

# **QUARTERLY ACTIVITIES REPORT**

#### FOR THE QUARTER ENDED 31 MARCH 2022

#### **Highlights**

- Gold identified in drilling at target CSA04 in the Everleigh Well target area
- Initial drilling into the **Castlemaine Fault** at the **Everleigh Well** target area completed.
- Identified VMS potential in the Claypan target area
- **Claypan** drilling commenced with chert/banded iron formation (SCT/BIF) intersected at target C5.
- Air core (AC) drilling commenced in the Guyer Well target area.
- First phase of diamond drilling (DD) at **Danjo NE** completed.

**Iceni Gold Limited** (ASX: ICL) (**Iceni** or the **Company**) is pleased to report on its activities during the quarter ended 31 March 2022.

#### **Projects and Activities**

#### Claypan

Drill testing commenced at the **Claypan** target area and is ongoing. Eight DD holes have been completed and a ninth is in progress for a total of 2,525m. Drilling during the quarter intersected significant widths of **strong alteration** with **sulphides.** 

Ongoing drilling in the **Claypan** target area has intersected **strong alteration** over a broad area. The observed alteration, mineralisation and stratigraphic position are consistent with a **VMS** exploration model, which is further supported by the observation of known **VMS deposits** within the district.

The **VMS** exploration model is well developed with defined alteration patterns and mineral zonations. This type of model can be used to guide exploration to locate the focus of the hydrothermal activity and any associated mineralisation.

The **VMS** style of mineralisation was not considered by the Company in the prospectus dated 3 March 2021. Identifying the potential for **VMS** mineralisation within the **14 Mile Well** project is an unexpected positive result.



Figure 1: Claypan FMDD0040 ~140m, sulphidic zone associated with SCT/BIF.

#### ASX RELEASE

29 April 2022

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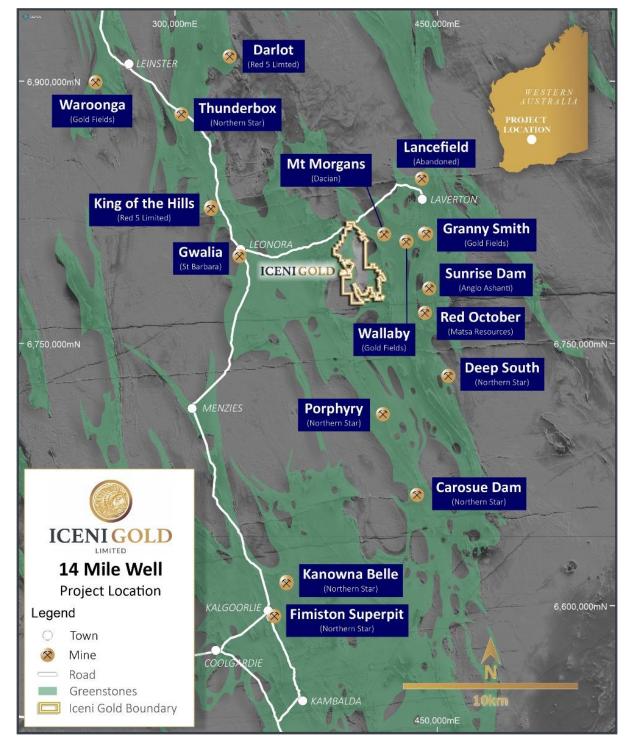
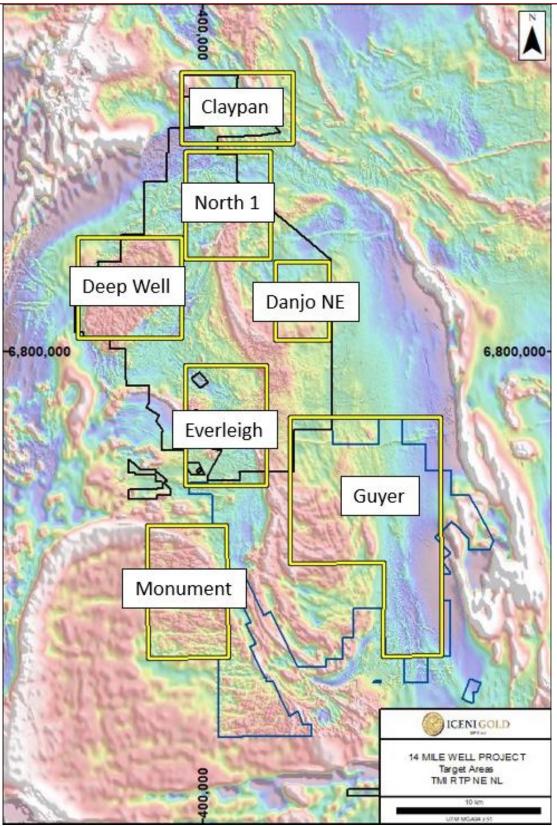


Figure 2: Location of the 14 Mile Well project within the Eastern Goldfields of Western Australia.



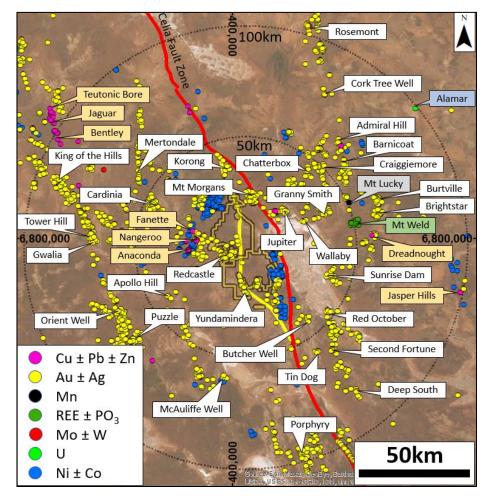


**Figure 3: 14 Mile Well** project area, showing the seven key target areas. DD is underway within the **Claypan** target area and AC drilling is underway in the **Guyer** target area. Image is Total Magnetic Intensity (TMI) Reduced to Pole (RTP) (after GSWA).



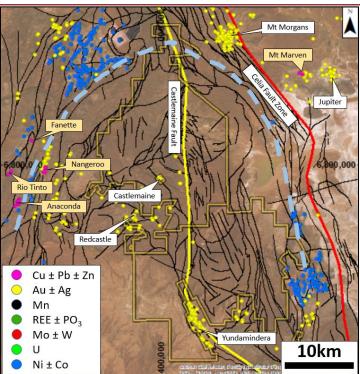
A number of coincident targets were developed using different exploration disciplines and include C5 (geology) and 14UF014 (geochemistry). The target area is situated at the structural intersection between the northwest trending **Claypan-Celia Fault** and the interpreted northern extension of the **Castlemaine Fault**, specifically in an interpreted flexure along the **Celia Fault**. Field validation and sampling of an interpreted structural target identified outcropping alteration and gold anomalism. A SCT/BIF horizon was located cloaked beneath shallow aeolian cover. This horizon has been tracked over a strike length of 2km. It is coincident with the priority 1 zone of the UFF+ Au anomaly 14UF014 and is currently being tested by DD.

A metallogenic study was completed for the **Leonora-Laverton** district. This type of study identifies the different deposit styles, their distribution patterns and geological associations. This work highlighted several known VMS deposits within the district (see **Figure 4**). Close to Leonora there is a well-defined **VMS camp** that includes the **Teutonic Bore**, **Jaguar** and **Bentley** deposits. Immediately to the west of the **14 Mile Well** project there is another **VMS camp** that includes the **Anaconda**, **Rio Tinto**, **Fanette and Nangeroo** deposits.



