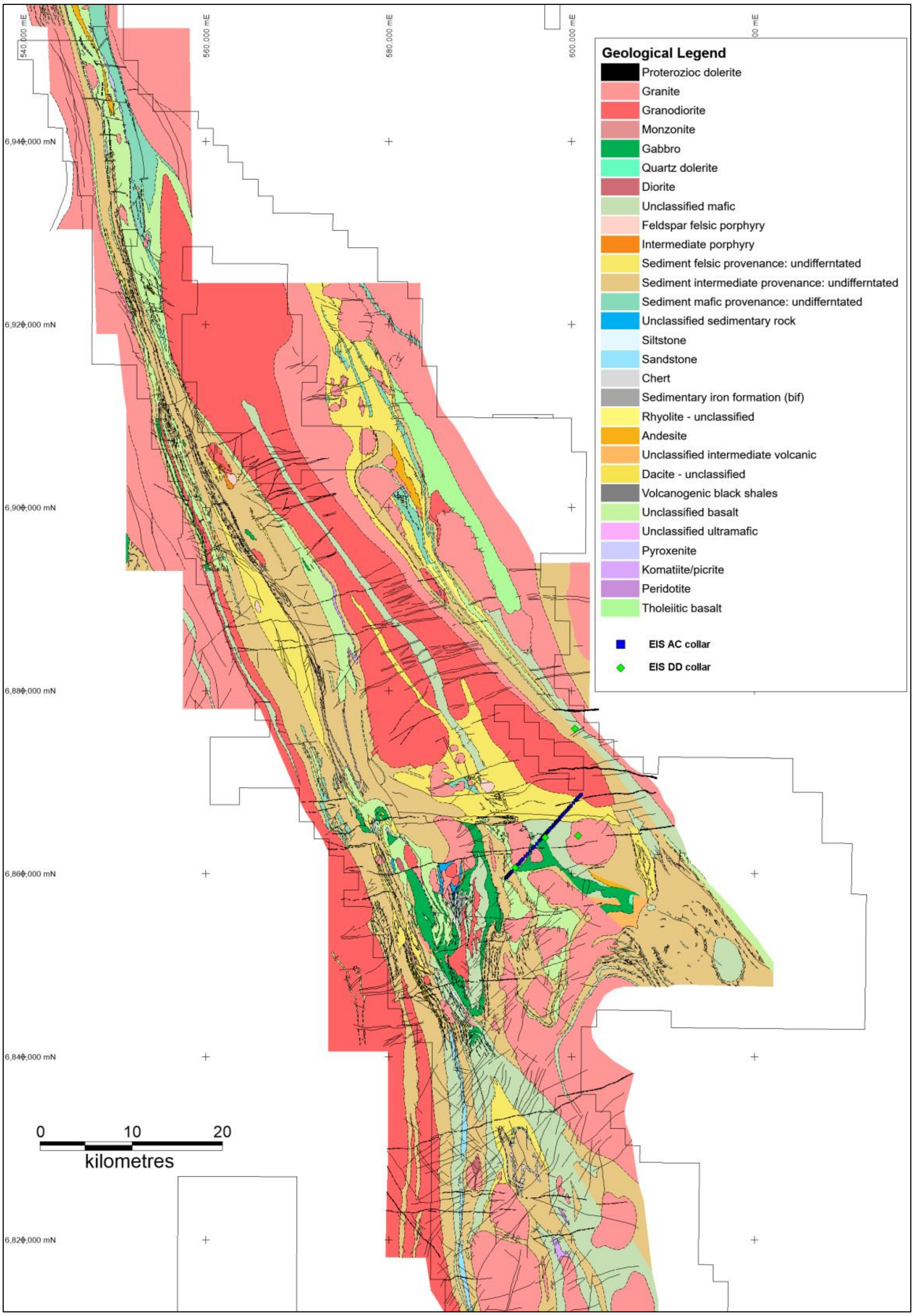

Figure 3. Interpreted Yamarna geology.

5.2 Local Geology

The EIS programme was drilled to test the nature of potential komatiitic body identified in a diamond drill hole (20PQDD0003) (Figure 2) drilled into a discrete magnetic high (1,800m strike by 300m thick) located in the southern part of the South Yamarna area, approximately 58km SSW of the Atilla Deposit and 72km south of the Gruyere Mine. The ultramafic body is situated within the St Andrews tectonostratigraphic group (Figure 4), to the west of the Smokebush Shear and is hosted within the western limb of the voluminous Muirfield Mafic that is comprised predominantly of high-Ti mod-Th basalt flows. Adjacent to the Muirfield Mafic are silicilastics of felsic to intermediate provenance.

The ultramafic rock intersected initially in 20PQDD0003 was a moderate-MgO, talc-carbonate altered rock with potential cumulate textures. The ultramafic has a faulted/sheared contact with the adjacent mafic and no facing indicators were evident, and it was not known if the rock represented an intrusive or extrusive unit.

The area in the vicinity of the drilling has a 100m thick cover sequence that contains Quaternary dune sands, Cenozoic alluvial and fluvial sands and Permian glacial sediments. The Permian glacial sediments comprise basal massive diamictite and an upper sequence of laminated silts and clays. The Archean profile is stripped and the Permian sequence sits on fresh Archean.

