

# **Quarterly Activities Report**

## for the period ending 30 June 2021

## **HIGHLIGHTS**

- Substantial 39% increase to Youanmi Gold Project Resource to 1.7Moz at 2.85 g/t<sup>(1)</sup>
- Extensional drilling at Youanmi pursuing significant growth
- High grade intercepts at Junction and Link prospects
- Key Executive appointments to accelerate studies into the development of Youanmi
- Cannon Resources demerger and IPO on track
- 1 for 15 Share Consolidation approved

Australian gold and nickel company, Rox Resources Limited ("Rox" or "the Company") (ASX: RXL), is pleased to present its quarterly activities report for the period ending 30 June 2021.

## Youanmi Gold Project

Rox Resources Limited (Rox) 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<sup>1</sup>.

There is significant scope to increase resources with further drilling.

<sup>&</sup>lt;sup>1</sup> Refer ASX announcement 23 June 2021



#### **Mineral Resource Increase**

A significant increase to the mineral resource estimate was announced during the quarter with the following key highlights:

- Youanmi total Mineral Resources increased by 466 koz (+39%) to 1,656 koz of contained gold (Au), with Junction and Link mineralisation to be incorporated into later models;
- Mineral Resource Estimates for both Youanmi Near Surface and Youanmi Deeps Resources
  have realised significant increases with 48,000 metres of combined diamond and RC drilling
  completed and results incorporated into the new estimate. Exploration work is ongoing;
- All in exploration costs for the project since the last published resource (2019) indicates a \$16
  per ounce discovery cost for this addition to the resource, well below industry averages;
- Grace Maiden Resource defined to contain 109koz of contained gold at 7 g/t Au with upside potential remaining;
- Near Surface Resource increased by 50% to 800koz Au in total;
- Deeps Resource shows impressive growth (+30%) to 856koz Au with high grades preserved (7.9g/t Au resource average); and
- Increase in Au metal ounces per vertical metre for Youanmi Deeps over key potential mining depths.

A summary of the Younami Resource 2021 with a comparison to 2018 is provided below:

Youanmi Resources Remaining June 2021					Change in Previously (Widenbar 2018)				
Area	Classification	on Cut-Off	Tonnes	Au Grade	Au Metal	Au Metal	Tonnes	Au Grade	Au Metal
			(dmt)	(g/t)	(oz)	(%)	(dmt)	(g/t)	(oz)
Near Surface	Indicated	0.5 g/t*	7,470,000	1.81	434,000	up 63%	4,720,000	1.76	266,200
Deeps	Indicated	4.0 g/t	1,097,000	8.23	290,200	up 38%	808,000	8.1	210,200
SubTotal	Indicated		8,567,000	2.63	724,200	up 52%	5,528,000	2.68	476,400
Near Surface	Inferred	0.5 g/t*	7,240,000	1.57	366,000	up 37%	5,360,000	1.55	266,500
Deeps	Inferred	4.0 g/t	2,279,000	7.73	566,200	up 26%	1,605,000	8.7	447,700
SubTotal	Inferred		9,519,000	3.05	932,200	up 31%	6,965,000	3.19	714,200
Near Surface	Ind + Inf	0.5 g/t*	14,710,000	1.69	800,000	up 50%	10,070,000	1.65	532,700
Deeps	Ind + Inf	4.0 g/t	3,377,000	7.89	856,300	up 30%	2,413,000	8.48	657,900
Near Surface + Deeps	Ind + Inf		18,087,000	2.85	1,656,300	up 39%	12,483,000	2.97	1,190,600

<sup>\*</sup> Grace 1.5 g/t Cutoff



Figure 1 below shows the increase in tonnes and metal for the combined Youanmi Mineral Resource.

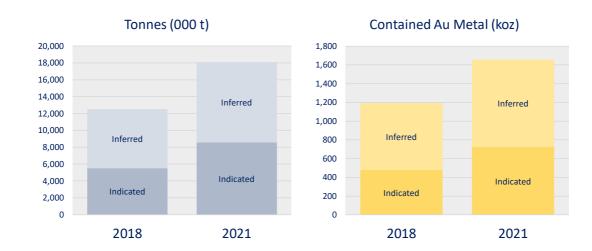


Figure 1

Figure 2 below shows the 3D view of Youanmi deeps resource model and near mine part of the near surface model.