**Figure 4:** Metallogenic plan of the Laverton district. Known **VMS** mineralisation at the Anaconda group of mines exists immediately to the west of the **14 Mile Well project**. The underlying stratigraphy associated with this mineralisation is interpreted to extend through the **Claypan** target area, where the **Castlemaine Fault** and **Celia Fault** zones are interpreted to interact.





**Figure 5:** Metallogenic plan of the **14 Mile Well** project. Known **VMS** mineralisation at the **Anaconda** group of mines exists immediately to the west of the **14 Mile Well project**. The underlying stratigraphy associated with this mineralisation is interpreted to extend through the **Claypan** target area (blue dashed line).

**Dr Walter Witt** was engaged by the Company to undertake a study on the drill core from the **Claypan** area. Dr Witt identified the bimodal association of andesite and rhyolite in the volcanic sequence. The sequence is pervasively silica-sericite altered, crystal fragments and vitric clasts in the andesite have been chloritized, and the combination of the alteration styles is interpreted as strata-bound or semi-conformable alteration. This is significant because this would be the kind of alteration produced in a sub-seafloor hydrothermal system (Witt 2022).

During the study Dr Witt noted "more intense chloritization in the form of chlorite stringers that overprints the sericitic alteration and may represent the outer or distal parts of a chloritic feeder pipe" (Witt 2022). This is significant because it is the style of alteration commonly found beneath **VMS deposits** (Witt 2022). "Sericite-chloritoid have formed during metamorphism of alkali depleted andesite with a bulk peraluminous composition, peraluminous assemblages, including sericite-chloritoid, are described in the vicinity of shallow, **precious metal-rich VMS systems**" (Witt 2022).

An alteration vector has been proposed towards potential mineralisation from hole FMDD0035, based on the increasing abundance of chlorite stringers and the sericite-chloritoid association in this direction (Witt 2022).

In the modern geological environment **VMS systems** have been observed forming from **Black Smokers** associated with volcanic activity on the sea floor. The hydrothermal system is driven by a shallow magma and the heat drives the circulation of seawater through the rock mass. The heated seawater strips metals, including gold, from the basement volcanics and carries them up through the central feeder structures. The metal laden fluid discharges at or near the sea floor; the sudden change in temperature, pressure and chemistry causes the metals to precipitate out of solution and crystallise as sulphides.



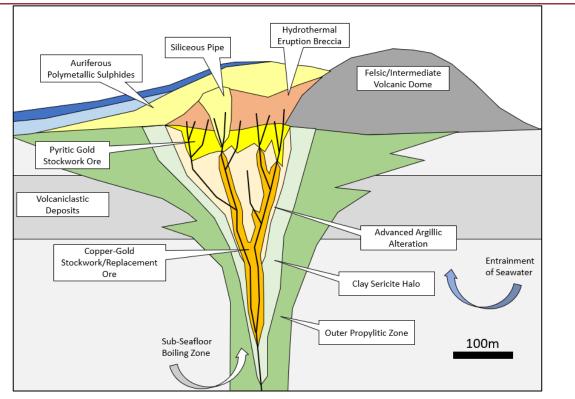


Figure 6: Schematic section through a gold rich VMS hydrothermal system (after Dube et al 2007.)

The sulphides zone vertically within the feeder structures with a copper-gold stockwork at depth giving way to a pyritic-gold stockwork zone beneath the polymetallic sulphide mound. The sulphide mound also displays zonation with a central copper rich core that zones outwards to lead-zinc polymetallic sulphides.

The alteration forms a large cone beneath the sulphide mound. The outer propylitic zone is characterised by chlorite-carbonate which transitions into increasing sericite alteration and continues into the central advanced argillic alteration zone which is dominated by clays. The central upper part of the system is dominated by silica.

The sulphide mounds tend to form in clusters. They can form across the palaeo-seafloor surrounding the heat source and can also form and reform through the stratigraphic sequence like a stack of pancakes.

The regular patterns presented by the alteration and mineralisation can be utilised by explorers to focus in on the prized gold rich cores that may be found within these systems.

The identification of BIF associated with gold anomalism and strong alteration zones is very significant. BIF is a chemical sediment, known to be associated with VMS systems, the lithology can vary along strike with SCT. BIF is a chemically reactive lithology because it is rich in iron bearing minerals. These minerals will react strongly with mineralising fluids and deposit metals, including gold.

BIF is a brittle lithology, so when it interacts with structures it tends to fracture rather than flex. This creates open pathways that mineralising fluids can access.

Examples of BIF associated gold mineralisation in the Laverton District include **Sunrise Dam** and **Mt Morgans**.





DD Holes FMDD0038, 39, 40, 41, 43, 44 and 45 were designed to test beneath the coincident targets C5, 14UF014 and the mapped SCT/BIF horizon, while holes FMDD0035 and 37 to the west were designed to test beneath geophysical and geochemical anomalies coincident with targets C6, CSA01 and 14UF014. Holes FMDD0038, 39, 40, 41, 43, 44 and 45 are oriented to the southwest (towards 225°), perpendicular to the trend of local stratigraphy and to optimise the intersection with anticipated structures.

The observed geology in the holes FMDD0038, 39, 40, 41, 43, 44 and 45 is dominated by strongly altered volcaniclastics and sediments (including SCT/BIF) with a number of porphyries intruding the sequence. The alteration assemblage is characterised by white mica-silica-carbonate-sulphide throughout all holes. This is a common alteration assemblage known to be associated with gold mineralisation within the Laverton District, across the Yilgarn Craton and in greenstone belts globally.

The geological observations of veining, alteration and sulphides from this drilling program are highly encouraging.

Assay results from this drilling program are expected to be received at the end of Q2 2022.

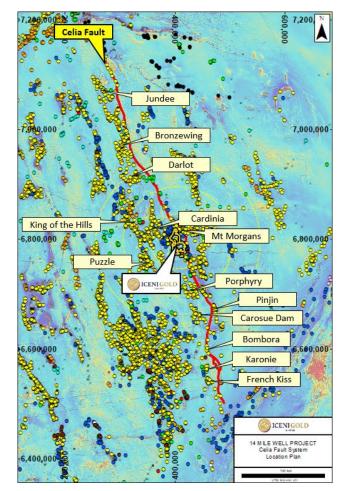
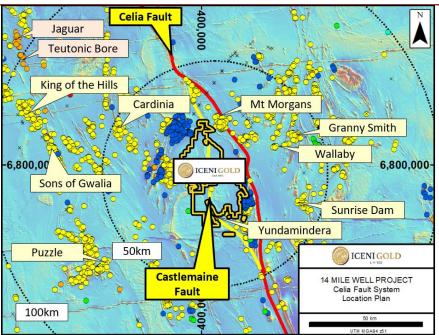
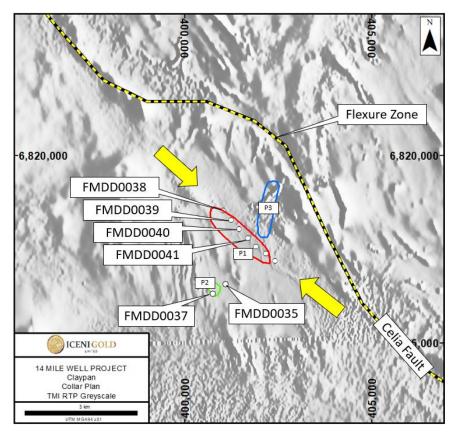


Figure 7: The Celia Fault is a major crustal structure know to extend across the Yilgarn Craton for ~700km. Significant gold deposits spatially related to the Celia Fault include: Jundee, Bronzewing, Darlot, Mt Morgans, Carosue Dam and Karonie.



