# MEDIA RELEASE



6<sup>th</sup> March 2023

# SUBSTANTIAL NEW HIGH-GRADE CLONCURRY COPPER DISCOVERY

Shallow copper sulphides, including chalcopyrite, bornite and covellite.

Cloncurry private explorer, Transition Resources Pty Ltd ("Transition"), is reporting dozens of high-grade drilling results from its new copper discovery in Cloncurry, Queensland, Australia.

Substantial zones of mineralisation have been intersected in 65 of 70 completed holes, with drilling ongoing. The average true width is between 8 to 10 metres and from assays received to date, the **average grade is 1.9% copper**. Importantly, after conservatively capping high-grade intervals at 8.0% copper (effects 3.7% of samples), the average grade remains high at 1.8% copper.

Transition's Founder and Managing Director, Mr David Wilson said;

"All evidence suggests Transition has a robust new discovery of high-grade, shallow copper sulphides. Considering there are literally dozens of similar prospects yet to be tested in the same target system, it appears a new copper mine is in the making. At the very least, early results indicate a substantial hub-and-spoke development model, is possible.

Looking to the remainder of 2023, the job now is to drill and define sufficient resources to support stand-alone processing options. By all accounts, 2023 is shaping up to be a transformational year for Transition."

Buoyed by its 2022 success, and the early results from its 2023 drilling, Transition has set itself an initial drilling target of **10 million tonnes @ 1.5% copper** by the end of 2023.

If achieved, it would rank as one of Cloncurry's most attractive, undeveloped, high-grade shallow copper sulphide opportunities. Despite this, Transition believes it is a very achievable target.

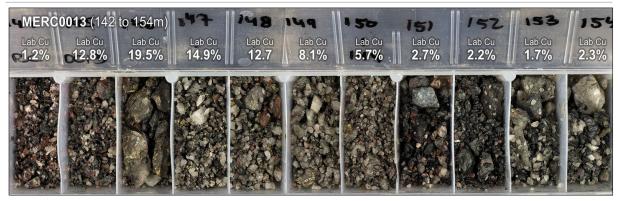
# Mr Wilson said:

"Based on internal exploration modelling, we may already be half-way to our 2023 drilling target, which if confirmed, would be a major achievement. However, we will have to contain our excitement until independent resource modelling confirms our internal numbers; which we await with great anticipation."

Stand-out drill intervals include (alphabetical order):

- **23m @ 1.89% copper** from 105m in RC drill hole **MERC0001** (true width ~15m)
- 10m @ 3.31% copper from 76m in RC drill hole MERC0003 (true width ~7m)
- 14m @ 4.28% copper from 113m in RC drill hole MERC0007 (true width ~9m)
- 27m @ 3.89% copper from 135m in RC drill hole MERC0013 (true width ~10m)
- 16m @ 2.90% copper from 123m in RC drill hole MERC0017 (true width ~13m)





Example of RC drill chips and copper grades from drill hole MERC0013. Copper minerals include chalcopyrite, bornite and covellite in quartz breccia. This interval is 11 metres @ 7.6% copper, from 143 metres.

These new copper sulphide discoveries are not a chance find. In four years since its inception, Transition has completed ~47,000 metres of drilling and ~90 square kilometres of high-resolution ground geophysics. It also boasts important new copper, gold, and critical metals discoveries.

Transition's success follows four-years of exhaustive research and development, including detailed scientific evaluation of regional mineral systems, and development of an alternative mineral system model for the Cloncurry District. Transition is applying new exploration methodologies, and a new understanding of the geodynamics responsible for copper, gold and critical metals enrichment at its Duck Creek tenements.

Transition is now converting its new knowledge into commercial opportunities, and in 2023 it will report multiple, significant mineral resource estimates (MREs) from its new discoveries. These include high-grade gold and associated critical metals (tungsten, rare earths and cobalt) from its new Highway discovery, and high-grade copper from its new Duck Creek discoveries.

Meanwhile, ongoing drilling is enjoying the same level of success as in 2022.



Figure 3. Diamond drill core showing examples of copper mineralisation at New Dollar, Meteor and Horseshoe.

