



**Podium Minerals Limited**

ABN: 84 009 200 079

ASX Ord Shares: POD

ASX Options: PODO

**Chief Executive Officer**

Tom Stynes

**Directors**

Clayton Dodd  
Non-Executive Chairman

Russell Thomson  
Executive Director & CFO

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## ASX Announcement

31 October 2019

### Quarterly Activities Report for the period ending 30 September 2019

The Board of Podium Minerals Limited ('Podium' or the 'Company') is pleased to provide the following report for the September quarter.

**Highlights:**

- Substantial 3,000m drilling programme commenced at Parks Reef comprising:
  - resource extension drilling to increase the current Inferred Mineral Resources containing 740,000 ounces of combined platinum palladium and gold plus base metal credits;
  - wide spaced step-out drilling to provide further confidence in the continuity of mineralisation and a foundation for the continued resource expansion; and
  - exploration drilling is targeting potential parallel reef structures.
- Drilling programme underway is the first step of 9,000m to 10,000m of staged drilling designed to extend the near surface resource drilling along the full 15km strike length of Parks Reef
- Two alternative leach processes identified to treat the near surface oxide mineralisation in Parks Reef with:
  - high and rapid extraction rates achieved by both processes with testwork achieving up to 96% PGM extraction;
  - both processes undertaken at atmospheric conditions and low to moderate temperatures; and
  - potential for a low capital intensity development with commonly available reagents in a tank or vat leach process.
- Completion of a rights issue and subsequent share placement has raised a total of approximately \$2m before costs, with Podium well funded to aggressively advance the planned drilling and resource definition programmes.

**Background – Parks Reef Resource Development Activity**

Parks Reef comprises an identified 15km long strike length of platinum group metal (PGM) and gold plus base metal mineralisation within the Company's mining leases, located approximately 40km west of the Great Northern Highway midway between Cue and Meekatharra, in the Mid West Region of Western Australia.

Drilling to date by Podium has defined Inferred Mineral Resources for Parks Reef containing 740,000 ounces of combined platinum, palladium and gold plus base metal credits. These resources extend along approximately 4.5km of the identified 15km strike length and within 100m of surface, with the mineralisation open at depth and along strike.

Based on the results of the resource drilling, which demonstrate continuous and thick mineralisation, an Exploration Target has been estimated of 80Mt to 120Mt at 1.2g/t to 1.5g/t 3E PGM containing between 3.1 and 5.8 million ounces of combined platinum, palladium and gold.

The Exploration Target has been estimated within 200m from surface and includes 40Mt to 55Mt at 1.2g/t to 1.5g/t 3E PGM containing between 1.5 and 2.6 million ounces of combined platinum, palladium and gold within 100m from surface as per the basis of the current Mineral Resources.

*Investors are cautioned that the potential quantity and grade of the Exploration Target is conceptual in nature, that there has been insufficient exploration to estimate further Mineral Resources and that it is uncertain if further drilling will result in the determination of Mineral Resources.*

The Mineral Resources and Exploration Target were estimated by Snowden Mining Industry Consultants and reported in accordance with the JORC Code.

## Resource Development Strategy

Podium plans to undertake systematic drilling to test the extent of the Exploration Target and to define a materially significant Mineral Resource.

Approximately 9,000m to 10,000m of staged drilling has been designed along the full strike length of Parks Reef with an objective of delivering Inferred Mineral Resources in-line with the revised Exploration Target within 100m of surface. The drilling programme currently underway comprises the first stage of this planned drilling.

## Q4-2019 Drilling Programme

Subsequent to the quarter end Podium announced the commencement of the Q4-2019 drilling programme in Parks Reef. The programme includes 3,000m of planned reverse circulation (RC) drilling as shown in Figure 1, comprising:

1. circa 2,200m of resource extension drilling over approximately 2km of strike length; and
2. circa 800m of wide spaced step out drilling to confirm continuity of mineralisation along strike and to identify high potential resource target areas plus exploration holes to test for parallel reef structures.

