ASX ANNOUNCEMENT 2nd December 2022

Helios Drilling Update: Early results indicate significant late-orogenic IOCG target in WA

Highlights:

- **Geochemical results from diamond drill hole HELIOS_DDH001 support the potential discovery of a large (>1000m) alteration system surrounding an IOCG deposit in the Nullarbor region of WA.**

- **Results show anomalous copper values up to 211ppm and anomalous geochemistry, consistent with published criteria for IOCG exploration including coincident elevated uranium (U) and iron (Fe) values of up to 82.3ppm and 116,000ppm respectively, and the antithetic relationship between titanium (Ti) and high iron (Fe).**

- **The drill core exhibits features indicative of other IOCG deposits and alteration zones and demonstrates that drilling has potentially intercepted a large alteration halo. Such features include, but are not limited to;**
  - ***replacement of altered granite groundmass with hematite***
  - ***syn-magmatic bimodal rock types***
  - ***syn-orogenic alteration, and***
  - ***low volumes of hydrothermal quartz***

- **NMR continues to use results obtained from current Helios drilling to further define the target mineralisation and refine follow-up drilling.**

Native Mineral Resources Holdings Limited (ASX: **NMR**), or ("**NMR**" the "**Company**"), is pleased to provide the results from its initial sampling program of the HELIOS_DDH001 diamond drill core.

NMR has recently completed drilling the gravity anomaly at the Helios Project in WA and this announcement is a presentation of the key geochemical results obtained from the first 122 drill core samples from HELIOS_DDH001. NMR is awaiting further assays and geochemistry from diamond drill hole HELIOS_DDH002. NMR's technical team views the results as further confirmation that drilling has intersected a large alteration halo potentially linked to a nearby IOCG-type mineral occurrence in the Northern Nullarbor region of WA.


Figures 1 and 2. Photos of NQ drill core with some examples of hematite (grey mineral in left image) and magnetite (grey mineral in right image) replacing the granite groundmass. Hematite staining (red) in both samples is pervasive, however, the image on the left is an example of where the host granite has been almost completely overprinted by hematite staining to the point where the host rock is difficult to recognise. Drill core is ØNQ, HELIOS_DDH001.

Figure 3. Felsic intrusive breccia containing significant hematite alteration with hematite and minor magnetite and pyrite within the matrix from drill hole HELIOS_DDH002. The identification of hematite and hematite alteration like that in HELIOS_DDH001 expands the alteration footprint to at least 1000m.

Management Commentary

NMR's Managing Director, Blake Cannavo, commented: *"The results from drilling at Helios continue to add more positive evidence and support to the company's interpretation that it has identified a large IOCG-style alteration system. The rocks are hematite- and magnetite-rich and have now been identified in two holes extending the mineralised footprint at Helios to well over 1000m. We know that we are in the right exploration address to potentially unearth a new IOCG discovery and our team is confident that we are on the right pathway to unlock the full potential of Helios.*

NMR continues to pursue an aggressive exploration pipeline with work programs continuing at both our Helios and Maneater Hill projects and I look forward to providing progress updates from across the business at regular intervals."

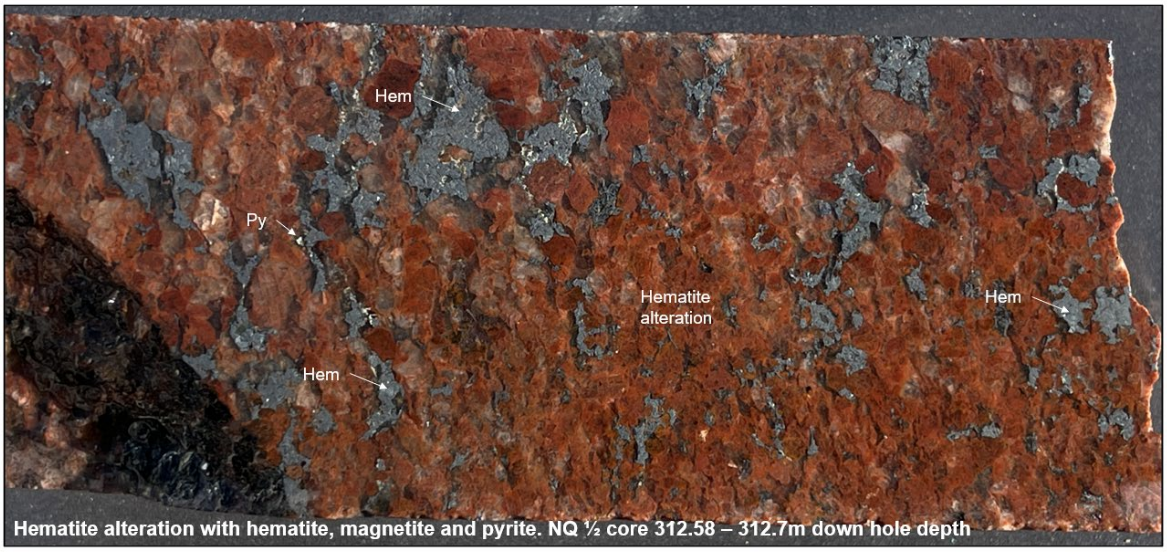

Figure 4. Photo of 1/2 HQ core from HELIOS_DDH001 showing hematite alteration of granite (red) and hematite infill of granite groundmass. Pyrite is present in multiple samples and post-dates interstitial hematite.

Figure 5. Pervasive iron oxide staining and hematite in altered granitic host rocks (HELIOS_DDH002).

HELIOS TARGETING – A NEW FRONTIER OF EXPLORATION

The Helios target is closer to the giant IOCG deposits of Olympic Dam and Prominent Hill than it is to the closest capital city of Perth and only 350 kilometers west of the known limits of the famous IOCG-bearing Gawler Craton.

The potentially mineralised basement rocks of the Madura province are entirely buried under cover therefore exploration in this region has previously been limited. NMR are forging a new path for exploration in the region and have now completed two diamond drill holes totaling over 1520m.

