# PODIUM MINERALS LIMITED (ASX: POD)

## *Platinum Project Resource Growth Demands Attention*

June 2022

Recommendation: BUY

| | |
|---|---|
| **PRICE** | **$0.38** |
| **PRICE TARGET** | **$1.00** |

**Mike Harrowell** |Senior Analyst

www.breakawayresearch.com

**Company Information**

| **ASX Code** | **POD** |
|---|---|
| Share Price (24 May 2022) | A$0.38 |
| Ord Shares | 306.4m |
| **Market Cap** | **A$116.4m** |
| Options/Performance Rights | 35.3m |
| **Market Cap (fully diluted)** | **A$129.8m** |
| Cash (31 March 2022) | A$6.0m |
| Debt (31 March 2022) | A$0m |
| **Enterprise Value (undiluted)** | **A$110.4m** |

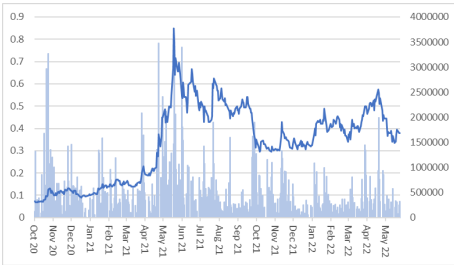
**Directors**

| | |
|---|---|
| Exec Chairman | Clayton Dodd |
| MD and CEO | Sam Rodda |
| Director (Non-Exec) | Roberto Castro |
| Director (Non-Exec) | Cathy Moises |
| Director (Non-Exec) | Rod Baxter |

**Company Details**

| | |
|---|---|
| Address | Level 1, 234 Churchill Ave. Subiaco WA 6008 |
| Phone | +61 (0) 8 9218 8878 |
| Web | www.podiumminerals.com |

**Price Chart**




*Price and volume to 24 May 2022*

**KEY POINTS**

- Podium Minerals Limited (ASX:POD) owns the Parks Reef Platinum Group Metals deposit in Western Australia, with a Resource of 71.9Mt containing 2.8Moz of platinum, palladium and gold (3E) within 15km of strike. The Resource comprises two horizons, a Platinum Group Metals (PGM) Horizon and a Base Metal Horizon.
- Cash and receivables on hand was A$6.0M on 31 March 2022.
- The top 100m of Parks Reef contains 1.98Moz (Table 8) and the orebody has demonstrated consistency and continuity over its 15Km strike. All three deep test holes drilled so far have demonstrated continuity to 500m depth at least, reporting widths and grades consistent with the first 100m. The implication is that there is a good chance that there is over 10Moz PGM to 500m depth with further depth extension likely, putting Parks Reef in the same league as the 10Moz 3E Gonneville discovery of Chalice, and at a higher grade.
- While the company has not commented of the timing of the next Resource upgrade, a September release would fit last year's reporting cycle. The current 2.8Moz Resource plus the likely conversion of a large part of the 2.7-3.8Moz Exploration Target will see a material increase in ounces. That Resource is likely to include Rhodium and Iridium grades for the first time, upgrading the Resource to 5E (3E plus Rhodium and Iridium), upgrading the value per tonne substantially.
- Podium has yet to identify and report on the higher grade regions of Parks Reef, but we would expect this will start to occur over the next 12 months, with potentially significant market impact.
- The news flow over the next twelve months is likely to include:
  - Drilling results below 100m and on the final 800m of strike
  - Rhodium/Iridium will add material revenue to next Resource.
  - Resource upgrade in H2 2022 including the items above
  - More clarity on how the world deals on Russian supply

***Podium Minerals' share price will be driven by Resource addition, de-risking, and PGM prices. The current Podium share price appears to reflect the current 2.5Moz PGM Horizon Resource on Canadian multiples adjusted for grade.***

***Our valuation range is very wide at A$0.60/sh to A$4.82/sh depending Resource addition and on whether Canadian (low) or Australian (High) peer valuations are used. Our central valuation of A$1.00/sh is at the top end of the Canadian based valuation range including Exploration Target, but well below Australian valuations based on Chalice and consistent with Galileo .***

***Breakaway Research has a BUY recommendation on PODIUM MINERALS with a price target of A$1.00/share reflecting our valuation.***

## Central valuation is A$1.00/sh within a range of A$0.60/sh to A$4.82/sh

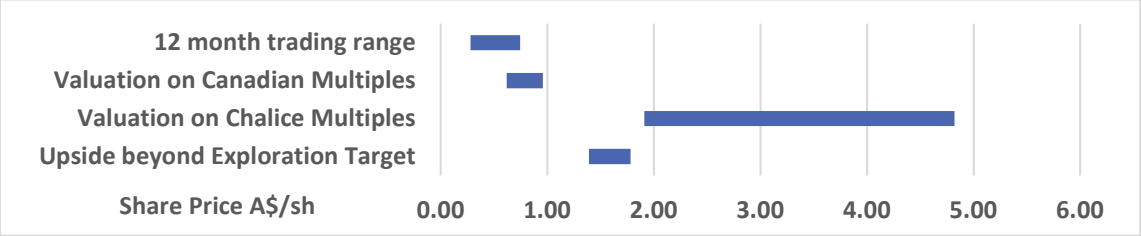
Our valuation is based on the peer valuations. If Platinum Group Metal prices change, all PGM stocks are likely to be affected. In the commodity section, we argue that the bias is likely to be flat to upward prices in a recovering global economy post COVID, and with concern over supply from Russia.

The Podium share price at A$0.38/sh appear to value the existing 2.5Moz Resource in line with the Canadian peers when adjusted for Resource grade (Figure 4).

The valuation of Podium is different if it is based on Canadian rather than Australian peers. The Canadian range is A$0.60/sh to A$1.76/sh, with the low end being based on current Resources plus some part of the Exploration Target (Valuation on Canadian Multiples in Figure 1) and the upper end including a Breakaway estimate of what would be contained in the next 250m of depth below the Exploration Target based on Canadian multiples (Upside Beyond Exploration Target in Figure 1).

The Australian Chalice based range is A$1.91-4.82/sh, and the recent upsurge in the Galileo price suggests a Podium price of A$1.04/sh. Our Podium central value of A$1.00/sh in 12 months' time assumes a 50% increase in the Resource and is a blend of both sets of comparisons.

FIGURE 1 VALUATION RANGE




*Source: Table 1*

TABLE 1 VALUATION RANGES

| | Low | High |
|---|---|---|
| Upside beyond Exploration Target on Canadian Multiples | 1.37 | 1.76 |
| Valuation on Chalice Multiples (2.5Moz to 6.4Moz) | 1.91 | 4.82 |
| Valuation on Canadian Multiples (5.2Moz to 6.4Moz) | 0.60 | 0.94 |
| 12 month trading range | 0.28 | 0.75 |

*Source: Tables 2 and 3*

## A global slowdown due to materials shortages likely to have limited impact on PGMs

There is concern over a global recession as central banks raise rates to fight inflation. While rate rises pose a risk to general equity market valuations, it should be remembered that the current inflation drivers are related to lack of material supplies, reduction in the efficiency of logistics chains requiring all levels of the global economy to hold larger inventories, adding to physical demand, and, for PGM demand particularly, light vehicle production levels artificially depressed by the auto makers losing access to computer chips.

## Chalice implies Podium is worth A$1.91-4.82/sh, Galileo points to A$1.04/sh.

The most relevant peer must be Chalice, being the only other Australian PGM deposit worth comparing Podium to with Resources. However, the comparative metrics of Chalice are substantially higher than nine Canadian peers. On a Chalice based valuation on current Resources, we could generate a price of A$1.91/sh as discussed later in this report, and if Podium were to increase its Resource by the upside Exploration Target to 6.4Moz, that value would increase to A$4.82/sh.

PGM explorer Galileo (ASX:GAL) has announced intersections of 1.26-1.56 g/t 3E which has seen the company's market capitalisation rise to A$318M on 3 June 2022. The company has no reported Resources



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

whereas Podium has 2.5Moz at 1.56g/t 3E in its PGM horizons, so Galileo has a lot of work to do to catch up. If Podium was trading at Galileo's market capitalisation, it would be at A$1.04/sh.

## *Canadian peers multiples suggest a valuation range of A$0.60/sh to A$1.76/sh*

TABLE 2 VALUATION OF PODIUM BASED OF COMPARATIVE ANALYSIS OF CANADIAN PEERS

| PGM Horizons only | Moz | g/t E3 | Lo Value A$/oz | Hi Value A$/oz | Low EV A$M | High EV A$M |
|---|---|---|---|---|---|---|
| Current Resource | 2.54 | 1.56 | 45 | 45 | 113.6 | 113.6 |
| Bottom of Target Range | 5.24 | 1.35 | 35 | | 183.4 | 0.0 |
| Top of Target Range | 6.40 | 1.58 | | 45 | 0.0 | 287.8 |
| Upside beyond Target | 12.00 | | 35 | 45 | 420.0 | 540.0 |
| | | | Market Capitalisation | | | |
| | Cash A$ | Lo A$M | Hi A$M | Lo A$/sh | Hi A$/sh | Shares M |
| Current Resource | 6.0 | 113.6 | 113.6 | 0.37 | 0.37 | 306.7 |
| Bottom of Target Range | 6.0 | 183.4 | 0.0 | **0.60** | | 306.7 |
| Top of Target Range | 6.0 | 0.0 | 287.8 | | **0.94** | 306.7 |
| Upside beyond Target | 6.0 | 420.0 | 540.0 | **1.37** | **1.76** | 306.7 |

*Source: Breakaway estimates – see Figure 4 for EV A$/oz valuations, Table 9 for Resource and exploration target data*

The Canadian peers point to a Podium valuation of A$45/oz of PGM Resource. This is at the top end of the Canadian peer comparisons, but Podium's Parks Reef grade is substantially higher than almost all its peers. In mining, grade is king, and we believe that A$45/oz is a valid reflection of how Parks Reef should be priced to be consistent with the Canadian peers.

## *Upside over next 12 months to be driven by Resource addition.*

The future share price performance of Podium will depend on the size and quality of Resource addition, and our valuation 12 months out is guided by the Exploration Target range for ounces and grade. That target range is down to 250m depth.

Our range assumes the addition of between 2.7Moz and 3.8Moz giving total resources of 5.2Moz to 6.4Moz (Table 9) valued at A$35/oz - A$45/oz and generating our A$0.60/sh - A$0.94/sh range (Table 2).

## *Parks Reef is likely to extend below the 250m limit of the Exploration Target*

Longer term, the recent deep drilling below 250m is demonstrating the deposit continues at depth with good grade and thickness, potentially supportive of low cost bulk underground mining, and we would expect the company will publish a new deep Exploration Target in due course.

In the meantime, we have assumed that the endowment from surface to 250m can be extended to 500m generating the estimated upside beyond the Exploration Target valuations to 12Moz.

Based on the same A$35/oz to A$45/oz grade driven valuation range, we end up with a further upside valuation range of A$1.37/sh to A$1.76/sh.

## *Comparison with Chalice implies that Podium's existing Resource is worth A$1.91/sh*

Chalice's Gonneville discovery has caused considerable excitement in the market, and rightly so. On 9 November 2021, Chalice (ASX:CHN) reported the Resources summarised in Table 2 below, causing the stock's share price to appreciate ~40% and taking the market capitalization to A$3.3 billion at A$10.33/sh in 2021. Since then, the Chalice share price has corrected to A$2.37 billion or A$6.23/sh before the share issue in May 2022.



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

TABLE 3 COMPARISON OF THE RESOURCES OF CHALICE MINING AND PODIUM MINERALS

| | Mt | Grade g/t 3E | Moz 3E | EV A$/oz | Resource Max Depth |
|---|---|---|---|---|---|
| **Chalice** | | | | | |
| Indicated | 150 | 0.94 | 4.53 | | to 280m |
| Inferred | 180 | 0.94 | 5.44 | | to 580m |
| Total | 330 | 0.94 | 9.97 | 230 | |
| High Grade | 74 | 1.8 | 4.27 | 537 | |
| **Podium PGM Horizon** | | | | | |
| Inferred | 51 | 1.56 | 2.54 | 44 | to 250m |

| | Issued Shares M | Moz 3E | EV A$/oz | Value A$M | Value A$/sh |
|---|---|---|---|---|---|
| Podium valuation per Chalice | | | | | |
| Current Resource (PGM Horizons) | 305.4 | 2.54 | 230 | 584.2 | 1.91 |
| Current + High Expln Target | 305.4 | 6.4 | 230 | 1472 | 4.82 |

*Source: POD and CHN Resource and 2A releases. Chalice Enterprise Value is based on 355M shares on issue at A$6.67/sh and cash of A$74M as existed at 24 May 2022*

At first pass, Chalice has 10M ounces of palladium, platinum and gold and has an Enterprise Value of A$230/oz, compared to the Resource in Podium's PGM Horizon of 2.5Moz or A$45/oz. Podium's overall grade of 1.56g/t 3E is substantially better than that of Chalice at 0.94g/t 3E, but the market could be focussed on the large amount of higher grade in the Chalice deposit.

