

# **Quarterly Activities Report**

# For the period ending 30 September 2021

# HIGHLIGHTS

- Continued success from exploration drilling at Youanmi Gold Project
- Aircore drilling program commenced at Youanmi Regional Joint Ventures
- Early settlement of remaining proceeds from 2017 sale of Reward Zinc-Lead Project
- Successful demerger of nickel assets into Cannon Resources

West Australian focused gold exploration and development company ("**Rox**" or "the Company") (ASX: RXL), is pleased to present its quarterly activities report for the period ending 30 September 2021.

Rox continued its extensive drilling campaign at the Youanmi Gold Project during the quarter, with the aim of expanding and growing the existing resource.

The Company is progressing a number of internal studies at Youanmi as it reviews opportunities for early mining and the return to production at the historic gold mining centre.

Subsequent to the end of the quarter, Rox released metallurgical testwork (6 October 2021) showing the potential for 95.6% gold extraction at Youanmi, compared with the historical recovery rate of 86.8%.

The testwork is one of a number of development studies underway into potential future production at the Youanmi Gold Project. This preliminary part of the study will establish processing pathways to optimise gold recovery prior to progressing to more extensive and detailed "feasibility study level" metallurgical testwork.

**Managing Director Alex Passmore commented:** *"We are pleased to report on another busy quarter for the Company. During the 3 months to the end of September we successfully launched our nickel spin out Cannon Resources which has since delivered strong returns to shareholders, and we have been prudent in managing our cash levels versus forecast exploration expenditure. Our financial position also benefitted by bringing forward settlement of the deferred component of sales proceeds from the sale of Reward to Teck in 2017.* 



Our investment in exploration at Youanmi, Youanmi Regional and Mount Fisher Gold continues to deliver. Exploration drilling at Youanmi has continued to return strong gold intercepts well-outside defined mineral resource envelopes that has us well-placed for a further resource upgrade. This couples well with the outcomes of recent metallurgical testwork that highlights the potential for a circa 10% increase in gold extraction levels. Continued progress on these fronts emphasizes the strong upside and outlook for Youanmi.

Meanwhile a comprehensive review of the Mt Fisher project has highlighted the potential for a variety of gold mineralisation styles in an underexplored belt that features numerous high grade gold occurrences. We look forward to updating the market on the outlook for Mt Fisher in the coming days."

# Youanmi Gold Project

Ro holds a 70% interest in the OYG Joint Venture and is the manager at the historic Youanmi mining centre. Venus Metals Corporation Limited (ASX:VMC) ("Venus" or "VMC") retains a 30% interest.

The Youanmi Gold Project is located 480km NE of Perth and 400km inland and to the east of Geraldton. The Youanmi Gold Mine, located near the centre of the project tenement package, has historic production of 667,000 ounces of gold grading 5.42g/t from open pit (1987 - 1993) and underground operations. The operation was closed in 1997 when the gold price was approximately \$400 per ounce with the last parcel of ore mined underground at 14.6 g/t Au grade.

The Youanmi Project Mineral Resource Estimate of 18.1Mt at 2.85 g/t Au for 1.7Moz of gold can be categorised into a near surface portion of 14.7Mt at 1.69 g/t Au for 0.8M ounces of gold and the Youanmi deeps of 3.4Mt at 7.9 g/t Au for 0.9M ounces of gold (refer ASX release 23 June 2021). This updated estimate incorporated exploration drilling results from 2019 and 2020 and represents an impressive 39% increase in ounces in inventory.

Exploration drilling was conducted at Youanmi during the quarter with a reverse circulation rig, an aircore rig and up to three diamond drill rigs operating at any one time, with the ultimate aim of growing the existing resource. Given the success seen in this exploration, Rox is looking forward to a continuation of strong resource growth rates.

On 8 July 2021, Rox reported assay results for seven holes from the RC program being undertaken at the Link Prospect at Youanmi from holes drilled during the month of May. The Link target area is situated within the Northern Mineralised Envelope that hosts the high-grade United North, Kathleen and Rebel-Kurrajong open pits and Hill End underground mine. At Link, a strongly mineralised North-South trending conjugate structure intersects the NW trending Mine Shear and forms multiple north plunging high-grade ore shoots. The highlights of this round of results included:

 RXRC390: 3m @ 4.42g/t Au from 101m and 5m @ 5.96g/t Au from 138m, including 2m @ 12.9g/t Au from 138m.