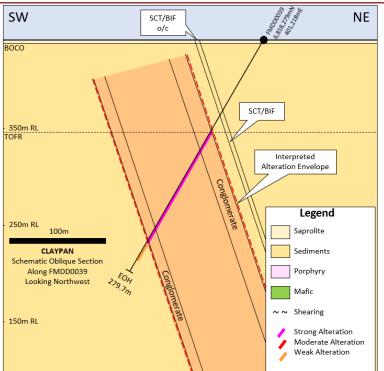


**Figure 8:** The **Celia Fault zone** passes along the eastern margin of the 14 Mile Well project, while a splay off this fault, the **Castlemaine Fault**, passes through the centre of the project area. In the **Claypan a**rea the **Celia Fault** has a significant change in orientation where it interacts with the Castlemaine Fault.

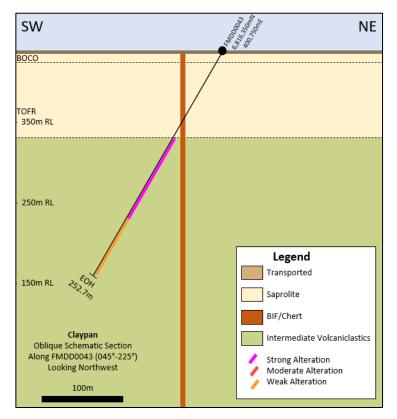


**Figure 9: Claypan** collar plan showing completed and planned drilling relative to the flexure in the **Celia Fault** and the 14UF014 Au anomaly priority zones. Arrows highlight the trend of the sub-cropping SCT/BIF beneath thin aeolian cover. Background image TMI RTP Greyscale.



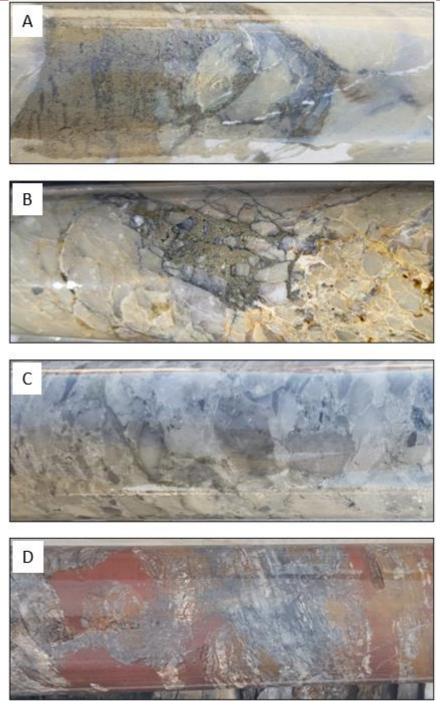


**Figure 10:** Oblique schematic section along the trace of hole FMDD0039, looking northwest. The strong to intense alteration envelope is focussed along the coarser clastic sediments/volcaniclastics.



**Figure 11:** Oblique schematic section along the trace of hole FMDD0043, looking northwest. The strong alteration zone is located to the west of the BIF/SCT.





**Figure 12:** Observed alteration in diamond drilling beneath UFF+ Au anomaly at **Claypan**; A) FMDD0038 ~ 199m strongly altered sulphidic chert;

B) FMDD0039 ~ 229m brecciated and strongly altered sediments with sulphidic quartz veining; C) FMDD0040 ~ 195m Strongly white mica-silica-carbonate altered polymictic conglomerate. The matrix between the clasts has been replaced by carbonate and chalcedonic silica, reminiscent locally of the alteration at **Wallaby**. Chalcedonic silica is deposited from colloidal low-temperature and low-pressure hydrothermal fluids, and is diagnostic of a process in the near surface geological environment.

D) FMDD0040 ~ 119m structurally disrupted chert/BIF in the sedimentary sequence.



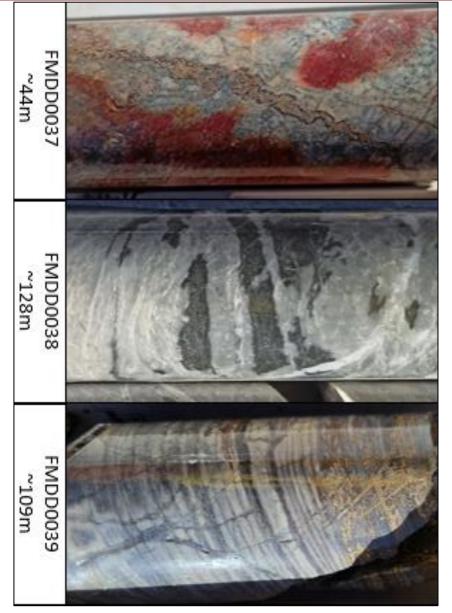


Figure 13: Examples of observed alteration styles in drill core from the Claypan target area:

**FMDD0037** ~44m: Pyrite-white mica-chloritoid-carbonate altered intermediate volcaniclastics. This assemblage is diagnostic of early alteration that has been subsequently metamorphosed. It is well established that this alteration is known to be associated with metamorphosed VMS deposits (like **Teutonic Bore** and **Gossan Hill** in the **Yilgarn, Bousquet-LaRonde** and **Horne-Noranda** in the Abitibi) and Orogenic deposits (like the **Kalgoorlie Superpit**, **Tower Hill**, **Wallaby** and **Kundana** in the Yilgarn).

**FMDD0038** ~128m: White mica-carbonate alteration overprinting earlier disseminated pyrite alteration (dark patches).

**FMDD0039** ~109m: BIF with pyrite alteration forming telegraph textures as it infiltrates the more porous beds and along fractures. These textures were present in the upper parts of the **Sunrise Dam** deposit. BIF/chert units are known to form as exhalites related to a **VMS** hydrothermal vent on the seafloor.



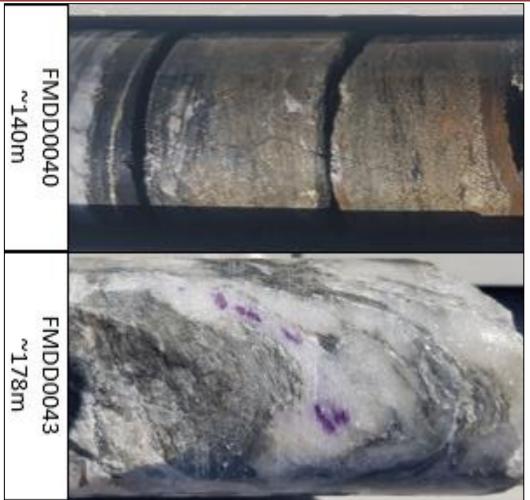


Figure 14: Examples of observed alteration styles in drill core from the Claypan target area:

**FMDD0040** ~140m: Strongly pyritic zone associated with the chert/BIF horizon. These sulphides may be exhalites or a distal part of a sulphide mound that has formed at or near the palaeo-seafloor.

**FMDD0043** ~178m: Purple fluorite bearing veins in a strong silica-white mica alteration zone. The presence of fluorite is diagnostic of fluids and volatiles being sourced from a nearby magma, possibly of syenitic composition. Fluorite is known to be associated with magmatic VMS systems in the Abitibi (like **Kidd Creek and Val d'Or**) and within the Yilgarn (like the **Teutonic Bore VMS camp**). Some orogenic gold deposits in the Yilgarn are known to have a fluorite association (for example **Enterprise** at Ora Banda, **Songvang** at Agnew and **Invincible** at Kambalda).

