## The Julimar Project

Chalice Mining is a Western Australian company with a track record of responsible and successful mineral exploration. In March 2020, Chalice made a significant discovery of platinum group elements (PGEs), nickel, copper, cobalt and gold at the Julimar Project near Toodyay, about 70km north-east of Perth.



### The Gonneville Deposit

The Gonneville Deposit is located on Chaliceowned farmland and is the first discovery of minerals within the Julimar Project. Chalice has been actively exploring the area since 2020, with exploration drilling underway to determine the size of the deposit on farmland. In parallel, low-impact, exploration has commenced to the north of Gonneville to determine if mineralisation can be found in other areas.

A maiden Mineral Resource Estimate (Resource) for the Gonneville Deposit was released in Nov-2021 and then upgraded in Jul-2022, confirming Gonneville as the largest Platinum Group Element (PGE) discovery in Australian history and the largest nickel-sulphide discovery globally for over 20 years.

I GA Boundaries Planned 2022 Exploration Drilling Julimar State Forest Gonneville Deposit Outline Minor Road Railway Track

The Julimar Project: Gonneville Deposit, key target areas project tenure and nearby shire boundaries.

The Resource contains an estimated 11 million ounces of precious metals (PGEs and gold) and over 900,000 tonnes of base metals (nickel, copper and cobalt).

#### Green Metals at Julimar

Gonneville is host to a suite of 'green metals' palladium, platinum, nickel, copper and cobalt. These green metals are required to decarbonise the world and address climate change.

As the world transitions to clean energy, we will require huge quantities of these metals for green technologies such as wind, solar, electric vehicles and hydrogen.

Large-scale deposits of these metals are extremely rare, and Chalice believes it is vital that deposits like Julimar are appropriately explored and responsibly mined to meet future demand.

The Julimar discovery also further strengthens Western Australia's potential to be at the forefront of the supply of these critical metals, generating significant economic benefits.



Drill core samples from the Gonneville Deposit.

#### When will the Julimar Project become a mine?

Typical Development Timeline for a Mining Project



A typical timeline for a mining project. Chalice is currently in the 'Feasibility & Permitting' stage

This is one of the most common questions the Chalice team are asked. There are many considerations to best answer this question:

- There are several stages required to develop a project from discovery of minerals to an operating mine.
- There are many determining factors, but on average it takes five-to-seven years for a project to reach mine stage, possibly longer if it is located in a new region like Julimar.
- Chalice is currently in the early period of the 'Feasibility & Permitting' Stage. The current stage is likely to take three-to-five years to complete.
- Ouring this stage, Chalice is progressing scoping studies to determine if the discovery can be developed into an economical mine.
- These studies will analyse the design, processing and costs as well as environmental and social impacts of the mine. Other plans for mine

- infrastructure, such as power, water, roads and waste management will also be assessed and refined throughout this stage.
- The metals found at Gonneville are very close to the surface and therefore a future mining operation is likely to initially involve some form of open-pit mining. A combination of both open-pit and underground mining methods will continue to be explored before the mine is finalised.
- Chalice recognises outcomes such as traffic and water supply are important to the community.
- « Chalice is at the beginning of the journey to mine and still has years of work before a development is assured. Our community consultation will increase and align with the relevant project stages, playing a key role in all planning considerations.

### Chalice is committed to strong environmental stewardship

The pre-mining years of exploration and feasibility before a mine is established is the time for building knowledge of the natural environment. Since 2020, a team of specialist botanists and zoologists have conducted baseline flora and fauna surveys covering an area of ~6,000 hectares in the Julimar region.

The purpose of these surveys is to inform Chalice's exploration program, identify populations of

threatened and priority species as well as assess vegetation types and conditions such as dieback. From this data, Chalice has developed strict environmental management measures to minimise our exploration impacts.

The full program of environmental studies will be developed over the coming years, with large scale assessments likely to be required by regulators for the full approval of a mining operation.

# What does exploration in the Julimar State Forest look like?

Chalice's exploration in the Julimar State Forest sets a new standard as one of the lowest impact exploration campaigns in WA.

This exploration is strictly governed by a Conservation Management Plan (CMP) which was approved by the WA Government and developed in conjunction with the Department of Biodiversity, Conservation and Attractions (DBCA).

Chalice's exploration in the area does not involve any mechanised clearing of vegetation, or the use of bulldozers or graders.

