

# ASX Announcement

9 May 2022



## Drilling to Commence at World-Class Angularli Deposit Alligator River Project – Northern Territory

### Key Highlights:

- Existing Inferred Mineral Resource of 0.91Mt at a uranium grade of 1.29% U<sub>3</sub>O<sub>8</sub> (12,900ppm U<sub>3</sub>O<sub>8</sub>) containing 26Mlbs U<sub>3</sub>O<sub>8</sub>
- Angularli is a high-grade deposit hosted in a high-angled shear fault system, analogous to the Cigar Lake (Cameco) and Phoenix (Denison) deposits in the Athabasca Basin, Canada
- The best drill hole intercept to date is 41.5 metres at 2.93% U<sub>3</sub>O<sub>8</sub>, including 22.9m at 4.63% U<sub>3</sub>O<sub>8</sub>
- Multiple parallel shear structures confirmed with uranium mineralisation present and open
- 19 diamond holes planned for a total of 7,200m to test multiple targets

Vimy Resources Limited (ASX:VMY, OTCQB:VMRSF) (Vimy) is pleased to announce that a major resource extension drilling program at its 100%-owned Angularli Project in the Northern Territory will commence in June 2022.

Work completed since the acquisition in 2018 has shown the potential of the Alligator River Project to develop into a Tier 1 global uranium project (see ASX announcements dated [3 September 2018](#) and [16 September 2020](#)). The Company is accelerating its resource extension drilling program at Angularli, following the lifting of access restrictions due to the COVID-19 pandemic.

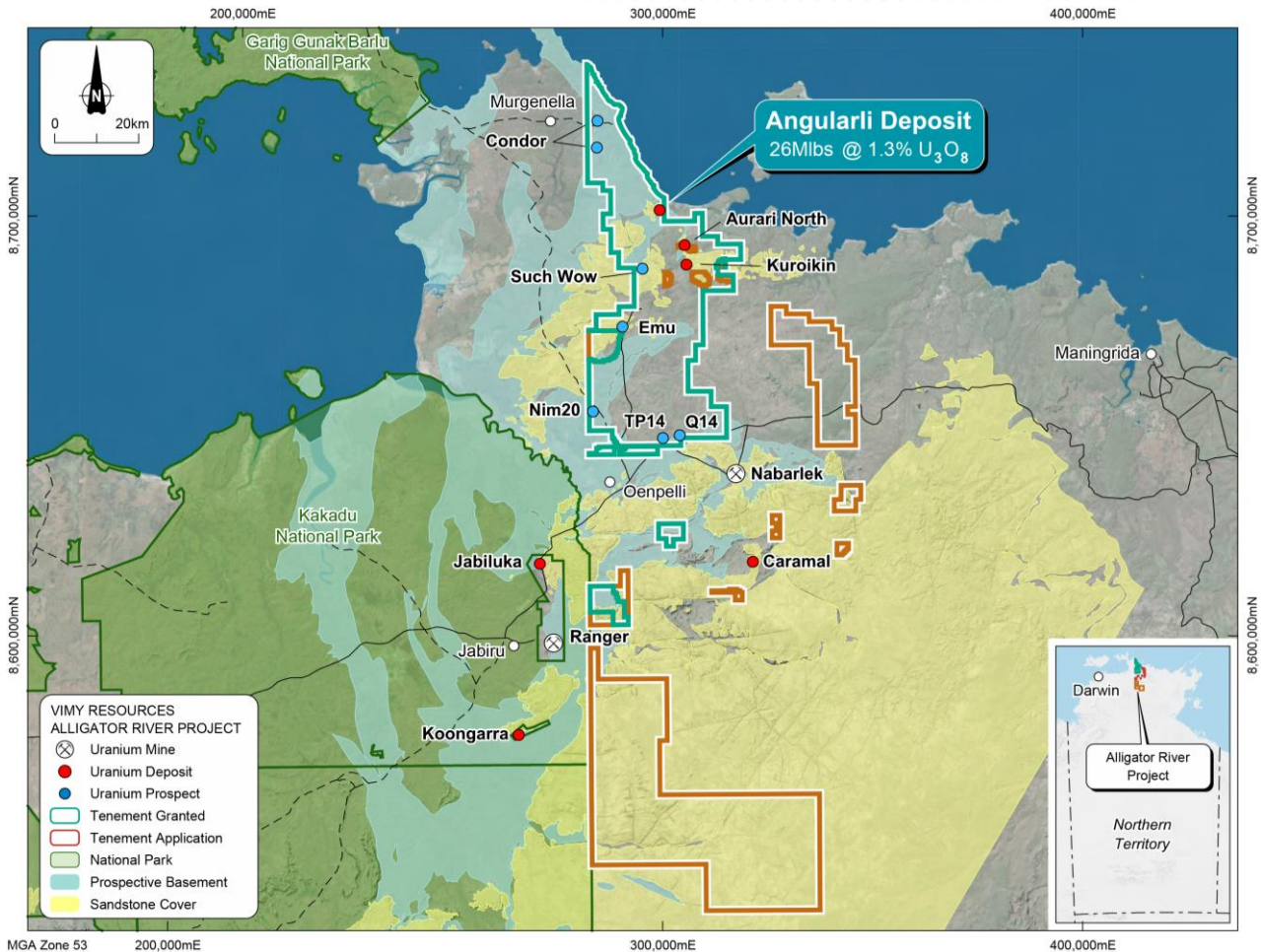
The main Angularli deposit is open at depth and parallel uranium-bearing structures have been identified to the southwest and along strike to the north and south.