Drilling has revealed, for the first time in Western Australia, a significant IOCG-style alteration halo extending for at least 1000m between the two diamond holes. The discovery is significant as it proves that the previously underexplored terrain may be host to major IOCG-type deposits.

Drilling targeted a magnetic and gravity high interpreted to be located on the margin of a granite-dominated crustal domain in a similar setting to the famous Olympic Dam IOCG deposit. The magnetic modelling indicated two high-priority pipe-like structured plunging to the North-west with susceptibilities of 0.17 and 0.2 SI. Modelling of the gravity data indicated a N-S trending sub-horizontal body sitting to the east of the magnetic targets with modelled density of up to $3.3g/cm^3$. Drill hole HELIOS_DDH001 targeted the NW-plunging magnetic body to a total drill hole depth of 500m. Drilling stopped within the altered, hematite-rich rocks primarily due to the difficulty associated with drilling using a small diamond drill rig. Prior to NMR obtaining the exploration permit, no other company had actively explored the region and no drilling has been completed on the tenement.

ROCK TYPES INTERSECTED IN DRILLING

Drilling intersected basement rocks at 114.7m down hole. The drill hole was oriented at a dip of -80 degrees towards the east (090) magnetic. The end of hole is at 500.19m. The rocks overlying the basement are a combination of grey siltstones and mudstones with intercalated limestones. The upper part of the drill hole is dominated by an equigranular tonalite with high magnetite content. The tonalite-granodiorite preserves a weak- to strong-foliation with increasing depth to approximately 309m down hole depth. Below this depth, the tectonic fabric is variably developed but generally weaker near the EOH. Mylonitic fabrics are localised but, due to the small diameter of NQ drill core, no lineation was observed and is an interpretation based on textural features.

Felsic breccias are locally cut across the host granite. The breccias exhibit significant hematite staining and hematite and/or magnetite replacement of groundmass.

*Relatively **unaltered** host granite (HELIOS_DDH001 ØNQ)*

*Moderately **altered** granite from HELIOS_DDH001 (ØNQ). An example of heavily altered granite is provided in figures 1 and 2.*

Alteration intensity is domainal but generally increases with depth down hole. The predominant alteration is hematite as either hematite replacing ground mass or as intense red staining of the granite and felsic breccias. In both cases, the discoloration of the host rocks is evident by visual observation alone. The most interesting and pervasive zone of alteration exists between 309.8m and 319m which is presented in more detail below.

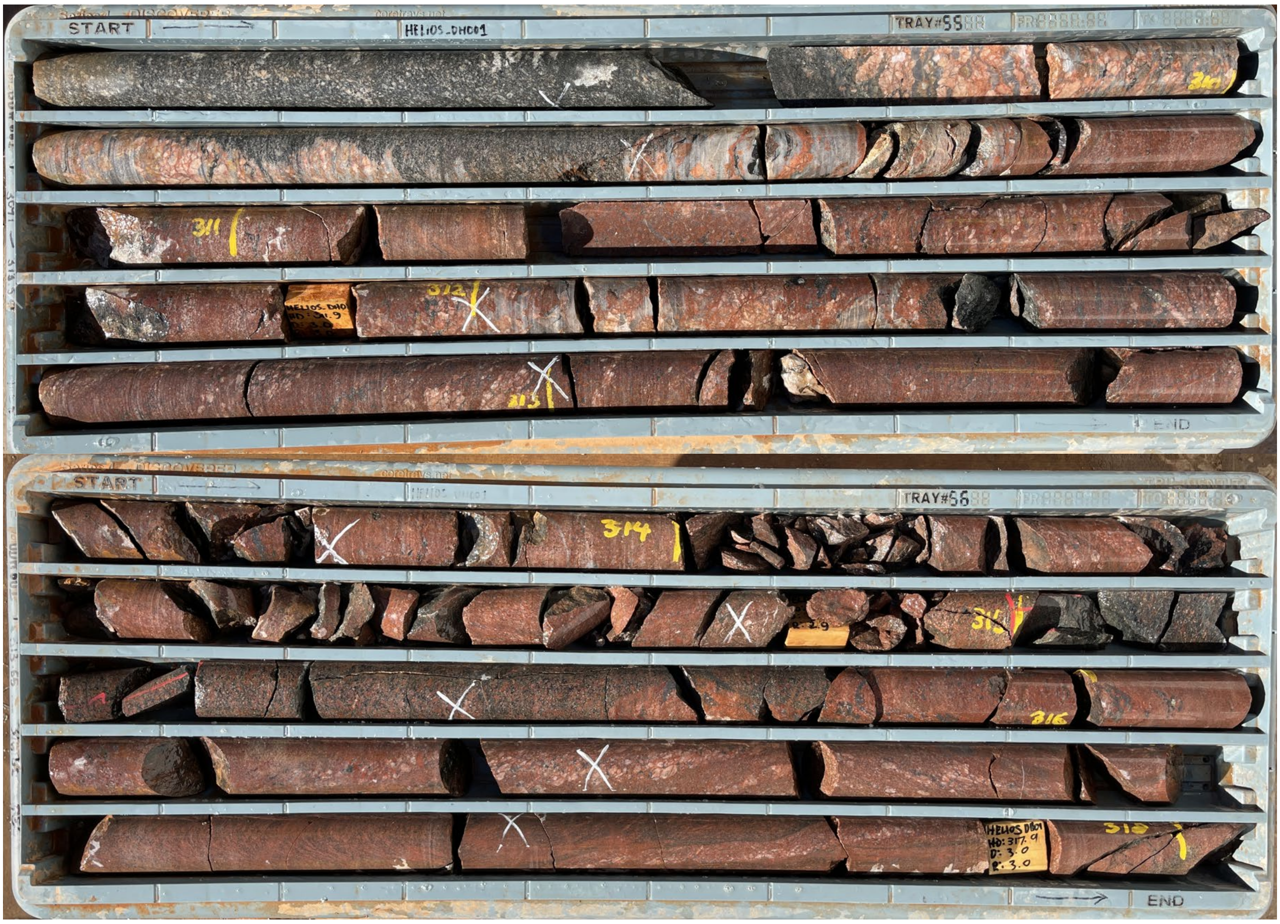

Figure 7. Trays containing NQ drill core of hematite altered granite between 310m and 318m down hole depth.

