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RESEARCH
INDEPENDENT INVESTMENT RESEARCH

Helix Resources Limited (ASX: HLX)

August 2023

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Note: This report is based on information provided by the company as at August 14, 2023.

Investment Profile	
Share Price as at August 11, 2023	A\$0.006
12 month L/H	A\$0.005/0.01
Issued Capital	
Ordinary Shares	2.323 m
Unlisted Options	42.6 m
In the Money Options	0.0 m
Performance Rights	30.9 m
Market Capitalisation (Undiluted)	A\$13.94 m
Market Capitalisation (Diluted for In the Money Options)	A\$13.94 m
Cash - June 30, 2023	A\$5.89 m
Notional Cash from In the Money Option Conversion	A\$0.0 m

Board and Management	
Mr Peter Lester: Non-Executive Chairman	
Mr Mike Rosenstreich: Managing Director	
Dr Kylie Prendergast: Non-Executive Director	
Mr Gordon Barnes: Exploration Manager	
Mr Ben Donovan: Company Secretary	

Top Shareholders	
Yandal Investments Pty Ltd	2.2%
Technical Ceramic Marketing Services Pty Ltd	2.2%
Mr Bulent Basim	1.9%
AG Investment Services Pty Ltd	1.8%
Board and Management	0.4%
Top 20	25.0%



The investment opinion in this report is current as at the date of publication. Investors and advisers should be aware that over time the circumstances of the issuer and/or product may change which may affect our investment opinion.

REGIONAL STRATEGY WELL ADVANCED

Following the recent delivery of an updated Mineral Resource Estimate (“MRE”) for the Canbelego Copper Deposit (to 1.83 Mt @ 1.74% Cu), and improved ground access following the end of unseasonable weather, Helix Resources (“Helix” or “the Company”) is now concentrating activities on defining and testing additional priority targets over its ~2,879 km² highly prospective exploration tenement package in the Central West of New South Wales.

The tenements cover units of the Cobar Basin and Girilambone Group, which are highly prospective for, respectively, Cobar-style structurally controlled and Besshi-style volcanic associated massive sulphide (“VAMS”) mineralisation, with copper being the main target metal. The region is host to several major deposits of the target styles, including the CSA mine, and Aeris Resources (ASX: AIS, “Aeris”) Tritton operations amongst others.

Helix’s highly experienced exploration team is continuing on with comprehensive and scientifically rigorous targeting work over the +150 km of prospective mineralised trends within the underexplored tenement package, with this work, largely including electromagnetic (“EM”) geophysical surveying and geochemical sampling identifying several new high priority prospects requiring follow up, including drilling.

This targeting work is still ongoing, and our view is that this should define several more quality prospects in this well endowed and highly productive region.

Also in the mix is laterite hosted Ni-Co (+PGE-Sc) mineralisation, which includes the recently acquired Homeville deposit (17.9 Mt @ 0.89% Ni and 0.06% Co, and one of the highest grade such deposits in Australia) as well as highly prospective exploration ground as confirmed by results from past drilling. Market conditions allowing, Helix plans to spin out an SPV, Ionick Metals Limited (“Ionick”), which will focus on the Ni-Co, whilst Helix then concentrates on the copper-gold work.

Although exploration in this region requires patience, persistence is rewarded, with several greenfields and brownfields discoveries being made over recent years. These include Mallee Bull and others (Peel Exploration, PEX: ASX), Dominion and Federation (Aurelia Metals, AMI: ASX) and Constellation (Aeris). This highlights the potential of the region for ongoing discoveries. In addition there are six appropriate processing mills in the region, and hence consolidation via M & A is likely.

The Company has a comprehensive exploration programme going forward, including the regional work, and testing targets arising from that. Further work is also planned for FY24 at Canbelego, with the ultimate aim of this to increase the resource inventory, and investigate the development potential. In addition to the defined resource, Canbelego has several targets that have either returned encouraging drilling results (with mineralisation still open), else remain untested by drilling. Aeris has elected not to contribute in the upcoming programme, and hence will be diluted from the current 30% equity stake in the Canbelego tenement.

In summary, Helix has a highly prospective exploration package in highly productive mineral belts with resources defined to date containing 32,000 t of copper. Our view is that ongoing rigorous exploration has excellent potential to deliver the goods, and drive value for shareholders.

KEY POINTS

Quality exploration property portfolio: Helix has a highly prospective tenement package over the right geology, with this highlighted by the results to date.

In a proven mining district with established infrastructure: Central Western New South Wales is a proven mining destination, with well developed transport and utility infrastructure, and ready access to skilled labour and mining services.

Experienced personnel with a history of delivering value to shareholders: Company personnel have extensive experience in the junior resource sector and in the region, and have a history of delivering value.

Leveraged to exploration success: With an enterprise value (“EV”) of under A\$10 million, value in Helix is well leveraged to exploration success.

Steady news flow: We expect to see a steady and positive news flow with ongoing exploration activities.

SWOT ANALYSIS

Strengths

- ◆ **Highly prospective holdings in a proven mineral district:** The western areas of Paleozoic geology in New South Wales are highly productive for base and precious metals - this includes the Early to Middle Ordovician Girilambone Group and Silurian to Devonian Cobar Basin, geological provinces where Helix is exploring.
- ◆ **Region continues to deliver:** The prospectivity has been confirmed by a string of discoveries over recent years - persistence pays off.
- ◆ **Under-explored:** Significant areas of Helix's tenement package are under-explored, with only having limited early stage work being completed away from the main prospects.
- ◆ **Experienced people:** Company personnel have significant experience in the resources sector, with a history of exploration success and delivering value to shareholders.
- ◆ **Well developed infrastructure:** All company projects are located in areas of well developed transport and utility infrastructure, and with readily available experienced labour and services.
- ◆ **Strong outlook for copper:** Market fundamentals look good for copper going forward, with it being one of the necessary metals for the "decarbonising" economy.

Weaknesses

- ◆ **Difficult exploration:** Some of the mineralisation styles in the Cobar Basin and Girilambone Group, particularly the syn-deformation, structurally controlled systems like CSA, have small surface footprints, and hence can prove to be difficult to find, and require significant drilling to understand and delineate resources.

Opportunities

- ◆ **Exploration and drilling success:** Given the quality of the exploration ground and the results of work to date, there is a good opportunity for exploration success at all projects.
- ◆ **Acquisitions and earn-ins:** This is a perennial opportunity should the right opportunities come up.
- ◆ **Iron ore royalties:** Helix has a 1% FOB iron ore royalty over areas of API Management's Western Pilbara Australian Premium Iron ("API") project, as well as one with Lodestone Mines Pty Ltd (a private group controlled by Gordon Toll) over their Olary Iron Project in South Australia.
- ◆ **Ionick IPO:** Market conditions and spin-out structure allowing, the proposed IPO has the potential to deliver further value to shareholders of Helix.
- ◆ **Toll treating:** Helix will soon be undertaking metallurgical test work and other mine development type studies for the first time. There is the potential to examine various production opportunities including ore sales and toll treatment given the local processing infrastructure.
- ◆ **Takeover:** Given the number of companies operating in the region, and resource bases, Helix could potentially be considered as a takeover target on demonstrating the potential for resources that would materially add to those of a potential suitor.

Threats

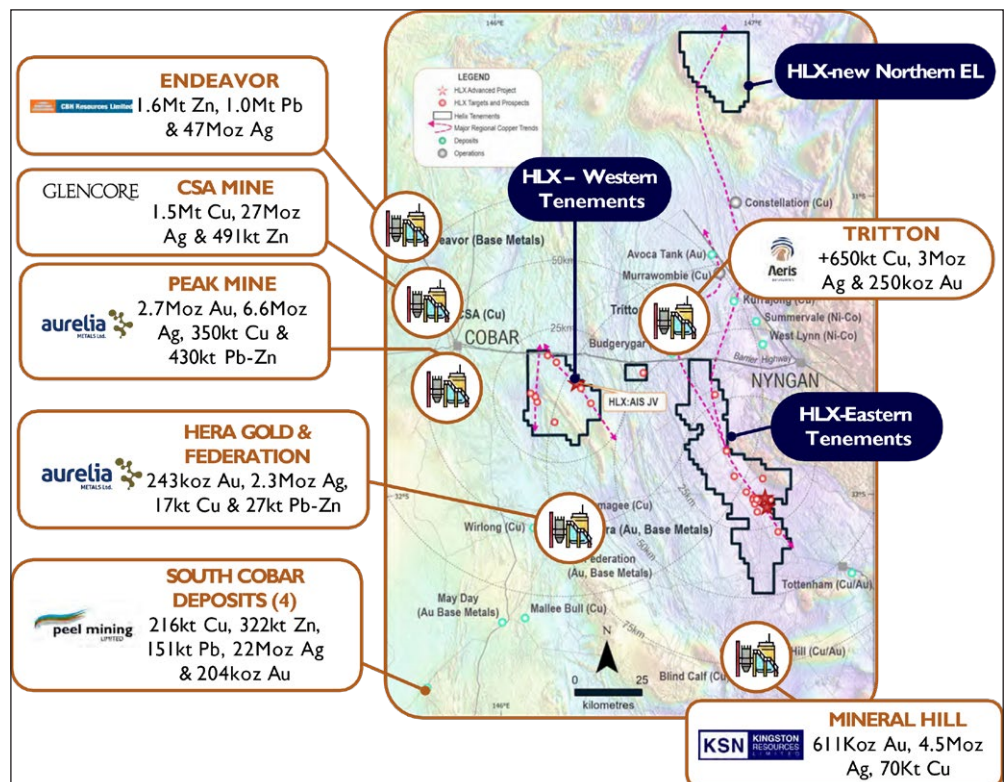
- ◆ **Markets and funding:** These are major threats for resource companies, with markets currently "shaky," and many junior exploration companies trading at near 12 month lows. With a reasonable treasury Helix is somewhat insulated from the vagaries of the market, however still needs to be careful in cash management. The main affect here will be the timing of the planned IPO of Ionick.
- ◆ **Poor exploration results:** This goes without saying, and is a perennial threat to junior explorers who rely on risk (equity) capital, and operate a long term game in what is often a short term market.

OVERVIEW

STRATEGY AND PROJECT OVERVIEW

- ◆ Helix's main focus is on copper exploration in the Cobar region of Central Western New South Wales, Australia - to that end the Company holds a ~2,879 km² package of exploration tenements located in three groups over highly prospective ground in a region that hosts several operating base and precious metal mines, as well as several more recent discoveries (Figure 1).
- ◆ The Company's properties cover ~155 km of largely Cu prospective strike in three main trends in two main tectonic provinces:
 - The Lower to Middle Ordovician Girilambone Group, which is a proven host for VAMS copper mineralisation (e.g. Tritton); and,
 - The northern end of the Mineral Hill-Canbelego Rift zone (flanked by Girilambone Group rocks), a failed arm of the The Silurian to Devonian Cobar Basin, the most well-endowed of the Silurian basins of the Lachlan Orogen, with the target largely being structurally controlled base and precious metal mineralisation, such as that at the CSA mine just north of Cobar, which Glencore recently divested to NYSE listed Metals Acquisition Corp for ~US\$1.1 billion.
- ◆ Work by the Company has already delineated numerous prospects (including areas of known mineralisation, Figure 3), as well as the Canbelego copper deposit.
- ◆ Although the focus is on copper, there are areas of proven gold mineralisation that require further work, including Battery Tank, and to a lesser extent Muriel Tank.
- ◆ Other assets include a 1% FOB royalty on any iron ore produced from the Yalleen Iron JV tenements that the Company was previously involved in with API Management Pty Ltd, a 50/50 JV between Aquila and AMCI/POSCO, and one with Lodestone Mines Pty Ltd (a private group controlled by Gordon Toll) over their Olary Iron Project in South Australia.