In addition to the existing Mineral Resource, Angularli has an Exploration Target of between 20-60Mlbs U<sub>3</sub>O<sub>8</sub> for 1.2-1.8Mt of uranium mineralisation at a grade of 0.75% - 1.5% U<sub>3</sub>O<sub>8</sub> (see ASX announcement of 20 March 2018 - [Maiden Mineral Resource at Angularli Deposit, Alligator River Project](#)). The potential quantity and grade of the Exploration Target are conceptual in nature and important to note that there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Vimy's Managing Director and CEO, Steven Michael, said:

*"Vimy has been focused on achieving key milestones at our flagship Mulga Rock Project in Western Australia. However, with the easing of access restrictions due to COVID 19 at the Alligator River Project in the Northern Territory, we will now commence the first drilling program at the world-class Angularli deposit since 2018. The 19-hole diamond drilling program will target extensions to the existing resource and potential new deposits at Angularli North, South and West."*

*Western Arnhem land is one of the premier uranium addresses in Australia. Our large landholding and the high-grade nature of mineralisation at Angularli make it extremely valuable. We are excited about the potential of this project as, coupled with the results of ore sorting trials in 2020, the economic viability of this project at all reasonable uranium price scenarios now comes into close focus."*



**Figure 1: Vimy's tenure within the Alligator River Province**

### Angularli Uranium Deposit

The Angularli deposit is part of the Alligator River Project, which lies approximately 380km by road east-northeast of Darwin in the Northern Territory of Australia (Figure 1).

Vimy has the largest granted exploration tenure package, 1,701 km<sup>2</sup>, within the Alligator River Uranium Province, and is actively exploring for high-grade unconformity-related uranium deposits similar to those found in the Athabasca Basin. The Alligator River Project has multiple uranium targets with Angularli being the most advanced deposit and the main focus of the Company's exploration effort.

The Angularli deposit is hosted in a high angled shear fault system, which is analogous to the Cigar Lake (Cameco) and Phoenix (Denison) deposits in the Athabasca Basin, Canada. Angularli has an Inferred Mineral Resource estimate of 0.91Mt at a uranium grade of 1.29% U<sub>3</sub>O<sub>8</sub> (12,900ppm U<sub>3</sub>O<sub>8</sub>) containing 26Mlbs U<sub>3</sub>O<sub>8</sub> (see ASX announcement of [20 March 2018](#) and Table 1).

The Mineral Resource Estimate is currently supported by 30 diamond drill holes. The best drill hole intercept to date at Angularli is WRD0084, consisting of 41.5 metres at 2.93% U<sub>3</sub>O<sub>8</sub>, including 22.9m at 4.63% U<sub>3</sub>O<sub>8</sub> (46,300ppm U<sub>3</sub>O<sub>8</sub>) (see Figure 3).