## *STRONG NEWS FLOW LIKELY FROM PODIUM OVER THE NEXT 12 MONTHS*

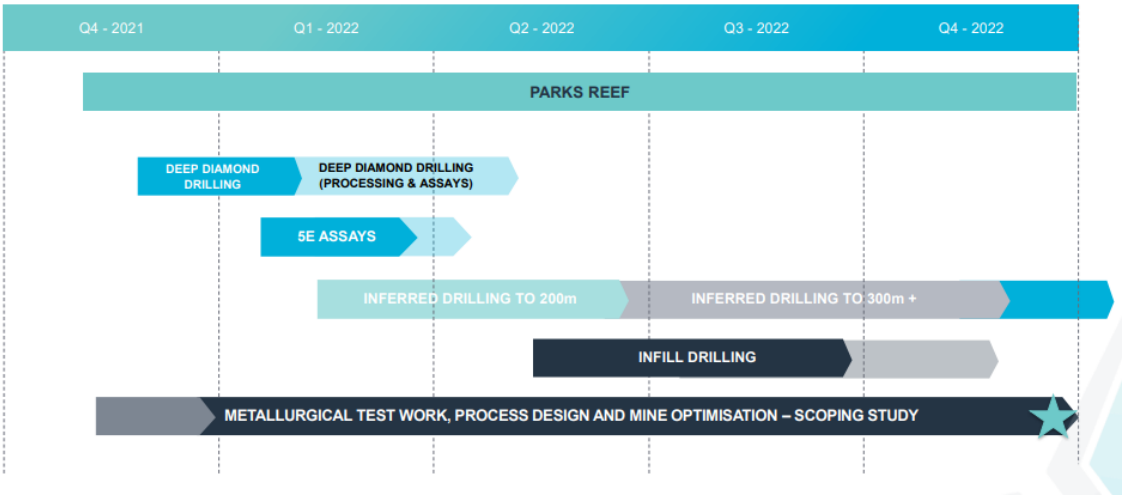
### The greatest value add is likely to be ongoing drilling in general, particularly below 100m

In the Podium IPO prospectus of 2018, the Snowden expert report estimated an Exploration Target for Parks Reef of 25-55Mt at a grade of 1.5-2.0g/t of platinum plus palladium.

In a release on 26 March 2019, the company increased the Exploration Target to 80-120Mt at 1.2-1.5g/t platinum + palladium + gold (ie three elements or 3E) containing 3.1-5.8 Moz. This target assumed 15Km of strike (ie length) and 200m depth, with the width indicated by the range of true widths indicated by drilling at that time.

The current PGM Horizon Resource to between 100m and 250m depth is 50.1Mt at 1.56g/t so the deposit is delivering the expected tonnage and grade has been at the top end of guidance.

FIGURE 2 WORKFLOW AND TIMING




*Source: POD presentation 28 March 2022*

## Higher grades detected in close to surface supergene enrichment zone

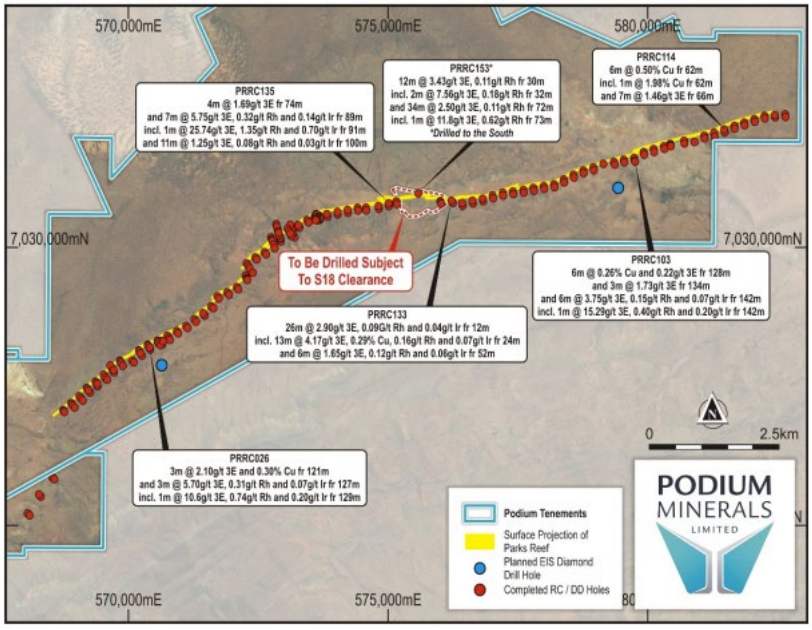
Stand out intersections include:

- 15m at 3.88g/t 3E PGM (2.59g/t Pt, 1.26g/t Pd and 0.03g/t Au) from 17m (PRRC191) including:
    - 2m at 8.34g/t 3E PGM (7.03g/t Pt, 1.30g/t Pd and 0.01g/t Au) from 22m; and
    - 3m at 5.33g/t 3E PGM (3.16g/t Pt, 2.14g/t Pd and 0.03g/t Au) from 26m.
- 27m at 2.23g/t 3E PGM (1.15g/t Pt, 0.99g/t Pd and 0.09g/t Au) from 9m (PRRC197)

Further assays of these intersections are scheduled to test for highly valuable rhodium, iridium, copper and nickel to support the total value proposition of these holes.

### Drilling of remaining 800m of reef in Section 18 zone

FIGURE 3 DRILLING EITHER SIDE OF THE S18 AREA CONTAINS HIGHER THAN AVERAGE GRADES




*Source: POD release 26 October 2021*

Podium has approval to drill the remaining undrilled 800m of the reef on sections 09E, 10E, and 11E shown in the figure below. This zone has the potential to host above average grade within the top 200m and at depth, and 9 holes in the Stage 9 program have been reserved to test this section of the reef.

## *GROSS METAL VALUE AS A TOOL TO MAKE SENSE OF THE PRICING DIFFERENCES*

Podium's grade of 1.56g/t sits between Chalice's overall 0.94g/t and the high grade component at 1.8g/t. Chalice is trading on A$230/oz (total Resource) and A$537/oz (high grade), and we interpret the appropriate value reflecting Podium's grade is A$350/oz in the current market. Podium is likely to report on its high grade zones in due course. Applying A$350/oz value to the current Resource of 2.54Moz generates a Podium value of A$1.15/sh.

Because PGM deposits contain a large number of metals, the only way to see where the value lies is by calculation the Gross Metal Value. Gross Metal Value is not a way of valuing a Resource, because it does not include deductions for mining and metallurgical losses, smelter terms, and capital and operating costs.

However, Gross Metal Value does inform the investor about the quality of the Resource.

Table 4 below shows the reported Resource stocks whose only or major asset is a PGM project.

Chalice's total Resource is not special compared to this group in terms on Gross Metal Value and while its Resource is big, it is not the biggest. Its High Grade Resource is special, with 74Mt at a gross value of



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

A$241/t. Clean Air has a deposit that is more valuable per tonne (A$261/t) but only around 8Mt is likely to be mined by open pit, with the rest being accessed by a much more expensive to operate underground.

Podium has a Gross Metal Value better than any apart from Chalice High Grade and Clean Air, and while the tonnage is towards the lower end, it is big enough to support a project and will likely grow further.

**TABLE 4 GROSS METAL VALUE COMPARISON OF PEERS – IN TOTAL AND SHOWING CONTRIBUTION BY EACH METAL**

| Resources | Mt | Pt g/t | Pd g/t | Au g/t | Rh g/t | Cu | Ni |
|---|---|---|---|---|---|---|---|
| Clean Air Metals Inc | 23 | 1.26 | 1.24 | 0.09 | 0.036 | 0.39% | 0.20% |
| Chalice High Grade | 74 | 0.33 | 1.40 | 0.07 | 0.000 | 0.21% | 0.22% |
| Podium Minerals | 51 | 0.82 | 0.66 | 0.08 | 0.061 | 0.07% | 0.09% |
| Nickel Creek Platinum | 437 | 0.25 | 0.26 | 0.04 | 0.000 | 0.15% | 0.27% |
| Grid Metals | 40 | 0.06 | 0.18 | 0.05 | 0.000 | 0.38% | 0.26% |
| Chalice All Resource | 330 | 0.16 | 0.75 | 0.03 | 0.000 | 0.09% | 0.16% |
| Palladium One Mining | 88 | 0.19 | 0.51 | 0.08 | 0.000 | 0.15% | 0.13% |
| Canadian Palladium | 33 | 0.24 | 0.67 | 0.06 | 0.000 | 0.11% | 0.05% |
| ValOre Metals Corp | 64 | 0.36 | 0.68 | 0.03 | 0.000 | 0.00% | 0.00% |
| Generation Mining Ltd | 279 | 0.17 | 0.51 | 0.07 | 0.000 | 0.21% | 0.00% |
| New Age Metals Inc | 184 | 0.18 | 0.44 | 0.03 | 0.015 | 0.10% | 0.01% |
| PolyMet Mining Corp | 1 | 0.06 | 0.22 | 0.03 | 0.000 | 0.23% | 0.07% |
| Assumptions | AUSUSD | US$/oz | US$/oz | US$/oz | US$/oz | US$/t | US$/t |
| Metal Prices | 0.71 | 954 | 1889 | 1791 | 12521 | 5027 | 27925 |
| Gross Metal Value A$/t | Total | Pt | Pd | Au | Rh | Cu | Ni |
| Clean Air Metals Inc | 294 | 54 | 106 | 7 | 20 | 27 | 79 |
| Chalice High Grade | 241 | 14 | 120 | 5 | 0 | 15 | 87 |
| Podium Minerals | 170 | 35 | 56 | 6 | 35 | 5 | 33 |
| Nickel Creek Platinum | 154 | 11 | 22 | 4 | 0 | 11 | 106 |
| Grid Metals | 151 | 3 | 16 | 4 | 0 | 27 | 102 |
| Chalice All Resource | 145 | 7 | 64 | 2 | 0 | 7 | 65 |
| Palladium One Mining | 119 | 8 | 43 | 7 | 0 | 10 | 50 |
| Canadian Palladium | 98 | 10 | 58 | 5 | 0 | 7 | 18 |
| ValOre Metals Corp | 76 | 16 | 58 | 2 | 0 | 0 | 0 |
| Generation Mining Ltd | 72 | 7 | 44 | 5 | 0 | 15 | 0 |
| New Age Metals Inc | 68 | 8 | 38 | 2 | 8 | 7 | 4 |
| PolyMet Mining Corp | 68 | 3 | 19 | 3 | 0 | 17 | 27 |
| Valuation Split | | | | | | | |
| Clean Air Metals Inc | 100% | 18% | 36% | 2% | 7% | 9% | 27% |
| Chalice High Grade | 100% | 6% | 50% | 2% | 0% | 6% | 36% |
| Podium Minerals | 100% | 20% | 33% | 4% | 20% | 3% | 20% |
| Nickel Creek Platinum | 100% | 7% | 14% | 2% | 0% | 7% | 69% |
| Grid Metals | 100% | 2% | 10% | 3% | 0% | 18% | 67% |
| Chalice All Resource | 100% | 5% | 44% | 2% | 0% | 5% | 45% |
| Palladium One Mining | 100% | 7% | 37% | 6% | 0% | 9% | 42% |
| Canadian Palladium | 100% | 11% | 59% | 5% | 0% | 8% | 18% |
| ValOre Metals Corp | 100% | 20% | 76% | 3% | 0% | 0% | 0% |
| Generation Mining Ltd | 100% | 10% | 61% | 7% | 0% | 21% | 0% |
| New Age Metals Inc | 100% | 12% | 56% | 3% | 12% | 10% | 6% |
| PolyMet Mining Corp | 100% | 4% | 27% | 4% | 0% | 25% | 40% |

*Source: Feasibility study releases for the Canadians, Resource releases for Chalice and Podium (Pt Platinum, Pd Palladium, Rh Rhodium, Au Gold)*

## *Valuation by comparison with Canadian Peers*

### *Canadian Peers trading at Enterprise Values of A$10/oz to A$48/oz Resource*

The Canadian companies generally trade at an Enterprise Value of A$10/oz and A$48/oz of platinum, palladium and gold in Resource.