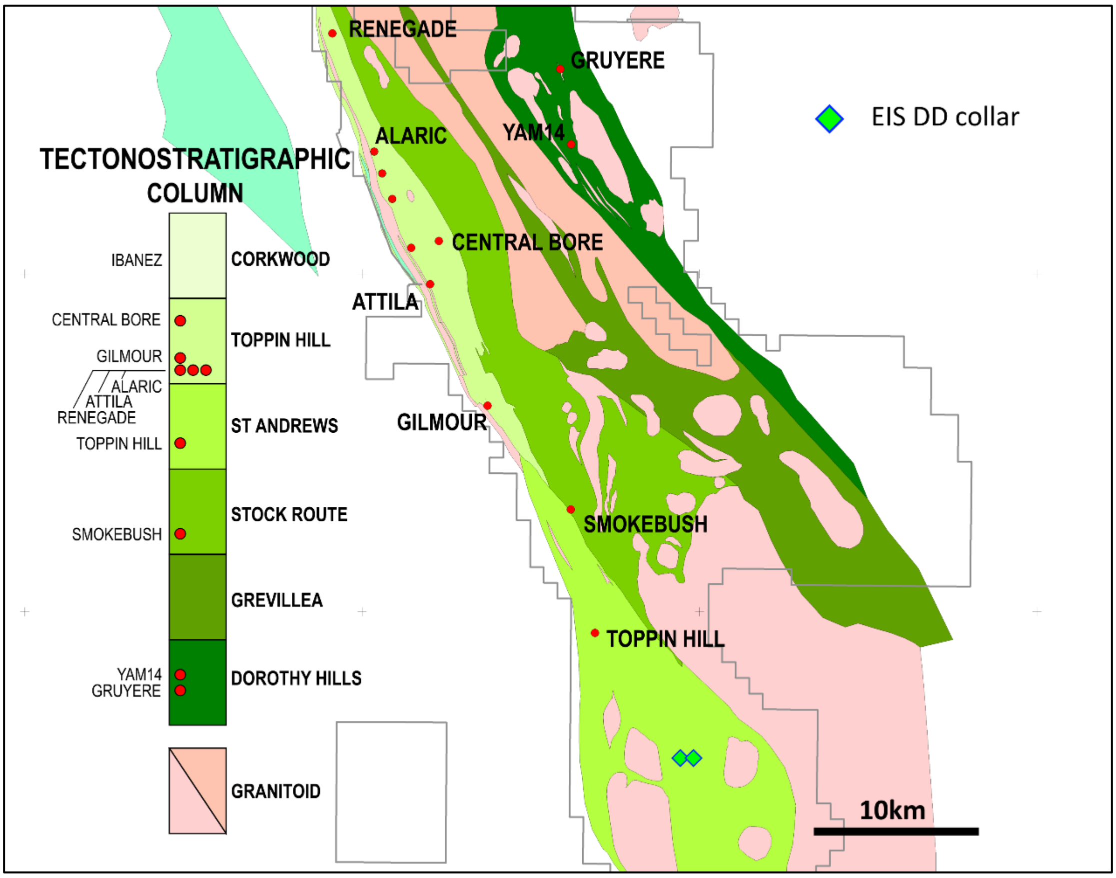

Figure 4. Yamarna tectonostratigraphic groups displaying the location of the EIS collars within the St Andrews tectonostratigraphic group.

6 Previous Exploration

Limited previous exploration has occurred in the vicinity of the diamond collars.

Western Mining Resources conducted an RC traverse across the magnetic high with vertical holes in 1997 (Figure 2). Ultramafic was logged in one hole on the traverse. The drilling only penetrated a short distance into the Archean and no anomalous gold or nickel-copper was identified. No further was conducted and the ground was surrendered in 2000 following the sale of the gold business unit to Gold Fields.

Gold Road entered into a joint venture over the area with Sumitomo Metal Mining Oceania in 2013, however the only drilling conducted in the vicinity was interface drilling testing a pisolitic horizon at the base of the dune sands. Gold Road bought Sumitomo's share of the JV in 2017 with the first drilling conducted in the area in 2020 being an RC traverse 1,200m to the north and the diamond hole, 20PQDD0003,drilled into the magnetic high that confirmed the presence of the ultramafic body.

7 Exploration During the Current Reporting Period

The EIS drilling programme was initially planned to be a single diamond hole to drill the footwall and hangingwall contacts of the ultramafic body, however three holes were collared. The first hole, 20PQDD0005, was abandoned at 18.3m due to a set up error. Gold Road was not charged for this hole. Drill holes 20PQDD0005A and 20PQDD0006 were then drilled to completion for a total of 1009.65m. Details of the DD holes are contained in Table 1.

20PQDD0005A was drilled to the northeast to a depth of 663.95m (Figure 5) , it entered ultramafic rock at the unconformity and exited the ultramafic body through what is thought to be the differentiated upper contact of an ultramafic intrusive body. A second hole was sought and approved, 20PQDD0006, to then drill to the southwest to a depth of 327.40m to test the western contact of the ultramafic body. 20PQDD0006 drilled into ultramafic rock at the unconformity drilled through the western and interpreted based contact of the ultramafic body. The holes were completed between September 10th and September 24th 2020.

All core was photographed using a dedicated core photo booth with Canon DSLR camera. Photographs of wet and dry core were collected. Drill core was oriented using a Reflex ACT III core orientation tool and lithologically and structurally logged by Gold Road geologists.

Table 3: Drill hole details

Hole ID	20PQDD0005 (ABANDONED)	20PQDD0005A	20PQDD0006
Hole Type	DDH	DDH	DDH
Max Depth	18.3	663.95	327.4
MGA East	598886	598888	598990
MGA North	6822729	6822730	6822737
NAT_RL	347	347	346
Zone	MGA94_51	MGA94_51	MGA94_51
Collar Surveys	DGPS		
Lease ID	E38/3223	E38/3221	E38/2292
Date Started	E 38/2507	E 38/2507	E 38/2507
Date Completed	10/09/2020	10/09/2020	20/09/2020

Collar dip	10/09/2020	19/09/2020	24/09/2020
Collar azimuth	060	060	240
Downhole Surveys	Reflex Sprint-IQ Gyro		
Drilling Company	Orlando Drilling		
Drill Rig	Rig 21		
# Samples	0	583	219
Sampling	Cut using Corewise core saw (min sample length 0.2m max length 1.2m)		
Sample Method	N/A	Quarter core	Quarter core
Laboratory	N/A	Min Analytical	Min Analytical
Au Analysis (method)	N/A	Fire Assay (FA50AAS)	Fire Assay (FA50AAS)
Multielement (method)	N/A	Mixed Acid/Fusion (MA40MS/FUS30MS)	Mixed Acid/Fusion (MA40MS/FUS30MS)
Lab pXRF	N/A	Olympus Vanta	Olympus Vanta

7.1 Lithologies, Alteration and Mineralisation

The two diamond holes successfully tested the extents of the targeted ultramafic, drilling an approximately 400m thick ultramafic body that is dominantly moderate to low MgO talc-carbonate altered peridotitic ultramafic intrusion (Figure 5). The presence of coarse grained pyroxenite and gabbo layers on the eastern contact are thought to be products of differentiation and indicative of an eastern facing of the intrusion. The ultramafic has intruded into a logged mafic stratigraphy comprising basalt and dolerite and has been intruded by a later biotite-bearing enriched mafic that may be lamprophyric in character. The area is overlain by Quaternary, Cenozoic and Permian sediments with the unconformable Archean contact being with stripped fresh rock.

