

12 April 2022

## MACA Interquip appointed to advance Youanmi metallurgical testwork to feasibility level

### ROX RESOURCES LIMITED

ASX: RXL

*Rox Resources Limited (ASX: RXL) is an Australian listed company with advanced gold projects in Western Australia: the Youanmi Gold Project and the Mt Fisher Gold project.*

#### DIRECTORS

**Mr Stephen Dennis**  
Chairman

**Mr Alex Passmore**  
Managing Director

**Dr John Mair**  
Non-Executive Director

Shares on Issue	168.9m
Share Price	\$0.39
Market Cap.	\$65.9m
Cash	\$9.6m

(pro-forma 31 Dec 2021 + \$4m capital raising (exc. costs) completed in March 2022)

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#### Highlights:

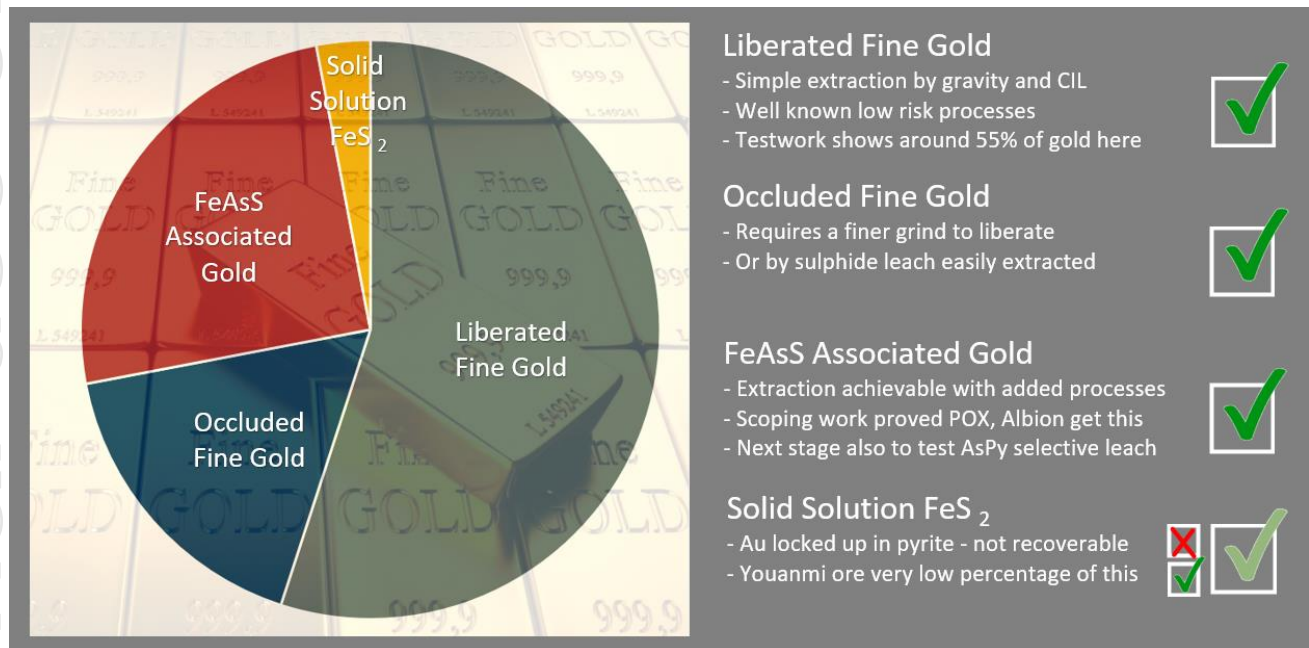
- **MACA Interquip has recently been appointed to complete feasibility study level metallurgical testwork for both Youanmi underground and open pit resources.**
- **Workflows are being managed by an experienced and high-performance team at MACA Interquip including Mr Damien Krebs who is highly regarded for his skills and experience in the field of metallurgical process development.**
- **MACA Interquip has also been appointed to complete design and costing of a dual-purpose processing plant to scoping level accuracy.**

Western Australian focused gold exploration and development company, Rox Resources Limited ("Rox" or "the Company") (**ASX: RXL**), in conjunction with its joint venture partner Venus Metals Corporation Limited (**ASX: VMC**) is pleased to announce the appointment of MACA Interquip to conduct the next round of metallurgical testwork (to feasibility level) on the Youanmi Deeps and Near Surface Resources, located within the OYG JV area (Rox 70% and Manager, VMC 30%). MACA Interquip have also been engaged to produce scoping level study design and costing for various processing plant options under consideration, with a view to recommend a process to be incorporated into the mine feasibility study.