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The section of polished drill core presented in Figure 4 highlights the presence of hematite replacing the altered granite matrix. The drill core section is from the section of the core shown in (Figure 7).

Helios results meet the key IOCG targeting criteria published by deposit experts

The results from drilling of the basement rocks under cover at the Helios project have provided the evidence necessary to support ongoing exploration of IOCG mineralisation. Listed below are key criteria discovered in drilling including 122 samples ranging from 0.1 to 0.59m in length with an average length of 0.25m.

The average mass of the samples was 679 grams. All core was ½ NQ core and sent to SGS labs in western Australia for multielement analysis including but not limited to fire assay, ICP-MS, and ICP-AES. The sampling was completed in two batches which resulted in not all samples receiving the same suite of element analysis. Key elements such as Fe, Cu, U were obtained for all samples and some of the results are presented below.

The best copper assay returned **211 ppm Cu** (sample #DH084 414.6-414.8m) and 100ppm Cu (Sample #DH055 258.6-258.8m). Sample #DH084 also contained the highest Cobalt (57ppm Co) and highest sulfur (**11,100ppm S**) suggesting the presence of sulfides within the sample. Background copper values for samples of altered and unaltered granite were generally around 50ppm to 0ppm Cu (average 38ppm Cu).

A defining characteristic of the rocks recovered from drilling is the very high Fe content which is consistently over 50,000ppm (av. 60,124ppm Fe) and up to **116,000ppm Fe** in samples #DH106.

*The results obtained so far from the drilling at Helios meet many key criteria (presented in **bold** text) used for characterising regions prospective for IOCG-type deposits defined by Skirrow et al., (2019) and/or observed at other IOCG deposits.*

1) **<u>Elevated Uranium above background.</u>** Uranium concentrations in the drill core vary from less than 2ppm to over 80ppm in heavily altered sections. The average concentration in the core is 11.2ppm but this includes the section of core containing higher than background values between 311m-319m down hole. If the anomalous zone is removed, the background average for Uranium concentration is only 7.5ppm. Accordingly, values of over 70ppm in the approximately nine-meter intercept width present a significant increase above background levels.
2) **<u>Elevated values of uranium coincident with significant elevations in iron content over the same interval.</u>** The results obtained from drill core and presented in Figure 8 below demonstrate a strong coincidence between elevated iron and elevated uranium. The values confirm observations in the drill core which show intense hematite staining and hematite replacing the granite groundmass. High iron and uranium are indicative of IOCG mineralisation and a positive indicator for potential ore-forming fluids. NMR recognises the significance of Uranium and iron enrichment relative to the existing host rocks, but the degree of alteration observed, combined with the elevated concentration of U and Fe and the replacement of groundmass by hematite support targeting criteria for IOCG deposits.

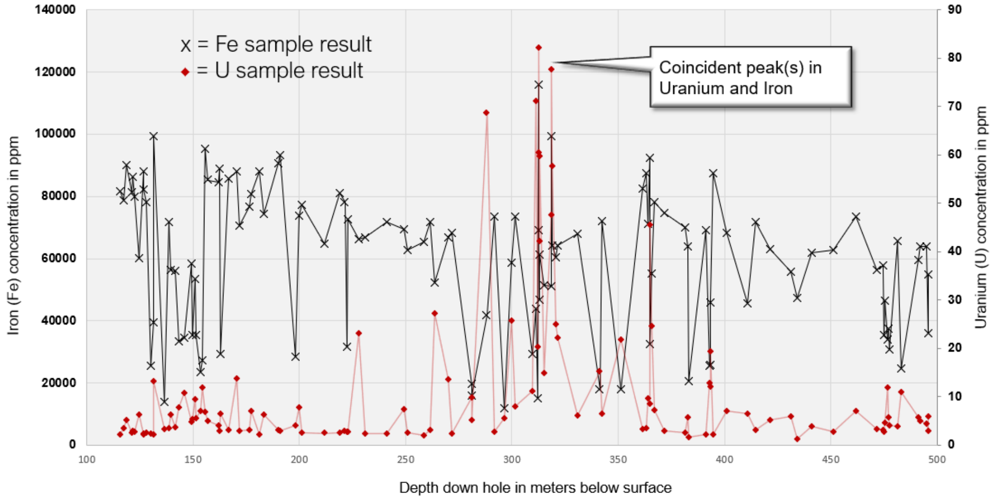

Figure 8. Plot of Uranium (red) and Iron (black) of samples collected from HELIOS_DDH001. Corresponding iron and uranium are indicative of other IOCG alteration systems.

3) **Titanium depletion.** Titanium values drop from above 10-12% for the majority of the samples analysed to an average of less than 3% in the section of core between 311m and 319m.
4) **Hematite present in altered rocks.** Hematite abundance is up to 10 percent in some samples (see various photos).
5) **Pyrite and/or pyrrhotite are generally present in minor amounts or may be absent.** Pyrite is not common in the drill core but locally occurs in quartz-pyrite-magnetite veins cutting across the altered granite. Similar veins have been observed in the halo of the Olympic Dam deposit.
6) **Hydrothermal quartz is minor relative to Fe oxides.** The core displays minor hydrothermal quartz veining and the amount of hydrothermal quartz is, based on observations, orders of magnitude less than the volume of hematite.
7) **The hydrothermal alteration footprint is large** with a proven extent of over 1000m based on intersections in the recently completed HELIOS_DDH002.
8) No garnet and minor epidote have been observed within the rocks from HELIOS_DDH001, however, recent observations of the rocks from the "Central" IOCG target show both garnet and epidote in siliciclastic rocks that resemble skarn mineralogies and is also consistent with the IOCG exploration criteria **epidote and garnet are uncommon, and are mostly confined to local zones of skarn mineralogy**.
9) **Fluorite** has ben identified in HELIOS_DDH002.
10) The rocks observed in drill core also exhibit evidence of multiphase alteration. Potassic alteration has been interpreted to be localised and pre-dating the pervasive Fe-oxide alteration. Secondary biotite is also observed in some rocks along with secondary magnetite. It has been noted that **Proximal alteration zones at mid-levels in the hydrothermal systems are Fe^{2+}-K-enriched with deeper magnetite-biotite (±albite) and shallower magnetite-K-feldspar sub-zones.** The rocks observed at Helios appear to preserve, based on initial, pre-petrographic observations, early magnetite plus biotite alteration in the upper (westernmost) parts of the core overprint by the later phase of hematite and then pyrite alteration.
11) A critical criteria linked to IOCG deposits is the presence of **Uppermost (near-surface to epithermal) levels in the hydrothermal systems are dominated by Fe3+ (hematite) and hydrolytic (sericite, chlorite) ± carbonate alteration minerals.** The granite within both the HELIOS_DDH001 and DDH002 core are heavily altered by hematite (flushing) plus hematite replacement of groundmass in granite (refer to photos provided bleow). Granite also preserves abundant fine-grained sericite alteration of feldspars in association with the hematite alteration.
12) **Deposits are epigenetic, syn-tectonic (brittle-ductile mid-crustal to brittle upper crustal deformation regimes), and occur as hydrothermal breccias, disseminated to massive sulfide replacements, and vein stockworks.** Breccias and granite within the Helios drill core indicate mid-crustal deformation with localised