Figure 1: Tenement location and regional deposits

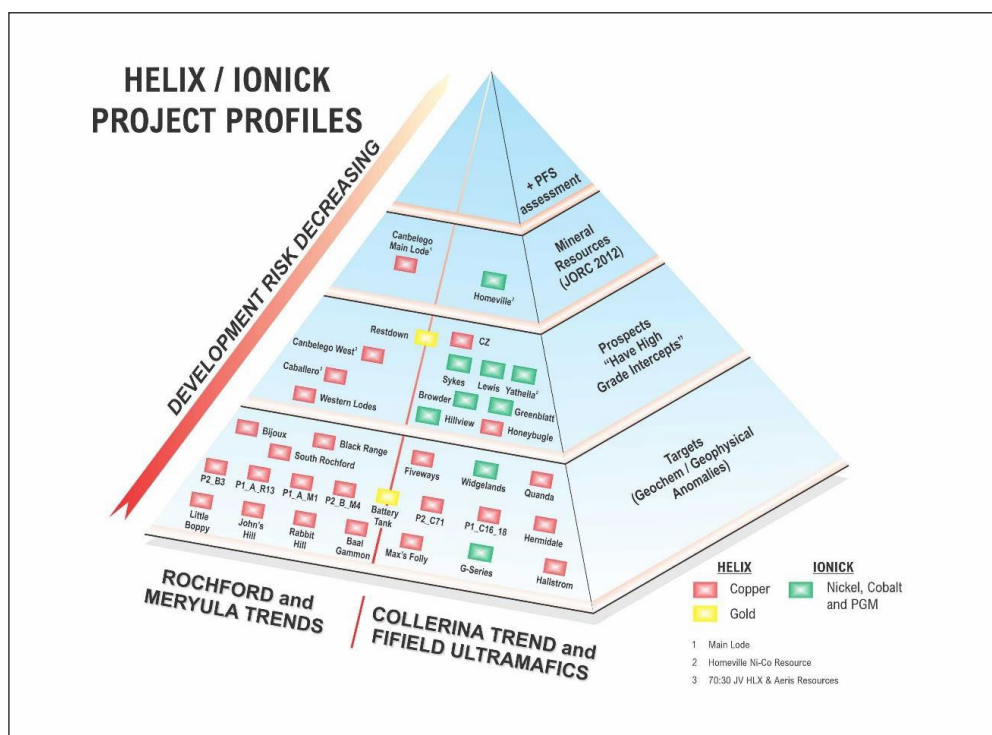


Source: Helix

- ◆ Despite significant periods of adverse weather over two years, the Company has made considerable progress on the properties subsequent to our May 2021 initiation report, with activities including:
 - Significant diamond and reverse circulation (“RC”) drilling (the first since 2013) at the Canbelego deposit (Helix 70%, with Aeris Resources holding 30% under a JV) and surrounding prospects, resulting in an MRE upgrade to 1.83 Mt @ 1.74% Cu (previously 1.5 Mt @ 1.2% Cu, 2010),

- RC drilling on Collerina trend targets, concentrating around the CZ Project,
 - Continuation of tenement wide geochemical sampling (largely by auger) focussed on the main mineralised trends - this however has been restricted due to weather inhibiting access,
 - Review of previous geochemical and geophysical data, including remodelling and reassaying where required,
 - Almost doubling prospective land holdings from ~1,500 km² to 2,879 km²,
 - Completion and rationalisation of acquisition and JV agreements with Glencore, Alpha HPA Limited (ASX: A4N, "Alpha" and Jodama Pty Ltd ("Jodama"),
 - Initiation of the Ni-Co strategy (discussed below); and,
 - Disposal of the Chilean properties, with the consideration being a conditional NSR (not discussed further).
- ◆ In addition, the Company has completed consolidating its operations base to Orange , and also rents a house in Nyngan - corporate overheads have been reduced significantly.
 - ◆ Both the Board and technical team have also been strengthened.
 - ◆ This has set the Company up well for ongoing activities, which, for the immediate future, will concentrate on following up and testing targets identified from the regional work, which mainly included geochemistry and geophysics (particularly electromagnetics - "EM"), with good coverage over the prospective mineralised trends.
 - ◆ In early 2023 the Company commenced a Ni-Co exploration and evaluation initiative, and has set up a wholly owned SPV, Ionick, with a view to a future spin out of Ni-Co assets, which require a different skill set to evaluate and develop - the two sets of projects, Cu, and Ni-Co are shown in Figure 2.

Figure 2: Helix/Ionick Project Profiles



Source: Helix

- ◆ This follows on from the September 2021 acquisition of the Ni-Co rights over several tenements, including the Homeville Ni-Co deposit, from Alpha, and the optioning of three Ni-Co prospective tenements covering 160 km² from Jodama in early 2023 (Figure 3).
- ◆ The proposed IPO of Ionick will allow Helix to concentrate exploration activities on the copper and gold projects, with Ionick focussed on the Ni-Co assets, which in some cases regionally also host PGEs and scandium.
- ◆ With the Ni-Co assets there is more of a focus on evaluation and development, particularly with regards to metallurgy - exploration is not as critical as the deposits are generally shallow, being developed as lateritic deposits over mafic to ultramafic units, with targets readily identifiable from geology and magnetics.

- ◆ The proposed spin out will include some tenements assigned to Ionick (including the Jodama optioned tenements), as well as Ni-Co rights over others that will continue to be held and operated by Helix for copper.
- ◆ The region is host to several other Ni-Co deposits and projects, and there could also be a case for consolidation of these.
- ◆ The Ni-Co initiative and properties are discussed in more detail later.

FINANCIAL POSITION

- ◆ As of the time of writing Helix had approximately A\$5.89 million in the bank and no debt.
- ◆ The last capital raising was in H1, 2022, and included a two tranche placement of A\$11 million, and an SPP which raised A\$1.536 million of the A\$2 million sought - all funds were raised at A\$0.012/share.
- ◆ Over the 12 months to June 30, 2023 the Company spent A\$7.354 million on exploration and evaluation, and A\$1.250 million on administration and staff, highlighting a strategy of putting money into the ground.
- ◆ Much of the work during the period was drilling at Canbelego, hence what could be considered a relatively high spend.

CAPITAL STRUCTURE

- ◆ Helix currently has 2,323 million fully paid ordinary shares and 40.20 million unlisted options on issue - option exercise dates range from 6/12/24 to 20/12/25, with exercise prices of between A\$0.018 and A\$0.081.
- ◆ There are also 30.9 million performance rights which are yet to be vested.
- ◆ The largest shareholder is Mark Creasy's Yandal Investments (2.2%); Directors and Management hold ~0.4%, with the top 20 holding 24.8%.

PLANNED ACTIVITIES

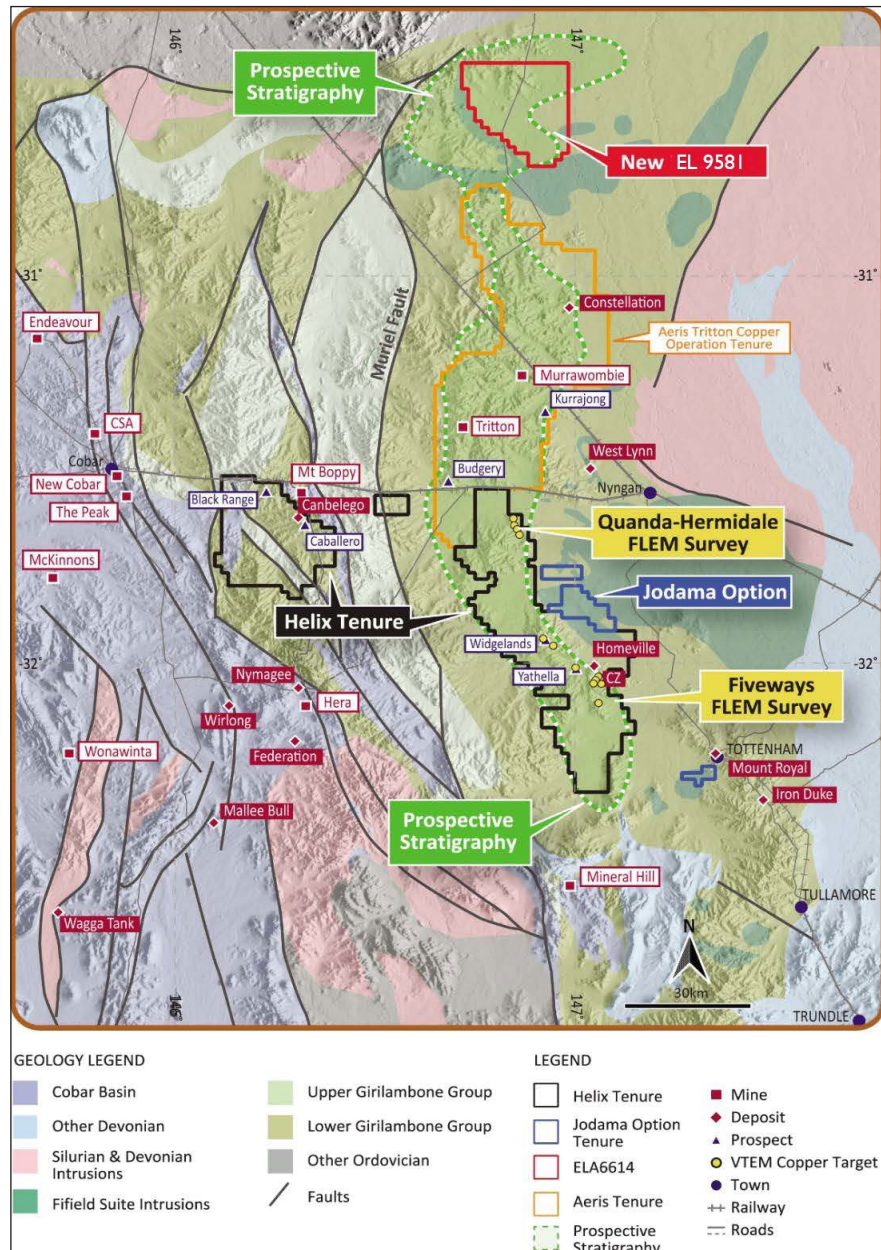
- ◆ With ~A\$5.89 million in the bank as of June 30, 2023 and no debt, the Company is well funded to pursue the planned exploration activities, which will now concentrate largely on regional work, and the initial drill testing of targets defined from this work.
- ◆ This should lead to a lower cash burn than that during the recently completed intensive drilling programme at Canbelego.
- ◆ Ongoing activities include:
 - Continuation of the regional geochemical sampling over the western and eastern tenements,
 - Further ground work over targets defined at Rochford, including infill geochemical sampling and geophysics; and,
 - Imminent commencement of drilling at the Collerina trend targets as mentioned earlier.
- ◆ Other work will include the ongoing review and integration of historic exploration data over all areas, including the northern tenement - this will include data previously lodged with NSW Mining, Exploration and Geoscience that is expected to be released under changes to the sunset clauses on such data.
- ◆ In addition, Helix has a comprehensive exploration plan for the Aeris JV tenement (Canbelego) for FY24 - Aeris has elected not to contribute, and hence Helix will sole fund activities and dilute Aeris.
- ◆ Activities will be targeted at adding additional tonnes to the current resource base, including through further drilling of the known mineralisation, and testing other targets on the property.
- ◆ The Company also plans to undertake a high level preliminary economic assessment of the deposit, with this including early stage metallurgical test work on the different mineralisation types, as well as assessing different treatment options given the existing plants in the region.

COBAR PROJECT - HLX 70% - 100%

LOCATION, TENURE AND INFRASTRUCTURE

- ◆ The Project comprises 23 Exploration Licences (“ELs”) for 2,879 km², all of which are in good standing, and include the following:
 - Nineteen 100% owned ELs for 2,681 km²,
 - EL6105 for 38 km², held 70% by Helix and 30% by Aeris under a contributing joint venture (“JV”), and which includes the Canbelego deposit; and,
 - Three ELs for 160 km² currently under option with Jodama.
- ◆ The tenements are situated in three main groupings, west, east and the recently granted EL9581 in the north (Figure 3).

Figure 3: Geologic architecture, geology and Helix tenements - note that ELA6614 has recently been granted



Source: Helix

- ◆ The western-most group is centred ~50 km SE of Cobar, and located over units of the Cobar Basin and Girilambone Group, with the eastern group centred ~100 km SE of Cobar, and stretching ~70 km in a NNW direction over an interpreted VAMS prospective trend within the Girilambone Group.
- ◆ The eastern tenements and the interpreted trend are contiguous with those held by Aeris to the north, which host the Tritton group of deposits, and with Locksley Resources (ASX: LKY, “Locksley”) Mt Royal and Carolina copper deposits near Tottenham to the south - EL9581 was pegged to cover extensions of this trend to the north of the Aeris tenements.

- ◆ The Restdown Goldfield and Muriel Tank tenements were acquired from Glencore, which has reduced from a 10% FCI to a 1% NSR on the relevant tenements.
- ◆ EL8703, and the Ni-Co rights other tenements for which Helix holds the rights to other metals, have recently been acquired from Alpha - Alpha retains a 1% NSR on the relevant tenements.
- ◆ The region is well served by towns, transport and utility infrastructure, and, being in a proven mining jurisdiction is well served by skilled services, with regional mining towns including Parkes (population ~11,500), Cobar (population ~4,000) and Nyngan (population ~2,000).
- ◆ Cobar is located some 700 km NW by highway from Sydney, Nyngan 550 km NW of Sydney with Parkes some 360 km west of Sydney.
- ◆ Currently and recently past operating mines in the region include CSA, Endeavour, Peak, Hera, Tritton, Mount Boppy and Avoca Tank (Figure 1, with Avoca Tank recently commencing production and Mount Boppy restarting), with others under development, including Federation and Budgerygar.