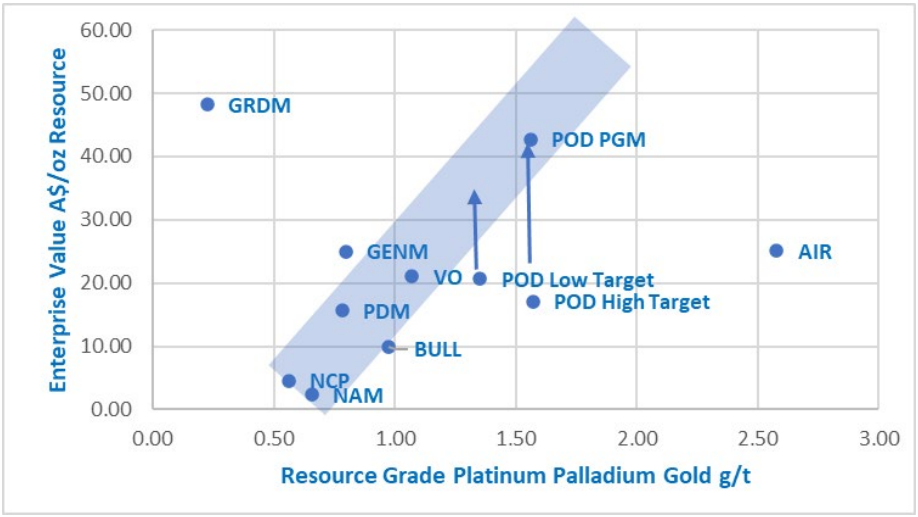
The most significant exception is the Thunder Bay project of Clean Air Metals Inc with a grade of 2.2g/t and Gross Metal Value of A$261/t but a market capitalization of A$25/oz. The Thunder Bay deposit is higher grade but relatively small at 26Mt of Resource, and only ~8Mt is likely to be mined by open pit. Mining a narrow vein underground loses ounces (lower ore recovery) and increases operating costs making the comparison less valid. Podium is dealing with a bulk mining deposit which is likely to be lower cost.

The data show a very strong relationship between Resource grade and the Enterprise Value per ounce of PGMs. The logic is that as the grade rises, the value of each Resource tonne should rise also, and the relationship appears to fall within the upward trending blue zone in Figure 4, which includes all but three of the eight comparisons.

In summary, Podium is currently valued at A$45/oz (Enterprise Value per ounce of existing Resource). It would be consistent with the pricing band (in light blue) if Podium traded up to A$50/oz. If Podium proved up the High Exploration Target 6.4Moz (Resource + Target), it would be currently trading at A$17/oz but should be at up to A$50/oz to be in the blue zone, implying an over 2x increase in Enterprise Value.

In our opinion, the blue zone shows what the market currently deems as the normal relationship between grade and valuation. Grades of between 0.3-0.6g/t have zero value. The cut-off grades in the Canadian peers are generally in the region of 0.35-0.59g/t, which is consistent. The zone rises at the rate of A$48/oz per 1g/t of grade. These valuations are conservative compared to those of Chalice and Galileo.

FIGURE 4 COMPARISON OF PODIUM TO CANADIAN PEERS ON GRADE AND $EV/OZ 3E RESOURCE




*Source: Company websites and releases- POD PGM shows the metrics calculated on the basis of Podium's Resource in the PGM horizon only*

Notionally, the grade sets the value. Any stocks trading below the blue zone are cheap and should be prices at a higher EV/oz (ie move upward to a higher share price). Stocks to the right of the bar are expensive, and should trade lower, all things being equal. The table below also includes the data points for Chalice, which relative to the Canadian comparisons is in a world of its own, at an Enterprise Value of A$230-537/oz compared to the others at A$2-48/oz.

Table 5 above summarises the implied valuations based on comparison with Canadian peers and applies that valuation range to the current Podium Resource and the Exploration Target range (Table 2).



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

TABLE 5 COMPANIES REPRESENTED IN FIGURE 4

| Company Name | ASX or TSX Code | Resource Grade g/t E3 | EV A$/oz Resource |
|---|---|---|---|
| Clean Air Metals Inc | AIR | 2.58 | 25.11 |
| Podium Minerals Ltd | POD - PGM | 1.56 | 42.74 |
| ValOre Metals Corp | VO | 1.07 | 21.08 |
| Canadian Palladium Resources | BULL | 0.97 | 9.98 |
| Generation Mining Limited | GENM | 0.80 | 25.01 |
| Palladium One Mining Inc | PDM | 0.78 | 15.65 |
| New Age Metals Inc | NAM | 0.66 | 2.38 |
| Nickel Creek Platinum Corp | NCP | 0.56 | 4.55 |
| Grid Metals | GRDM | 0.22 | 48.23 |
| Podium Minerals Pty Ltd | Target Low | 1.35 | 20.72 |
| Podium Minerals Pty Ltd | Target High | 1.57 | 17.12 |
| Chalice Mining Ltd | All | 0.94 | 230.18 |
| Chalice Mining Ltd | High Grade | 1.80 | 537.33 |

*Source: Share prices and market capitalizations at 24 May 2022, Resource data from the NI43-101 reports or equivalent published by the companies*

## Impact of market factors on the Podium share price

In the above section, we have valued Podium compared to its Canadian peers. However, those valuations are at a point of time and at current PGM prices. The share prices of the peers will move if PGM prices change significantly. For Podium, there are two factors that will influence on the company's share price:

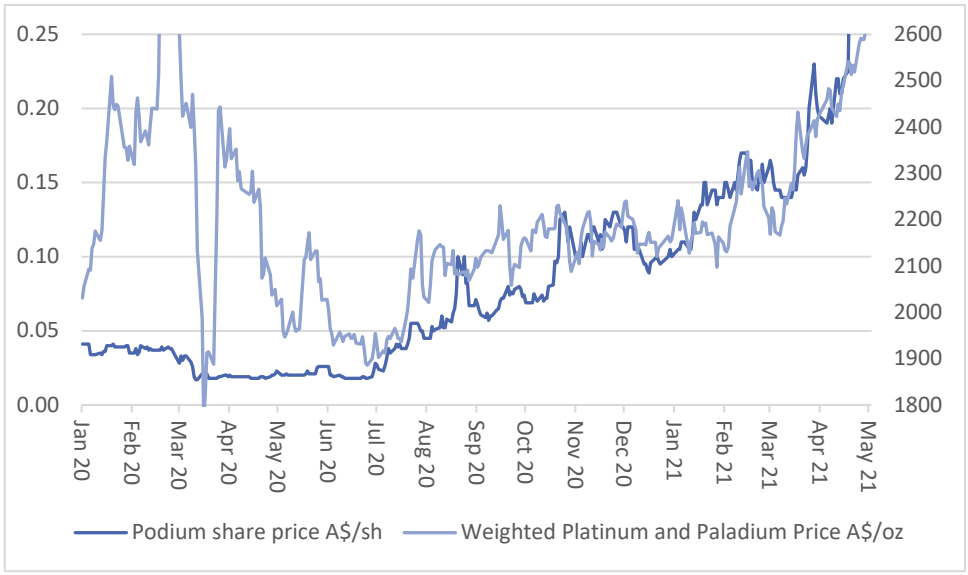
- The movements in the commodity prices
- Re-rating

While the Podium share price does react to the movements in PGM prices, there appears to have been two phases of re-rating where the Podium share price changed its behaviour relative to commodity price movements, and we believe a third re-rating could occur as Podium is "discovered" by a wider audience.

Before June 2020, the company was largely ignored by the market, and did not respond to very large gyrations in the PGM prices. This changed in June 2020, and as the PGM prices recovered from the initial COVID scare, the Podium share price appears to have moved with it. Likely triggers for this re-rating include the February 2020 Resource doubling to over 1Moz PGM creating relevance, and from mid-March 2020, the Chalice share price took off due to its Julimar/Gonneville discovery, which started to focus Australian investor attention on PGM exploration in general, and alternatives to Chalice like Podium in particular.

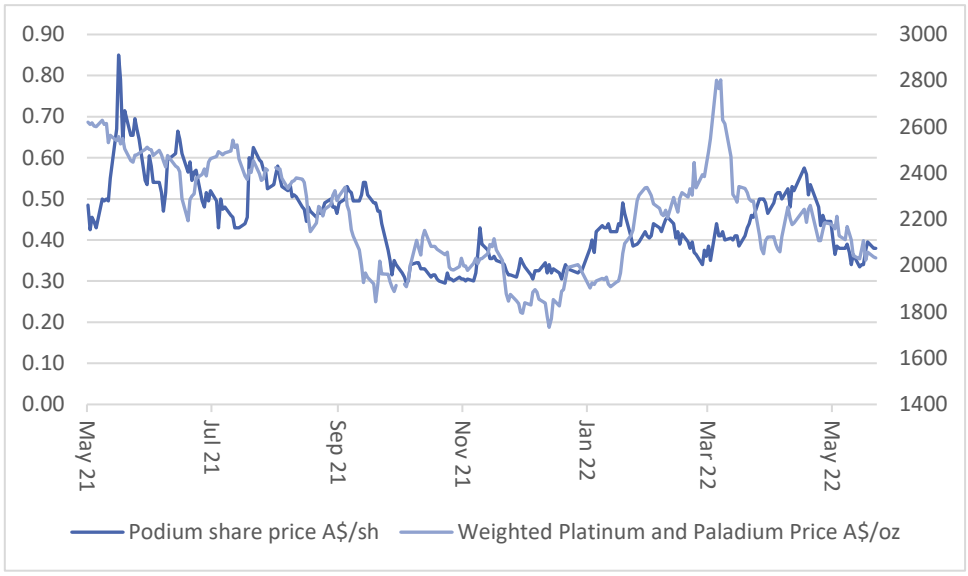
Around April 2021, a second rerating occurred. The result was to lift the company's share price to a level where it is trading more in line with its Canadian peers. The trigger was probably the surge in the prices of palladium and rhodium (see Figure 20), with supply struggling to meet the sudden surge in manufacturing demand as the global economic recovery gathered steam post COVID. The commodity price volatility was probably a factor in attracting investors to the PGM space and to Podium. The April 2021 re-rating took place ahead of the Resource increase in September 2021, but the drilling to April 2021 was clearly indicating the existing Resource would increase substantially.

FIGURE 5 COMPARING THE PODIUM SHARE PRICE TO PRICES OF A PLATINUM PALLADIUM BASKET TO APRIL 2021




*Source: Share price ASX, PGM prices Johnson Matthey*

FIGURE 6 COMPARING THE PODIUM SHARE PRICE TO PRICES OF A PLATINUM PALLADIUM BASKET FROM APRIL 2021




*Source: Share price ASX, PGM prices Johnson Matthey*

**TABLE 6 PODIUM SHARE PRICE HAS MOVED TO A HIGHER TRADING RANGE WITH INCREASED SENSITIVITY TO PGM PRICES**

| | Low | High | Change |
|---|---|---|---|
| PGM Basket Price in A$/oz | 2000 | 2600 | 600 |
| **Share Price A$/sh** | | | |
| Pre Q2 2021 | 0.05 | 0.25 | 0.20 |
| Post Q2 2021 | 0.30 | 0.70 | 0.40 |

*Source: PGM prices from Johnson Matthey, POD share prices from ASX*

The table above summarises the re-rating in the second quarter of 2021, and the change in apparent sensitivity of the Podium share price to changes in the Platinum/Palladium basket.

The price of the PGM basket (weighted to the metal content of Parks Reef) spiked to A$2600/oz in March 2021 but the Podium share price did not return to A$0.70/sh. The March 2021 event was a shorter duration peak than that of May 2020, and there may have been a bigger share price reaction if the high prices had lasted longer. Also there appears to be a seasonal rise in PGM prices in Q2 of each year, and maybe the market is less interested in chasing seasonal price variations.



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

## *LOCATION*

FIGURE 7 PARKS REEF LOCATION


*Source: POD presentation 26 October 2021*

The Parks Reef Project is located 480Km by road northeast of the export port of Geraldton, which has facilities for the export of the project's concentrate production. The nearest gas line is around 130km away at Mt Magnet.

## *OWNERSHIP*

All the tenements covering the Weld Range Complex (WRC) have been granted.

### Current Ownership

Podium has an access agreement with Beebyn Station which covers the eastern portion of the Company's WRC Mining Leases and informal working arrangements with other pastoralists and land owners regarding the western portion of the WRC and other Exploration Licenses.