# **NDDD0002**

(New Dollar) malachite, chalcocite in quartz vein (~19m)

#### NDDD0001

(New Dollar) malachite, cuprite, azurite, chalcocite in potassic altered gabbro (~124m)

#### **MEDD0002**

(Meteor) bornite, covellite, chalcopyrite in quartz breccia (~84m)

#### NDDD0001

(New Dollar) bornite, covellite, chalcopyrite in quartz breccia (~81m)

#### **MEDD0001**

(Meteor) chalcopyrite in quartz breccia (~80m)

#### **MEDD0001**

(Meteor) chalcopyrite, bornite in quartz breccia (~81m)

## **HSDD0001**

(Horseshoe) chalcopyrite in quartz breccia (~291m)



#### Mr Wilson said;

"Our first priority is to define open-pit copper-sulphide resources and because of this, only a few holes have tested the system below 200 metres. All of these intersected high-grade copper sulphides, the deepest at a vertical depth of around 280 metres. So, we know the system continues at depth, however, whilst we keep intersecting shallow, high-grade copper sulphides, it is not the right time to focus on expensive, slower, deeper drilling."

As the global investment community embraces the link between copper and a low-carbon future, producers are wondering how they will meet future demand.

According to a February 2023 report by S&P Global, new copper discoveries averaged ~50 million tonnes per annum between 1990 to 2010 but have since declined by a staggering 80%. The report also predicts average head-grades of existing mines will fall to 0.53% copper by 2025 (~30% less than in 2010). Adding to this looming inventory shortfall, demand for copper is predicted to double from the current 25 million tonnes, to around 50 million tonnes per annum by 2035.

This scenario is fuelling a wave of mergers and acquisitions, including in the Cloncurry District, where notable recent activity includes:

- Evolution Mining Limited (ASX:EVN) billion dollar acquisition of the Ernest Henry mine.
- Aeris Resources Limited (ASX:AIS) \$234 million acquisition of Round Oak Minerals.
- Harmony Gold Limited (NYSE:HMY) \$230 million acquisition of the Eva Copper Project.

Transition anticipates 2023 could be a very big year.

"Cloncurry is globally recognised as a go-to destination for copper, but when you look closely, investment opportunities in new mines are somewhat limited. It's the same story globally; at the top end, the big deposits are tightly held by large groups and the mid-sized opportunities (within fiscal reach of smaller entities) are few and far between. At the bottom end, projects are often trapped in the "too" category, with the copper grades being too low, or the projects too small, too deep, too risky, or too difficult at current copper prices.

Transition is one of very few in the Cloncurry District, that now offers shallow, high-grade, copper sulphide opportunities, at a scale that is worth the effort."





Example of RC drill chips with copper sulphide chalcopyrite (yellow), and high-grade copper sulphides bornite (purple) and covellite (blue), in quartz breccia. This sample from a depth of 125m in drill hole MERC0017, returned an assay of 17.5% copper.



# **Contact information:**

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## **About Transition**

Transition Resources Pty Ltd (Transition) is a privately-owned, research-focused explorer. It was established in March 2018, acquired its first assets in July 2018, undertook its first field activity in November 2018 and made its first major greenfield discovery in June 2019. Transition currently has 3 directors, 15 personnel and 40 retail shareholders. Its primary assets include approximately 1,100 square kilometres of exploration and mining tenements near the regional Queensland township of Cloncurry, which is located within the world class Mt Isa Inlier. Transition's first field season commenced in October 2018 and all assets are 100% owned.

## **Highway Prospect**

The Highway Prospect (Highway) includes multiple gold-rich orebodies with associated critical metals by-products such as tungsten, cobalt, and rare earth elements (REEs), including heavy REEs, that are hosted within weathered to sulphide-rich quartz and carbothermal units, and breccias. Highway gets its name from the high W, Au and Y results obtained during the first field visit to the prospect, which was identified in a desk-top environment using proprietary remote sensing and prospect targeting methods.

Highway is a genuine greenfield discovery that is not associated with historical mine workings, is not adjacent to or along strike from existing producing mines and includes a suite of metals that is unique to the Cloncurry District, and Australia more generally.

The Highway orebodies identified to date are located within a 650m long prospective zone that remains open and is interpreted to be part of a much larger system. This gold-rich system, which is yet to be fully explored, has been dubbed the "Highway Corridor."

# **Highway Corridor**

The Highway Corridor is an interpreted regional-scale, gold-rich mineral system, estimated to be at least 21km long, up to 2km wide, and is modelled to contain many billions of tonnes of highly prospective rock units that could potentially host numerous orebodies like those already discovered at Highway.

High-resolution geophysical surveys over ~14km of the system, and detailed surface geochemistry over ~4km of the system, indicate many settings comparable to those discovered at Highway.

Three-dimensional inversion modelling of these geophysics surveys has identified Tier-One scale anomalies that are modelled to be possible intrusive systems associated with the new gold discoveries. Along with a specific suit of elevated minerals and metals, identified along the Highway Corridor, these possible intrusive systems are consistent with Transition's new mineral system model for the region.