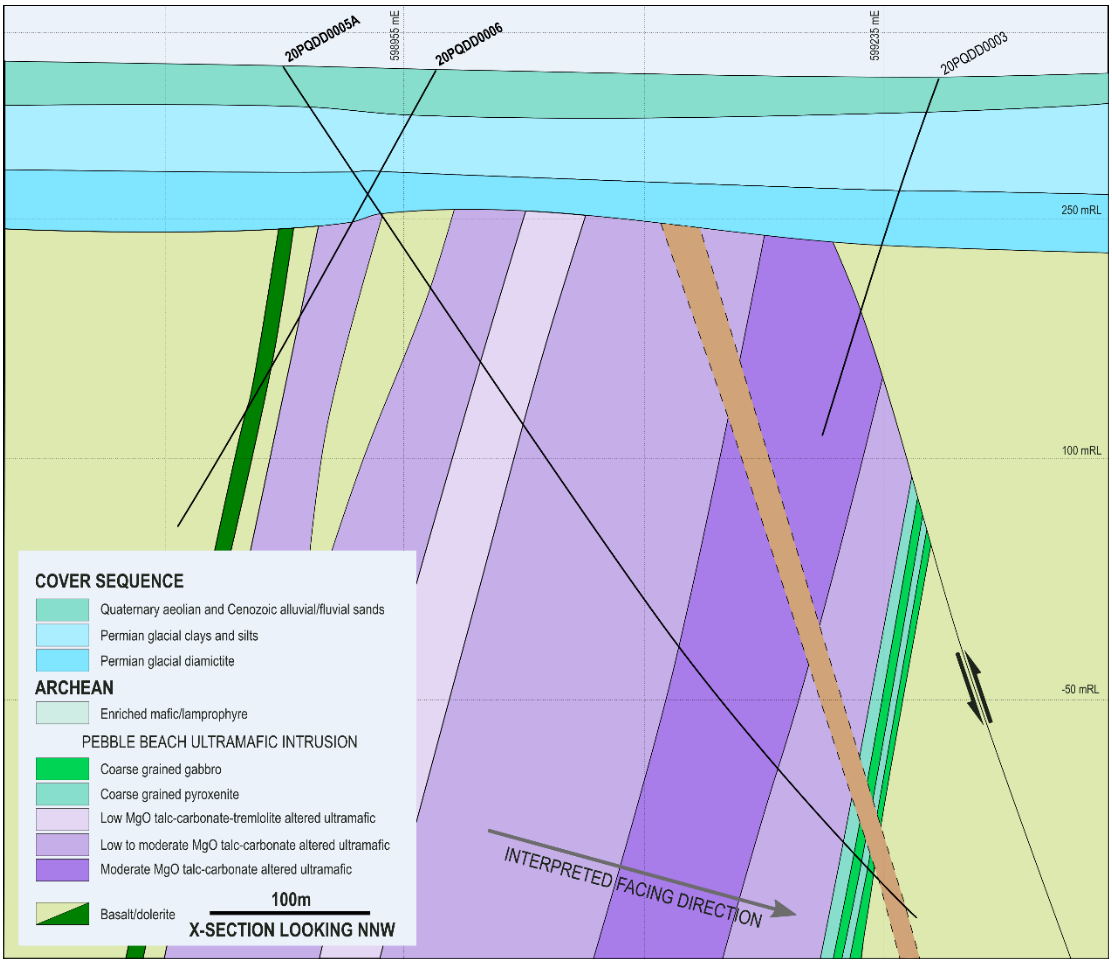

Figure 5. Oblique cross-section looking NNW displaying the initial geological interpretation through the ultramafic intrusion with respect to the two EIS diamond holes (20PQDD0005A and 0006) and the original diamond hole (20PQDD0003).

The initial diamond hole, 20PQDD0005A, drilled directly into the ultramafic body beneath the overlying sediments intersecting a thick zone dominated by low to moderate MgO (15-22% MgO) talc-carbonate altered peridotite from 107m to 420m down hole with an internal zone of lower MgO (7.5-18%) within the intrusion from 238m to 270m. This low to moderate zone contains a thick interval of basalt and dolerite from 111m to 166m that is interpreted to be a large raft within the intrusion. From 420m to 575m the intrusion becomes higher MgO (typically 22-40% MgO) and then displays a decrease in MgO to 599m downhole where the intrusion grades into coarse grained pyroxenite and dolerite to 630m (Figure 6). The pyroxenite (Figure 7a and 7b) and gabbro (Figure 8a and 8b) are interpreted to represent the upper differentiated margin of the intrusion. The peridotitic part of the intrusion is commonly strongly deformed with well-developed carbonate porphyroblasts (Figure 9), though there are localised areas with preserved cumulate textures that range from orthocumulate to mesocumulate (Figure 10).