altered mylonites developed synchronous with hematite alteration. The breccias show groundmass replaced with hematite and sulfides (predominantly pyrite).

13) **Deposits are distal from broadly coeval felsic and mafic igneous intrusions.** The most abundant evidence for co-magmtic bi-modal intrusions is preserved within the HELIOS_DDH002 drill core where alteration is associated with early mafic magmas cutting across heavily altered felsic granitic hostrocks. The more mafic diorites and basalts are partly altered and some diorite porphyries show partial replacement of phenochrysts by pyrite (refer to image below). This observation is also consistent with those from Olympic Dam where "A suite of mafic and felsic igneous intrusions, mainly dykes, are interpreted to have been emplaced just prior to or during brecciation and mineralisation".

The right tectonic setting for IOCG deposits

Critical to targeting IOCG deposits is selecting the correct terrain or tectonic province for the development of these unique deposits. The target mineralisation at HELIOS is late-orogenic IOCG type. The reader is directed to the published article by Roger Skirrow (2022) for a complete description of this style of deposit. The Ernest Henry IOCG is an example of Late-Orogenic IOCG and it also shares many similarities in alteration type and alteration style observed at HELIOS. Based on limited information from the region, authors such as Tyler, Spaggiarri, Smithies, Kirkland, Wingate, and England have contributed significantly to the understanding of the region through application of geochemistry and geochronology. Their understanding has led to tectonic composite diagrams such as those presented below in Figure 9A. For the Madura Province. This understanding of the basement terrain has allowed NMR to forge ahead with frontier deposit exploration. Based on the results obtained from two drill holes at Helios and a third drill hole at Central, NMR are confident that it is drilling within a post-orogenic terrain with the tectonic conditions suitable for IOCG formation.

This interpreted tectonic setting, combined with the significant alteration identified in drill core is further confidence that NMR may be on the verge of discovering Western Australia's first IOCG deposit.