On 22 July 2021, Rox reported further assays from the Link Prospect, including from the first diamond hole and two RC holes from resource growth drilling being undertaken. Highlights of this round of results included:

 RXDD018: 6.82m @ 11.98g/t Au from 264m, including 2m @ 37.65g/t Au from 269m and 4.92m @ 6.51g/t Au from 250m.

The results defined a zone of high-grade mineralisation more than 80m from the current resource within close proximity to both the base of historic open pits and in some cases close to existing underground development.

Further assay results were announced on 12 August 2021 for four RC holes and two diamond holes from the drilling program at Youanmi. The highlights of this round of results included:

- RXRC402: 17m @ 5.14g/t Au from 151m, including 11m @ 7g/t Au from 156m; and
- RXRC396: 9m @ 4.57g/t Au from 148m at the Junction prospect.

In early September, a potential new parallel lode was identified at the Youanmi Gold Project. Drilling encountered strongly mineralised intersections in a newly identified structure near the Youanmi mine and up-sequence from the main-lode ore body. The highlights of this round of results included:

- RXDD022: 4m @ 45.5g/t Au from 341m, including 1.33m @ 129.3g/t Au from 341.75m; and
- RXDD024: 16m @ 4.22g/t Au from 56m, including 3m @ 16.4g/t Au from 66m and 3m @ 4.1g/t Au from 203m.

Further exceptional drilling results announced on 9 September 2021 at Link Prospect extended the known high-grade mineralisation with high-grade drill intercepts received from 120m down plunge of the existing resource envelope. Highlights of this round of assays included:

• RXDD026: 7.25m @ 15.02g/t Au from 315.8m, including 2.9m @ 22.37g/t Au from 320.1m;

3

- RXRC410: 12m @ 4.46g/t Au from 184m, including 3m @ 7.73g/t Au from 186m; and
- RXRC409: 7m @ 3.56g/t Au from 234m, including 3m @ 6.45g/t Au from 236m.



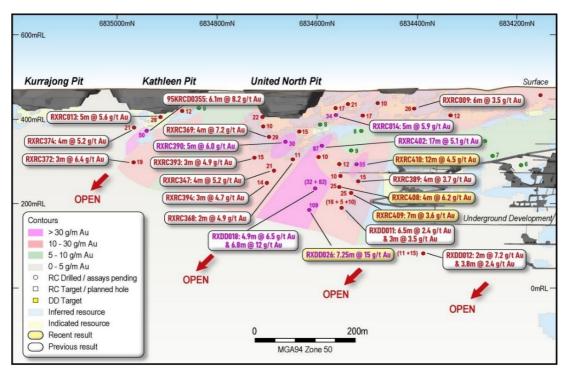


Figure 1: Link target area long section (ASX: 9 September 2021)

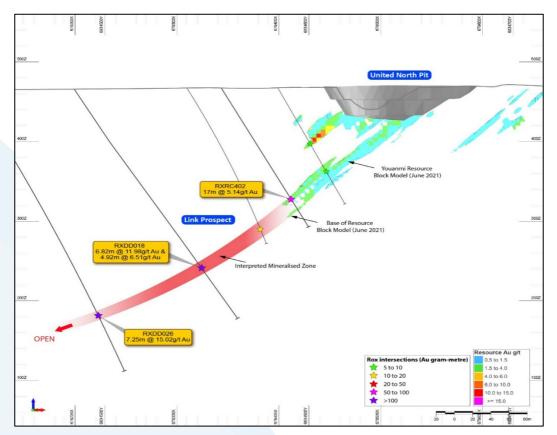


Figure 2: Cross-section through the Link Prospect showing June 2021 resource block model (ASX: 9 September 2021)

4

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Figure 3. View of Youanmi Main Pit looking northwest - RC and diamond drill rigs operating at Junction.

# Youanmi Regional Joint Ventures

Rox and its joint venture partner, Venus, are parties to three joint ventures covering regional exploration at Youanmi.

- 1. The high-grade historic Currans Find Joint Venture located in the centre of the Youanmi Gold Project in which Rox and Venus each hold a 45% interest in all minerals (ASX: 10 April 2019);
- 2. The VMC Joint Venture in which Rox has earned a 50% interest in the gold rights; and
- 3. The Youanmi Joint venture in which Rox has earned a 45% interest in the gold rights.