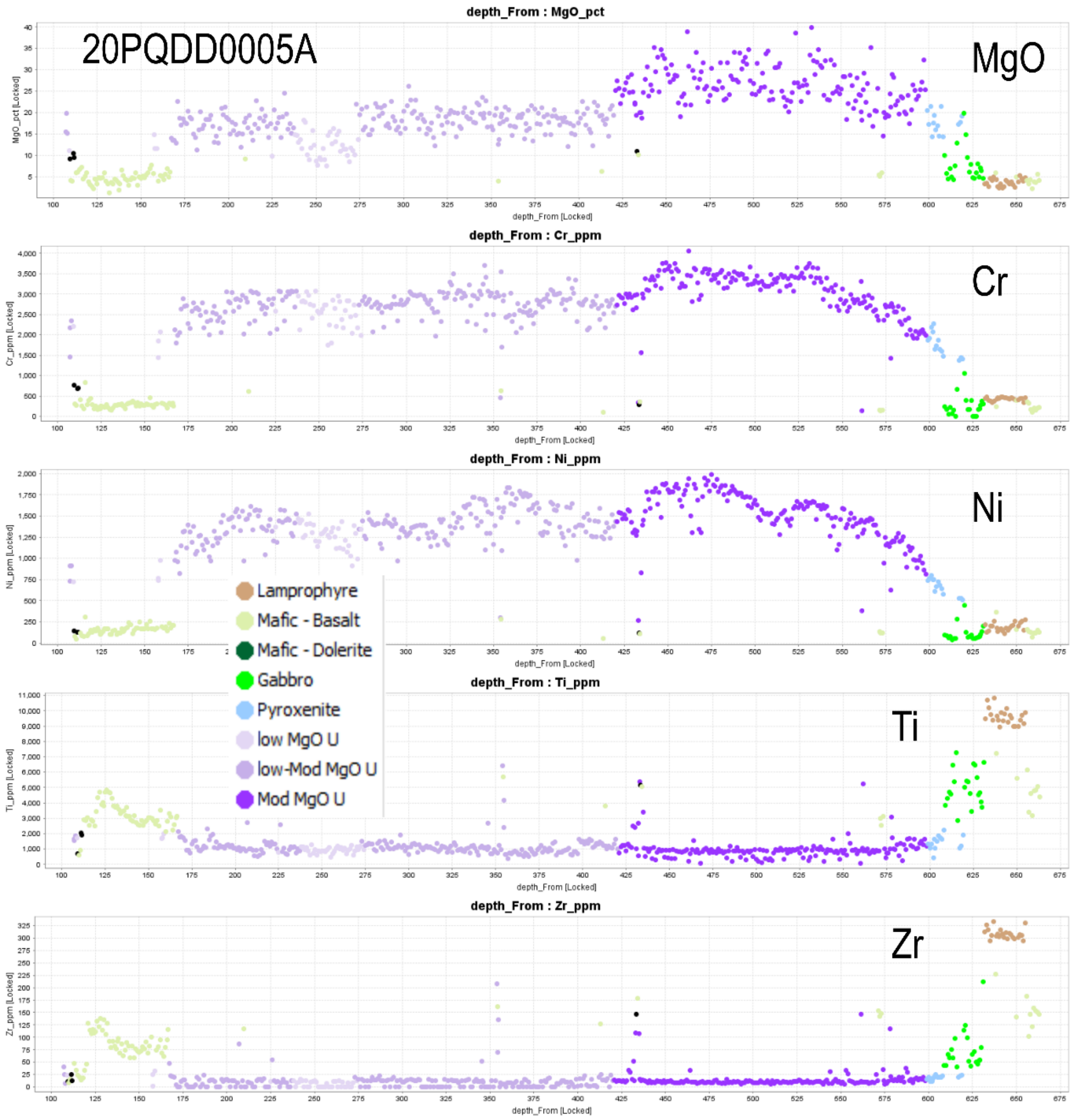

Figure 6. Down hole laboratory pXRF data for 20PQDD0005A displaying the character of the different zones within the ultramafic intrusion and country rock.

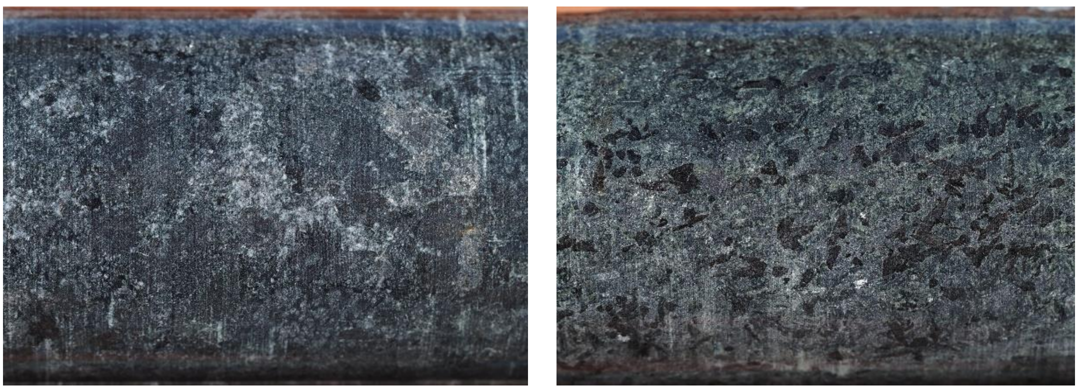

Figure 7a lower coarse grained pyroxenite (core diameter is 5cm). Figure 7b upper pyroxenite with prominent dark pyroxenes. PQDD0005A.


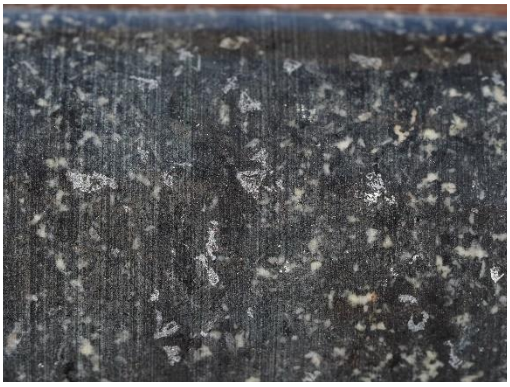

Figure 8a upper gabbro unit (core diameter is 5cm). Figure 8b lower gabbro unit with prominent skeletal leucoxene. PQDD0005A.

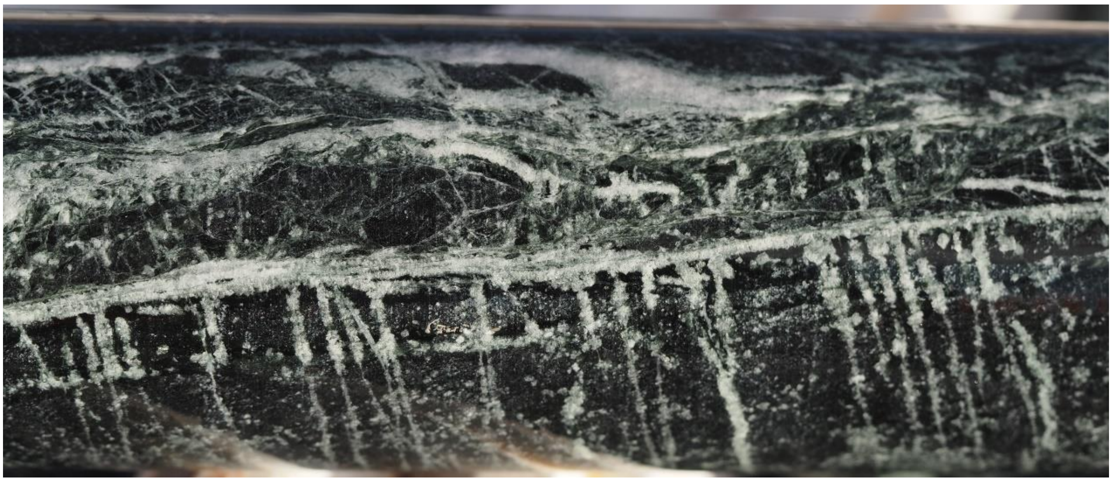

Figure 9 talc-carbonate-chlorite altered deformed peridotite with prominent dolomite porphyroblasts (core diameter is 5cm). PQDD0005A.


Figure 10a Peridotite with partially preserved relict orthocumulate to mesocumulate texture (core diameter is 5cm) PQDD0005A. Figure 10b Preserved mesocumulate texture in peridotite, PQDD0006.

As 20PQDD0005A was interpreted to have only tested the upper contact of the intrusion, a second hole, 20PQDD00006, was drilled toward 240˚ to test the western contact. 20PQDD0006 drilled into the equivalent of the low to moderate talc-carbonate altered ultramafic intersected in 20PQDD0005A (Figure 5 and 11). At 179m the hole passed into basalt to the end of hole with an intersection of dolerite from 192m to 233m. The ultramafic-mafic contact is relatively sharp and not obviously structural.