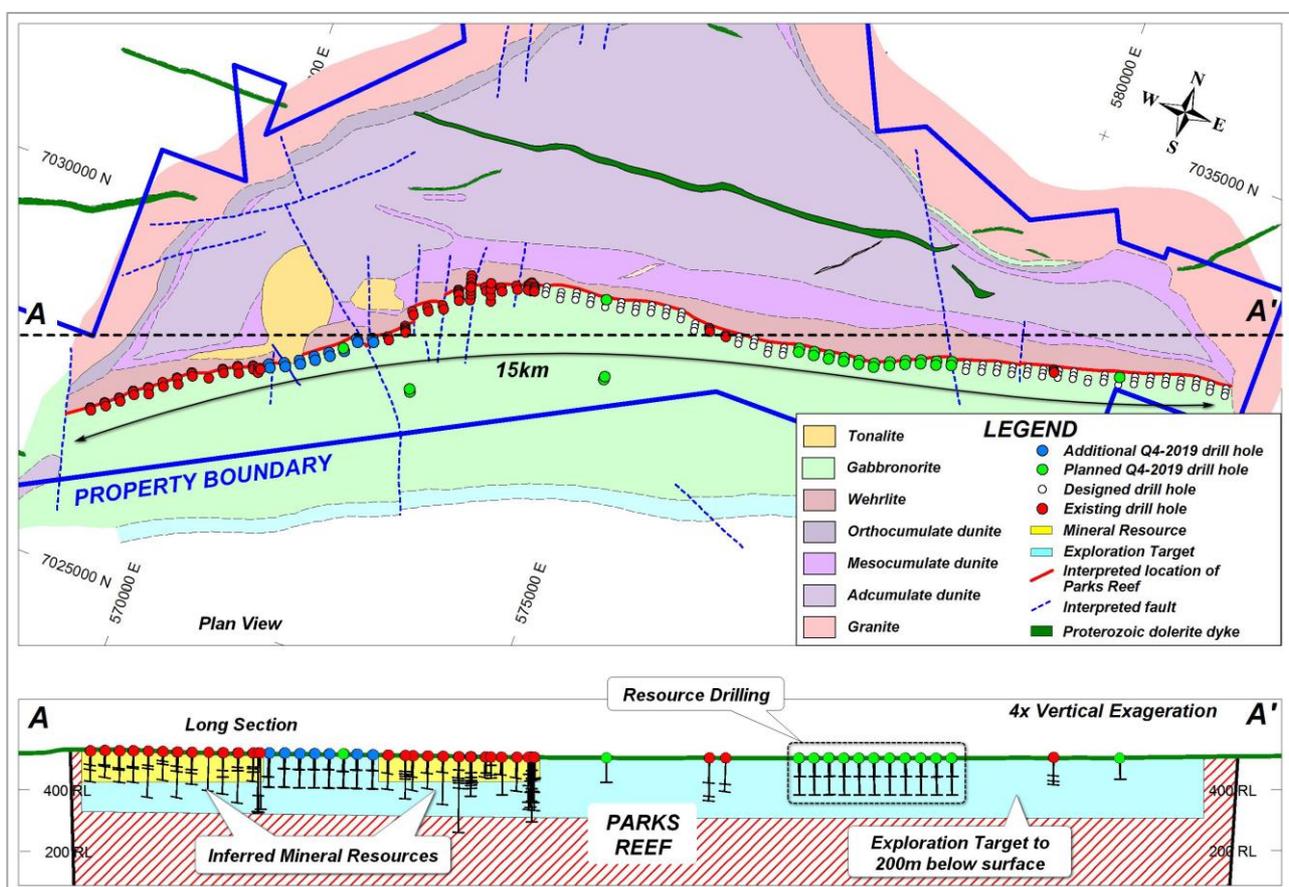


Figure 1 - Parks Reef Q4-2019 drilling programme

The resource drilling is planned in the eastern zone of Parks Reef with an initial objective to increase the Inferred Mineral Resources to above 1 million ounces 3E PGM and which will result in resources being defined in three separate blocks in the western, central and eastern zones. The step out drilling will then provide further confidence in the continuity of mineralisation and a foundation for the continued resource expansion.