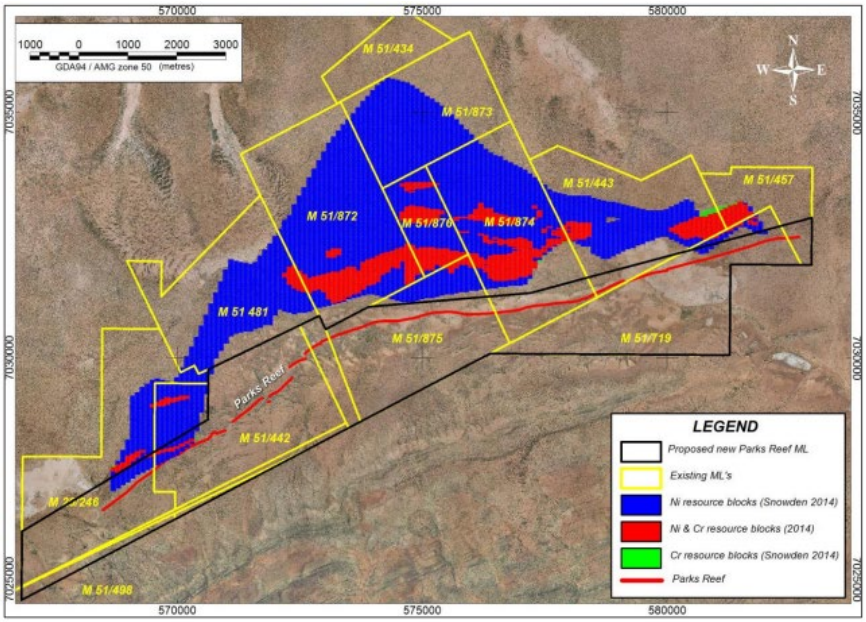
In respect of Podium's mineral rights, it effectively has rights to all oxide and sulphide minerals in the Parks Reef Complex but has divested the right to mine oxides other than those associated with PGMs and gold.

The Oxide Mining Rights pursuant to a Mining Rights Deed to Ausinox Pty Ltd, a wholly owned subsidiary of EV Metals Group plc, allow Ausinox to explore for and mine Oxide Minerals. Oxide Minerals are defined as minerals in the oxide zone (from surface to a depth of 50 m or the base of weathering or oxidation of fresh rock, whichever is the greater) and all metals in an oxide form wherever occurring but which excludes all sulphide minerals and PGM where the definition of PGM includes all platinum group metals and all gold, silver and base metals contained in, associated with or within 10 m of minerals containing any PGMs but excludes chromium and all metals other than PGMs in the currently defined oxide resources.

## Negotiations to clean up ownership stalled

The current tenure was to be unwound to give Podium 100% ownership of all of Parks Reef including the oxide. The new agreement was announced on 18 December 2020, and the completion deadline extended to 31 December 2021 (see release 30 September 2021). This deadline has past without completion, and while the new ownership structure is likely to be positive for both parties, Podium appears to be having trouble attracting the attention of EV Metals, which has other priorities at present.

FIGURE 8 PODIUM WAS TO OWN 100% OF THE TENEMENTS OUTLINED IN BLACK. EV METALS WILL OWN THE BALANCE, AND HAVE RIGHTS TO EXPLORE AND MINE THE NICKEL BLOCKS (BLUE) AND CHROME BLOCKS (RED) INSIDE PODIUM'S GROUND




*Source: POD release 18 December 2020*

### New ownership structure

Under the agreement of 18 December 2020, which has yet to be ratified, the existing Mining Rights Deed will terminate and replaced with title that means Podium will own 100% of all minerals within the new tenement (within the black outline in Figure 9, except for nickel cobalt and chrome in small specific areas).

On completion, Podium was to have received A$2.4M from EV Metals in two tranches.

## *RESOURCES*

FIGURE 9 PARKS REEF IS A SERIES OF LAYERS OR HORIZONS

| Zone | Sub-zone | Comments |
|---|---|---|
| *Surface* | | near surface supergene PGM mineralisation |
| *Base metal - Au zone* | | upper contact is the werhlite-gabbronorite contact |
| *Upper PGM zone* | | upper contact based on nominal 0.5g/t 3E PGM threshold; lower contact based on 0.1% Cu, 0.1g/t Au and Pt:Pd ratio falling below 1 |
| *Lower PGM zone* | *Mid-reef PGM zone* | lower contact based on Pt:Pd ratio <1 |
| | *Footwall PGM zone* | lower contact based on nominal 0.5g/t 3E threshold and Pt:Pd > 1 |

*Source: POD Resource release 18 October 2019*

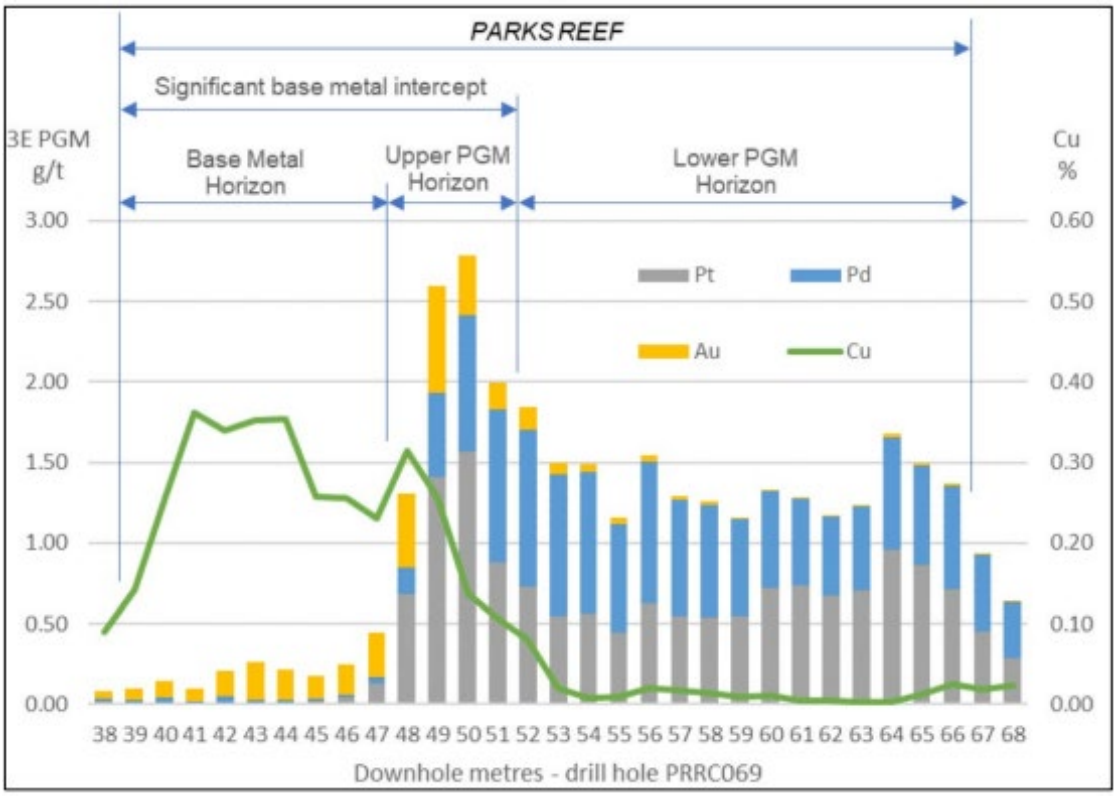
Parks Reef is near vertical, dipping at around 80 degrees, and comprises three layers or horizons.

The upper layer is a low-grade base metal horizon, and the lower layer contains lower grade PGMs. The middle layer or High Grade PGM horizon is enriched in both PGMs and base metals and will be the target when looking for underground depth extensions.



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

FIGURE 10 TYPICAL DRILL INTERSECTION SHOWING THREE DISTINCT HORIZONS




*Source: Resource upgrade release 23 September 2021*

## Potential for a large underground mine

Note that the high value Upper PGM Horizon has a fairly consistent true width of 4m and the Lower PGM Horizon 16m, for a total of 20m. The orebody is almost vertical in orientation, and this combination of width and orientation is very favourable for low cost underground mining.

The growth in the Resource from September 2021 to February 2022 of 10.3mt at a 3E of 2g/t was contained in 2.4km of the 15km total Parks Reef strike length and was very similar in grade to the September 2021 Resource.

TABLE 7 PARKS REEF INFERRED RESOURCE

| | Mt | Pt g/t | Pd g/t | Au g/t | PGM 3E g/t | PGM Koz | Cu % | Ni% | Cu Kt | Ni Kt |
|---|---|---|---|---|---|---|---|---|---|---|
| **PGM Horizon Upper** | | | | | | | | | | |
| Total | 12.3 | 1.08 | 0.71 | 0.21 | 2.00 | 791 | 0.17% | 0.10% | 20.9 | 12.3 |
| Oxide | 3.8 | 1.15 | 0.68 | 0.20 | 2.03 | 248 | 0.17% | 0.10% | 6.5 | 3.8 |
| Fresh | 8.5 | 1.06 | 0.72 | 0.21 | 1.98 | 541 | 0.17% | 0.10% | 14.5 | 8.5 |
| **PGM Horizon Lower** | | | | | | | | | | |
| Total | 38.3 | 0.73 | 0.65 | 0.04 | 1.42 | 1749 | 0.04% | 0.08% | 15.3 | 30.6 |
| Oxide | 11.0 | 0.78 | 0.65 | 0.05 | 1.48 | 523 | 0.05% | 0.08% | 5.5 | 8.8 |
| Fresh | 27.4 | 0.71 | 0.65 | 0.04 | 1.39 | 1225 | 0.03% | 0.08% | 8.2 | 21.9 |
| **PGM Horizon Total** | | | | | | | | | | |
| Total | 50.6 | 0.80 | 0.65 | 0.08 | 1.56 | 2540 | 0.07% | 0.08% | 36.2 | 42.9 |
| Oxide | 14.8 | 0.87 | 0.66 | 0.09 | 1.62 | 772 | 0.08% | 0.09% | 12.0 | 12.6 |
| Fresh | 35.9 | 0.77 | 0.65 | 0.07 | 1.53 | 1766 | 0.06% | 0.08% | 22.7 | 30.4 |
| **Base Metal Horizon** | | | | | | | | | | |
| Total | 21.3 | 0.10 | 0.08 | 0.11 | 0.29 | 199 | 0.24% | 0.10% | 51.1 | 21.3 |
| Oxide | 8.1 | 0.10 | 0.09 | 0.09 | 0.28 | 73 | 0.23% | 0.10% | 18.6 | 8.1 |
| Fresh | 19.7 | 0.10 | 0.07 | 0.15 | 0.31 | 196 | 0.25% | 0.10% | 49.3 | 19.7 |

*Source: POD Resource release 19m February 2022*



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

Podium has added to Resources between 2018 and 2021 by constraining the Resource to 100m depth and extending the drilling along the 14.2km of strike length. The Resource addition from drilling has been 2.3Mt/km to 3.9Mt/km and these Resources were all constrained to being above 100m depth.