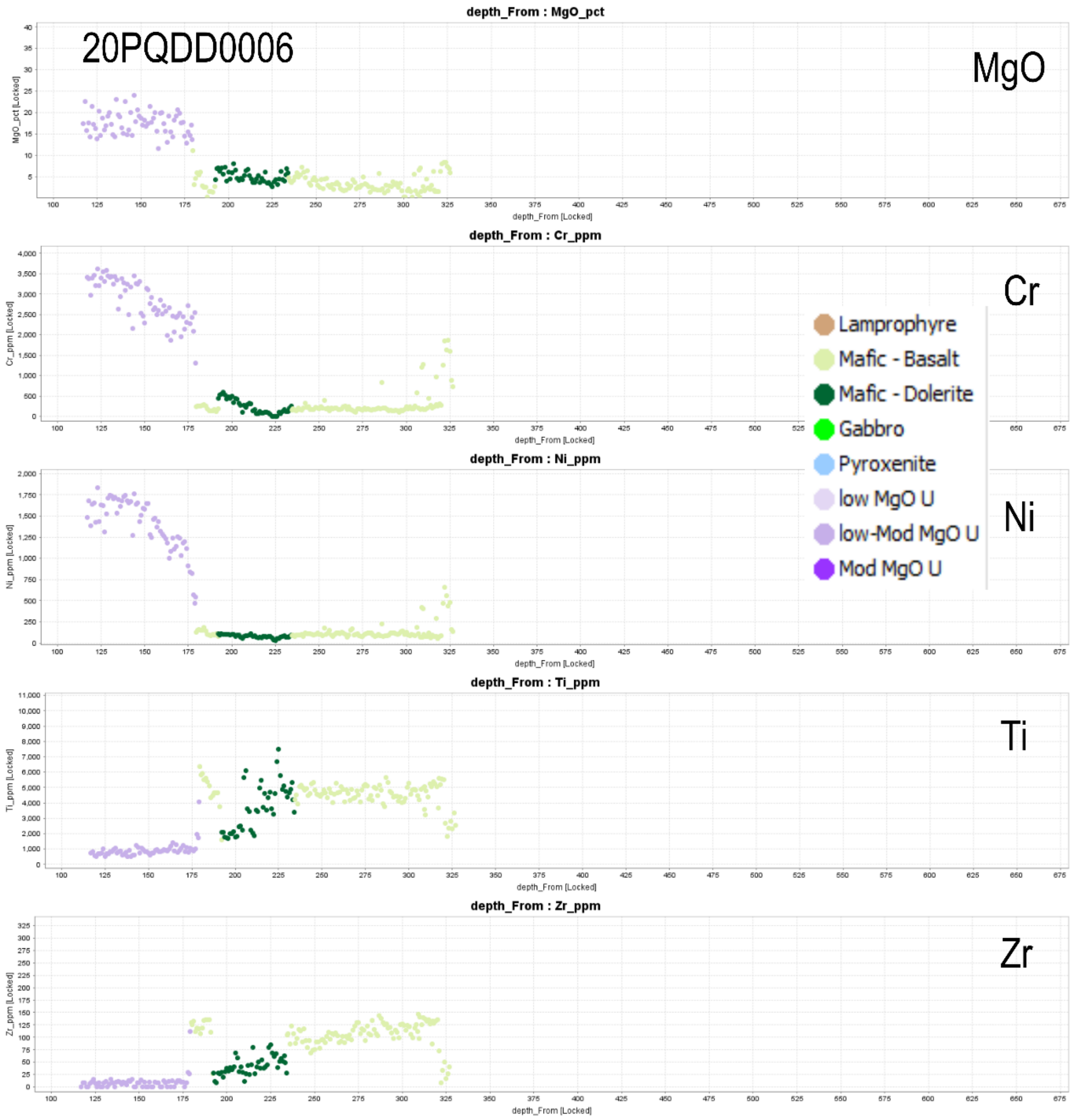

Figure 11. Down hole laboratory pXRF data for 20PQDD0006 displaying the character of the western part of the ultramafic intrusion and contact with country rock.

The interpretation is that the ultramafic intrusion has an east facing due to the presence of the pyroxenite and gabbro differentiate on the eastern contact. However, the highest MgO part of the intrusion is also located on the eastern side of the intrusion with the western half of the intrusion being consistently lower MgO with a general decreasing MgO towards the west (Figure 5). The interpretation remains that the facing is east, though the internal complexity may be due to multiple pulses of magma during the intrusive event.

The external mafic rock intersected in both holes is mainly fine-grained basalt (Figure 12). The basalt is typically strongly deformed and contains a doleritic intrusion (Figure 13) intersected in 20PQDD0006 that has deformed and undeformed parts. Within 20PQDD0005A a late biotite-bearing mafic intrusion was intersected from 632m to 656m (Figure 14). Similar thin units were also intersected within the ultramafic body. This intrusion is thought to post-date the ultramafic and is likely to represent the product of a metasomatised mantle source, with the intrusion having high P, Nb, Zr, Ti and elevated Ni and Cr.

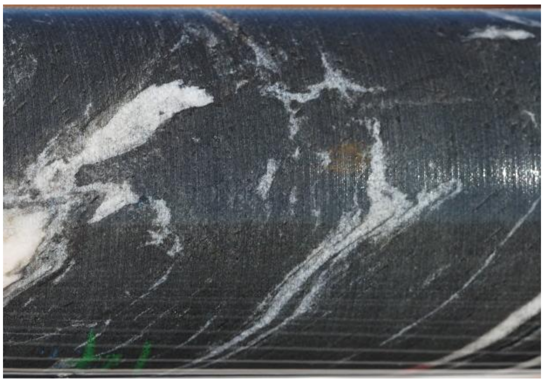

Figure 12a Strongly deformed basalt (basaltic andesite) (core diameter is 5cm) PQDD0005A. Figure 12b Deformed and folded basalt (basaltic andesite), PQDD0006.

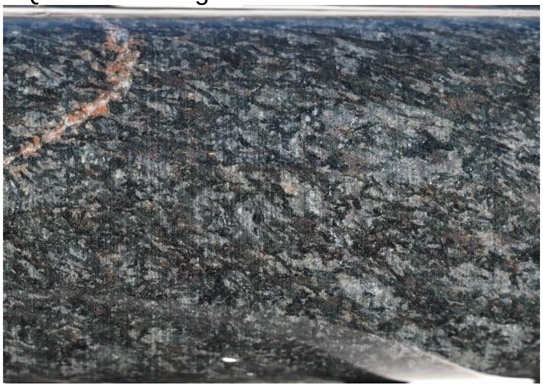

Figure 13a Dolerite located within basalt to the west of the ultramafic intrusion in PQDD0006 (core diameter is 5cm). Figure 13b Strongly deformed dolerite in PQDD0006.

Figure 14 Biotite-bearing enriched intrusion, potentially lamprophyric (core diameter is 5cm).

The drilled cover sequence cover sequence comprises Quaternary, Cenozoic and Permian elements. A surficial sequence of red-orange Quaternary dune sands grading into a zone of authigenic sandy pisoliths that overlie a zone of variably indurated alluvial gravels and sands that are thought to represent the base of the Cenozoic sequence. The Permian glacial-derived sediments consist of upper oxidised massive mud and claystones (Figure 15) grading into reduced laminated silts (Figure 16). The silts rapidly grade into matric supported, variably indurated, massive polymictic diamictite (Figure 17) with clasts up to cobble size. Within the diamictite are intervals of silts and varved shales. The diamictite unconformably overlies the fresh Archean basement. The unconformity was intersected at 107.1m downhole in 20PQDD0005A (Figure 18) and 117.0m in 20PQDD0006.