Podium then plans to systematically complete the balance of the 9,000m to 10,000m programme of which approximately 1,500m of drilling is required to infill between the western and central resource blocks. Subject to budgets and rig availability Podium is looking to advance this drilling into Q4 2019 which would target a continuous resource block of approximately 6km long. On completion this additional drilling would expand the resources to cover approximately 8km, corresponding to more than 50% of the full strike length.

Exploration drilling is targeting potential parallel reef structures in the mafic zone of the layer intrusion. Other examples of PGM deposits in mafic-ultramafic layered intrusions, such as the Bushveld Complex in South Africa, host multiple parallel reef structures. No drilling has been undertaken below cover in the mafic zone south of Parks Reef. Podium has planned some initial exploration drilling in this region with targets identified from historical surface geochemistry.

For further details regarding the Q4-2019 drilling programme refer to Podium's ASX announcement dated 22 October 2019.

## Metallurgical Testwork

During the period Podium continued to progress metallurgical testwork to investigate the potential for a leach process route with objectives to:

1. maximise metal recoveries from the oxide mineralisation in Parks Reef; and
2. evaluate the potential for production of a high-purity product(s) that may be marketable directly to metal refiners.

Podium has contracted two separate testwork programmes with the Western Australian School of Mines (WASM) at Curtin University and WildIP Ltd (WildIP).

WASM have specialist and directly relevant experience in leaching processes for PGMs, gold and base metals and have been engaged with part funding provided under the Innovation Connections programme by the Australian Government Department of Industry.

WildIP is a process technology group which has developed a proprietary process for the leaching of nickel. The process has shown potential for broader applications and Podium has worked with WildIP to test the process for the PGM mineralisation at Parks Reef.

Subsequent to the quarter end Podium announced the Initial results from the testwork programmes, which both demonstrated processes to leach the payable metals from the oxide mineralisation with high rates of metal extraction and very fast leach times.

The testwork was undertaken on samples collected from the Company's drilling programmes with samples selected with varying levels of oxidation and from the different sub-layers within the reef.

## Western Australian School of Mines

Testwork by WASM led to a sulphuric acid - chloride leach system which demonstrated the ability to rapidly leach the tested samples under atmospheric conditions at temperatures between 70 and 90 degrees C. The testwork has used sulphuric acid (H<sub>2</sub>SO<sub>4</sub>) in saline process water, created with addition of salt (NaCl), and with calcium hypochlorite (pool chlorine) as an oxidant.

It is believed the process could be suitable for either a simple tank leach or vat leach configuration and is considered to have potential for a low capital intensity development with commonly available reagents.

Results of the testwork on a sample from the upper PGM horizon (with elevated gold and copper present with PGMs) at varying leach temperatures and acid additions are shown in the following table after a leach time of only 3 hours. The sample was characterised as moderately oxidised representing an oxide to transitional ore type.

Table 1 - Testwork Results for Sample Number 2

Test Number	Test Conditions		Metal Extraction					
	Temp deg C	H <sub>2</sub> SO <sub>4</sub> kg/t ore	Pt %	Pd %	Au %	3E PGM <sup>1</sup> %	Cu %	Ni %
PDCL41	70	115	25	34	84	36	28	45
PDCL33	70	230	52	40	80	54	51	35
PDCL34	70	460	54	52	88	59	78	57
PDCL39	90	115	41	53	88	51	26	21
PDCL42	90	175	58	56	88	62	46	35
<b>PDCL28</b>	<b>90</b>	<b>230</b>	<b>71</b>	<b>62</b>	<b>86</b>	<b>70</b>	<b>58</b>	<b>42</b>
PDCL40	90	345	81	69	90	80	80	61
PDCL29	90	460	83	79	87	83	88	55

<sup>1</sup> 3E PGM refers to combined platinum (Pt) plus palladium (Pd) plus gold (Au)

Test number PDCL28 (highlighted bold in the table above) has been identified as the initial 'base case' conditions for further optimisation through ongoing testwork. This test achieved 70% 3E PGM extraction with moderate reagent consumptions.