HISTORY AND PREVIOUS WORK

Regional History and Discoveries

- ◆ The Cobar region has a long history of mining and exploration, with the first operations at the Great Cobar copper mine commencing in 1871, following discovery in 1869, with activities initially concentrated on the 10 km of strike at Cobar that hosts a number of deposits, including Great Cobar, the Peak and Chesney amongst others.
- ◆ The region, as mentioned earlier, contains two main geological tectonic terranes - the Ordovician Girilambone Group and the Silurian to Devonian Cobar Superbasin, which includes the main Cobar Basin (the generic term for the overall superbasin) and associated troughs, rifts and shelves (Figure 3).
- ◆ The Cobar Basin, which is the richest post Ordovician poly-metallic basin in the LFB, has a pre-mining metal inventory of reportedly >2.2 Mt of copper >7.0 Moz of gold, >4.7 Mt of zinc, >2.0 million tonnes of lead and >200 million ounces of silver - copper deposits in the Girilambone Group have an additional inventory of >750 kt contained copper.
- ◆ The period from 1869 until the 1910s saw intense activity, and the discovery and opening of a number of new base metal and gold mines, including Girilambone (1881), the Peak (1896) and CSA (1905).
- ◆ The fall of copper prices in 1908 saw the industry decline with generally hard times through to 1965 - this included the period from 1952 to 1965 when none of the major mines operated (although some exploration continued), however there was a resurgence in gold demand in the 1930s depression.
- ◆ The early 1960s again saw a resurgence of mining, with deep shaft sinking at CSA commencing in 1962, and operations at the deep mine commencing in 1965 - production has been continuous since then (albeit with some times of lean or no profit) with new lenses also being discovered at regular intervals.
- ◆ Elura (now Toho Zinc's Endeavour operation) was discovered by drilling of an aeromagnetic anomaly in 1973/1974, with operations commencing in 1983.
- ◆ One of the most recent gold discoveries was McKinnons Tank in 1988, and the first gold deposit to be found on the western side of the basin - this operated from 1995 to 2000 and produced some 131,000 oz of gold.
- ◆ Mineral Hill, an epithermal system in the Canbelego-Mineral Hill Rift System, was initially discovered in 1908, with intermittent small scale mining until the 1950s, and with modern mining commencing in 1989.
- ◆ The mine entered care and maintenance in 2005 - mining again commenced in 2011, however was suspended again in 2016 - drilling at Mineral Hill during phases of mining has delineated new zones of mineralisation, including Pearses, a gold rich part of the system.
- ◆ Recent times have seen a number of discoveries of other "Cobar-style" systems, including, amongst others, Mallee Bull et al (Peel), Hera (CBH, 2001), with high grade polymetallic mineralisation also recently being discovered at Aurelia's Federation prospect 10 km south of Hera (2019, and which is now being developed) and at Dominion, also close to Hera (2018).

- ◆ The Girilambone Group itself has also seen recent discoveries - some associated with historic mining activities, such as Helix's Central Zone prospect in 2015 and other totally new discoveries, such as Aeris's Constellation discovery in late 2020.
- ◆ The latter was discovered by drilling a ground EM anomaly defined from the follow up of an airborne EM anomaly ("Anomaly K"), highlighting the potential for new discoveries in the Girilambone Group.
- ◆ Exploration for Cobar-style and the highly deformed VAMS deposits is not easy, however with perseverance exploration in the Cobar Basin and Girilambone Group continues to deliver strong exploration results and new discoveries; likewise continuing exploration has resulted in the discovery of other styles of mineralisation, and additional mineralised zones at known deposits.

GEOLOGY AND MINERALISATION

Regional Geology

- ◆ The tenements are largely located over units of the Girilambone Group, the Kopyje Shelf and the NNW trending Canbelego-Mineral Hill Rift Zone, to the east of the main Cobar Basin (Figure 3); the rift zone is a failed arm of the Cobar Basin, and the Kopyje Shelf includes sediments (largely carbonates) flanking the main deep water rifts and basins.
- ◆ Note that more recent work has indicated that some of the areas mapped as Girilambone Group within the Company's western tenements may in fact belong within successions related to the Cobar Basin which will affect exploration strategy - the original mapping was undertaken in the 1950s.
- ◆ The Girilambone Group is largely comprised of Lower to Middle Ordovician deep marine sediments, deposited off the eastern edge of a Proterozoic to Cambrian continent - the Girilambone Group also includes some mid-ocean ridge ("MORB") and oceanic island ("OIB") basalts and associated dolerites, with the MORB basalts being associated with the genesis of the VAMS mineralisation found in the Formation.
- ◆ The Girilambone Group stratigraphy includes:
 - The Lower Ordovician Narrama Formation (including the Budgery Sandstone Member), with the associated basalts, VAMS mineralisation and jasper beds, and,
 - The Middle Ordovician Lang and Ballast Formations, which are generally finer and contain increasing cherty beds than the underlying Narrama Formation.
- ◆ Outcropping basalts/dolerites within the Company's tenements include the Yathalla Serpentinite, which forms a laterally extensive, strike parallel unit marked by a distinct magnetic signature.
- ◆ Other mafic-ultramafic units include late or post orogenic Alaskan-Ural type intrusives of the Fifield Suite, which were intruded following on from the collision of the Macquarie Arc to the pre-existing continent, with the contact being marked by the faulted suture between the Girilambone Group in the west and arc units in the east.
- ◆ Four phases of magmatic activity have been recognised in the Arc, with the early Ordovician Phase 1 activity being followed by a hiatus of ~9 million years, and then with Phases 2 to 4 being largely continuous.
- ◆ Phases 1, 2 and 3 represent island arc volcanism, whereas Phase 4 is interpreted as being Late Ordovician/Early Silurian (~440 Ma) post orogenic activity.
- ◆ Phase 4 intrusives are also interpreted as being the mineralising event at the world class Cadia (Newcrest) and Northparkes (CMOC/Sumitomo) porphyry Cu-Au operations, where they intrude younger arc rocks and sediments, whereas mineralisation at Lake Cowal and Copper Hill is interpreted as being related to the Phase 3 activity, at around 455 Ma to 450 Ma.
- ◆ The Girilambone Group saw significant east-west deformation during the late Ordovician Benambran Orogeny, followed by NW-SE deformation during the Mid-Devonian Tabberabberan Orogeny - this latter orogeny also resulted in the inversion of the Cobar Basin, with the effects of the combined orogenies resulting in complex structure.
- ◆ The Cobar Basin is a complex tectono-stratigraphic terrane in the western part of the Lachlan Fold Belt, with rocks including clastic and chemical sediments, and volcanics of the Cobar Supergroup.
- ◆ Sedimentation was initiated in the Late Silurian and extended into the Early Devonian in response to thin skinned extension, and was inverted during the Late Devonian Tabberabberan Orogeny and Middle Carboniferous Kanimblan Orogeny.

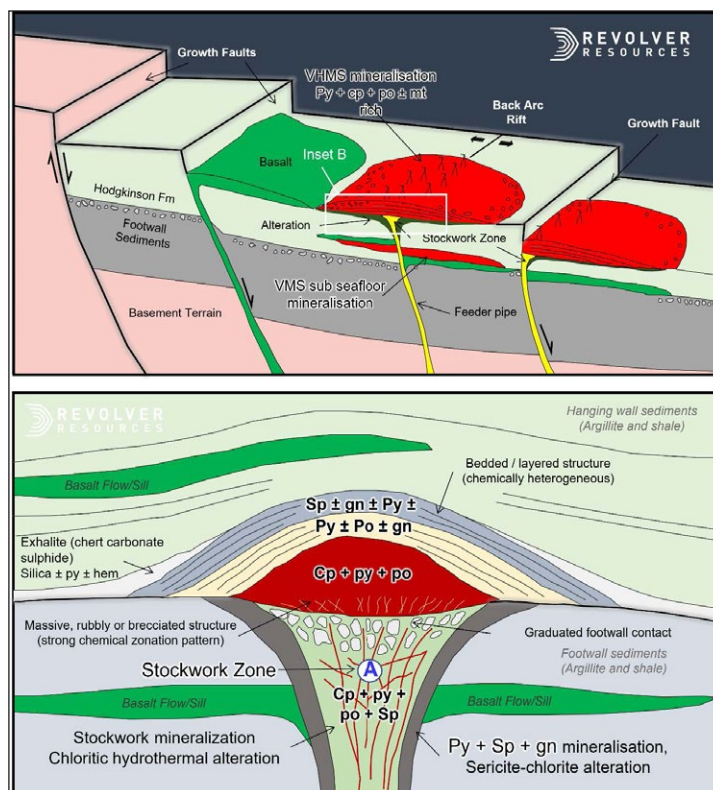
- ◆ The basin opening was the result of transtensional, NE-SW extension and closing by NW sinistral transpression.
- ◆ The basin, which formed as a half-graben with the major downthrow on the eastern side, developed as four deepwater troughs, including the Cobar Basin in the north, the Rast and Mt Hope Troughs in the south, and the Canbelego-Mineral Hill Rift Zone on the eastern margin (Figure 3).
- ◆ The various basin segments were separated and flanked by shelves, which are marked by carbonate reefs, with the basin architecture also partly controlled by Silurian granite batholiths, with the margins forming zones of weakness and the batholiths themselves forming buffers.
- ◆ Lithologies in the northern part of the basin are dominated by siliclastic sediments, with some felsic intrusives, with the two southern troughs including bimodal volcanics and intercalated sediments - likewise the Canbelego-Mineral Hill Rift Zone is marked by intercalated volcanics and sediments - sediments include both rift and sag phase successions.
- ◆ Major structures include shallowly to steeply west dipping faults, which largely represent the original basin-bounding listric faults which were reactivated during compression; these are crosscut by a number of NE and NW striking, steeply dipping faults which represent transform/transfer structures.

Regional Mineralisation

Girilambone Group

- ◆ Mineralisation within the Girilambone Group is largely syn-depositional VAMS in style, with some syn-deformation structurally controlled mineralisation also present.
- ◆ The VAMS deposits are all located within the Narrama Formation, which forms the lower sequence within the Girilambone Group - mineralisation is hosted within sedimentary rocks, with mafic rocks (MORB basalts or dolerite sills) occurring in the footwall - the MORB basalts are associated with oceanic rifting, with the volcanic activity providing the heat engine driving the mineralising hydrothermal systems, with fluids focussed along rift-associated structures.
- ◆ The mineralisation is also commonly overlain and flanked by "jasper" (Si-Fe) horizons deposited by cooling and "spent" mineralising fluids - these can be laterally extensive, and provide a good marker horizon and vector to potential mineralisation, and are a common feature of VAMS regions globally.

Figure 4: Diagrammatic representation of Besshi-style VAMS occurrences



Source: Revolver Resources

- ◆ Both the basalts and Si-Fe units have a relatively high magnetic signature when compared with the sediments, and thus can be used as vectors for exploration.
- ◆ The deposits have undergone the complex deformation as seen in the host sediments, with deposits now presenting as plunging shoots and ribbons - this has resulted from thickening at fold hinges and attenuation along the fold limbs.
- ◆ The mineralisation has been classified as both mafic-siliciclastic or pelitic-mafic-hosted (Besshi-type) under different naming conventions, and have either formed as mounds on the sea-floor else as sub-seafloor replacement of unconsolidated deep sea sediments - Figure 4 presents a diagrammatic representation of this style of deposit.
- ◆ These are a distal subset of the overall category, with Cyprus-type deposits being more proximal to the volcanic activity.

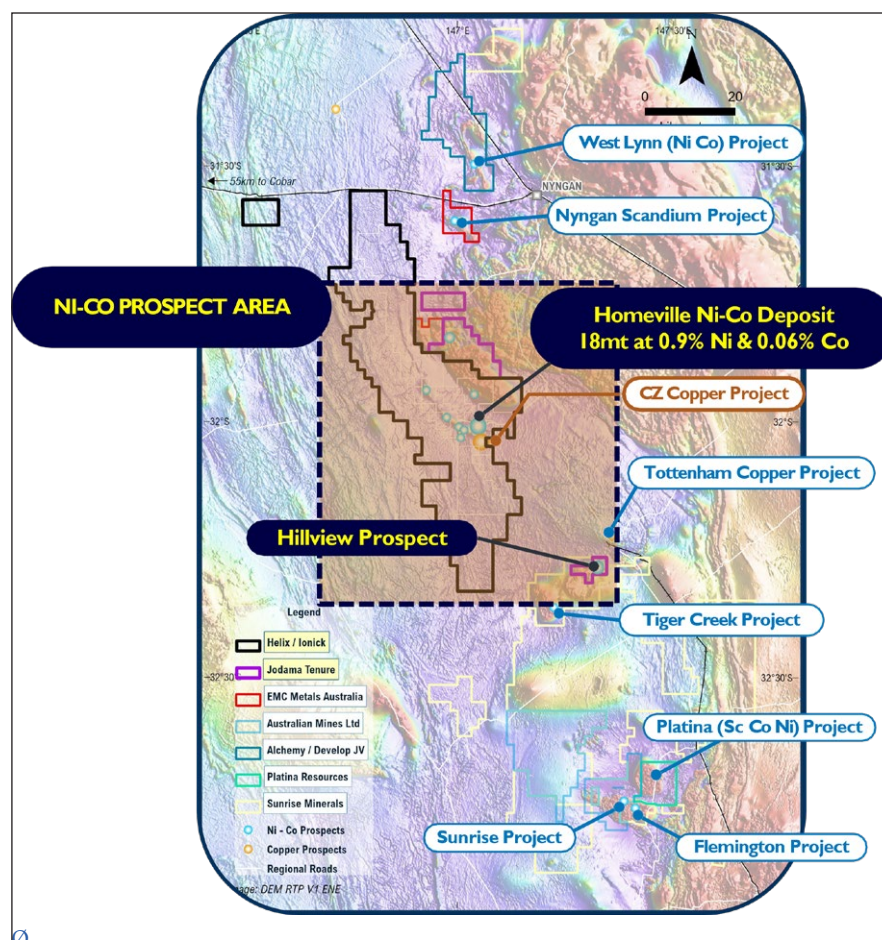
Cobar Basin

- ◆ The faults and intersections of them form the main controls on mineralisation in the broader Cobar Basin, with a number of mineralisation styles, ranging from those associated with initial rifting to those associated with compressional tectonics being present.
- ◆ Main mineralisation styles associated with rifting include low sulphidation epithermal, with examples including Mineral Hill and the McKinnons gold deposit.
- ◆ Mineralisation styles largely related to basin inversion include:
 - Polymetallic Cu-Pb-Zn-Ag shear related mineralisation, which forms the main style of mineralisation in the field, including CSA, Endeavour, the Peak, Great Cobar and other deposits along the Cobar Gold Field amongst many others - mineralisation varies from polymetallic to Cu-Au through to Cu with minor gold; and,
 - Mississippi Valley Type ("MVT") - examples include the Wonawinta silver deposit.
- ◆ There has also been overprinting of the earlier deposits by later events.
- ◆ The Cobar-style shear hosted mineralisation hosts the majority of mineralisation in the Cobar Basin, with these systems having a relatively small surface footprint, but can extend for many hundreds to a few thousand metres vertically.
- ◆ The dominant control on these systems are the major NNW trending structures (Figure 3).
- ◆ These often form as a series of en-echelon steeply plunging veins/lodes, with a number of deposits containing lodes which are blind to the surface - the CSA Mine is a case in point with underground drilling discovering new lodes over relatively recent history - other examples include the recent Dominion and Federation discoveries by Aurelia near the Hera operation.