**Table 1: Angularli Mineral Resource Estimate, March 2018<sup>1, 2</sup>**

Deposit / Resource	Classification	Cut-off Grade (% U <sub>3</sub> O <sub>8</sub> )	Tonnes (Mt) <sup>1</sup>	U <sub>3</sub> O <sub>8</sub> (%) <sup>2</sup>	U <sub>3</sub> O <sub>8</sub> (Mlbs)
Angularli	Inferred	0.10	0.95	1.24	26.0
		<b>0.15</b>	<b>0.91</b>	<b>1.29</b>	<b>25.9</b>
		0.20	0.88	1.33	25.8
		0.25	0.77	1.49	25.2

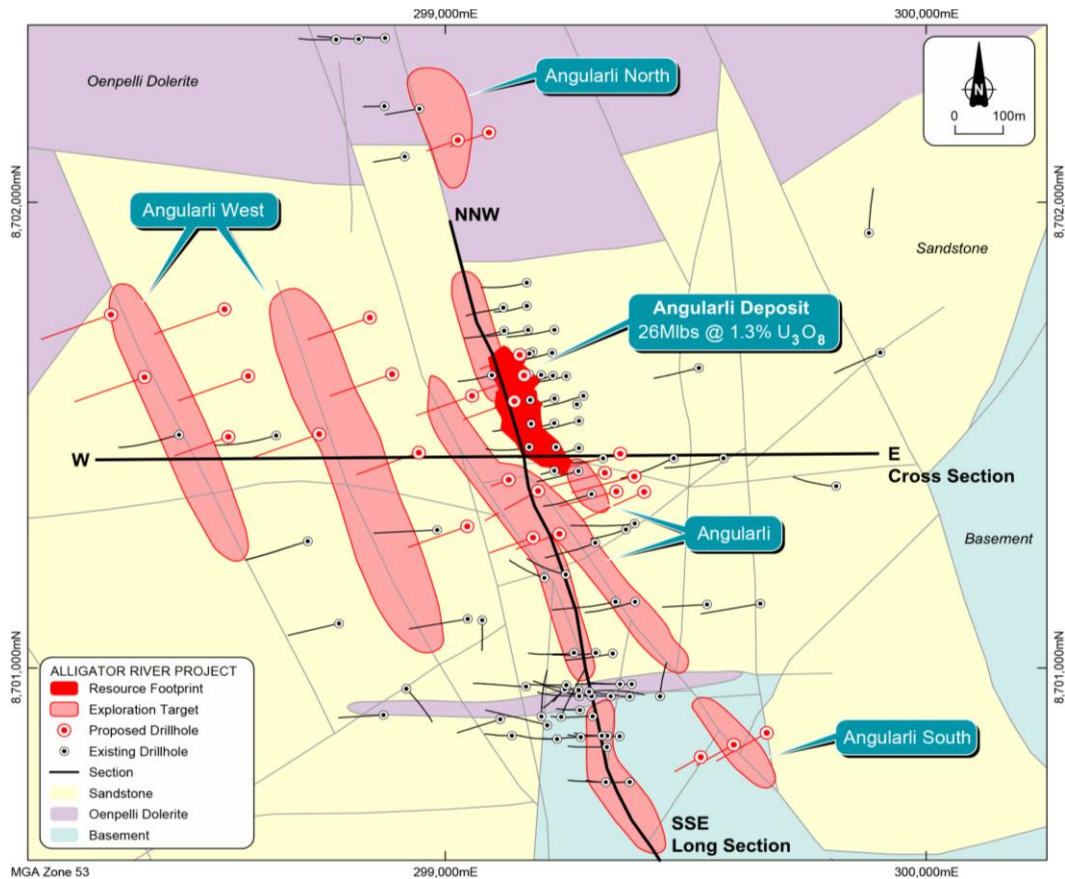
1 t = metric dry tonnes; appropriate rounding has been applied and rounding errors may occur.