Figure 15 Oxidised Permian glacial-derived clays, 20PQDD0005A (core diameter is 7cm).

Figure 16 Reduced Permian glacial-derived laminated silts, 20PQDD0005A (core diameter is 7cm).

Figure 17 Indurated Permian glacial diamictite, 20PQDD0005A (core diameter is 7cm).

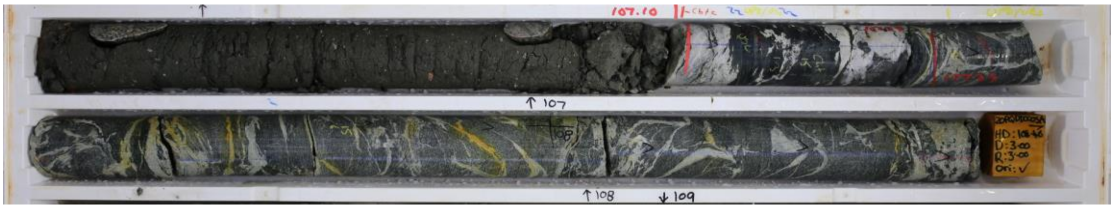

Figure 18 Fresh Archean unconformity, 20PQDD0005A (core diameter is 7cm).

The dominant alteration within the drilling is carbonation of the peridotite that is manifest as talc-carbonate-chlorite alteration with common dolomite porphyroblasts as evenly distributed spots (Figure 19a), fracture associated accumulations and spider veinlets (Figure 18). Lower MgO areas contained tremolite in addition and the higher MgO parts appeared much darker and may contain some residual serpentine (Figure 19b). The mafic rocks within the drilling displayed chlorite alteration with shearing (Figure 12a and b), however no alteration that was indicative of gold mineralisation. Xenoliths and intrusions within the ultramafic were commonly chlorite-biotite altered with local magnetite porphyroblasts (Figure 20).

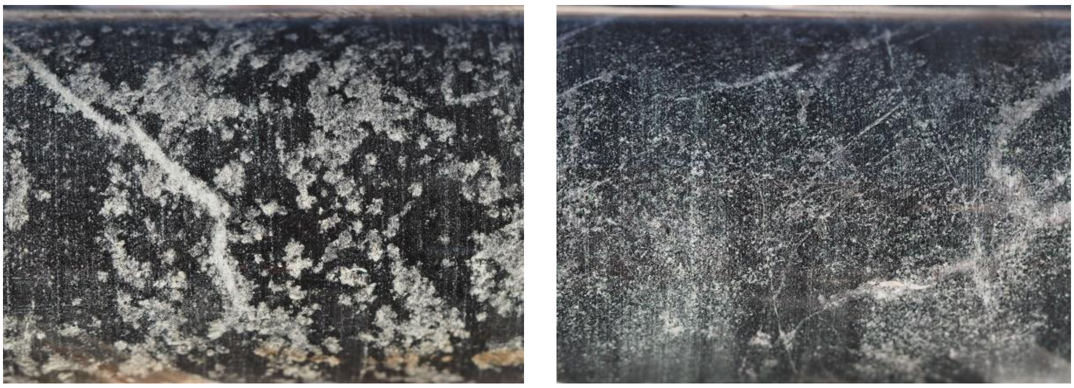

Figure 19a Talc-carbonate altered peridotite with dolomite porphyroblasts in PQDD0005A (core diameter is 5cm). Figure 19b Peridotite with potential residual serpentine PQDD0005A.

Figure 20 Intrusion (lamprophyre?) within ultramafic with biotite-chlorite-magnetite alteration, 20PQDD0005A (core diameter is 5cm).

7.2 Structure

The dominant deformation though the area is metamorphic foliation that occurs as a pervasive fabric though the intersected basalt and is partitioned within the ultramafic and dolerite ranging from intense to undeformed. Within 20PQDD0005A the talc-carbonate altered peridotite to a depth of 320m is intensely deformed and commonly folded (Figure 21), the deformation then becomes partitioned and weaker and from 400m down hole the ultramafic and country rock is essentially undeformed (Figure 10a) with only thin discrete shearing. The basalt to the west of the intrusion in 20PQDD0006 is strongly deformed (Figures 12a and 12b), however the ultramafic in this hole is weakly deformed with primary igneous textures retained in places (Figure 10b).

Figure 21 Strongly deformed and folded talc-carbonate altered peridotite, 20PQDD0005A (core diameter is 5cm).

Veining is common throughout the hole. The talc-carbonate altered ultramafic commonly has high density dolomite spider veinlets and thin quartz veining is common within the deformed mafic rock.

It is thought that a significant fault has produced the juxtaposition of the basalt and moderate MgO ultramafic observed in the original diamond hole 20PQDD0003 (Figure 5).

7.3 Results

No significant gold or Ni-Cu anomalism was intersected in the diamond drill holes. No sulphide associated elevated Ni was evident and Ni vs MgO data (4AD/fusion) plots on the expected Ni in olivine trend or as slightly Ni-depleted. Sulphides visually identified in the drilling were primarily located within the mafic lithologies (Figure 8b) and did not have any appreciable associated Ni or Cu. No PGE analyses were conducted as such the presence of any PGE anomalism is unknown.

Selected four acid digest/lithium borate fusion analyses were collected from the two diamond drill holes and laboratory based pXRF was conducted on the pulps for every sample and as such the pXRF data gives complete coverage for the available elements down both diamond holes (Figure 6 and 11). From the pXRF data, the maximum Ni-Cu values within the ultramafic intrusion were 1832ppm Ni and 105ppm Cu. The maximum within the limited 4AD/fusion data was 1655ppm Ni and 360ppm Cu. There were no coincident anomalous Ni-Cu values in either the pXRF and 4AD/fusion results. The maximum gold assay via fire assay within the two holes was 0.084 ppm Au.

The intersected intrusion is an Al-undepleted ultramafic (Figure 22) (Barnes 2006), and as such is potentially similar in origin and age to the 2.7 Ga nickel sulphide bearing komatiites that occur throughout the eastern Yilgarn. The ultramafic intrusion, including differentiates, have a characteristic flat REE to slightly depleted LREE signature (Figure 23), distinct from the LREE enriched signatures of the mafic volcanic and intrusive rocks within the Yamarna Terrane. The dolerite intersected in 20PQDD0006 external to the peridotite also has the same flat REE signature as the gabbro within the differentiated pyroxenite/gabbro occurring on the eastern contact. It suggests that this dolerite is genetically associated with the main ultramafic intrusion and not a typical Yamarna Terrane dolerite.