Fifield Suite

- ◆ The ~440 Ma Alaskan-Ural intrusives of the Fifield Suite are prospective for Ni-Co +- PGE-Sc mineralisation, with several deposits being present in the region.
- ◆ These deposits form as relatively shallow flat lying laterite blankets generally up to 25 m to 30 m thick, formed by the weathering of the underlying mafic-ultramafic intrusives, leading to the residual enrichment of the target minerals, which are already enriched in the fresh rocks..
- ◆ The underlying intrusives are readily identified by magnetics, and can occur as ovoid to circular stocks, to linear sills and dykes (Figure 5).
- ◆ They are commonly zoned, with compositions ranging from monzonites through to the Ni-Co enriched ultramafics, including peridotites and pyroxenites.
- ◆ One such intrusive is an element of the Honeybugle Complex, covering ~100 km², overlapping the border between the Company's eastern tenements and the Jodama option tenements.
- ◆ Related mineralisation includes alluvial platinum, as mined in the Fifield area from the 1880s until 1938, and producing in the order of 20,000 oz of Pt and 6,200 oz of gold from pits and underground workings on deep leads.
- ◆ Fifield still remains as Australia's largest dedicated platinum operation.

Figure 5: Fifield Suite related Ni-Co occurrences on magnetics image



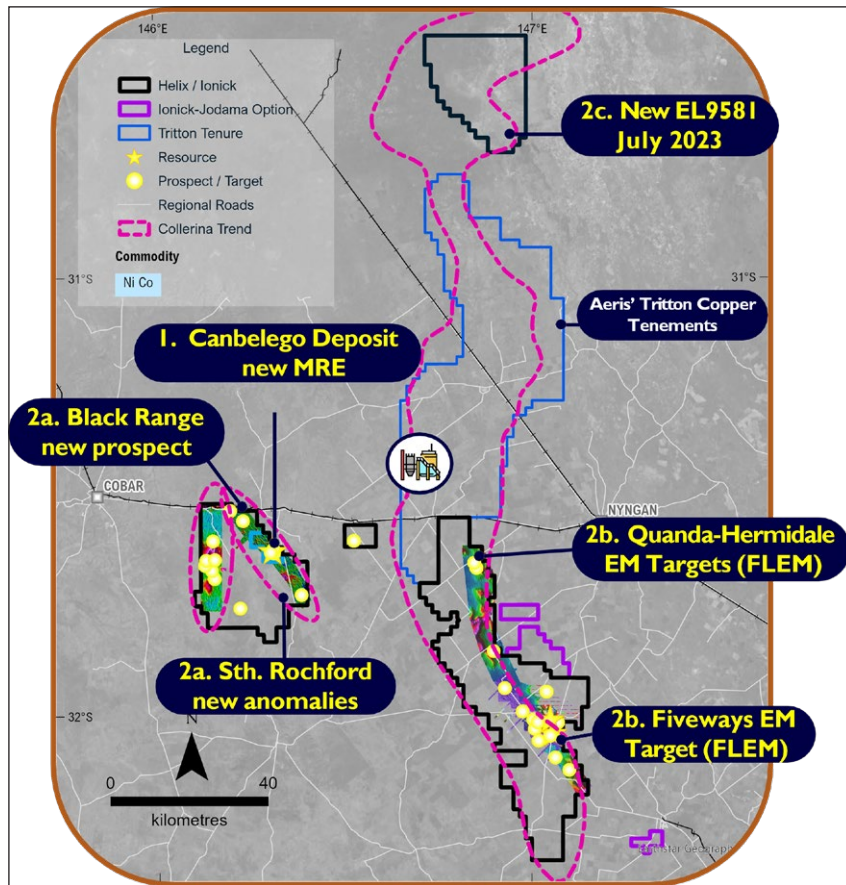
Source: Helix

WORK BY HELIX AND PROSPECT DESCRIPTIONS

- ◆ The Company is exploring three main copper trends, as presented in Figure 1:
 - The Collerina Copper Trend, which extends for +200 km NNW within the Girilambone Group from Lockley's Tottenham projects in the south, through Helix's eastern tenements, and then through Aeris's ground to Helix's northern tenement, and includes CZ and several other copper prospects,
 - The 30 km long Rochford Copper Trend, which hosts the Canbelego copper deposit - although mapped as Girilambone Group it is thought that there may be more Silurian/Devonian units in this area; and,
 - The 25 km long Meryula Copper Trend, covering units of the greater Cobar Basin, with earlier stage Cu (+Pb-Zn) targets.
- ◆ Work by the Company has suggested that there may be a fourth trend (the Quanda Trend, supported by interpretations made by Aeris - Figure 14), to the west of and parallel to the Collerina Trend, and a fifth, the Restdown Trend, striking NW between the Meryula and Rochford Trends (Figure 7).
- ◆ Work completed by Helix to date includes intensive drilling of some prospects (mainly Canbelego and adjacent Cobar style prospects, and CZ), and regional work concentrated along the copper trends to define prospects for further work.
- ◆ The regional work has largely included airborne EM and surface geochemistry, which are considered the best exploration tools for the styles of mineralisation sought - the airborne VTEM surveying was undertaken in 2017 and 2021, resulting in 100% coverage of the three main trends, with several prospects being defined (Figure 6).
- ◆ The ground geochemistry has, given significant areas of cover, involved considerable shallow, 4WD mounted auger drilling, with this work ongoing, after having been disrupted by significant rainfall events following commencement of the latest programme in Q3, 2022.
- ◆ Ground activities are also affected by the winter wheat cropping in the region.

- ◆ Follow up activities include ground geophysics (mainly EM), infill and extensional geochemistry and geological mapping to define drill targets - these activities are ongoing.

Figure 6: Tenements and prospects on VTEM image



Source: Helix

Figure 7: Tenements, ongoing auger sampling and prospects on DTM image

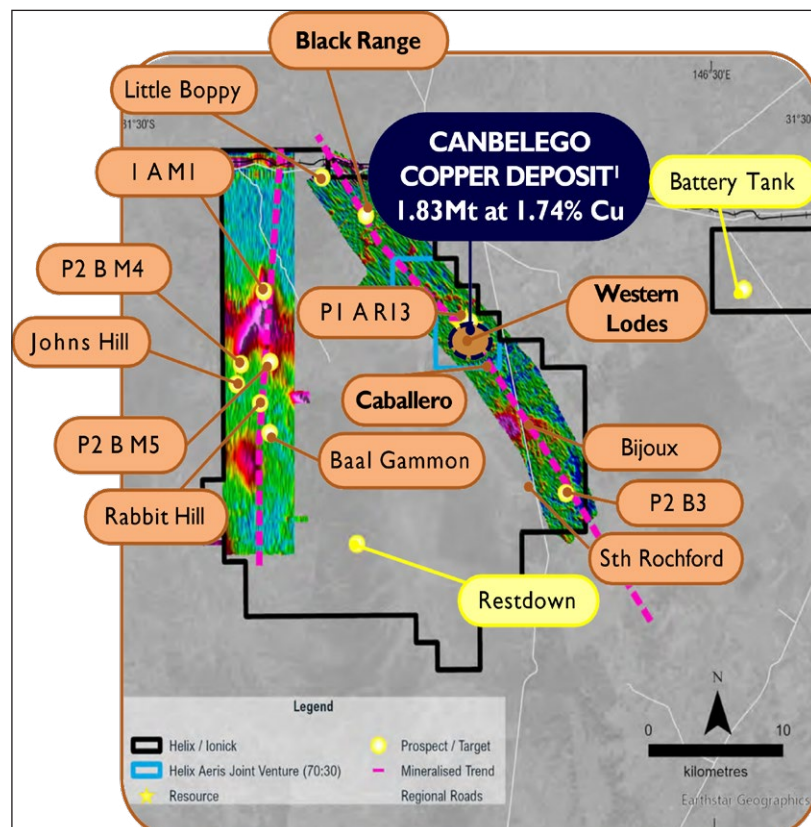


Source: Helix

Rochford Copper Trend

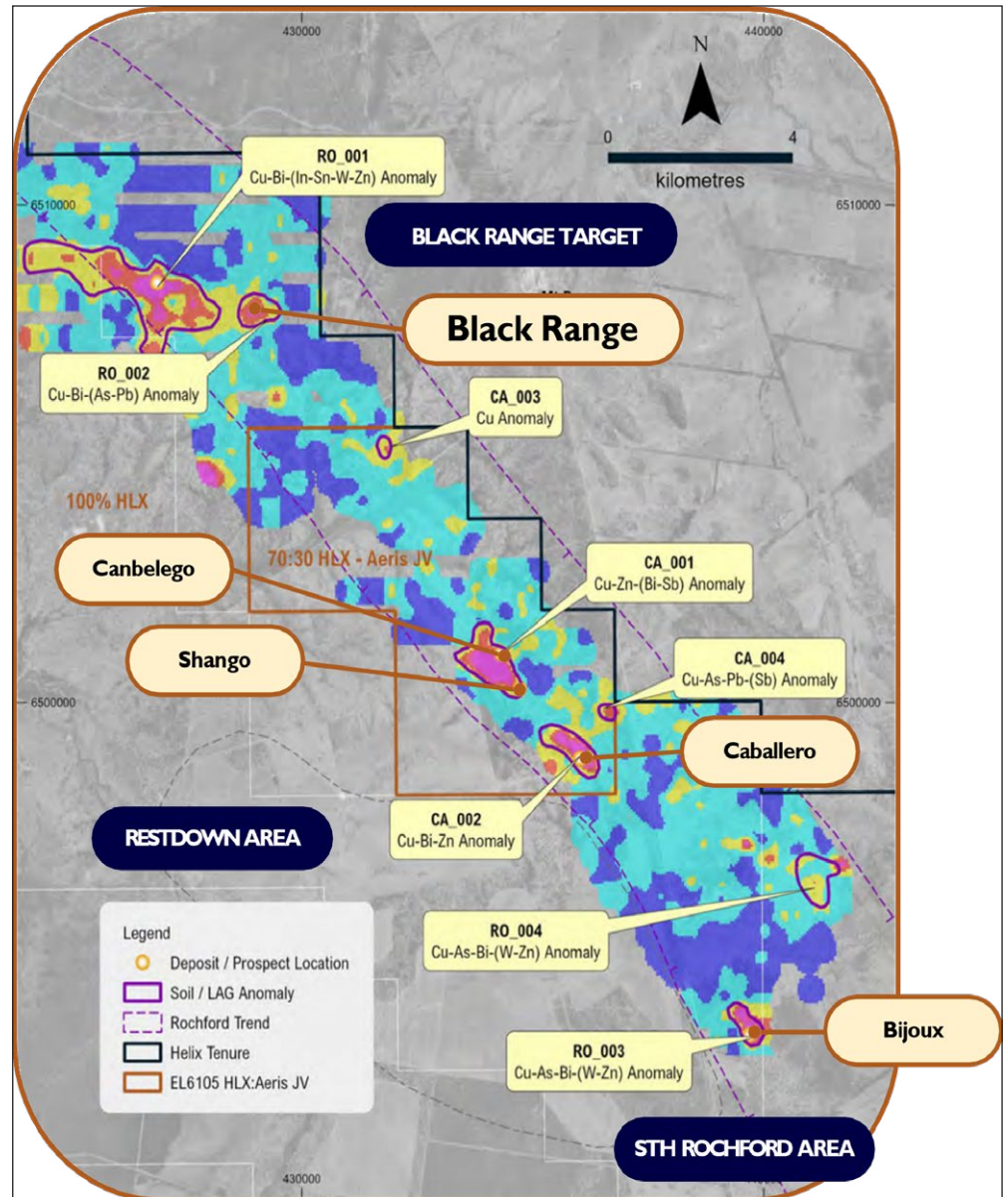
- ◆ The Rochford Copper Trend (Figures 8 and 9) is a NW trending, 30 km long zone that includes the Canbelego Copper Deposit, with an Inferred and Indicated JORC 2012-compliant MRE of 1.83 Mt @ 1.74% Cu, for 32,000 t of contained metal - the copper deposit is located within the Canbelego JV with Aeris, with Aeris having recently elected not to contribute further, and hence dilute.
- ◆ The Government mapping indicates that the trend is largely along the Narrama Formation of the Girilambone Group, flanked to the west by the main Cobar Trough, and to the east by the Canbelego-Mineral Hill Rift Zone.
- ◆ More recent mapping has suggested that there may be more Cobar Basin units in the area, however work at Canbelego has confirmed that the deposit is hosted in the Girilambone group, although it is a Cobar-style deposit, related to the basin inversion during the Tabberabberan Orogeny.
- ◆ Given the presence of the Narrama Formation, and mapped chert horizons, the Rochford Trend can also be considered prospective for Tritton-style VAMS mineralisation.
- ◆ The trend is marked by several copper showings and workings (Figures 9 and 10), with early mines including the Canbelego Copper Mine, which reportedly produced ~10,000 t of hand-picked ore grading 5% Cu to 1920 - mining stopped at the water table at 80 m.
- ◆ Work has identified several targets as shown on Figures 8 and 9; limited previous follow up drilling at targets away from the Canbelego deposit, including at the Bijoux and Caballero prospects, has returned very encouraging results, and with Caballero also being followed up in recent drilling.
- ◆ Prior to commencing geochemical sampling in 2022, a regolith landform analysis was undertaken to determine the best sampling methods over the trend - conclusions were:
 - There is a general trend from residual soils and outcrop in the north, to covered areas in the south,
 - Some of the areas covered by the previous ~17,000 shallow hand auger programme (2010 - 2020) were essentially untested, with sampling not reaching below the transported cover; and,
 - Due to budgetary reasons significant areas of previous sampling were only assayed for a limited element suite, or by pXRF, and thus the data set lacked critical elements, including pathfinders that are important in prospect targeting.