2 Using chemical U<sub>3</sub>O<sub>8</sub> composites from drill core.

### Proposed Resource Extension Drilling

The drill program proposed for the 2022 field season will test extensions of the Angularli deposit at depth, up-dip and uranium-bearing structures to the north and west of the defined Mineral Resource. Drilling of 19 diamond holes is proposed with the potential for an additional six holes depending on results. Figure 2 shows the proposed collar locations, summarised below:

- Angularli Up-dip (2 diamond drill holes, average depth of 350m)
- Angularli Deeps (5 diamond drill holes down plunge, average depth of 450-550m)
- Angularli South (3 diamond drill holes, average depth of 300m)
- Angularli West (7 diamond drill holes, average depth of 450m)
- Angularli North (2 diamond drill holes, average depth of 200m)



**Figure 2: Angularli Deposit Collar Map (Depth Slice at -280m RL)**



The Angularli deposit has a number of targets immediately to the south-southeast and west with the deposit still remaining open up-dip and down plunge (Angularli Deeps) as shown in Figure 2. The key diamond drill hole intersections within the existing Angularli Mineral Resource are:

- WRD0084 - 22.9m @ 4.63% (46,300ppm)  $U_3O_8$  from 244.6m,
- WRD0085 - 25.4m @ 1.62% (16,200ppm)  $U_3O_8$  from 235.4m,
- WRD0084 - 12.3m @ 1.10% (11,000ppm)  $U_3O_8$  from 228.0m,
- WRD0097 - 25.4m @ 0.40% (4,000ppm)  $U_3O_8$  from 224.7m,
- WRD0081 - 17.4m @ 0.52% (5,200ppm)  $U_3O_8$  from 209.5m,
- WRD0075 - 11.8m @ 0.73% (7,300ppm)  $U_3O_8$  from 231.0m, and
- WRD0073 - 6.5m @ 1.20% (12,000ppm)  $U_3O_8$  from 208.5m.

A long section of the Angularli deposit is shown in Figure 3 with the proposed targets up-dip and down plunge of the main deposit.