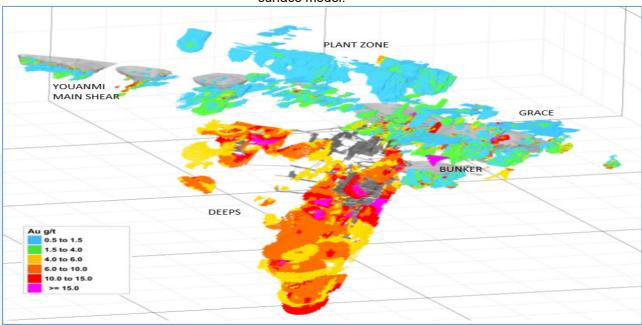


Figure 2



On the back of the recent resource upgrade, the Company has commenced studies into optimal production scenarios at Youanmi. These studies will feed into a detailed feasibility study which is due for completion in the second half of next year. The various studies include metallurgical test work, development of a geo-metallurgical model, processing plant design, pit optimisation, underground mining optimisation, dewatering and geotechnical studies, waste rock characterisation and environmental baseline testing.

In parallel to the feasibility study outlined above, the Company is undertaking an extensive regional exploration program and a drilling program in the near-mine area. Ongoing exploration results will be released to the market as they come to hand.

The Company is highly confident that the resource inventory at Youanmi will continue to grow rapidly as results from this program are incorporated into further resource estimates.

## **Link and Junction Prospects**

Positive drill results for Link received during the quarter have extended the known area of high-grade mineralisation by 100m beneath the historically mined high-grade United North Pit. The highlights of these results were<sup>2</sup>:

- RXRC369: 4m @ 7.2g/t Au from 131m
- RXRC368: 4m @ 2.7g/t Au from 164m
- RXRC365: 1m @ 5.2g/t Au from 220m
- RXRC367: 4m @ 2.2g/t Au from 151m

These results also define a zone of high-grade mineralisation within 150m of existing underground development.

Positive drill results from the Junction prospect which is located over 1km (1,100m) along strike to the south of Link, have extended the known area of high-grade mineralisation at Junction 150m beneath the historically mined high-grade Youanmi Main Pit. The highlights of these results were <sup>3</sup>.

- RXRC380: 4m @ 17.5g/t Au from 259m
- RXRC376: 4m @ 6.1g/t Au from 170m
- RXRC378: 3m @ 8g/t Au from 194m
- RXRC379: 3m @ 7.1g/t Au from 243m at end of hole

<sup>&</sup>lt;sup>2</sup> Refer ASX announcement 19 April 2021

<sup>&</sup>lt;sup>3</sup> Refer ASX announcement 23 April 2021



## **Extensional Drilling**

Drilling at the Youanmi Gold Project continued with an RC drilling rig and diamond drill rigs operating (Figure 3).

The diamond drilling is targeting extensions of high-grade shoots down plunge at Junction and Link and step out drilling will test Rox's exploration model with the aim of identifying recurring NW-plunging ore shoots within SW-plunging mineralised envelopes (Figures 4 and 5). The programme will involve more than 2,000m of diamond coring (in addition to RC pre-collars).

RC drilling continued to delineate and extend known shallow high-grade ore shoots at Junction, Link and Grace.

The Company received promising results from RC drilling conducted at Kathleen Pit and Hill End prospects. Highlights are as follows<sup>4</sup>:

RXRC372: 3m @ 6.4g/t Au from 183m (Kathleen)

RXRC374: 4m @ 5.2g/t Au from 104m (Kathleen)

and 3m @ 2.8g/t Au from 126m

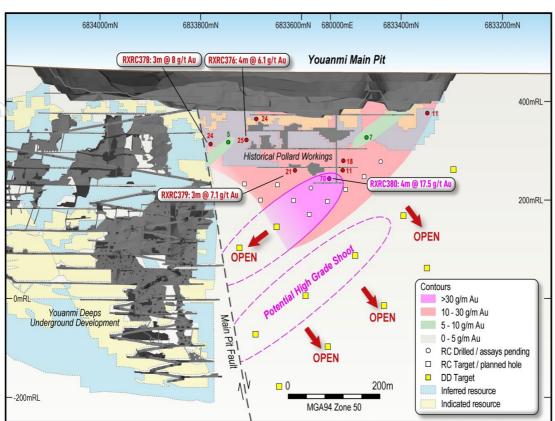
RXRC383: **3m @ 2.4g/t Au** from 209m RXRC384: **1m @ 6.3g/t Au** from 229m