#### Managing Director Alex Passmore commented:

*"2021 was a successful year with respect to completing scoping level metallurgical testwork on the Youanmi Underground (Deeps) Resource (ASX release 6 October 2021, and ASX release 23 December 2021) proving that the Youanmi sulphide mineralisation can achieve very high extraction rates through various methods. Mine planning has also progressed to a stage where we now understand that free milling pit feed will likely make up 60 to 70 percent of the total feed tonnes allowing larger processing plant options to be considered and reducing the percentage of sulphide material in the total feed. Our plan includes a dual-purpose plant for oxide and sulphide feed material, which is now included in the scope for processing plant design and costing."*

Key understandings from 2021 Deeps Resource metallurgical testwork are presented in Figure 1 below. The testwork provides confidence that a modest portion of gold in mineralisation resides in arsenopyrite, and pyrite minerals. More detailed metallurgical testwork has commenced on various mineralisation domains.



**Figure 1: Pie chart showing approximate gold department proportions for Youanmi underground material (makes up around 30% to 40% of total feed in LOM).**

### Dual-purpose Processing Plant

Conceptual Life of Mine (LOM) mine plans have so far indicated that

- around 60% to 70% of mill feed tonnes in the LOM will be sourced from open pits which are made up of oxide material from which gold can be extracted efficiently via the standard and widely used CIL extraction process.
- the remaining 30% to 40% of mill feed tonnes in the LOM will be sourced from underground sulphide materials which can be simply extracted via use of a conventional flotation circuit producing a gold concentrate achieving Au metal extraction rates of over 91% (refer ASX announcements 6 October 2021 and 23 December 2021)

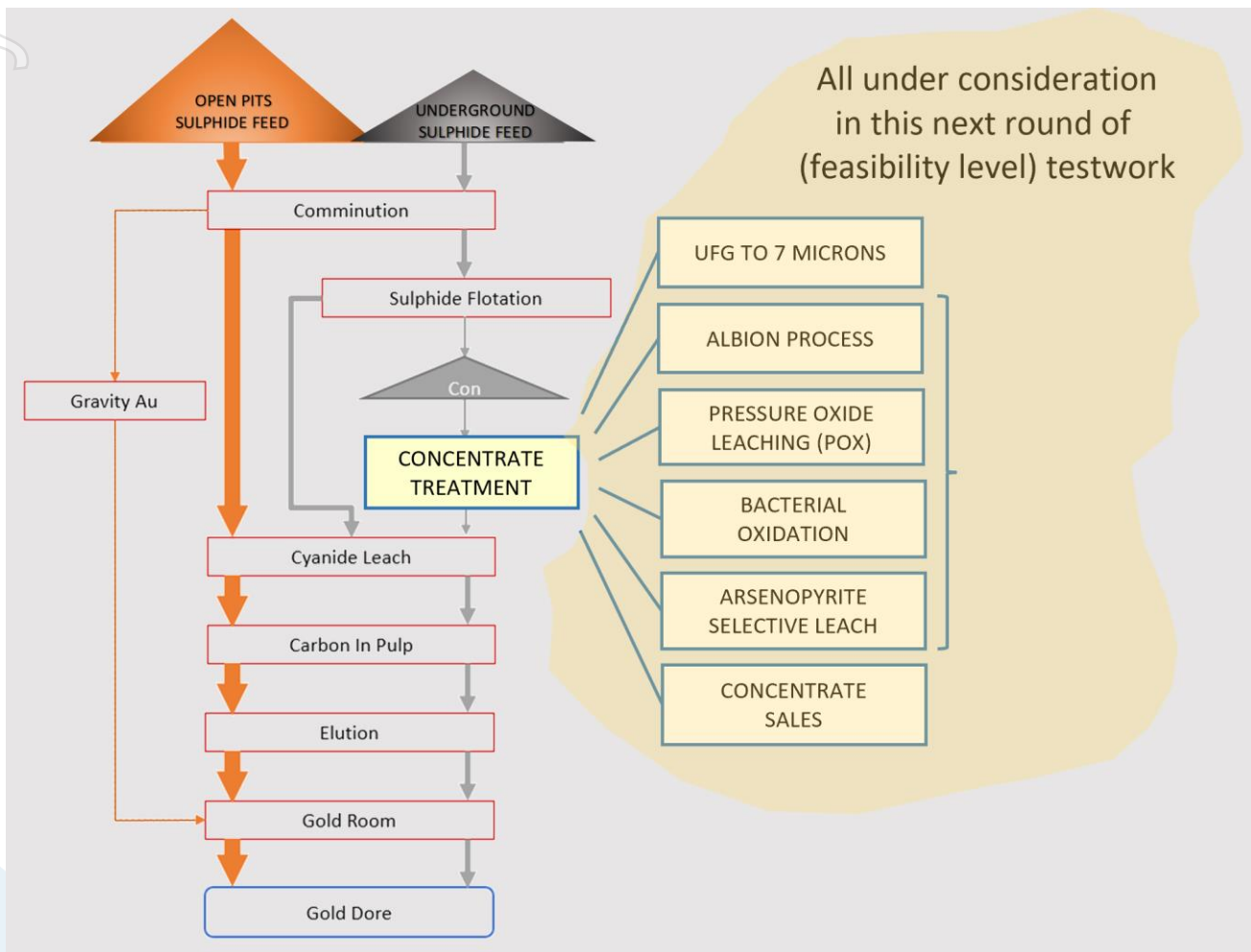
Comp ID	Grind Size P <sub>80</sub>	Mass Pull (%)	Gold		S-total		Tail Grades	
			(g/t)	Rec'y (%)	(%)	Rec'y (%)	Au (g/t)	S (%)
ROM Stockpile	75 µm	15.1	59.9	89.6	21.2	97.9	1.23	0.08
	125 µm	15.7	55.9	87.0	20.5	97.7	1.56	0.09
Upper Hanging Wall	75 µm	14.5	32.8	91.5	25.5	98.2	0.52	0.08
	125 µm	15.6	32.5	90.7	23.9	97.6	0.61	0.11
Upper Main	75 µm	13.2	62.3	93.2	21.7	97.6	0.69	0.08
	125 µm	14.7	55.6	92.4	19.6	97.4	0.78	0.09