**TABLE 8 HISTORY OF RESOURCE ADDITION (FOR LOCATIONS OF REEF SECTIONS SEE FIGURE 12)**

| | Strike Drilled Km | RC Drilled m | Diamond Drilling m | Cutoff Date | Depth Constraint m | PGM Mt | PGM Koz |
|---|---|---|---|---|---|---|---|
| 2018 Resource | 2.2 | 3836.9 | 160.9 | May-18 | 100 | 6.8 | 320 |
| 2019 Resource | 4.5 | 8452.6 | 2746.6 | Dec-18 | 100 | 15.7 | 696 |
| 2020 Resource | 8.5 | 11781 | 3565.5 | Oct-20 | 100 | 25.0 | 1221 |
| 2021 Resource | 14.2 | 21587 | 3565.5 | Jun-21 | 100 | 40.2 | 1981 |
| 2022 Resource | na | 21587 | 3565.5 | Jun-21 | none | 50.6 | 2540 |
| | | | | | Mt/km | Koz/km | g/t |
| Western | | | | | 3.09 | 145 | 1.46 |
| Central | | | | | 3.87 | 163 | 1.31 |
| Eastern | | | | | 2.33 | 131 | 1.75 |
| Far Eastern | | | | | 2.67 | 133 | 1.56 |
| Unconstrained | | | | | na | na | 1.67 |

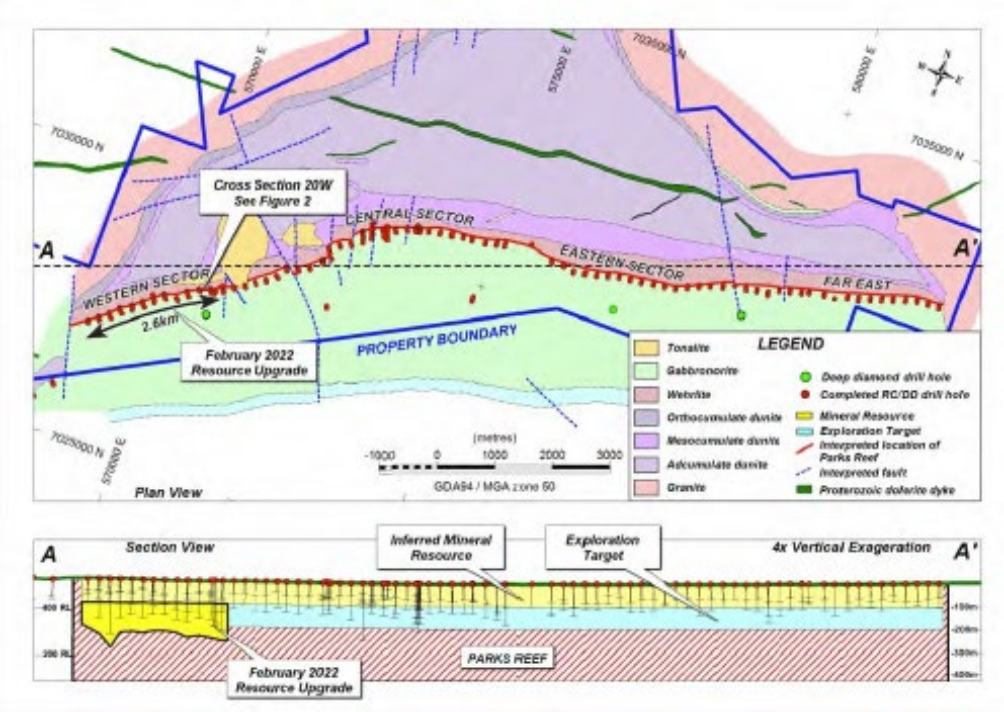
*Source: Podium Resource releases 10 February 2022*

The 2021 Resource was across almost the entire strike length, representing 560Kt per vertical metre or 2540oz 3E per vertical metre.

The 2022 Resource addition was on exactly the same drilling results as the 2021 Resource, but this time included intersections below 100m, over 2.4km at the western end of the reef (Figure 11). The Resource addition is 4.3Mt/km or 233Koz per km. but these numbers are not comparable to the rest of the Resource changes because the depth is variable.

The constraint to 100m was based on the assumption of open pit mining only. The company is now contemplating mining underground, which has lifted the 100m constraint.

**FIGURE 11 LOCATION OF THE 2022 RESOURCE (YELLOW) SHOWING THE CHANGE (BRIGHT YELLOW) AND THE EXPLORATION TARGET (BLUE)**




*Source: POD Resource release 10 February 2022*



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

## Exploration Target of 70-75Mt at 1.2g/t to 1.6g/t 3E PGMs for 2.7-3.8Moz 3E to 250m depth

This target is additional to the 2.8Moz 3E in the 2022 Resource and related to the remaining 12km of the reef at depths of between 100m and 250m. In the figure above, this is represented by the blue area, and the reader should note the considerable amount of drilling (black lines) that already intersects the target area.

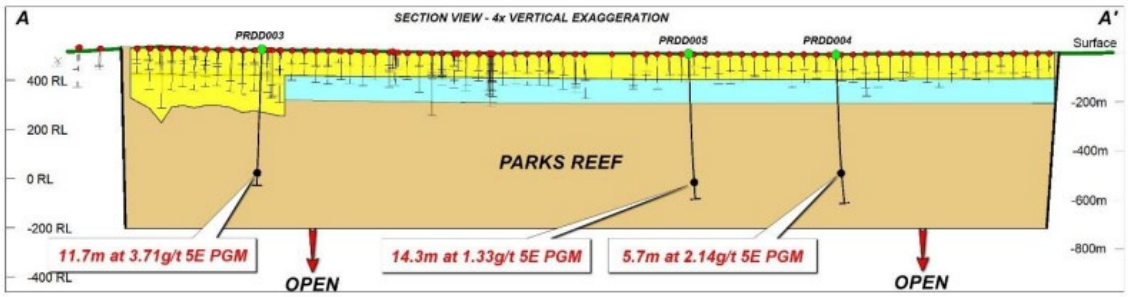
TABLE 9 EXPLORATION TARGETS COMBINED WITH EXISTING PGM RESOURCE (IE EXCLUDING THE BASE METAL HORIZON)

| | Mt | 3E g/t | 3E Moz |
|---|---|---|---|
| Current Resource | 50.60 | 1.56 | 2.54 |
| Low Exploration Target | 70.00 | 1.20 | 2.70 |
| High Exploration Target | 75.00 | 1.60 | 3.86 |
| Current + Low Target | 120.60 | 1.35 | 5.24 |
| Current + High Target | 125.60 | 1.58 | 6.40 |

*Source: POD release 3 March 2022*

## Potential Resource extension beyond the Exploration Target (ie below 250m depth)

FIGURE 12 LOCATION OF DEEP DRILL HOLES INDICATING EXTENSION TO AT LEAST 500M (IE 2X THE EAPLORATION TARGET DEPTH)




*Source: Podium release 20 April 2022*

The objective of the three well deep drilling program was:

- To test for continuity of grade and thickness of the reef at approximately 520m below surface for an enhanced interpretation of the intrusive complex. If the reef is intersected at these depths, then it is considered that precious and base metal grades, mineralogy, and metal ratios of the reef will provide valuable vectors toward zones hosting higher grade and/or thickness of PGM mineralisation.
- To drill for previously untested, high grade, reef style PGM+/- Cr (Ti) mineralisation in the hanging wall mafic stratigraphy, which occurs in the Stillwater Complex (J-M reef) in Montana and Bushveld Complex (Merensky and UG2 reef complexes in South Africa. The proposed holes will test approximately 450m of this potentially fertile mafic stratigraphy.

The first objective of testing continuity had a successful result with all three holes intersecting grade:

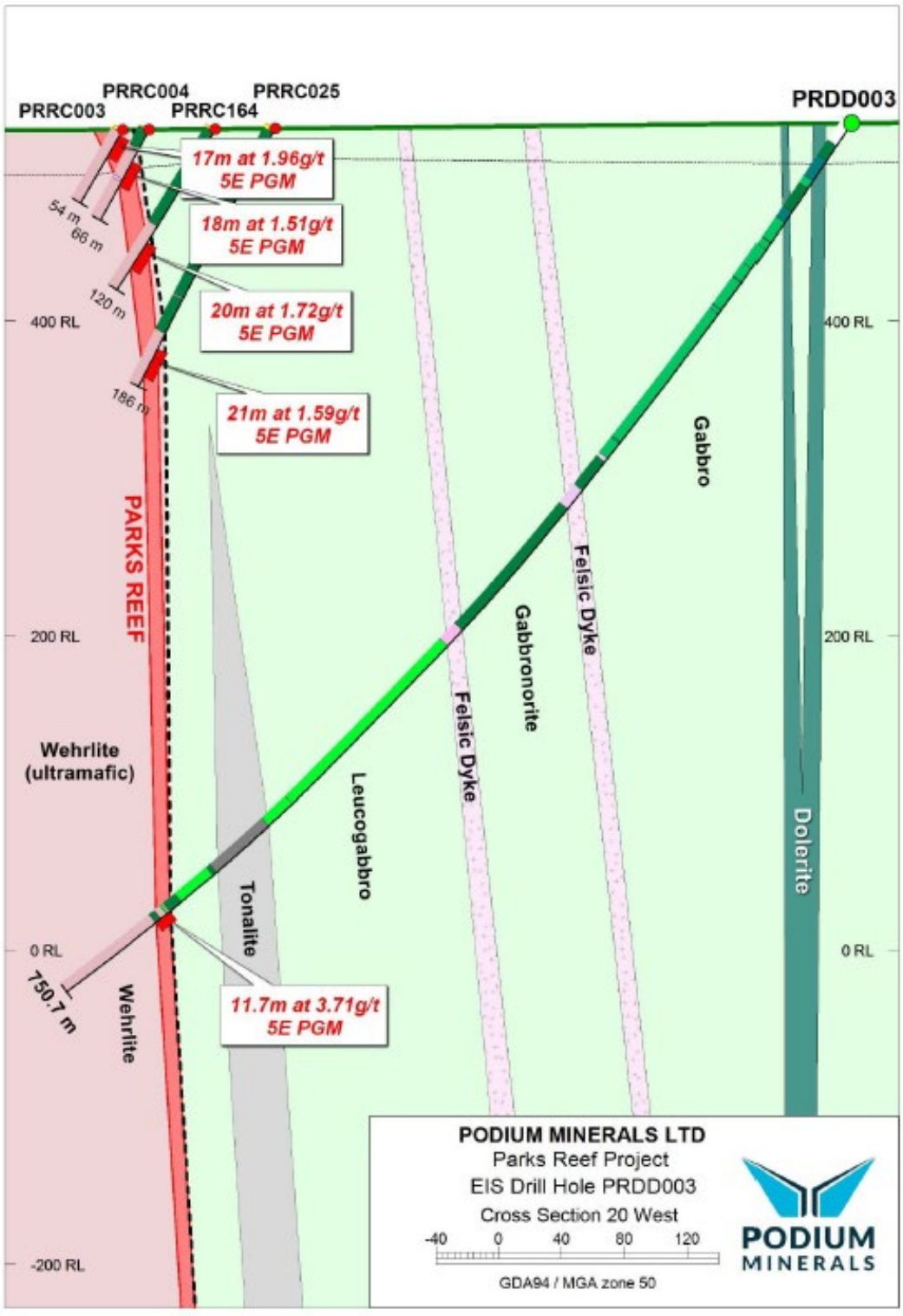
- 11.7m at 3.71g/t 5E PGM from 666.7m (PRDD003)
- 5.7m at 2.14g/t 5E PGM from 581.0m (PRDD004)
- 14.3m at 1.33g/t 5E PGM from 644.7m (PRDD005)

In respect of the second objective, the outcome was disappointing in that no hanging wall mineralisation was reported (Figure 13).



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

FIGURE 13 CROSS SECTION OF ONE OF THE THREE DEEP HOLES TESTING PARKS REEF EXTENSION AT DEPTH




*Source: POD release 20 April 2022*

## Gross Revenue Value is a guide to Resource quality not valuation

The following tables discuss the Gross Revenue Value of the various parts of the deposit by multiplying the metal content by the current spot price. Readers should note that there is no discussion of Reserve modifying factors, mining and metallurgical recoveries, capital and operating costs, nor royalties and taxes. The Gross Revenue Value cannot be used as a measure the value of Podium itself.

Gross Revenue is used here to highlight the relationship between the various parts of the deposit.

TABLE 10 GROSS REVENUE VALUE OF RESOURCE EXCLUDING RHODIUM & IRIDIUM

| A$/t Resource | Pt | Pd | Au | Cu | Ni | Total |
|---|---|---|---|---|---|---|
| **PGM Horizon Upper** | | | | | | |
| Total | 46.7 | 60.7 | 17.0 | 12.0 | 39.3 | 175.8 |
| Oxide | 49.7 | 58.2 | 16.2 | 12.0 | 39.3 | 175.4 |
| Fresh | 45.8 | 61.6 | 17.0 | 12.0 | 39.3 | 175.8 |
| **PGM Horizon Lower** | | | | | | |
| Total | 31.5 | 55.6 | 3.2 | 2.8 | 31.5 | 124.7 |
| Oxide | 33.7 | 55.6 | 4.1 | 3.5 | 31.5 | 128.4 |
| Fresh | 30.7 | 55.6 | 3.2 | 2.1 | 31.5 | 123.1 |
| **PGM Horizon Total** | | | | | | |
| Total | 34.6 | 55.6 | 6.5 | 5.1 | 33.4 | 135.1 |
| Oxide | 37.6 | 56.5 | 7.3 | 5.7 | 33.5 | 140.6 |
| Fresh | 33.3 | 55.6 | 5.7 | 4.5 | 33.3 | 132.4 |
| **Base Metal Horizon** | | | | | | |
| Total | 4.3 | 6.8 | 8.9 | 17.0 | 39.3 | 76.4 |
| Oxide | 4.3 | 7.7 | 7.3 | 16.3 | 39.3 | 74.9 |
| Fresh | 4.3 | 6.0 | 12.2 | 17.7 | 39.3 | 79.5 |
| | **$/oz** | **$/oz** | **$/oz** | **$/t** | **$/t** | |
| Spot Prices US$ | 954 | 1889 | 1791 | 5027 | 27925 | |
| Spot Prices A$ | 1344 | 2661 | 2523 | 7081 | 39331 | |

*Source: Spot prices at 20 May 2022 from Johnson Matthey and Kitco*

### Next Resource will include Rhodium and Iridium, adding A$40-60/t of gross revenue value

Podium announced on 14 April 2022 that it has completed assaying 2740 samples from 127 holes for the other Platinum Group Elements, and we believe this will be sufficient to allow the next Resource statement to include the grades of Rhodium and Iridium. The preliminary assessment by Podium is that the 3E PGM grade will be increased by 3-4% by Rhodium and 1-2% by Iridium. At the current Resource grade of 1.56g/t 3E, Rhodium and Iridium would add 0.09g/t.