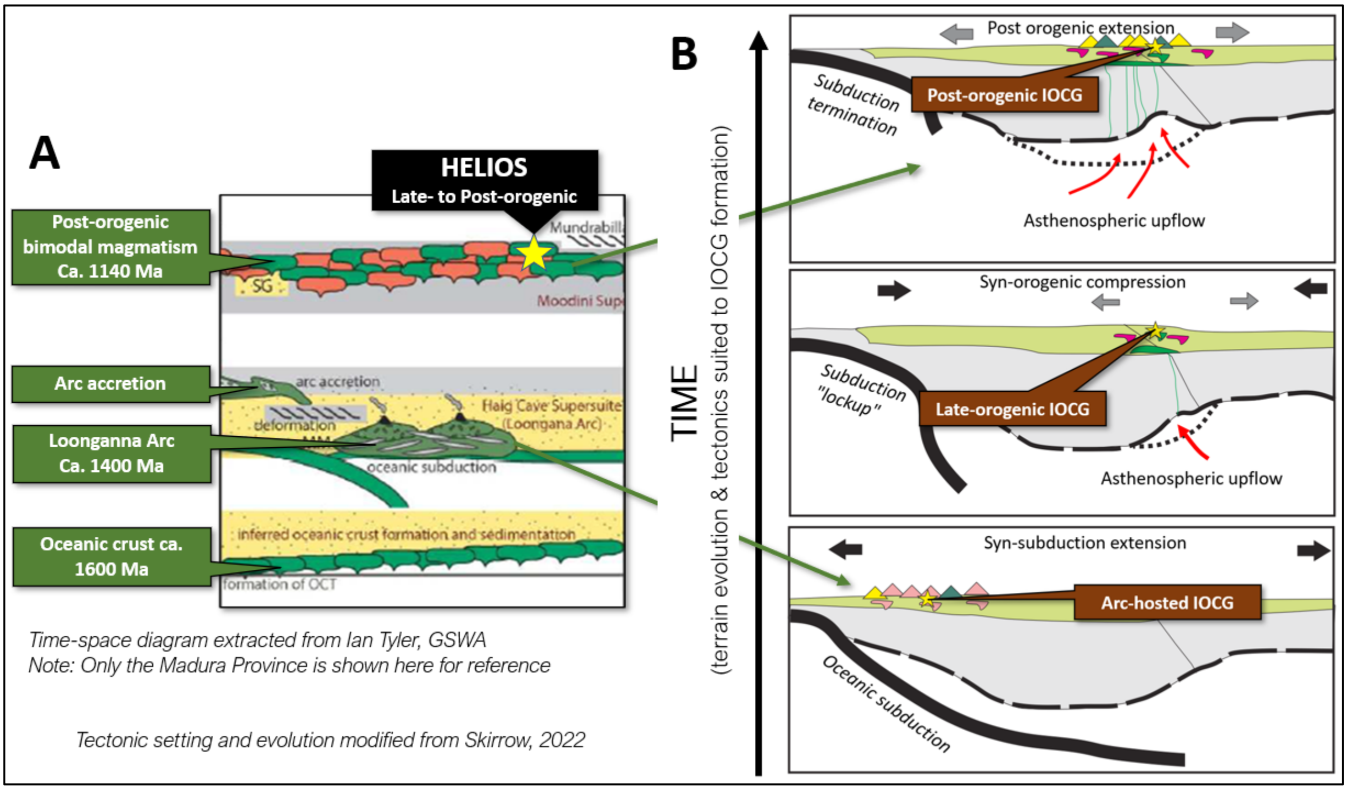

Figure 9. Composite diagram showing A) the interpreted tectonic evolution of the Madura province from approximately 1650 Ma through to late-orogenic magmatism at ca. 1140 Ma. B) schematic diagrams showing the evolution of orogenic margins and the location of associated IOCG mineralisation in each of the tectonic scenarios modified from Skirrow, 2022. The HELIOS target is interpreted to have formed late in the magmatic evolution of the Madura province in a similar setting as the "Post-Orogenic extension" phase described by Skirrow 2022 and illustrated in the uppermost diagram B.

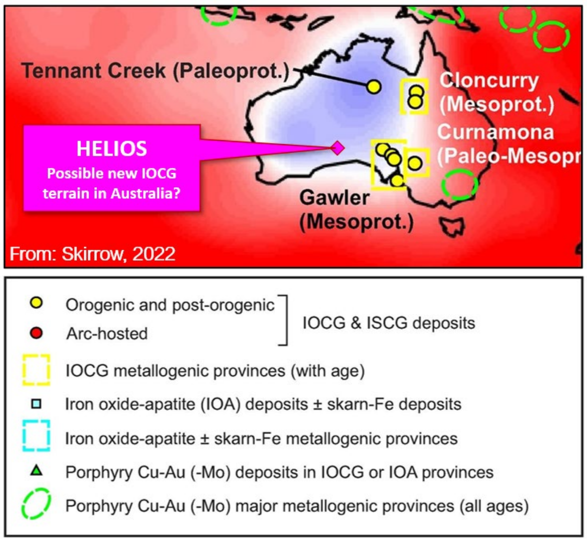

Figure 10. Map of Australian IOCG deposits. Currently, no IOCG deposits have been discovered in Western Australia. NMR have uncovered what it has interpreted to be the large (>1000m as of Nov 2022) alteration halo surrounding what could be Western Australia's first IOCG discovery.

Modified image sourced from Skirrow, 2022

Figure 11. Image fo NQ drill core HELIOS_DDH001 showing heavily hematite stained granite breccia together with hematite, pyrite and minor quartz replacement of groundmass

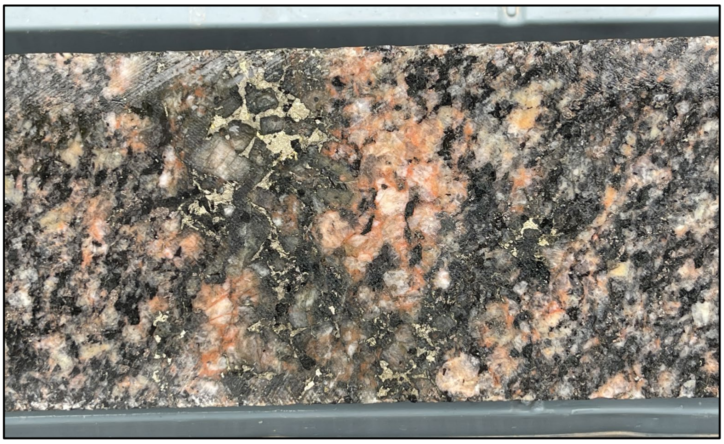

Figure 12. Image fo NQ ½ drill core HELIOS_DDH001 showing relatively fresh host granite, but with pyrite and minor secondary biotite replacing groundmass. Orange -pink staining is potassic rahter than hematitic.

Figure 13. Image fo NQ ½ drill core HELIOS_DDH001 showing a range of alteration minerals and textrues. Red alteration is hematie staining of host granite and replacement of groundmass. Part of the rock is also replaced by biotite, amphibole and hematite. The host granite is almost unrecongnisable in this part of the drill core due to the pervasive multi-phase alteration.

Figure 14. Image fo NQ ½ drill core HELIOS_DDH002 showing the bimodal mafic (black) igneous rocks mingling with felsic (pale pink) host granitic rocks. The granite is partly altered and locally porphyritic with well-defined potassium feldspar phenochrysts. The textures presented in this sample are indicative of co-mingling between mafic and felsic rocks near the margin of a larger mafic intrusive.

Figure 15. Image fo NQ ½ drill core HELIOS_DDH002 showing K-feldspar phenochryst in fine grained diorite. The already altered phenochryst shows partial replacement by pyrite.

Figure 16. Image showing quartz vein cutting across sericite and hematite altered host granite. The vein contains pyrite and magnetite and is similar to pyrite-magnetite-quartz veins observed around the Olympic Dam IOCG deposit.

NMR's Nullarbor Temnement Portfolio

NMR has been granted three tenements in the Nullarbor region of SE Western Australia (E69/3849, E69/3850, and E69/3852). The three tenements are located over potential iron-oxide copper-gold (IOCG)- and Porphyry-style mineralisation.

As reported on 16th May 2022, NMR completed its maiden diamond drilling program at the Helios Project and intersected what the company considers to be significant IOCG-style alteration including felsic breccias with hematite, magnetite, and pervasive hematite alteration of host granites.

A common signature or "fingerprint" of IOCG systems is the close association between magnetic highs and gravity highs. Deposits such as Ernest Henry, Prominent Hill, and Brumby are examples where this correlation is observed. As described above, NMR is targeting the central gravity high derived from the modelling of a ground-based gravity survey over the Helios project area.