This result opens up the **potential for VMS mineralisation within the 14 Mile Well project**, particularly the **Claypan** target area where geological features consistent with a VMS environment have been observed. The areas surrounding the syn-volcanic Danjo intrusion also have potential, as do the structures that communicate with it.

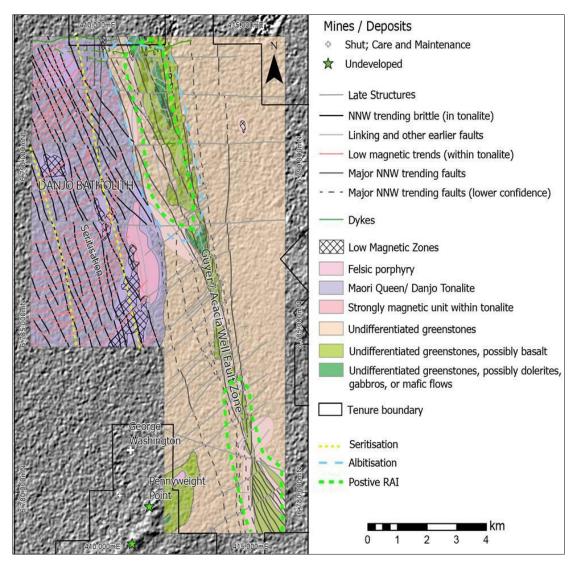


### Guyer Well

The initial AC drilling program at the Guyer target area is underway in a program of approximately 300 holes. The entire campaign is anticipated to test the UFF soil anomalies 14UF003, 4, 5 and 6 that are located ~ **25km to the west of the Sunrise Dam gold deposit.** 

Early observations from the drilling indicate a deep palaeochannel system has exploited the underlying **structural corridor related to the Guyer Shear**. The UFF soil technique was designed by the **CSIRO** to see through deeper cover like this palaeochannel system.

Several coincident targets along the **Guyer structural corridor** were developed using multiple exploration disciplines, including geophysics, geochemistry, structure, geology and regolith.



**Figure 15**: Interpreted geology and alteration zones within the Guyer Well target area. The main structural corridor has a length of 15km within the **14 Mile Well** project area.



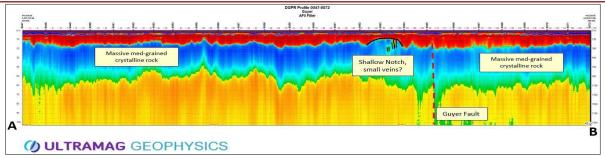


Figure 16: DGPR Survey line across the **Guyer Shear**, where the deepening of the overlying cover sequence has been confirmed by recent AC drilling.

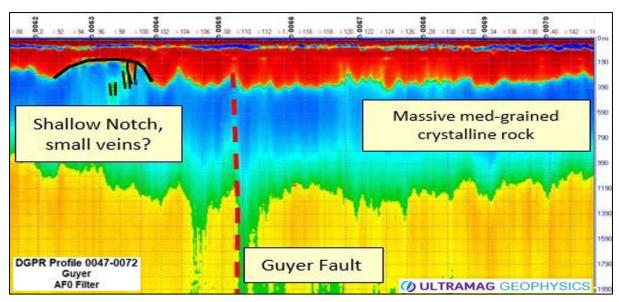
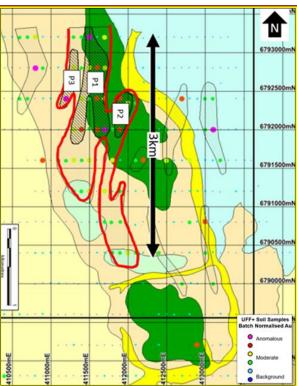


Figure 17: Zoomed in view of a portion of Figure 16, to demonstrate the anomalous geophysical response across the structural zone.



**Figure 18**: Close up view of the drill samples from the first hole in the **Guyer Shear** target area, where transported cover is ~30m thick. The thick cover has been a considerable deterrent for previous explorers, a significant reason why this area has remained untested.





**Figure 19**: UFF anomaly **14UF003** at the northern end of the **Guyer** target area. The overall **length of the anomaly is ~3km along the strike of the Guyer Shear**. The Priority 1 area within this anomaly has a coherent gold and multi-element zone across 4 sample lines.

This specific reconnaissance AC drilling program is expected to deliver data that will be used to focus follow-up DD programs on centres of hydrothermal activity along the Guyer Fault zone.

Assay results from this drilling program are expected to be received at the end of Q2 2022.

#### **Everleigh Well**

The initial drill testing into the **Castlemaine Fault** (see **Figure 21**), at the **Everleigh Well** (Everleigh) target area has been completed with 2 DD holes for 997m. The first hole, **FMDD0032**, was designed to test coincident targets associated with the **Castlemaine Fault**. The hole was initially drilled to 445m, but after geological evaluation it was re-entered and extended to 579.8m. It intersected a broad zone of structural disruption, interpreted as the **Castlemaine Fault**. That broad zone was associated with strong alteration and **gold** was observed at a downhole depth of 224.6m in **FMDD0032** (see **Figure 22**).

At this location a number of primary targets are coincident. The targets were developed using a variety of exploration disciplines and include: FMD21 (geophysics), EW27 (geophysics), CSA04 (geology) and 14UF009 (geochemistry).

The **Everleigh Well** key target area is located on the western contact of the Danjo Monzogranite, classified as a prospective Mafic Group intrusion (Cassidy 2019). This is significant because Mafic Group intrusions are known to be spatially and temporally associated with gold mineralisation in the Kalgoorlie-Kurnalpi Rift (see **Figure 24**).

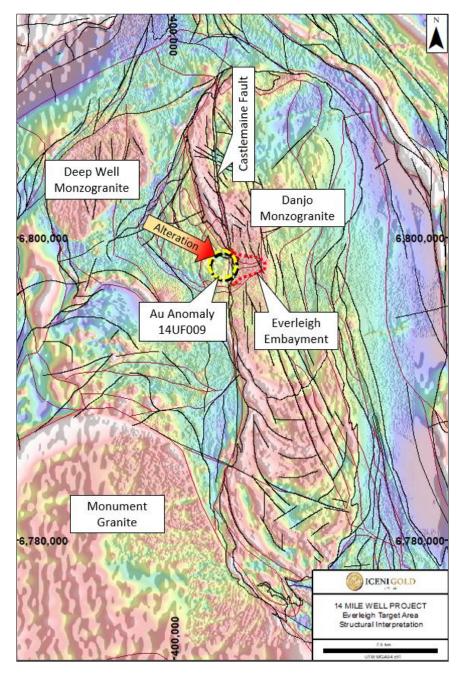
The **Everleigh Well** target area formed part of the historic **Redcastle** gold mining centre which was discovered in 1894. The **Everleigh** area also contains a number of pits and shafts that were previously explored, 25 years ago, by BHP among others. The **Tatong prospect**, located nearby, was discovered by BHP as one of many large soil anomalies which were drill tested by Rotary Air Blast (RAB) and Reverse Circulation (RC) drilling.





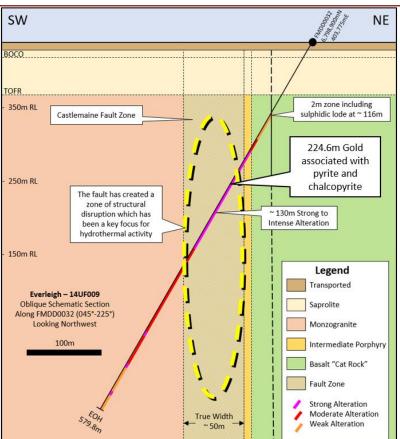
The **Everleigh Well** area was targeted due to positive field mapping observations made by CSA Pty Ltd geologists in 2018 and 2020, which includes the following positive geological prospectivity indicators:

- Presence of a prominent fault and cross structures, evident in magnetic and gravity data sets.
- Albite alteration identified in litho-geochemistry.
- Interpreted Everleigh Embayment on the margin of the Danjo Batholith (see Figure 20).
- Alteration zonation identified in previous exploration vectoring towards the embayment.
- Historic workings trending towards the structural intersection.