Rox is the manager of all regional joint ventures.



The Youanmi joint venture tenements cover approximately 80km of strike of the highly prospective Youanmi Shear Zone. The Youanmi Shear Zone is a major state scale feature and is the boundary between the Murchison and Southern Cross Domains of the Youanmi Terrane of the Yilgarn Craton. This major structure is a crustal-scale plumbing system and is likely the first-order fluid pathway for gold mineralisation in the region.

During the quarter Rox announced the commencement of an aircore drilling program which was completed by the end of the quarter, with 424 holes for 22,337m completed, with assays pending for all holes.

The drilling occurred over 4 target areas (Table 1, Figure 4) on the Youanmi Regional Joint Venture tenements. The first phase of drilling tested interpreted west-northwest trending secondary structures, including numerous demagnetised zones and untested helicopter-borne time-domain electromagnetic conductors (HTDEM) (VMC ASX Release 21 February 2018) that may represent sulphide-related gold mineralisation. Drill spacing is planned at 50-80m on 400m spaced lines with average hole depth expected to be 40m (approximating blade refusal). Drilling will penetrate below transported cover sequences to test in situ regolith where historical soil sampling and shallow RAB drilling was ineffective.

Target	Target Type	Description
Area 1	Magnetic/ HTDEM/ Structural	5km section of the Youanmi Shear Zone. The area includes numerous demagnetised zones representing alteration and seven HTDEM conductors associated with major WNW subsidiary structures that may represent sulphide related gold mineralisation.
Area 2	Magnetic/ HTDEM/ Geochemical	9 HTDEM conductors and numerous demagnetised zones associated with multiple WNW structures. Low-level Au anomalism present in historic shallow RAB drilling.
Area 3	Magnetic/ HTDEM/ Structural	8 HTDEM conductors and numerous demagnetised zones within the Penny Shear corridor and subsidiary structures.
Area 4	Structural	Untested granite-greenstone contact and major WNW structure proximal to Penny West.

#### Table 1. Summary of regional aircore targets.



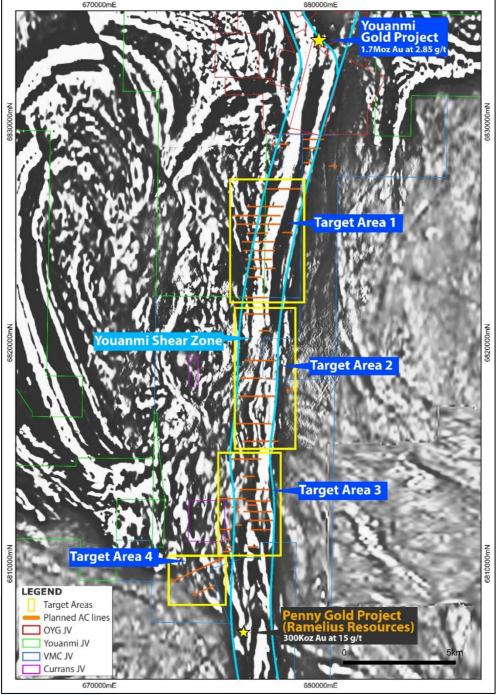


Figure 4. Youanmi regional aeromagnetics (RTP\_1VD), target areas and first pass AC drilling (Orange Lines)

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### Mt Fisher Gold / Mt Eureka Project

The Mt Fisher / Mt Eureka Project is located in the Northern Goldfields, about 500km north of Kalgoorlie (about 120km east of Wiluna).

Rox holds 850km<sup>2</sup> of the Mt Fisher greenstone belt and surrounding prospective zones (Rox 100% 500km<sup>2</sup>) and in the Mt Eureka area through the Cullen Resources Joint Venture, 350km<sup>2</sup> (Rox currently earning up to 75%, Cullen Resources Limited 25%).

The Mt Fisher greenstone belt hosts extensive orogenic gold mineralisation. More recently the belt has been recognised as containing significant komatiite hosted nickel deposits and showing potential for VMS Cu-Zn style deposits.

Following the demerger of the Fisher East Nickel Project Rox has renewed its focus on gold exploration in the belt and has undertaken an extensive project scale review.