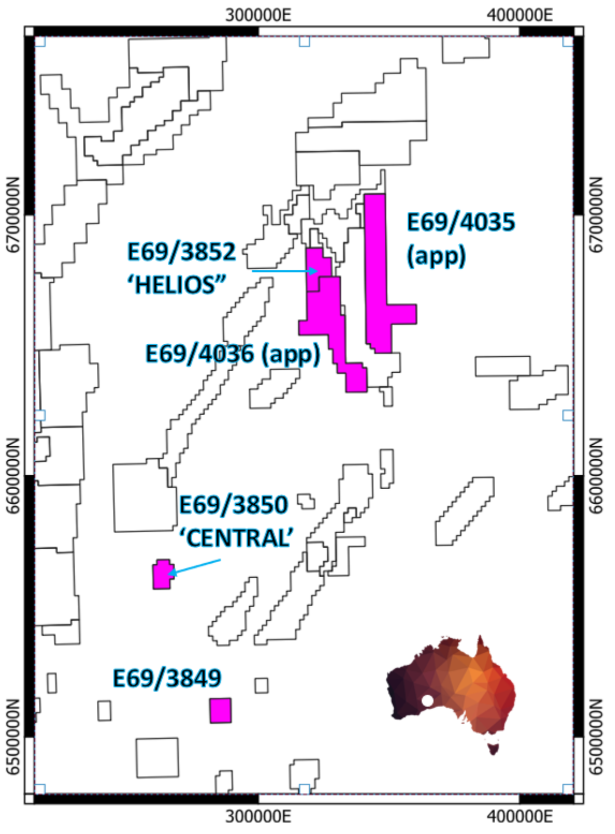

Figure 17. Map of the three IOCG target tenements managed and currently being explored by NMR in the underexplored Madura Province.

References

Skirrow. R., Murr, J., Schofield. A., Huston. D.L., van der Wielen. S., Czarnota. K., Coghlan. R., Highet. L.M., Connolly. D., Doublier. M., Duan. J.; *Mapping iron oxide Cu-Au (IOCG) mineral potential in Australia using a knowledge-driven mineral systems-based approach*, Ore Geology Reviews, Volume 113, 2019, 103011, ISSN 0169-1368.

Skirrow. R., *Iron oxide copper-gold (IOCG) deposits – A review (part 1): Settings, mineralogy, ore geochemistry and classification*, Ore Geology Reviews, Volume 140, 2022, 104569, ISSN 0169-1368.

-Ends-

The Board of Native Mineral Resources Holdings Ltd authorised this announcement to be lodged with the ASX.

This announcement refers to information contained within previous ASX announcements

2nd May, 2022 - **NMR awarded a $220,000 EIS grant to drill a follow-up hole at its Helios project**.

16th May, 2022 **Iron-Oxide Copper Gold (IOCG) style alteration intercepted in frontier drilling at Helios**

23rd May, 2022 – **Gravity survey to begin at Helios following the identification of Iron Oxide Coopper-Gold (IOCG)-style alteration**

18th August, 2022 – **Phase 2 diamond drilling underway at Helios targeting IOCG-style mineralisation**

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About Native Mineral Resources:

Native Mineral Resources (ASX: NMR) is an Australian publicly listed minerals exploration company established to explore for copper and gold deposits in the Palmerville region in North Queensland and for gold, Ni and IOCG deposits in the Eastern Goldfields and Nullarbor region in Western Australia.

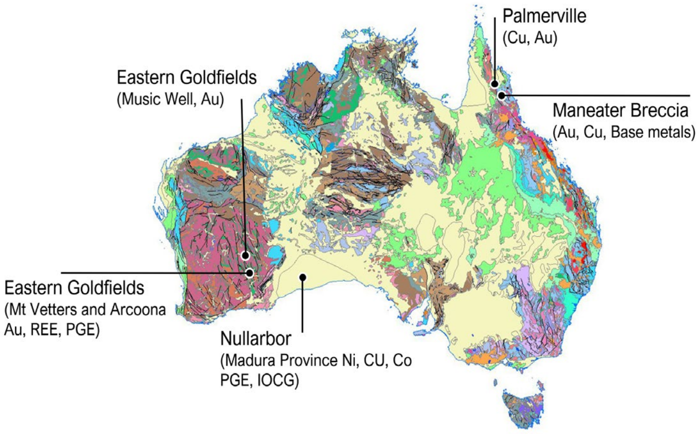

Figure 1. Native Mineral Resources' exploration portfolio focussed on Cu, Au, Ni and PGE in key geological provinces of Australia

Palmerville Project

The Palmerville Project is the Company's principal exploration asset and covers a near continuous strike length of 130km over an area of ~1,820km^2 centred 200km west-northwest of Cairns in North Queensland. The Project is considered prospective for the following deposit styles:

- Copper-zinc-gold volcanic massive Sulfide or vein-style mineralisation.
- Porphyry- and skarn-associated copper-zinc-gold mineralisation in Chillagoe Formation limestone-dominant strata.
- Porphyry-related copper-gold mineralisation in non-carbonate lithologies.
- Orogenic-style gold-antimony mineralisation.
- Epithermal gold mineralisation distal to porphyry intrusions
- Alluvial gold akin to the historic Palmerville Goldfield.

Exploration results released in May 2021 (see ASX release "High-grade Copper confirmed within NMR's Palmerville project" 04 May 2021)

Eastern Goldfield Project

The Yilgarn Craton is one of Australia's premier mineral provinces and host to major deposits of gold, nickel, zinc, silver, tantalum and iron ore and other commodities. Recent exploration success has discovered new gold deposits that are intrusion-related gold systems (IRGS), which has led to a greater exploration focus in areas that have received little exploration focus.

NMR has a landholding of 540km^2 in the Eastern Goldfields between Kalgoorlie and Leonora, in areas of prospective intrusive rocks, close to operating gold mines. The tenements are underexplored and offer opportunities to discover relatively new concepts of gold mineralisation.

Nullarbor Greenfields Ni and IOCG exploration

NMR have completed its first diamond drill hole on tenement E69/3852 and announced the discovery of significant IOCG-style hematite, magnetite, sericite alteration. NMR was awarded an EIS government co-funded grant of up to $220,000 to complete a second hole at the Helios target which will begin Q3-Q4 CY 2022.