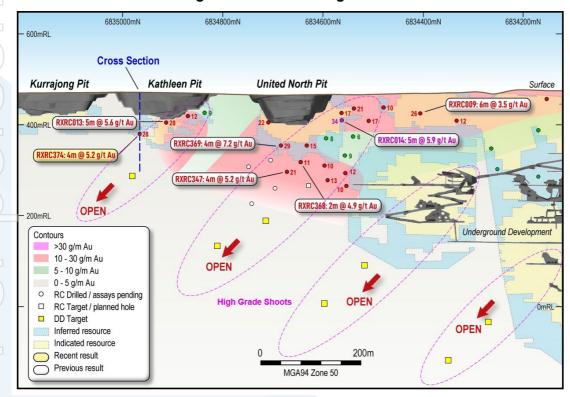
Figure 3

<sup>&</sup>lt;sup>4</sup> Refer ASX announcement 21 June 2021





**Figure 4 Junction Long Section** 



**Figure 5 Link Long Section** 



## 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.

## **Forward Plan**

Having assumed management of the regional joint ventures, Rox is undertaking a comprehensive review of the extensive historical dataset (drilling, geochemical and geophysical) with the aim of identifying target regions of structural complexity that are fluid focusing gold deposition trap sites. Target generation will focus on discovering free milling gold mineralisation analogous to the Penny deposits held by Ramelius Resources Limited which are quartz-sulphide lode veins occurring within greenstone and granitoid intrusive units with associated lead, zinc and copper pathfinder elements.

## 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.



#### **Forward Plan**

Exploration at Mt Eureka is focused on the identification of orogenic gold mineralisation and VMS style mineralisation.

A project scale review in 2020 of historic geochemical and geophysical datasets recognised the potential for VMS mineralisation in Mt Fisher-Mt Eureka greenstone belt including Cu, Zn & Au anomalous VMS style exhalative sulphide mineralisation in historical drilling. Additionally, zones of strong multielement geochemical anomalism in regolith (including Au, Cu, Pb and Zn) were identified in several areas throughout the project.

The direct evidence for VMS style mineralisation highlights the belt's prospectivity for this style of mineralisation. Due to minimal previous VMS exploration across the belt, the entire Mt Fisher-Mt Eureka greenstone belt is considered prospective for VMS mineralisation. VMS targets are analogous to Teutonic Bore, Jaguar and Bentley, which lie within the same geological Terrane as the Mt Fisher greenstone belt.

## **Drilling**

During the quarter Rox completed 387 aircore holes for 9,322m to test several under-explored target areas within the Mt Eureka area.

Drilling was contained within 3 target areas:

- 1. Target Area 1: Red Bluff VMS/Au; 271 holes for 2,811m (Rox tenements)
- 2. Target Area 2: Mt Eureka VMS/Au; 41 holes for 2,339m (Cullen tenements)
- 3. Target Area 3: Mt Eureka Au; 75 holes for 4,172m (Cullen tenements)

## Corporate

During the quarter Rox's Executive team was strengthened with the recruitment of Mr Chris Hunt as Chief Financial Officer and Company Secretary, and Mr Matthew Antill as General Manager Youanmi Operations. Both Mr Hunt and Mr Antill bring a wealth of relevant expertise to Rox Resources and significantly enhance the Executive team, positioning the Company to bring the Youanmi project into production.



The demerger of Cannon Resources Limited, which holds the Fisher East and Collurabbie nickel and base metal assets, has rapidly progressed with the following milestone activities completed during the quarter:

- Timetable confirmed;
- · Board and Management team appointed;
- ASX in-principle approval for listing;
- · Prospectus lodged; and
- Shareholder approval received for items pertaining to the demerger.

The Company's share consolidation (1 for 15) was approved at the General Meeting on 28 June 2021.