**Table 1: Underground Ore Flotation Results Summary showing high recovery to a concentrate. Note the Youanmi concentrate is relatively low in Arsenic content for a gold concentrate at ~ 2% As. <sup>(1)</sup>**

These simple and widely used processes provide the basis for a dual-purpose processing plant flow sheet being adopted in the next phase of scoping level design and costing work. Mineralisation will be campaigned exclusively with either underground or open pit mineralisation. A concentrate will be produced from the underground mineralisation only which will undergo further treatment for gold recovery. The sulphide concentrate treatment circuit will be sized to operate all year round to reduce capital cost and provide operational stability.

(1) Refer ASX announcements released on the ASX 6 October 2021 and 23 December 2021

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**Figure 2: Campaigning of different mineralisation types through a dual purpose process plant design.**

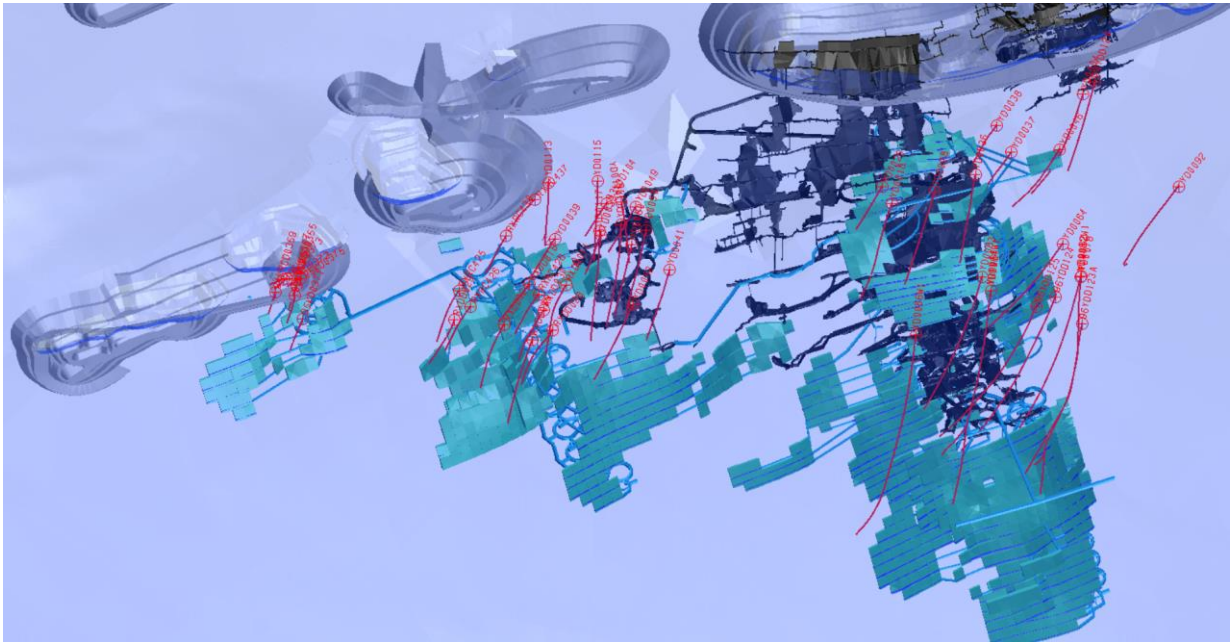
In the underground sulphide part of the flowsheet, which initially makes a gold concentrate, there are several options under consideration which once evaluated to scoping level accuracy will be incorporated into various trade off studies in order to determine the most suitable method based on various constraints applied.