The Central Target has been derived using the geophysical criteria that have led to the discovery of other IOCG-style deposits, particularly those in South Australia. NMR's drone-based magnetic survey has confirmed the presence of a significant anomaly – 1,200m long and 400m wide - with a relative peak of over 760nT.

Competent Person Statement:

The information in this report relating to Exploration Results is based on information provided to Dr Simon Richards, a Competent Person who is a Member of the Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy. Dr Simon Richards is a full-time employee of Native Mineral Resources. Dr Richards has sufficient experience that is relevant to the styles of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Richards has no potential conflict of interest in accepting Competent Person responsibility for the information presented in this report and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

Native Mineral Resources prepared this release using available information. Statements about future capital expenditures, exploration programs for the Company's projects and mineral properties, and the Company's business plans and timing are forward-looking statements. The Company believes such statements are reasonable, but it cannot guarantee their accuracy. Forward-looking information is often identified by words like "pro forma", "plans", "expects", "may", "should", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", "believes", "potential" or variations of such words, including negative variations thereof, and phrases that refer to certain actions, events, or results that may, could, would, might, or will occur or be taken or achieved. The Company's actual results, performance, and achievements may differ materially from those expressed or implied by forward-looking statements due to known and unknown risks, uncertainties, and other factors. The information, opinions, and conclusions in this release are not warranted for fairness, accuracy, completeness, or correctness. To the maximum extent permitted by law, none of Native Mineral Resources, its directors, employees, agents, advisers, or any other person accepts any liability, including liability arising from fault or negligence, for any loss arising from the use of this release or its contents or otherwise in connection with it.

This document does not constitute an offer, invitation, solicitation, or other recommendation to subscribe for, purchase, or sell any security, nor does it constitute a contract or commitment. This release may contain speculative and forward-looking statements subject to risk factors associated with gold, copper, nickel, and other mineral and metal exploration, mining, and production businesses. These statements reflect reasonable expectations, but they may be affected by a variety of variables and changes in underlying assumptions that could cause actual results or trends to differ materially, including price fluctuations, actual demand, currency fluctuations, drilling and production results, Resource or Reserve estimations, loss of market, industry competition, environmental risks, physical risks, legislative changes, and more. Native Mineral Resources confirms that it is not aware of any new information or data that materially affects the information in the following presentation and that all material assumptions and technical parameters underpinning the information provided continue to apply.

JORC Code 2012 Edition -Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	*JORC Code explanation*	*Commentary*
	• *Nature and quality of sampling (e.g. cut channels, random chips or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	Sampling of the drill core was completed in representative sections in order to obtain results from altered and unaltered sections of core. All core is NQ diameter and sections of ½ were sampled for geochemical analysis. Drill core was analysed for gold, copper and other elements at SGS labs in Perth and Kalgoorlie. All 122 samples were selected from various sections of the core and from a variety of rock types in order to provide NMR with an initial first-pass overview of the composition of the rocks.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	The samples and results discussed here are from 122 samples of various sections of drill core from HELIOS_DDH001. All samples were processed and assayed by a registered analytical laboratory.
	• *Aspects of the determination of mineralisation that are Material to the Public Report.*	No reference to any material Cu or Au mineralisation has been made at this stage. NMR have recovered rocks with pervasive alteration only and have obtained geochemical results to help target the source of the alteration.
	• *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'), In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	At this stage, 12 core samples were collected for geochemical analysis and no material mineralisation has been reported. Samples were submitted in two batches with the first 89 samples undergoing Fire Assay for Au as well as ICP-OES for 21 elements and ICP-MS for 39 elements providing a total of 61 elements with some elements repeated. A second batch of 33 samples was submitted for ten elements using ICP-OES and four elements using ICP-MS. Gold (Au) was again tested using Fire Assay.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary aid blast, auger, Bangka, sonic, etc.,) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is orientated and if so by what method, etc.).*	Drilling through basement rock was diamond NQ.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	Drill core from basement had almost 100% recovery due to the good competency of the granite country rock. NMR are not reporting on any significant domains of material mineralisation, therefore the high level of recovery is sufficient to be a reliable indicator of the rocks present at the target location.
	• *Measures taken to maximise sample recovery and ensure representative nature of samples*	Samples were selected from a variety of rock types in the drill core. The two batches of samples presented here (total 122 samples) were obtained to provide a first-pass understanding of the geochemical makeup of the altered granites. The samples provide an excellent array of the different rock types encountered in the drilling and may prompt further, focused sampling. No sampling bias has been introduced as there is no sections of material mineralisation being reported.

	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material*	N/A
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Drill logs were completed for the drill hole and done-so at a level of detail sufficient to allow a first-pass interpretation of the drill core. The core is characterised by predominantly granitic host rocks with varying degrees of predominantly hematite alteration. The level of detail captured in drill logs is sufficient to capture the broad changes in rock characteristics observed in HELIOS_DDH001.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.,) photography.*	Logging of the drill core at this stage is qualitative only. Quantitative analysis, include pXRF and assays from selected sections of interest will be undertaken in following months.
	• *The total length and percentage of the relevant intersections logged.*	N/A
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken*	½ core was taken from representative rock types throughout the drill hole for sample processing and geochemical analysis.
	• *If non-core, whether riffles, tube sampled, rotary split, etc., and whether sampled wet or dry*	N/A
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	All samples are of ½ core. As described above, the core is predominantly granite with varying degrees of alteration. The changes in rock types occur over relatively broad zones so representative sections of specific rock types were easily obtained in 10-60cm sections of ½ core. In total, 122 samples ranging from 0.1 to 0.59m in length with an average length of 0.25m. The average mass of the samples was 679 grams.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	As described above. At this stage of sampling, only sub-sections of representative rocks have been used for geochemical analysis. No continuous sections of ½ were sampled at this stage.
	• *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second half sampling.*	N/A
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	N/A
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Samples were submitted in two batches with the first 89 samples undergoing Fire Assay for Au as well as ICP-OES for 21 elements and ICP-MS for 39 elements providing a total of 61 elements with some elements repeated. A second batch of 33 samples was submitted for ten elements using ICP-OES and four elements using ICP-MS. Gold (Au) was again tested using Fire Assay.
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instruments make and model, reading times, calibrations factors applied and their derivation, etc.*	N/A