**Figure 20:** Structures in the Everleigh Well target area and the Everleigh Embayment on the margin of the Danjo Batholith. Historic work identified alteration vectoring towards the embayment. Background image is TMI RTP magnetics with structural interpretation overlays.





**Figure 21:** Oblique schematic section along the trace of the hole FMDD0032, through the Castlemaine Fault. Gold was identified at a depth of 224.6m, within the ~130m thick zone of strong alteration in hole FMDD0032 through the Castlemaine Fault.

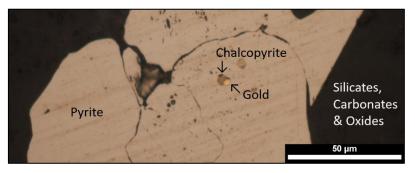
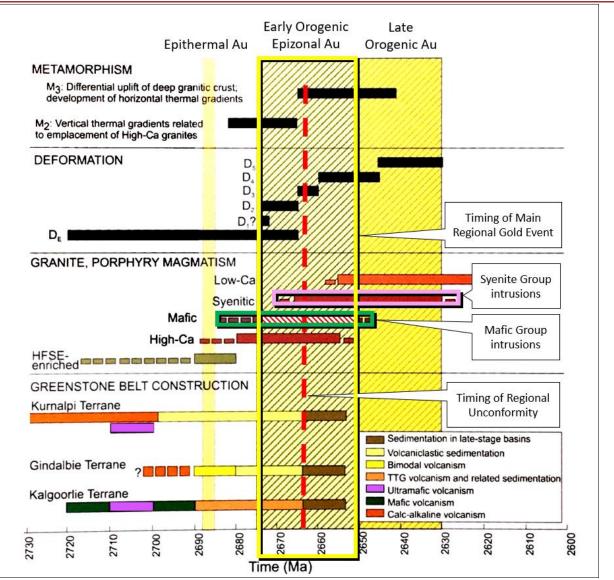


Figure 22: Photomicrograph of gold observed at 224.6m in FMDD0032 at the Everleigh target area.



Figure 23: Sulphide bearing lode in FMDD0032 at ~116m.





**Figure 24:** Framework for gold mineralisation in the Kalgoorlie-Kurnalpi Rift (modified after Cunningham 2021 and Witt et al 2020). The temporal relationship between gold mineralising events and Mafic Group intrusions in the **Kalgoorlie-Kurnalpi Rift.** The main gold mineralising event (Early Orogenic – Epizonal gold) occurred synchronously with the formation of the regional unconformity and the emplacement of the Mafic Group and **Syenite group intrusions**. Significantly, gold mineralisation is known to be located proximal to the Mafic Group Intrusions and in the Laverton District gold is very strongly associated with Syenite Group intrusions.

DD was oriented to the southwest (towards 225°), perpendicular to the trend of local stratigraphy and to optimise the intersection of the monzogranite contact and the **Castlemaine Fault**. This is the first campaign to specifically test the **Castlemaine Fault**, as it has never previously been DD tested.

DD Hole FMDD0032 was designed to intersect the **Castlemaine Fault** within the interpreted Everleigh Embayment geophysical feature. The hole intersected the Danjo Monzogranite and a distinctive porphyritic basalt known regionally in the Eastern Goldfields as "cat rock". In places the basalt displays pillowed textures, indicating it was erupted into water. This is significant because pillowed basalts tend to have increased internal structural disruptions and higher bulk permeabilities. This higher permeability provides ready access for hydrothermal fluids and any associated alteration or mineralising events.





**Figure 25:** FMDD0032 ~ 175m Hematite-silica altered intermediate porphyry that cuts the Danjo Monzogranite and exploits the adjacent cat rock contact.

The monzogranite and cat rock are cut by a number of felsic to intermediate porphyries. These intrusions are all altered and contain varying proportions of pyrite and pyrrhotite. This is significant as sulphur compounds in igneous melts have the capacity to transport metals, including gold.

The **Castlemaine Fault** is a significant regional structure and is manifest as an extensive zone of granite/basalt intercalation, veining, brecciation and structural damage. Within FMDD0032 the Castlemaine Fault has a downhole thickness of ~130m (~50m in true width). The fault is oriented subvertically and strikes northerly. This fault has seen extensive hydrothermal activity, evidenced by the abundant alteration assemblages and zones of veining observed within the hole (see Figure 26).

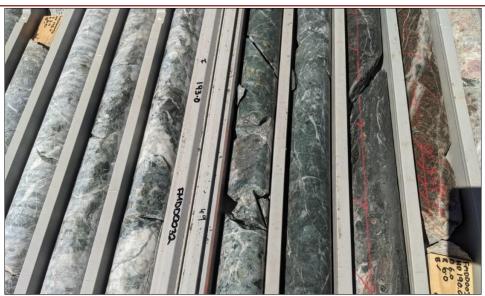
A **30km length of the Castlemaine Fault** traverses along the entire **14 Mile Well** project area from north to south. The structure is interpreted to be a splay off the **Claypan/Celia** Fault further to the east (CSA 2018). The Company's key target areas are either directly associated with this structure or on structures that link to this fault. It is interpreted to have been a key controlling structure for hydrothermal activity within the **14 Mile Well** project area and, as such, it needs to be understood to provide guidance for ongoing exploration and gold discovery.

The mineralised lode structure observed at ~116m in FMDD0032 (see **Figure 23**) was located on the eastern side of the Castlemaine Fault (see **Figure 20**). Previous lodes were known in old workings much further to the west on the western side of the fault. This is significant as it demonstrates the potential for mineralisation to be associated with the **Castlemaine Fault**, particularly on the eastern side. This also now opens up new exploration opportunities for the Company along the entire 30km length of this structure within the **14 Mile Well** project.

Sulphides were common throughout the hole and are dominated by pyrite and pyrrhotite, with lesser chalcopyrite being observed. Sulphides were generally disseminated or associated with veining and alteration. Alteration in the hole was extensive and focussed in and around the **Castlemaine Fault**.

DD Hole FMDD0034 tested along strike to the southeast from FMDD0032, testing a position on the northern cusp of the interpreted Everleigh Embayment structure. The geology within this hole was dominated by the Danjo Monzogranite. The monzogranite was moderately hematite-silica altered throughout with trace pyrite. Two narrow shears were identified in FMDD0034, located at 89m and 152m downhole. The shears were manifest as zones of intense foliation with associated quartz veining.





**Figure 26:** FMDD0032 ~190m. Example of alteration and structural complexity within the **Castlemaine Fault**. To the left the rock is overwhelmed by multiple generations of quartz carbonate veins. In the centre the entire rock mass is brecciated and silica flooded. To the right hematite alteration and quartz veining is apparent within the Danjo Monzogranite.

The geological observations of veining, structures, alteration and sulphides from this drilling program are highly encouraging. A broad suite of alteration assemblages was observed within the cat rock and monzogranite hosts. These assemblages were typical for mineralised systems in this district and included silica, carbonate, white mica, epidote, tourmaline, and a range of sulphides (notably pyrite, pyrrhotite and chalcopyrite).