Some of the measures to minimise our impact include:

- The use of low-impact, compact drill rigs.
- Where possible, drill sites have occurred on access tracks in the Forest. There is an extensive network of existing tracks frequently used by recreational users as well as emergency services.
- We Before a drill rig can be mobilised in the area, monitoring for wildlife is performed checking for threatened species such as Black Cockatoos, Woylie and Chuditch.
- Monitoring must also be conducted by Yued and Whadjuk Traditional Owners. The role of the monitors is to confirm that all drilling activities are taking place within areas that do not contain any cultural heritage sites.
- If any wildlife, breeding habitats or cultural heritage sites are found, drilling must be moved or postponed.
- This area has never been explored for minerals before, but there is considerable potential it could host additional green metals.

Chalice follows strict dieback management measures to prevent exploration activities from spreading dieback.

#### Minimising our footprint

Small track-mounted rigs are being used in the Julimar State Forest. These drill rigs have a small footprint and can easily navigate around trees, eliminating the need for clearing.

Because these drill rigs have caterpillar tracks rather than standard tyres, they exert very low pressure on the ground, allowing them to roll over vegetation with minimal impact to roots, soil and the seed bank. This exploration method also helps with successful rehabilitation.

They also have self-contained drilling fluids systems, which means all fluids and rock cuttings generated are captured in above ground tanks and removed from the Forest area.

A video demonstrating the compact drill rigs is available here: <a href="https://youtu.be/JVBqwUHjA4A">https://youtu.be/JVBqwUHjA4A</a>

# Key environmental work underway for the Julimar Project includes:

- Baseline surface and groundwater studies underway; water studies are a priority focus for Chalice to ensure that water is responsibly managed as a shared resource.
- Comprehensive program of baseline environmental surveys ongoing since 2020; covering flora, fauna, dieback, cultural heritage.
- Oevelopment of Biodiversity Strategy underway to ensure potential mining in future co-exists with conservation values.
- « Mine rehabilitation and closure planning.

Below; track mounted rigs minimise our impact and footprint in environmentally sensitive areas.



#### **Cultural heritage**

Yued and Whadjuk Traditional Owners recently completed cultural heritage surveys across the proposed exploration areas of the project. Chalice is now working with Yued and Whadjuk representatives to implement a cultural heritage management plan for the exploration program, as part of Chalice's commitment to the ongoing involvement of Traditional Owners in the Julimar Project.

Yued and Whadjuk groups have also provided Cultural Awareness Training for Chalice field staff, with additional training planned for the broader team. The purpose of this training was to educate the Chalice team on key skills such as identifying potential heritage sites, and to better understand the significance of the area for Traditional Owners. Chalice has also engaged Ballardong Medical, an Indigenous owned first-aid training and medical supplies company, to provide first aid training sessions and provision of key medical equipment.

#### Chalice and the community

If Julimar progresses to a mine, it would be the first in the Avon district and a significant new industry in the wheatbelt region of WA. This is an exciting opportunity for local economic development, which could also bring about changes to an area with a rich history and established communities.

Chalice is committed to open and transparent communication with local communities throughout every project stage, meeting regularly with key stakeholders, community leaders and project neighbours.

Chalice recognises that the community has high expectations of its environmental and social performance, and is committed to do the right thing.

#### **Community contributions**

As an active member of the community, Chalice prioritises local procurement and employment.

Currently, ~29% of the Chalice workforce is locally based (Mar-22), and we continue to focus on growing employment opportunities.

In FY2021, Chalice spent ~\$500,000 in local businesses and sponsored key community events and programs. An estimated additional local spend of ~\$1.5 million was contributed by our contractors.

Some of the local events and organisations we have supported include:

- « Marsupial Mummas and Pappas wildlife rehabilitation
- 2021 and 2022 Toodyay Christmas Street Party
- Toodyay District High School reading nook and school upgrades
- Toodyay Agricultural Show
- Toodyay Junior Cricket Club
- International Food Festival part of the Avon Descent
- Toodyay Volunteer Fire and Rescue Service (VFRS) – Santa Iolly run

Community organisations are encouraged to submit proposals using the form on the Chalice website via:

www.chalicemining.com/julimar-investment



#### **Get in Touch**

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For more information please visit: www.chalicemining.com/community-julimar-project