During the quarter Rox progressed a broad review of all available data to develop a forward work plan with the aim of generating orogenic gold and VMS targets throughout the project area. Rox expects to announce a full project update with drill ready targets when the review is completed, which is expected within the December 21 quarter.

#### Corporate

During the quarter, Teck Australia Pty Ltd ("Teck") agreed to bring forward a deferred cash settlement due to Rox from the sale of Rox's interest in the Reward Zinc-Lead Project.

Rox completed the sale of its interest in Reward Zinc-Lead Project in February 2017 and as part of the consideration \$3.75m is due to Rox at the earlier of the completion of a Bankable Feasibility Study or 6 years, being 16 February 2023.

Rox and Teck agreed to settle the deferred cash consideration for \$3.1m, payable to Rox by 1 September 2021. The funds were received on 26 August 2021 and will be used to further progress drilling activities and studies into the potential restart of mining at Youanmi.

On 30 September 2021, Rox confirmed the Australian Tax Office would allow demerger tax relief for Australian tax resident Rox shareholders who hold their Rox shares on capital account.

The effect of the ATO Class Ruling is that, in respect of an Australian tax resident Rox shareholder (who holds their Rox shares on capital account) who is eligible for, and chooses, demerger tax relief:

- that Rox shareholder will be able to disregard any capital gain that arises from the capital reduction that occurred in connection with the Demerger; and
- the receipt of Cannon Resources Limited ("Cannon") shares under the Demerger is not an assessable dividend.



# Financial

As at 30 September 2021, the Company's cash balance was \$10.7 million, a decrease of \$1.2m from 30 June 2021. The primary cash movements for the quarter were as follow:

Description	\$m
Teck proceeds	3.1
Repayment of IPO and operating expenses from Cannon Resources	0.7
Exploration and evaluation expenditure (including Investing Activities)	(4.1)
Administration and employee costs	(0.9)
Total	(1.2)

Payments to related parties of the entity and their associates totalled \$0.14 million and consisted of Executive and Non-Executive Director Fees.

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

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

9

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# **Competent Person Statements**

#### **Resource Statements**

The information in this report that relates to gold Mineral Resources for the Youanmi project was reported to the ASX on 23 June 2021 (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 23 June 2021, and that all material assumptions and technical parameters underpinning the estimates in the announcement of 23 June 2021 continue to apply and have not materially changed.

The information in this report that relates to gold Mineral Resources for the Mt Fisher project was reported to the ASX on 11 July 2018 (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 28 March 2018, and that all material assumptions and technical parameters underpinning the estimates in the announcement of 28 March 2018 continue to apply and have not materially changed.

#### **Exploration Results**

The information in this report that relates to previous Exploration Results, was either prepared and first disclosed under the JORC Code 2004 or under the JORC Code 2012 and has been properly and extensively cross-referenced in the text to the date of original announcement to ASX. In the case of the 2004 JORC Code Exploration Results and Mineral Resources, they have not been updated to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.



#### **About Rox Resources**

Rox Resources Limited is an emerging Australian minerals exploration company. The Company has a number of key assets at various levels of development with exposure to gold and copper.

#### Youanmi Gold Project (45% - 70%)

The Youanmi Gold Project is located 480 km to the northeast of Perth, Western Australia. The Youanmi Mining Centre has produced an estimated 667,000 oz of gold (at 5.47 g/t Au) since discovery in 1901 during three main periods: 1908 to 1921, 1937 to 1942, and 1987 to 1997.

The project is situated in the Youanmi Greenstone Belt, within the Southern Cross Province of the Archaean Yilgarn Craton in Western Australia. The structure of the Youanmi Project is dominated by the north-trending Youanmi Fault Zone. Most of the gold mineralisation seen at the project is hosted within north-northwest splays off the north-northeast trending Youanmi Fault.

The Youanmi Gold Project consist of four joint ventures with Venus Metals Corporation Limited. The OYG JV (Rox 70%, all minerals) covers 65km<sup>2</sup> and surrounds the Youanmi Gold Mine and nearby extensions; the VMC JV (Rox 50%, gold rights) lies immediately south of the OYG JV and covers 302km<sup>2</sup> with some 35km of strike the Youanmi shear zone; The Youanmi JV (Rox 45%, gold rights) covers 270km<sup>2</sup> and lies to the south west and north east of the OYG JV and the Currans Find JV (Rox 45%, all minerals) which covers 4km<sup>2</sup> and is located within the Youanmi Greenstone Belt and situated approximately 5 km north-northwest of the historical Penny West gold mine.