The **30km long Castlemaine Fault** forms the contact between the monzogranite and adjacent greenstone sequence and has been a significant regional focus for hydrothermal activity. This is the type of structure that is known to be associated with many gold deposits in the Yilgarn Craton. In the Leonora-Laverton Districts a number of deposits are associated with structures interacting with the margins of intrusions. Examples of this style of deposit include **Granny Smith, Puzzle North, King of the Hills, Burtville, Jubilee** and **Yundamindera** (interpreted to be along strike on the Castlemaine Fault).

The **Castlemaine Fault** is extensive and has the potential to extend to considerable depth and may be a crustal scale structure with links to the mantle. Further work is required to better understand this structure and its application to ongoing exploration and gold discovery.

Assay results from this drilling program are expected to be received in Q2 2022.

#### Danjo NE

The first phase of diamond drilling at **Danjo NE** has been completed, with 7 holes for 2,829m.

Danjo NE is located within the Danjo Monzogranite intrusion, classified as a prospective Mafic Group intrusion (Cassidy 2019). The target is centred on a large **+1km long outcropping**, east-west trending thick quartz reef that is situated within an anomalous corridor that links with the TOTK vein ~6km to the northwest, within the North-1 Target area.

The **Danjo NE** quartz reef displays a strong Au-Ag-Te geochemical association. Drilling was designed to follow up significant rock chip anomalies from the Danjo NE quartz reef, which included:

- 24.6 g/t Au, 14.5 g/t Ag & 7.33 g/t Te
- 5.07 g/t Au, 78.7 g/t Ag & 56.4 g/t Te
- 3.67 g/t Au, 4.02 g/t Ag & 25.3 g/t Te

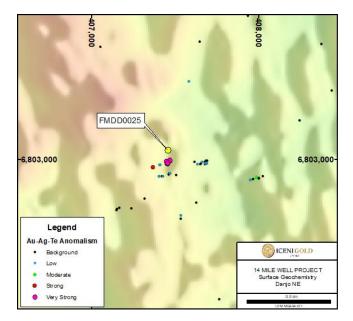




**Figure 27**: Alteration in FMDD0026, the Danjo Monzogranite is cut by quartz tourmaline pyrite veins with hematite, pyrite and white mica alteration.

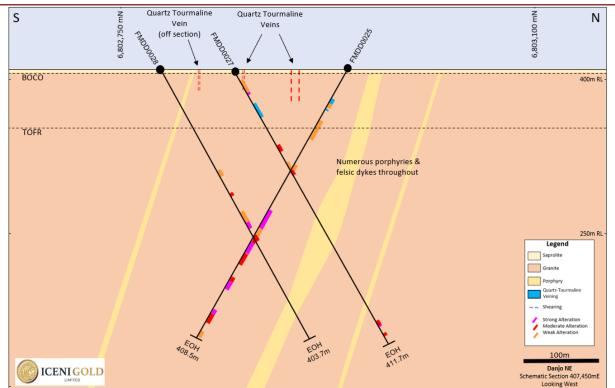
The **Danjo NE** area was targeted due to positive field mapping observations made by CSA Pty Ltd geologists in 2018 and 2020, which includes the following positive geological prospectivity indicators:

- Presence of prominent fault, evident in magnetic and gravity data sets.
- Zone of intensely foliated and sericite altered granite with quartz tourmaline veins.
- Identification of a central deformation zone hosting quartz veining.
- Substantial amounts of quartz tourmaline veining.



**Figure 28: Danjo NE**: Geochemistry illustrating the combined anomalism for **Au**, **Ag and Te** in surface rockchip sampling. The first DD hole FMDD0025, tested beneath the zone of strongest anomalism at Danjo NE. Background image is TMI RTP magnetics.





**Figure 29**: **Danjo NE**: Schematic section 407,450mE, where DD intersected several zones of quartz, tourmaline and sulphide veins beneath the Danjo NE reef outcrop. The host rock is the Danjo Monzogranite which has been intruded by **intermediate porphyries.** Drilling intersected zones of strong alteration associated with the quartz veining. The DD program included scissor holes to gain early structural control (section is looking west).

The first half of the DD program was conducted on three north-south sections, designed to intersect and adequately test the easterly trending quartz veins that host the Au bearing rock chip samples. Scissor holes were drilled early in the program to constrain structural controls and optimise the drilling orientations with respect to the geology.

The second half of the DD program was conducted on two east-west sections, which were designed to intersect an anomalous geochemical trend associated with interpreted northerly to northwesterly trending structures.

Drilling intersected the Danjo Monzogranite beneath a thin cover sequence. The monzogranite has been intruded by a number of felsic to intermediate porphyries. An interval within hole FMDD0027 has a preliminary identification as a biotite rich lamprophyre (see **Figure 30**). This is significant, as lamprophyres are known to be associated with gold mineralisation in Archean greenstone belts.

The larger **intermediate porphyry** was consistent and could be traced between holes and between sections. This porphyry contains trace sulphides disseminated throughout, which is meaningful because it demonstrates that a sulphide bearing magma with the capacity to carry gold is spatially associated with the **Danjo NE quartz reef**.



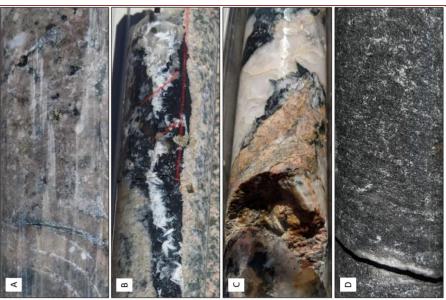


Figure 30: Examples of alteration and intrusions at Danjo NE;

- A) Danjo Monzogranite with silica-carbonate-pyrite alteration;
- B) altered Danjo Monzogranite cut by quartz-carbonate-tourmaline-pyrite vein;
- C) altered Danjo Monzogranite cut by quartz-tourmaline-pyrite vein;
- D) possible lamprophyre in FMDD0027.

#### **Deep Well**

The Company is still awaiting the remaining assay results from the 132-hole AC drilling program totalling 6,860m surrounding the initial DD program. The Company expected the results in February 2022 but are confirmed to be available in early Q2 2022.

DD commenced at target FMW44 at Deep Well in June 2021, following up gold anomalism identified in historic exploration work.

The DD at Deep Well was designed to replicate the historic drilling, test beneath the historic gold results, and test further along strike. The DD program intersected zones of sulphide bearing alteration adjacent to a significant north trending shear zone at target FMW44.

Dr Witt was engaged by the Company to complete a geological study on the diamond core from Iceni's **14 Mile Well** project. Dr Witt has extensive experience working with **syenite related gold** mineralisation in the Eastern Goldfields of Western Australia.

Dr Witt identified several types of intrusions at target FMW44 at Deep Well, including hydrothermally altered syenite and a lamprophyre in the diamond core. Within the Laverton District there is a consistent association between syenite intrusions and gold mineralisation. For example, **Heffernan's**, **Jupiter, Cameron Well and Wallaby** are known to be hosted or associated with **syenite intrusions**.



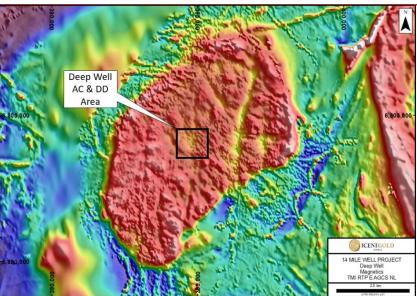


Figure 31: Magnetic image showing the location of drilling at Deep Well.

The DD program was followed up in August 2021 by an AC drilling campaign designed to identify broader anomalous trends. The program included 132 AC holes for 6,860m. The AC drilling program was successful and identified a series of altered structures at target FMW44 that enlarged the alteration envelope to a length and width of 1km (see **Figure 33**).