The major cost drivers identified for each process include:

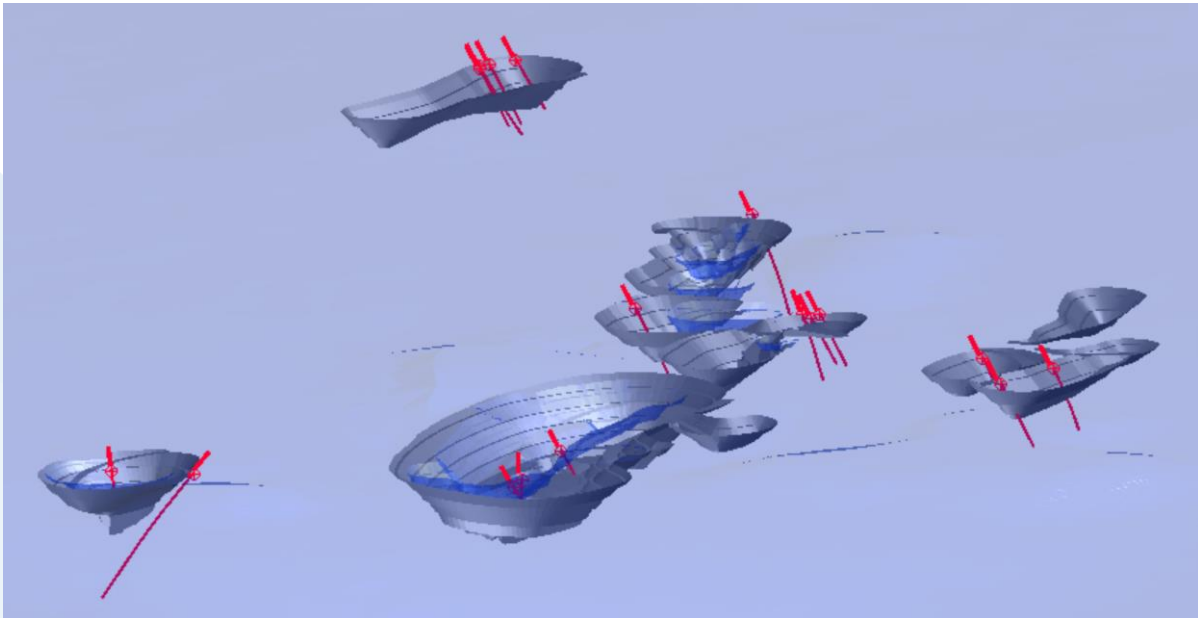
- for pre-treatment - ultra fine grind capex and power costs;
- for oxygen - capex for oxygen plant and electrical power consumption;
- for tankage – capex for tankage and opex for corrosion, agitator power; and
- for Neutralisation – costs driven by degree of sulphur oxidation, and conditioning stage needed for partial oxidation.

Revenue drivers are based mainly on the extent of Au extraction.