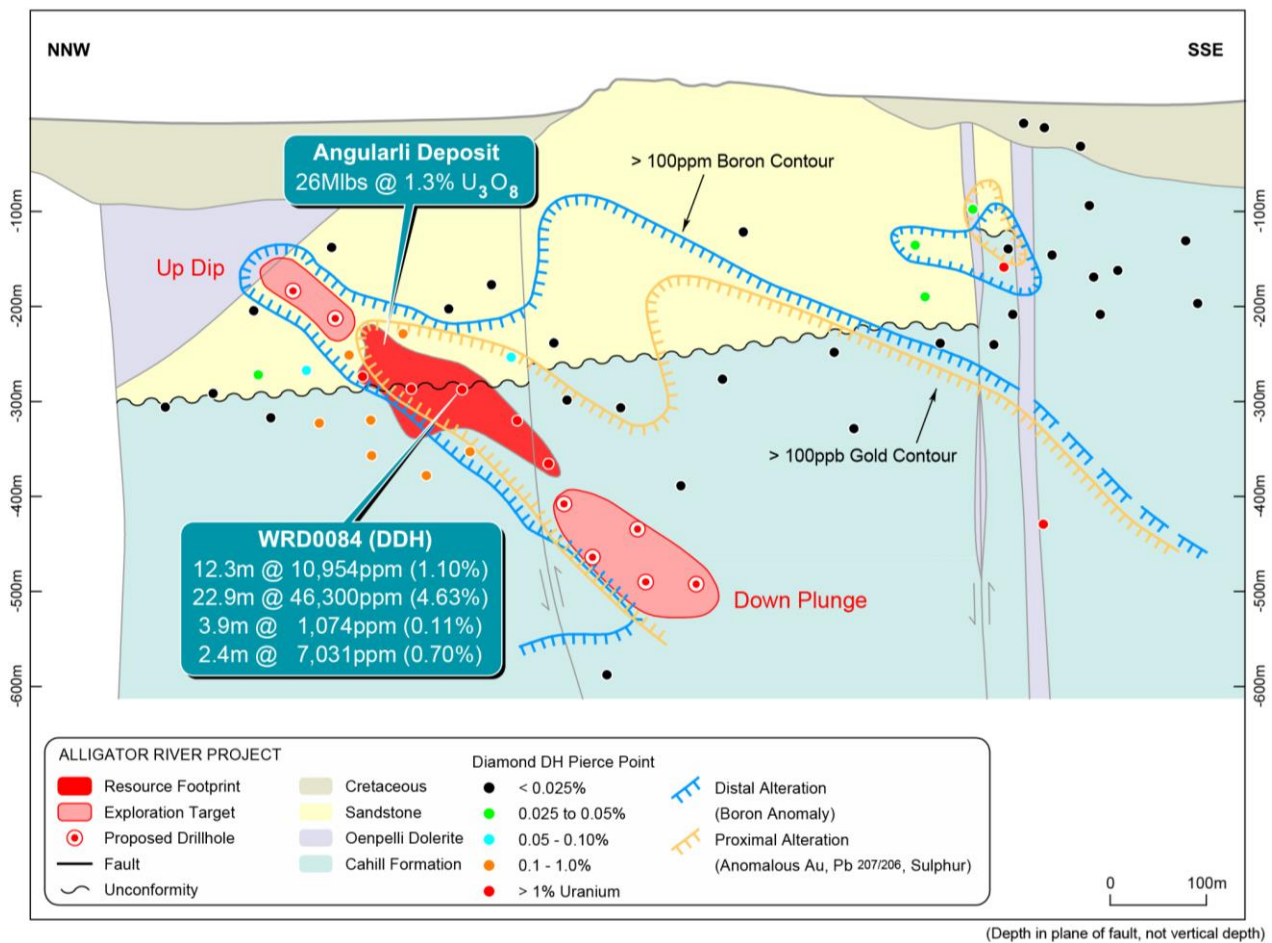


Figure 3: NNW-SSE Long Section of the Angularli Deposit



In 2018, Vimy conducted a wide-spaced reverse circulation drilling program at Angularli focused on a series of newly identified parallel structures to the west of the Angularli deposit (see ASX announcement of [26 November 2018](#)).

Reverse circulation holes ARRC003, -004, -006, -007 and -010 were drilled along three traverses to the west of the Angularli deposit, targeting Angularli West (refer to Figure 4). All of those drill holes intersected significant Angularli-style hydrothermal distal alteration with anomalous uranium mineralisation. Peak uranium grades of 0.16% eU<sub>3</sub>O<sub>8</sub> in hole ARRC004 and 0.10% eU<sub>3</sub>O<sub>8</sub> in hole ARRC006 were obtained at the unconformity. More importantly, ARRC010 displayed very strong proximal alteration and silica flooded breccia at the unconformity, two key features of the main Angularli deposit. Identification of these alteration haloes provided important vectors to unconformity-related uranium mineralisation given the small footprint of these high-grade deposits.

Figure 4 shows a cross-section of the multiple drilling targets at Angularli West and previously mentioned targets immediately adjacent to the Angularli resource. Vimy intends to drill three more traverses along Angularli West to properly test the multiple structures.