TABLE 11 RHODIUM AND IRIDIUM COULD ADD BETWEEN A$43.9/T AND A$60.9/T TO GROSS REVENUE VALUE

| Rhodium & Iridium | Mt | 3E PGM g/t | Rhodium | Iridium | Value A$/t |
|---|---|---|---|---|---|
| Low | 50.6 | 1.56 | 3% | 1% | 43.90 |
| High | 50.6 | 1.56 | 4% | 2% | 60.94 |
| **Assumptions** | | | | | |
| Prices Assumed US$/oz | | | 19000 | 5100 | |
| Prices Assumed A$/oz | | | 26761 | 7183 | |

*Source: Rhodium and Iridium grades and prices from Podium release dated 14 April 2022*

## *MET TESTS INDICATE 81% PGM RECOVERY, INTO 58g/t PGM CONCENTRATE*

### Processing of fresh ore is conventional and well understood

Bench scale flotation test work on fresh mineralisation showed similarities to Southern African sulphide PGM ores (e.g.Platreef ores from South Africa and Great Dyke ores from Zimbabwe). PGM recovery of 71% and Cu recovery of 69% was reported from a rougher flotation test, with a cleaner test achieving grades of 58g/t 3E PGM and 5% Cu. The rougher test is considered to be indicative of overall recovery potential while the open circuit cleaner tests are indicative of potential concentrate grades. The PGM recovery was increased to 81% with the addition of a secondary rougher stage and finer grind. (refer POD release 1 October 2018).

### Processing of oxide is more experimental but potentially very high reward

In the early tests using flotation to process the oxides, PGM recoveries were 44-48% into concentrate. Subsequent Leaching test work on the oxidised mineralisation achieved recoveries of 70% average (platinum 71%, palladium 62%, gold 86%) using sulphuric acid, and 96% using the WildIP process.



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

Investigation continues into the potential for a leach process route with objectives to:

1. maximise metal recoveries from the oxide mineralisation in Parks Reef; and

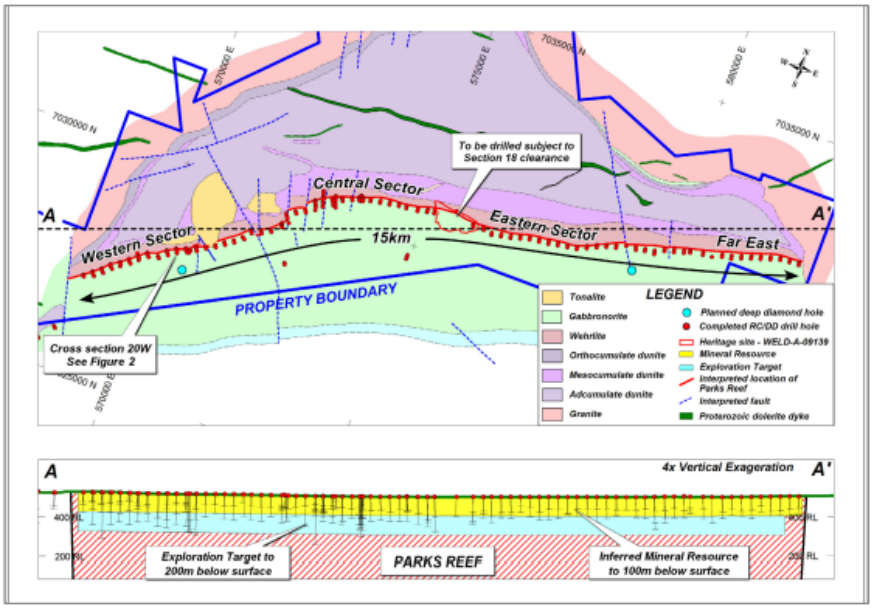
2. evaluate the potential for production of high-purity products that may be marketable directly to metal refiners.

Leaching test work on oxide has shown the ability for dissolution of the targeted metals with a sulphuric acid- chloride leach system rapidly leaching the tested samples under atmospheric conditions, with 70% 3E PGM extraction achieved in three hours with moderate reagent consumption at 90 degrees C.

Further metallurgical test work is currently in progress to select and optimise a preferred process route (refer POD release 16 October 2019, POD presentation 26 October 2021).

## *PUBLISHED CROSS-SECTIONS*

FIGURE 14 PLAN VIEW OF PARKS REEF DRILLING

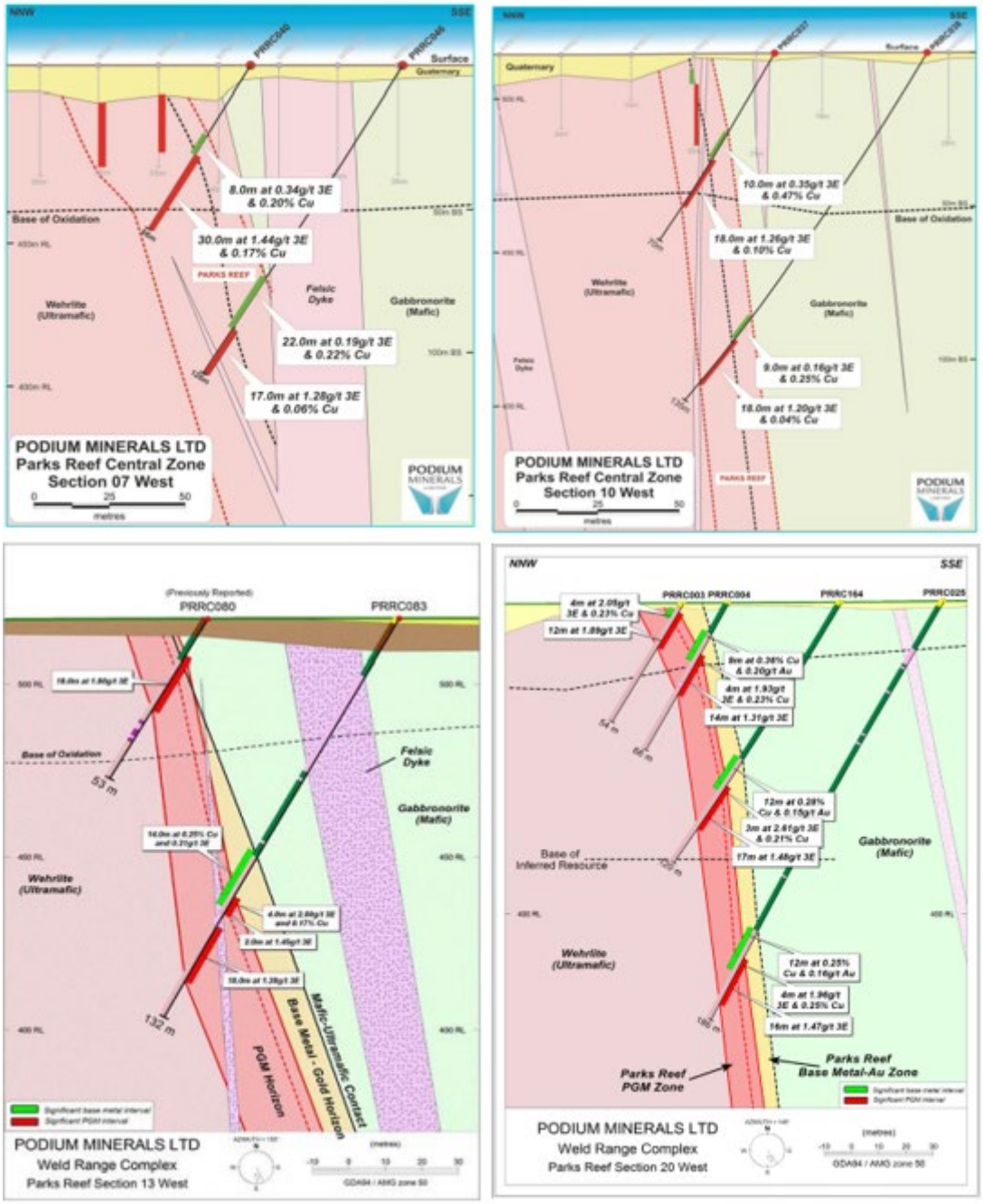



*Source: POD Resource release 23 September 2021*



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

FIGURE 15 CROSS-SECTIONS IN WESTERN ZONE OF PARKS REEF

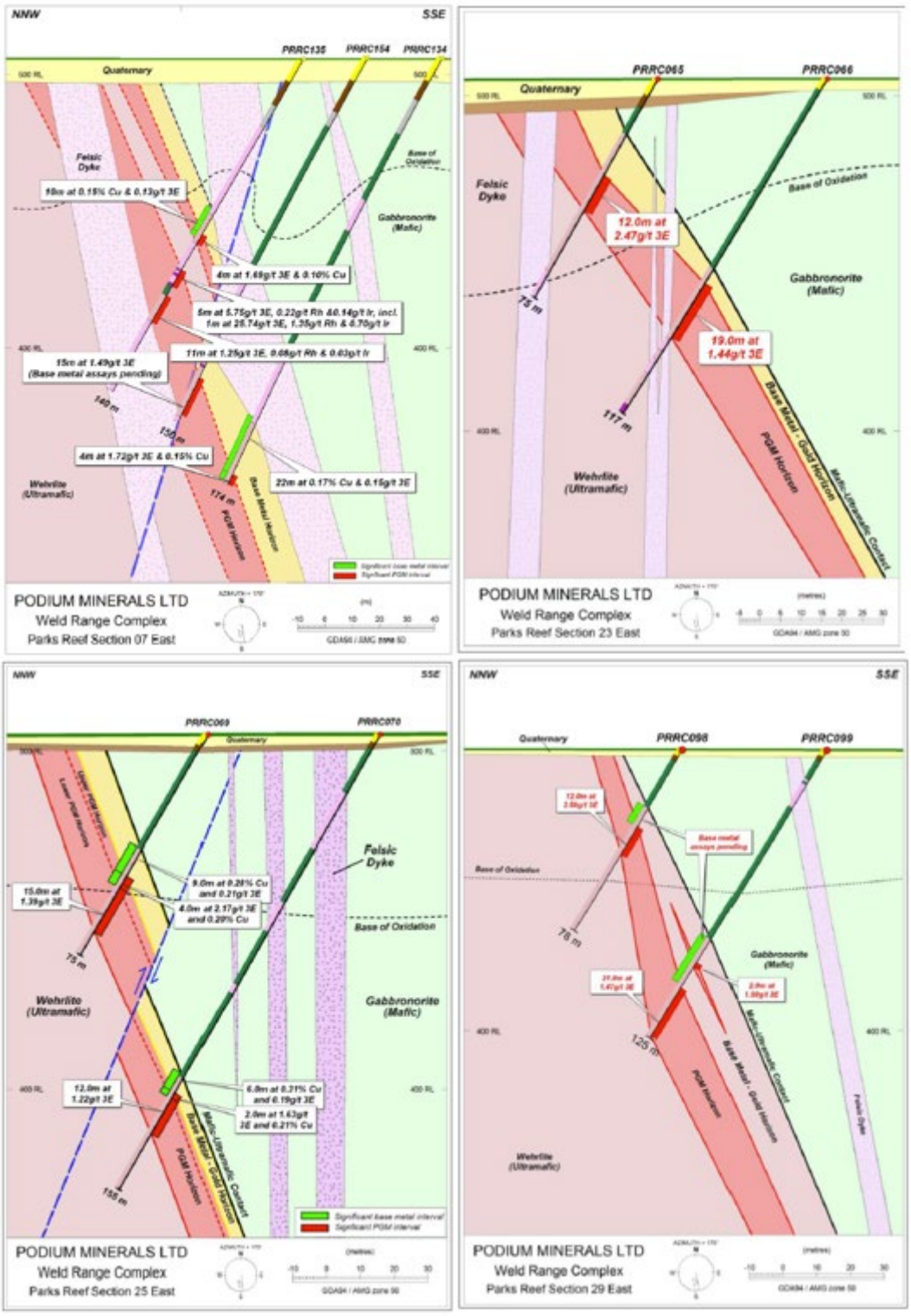



*Source: POD releases 5 March 2019, 30 November 2020, 29 September 2020*



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

FIGURE 16 CROSS-SECTIONS IN ZONE SECTION OF PARKS REEF




*Source: Sources POD releases 27 November 2019, 17 January 2020, 24 March 2021, 2 July 2021*