## **Financial**

As at 30 June 2021, the Company's cash balance was \$11.9 million. A payment of \$3.1 million is due from Teck Australia by 1 September 2021<sup>5</sup>. In total, the Company's cash and receivables is \$15.0 million as at 30 June 2021. Cash expenditure for the quarter was as follow:

- Exploration and evaluation \$1.6m;
- Administration and employee costs \$0.6m; and
- Demerger expenses \$0.3m.

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 Rox Board.

## For more information:

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ASX CODE: RXL

<sup>&</sup>lt;sup>5</sup> Refer ASX announcement 20 July 2021



Table 1 - Mineral Resources - Youanmi Gold Project, WA (Reported to the ASX on 23 June 2021)

Area	Classification	Cut-off (g/t)	Tonnes (dmt)	Au Grade (g/t)	Au Metal (oz)
Near Surface	Indicated	0.5*	7,470,000	1.81	434,000
Deeps	Indicated	4.0	1,097,000	8.23	290,200
Sub-total			8,567,000	2.63	724,200
Near Surface	Inferred	0.5*	7,240,000	1.57	366,000
Deeps	Inferred	4.0	2,279,000	7.73	566,200
Sub-total			9,519,000	3.05	932,200
Near Surface	Indicated + Inferred	0.5*	14,710,000	1.69	800,000
Deeps	Indicated + Inferred	4.0	3,377,000	7.89	856,300
Total			18,087,000	2.85	1,656,300

## **Notes**

\* Grace 1.5 g/t cutoff



## **Competent Person Statements**

#### **Resource Statements**

The information in this report that relates to nickel Mineral Resources for the Fisher East project was reported to the ASX on 5 February 2016 (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 5 February 2016, and that all material assumptions and technical parameters underpinning the estimates in the announcement of 5 February 2016 continue to apply and have not materially changed.

The information in this report that relates to nickel Mineral Resources for the Collurabbie project was reported to the ASX on 18 August 2017 (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 18 August 2017, and that all material assumptions and technical parameters underpinning the estimates in the announcement of 18 August 2017 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.

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.

### **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.

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## **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 65km² 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 302km² with some 35km of strike the Youanmi shear zone; The Youanmi JV (Rox 45%, gold rights) covers 270km² and lies to the south west and north east of the OYG JV and the Currans Find JV (Rox 45%, all minerals) which covers 4km² 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 850km² of the Mt Fisher greenstone belt and surrounding prospective zones (Rox 100% 500km²) and in the Mt Eureka area via the Cullen Resources JV, 350km² (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.

## Cannon Resources Limited (100% subsidiary of Rox Resources Limited)

Rox is in the process of demerging its Fisher East and Collurabbie nickel and base metal assets into a new company, Cannon Resources Limited ("Cannon"). Rox will retain an 11.4% interest in Cannon upon listing on the ASX. The expected listing date is on or around 10 August 2021.

Both the Fisher East and Collurabbie Projects represent excellent exploration opportunities and Cannon has a sharp focus on delivering value from these assets against a backdrop of strengthening demand and pricing for nickel.

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**ROX RESOURCES LIMITED** 

**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%
Fisher East, WA	All Minerals	E36/948	100%	100%
	All Minerals	E53/1218	100%	100%
	All Minerals	E53/1318	100%	100%
	All Minerals	E53/1716	100%	100%
	All Minerals	E531802	100%	100%
	All Minerals	E53/1884	100%	100%
	All Minerals	E53/1885	100%	100%
	All Minerals	E53/1886	100%	100%
	All Minerals	E53/1887	100%	100%
	All Minerals	E53/1950	100%	100%
	All Minerals	E53/2002	100%	100%
	All Minerals	E53/2018	100%	100%
	All Minerals	E53/2075	100%	100%
	Application	E53/2062	0%	0%
	All Minerals	E53/2090	100%	100%
	All Minerals	E53/2095	100%	100%
	All Minerals	E53/2102	100%	100%
Collurabbie, WA	All Minerals	E38/2009	100%	100%
	All Minerals	E38/2912	100%	100%
	All Minerals	E38/3193	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%

Project	Interest	Tenement Number	Interest held at beginning of quarter	Interest held at end of quarter
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%
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%

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