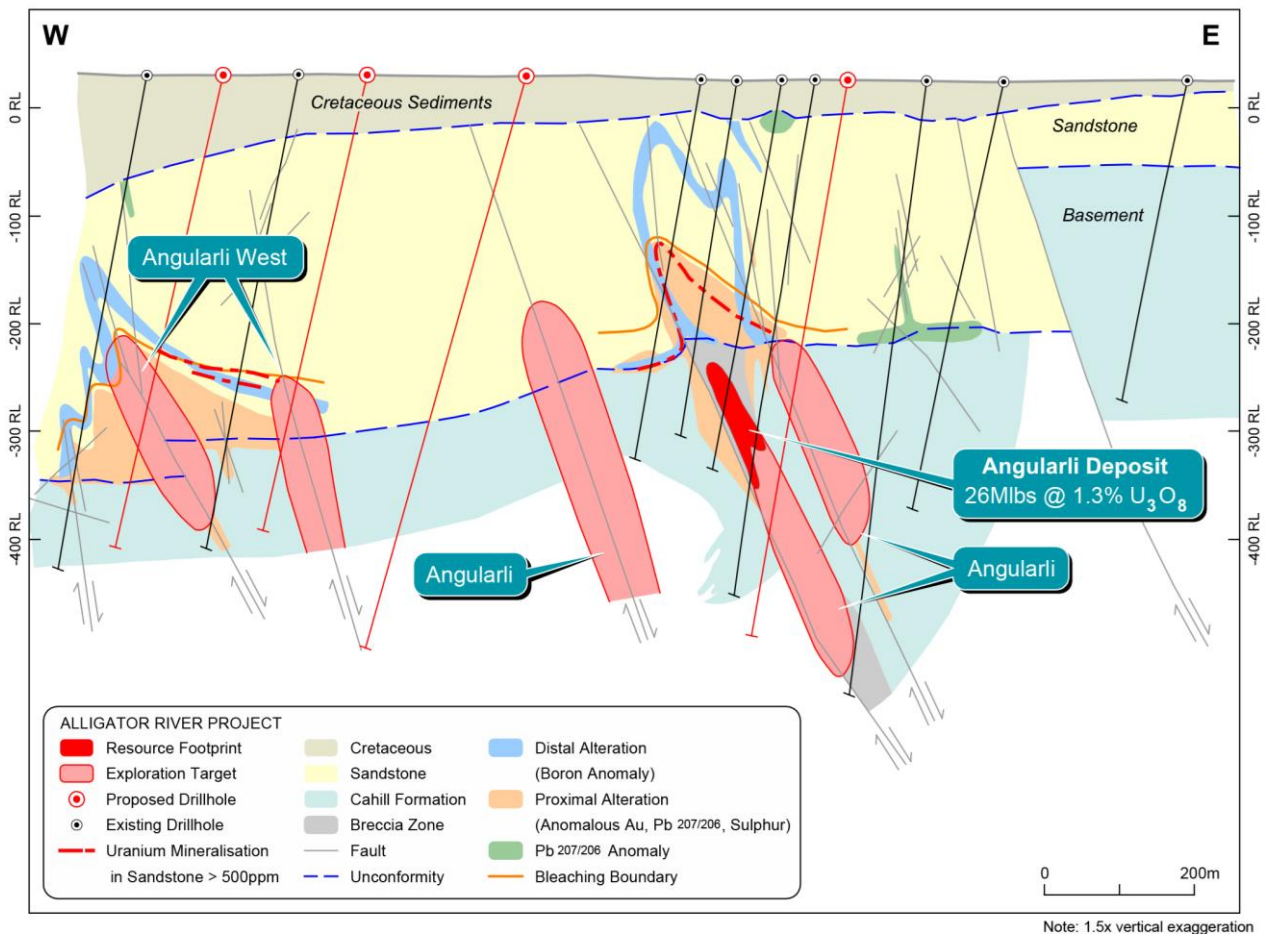


Figure 4: Cross Section of the Angularli Deposit (8,701,500mN)



## Previous Vimy Evaluations

In December 2018, Vimy [released the results of a scoping study](#) based on the Angularli Inferred Mineral Resource which concluded that the operating costs of the Alligator River Project are potentially within the first quartile of the global uranium cost curve.

Mineralisation at Angularli is well understood and comprises predominantly uraninite (UO<sub>2</sub>) within the matrix of brecciated, silica-altered basement and sandstone. Metallurgical testwork to date suggests that the high uranium grade and low impurity content of the ore will result in very high metallurgical recoveries and low reagent consumption, owing to the silica host mineralisation being chemically inert.

Ore sorting trials have demonstrated the potential to realise further operating and capital cost savings, due to the nature of the Angularli style of mineralisation (see further details in Appendix A). Further ore sorting trials will be completed to confirm an appropriate cut-off grade for the resource and an infill drilling program to convert the main resource into Indicated status.

## Next Steps

A diamond drilling contract has been executed and the drill rig is expected to arrive in late May with drilling to commence in early June. Consent from Traditional Owners was gained at prior on-country meetings, and approval of planned activities is covered by the existing Mining Management Plan Authorisation 984-3, issued by the Northern Territory Department of Industry Tourism and Trade (DITT).

Parallel testwork on ore-sorted material is also planned in the latter part of this year, to support a scoping study update for Angularli and justify an infill drilling program to convert the existing Mineral Resource to an Indicated status, as a precursor to a Pre-Feasibility Study.