Figure 8: Western tenements, showing the Rochford and Meryula trends and prospects on airborne EM image



Source: Helix

Figure 9: Rochford trend, showing geochemical anomalies and prospects



Source: Helix

- ◆ This informed the sampling methods for the new programme, which included lag, hand auger and mechanical auger, and also resulted in the reassaying of previous samples for the full element suite as currently used.
- ◆ Geochemical anomalies have been generated from the levelled combination of the new sampling and historical sampling - this has identified anomalous primary and pathfinder element associations as shown in Figure 9, with geochemical and EM anomalies commonly coincident, and in some cases associated with historical workings.
- ◆ A priority prospect to come out of this work is Black Range, which extends for ~6 km x 1.7 km east-west, and remains open to the north and south (Figure 9), and has never been drilled, despite the presence of historical workings and rock chips returning values up to 2.6% Cu.
- ◆ As noted previously, the regional work had been delayed and interrupted due to unseasonably wet weather hampering access over the past two years.

Canbelego Project and Copper Deposit

- ◆ Canbelego is located over the historic Canbelego Copper Mine, which as mentioned previously produced until the 1920s - it is also located in the 70/30 JV tenement with Aeris.
- ◆ Prior to the drilling carried out over the past two years, work by the Helix/Aeris JV had included drilling (39 holes for 8,080 m of RC and diamond), and the 1.5 Mt @ 1.2% Cu Inferred MRE (0.3% Cu cutoff) as released to the market on October 1, 2010 - the MRE was based on 20 RC and diamond holes for 4,111 m, and was estimated internally by Aeris (then Straits Resources).

- ◆ Over the past two years the Company has undertaken extensive drilling at Canbelego, with this further defining and enlarging the Main Lode, and discovering the two Western Lodes (Figures 10 and 11) - this has resulted in the updated Mineral Resource Estimate ("MRE") for Canbelego, as presented in Table 1.
- ◆ This is an increase of 22% in tonnage and 45% in grade (and hence a 77% increase in contained copper) on the 2010 estimate of 1.5 Mt @ 1.2% Cu for 18,000 tonnes of contained copper, with the estimation down to a depth of 600 m, and for ~300 m along strike at surface (Figure 11).

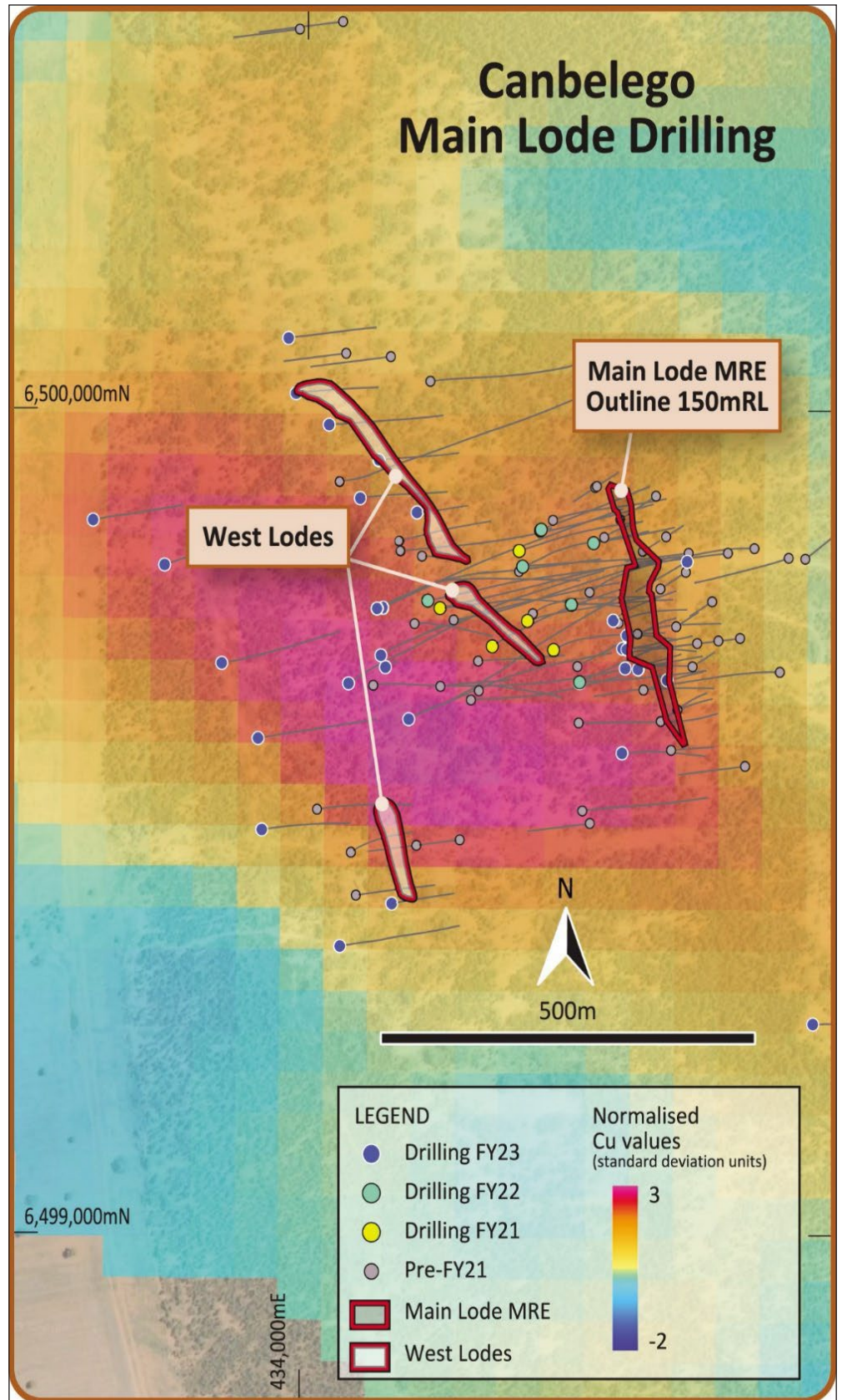
Table 1: Canbelego 2023 JORC 2012 Compliant MRE

Canbelego 2023 JORC 2012 Compliant MRE			
Classification	Tonnes	Grade (Cu%)	Cu Metal (t)
<i>Total opencut MRE, ≥240mRL; 0.3 Cu% cut-off grade & underground MRE, <240mRL; 0.8 Cu% cut-off grade</i>			
Indicated	340,600	1.65	5,620
Inferred	1,493,700	1.75	26,140
Total: Opencut & Underground	1,830,000	1.74	31,842
Comprising:			
MRE Category	Tonnes	Grade (Cu%)	Cu-Metal (t)
<i>Potential opencut MRE, ≥240mRL; 0.3 Cu% cut-off grade</i>			
Indicated	99,700	1.28	1,276
Inferred	282,300	1.21	3,416
Total: potential opencut MRE	377,000	1.23	4,637
<i>Potential underground MRE, <240mRL; 0.8 Cu% cut-off grade</i>			
Indicated	240,900	1.81	4,360
Inferred	1,211,400	1.88	22,774
Total: potential underground MRE	1,453,000	1.87	27,171
* Numbers may not sum due to rounding			
* Numbers are rounded to reflect that they are estimates			
* A top-cut grade of Cu 12% was applied to the MRE			
* Stated MRE complies with Reasonable prospects of eventual economic extraction			

Source: Helix

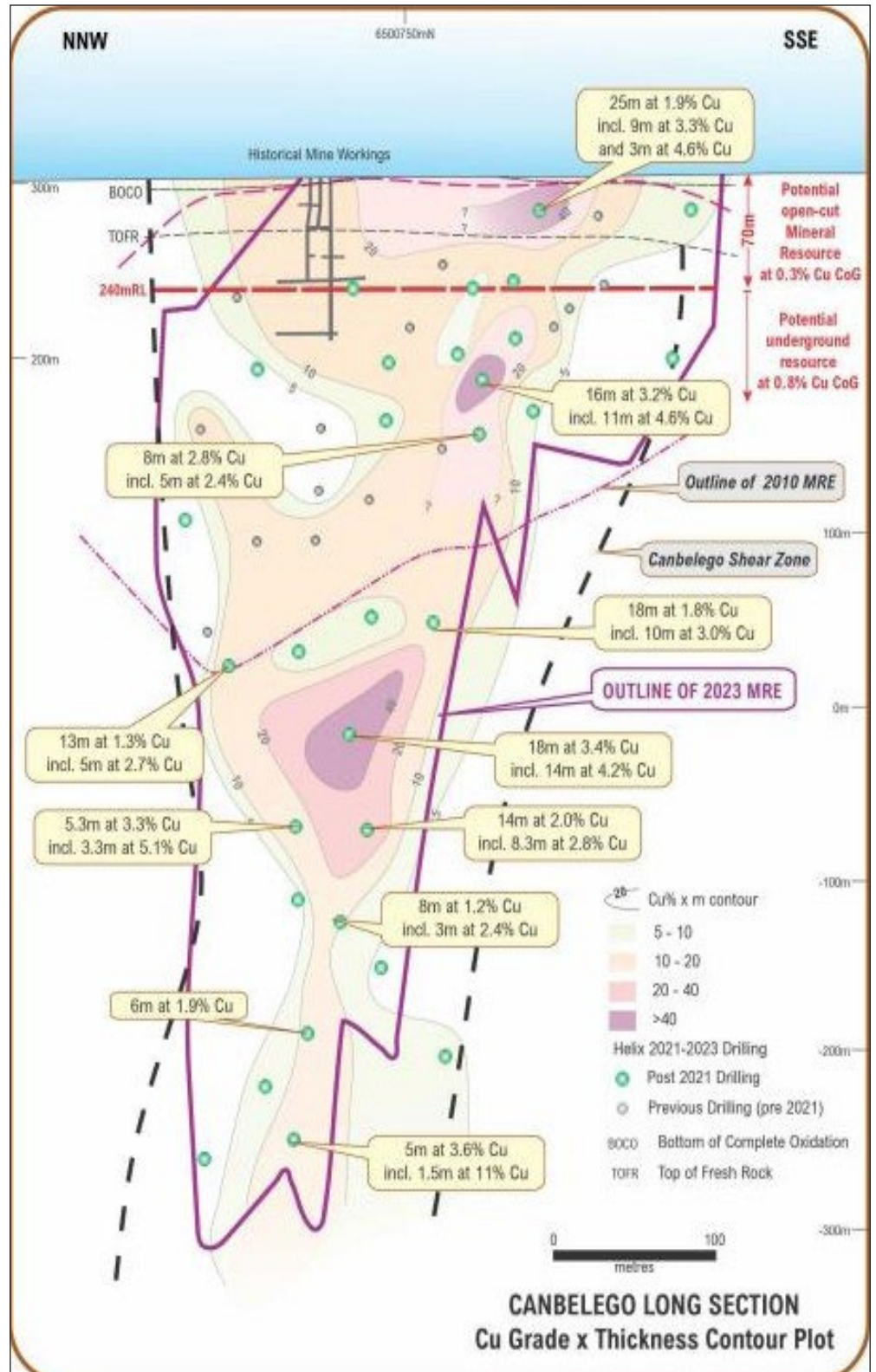
- ◆ Mineralisation is structurally complex, and takes the form of a steeply plunging semi-massive to massive sulphide shoot within the overall NNW trending, steeply WSW dipping controlling shear zone (Figure 11) - the style is akin to that of the CSA deposit at Cobar.
- ◆ The drilling intersected up to 18 m @ 3.4% copper, with this close to true thickness at the pierce point - the estimation is based on 16,224 m of drilling, comprising 56 drill holes and 15,143 drill samples from the Main Lode.
- ◆ This includes 25 diamond holes (10,116 m) and 14 RC holes (2004 m) drilled since 2021.
- ◆ The discovery of the Western Lodes could be crucial, given that, our view is that the Main Lode as it currently stands may not support a robust standalone operation, even should toll treating options be available - this however is being looked at by the Company.
- ◆ The limited RC and diamond drilling on these lodes has returned very encouraging results (including up to 22 m @ 0.38% Cu, 8 m @ 1.25% Cu and 2 m @ 3.4% Cu), with the lodes open along strike and at depth.
- ◆ As mentioned earlier, multiple lodes are a feature of Cobar-style mineralisation, and may not necessarily daylight - should future work define material mineralisation in the en-echelon Western Lodes, there could be the potential to reach a critical mass for exploitation.
- ◆ In addition drilling was undertaken at the nearby Caballero prospect (Figures 9 and 11), which included 13 RC holes for 1,954 m, and one diamond hole for 417.5 m.
- ◆ This drilling, following up from positive results from two scout holes completed in 2013, returned encouraging intersections, including up to 12 m @ 0.45% Cu from 78 m in hole CBLRC040.
- ◆ This was followed up by the diamond hole, CANDD014, which intersected several zones of anomalous copper below 240 m downhole - this remains open along strike and at depth, however is extensively faulted.