	• *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	This initial first-pass geochemical analysis of the rocks recovered in drill core HELIOS_DDH001 were analysed for their geochemical fingerprint as no significant, or material mineralisation has been observed. Stands and blanks were used throughout the process by the registered laboratory and the level of accuracy and precision is considered appropriate by NMR.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	N/A
	• *The use of twinned holes.*	N/A
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	N/A.
	• *Discuss any adjustment to assay data.*	N/A
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys) trenches, mine workings and other locations used in Mineral Resource estimation.*	The drill hole collar has been obtained using a handheld GPS with approximately +/- 2m position accuracy. All coordinates are provided in GDA94 Zone 52J.
	• *Specification of the grid system used.*	In all cases, unless otherwise stated, grid references are provided in GDA94 MGA Zone 52J (Southern Hemisphere).
	• *Quality and adequacy of topographic control.*	No topographic information has been provided.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	Sample spacing was designed to select a representative suite of samples in order to obtain an overarching understanding of the geochemistry of the greenfield exploration drill hole where material mineralisation was not intersected. Accordingly, the spacing is not at regular intervals, but defined by the rock types and alteration present.
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedures and classifications applied.*	N/A
	• *Whether sample compositing has been applied.*	N/A
Orientation of data in relation to geological structure.	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	N/A
	• *If the relationship between drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	Diamond drilling was oriented at to the east at 80 degrees. The orientation of the hole was designed to intersect west-dipping tabular bodies modelled from the drone-based magnetic data. The core was not oriented, however, most structures and magmatic features are oriented at approximately 45 degrees to the axis of the drill core which would correspond with the approximately 65 degree dip of the modelled bodies. The hematite and magnetite alteration is not defined by a sharp contact but is pervasive in the granite and in late, cross-cutting felsic breccias therefore a true orientation of the alteration front cannot be determined using just a single drill hole.
Sample security	• *The measures taken to ensure sample security.*	N/A
Audits and review	• *The results of any audits or reviews of sampling techniques and data.*	No material mineralisation has been obtained at this stage, therefore no audits have been completed.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	*JORC Code explanation*	*Commentary*
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	Information contained within the related document is for an exploration permit E69/3852. The tenement is wholly owned and operated by NMR and is compliant in all aspects.
	• *The security of tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The exploration permits are current, and drilling was undertaken following the granting, for example of appropriate permits such as PoW.
Exploration done by other parties	• *Acknowledgement and appraisal of exploration by other parties*	No other exploration has been undertaken on or near this tenement.
Geology	• *Deposit type, geological setting and style of mineralisation*	The target deposit style is IOCG-type based on the successful identification of IOCG-style hematite-dominated alteration in Helios_DDH001. A full description of the target geology has been provided in multiple previous ASX announcements as referred to at the end of the body text and within the body text where pertinent.
Drill hole information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all material drill holes;* • *Easting and northing of the drill hole collar* • *Elevation or RL (reduced Level – elevation above sea level in metres) of the drill hole collar* • *Dip and azimuth of the hole* • *Down hole length and interception depth* • *Hole length*	Only one drill hole HELIOS_DDH001 is reported here. All results are from the single drill hole which was aimed at intersecting a modelled body evident in the magnetic data. The EOH was limited by the physical capability of the drill rig. Drill hole Helios_DDH001 52J 320804, 6678593mN elev. 241m asl. Drill hole orientation is -980 dips to 090 (magnetic) EOH is 500.9m Basement is at 115m down-hole depth.
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	N/A
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut off grades are usually Material and should be stated.*	N/A

	• *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	N/A
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	N/A
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results*	No material mineralisation is reported here. Geochemistry for multiple different rock types along the entirety of the diamond drill hole are provided in order to assess the potential for IOCG-style mineralisation relative to the heavily altered rocks intersected in drilling. Sections containing alteration are highly variable but occur throughout the drill hole. The most interesting and pervasive section of altered drill core exists between 309.8m and 319m as explained within the body text. Other sections of alteration are present throughout the drill core, but hematite alteration of the granite is most pervasive below approximately 300m depth to EOH, but the alteration increases and decreases in intensity in the drill core. No specific sections of mineralisation have been identified. The zone of high uranium and iron (typical of other IOCG's, is most apparent within the same zone at 309.8m and 319m and presented in the chart in the main body text.
	• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported*	It is interpreted that the angle of the drill hole (-80 degrees) relative to the angle of most structures and igneous features to the hole (approximately 45 degrees) supports the drilling of the modelled tabular body dipping at approximately 65 degrees to the west. Accordingly, the widths reported are apparent widths only. It should be noted that the granite breccias and other features, some being primary magmatic, may not have uniform shapes, therefore, true width statements are not discussed until the geometries of the magmatic and alteration system are better understood.
	• *If it is known and only the down hole lengths reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	No true widths are reported. As described in the previous point above.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	All maps are provided with grid references in meters East and South aligned with grid references in GDA94 MGA Zone 52J.
Balanced Reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be*	N/A

	practiced to avoid misleading reporting of Exploration Results	
Other substantive exploration data	• *Other exploration data, if meaningful and material should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, ground water, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	The geochemistry reported here is part of a large and ongoing frontier greenfields exploration campaign. At the time of writing, a second diamond drill hole, HELIOS_DDH002, has been completed to a depth of over 1020m and has recovered similar hematite altered rocks. Based on these observations NMR are utilising a combination of geochemistry, geophysics and observations to attempt to target the potential source IOCG mineralisation. No other drilling is present within the region and the interpretation of the regional geology is an ongoing process. NMR has presented all available information.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extension or depth extensions or large-scale step-out drilling).*	Based on current results, NMR is planning further drilling at Helios. A preliminary plan of two additional diamond drill holes is anticipated for 2023.
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	N/A