# Business ANAX NEWSLETTE DECEMBER, 2023



ANAX

#### **BITTEN BY THE BUGS (OF THE WHIM CREEK VARIETY)**

Having **completed major upgrades of the heap leach infrastructure** after acquiring its stake in the Whim Creek Project, **Anax has been investigating re-start of the heap leach operation that was constructed and operated by Straits Resources in the mid-2000s**. With the typical feed that goes onto a heap (oxide copper ore) all but exhausted by previous mining, **Anax has been looking at innovative ways to use the heap infrastructure to produce copper and zinc...and as it turns out, we did not have far to look.** 

Anax collected naturally occurring bacteria from the previously mined Mons Cupri pit and has been running bio-leaching test work on copper sulphide ore. Extracting copper from sulphide ore is notoriously hard to do, but with a little bit of help from the Whim Creek bacteria (or "bugs" as they are affectionately referred to), a bit of help from the CSIRO in Perth and a bit of challenging old conventions, Anax has demonstrated that leaching of sulphide ore is very much achievable.

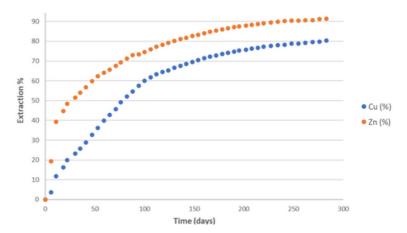
Having evolved naturally at Whim Creek, the local bugs have become very adept at feeding on their local cuisine, Whim Creek sulphide ore.

By eating their fill, the bugs are able to liberate copper and zinc, which can then be recovered at the process plant to produce copper cathode and zinc sulphate, a product that may be fed into fertiliser. In June 2023, Anax released very encouraging initial results from column leaching test work conducted at the CSIRO. The test work demonstrated that the bugs liberated approximately 80% of the copper and over 90% of the zinc in the sulphide ore that was tested.

On the back of column leaching tests, Anax announced the results of a **Scoping Study in September 2023**. The Study demonstrated the potential for <u>low-cost production of copper cathode and zinc sulphate by bio-leaching sulphide ore</u>. The **heap leaching operation** would run in **parallel with the planned concentrator and is envisaged to produce in the order of 8,900 t of copper cathode and 13,300 t of zinc in zinc sulphate over the Life of Mine.** 

Importantly, the potential to process sulphide ore through the concentrator, as well as transitional, oxide and lower grade sulphides through the heap leach, circuit puts Whim Creek in a unique position where it would be able to accept and process different ore types from all through the region.

WITH THE LOCAL BUGS WORKING THEIR MAGIC, ANAX HOPES THAT WHIM CREEK WILL ONE DAY BE FAMOUS FOR ITS BUGS AND ITS INNOVATIVE BIO-LEACHING IN ADDITION TO THE PUB.



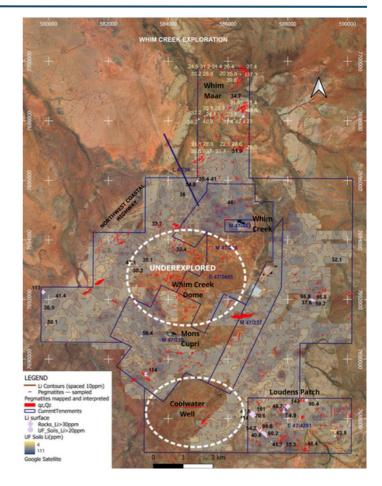
**Results** from bio-leaching of Whim Creek sulphide ore using local Whim Creek bacteria

## WHIM CREEK EXPLORATION

Anax is extending its **exploration for lithium** across the Whim Creek project area. <u>Soil sampling surveys</u> have been extended over Whim Maar, Whim Creek Dome and other under-explored areas and **lab results are awaited**. Rock chip sampling is ongoing. <u>Heritage surveys</u> are being planned over lithium prospective areas which will enable **future drilling to take place**. Watch this space!

# WHIM CREEK PROJECT STAGE 2 MINING PROPOSAL APPROVED

**The Stage 2 Mining Proposal was approved during July 2023.** The approved Stage 2 Mining Proposal allows for the commencement of mining from the Whim Creek Pit and the processing of ore from the Mons Cupri and Whim Creek pits through a Conventional Flotation Processing Plant (Concentrator) which will produce separate copper, lead and zinc concentrates. The Mining Proposal also allows for the construction of a three-cell In-Pit Tailings Storage facility (TSF). The Stage 2 Mining Proposal supports the previously approved (October 2022) Stage 1 Mining Proposal. The Stage 1 Mining Proposal allows for the mining of ore from the Mons Cupri Pit, the refurbishment of the existing Heap Leach Facility, the incorporation of ore sorters into the existing crushing infrastructure and the construction of a 120-man accommodation village.



The approval of the Stage 2 Mining Proposal now completes all DMIRS approvals required for the commencement of mining activities at the Whim Creek Copper Project and is the final major regulatory approval for the Whim Creek site.



# **MEET VICKI LONG**

**Vicki is a Principal Environmental Consultant** and has lived in the Pilbara since 1985. Vicki has had over 34 years of experience in the identification, rehabilitation and management of coastal and arid inland flora, vegetation and environment, in the northern half of Western Australia. This includes two years as assistant curator at the Pilbara Regional Herbarium after which she established the environmental division of Astron Engineering – now Vicki Long & Associates (VLA). Vicki has performed numerous flora and vegetation surveys, for most of the large resource companies in the Pilbara region, including Chevron Australia, Quadrant Energy, Woodside Energy, Origin Energy, Rio Tinto as well as State Government agencies including MRWA, CALM/DEC/DPaW/DBCA, Water Corporation, Learmonth Naval Base (RAAF) and the City of Karratha.

She has become increasingly involved with Aboriginal communities from Onslow to Broome and inland to Newman and Tom Price, assisting them to document ethno-botanical and ecological knowledge and prepare it for publication or other use in their communities. She first assisted Claire Olsson and DEC with an ethno-botanical survey in the 1985 for Ngarluma-Yindjibarndi and has since worked with Elders and many Pilbara Aboriginal communities documenting their knowledge, and encouraging them to bring that knowledge to life again in their communities.

Vicki has undertaken a number of flora studies at the Whim Creek site dating back to the 2000s when the site was operated by Straits Resources. More recently Vicki has assisted Anax Metals in gaining the necessary government approvals to restart mining and processing operations at Whim Creek.