Figure 10: Canbelego Copper Deposit plan on Cu soil geochemistry image



Source: Helix

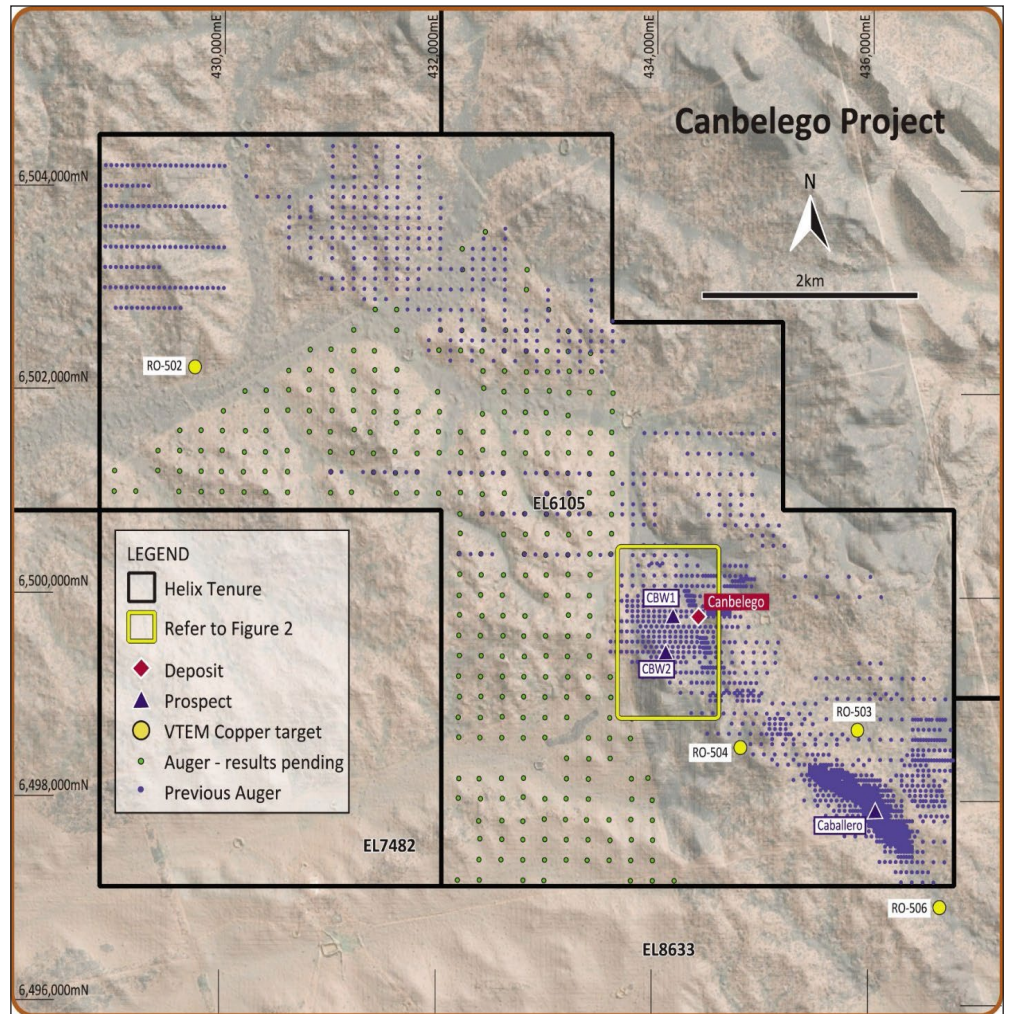
Figure 11: Canbelego Copper Deposit long section, looking ENE



Source: Helix

- ◆ Figure 12 shows the geochemical sampling, VTEM anomalies and prospects/targets over the JV tenement - extensive further work is planned for 2024 over the tenement as detailed previously.

Figure 12: Canbelego Project soils and targets on topography - "Figure 2" on the diagram is "Figure 10" here

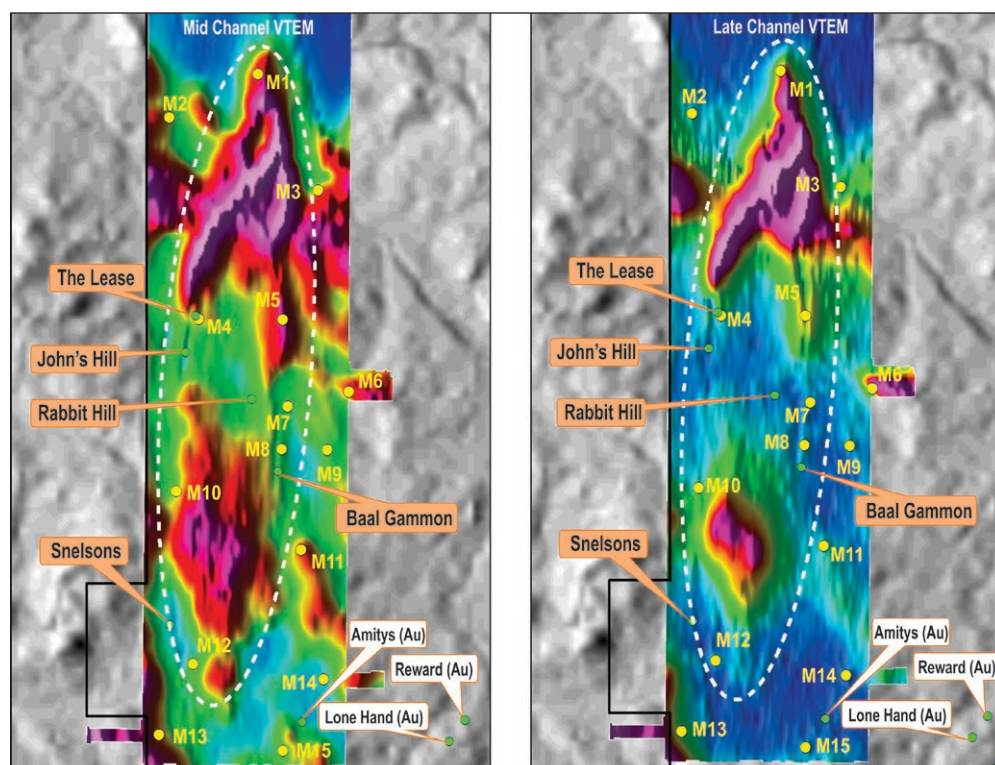


Source: Helix

Meryula Trend

- ◆ The Meryula Trend, a ~25 km long, N-S trending zone to the west of Rochford, and is largely located over folded Devonian rocks of the Meryula sub-basin, a part of the broader Cobar Basin, with the target being Cobar-style mineralisation (Figures 6-8, 13).
- ◆ The area contains a number of Cu (+-Pb-Zn) workings and early stage prospects, with the 2021 airborne EM survey identifying six high priority targets, as well as what appear to be fold hinges in a conductive stratigraphic unit (Figure 13).
- ◆ The discrete anomalies have been interpreted as flanking a stratigraphic unit towards the base of the sub-basin, with this also correlating with known workings and mineral occurrences.
- ◆ The Meryula Trend is included in the current geochemical sampling and drill targeting programmes.

Figure 13: Meryula Trend prospects on mid (left) and late (right) time airborne EM images



Source: Helix

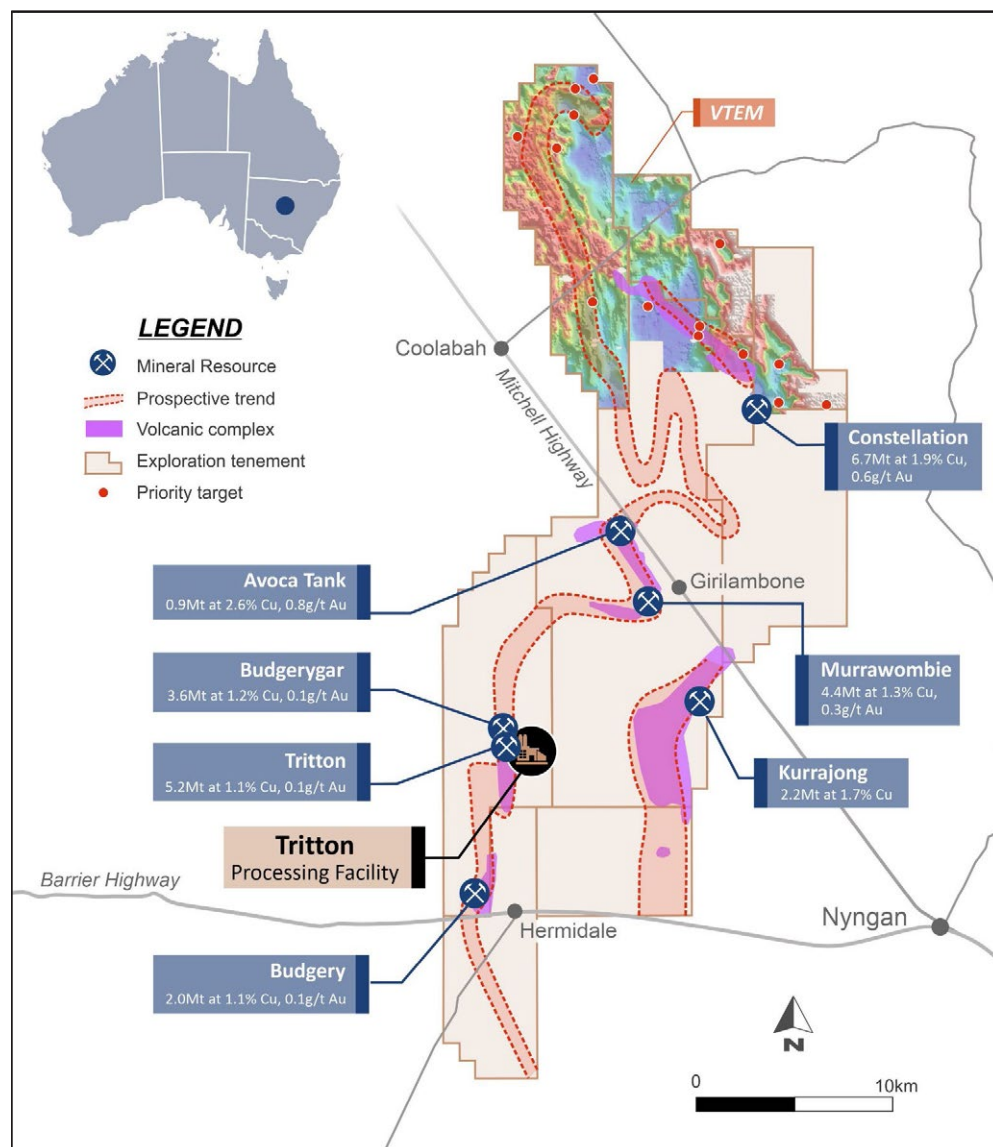
Restdown Trend and Goldfield

- ◆ Although not a priority at the moment, the Restdown Goldfield, located between Meryula and Canbelego, remains a tantalising target, however due to some uncertainties underlying the assumptions made in the previous gold MRE, the MRE is no longer being quoted.
- ◆ Recent interpretations suggest that the gold mineralisation that formed the basis of the MRE is generally oxide in nature, with little evidence of gold in the fresh rocks.
- ◆ Interpretations suggest structural similarities between the Restdown area and the Peak Gold Trend, and thus highlights the potential of Restdown; an interpreted NNW trend is shown in Figure 7.

Collerina Trend

- ◆ The Collerina Trend is dominated by deep marine sediments of the Girilambone Group, and is prospective for Besshi-style VAMS mineralisation - large areas of the tenements are also under shallow cover, and until recently have only seen limited exploration despite the prospectivity.
- ◆ The trend is interpreted as extending for over 200 km from south near Tottenham, to the recently granted "Yangunyah" tenement in the north.
- ◆ Mineralisation is hosted in the Narrama Formation, near the base of the Girilambone Group, and as mentioned the sequence also includes basaltic flows and sills, of both MORB and OIB affinities (with some outcropping as serpentinites), as well serpentinites potentially related to the younger Fifield Suite, including the one that hosts the Homeville deposit (discussed later).
- ◆ Other units include what has been previously termed a "quartzite" breccia, that can be cherty in nature, and is found close to the mineralisation - this may represent late stage siliceous jasper material as commonly associated with VAMS mineralisation, else a chemical sediment.
- ◆ As mentioned earlier, the Girilambone Group has undergone significant deformation due to being subject to at least two major orogenies - the Benabran and Tabberabberan - resulting in complex folding and interference patterns (Figure 14), with this also evident at the prospect scale.