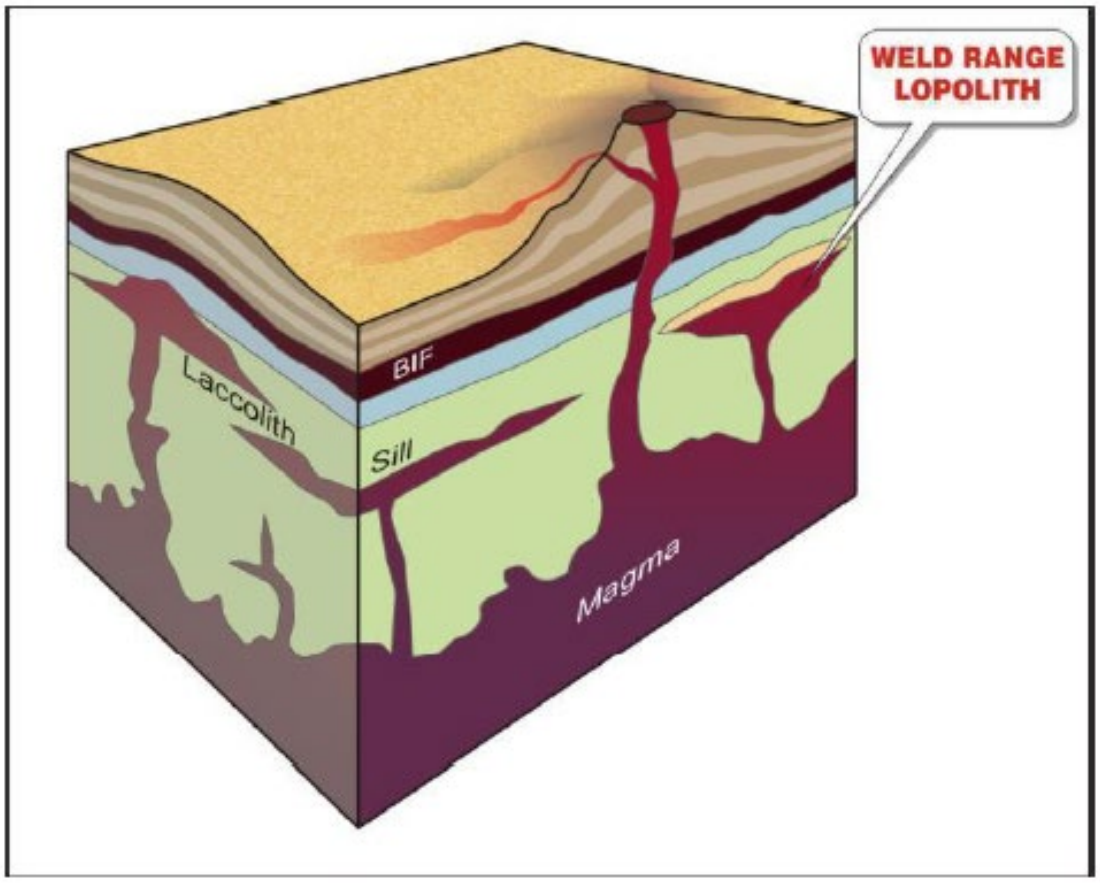
*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

## *GEOLOGY*

### Geology of major global PGM provinces

Nickel copper and PGM bearing magmatic sulphide deposits accumulate at the base of intrusive features shown in the diagram below as laccoliths, sills, and lopoliths, when a nickel and copper bearing sulphur unsaturated magma reaches sulphur saturation, causing nickel copper sulphide liquid to precipitate out of the melt. Sulphur saturation can occur through fractional crystallization or when the magma encounters a sulphur bearing trap rock. The mineralised liquids require precipitation and a concentration trap site to form disseminated or massive (ie high grade) mineral deposits.

FIGURE 17 IDEALISED MODEL OF PLATINUM GROUP METALS (PGM) OREBODY FORMATION




*Source: POD prospectus 27 February 2018*

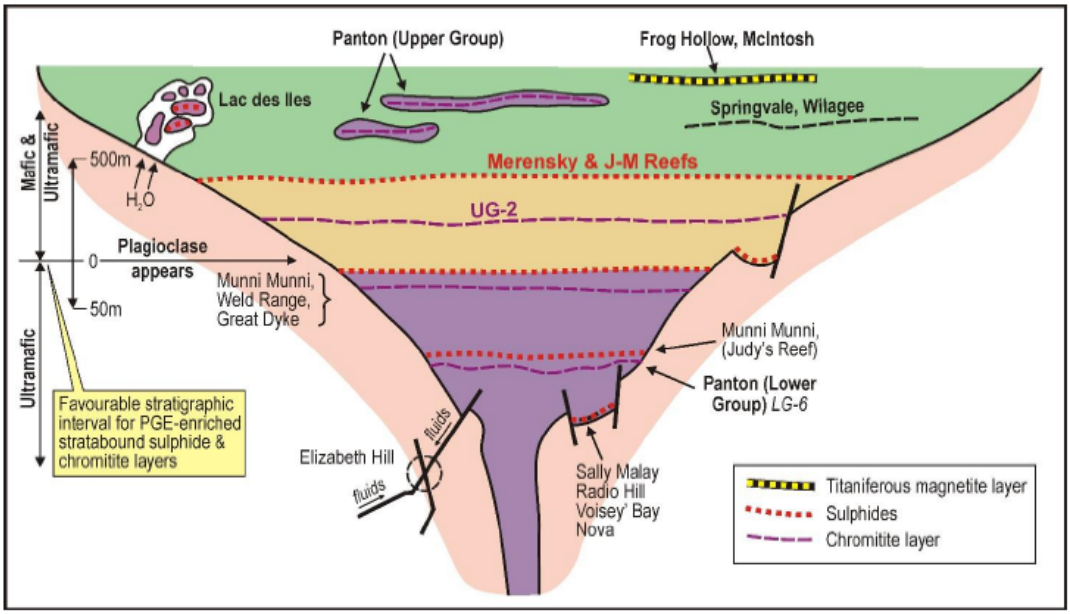
The precipitating nickel copper PGM mineralisation can precipitate out of solution at various levels within the originally flat lying intrusive complex, creating different styles of deposits in vertical layers, shown in Figure 17 above and in Figure 18.

The mineralisation on precipitating will be heavier than the molten magma, and tends to sink, settling into horizons at different levels depending on the chemistry of the melt, the rate of cooling and other factors. Each horizon will have different grade and metallurgical properties.



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

FIGURE 18 DEPOSITION MODELS FOR GLOBAL NICKEL DEPOSITS




*Source: POD prospectus 27 February 2018*

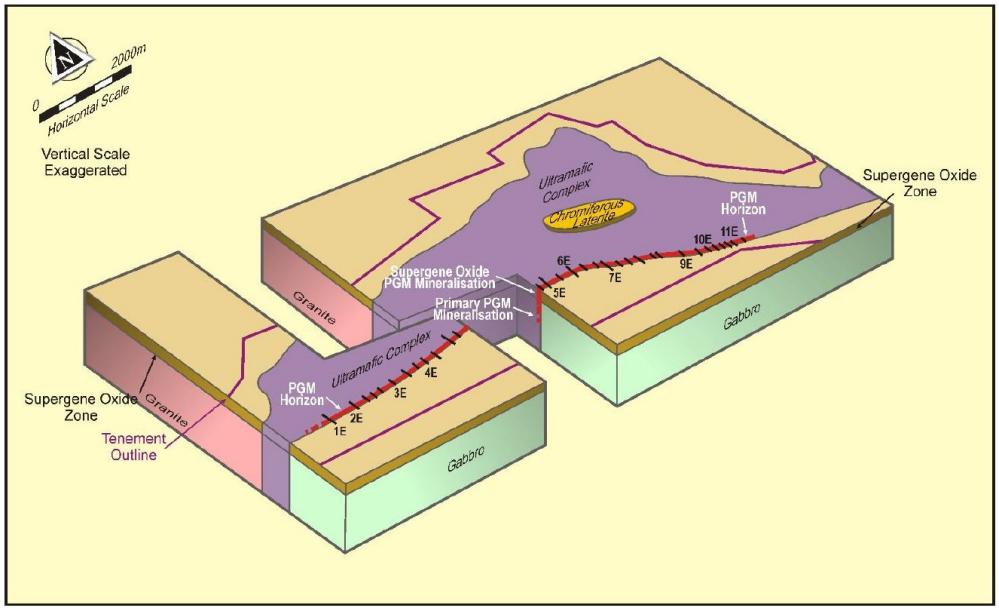
Parks Reef presents as three horizons, including two PGM and one base metal horizon, and is believed to be of the same class of deposits as Great Dyke in Zimbabwe and the upper Munni Munni in Western Australia.

Note that the above cross section shows relatively flat horizons of mineralisation in the original orientation of deposition. Parks Reef is now close to vertical, meaning the entire structure in Figure 18 has been tipped on its side. With 15 Km of strike, there is the possibility that the mineralisation could be kilometres deep.

As we have seen in Australia with the Komatiite nickel deposits in the Kambalda region, mineral deposition was influenced by the shape of the surface on which the deposition occurred, and the mineralisation can form "lakes" and "rivers" of higher grade, which potentially could be exploited to depth.

## Geology of Parks Reef

FIGURE 19 SCHEMATIC OF PARKS REEF AND THE WELD RANGE COMPLEX




*Source: POD prospectus 27 February 2018*



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

## Description of the geology (From POD Resource upgrade 23 Sep 2021)

*"The Gnanagooragoo (Weld Range) Igneous Complex is located to the immediate northwest of the steeply dipping Weld Range volcano-sedimentary succession and hosts the only known occurrence of PGM mineralisation in the northern Murchison Province.*

*"The interpretation of the base of oxidation and gabbronorite-wehrlite contact was based on the geological logging, with the contact clearly identified in the RC chips.*

*"The Weld Range Complex corresponds to the basal part of the Gnanagooragoo Igneous Complex and forms a discordant, steeply dipping lopolith, up to 7 km thick, confined by an overlying succession of jaspilite and dolerite sills of the Gabanintha Formation to the south. The Weld Range Complex is divided into ultramafic and mafic endmembers.*

*"Parks Reef is situated 10–20 m below the upper or southern contact with the upper mafic member. Near the Parks Reef PGM mineralisation, the magmatic stratigraphy comprises a sequence of olivine–pyroxene bearing cumulates terminating very abruptly at the ultramafic-mafic contact with the cessation of olivine crystallisation and the first appearance of cumulus plagioclase in a leucocratic gabbronorite. The mafic-ultramafic contact in the western and central portions of Parks Reef dips consistently at approximately 80° to the south-southeast. This boundary effectively defines the upper limit of the hanging wall Cu-Au zone of Parks Reef.*

*"The Parks Reef mineralisation displays a generalised pattern that can be described from the mafic-ultramafic contact downwards as follows:*

- *Hanging wall Cu-Au zone. An olivine dominant, high MgO wehrlite, with minimal clinopyroxene, 1–3% disseminated chalcopyrite-pyrrhotite pentlandite. Up to 14 m true thickness. Bounded at the top by very sharp contact to gabbronorite and lower boundary defined analytically as >1.0g/t 3E. Cu content up to 0.5% and Au content increasing downward to maximum on or near the lower boundary.*
- *Upper-reef high-grade PGM-Au zone. A 1-5m true thickness higher grade (typically >2g/t 3E) zone. The upper boundary commonly coincides with the highest Au grades in the reef, in places exceeding 1g/t, and may overlap with the lower limit of elevated Cu values from the Hanging wall Cu-Au Zone. Sulphide concentrations are low, except at the very top of the zone. Pt:Pd ratio is >1.*
- *Lower-reef medium-grade PGM zone. A 3-14m true thickness zone of intermediate PGM concentrations, typically slightly greater than 1g/t 3E. CuAu grades are insignificant and Pt:Pd ratio is generally <1.*
- *Footwall high-grade PGM zone. A 0-3m true thickness wehrlite hosted sublayer at the base of the reef, with elevated PGM grades, including Rh, Ru, Os and Ir, and Pt:Pd ratio >1. No visible sulphides or Cu-Au mineralisation.*