## New mineral system model for the Cloncurry District

The Highway discovery is an important contributing factor and feedback mechanism for the development of Transition's evidence-based alternative mineral system model for the Cloncurry District. This alternative geological model provides a new and coherent scientific explanation for mineralisation on Transition's tenements including Gold (Au), copper (Cu), Palladium (Pd), Platinum (Pt), Tungsten (W), rare earth elements (REEs), Yttrium (Y), Scandium (Sc), and Cobalt (Co), and offers alternative exploration methodologies for finding possible economic concentrations of these metals.



### **Copper prospects**

Transition's tenements include some of the most densely mineralised areas of the Mt Isa Inlier, with over 500 historical copper occurrences including pits, shafts and surface workings, identified across the tenements to date. The region has been extensively mined from the early 1890s. Despite this, modern exploration of Transition's tenements is relatively limited, and only a fraction of its extensive number of copper prospects have been drill-tested by prior explorers.

Transition's recent short drilling programmes included more metres than all prior drilling, by all previous owners.

Through its research focussed programmes, Transition identified over 200 high-priority copper prospects, of which just 6 were drilled in the last 2 months of 2022. Substantial zones of mineralisation were identified in multiple adjacent prospects and remains open in all directions.

All evidence suggests a future copper mine is in its early stages of discovery at Transition's West Cloncurry Project tenements.

# Rare Earth Element (REE) prospects

In late 2022 Transition confirmed through drilling that significant zones of shallow, high-grade rare earth elements (REE) exist at its Toolebuc REE prospect, including high ratios of valuable magnet REEs (Nd/Pr and Dy/Tb), in what is shaping up to be a potential new style of REE mineral system.

# Geophysics

By aligning aspects of Transitions new mineral system model for the region, with some of the most densely mineralised areas of its West Cloncurry Project tenements, Transition has generated one of the most prospective, and to date reliable, surface geophysical exploration records in the Cloncurry District.

Sub Audio Magnetics (SAM) by Gap Geophysics Australia, is the preferred match to Transition target mineral systems, and concurrently measures magnetometric conductivity (MMC), total field electromagnetics (TFEM) and total field magnetics (TMI), including their various derivatives, leading to a complementary suite of geophysical data.

3D inversion modelling of these surveys, by expert geophysicists, adds a sub-surface dimension to this data, with exceptional correlation to known deposits.

Adding to the relevance of this survey method, which includes ~90km² of high-resolution ground-based surveying, most of the historical copper occurrences including pits, shafts and surface workings, align with the survey anomalies.

With hundreds of high-priority copper-targets identified, and significant success at just a hand full of these targets tested by drilling to date, the upside appears significant.

Supporting data and reference images follow...



#### SUPPORTING DATA

## Selection of important assay results (alphabetical order):

\* HSRC0001: **18m** @ **1.28**% Cu from 98m

\* HSRC0002: **15m** @ **1.47**% Cu from 108m

\* HSRC0004: **22m** @ **1.56**% Cu from 58m

\* MERC0001: 23m @ 1.89% Cu from 105m

\* MERC0003: 10m @ 3.31% Cu from 76m

\* MERC0007: 14m @ 4.28% Cu from 113m

\* MERC0010: 9m @ 3.51% Cu from 117m

\* MERC0013:

Zone 1: 54m @ 1.39% Cu from 71m

Zone 2: **27m** @ **3.88**% Cu from 135m

\* MERC0015: 8m @ 3.54% Cu from 120m

\* MERC0016: 20m @ 1.74% Cu from 108m

\* MERC0017: 16m @ 2.90% Cu from 123m

\* NDRC0001: 10m @ 2.63% Cu from 107m

\* NDRC0003: 12m @ 2.26% Cu from 70m

\* NDRC0004:

Zone 1: **7m** @ **1.75**% Cu from 115m

Zone 2: 16m @ 1.97% Cu from 135m

\* NDRC0005: **16m** @ **1.48**% Cu from 43m

\* NDRC0008:

Zone 1: 10m @ 3.36% Cu from 53m

Zone 2: 10m @ 2.93% Cu from 116m

\* NDRC0009:

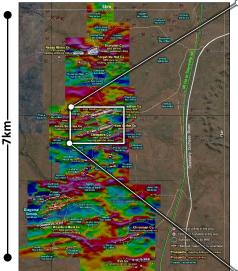
Zone 1: 9m @ 1.99% Cu from 172m

Zone 2: 11m @ 1.45% Cu from 194m

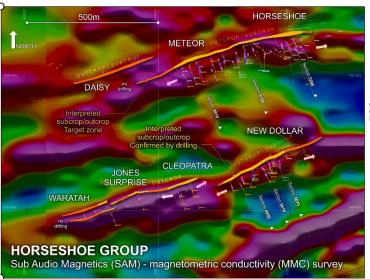
\* NDRC0014: 9m @ 2.64% Cu from 172m

\* NDRC0022: 10m @ 2.05% Cu from 140m

\* NDRC0024: **10m** @ **2.01**% Cu from 111m



The above image shows 7km of a 21km long prospective corridor at Transitions West Cloncurry Project, that includes over 200 high-priority prospects.



Detail from the left image, highlights the current area of drilling from which the above list of drill holes are being reported.



## **REFERENCE IMAGES**



Transition's drilling excitement culminated in December 2022, with three RC rigs intersecting high-grade sulphides at the Meteor Prospect.



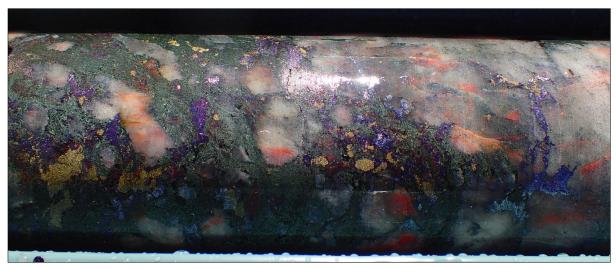
Excited geologists inspect diamond core drill hole MEDD0002, that intersected a 10-metre zone of high-grade copper sulphides from 117 metres at the Meteor prospect. Assays pending.



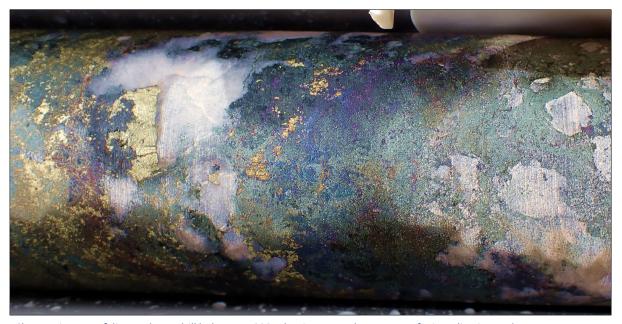


Diamond core drill hole HSDD0001 that intersected a 10-metre zone of high-grade copper sulphides (chalcopyrite) at the Horseshoe prospect, from 285 metres. Assays pending.



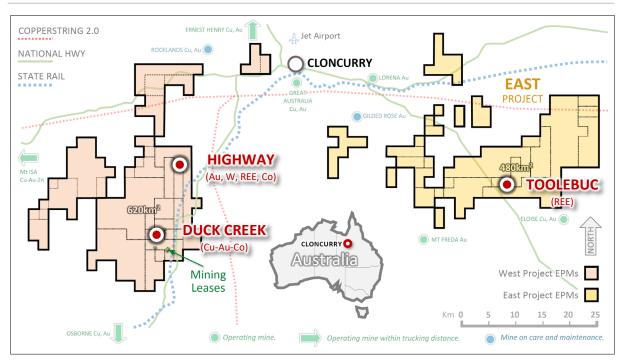


Close-up images of diamond core drill hole NDDD0001 that intersected multiple, wide zones of copper sulphides, between 78 metres and 160 metres at the New Dollar Prospect. The above image includes copper sulphides chalcopyrite (yellow) and high-grade sulphides bornite (purple) and covellite (blue). Assays pending.



Close-up images of diamond core drill hole MEDD0001 that intersected two zones of mineralisation at the Meteor prospect, including 6m of high-grade copper sulphides from 79 metres and possibly a second zone of 5-10 metres, including low-grade sulphides from 125 metres. The above image includes copper sulphides chalcopyrite (yellow) and high-grade sulphides bornite (purple) and covellite (blue). Assays pending.





Transition's Cloncurry tenements include EPMs and MLs. Highlighted are the locations of the Highway (Au-W-REE-Co), Duck Creek (Cu-Au-Co) and Toolebuc (REE) project areas. The township of Cloncurry is located between the East and West Cloncurry Project tenements. Important regional infrastructure includes national highway, state rail and proposed new Copperstring 2.0 location, which traverses Transition's East and West Cloncurry tenements and also skirts down the east side of the West Cloncurry Project tenements. Operating mines, mines within trucking distance, and mines on care and maintenance are shown.