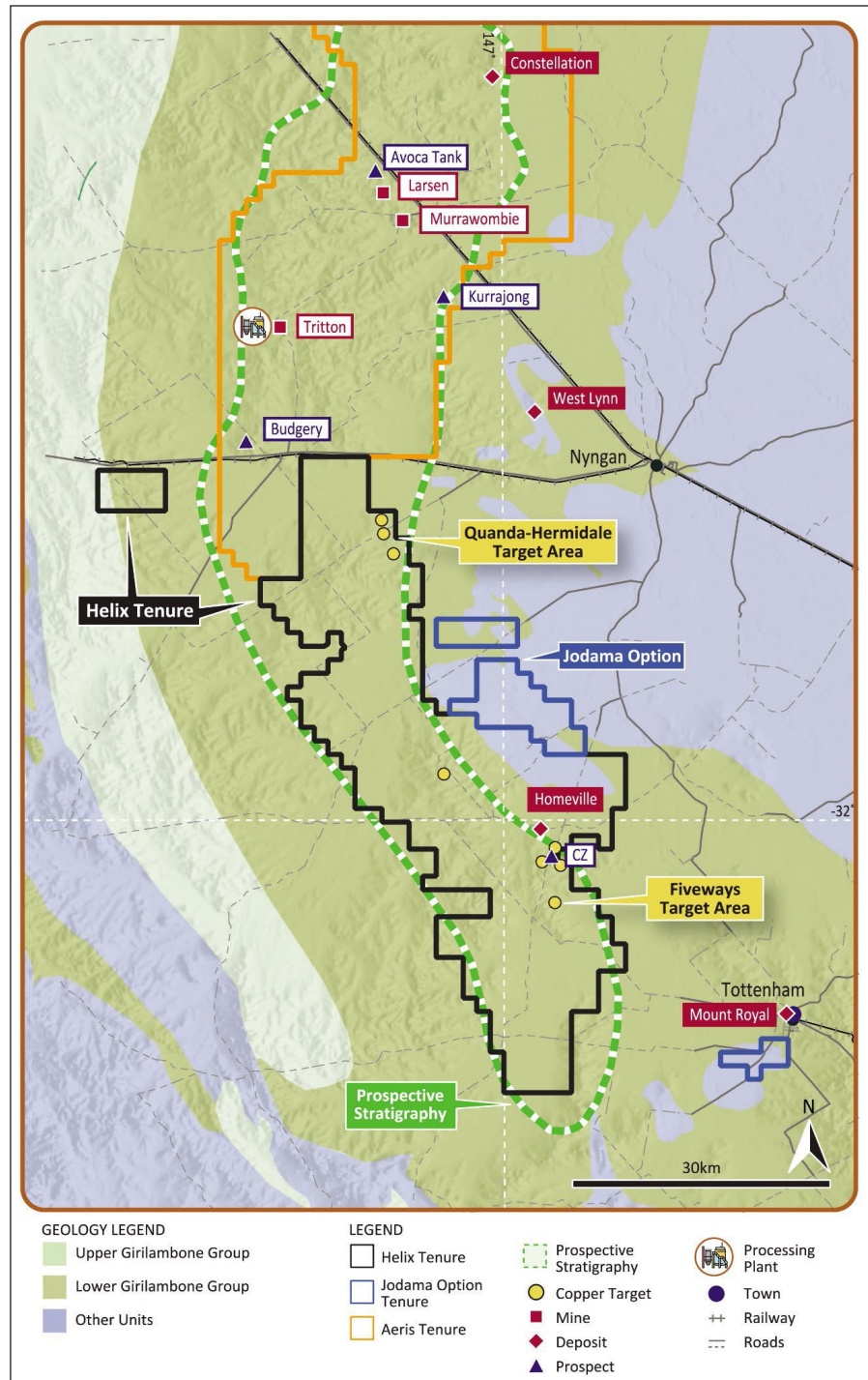
Figure 14: Aeris Resources Tritton tenements, deposits and interpreted prospective trend, highlighting deformation



Source: Aeris Resources August 2023 Presentation

- ◆ The deformation can make mapping and interpretations difficult, and as such the Company has worked on identifying marker beds (quartz rich sandstones) through mapping and litho-geochemistry to help with the mapping and interpretations.
- ◆ Detailed work until recently was largely concentrated around the known mineralisation, mainly the CZ prospect, with relatively little work over rest of the interpreted trend.
- ◆ To that end, the Company has now undertaken tenement wide exploration, with this including:
 - The 2021 airborne EM surveying, that identified five high priority anomalies requiring follow up,
 - Ongoing soil/auger geochemical surveying as part of the broader project wide programme; and,
 - Ongoing geological mapping.
- ◆ The Company has recently completed fixed loop ground EM surveying (“FLEM”), following up on the EM anomalies generated from the airborne work - this has resulted in the confirmation of four of these, with three in the Quanda-Hermidale area and one at Fiveways (Figure 15).
- ◆ Three basement conductors over a strike length of ~4.5 km were confirmed at Quanda-Hermidale, with the fourth being attributed to conductive cover.
- ◆ Drilling is imminent, with a ~1,500 m programme planned, starting with a ~250 m diamond hole at Fiveways.

Figure 15: Collerina Trend prospects on airborne EM image



Source: Helix

CZ Project

- ◆ The Collerina Project saw limited copper mining in the early 1900s, and with modern exploration limited to mapping and the drilling of three RC holes by CRA in the 1980s, all of which intersected copper.
- ◆ No further work was undertaken until that carried out by Helix, with initial work including mapping and rock chip sampling of a gossanous outcrop extending for ~500 m, soon after acquiring the gold and base metals rights (excluding nickel laterite mineralisation) from Augur Resources Ltd (“Augur”, now Alpha).
- ◆ The initial sampling by Helix returned up to 3.01% Cu and 9.32 g/t Au, with this followed by auger geochemical sampling and ground EM surveying, both of which returned anomalies which led to the initial drilling by Helix.
- ◆ The first RC programme, completed in December 2016, returned up to 12 m @ 4.8% Cu, 0.7 g/t Au, 19 g/t Ag, 1.6% Zn from 80 m, within a broader interval of 28 m @ 2.4% Cu, 0.4 g/t Au, 10 g/t Ag and 1.3% Zn from 80 m - this was in primary mineralisation.

- ◆ Subsequent activities included downhole EM surveying and drilling, with an initial Mineral Resource Estimate ("MRE") released to the market on June 11, 2019, estimated from 11,434 m of drilling in 57 holes.
- ◆ Helix has completed subsequent drilling, with the latest in H2, 2021 - after a review of the new results and previous work, the Company has decided to no longer quote the MRE, pending further work.
- ◆ Despite this, CZ remains an advanced copper project with high grade results, with the Company to leverage the knowledge in assessing other prospects.
- ◆ As mentioned previously Helix/Ionick has now acquired the Ni-Co rights over the tenement from Alpha with Alpha to receive a 1% NSR royalty over any discoveries made by Helix.

NICKEL-COBALT STRATEGY

Background

- ◆ Helix has entered into a process to spin out the Ni-Co assets into the SPV, Ionick, with this allowing these assets to get the attention that they deserve, and with the current Helix team concentrating on the copper exploration and evaluation.
- ◆ Actions pertinent to the strategy include:
 - The setting up of Ionick which is planned to be the entity to be spun out,
 - The distinct geological hosts to the different mineralisation types, which allows for the setting up of a Mineral Sharing Agreement ("MSA") between Helix and Ionick,
 - The acquisition of the Ni-Co rights over relevant tenements, and the acquisition of the Homeville deposit from Alpha,
 - The Jodama option, which is over tenements with demonstrated Ni-Co laterite mineralisation, with execution and consideration dependent upon a successful IPO of Ionick,
 - A different skill set required, as these deposits are relatively easy to explore for and delineate, but with a rapid move to assessing the often complex metallurgy and development studies; and,
 - The presence of other Ni-Co projects in the region.
- ◆ Following a successful IPO the Company will look at undertaking drilling, with a target of delivering an overall Resource of >80 Mt, underpinned by the current 19 Mt Homeville MRE - there are several prospects that require drill testing as shown in Figure 2.
- ◆ The Company is of the view that a inventory of 80 Mt to 100 Mt would potentially be required to support a viable operation, and as such there could also be the potential for a consolidation of other such assets in the region, with deposits shown in Figure 5.

Acquisition of Alpha Interests

- ◆ As announced to the market on September 2, 2023, the Company entered into a binding offer letter with Alpha to:
 - Acquire EL8703,
 - Acquire the Homeville Ni-Co deposit,
 - Reduce the NSR royalty on relevant tenements from 1.5% to 1%; and,
 - Extinguish Alpha's deemed 49% JV interest for base metals on the affected tenements.
- ◆ Consideration for the transaction was 20 million shares in Helix, and a 1% NSR royalty from all production from the former JV tenements and EL8703.
- ◆ The transaction was completed following approval of the issue of the shares to Alpha at the AGM held on November 23, 2021.

Jodama Option Agreement

- ◆ The option to acquire the three tenements (EL8248, EL8748 and EL9435) was announced to the market on February 28, 2023, with further details about the strategy and agreement presented in the release.
- ◆ The option terms include:
 - An initial 12 month option to February 2024, with a fee of \$30k in cash, and \$60k in expenditure on the tenements,
 - The option will be able to be extended for a further 12 months (to February 2025), subject to the payment of an extension fee of \$40k in cash, and an additional \$120k in expenditure on the tenements.

- ◆ The proposed IPO structure includes:
 - Vendor shares comprising \$300k of Ionick shares at \$0.20/share,
 - A first milestone payment of 1.5 million Ionick shares on the definition of an MRE of >10 Mt; and,
 - A second milestone payment of 3.0 million Ionick shares if a positive Financial Investment Decision is made on a project which includes resources from the Jodama leases in the underlying Feasibility Study.
- ◆ As mentioned previously, the tenements cover parts of the Honeybugle Complex, one of the Fifield Suite intrusives.

Geology, Mineralisation and Metallurgy

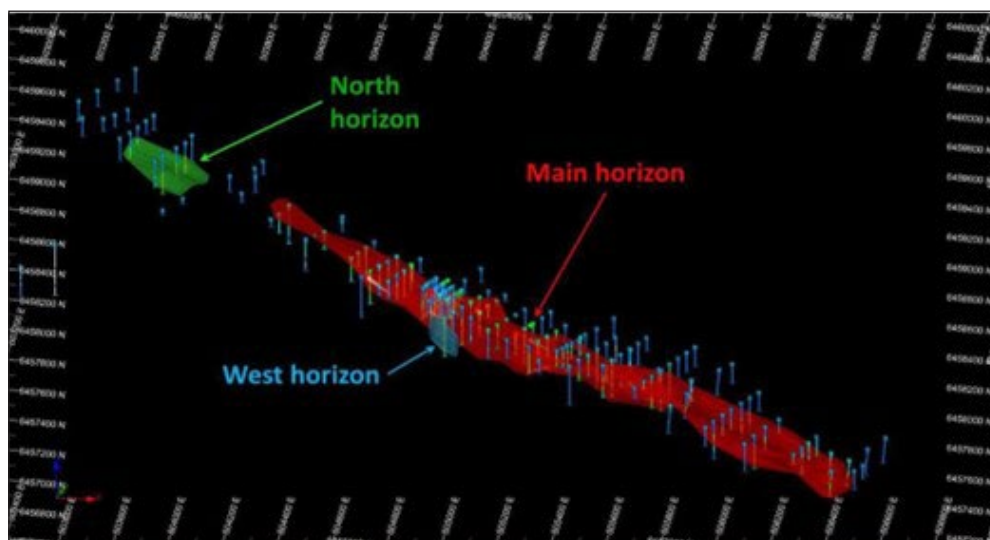
- ◆ As mentioned earlier, the target mineralisation style is lateritic Ni-Co, developed through the weathering of mafic to ultramafic rocks.
- ◆ The cornerstone deposit is Homeville, with the MRE shown in Table 2, and an oblique view shown in Figure 16.
- ◆ The deposit, which strikes NW, is developed over a linear ultramafic body, attributed to the Fifield Suite.