Gold assays, Hyperspectral Mineralogy and Bottom of Hole multi-element results from the AC drilling are still pending. When these results are received in their entirety, they will be collectively analysed by an independent consulting geochemist to gain insights into the behaviour and distribution of the pathfinder elements, alteration and zonation patterns that can vector towards possible gold deposits in this target area.

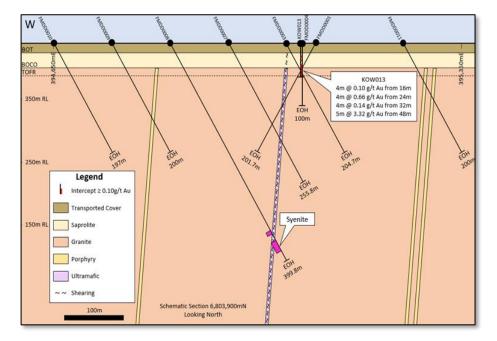
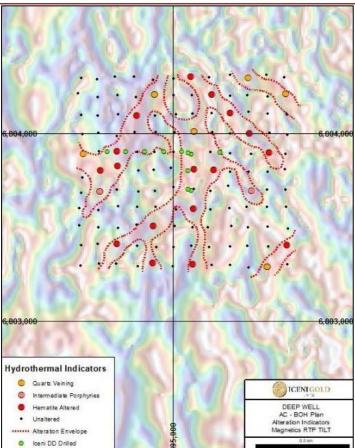


Figure 32: Schematic cross section 6,803,900mN, from target FMW44 at Deep Well.





**Figure 33**: Schematic collar plan showing the 1km long anomalous zone, defined by the distribution of hydrothermal alteration indicators at target FMW44 at **Deep Well.** 

The targeted quartz veins were intersected in most holes. The veins have a characteristic mineral assemblage that includes quartz, carbonate, tourmaline, pyrite and white mica.

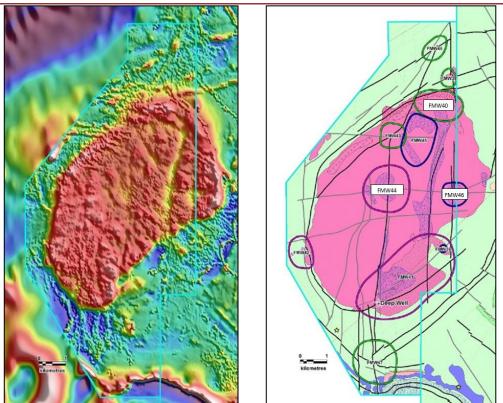
Alteration within the host monzogranite includes silica, carbonate, white mica and pyrite. This alteration is focussed around the quartz veins. These mineral assemblages are common within known gold deposits in Archean greenstone belts.

This drilling program was followed-up with a broader +120 hole/6,500m AC drilling program covering an area 1km x 1km surrounding the main DD target area.

AC assay results from this drilling program were expected to be received mid Q1 2022 but are now confirmed to be available early in Q2 2022

Target **FMW44** was identified during target generation work conducted by Southern Geoscience Consultants. Numerous targets were identified, along with a series of other targets specifically associated with the **Deep Well** Intrusion. During 2021 the Company drill tested target FMW44 with the Deep Well DD and AC drilling programs. During 2022 the Company is considering testing a number of these targets with an AC drilling campaign, specifically testing the Deep Well East area, which includes the targets FMW40 and FMW46.





**Figure 34:** Targeting completed on the **Deep Well** Target Area by Southern Geoscience Consultants. The image on the left is TMI RTP Magnetics. The image on the right is the interpretation by Southern Geoscience Consultants showing prioritised target areas associated with the **Deep Well** Intrusion.

### тотк

Fieldwork at **TOTK** demonstrated the potential for gold mineralisation along a +100m outcropping quartz vein that hosted fresh sulphides and visible gold at surface. These results form part of a broader mineralised envelope that extends over a much larger 400m long trend.

The mineralisation at **TOTK** displays a distinctive **Au-Ag-Te-W** signature, like several of the neighbouring high grade, high tonnage gold deposits in the Laverton District. DD was undertaken in 2021 to test beneath the surface gold anomalism and visible high-grade gold identified in outcrop.



**Figure 35:** Ongoing fieldwork at **TOTK** has recovered new samples of the **TOTK** vein hosting fresh sulphidic blebs within the quartz vein. The specimens were located along strike to the south of the **TOTK discovery outcrop**. Results are pending.



The **TOTK** DD program was completed during Q4 2021. It intersected several thick zones of strongly altered and sulphide bearing granite that are cut by several different porphyry intrusions.

Significant sulphide bearing alteration zones were identified in several holes on a number of drill sections. Each of these intercepts have downhole lengths up to **~90m**. The alteration has a variable composition; at times it is strongly haematitic, switching to zones of silica, sericite and albite. The alteration zones are cut by multiple generations of quartz veining and felsic to intermediate porphyry intrusions.

These observations are encouraging as they confirm the continuity of the alteration zone to depth and along strike. Assays were expected in Q1 2022, but it has been **confirmed that they will now be available in Q2 2022.** 

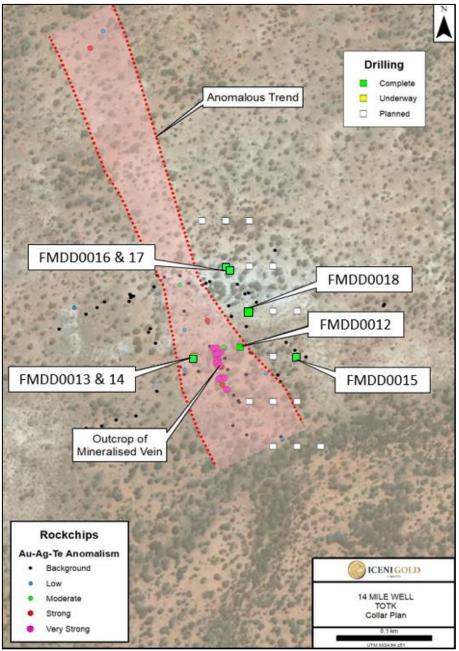
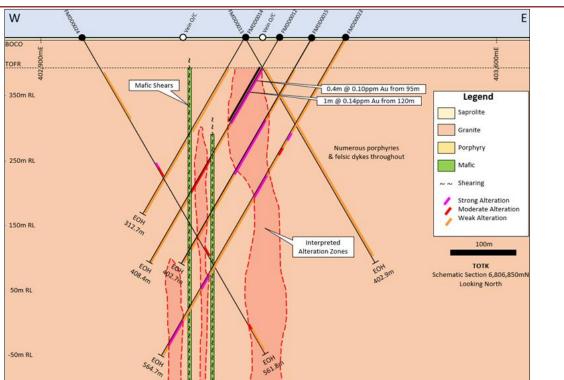


Figure 36: Collar Plan showing drillhole locations at TOTK.





**Figure 37**: Schematic section 6,806,850mN, looking north. The strong alteration zones are interpreted to be oriented vertically and are spatially associated with mafic shears which are interpreted to be after lamprophyres.

#### UFF+ Soil Sampling Campaign

The Ultra Fine Fraction (UFF+) process was developed by **CSIRO** and is optimised for soil particles less than two microns in size. The workflow involves a physical step to retain the fine microparticles, then a chemical step to test for the presence of gold and other elements.

Fine particles (clays and iron oxides) in the soil have more surface area to accumulate gold and other metals that move through the environment. This accumulation process forms the geochemical signatures above orebodies lying deep below. This allows the Company to generate new exploration targets that were previously unknown.