**Steven Michael**  
**Managing Director and CEO**

Tel: +61 8 9389 2700

Released for and on behalf of the Board of Vimy Resources Limited



### **Compliance Statement**

*The information in relation to the Angularli Deposit Exploration Results (in accordance with ASX listing rule 5.7), Mineral Resource (in accordance with ASX listing rule 5.8) and Exploration Target (in accordance with ASX listing rule 5.7 and Guidance Note 31) that is contained in this announcement is extracted from ASX announcements referenced in this announcement, including the announcement entitled 'Maiden Mineral Resource at Angularli Deposit Alligator River Project' released on 20 March 2018 and available to download from [asx.com.au](http://asx.com.au) ASX:VMY. The Company is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.*

### **Forward-Looking Statements**

*This announcement includes forward-looking statements. These statements relate to the Company's expectations, beliefs, intentions or strategies regarding the future. These statements can be identified by the use of words like "will", "potential", "progress", "aim", "anticipate", "believe", "intend", "estimate", "expect", "may", "plan", "project", "should", "seek" and similar words or expressions containing same.*

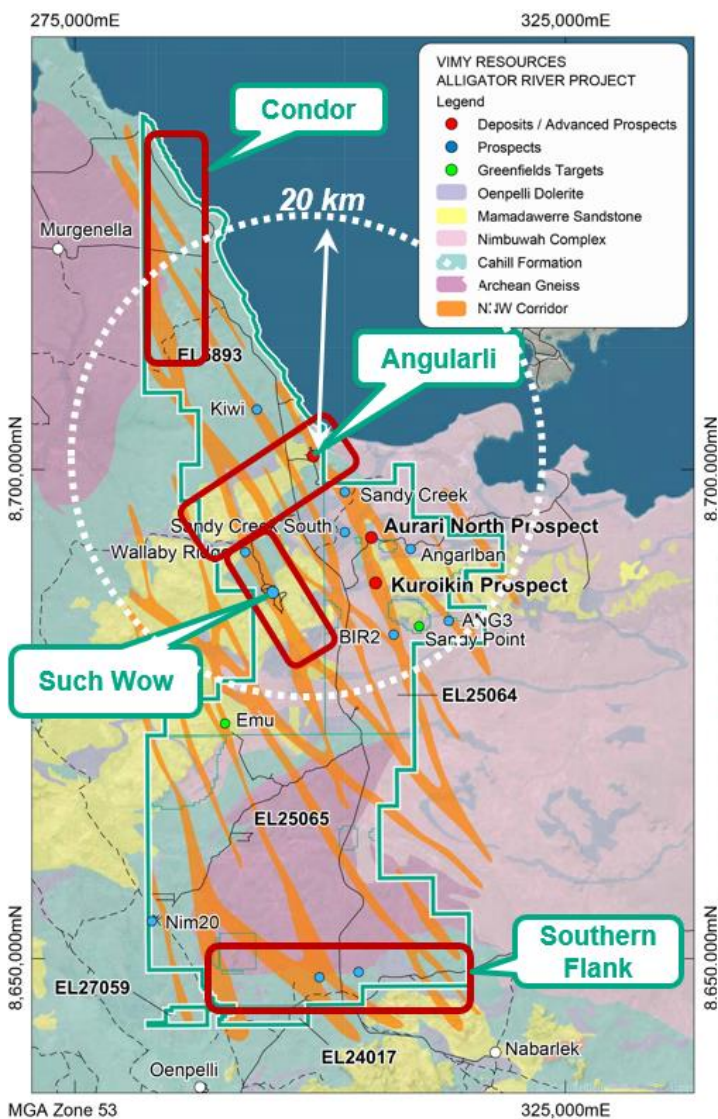
*The forward-looking statements reflect the Company's views and assumptions with respect to future events as of the date of this announcement and are subject to a variety of unpredictable risks, uncertainties, and other unknowns. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, many of which are beyond our ability to control or predict. Given these uncertainties, no one should place undue reliance on any forward-looking statements attributable to the Company, or any of its affiliates or persons acting on its behalf. The Company does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Neither the Company nor any other person, gives any representation, warranty, assurance, nor will guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. To the maximum extent permitted by law, the Company and each of its advisors, affiliates, related bodies corporate, directors, officers, partners, employees and agents disclaim any responsibility for the accuracy or completeness of any forward-looking statements whether as a result of new information, future events or results or otherwise.*



## APPENDIX A – Angularli-Style Uranium Mineralisation

The Angularli deposit is located in the Wellington Range-King River tenement group, which is wholly owned by Vimy.