The leach kinetic curves for test PDCL28 are shown below, which indicates that leaching of the PGM and gold is ongoing after 3 hours with potential for higher extractions with an extended leach time. For comparison the typical residence time for cyanide leaching of gold is 24 hours.

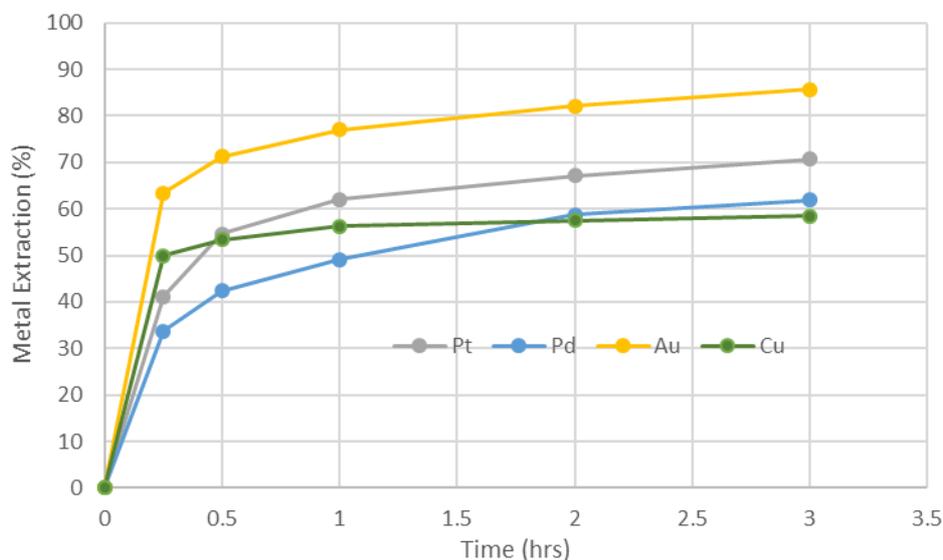


Figure 2 – Leach Kinetic Curves for Test PDCL28

## WildIP Process

The proprietary WildIP process has been developed as a low-cost and environmentally benign leaching process. The process uses ferric chloride in an electrochemical redox ionic substitution process to leach the target metals in a weakly acidified solution at low to moderate temperatures.

An important characteristic of the process is that the reagents are not directly consumed. An acidic environment is created for the process and it is intended that after removal of the payable metals the leach solution can be recharged with acid and recycled.

Initial tests were conducted on a moderately oxidised sample from the upper PGM horizon (sample number 3), which was a sub-sample of the composite drill sample tested by WASM (sample number 2). Varying conditions were trialed which demonstrated the potential of the process. Further tests were then completed on samples number 1 and number 2 under more aggressive conditions.

Sample number 1 corresponds to strongly oxidised mineralisation from the lower PGM horizon. This sample is enriched in platinum and palladium with negligible gold and copper. The test on this sample achieved 96% 3E PGM extraction.

Table 2 - WildIP Testwork Results

Sample	Test Conditions		Metal Extraction					
	Temp deg C	HCl mol/litre	Pt %	Pd %	Au %	3E PGM %	Cu %	Ni %
#3	70	0.1	11	15	100	34	14	12
#3	70	0.2	*12	*41	*77	*31	*24	*26
#3	70	0.4	*36	*41	*77	*47	*37	*36
#3	85	0.5	72	41	15	55	60	53
#3	85	1.0	84	41	15	62	95	87
#2	85	2.0	66	**90	15	64	100	95
#1	85	2.0	100	90	-	96	-	**100

The leach results were achieved within 6 hours for all tests except those indicated as \* were completed over 12 hours and the results indicated as \*\* were after 4 hours.