Table 2: Homeville 2018 JORC 2012 Compliant MRE - 0.7% Ni cutoff

Homeville 2018 JORC 2012 Compliant MRE - 0.7% Ni cutoff						
Category	Cut-off grade (Ni%)	Tonnes (Mt)	Ni %	Co %	Fe %	Al %
Indicated	0.7	2.2	0.98	0.04	19	2.8
Inferred	0.7	15.7	0.88	0.06	23	3.7
Total		17.9	0.89	0.06	22	3.6

Source: Helix

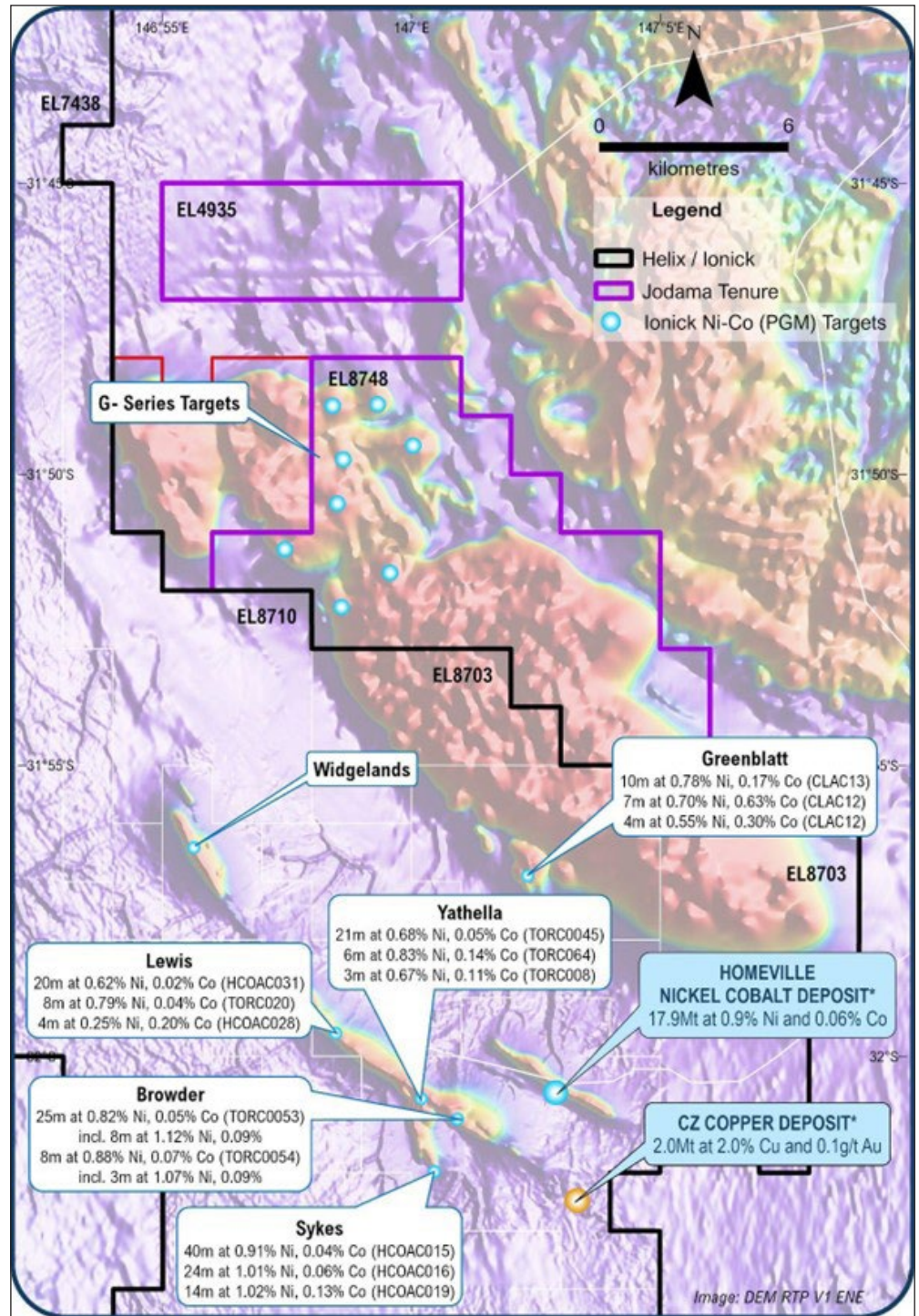
Figure 16: Oblique view of the Homeville deposit



Source: Helix

- ◆ Previous work has also defined several drill ready prospects, with these shown, including intersections, shown in Figure 17.
- ◆ Several of the prospects are located what is termed the Yanthalla Serpentinite, which has been interpreted as being a sheared and metamorphosed body associated with the Lower Ordovician marine volcanic activity, which has an arcuate trend from the CZ prospect (Figure 17).
- ◆ What is noticeable are the magnetic signatures associated with the fresh precursors to the laterites - this provides for relatively rapid and effective targeting.
- ◆ Magnetic bodies also include the larger Alaskan-Ural intrusive complexes - one such body is the Honeybugle Complex, forming the NW-trending ovoid body along the boundary between the Company's and Jodama tenements.
- ◆ As mentioned previously these are commonly zoned bodies, with compositions ranging from monzonites through to the Ni-Co enriched ultramafic units, including peridotites and pyroxenites.

Figure 17: Ni-Co prospects on magnetic image



Source: Helix

- ◆ A feature of most lateritic nickel deposits is metallurgy, with these commonly requiring expensive and complex treatment, including high pressure and temperature acid leaching ("HPAL"), which have been proven to be impediments to development and operation for several Australian projects.
- ◆ However, the Company has stated in the 28 February 2023 release that preliminary metallurgical testwork achieved >90% Ni and Co recovery at atmospheric temperature and pressure, indicating the potential for a lower cost and complexity process.
- ◆ A February 2018 release by the previous owners also mentions recoveries of 85% for Ni and 94% for cobalt using a two stage ambient pressure and temperature leach, simulating a counter current atmospheric leach ("CCAL") process.
- ◆ It needs to be noted that these were early stage tests only, and metallurgy will be a key part of any future studies.

PEER GROUP ANALYSIS

- ◆ Table 3 presents a representative selection of ASX-listed companies exploring for copper in NSW and Queensland - this includes those exploring for VMS, IOCG, Cobar-style and Isa-style Cu deposits, and highlights the value upside potential for Helix.
- ◆ Market capitalisations have been diluted for escrow shares where applicable, and we have included equity copper resources - some of these have by-products, including Pb, Zn, Au, Ag and Co, however Cu is the dominant commodity.
- ◆ “Equity Tonnes” are the tonnages of copper resources attributable to the relevant company, and not global resources where one or more projects are held under a JV or other arrangement with a third party - tonnages are aggregated where more than one resource is held, and grade is the calculated average between the projects, with the CuEq grade calculated using current metals prices.
- ◆ Resources outside of the main copper resources have not been aggregated - these are otherwise noted.
- ◆ Exploration upside is demonstrated by Carnaby, which, with very strong drilling results from several of their Western Succession projects, increased over 8 x in price from ~A\$0.25 in early 2022 to over A\$2.00 within a few months, although subsequently retreating to ~A\$0.70, and subsequently recovering to the current price of A\$1.09/share.
- ◆ Until recently most base and precious metal junior explorers were trading at near 12-month lows, however that seems to be changing with several (including Revolver) showing recent appreciation in the share price.

Table 3: Helix peer group comparison

Helix Peer Group Comparison							
Company	MC inc Escrow	Cash	EV	Projects	Equity Tonnes (Mt)	Cu/CuEq% ¹	CuEq metal (kt)
Carnaby Resources Limited	\$177.4 m	\$26.9 m	\$150.5 m	Mt Isa Eastern Succession focus. Mt Hope, Nil Desperandum etc discoveries. Also has Tick Hill	No Cu resources. 44.6 koz Au at Tick Hill	-	-
Hammer Metals Limited	\$55.8 m	\$4.4 m	\$51.5 m	Both Eastern and Western Successions, numerous JV tenements. Includes Kalman IOCG	32.50	0.73%/1.47%	477
Revolver Resources Holdings Ltd	\$39.1 m	\$1.2 m	\$37.9 m	Osprey, Western Succession, Dianne, Hodgkinson Basin	1.62	1.10%/1.10%	17.9
Emmerson Resources Limited	\$40.9 m	\$5.3 m	\$35.6 m	Tennant Creek and NSW Cu-Au projects	No Cu resources. 167.8 koz of gold at Tennant Creek	-	-
Coda Minerals Ltd	\$29.9 m	\$4.7 m	\$25.1 m	Advanced Elizabeth Creek stratabound and IOCG project - Scoping on Elizabeth Creek	62.80	1.15%/1.41%	886
Qmines Ltd	\$25.6 m	\$2.3 m	\$23.3 m	Mount Chalmers project - VHMS. Scoping completed	11.86	0.76%/1.19%	141
Aeon Metals Limited	\$17.5 m	\$1.3 m	\$16.3 m	Walford Creek Project, to drill test targets	72.60	0.64%/1.96%	1,420
Renegade Exploration Limited	\$11.4 m	\$0.1 m	\$11.4 m	Early stage exploration on several projects in the Eastern Succession	-	-	-
Helix Resources Limited	\$13.9 m	\$5.9 m	\$8.0 m	Canbelego (Cobar-style) and Collerina (Tritton style) copper projects in Cobar region, NSW	1.28	1.74%/1.74%	22.3
Larvotto Resources Limited	\$9.1 m	\$3.7 m	\$5.4 m	Both Western and Eastern Succession early stage projects - along strike from Mt Isa in West 889 km2. Focus on WA Eyre project - Li, REE, Ni	-	-	-
Cooper Metals Ltd	\$5.7 m	\$2.5 m	\$3.2 m	Mt Isa East - IOCG focus, early stage, Ardmore project near CNB's Mt Hope. Some WA	-	-	-
Locksley Resources Limited	\$4.8 m	\$2.3 m	\$2.5 m	Tottenham Project, acquiring REE project in the US	9.86	0.73%/0.91%	89.3

Source: Excel Stock Data, Company reports, IIR analysis

1: First number is the actual Cu grade, and the second is CuEq including by-products calculated using current metals prices.

2: Helix does not include Homeville Ni-Co - refer to Table 4.

- ◆ Table 4 presents a comparison of undeveloped laterite Ni-Co deposits in Australia, highlighting the relatively high NiEq grade of Homeville.
- ◆ This table is as published by Helix in February 2023, with equivalent grades not taking account of metallurgical recoveries.

Table 4: Ni-Co project comparatives

Homeville 2018 JORC 2012 Compliant MRE - 0.7% Ni cutoff								
Project	Company	Location	NiEq (%)	Tonnes (Mt)	Ni (%)	Co (%)	Ni Metal (kt)	Co Metal (kt)
NSW Projects								
Homeville	ASX:HLX	NSW	1.01%	18	0.89%	0.06%	160	10
West Lynn	ASX:ALY	NSW	0.94%	21	0.84%	0.05%	179	11
NiCo-Young	ASX:JRV	NSW	0.73%	93	0.63%	0.05%	935	168
Sunrise	ASX:SRL	NSW	0.72%	177	0.53%	0.09%	293	18
WA Projects								
NiWest	ASX:GME	WA	1.16%	85	1.03%	0.06%	5,879	384
Central Musgraves	ASX:NC3	WA	1.05%	216	0.91%	0.07%	878	55
Kalgoorlie Nickel Project	ASX:ARE	WA	0.80%	831	0.71%	0.05%	736	71
'Others' in Australia								
Barnes Hill	NQM Plc	Tas	0.93%	7	0.81%	0.06%	589	46
Sconi	ASX:AUZ	Qld	0.76%	116	0.64%	0.06%	54	4

Source: Helix

BOARD AND MANAGEMENT

- ◆ **Mr Peter Lester - Non-Executive Chairman:** Mr Lester has over 40 years' experience in the mining industry and has held senior executive positions with North Ltd, Newcrest Mining Limited, Oxiana/Oz Minerals Limited and Citadel Resource Group Limited. Mr Lester's experience covers operations, project and business development and general corporate activities including financial services. Mr Lester has served on several ASX listed and private mining boards and is currently Non-Executive Chairman of White Rock Minerals Ltd.
- ◆ **Mr Mike Rosenstreich - Managing Director:** Mr Rosenstreich contributes over 30 years technical, corporate and financial experience.
He has held senior geological roles covering exploration, development and production. He worked in resource banking with NM Rothschild before becoming founding Managing Director of Bass Metals, leading it from IPO, exploration success and over 5 years of base and precious metals production.
Since late 2013, he has held several executive roles with ASX listed companies focused on 'specialty materials' such as tantalum, graphite and REE as well as gold and base metals in Australia and off-shore.
- ◆ **Dr Kylie Prendergast - Non-Executive Director:** Dr. Prendergast is an experienced geologist and technical leader with over 25 years' experience within the international mining and resource sector. She has worked across a range of different operating jurisdictions, including significant in-country assignments and expatriate roles. This has included substantial business development, project technical and economic evaluation, and commercial management, including direct interaction with a range of stakeholders in global resource capital markets..
- ◆ **Mr Gordon Barnes - Exploration Manager (From May 10, 2021):** Gordon is a highly experienced and well-respected exploration geologist based in Orange, New South Wales. He will commence with Helix on 10 May 2021.
Gordon has over 30 years of practical mineral exploration experience, ranging from active field-based projects through to multi-commodity project generation initiatives in Australia and overseas. He has extensive New South Wales copper and gold exploration experience, including Exploration Manager roles with listed explorers Magmatic Resources Ltd and Clancy Exploration Ltd, and prior to that Geoinformatics Exploration Pty Ltd. Since October 2018 he has been a Senior Consultant with R.W. Corkery & Co Pty Limited, a geological

and environmental consultancy specialising in New South Wales mining and development projects.

Gordon commenced his career in WA with Freeport McMoran and then the Normandy Group, gaining experience in exploration on both greenfield and near-mine programs. Thereafter he became a senior member of the DataShed / Insight Geoscience Group before going on to co-found the highly successful on-line resources data management business, Intiera Pty Ltd.

Gordon is a Member of the Australian Institute of Geoscientists and holds a Masters in Geology (UWA), a BSC in Applied Science – Geology (RMIT) and is a Graduate of the Australian Institute of Company Directors.

- ◆ **Mr Ben Donovan – Company Secretary:** Mr Donovan is a member of the Governance Institute of Australia and provides corporate advisory, IPO and consultancy services to a number of companies. Mr Donovan is currently a company secretary of several ASX listed and public unlisted companies and has gained experience across resources, agritech, biotech, media and technology industries.

He has extensive experience in listing rules compliance and corporate governance, having served as a Senior Adviser at the ASX in Perth for nearly 3 years, where he managed the listing of nearly 100 companies on the ASX.

In addition, Mr Donovan has experience in the capital markets having raised capital and assisted numerous companies on achieving an initial listing on the ASX, as well as for a period of time, as a private client adviser at a boutique stock broking group



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