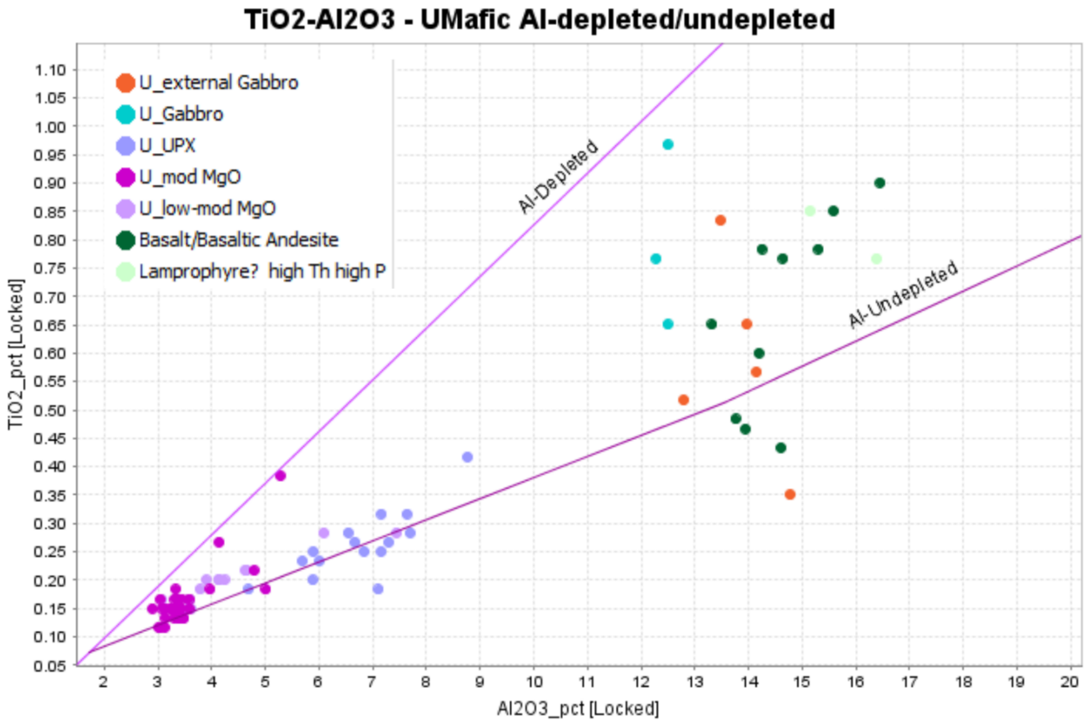

Figure 22 Al_2O_3 vs TiO_2 displaying Al-undepleted nature of ultramafic intrusion.

The intersected basalt was originally assumed to be part of the Muirfield Mafic sequence that is characterised by being a high-Ti moderate-Th mafic. The deformed lithologies logged as basalt have lower Ti (3000-6000ppm vs 6500-13000ppm), higher Th (2-5ppm vs 1-2.5ppm), lower Sc (15-23ppm vs 28-45ppm) and plot distinct to the Muirfield Mafic in the Jensen Cation Plot and the Ti-Cr-Th discrimination plot (Figure 24). This logged basalt it likely to be a basaltic andesite in composition and not part of the greater Muirfield Mafic sequence.

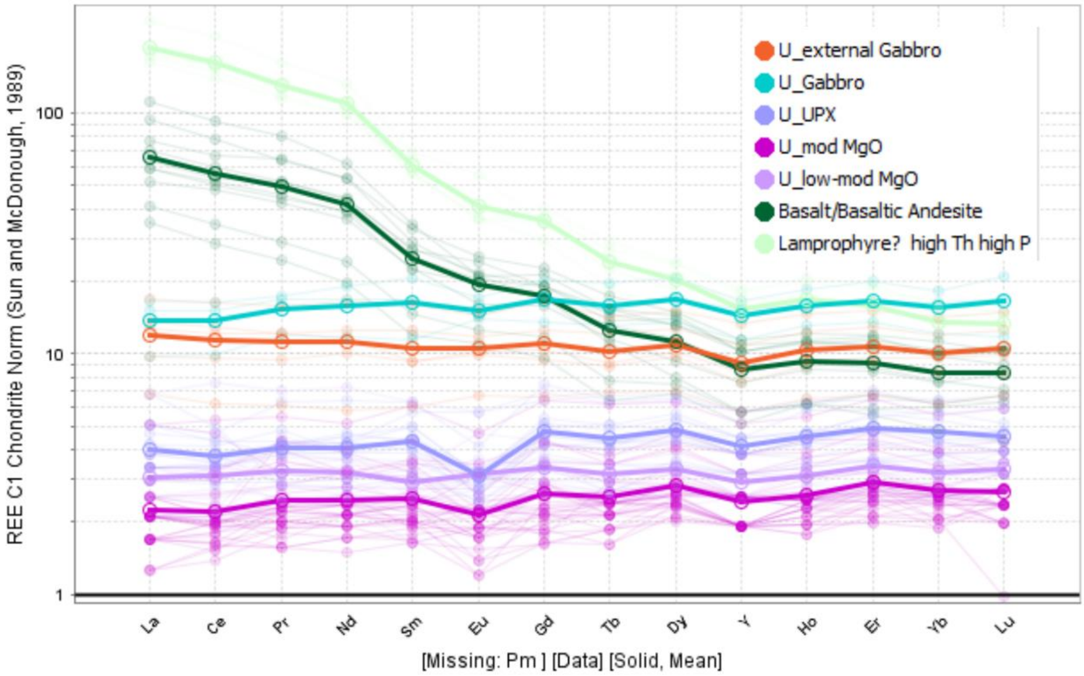

Figure 23 Chondrite normalised REE spider plot showing the consistent weak LREE depletion of the ultramafic intrusion vs the LREE enriched basaltic andesite and lamprophyre.