The leach kinetic curves for the test on sample number 1 is shown below which demonstrates very fast and complete leaching of platinum and with palladium still leaching after the test ended at 6 hours. Higher palladium extractions may have been achieved with a longer leach time.

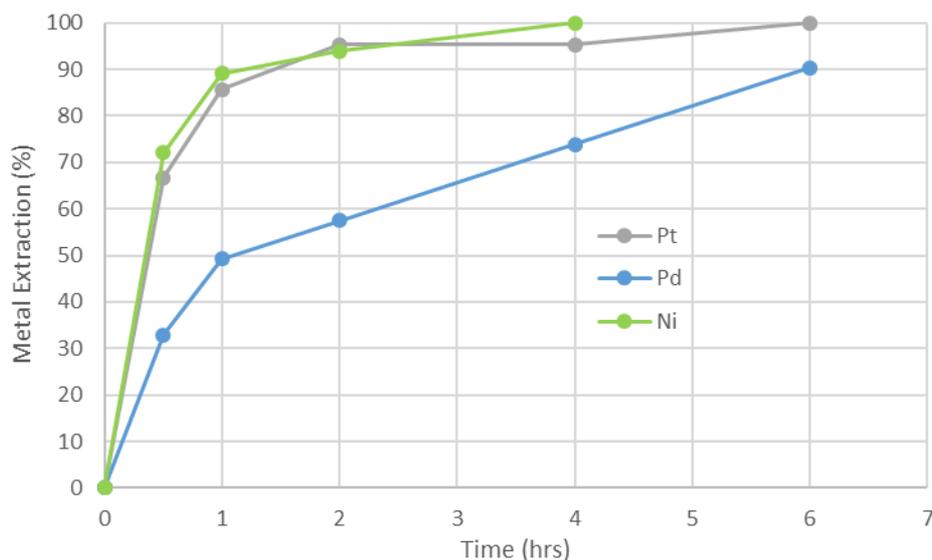


Figure 3 – Leach Kinetic Curves for Sample Number 1

For further details of the metallurgical testwork results refer to Podium’s ASX announcement dated 16 October 2019

### Ongoing Activity and Next Steps

The primary focus of work during the December quarter relates to the substantial drilling programme underway at Parks Reef.

It is anticipated that drilling will be completed before the end of November with drill assays to be processed in batches and results to be released progressively as they become available.

Podium is then aggressively targeting to incorporate the drilling results into a resource upgrade by the end of January 2020 and will keep the market informed as to progress.

Following release of the recent metallurgical testwork, further testwork with both WASM and WildIP is currently in progress. The scheduled work with WASM is to test a sample of highly oxidised material from the lower PGM horizon which is comparable to the sample most successfully tested by WildIP. The ongoing work with WildIP will further test the process under milder conditions to obtain more data of the potential of the process.

Once a full set of results from the scheduled work is received Podium will assess whether to advance further work on one or both of the identified process routes. Podium has commenced discussions with WildIP for the potential to progress further work at an independent commercial laboratory which will allow for more comprehensive testing including the recovery of metals from solution and the ability to recycle the leach solution.

## CORPORATE

### Rights Issue

During the quarter Podium completed a 2 for 3 renounceable pro-rata offer to eligible shareholders (Rights Issue) pursuant to a prospectus dated 1 August 2019 under which the Company issued 58.2 million new fully paid ordinary shares at 3.0c per share to raise \$1,746,000 before costs.

The Rights Issue was partially underwritten by Patersons Securities Limited to \$1,626,000 who also acted as Lead Manager.

The offers were strongly supported by management with a \$300,000 subscription via related a party of the Company Chairman plus \$75,000 of sub-underwriting provided by the Company's CEO.

For further details regarding the results of the Rights Issue refer to Podium's ASX announcement dated 28 August 2019.