#### Guyer Target Area: East Well (14UF002) Gold soil anomaly Significant Size Increase

Further assays have been received around the East Well Au soil anomaly from the ongoing UFF+ soil program. New results have significantly increased the size of the Au soil anomaly. The UFF+ anomaly now covers an area 5km wide defined by coincident Au and multi-element anomalism. The residual soil anomaly, known as **14UF002** (**East Well**), is located within the **Guyer target area**. Samples are spaced 100m apart on lines 400m apart (100m x 400m).

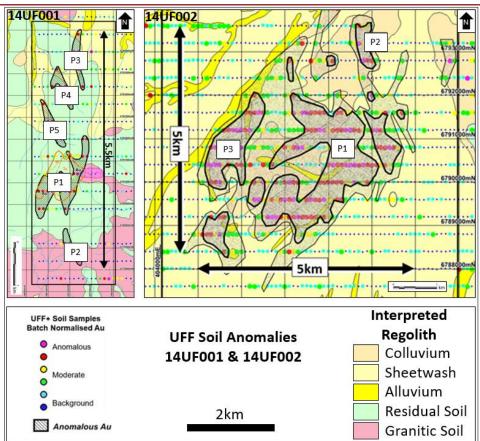
The anomaly displays a strong **Au-W-Te-Mo** geochemical association and is interpreted to be underlain by granodiorite. The anomaly has a >5km long strike north-south and a 5km width east-west, comprising several priority zones, the 3 main zones being as follows:

Priority 1 Zone: Consists of coherent Au and multi-element anomalism across 8 sample lines.

Priority 2 Zone: Narrow coherent Au anomaly across 3 sample lines with offset multi-elements

Priority 3 Zone: Generally, Au only anomaly across 6 sample lines.





**Figure 38:** Comparison of the gold in soil anomalies **14UF001-Breakaway** and **14UF002-East Well** unearthed within the 14 Mile Well project area. Both anomalies are ~5km long and are shown here at the same scale to aid comparison. The anomalies occur in different regolith regimes but both are underlain by felsic granite intrusions. The Priority 1 zone within the **Breakaway** Well anomaly is defined by coincident **Au-W-Te-Mo-As** anomalism. The Priority 2-5 zones of the Breakaway Well anomaly are generally Au only.

#### **Tenement Status**

The Company confirms that all of its tenements remain in good standing. During the quarter, the Company acquired tenements set out in the table below.

Tenement ID	Holder	Interest (%)	Current Area	Area Unit	Grant Date	Expiry Date
P39/5851	14 Mile Well Gold Pty Ltd	100	156	ha	3/5/2018	2/5/2022*
P39/5852	14 Mile Well Gold Pty Ltd	100	199	ha	3/5/2018	2/5/2022*
P39/6165	14 Mile Well Gold Pty Ltd	100	164	ha	11/11/2020	11/11/2024
P39/6166	14 Mile Well Gold Pty Ltd	100	193	ha	11/11/2020	11/11/2024
* Tenements will go through application for extension process.						

The Company has not disposed of any tenements during the quarter. The Company confirms that, as at the end of the quarter, the beneficial interest held by the Company in the various tenements has not changed. Details of the tenements and their locations are set out in detail in the Company's annual report dated 29 September 2021.



#### Corporate

During the quarter, the Company released the interim financial report for the half year ended 31 December 2021. The cash flows relating to the quarter included \$1.53 million spent on exploration and evaluation expenditure, which is primarily associated with the costs of exploration activities at the 14 Mile Well project.

The Company had a closing cash balance of \$10.339 million.

#### Finance and Use of Funds

Pursuant to ASX listing rule 5.3.4, the Company provides a comparison of its actual expenditure against the estimated expenditure on items set out in in section 5.4 of the Company's Prospectus.

Activity Description	Funds Allocated (\$)	Actual to Date (\$)
Exploration (2 years)	13,000,000	8,066,747
Administration (2 years)	3,500,000	2,488,671
Expenses of the Offer	1,350,000	1,219,824

For the purposes of section 6 of the Appendix 5B, all payments made to related parties are for director fees, office rent, administration services and geological consulting services.

For further information regarding Iceni Gold Limited please visit our website www.icenigold.com.au

Authorised by the Board of Iceni Gold Limited.

For further information, please contact:

Brian Rodan Executive Chairman admin@icenigold.com.au David Nixon Technical Director

#### ABOUT ICENI GOLD LIMITED

Iceni Gold Limited is a Perth based exploration company that operates the 14 Mile Well Gold project in the Laverton Greenstone Belt.

The project consists of a ~600km<sup>2</sup> tenement package on the western side of Lake Carey, the majority of which has never been subject to modern systematic geological investigation.

#### **Competent Person Statement**

The information in this announcement was first released by the Company in various announcements in 2021 and 2022 ("Announcements"). The Company confirms that it is not aware of any new information or data that materially affects the information included in the Announcements.

# Appendix 5B

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity				
Iceni Gold Limited				
ABN Quarter ended ("current quarter")				
98 639 626 949	31 March 2022			

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		-
1.2	Payments for		
	(a) exploration & evaluation	(1,530)	(5,694)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(359)	(1,068)
	(e) administration and corporate costs	(224)	(858)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
1.5	Interest and other costs of finance paid	(24)	(63)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(2,137)	(7,683)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	(94)	(179)
	(c) property, plant and equipment	(6)	(487)
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(100)	(666)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	2,025
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(9)
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings	(258)	(696)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	(258)	1,320

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	12,834	17,368
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,137)	(7,683)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(100)	(666)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(258)	1,320

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	10,339	10,339

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	5,339	7,834
5.2	Call deposits	5,000	5,000
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	10,339	12,834

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	293
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	f any amounts are shown in items 6.1 or 6.2, your quarterly activity report must incluc ation for, such payments.	le a description of, and an

7.	<b>Financing facilities</b> Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	2,700	1,745
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	2,700	1,745
7.5	Unused financing facilities available at quarter end		955
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
	A finance facility of \$2.7 million is held with Toyota Australia and relates to equipment financing at various terms and rates. Terms range up to 36 months and interest rates range from 2.8% - 5.34%. The facility is secured by the equipment purchased under the various equipment finance agreements and a further company guarantee in favour of Toyota Finance from 100% owned subsidiary 14 Mile Well Gold Pty Ltd. In addition, Iceni Gold Limited has provided a bank guarantee to Toyota Finance for \$150,000.		

8.	Estim	nated cash available for future operating activities	\$A'000	
8.1	Net cash from / (used in) operating activities (item 1.9)		(2,137)	
8.2		ents for exploration & evaluation classified as investing es) (item 2.1(d))	-	
8.3	Total r	elevant outgoings (item 8.1 + item 8.2)	(2,137)	
8.4	Cash a	and cash equivalents at quarter end (item 4.6)	10,339	
8.5	Unuse	ed finance facilities available at quarter end (item 7.5)	-	
8.6	Total a	available funding (item 8.4 + item 8.5)	10,339	
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)		4.8	
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.			
8.8	If item 8.7 is less than 2 quarters, please provide answers to the follo		ing questions:	
	8.8.1	Does the entity expect that it will continue to have the current le cash flows for the time being and, if not, why not?	evel of net operating	
	Answe	er: N/A		
	8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?			
	Answer: N/A			

8.8.3	Does the entity expect to be able to continue its operations and to meet its business	
	objectives and, if so, on what basis?	

Answer: N/A

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 29 April 2022

#### Authorised by: The Board (Name of body or officer authorising release – see note 4)

#### Notes

- This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.