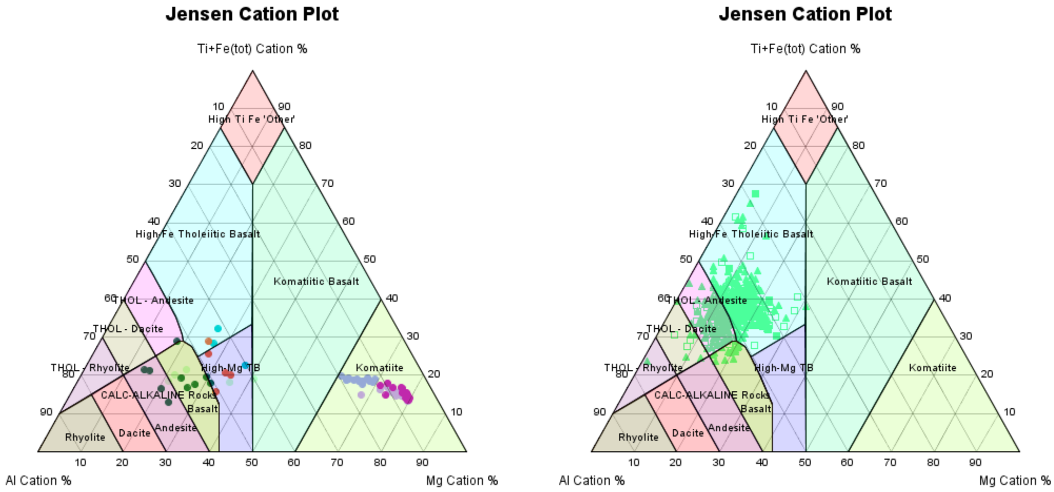

Figure 24 Jensen Cation Plot displaying EIS diamond hole data (left) with logged basalt (dark green) plotting distinct to the signature of the Muirfield Mafic (right).

8 Costs

Drilling costs for the DD drilling programmes totals $201,441.53 not including GST. Table 4 details the breakdown of costs by hole and initial contributions by DMIRS. Please note that the final 50% contribution (not including GST) of $201,441.53 is above the EIS agreement of $100,000 and as such the 80% claim will be capped at $80,000 excluding GST.

Table 4: Drilling costs

	Costs (excl. GST)	Costs (incl. GST)	50% CO-FUNDING (excl. GST)	50% CO-FUNDING (incl. GST)	INITIAL INVOICE 80% (excl. GST)	INITIAL INVOICE 80% (incl. GST)
20PQDD0005A	$148,219.69	$163,041.65	$74,109.84	$81,520.83	$59,287.87	$65,216.66
20PQDD0006	$53,221.84	$58,544.02	$26,610.92	$29,272.01	$21,288.74	$23,417.61
Total	$201,441.53	$221,585.68	$100,720.76	$110,792.84	$80,576.61	$88,634.27
	Capped Amount		$100,000.00	$110,000.00	$80,000.00	**$88,000.00**

9 Conclusions and Recommendations

The two diamond drillholes successfully defined the bounds of the targeted ultramafic body and confirmed the ultramafic as being a 400m thick Al-undepleted differentiated intrusion of similar character to the komatiites that occur throughout the Eastern Yilgarn. The morphology of the high magnetic signature suggests the body is of limited strike extent (approx. 2km) and has been emplaced as a chonolith rather than a sill. It is possible that the ultramafic is a feeder for komatiitic volcanism elsewhere in the Yamarna Belt, however to date there has been no indication of komatiitic volcanics within the stratigraphy and the other intersected bodies of similar character all appear to be intrusions.

The ultramafic displays a differentiated pyroxenite/gabbro eastern contact that is indicative of an eastern facing to the intrusion, however the highest MgO part of the peridotitic part is the eastern part (Figure 5) with the western half being low to moderate MgO ultramafic that suggests a gross differentiation facing to the west. The western contact is peridotitic ultramafic in contact with the basaltic andesite. Within the basaltic andesite is a dolerite/gabbro that appears to be genetically related to the main ultramafic chonolith. It is likely that what has been drilled is a multi-phase intrusive conduit that has received komatiitic magmas of varying stages of differentiation/evolution and that the western part, the eastern part and the isolated dolerite/gabbro are distinct magmatic pulses or intrusive events.

The immediate body does not appear prospective for primary Ni-Cu sulphide associated mineralisation or for gold for gold bearing structures. The weak nickel depletion may be indicative of the presence of Ni-bearing sulphides somewhere else in the system though it is impossible to know if these were erupted or are deeper in the system. No exploration to date has identified anomalous sulphide related Ni-Cu anomalism.

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Appendix 1 **Verification Listing Form**

Verification Listing Form

Exploration work type	*File name*	*Format*
Office studies		
Literature search		
Database compilation		
Computer modelling		
Reprocessing of data		
General research		
Report	DAG2020_00122742_EIS_Final Report	pdf
Other (specify) Prospect Review	GORLegendFieldReference_A4_201902_derwent	pdf
Airborne exploration surveys		
Aeromagnetics		
Radiometrics		
Electromagnetics		
Gravity		
Digital terrain modelling		
Other (specify)		
Remote sensing		
Aerial photography		
LANDSAT		
SPOT		
MSS		
Radar		
Other (specify)		
Ground exploration surveys		
Geological Mapping		
Regional		
Reconnaissance		
Prospect		
Underground		
Costean		
Ground geophysics		
Radiometrics		
Magnetics		
Gravity		
Digital terrain modelling		
Electromagnetics		
SP/AP/EP		
IP		
AMT		
Resistivity		
Complex resistivity		
Geophysical interpretation		
Other (specify)		
Geochemical surveys		
Drill sample		
Stream sediment		
Soil		
Rock chip		
Laterite		
Water		
Biogeochemistry		
Drilling		
Diamond	EIS_122742_WADG4_DHPXRF2020A.txt EIS_122742_WADG4_DHSAMPLE2020A.txt EIS_122742_WADG4_SAMP2020A.txt EIS_122742_WADL4_DHALTERATION2020A.txt EIS_122742_WADL4_DHLITHOLOGY2020A.txt EIS_122742_WADL4_DHMINERALS2020A.txt EIS_122742_WADL4_DHSTRUCTUREINTERVAL2020.txt EIS_122742_WADL4_DHSULPHIDES2020A.txt EIS_122742_WADL4_DHVEIN2020A.txt EIS_122742_WADL4_STRUCTUREORIENT2020A.txt EIS_122742_WADS4_DHSURVEY2020A.txt EIS_122742_WASL4_DHCOLLAR2020A.txt	txt txt txt txt txt txt txt txt txt txt txt txt
Reverse circulation	EIS_122742_WADG4_DHPXRF2020A.txt EIS_122742_WADG4_DHSAMPLE2020A.txt EIS_122742_WADG4_SAMP2020A.txt EIS_122742_WADL4_DHALTERATION2020A.txt EIS_122742_WADL4_DHLITHOLOGY2020A.txt EIS_122742_WADL4_DHMINERALS2020A.txt EIS_122742_WADL4_DHSTRUCTUREINTERVAL2020.txt	txt txt txt txt txt txt txt

	EIS_122742_WADL4_DHSULPHIDES2020A.txt EIS_122742_WADL4_DHVEIN2020A.txt EIS_122742_WADL4_STRUCTUREORIENT2020A.txt EIS_122742_WADS4_DHSURVEY2020A.txt EIS_122742_WASL4_DHCOLLAR2020A.txt	txt txt txt txt txt
Rotary air blast		
Air-core		
Auger		
Groundwater drilling		
All drilling		
Verification Form	Appendix1 in DAG2020_00122742_EIS_Final Report	pdf