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**Figure 3: Three-dimensional view of conceptual first draft pit designs, draft underground mine design, and drill samples used to make up metallurgical samples for next stage of test work (a total of 60 diamond drill holes and 6 RC holes over various domain intervals).**



**Figure 4: Diagram showing conceptual open pit RC and diamond drill holes planned for use in open pit metallurgical testwork overlaid with first draft pit designs.**

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### **Background on Testwork Manager – MACA Interquip**

MACA Interquip has over 25 years' industry experience in construction, and is part of the MACA Limited (MLD) Group. With operations spanning across Australia, and extensive recent experience in gold processing plant refurbishment and construction in WA. Founded in the mid 90's as Interquip Pty Ltd, the company has grown into a multi-disciplined mineral processing provider, and in 2016 a 60% stake was purchased by MACA Limited..

MACA Interquip offers an extensive range of services including fixed plant installation and commissioning, structural, mechanical and piping capabilities, engineering, procurement and construction, tank builds, mining maintenance solutions, process plant upgrades, on and off-site refurbishment services, plant dismantling, relocation and installation, and recommissioning services.

Damien Krebs is leading both the metallurgical testwork studies as well as the scoping level process plant design and costing work to assess the various options. Damien has extensive experience as a study manager and metallurgist in projects with complex metallurgical development requirements, including 9 years with BHP, 2 years with Independent Metallurgical Services in WA, and more recently 12 years with Greenland Minerals and Energy Ltd.

Authorised for release to the ASX by the Board of Rox Resources Limited.

**\*\*\* ENDS \*\*\***

### **For more information:**

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### Competent Person Statements

The information contained in this report relates to information compiled or reviewed by Mr Matthew Antill who is Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM), who is an employee of the company and fairly represents this information. Mr Antill has sufficient experience of relevance to the styles of mineralisation and the types of deposit under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 edition of the "JORC Australian code for reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Antill consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

Where reference is made to previous releases of exploration results in this announcement, the Company confirms that it is not aware of any new information or data that materially affects the information included in those announcements and all material assumptions and technical parameters underpinning the exploration results included in those announcements continue to apply and have not materially changed.

The information in this report that relates to previous Exploration Results are reported under the JORC Code 2012 and has been properly and extensively cross-referenced in the text to the date of the original announcement to the ASX.

### Resource Statements

The information in this report that relates to gold Mineral Resources for the Youanmi Project was reported by the Company to the ASX on 20 January 2022 (JORC 2012). Rox confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 20 January 2022, and that all material assumptions and technical parameters underpinning the estimates in the announcement of 20 January 2022 continue to apply and have not materially changed.

### Cautionary statement and forward-looking statements disclaimer

The Company makes no forecast of whether the Youanmi Gold Project is, or will become, feasible and does not forecast whether it will be developed or mined or whether future production of gold will occur from the Project. The question of whether the Project will be feasible has not yet been determined and will be the subject of a feasibility study of the standard contemplated by the JORC Code. No ore reserves have been estimated at the Project and no forecast is made of whether that will occur. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources (or ore reserves) in relation to that mineralisation.

This announcement contains forward-looking statements. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "is expecting", "budget", "outlook", "scheduled", "target", "estimates", "forecasts", "intends", "anticipates", or "believes", or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might", or "will" be taken, occur or be achieved. Such information is based on assumptions and judgments of the Company regarding future events and results, but which may prove to be incorrect. Readers of this announcement are cautioned that forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, targets, performance or achievements of the Company to be materially different from any future results, targets, performance or achievements expressed or implied by the forward-looking statements.

Forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company. Past performance is not a guide to future performance.

No representation or warranty, express or implied, is made by the Company that the material contained in this announcement will be achieved or prove to be correct. Other than as required by applicable law, the Company accepts no responsibility to update any statements in this announcement.

### About Rox Resources

Rox Resources (ASX:RXL) is a West Australian focused gold exploration and development company. It is 70 per cent owner and operator of the historic Youanmi Gold Project near Mt Magnet, approximately 480 kilometres northeast of Perth, and wholly-owns the Mt Fisher Gold project approximately 140 kilometres southeast of Wiluna. Youanmi has a Total Mineral Resource of 2,994 koz of contained gold, with potential for further expansion with the integration of existing prospects into the Resource and further drilling. Youanmi was a high-grade gold mine and produced 667,000oz of gold (at 5.47 g/t Au) before it closed in 1997. Youanmi is classified as a disturbed site and is on existing mining leases which has significant existing infrastructure to support a return to mining operations.