Uranium mineralisation at Angularli occurs in steeply dipping, brittle fault zones in the basement metamorphic rocks, and which propagate into the overlying sandstone. The basement faults reactivated earlier ductile shear zones which predated the sandstone. The subsequent brittle faulting and brecciation has led to silica flooding and uranium mineralisation in the basement rocks, and swarms of brittle faults with broad clay alteration zones in the overlying sandstones.



**Figure 5: Alligator River Project and key deposits and prospects location map**

Vimy has multiple prospects with similar alteration and uranium anomalism identified. Angularli is currently the main focus of exploration drill activities with continued reconnaissance occurring at the other prospects.

Uranium mineralisation at Angularli is tightly controlled in a zone 100m x 300m with proximal alteration halo extending between 0m and 50m from the mineralised zone. This proximal alteration occurs mainly in the basement rocks but also in the base of the sandstone. The zone is characterised by intense muscovite alteration and minor disseminated pyrite.

A broader distal alteration zone occurs in the sandstone along the brittle structures up to 200m away from mineralisation up dip, and as far as 1,000m away along strike. The sandstone alteration comprises strong bleaching of the hematite sandstone, and boron-rich tourmaline (dravite) alteration.

Where prospective structures propagate through the sandstone to the surface, they occur as swarms of anastomosing and closely spaced fractures and may exhibit bleaching and clay alteration.

The alteration zones, both on surface and in drilling, are very important in exploration in the Alligator River Project as they help to 'zero in' on uranium mineralisation as they present a larger drill target compared to the relatively smaller uranium mineralised zones. Once in an alteration zone, drilling can be more effectively targeted towards the uranium ore zone.



## About Vimy Resources

Vimy Resources Limited (ASX: VMY, OTCQB: VMRSF) is a Perth-based resource development company. Vimy's flagship project is the Mulga Rock Project (100%), one of Australia's largest undeveloped uranium resources, which is located 290km by road ENE of Kalgoorlie in the Great Victoria Desert of Western Australia.

Vimy also owns and operates the largest granted uranium exploration package in the world-class Alligator River uranium district, located in the Northern Territory. Vimy is exploring for large high-grade uranium unconformity deposits identical to those found in the Athabasca Basin in Canada.

Vimy acknowledges the Traditional Custodians of the country on which we work and travel, throughout Australia, and respects their associated connections.

### Directors and Management

The Hon. Cheryl Edwardes AM  
*Non-Executive Chairman*

Wayne Bramwell  
*Non-Executive Director*

Steven Michael  
*Managing Director & CEO*

Dr Tony Chamberlain  
*Executive Director & COO*

Paula Arthur  
*Manager Approvals and ESG*

Shannon Coates  
*Company Secretary*

Scott Hyman  
*Vice President Sales and Marketing*

Xavier Moreau  
*General Manager, Geology and Exploration*

Matthew Owen  
*Chief Financial Officer*

For a comprehensive view of information that has been lodged on the ASX online lodgement system and the Company website, please visit [asx.com.au](http://asx.com.au) and [vimyresources.com.au](http://vimyresources.com.au), respectively.

#### Principal Place of Business

First Floor  
1209 Hay Street  
West Perth WA 6005

Postal Address:  
PO Box 23  
West Perth WA 6872

T: +61 8 9389 2700  
F: +61 8 9389 2722  
E: [info@vimyresources.com.au](mailto:info@vimyresources.com.au)

ABN: 56 120 178 949

#### Share Registry

Automatic Group

T: 1300 288 664 (within Australia)  
+61 2 9698 5414 (outside Australia)  
W: [investor.automic.com.au](http://investor.automic.com.au)  
E: [hello@automicgroup.com.au](mailto:hello@automicgroup.com.au)



### Towards Sustainable Mining<sup>®</sup>

Vimy has adopted an award-winning accountability framework which helps minerals companies evaluate, manage and communicate their sustainability performance.

Adopting the independently verified system will reinforce Vimy's commitment to continuous improvement in safety, environmental and social governance (ESG).

### Committed to:

ESG

The amount of natural uranium produced from Mulga Rock (3.5Mlbs pa U<sub>3</sub>O<sub>8</sub>) if utilised in nuclear reactors which displaced coal-fired electricity would reduce carbon dioxide equivalent emissions by approximately

**64 million tonnes**



That is equivalent to **about 12%** of Australia's and **70%** of Western Australia's greenhouse gas emissions