#### Mt Fisher Gold Project (100%)

The Mt Fisher / Mt Eureka Project is located in the Northern Goldfields, about 500km north of Kalgoorlie (about 120km east of Wiluna). Rox holds 850km<sup>2</sup> of the Mt Fisher greenstone belt and surrounding prospective zones (Rox 100% 500km<sup>2</sup>) and in the Mt Eureka area via the Cullen Resources JV, 350km<sup>2</sup> (Rox currently earning up to 75%, Cullen Resources Limited 25%).

Drilling by Rox has defined numerous high-grade gold targets and a JORC 2012 Measured, Indicated and Inferred Mineral Resource (ASX:RXL 11 July 2018) of 1.0 million tonnes grading 2.7 g/t Au reported at a 0.8 g/tAu cut-off exists for 89,000 ounces of gold (Measured: 170,000 tonnes grading 4.1 g/t Au, Indicated: 220,000 tonnes grading 2.7 g/t Au, Inferred: 630,000 tonnes grading 2.3 g/t Au) aggregated over the Damsel, Moray Reef and Mt Fisher deposits.

Appendix 1 - Mining Tenements

Project	Interest	Tenement Number	Interest held at beginning of quarter	Interest held at end of quarter
Mt Fisher, WA	All Minerals	E53/1061	100%	100%
	All Minerals	E53/1106	100%	100%
	All Minerals	E53/1836	100%	100%
	All Minerals	E53/1319	100%	100%
	All Minerals	E53/1788	100%	100%
	All Minerals	M53/0009	100%	100%
	All Minerals	M53/0127	100%	100%
	All Minerals	E36/948	100%	100%
	Gold Rights	E53/1218	100%	100%
	All Minerals	E53/2002	100%	100%
	Application	E53/2062	0%	0%
	All Minerals	E53/2075	100%	100%
	All Minerals	E53/2095	100%	100%
	All Minerals	E53/2102	100%	100%
Youanmi Gold Project,	All Minerals	E57/1121	100%	100%
WA	All Minerals	E57/1122	100%	100%
	All Minerals	E57/1123	100%	100%
Youanmi - OYG JV, WA	All Minerals	M57/10	70%	70%
	All Minerals	M57/51	70%	70%
	All Minerals	M57/75	70%	70%
Youanmi - OYG JV, WA	All Minerals	M57/97	70%	70%
	All Minerals	M57/109	70%	70%
	All Minerals	M57/135	70%	70%
	All Minerals	M57/160A	70%	70%
	All Minerals	M57/164	70%	70%
	All Minerals	M/57165	70%	70%
	All Minerals	M57/166	70%	70%
	All Minerals	M57167	70%	70%
Youanmi - Sandstone	Gold Rights	E57/985	45%	45%
Youanmi JV	Gold Rights	E57/986	45%	45%
	Gold Rights	E57/1011-I	45%	45%
	Gold Rights	P57/1365	45%	45%
	Gold Rights	P57/1366	45%	45%

Project	Interest	Tenement Number	Interest held at beginning of quarter	Interest held at end of quarter
Youanmi - VMC JV, WA	Gold Rights	E57/982	50%	50%
	Gold Rights	E57/1018	50%	50%
	Gold Rights	E57/1019	50%	50%
	Gold Rights	E57/1023-I	50%	50%
	Gold Rights	E57/1078	50%	50%
Youanmi - Currans JV,	All Minerals	M57/641	45%	45%
WA	All Minerals	M57/642	45%	45%
Mt Eureka - Cullen JV,	All Minerals	E53/1209	0%	Earning up to 75%
WA	All Minerals	E53/1299	0%	Earning up to 75%
	All Minerals	E53/1637	0%	Earning up to 75%
	All Minerals	E53/1893	0%	Earning up to 75%
	All Minerals	E53/1957	0%	Earning up to 75%
	All Minerals	E53/1958	0%	Earning up to 75%
	All Minerals	E53/1959	0%	Earning up to 75%
	All Minerals	E53/1961	0%	Earning up to 75%
	All Minerals	E53/2052	0%	Earning up to 75%