### Share Placement

Subsequent to the quarter end Podium announced that it had received commitments to raise an additional \$250,000 by the placement of approximately 8.3m shares at 3.0c per share (Placement). Combined with the funds raised from the Rights Issue the Company is well funded for its current work programme as it looks to aggressively advance drilling and resource definition.

The Placement was arranged by Patersons Securities Limited with strong support from existing shareholders, including a number of sophisticated investors.

For further details regarding the Placement refer to Podium's ASX announcement dated 25 October 2019.

### Capital Structure

At 30 September 2019 the Company has the following securities on issue:

- 153,864,967 ordinary shares
- 73,105,000 quoted options exercisable at 20c each and expiring on 28 August 2020
- 2,000,000 unquoted options exercisable at 20c and expiring on 21 February 2021
- 9,000,000 performance rights

Note that the above capital structure includes the securities issued under the Rights Issue but does not include the new shares issued under the Placement announced 25 October 2019.

### Cash on Hand

At 30 September 2019 Podium held \$1,088,000 cash on hand. This amount excludes the funds raised under the Placement announced 25 October 2019. Further details can be found in the Appendix 5B released with this announcement.

– ENDS –

For further information, please contact:

#### Podium Minerals Limited

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## Compliance Statement

The information in this announcement which relates to metallurgical testwork results has been extracted from the Company's ASX announcement dated 16 October 2019 which includes further details and supporting JORC Reporting Tables. The Company confirms that it is not aware of any new information or data that materially affects this information.

The information in this announcement which relates to Mineral Resources was first released to ASX on 5 March 2019. The Company confirms it is not aware of any new information or data that materially affects the information included in the original announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimate continue to apply and have not materially changed.

The information in this announcement that relates to the Exploration Target was first released to ASX on 26 March 2019. The Company confirms that it is not aware of any new information that materially affects the information included in the market announcement and that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement. The Company advises that the Exploration Target is based on extrapolation of the Mineral Resource estimates and historical exploration drilling, that the potential quantity and grade of the Exploration Target for Parks Reef is conceptual in nature, that there has been insufficient exploration to estimate further Mineral Resources and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

These announcements are available on the Company's website at: [www.podiumminerals.com.au](http://www.podiumminerals.com.au).

## Inferred Mineral Resources for Parks Reef PGM Horizon

Horizon		Tonnes Mt	Pt g/t	Pd g/t	Au g/t	3E PGM g/t	Cu %	Ni %
PGM - Upper	Oxide	1.4	0.83	0.45	0.27	1.55	0.23	0.11
	Fresh	2.0	0.85	0.43	0.29	1.57	0.20	0.09
	<b>Sub-total</b>	<b>3.4</b>	<b>0.84</b>	<b>0.44</b>	<b>0.28</b>	<b>1.56</b>	<b>0.21</b>	<b>0.10</b>
PGM - Lower	Oxide	6.6	0.73	0.65	0.05	1.42	0.04	0.09
	Fresh	5.4	0.56	0.63	0.04	1.23	0.03	0.08
	<b>Sub-total</b>	<b>12.0</b>	<b>0.65</b>	<b>0.64</b>	<b>0.04</b>	<b>1.33</b>	<b>0.04</b>	<b>0.09</b>
PGM - Surface	Oxide	0.3	0.55	0.59	0.13	1.27	0.06	0.09
	Fresh	-	-	-	-	-	-	-
	<b>Sub-total</b>	<b>0.3</b>	<b>0.55</b>	<b>0.59</b>	<b>0.13</b>	<b>1.27</b>	<b>0.06</b>	<b>0.09</b>
<b>PGM - Total</b>	Oxide	8.3	0.74	0.61	0.09	1.43	0.08	0.09
	Fresh	7.4	0.64	0.58	0.10	1.32	0.08	0.08
	<b>Total</b>	<b>15.7</b>	<b>0.69</b>	<b>0.59</b>	<b>0.10</b>	<b>1.38</b>	<b>0.08</b>	<b>0.09</b>

(i) Note small discrepancies may occur due to rounding

(ii) Cut-off grade of 1g/t 3E PGM; 3E PGM refers to platinum (Pt) plus palladium (Pd) plus gold (Au) expressed in units of g/t

## Inferred Mineral Resources for Parks Reef Base Metal - Gold Horizon

Horizon		Tonnes Mt	Pt g/t	Pd g/t	Au g/t	3E PGM g/t	Cu %	Ni %
Base Metal - Au	Oxide	1.8	0.09	0.08	0.12	0.28	0.24	0.10
	Fresh	2.9	0.05	0.03	0.15	0.23	0.24	0.10
	<b>Total</b>	<b>4.7</b>	<b>0.07</b>	<b>0.05</b>	<b>0.13</b>	<b>0.25</b>	<b>0.24</b>	<b>0.10</b>

(i) Note small discrepancies may occur due to rounding

(ii) Cut-off grade of 0.1% Cu and excluding base-metal and gold mineralisation included within the Parks Reef PGM Horizon Mineral Resource

## Parks Reef Exploration Target

Parks Reef Exploration Target	Tonnage (Mt)		Grade (g/t 3E PGM)		Commodity
	from	to	from	to	
within 100m depth	40	55	1.2	1.5	Pt + Pd + Au
100m to 200m depth	40	65	1.2	1.5	
<b>TOTAL</b>	<b>80</b>	<b>120</b>	<b>1.2</b>	<b>1.5</b>	

## Tenement Schedule

Tenement	Name	Holder (100%)	Size	State	Renewal
M20/246-I	WRC	Podium Minerals Ltd	946.75 ha	WA	25-Oct-34
M51/434-I	WRC	Podium Minerals Ltd	211.35 ha	WA	13-Oct-34
M51/442-I	WRC	Podium Minerals Ltd	852.5 ha	WA	5-Oct-34
M51/443-I	WRC	Podium Minerals Ltd	683.85 ha	WA	13-Oct-34
M51/457-I	WRC	Podium Minerals Ltd	251.4 ha	WA	18-Feb-35
M51/481-I	WRC	Podium Minerals Ltd	786.9 ha	WA	9-Dec-35
M51/498-I	WRC	Podium Minerals Ltd	56.58 ha	WA	7-Mar-36
M51/719-I	WRC	Podium Minerals Ltd	755.8 ha	WA	23-Mar-40
M51/872-I	WRC	Podium Minerals Ltd	910.3 ha	WA	6-Mar-35
M51/873-I	WRC	Podium Minerals Ltd	590.55 ha	WA	6-Mar-35
M51/874-I	WRC	Podium Minerals Ltd	791.85 ha	WA	6-Mar-35
M51/875-I	WRC	Podium Minerals Ltd	671.5 ha	WA	6-Mar-35
M51/876-I	WRC	Podium Minerals Ltd	200.85 ha	WA	6-Mar-35
E20/844-I	Mindoolah	Podium Minerals Ltd	37 blocks	WA	30-Jun-20
E20/845-I	Tuckabianna	Podium Minerals Ltd	2 blocks	WA	11-May-20
E20/876-I	Mindoolah	Podium Minerals Ltd	6 blocks	WA	28-Jul-21
E20/877-I	Mindoolah	Podium Minerals Ltd	1 block	WA	28-Jul-21
E20/928-I	Mindoolah	Podium Minerals Ltd	27 blocks	WA	13-Sep-23
EL26094	Highlander	Podium Minerals Ltd	11 blocks	NT	5-May-20

### Notes:

- The Western Australian tenements are subject to the Mining Rights Deed with Ausinox Pty Ltd under which Ausinox Pty Ltd owns the mining rights for all Oxide Minerals as detailed in the Company's IPO prospectus released to ASX on 27 February 2018 and announcement dated 19 June 2018.