*"The lower contact is defined by a 0.5g/t 3E threshold. This zone is relatively discontinuous and is not always present.*

*"Low-grade (~0.5g/t 3E) PGM mineralisation occurs below the Parks Reef as described above but is only recognised in some drillholes. Pt+Pd mineralisation at grades of 0.2g/t to 0.6g/t frequently continues from the base of the footwall high-grade PGM zone for up to 20m or may occur as an isolated zone of weakly elevated Pt+Pd, located 10–15m below the footwall high-grade PGM zone.*

*"The Lower-reef and footwall high-grade zones have not been delineated in the resource modelling.*

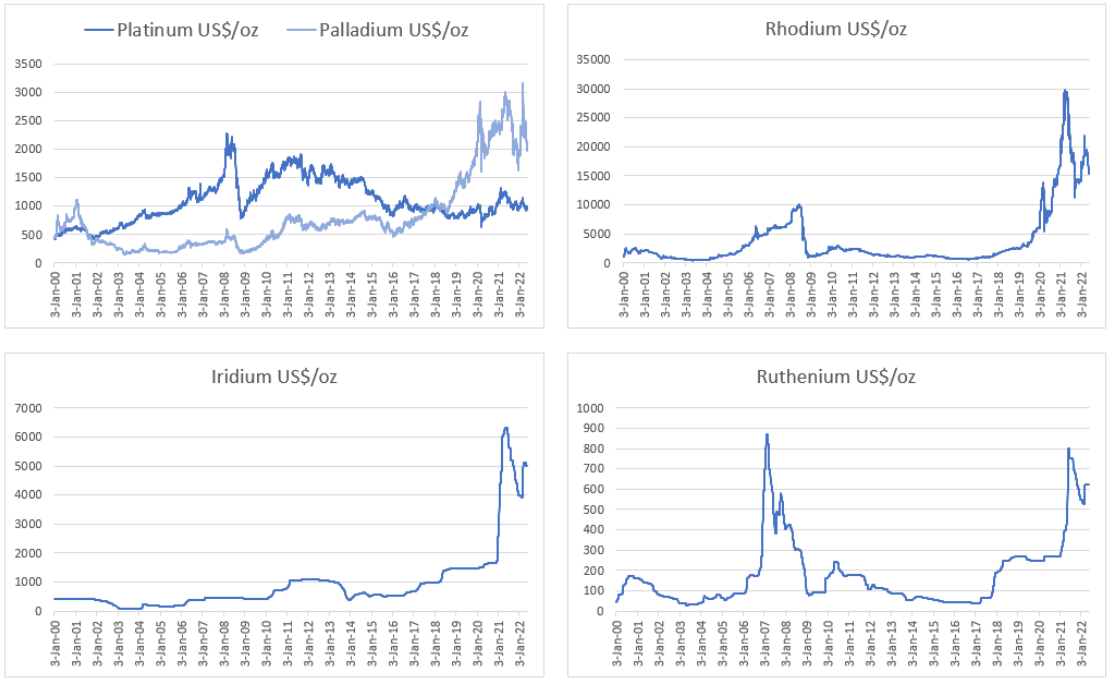
*"Oxidation extends from the surface to a vertical depth of approximately 30m to 50m in the western sector and up to 70m in the central and eastern sectors. The ultramafic lithologies showing consistently deeper oxidation than the mafic hanging wall rocks."*



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

## PGM PRICE HISTORY

FIGURE 20 PLATINUM GROUP METALS PRICE HISTORY (TO 24 MAY 2022)




*Source: Johnson Matthey*

For the Parks Reef project, the two most critical prices are platinum and palladium, with highly volatile rhodium adding extra value depending on price. The revenue contribution from each metal splits roughly one third platinum, one third palladium, and one third the rest.

FIGURE 21 PARKS REEF WEIGHTED AVERAGE PLATINUM/PALLADIUM PRICE (55% PLATINUM, 45% PALLADIUM)

*Source Johnson Matthey*

The strengthening prices have been a feature of the market since 2016 for all the metals except platinum, which has been losing market share to the others. The forecasts below are suggesting a finely balanced market to 2024. In an environment of a recovering post COVID world, our view would be that any surprise



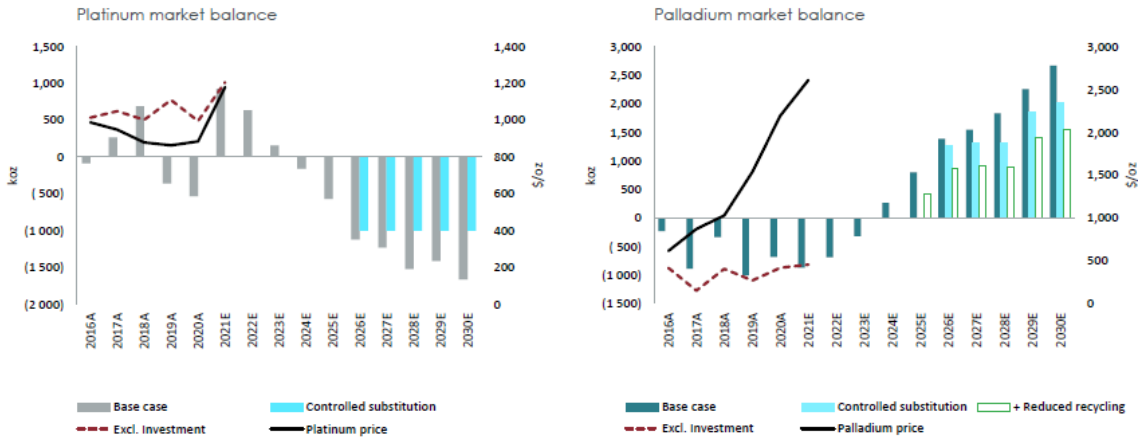
*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

will be to the upside, and the explosive behaviour of the minor members of the Platinum Group suggest that very little will be required to trigger future strong upside moves.

## *SUPPLY DEMAND FORECAST TO BE IN BALANCE IN MEDIUM TERM*

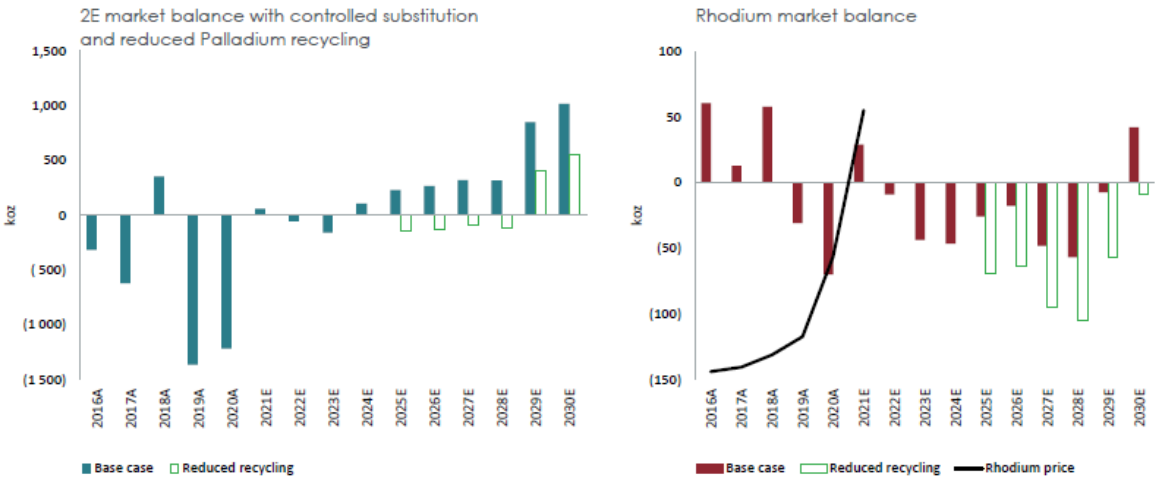
Sibanye Stillwater is one of the world's major PGM producers. In its most recent commodity outlook, dated September 2021, it is forecasting supply demand deficits up to 2024 for palladium and rhodium, and a surplus in platinum. Platinum can substitute for palladium, with a multi-year lag, and that is expected to take place, resulting in longer term deficit in platinum and a surplus in palladium (Figure 22). Combining the two metals gives a modest surplus of around 200,000 ounces (Figure 23). Rhodium is in deficit to 2029.

FIGURE 22 SUPPLY DEMAND BALANCE FOR PLATIMUM AND PALLADIUM




*Source: Sibanye Stillwater 10 year outlook September 2021*

FIGURE 23 SUPPLY DEMAND BALANCE OF PLATINUM AND PALLADIUM COMBINED, AND RHODIUM




*Source: Sibanye Stillwater 10 year outlook May 2021*

### Commentary on PGM Supply Demand in the short term (0-3 years)

The price spike we have seen in 2021 was driven by a number of factors, some of which have short term effects and others are likely to be sustained.

Global supply was heavily impacted in 2020 by the initial effect of COVID on very labour-intensive underground mines in South Africa, and a series of disruptions at the Anglo Converter Plant which produces the metals in final forms for industrial use. The Anglo Converter Plant came back online in December 2020, and by the June Quarter 2021 was outperforming expectations by processing work-in-progress inventories built up during the outages. The COVID situation at the mines is being successfully managed with appropriate protocols.



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

Major producer Norilsk suffered environmental, mine flooding and concentrator availability issues, but is coming back online.

The Ukraine War has had a negative impact on supply and has resulted in higher prices, particularly for nickel. Nickel and PGM exports have not been sanctioned yet by the West, nor has Moscow banned exports, but indirect sanctions are having some impact. Sanctions on international banking make trading difficult, and insurance coverage for shipping from Russia is largely unavailable. Shippers are also nervous that sanctions on nickel and PGMs could occur if the war drags on.

Global industrial demand was also up very strongly on recovering auto production, which is still constrained by the lack of semiconductor chips. Investment demand has been very weak in 2021.

The forecasts for 2022 by both Johnson Matthey and the World Platinum Council are for a small surplus in Platinum and deficits in Palladium and Rhodium, but the outlook is highly uncertain in their view.

However, the nature of the surplus means that there is a greater chance of upside in the near future rather than downside. On the demand side, auto production still has further upside as chip shortages are resolved, and so there could be upside surprise from demand. On the supply side, the Work In Progress inventory reductions have added metal to supply, but once inventories stop falling, the supply is gone and if mine supply cannot lift sufficiently, under-supply might result.

Supply from Russia (28% of global palladium supply) is a major driver of uncertainty, along with uncertainty over global vehicle production.

The low level of investment demand is comforting because it means that the metal is being purchased by industry which consumes rather that stores it. Weak investment can also mean destocking had added to supply, resulting in surprisingly less supply once the destocking ceases. Investment demand is largely in the form of platinum, which has not seen the price performance of the other PGMs. To get investment demand firing, platinum prices need to trend up. That is the forecast in the longer term, as platinum takes market share from palladium, as forecast by Sibabye Stillwater. However, will happen over a number of years, because the auto companies are locked into model runs and cannot change materials quickly.

### Commentary on PGM demand long term, including the impact of de-carbonisation

Longer term, the PGM demand outlook will be dominated by de-carbonisation. PGMs are most often used as catalysts in chemical reactions, where they provide a large surface area on which the chemical reactions can take place, but because of their inertness, they remain unchanged by the reaction.

The most significant demand for PGMs is for auto-catalysts that clean up Internal Combustion Engine exhaust and as catalysts in petroleum refining. Climate change driven thematic thinking would have all this demand die away, as the world turns to electric vehicles.

That simplistic view misses the detail of how any move to a decarbonised world can occur. While this is a big topic, here are a few key bullet points to think about:

1. Eliminating all Internal Combustion Engine Vehicles will take time, and meanwhile, pollution regulations will get tighter, mandating greater PGM loadings per vehicle.
2. Oil refineries will be needed forever, to provide the plastic feedstocks, lubrication oils, road bitumen, and probably jet fuel, so even if the gasoline and diesel markets go to zero, there will still be refineries, processing crude oil into those products that are still essential, and demand for catalysts should continue, and this product shift may even result in increased catalyst demand.
3. Battery Electric Vehicles are likely to struggle as long-haul trucks, which are configured to haul as much as 150 tonnes of goods 500-1000km without refuelling, and when they refuel, time is of the essence, and they would not want to be stuck at a charger for the day or more that battery charging session involves. At this stage, the two candidates most likely to do the job are hydrogen fuel cells, and green diesel that has been made from carbon dioxide sequestered from the atmosphere and converted into diesel. Both applications need PGM catalysts.



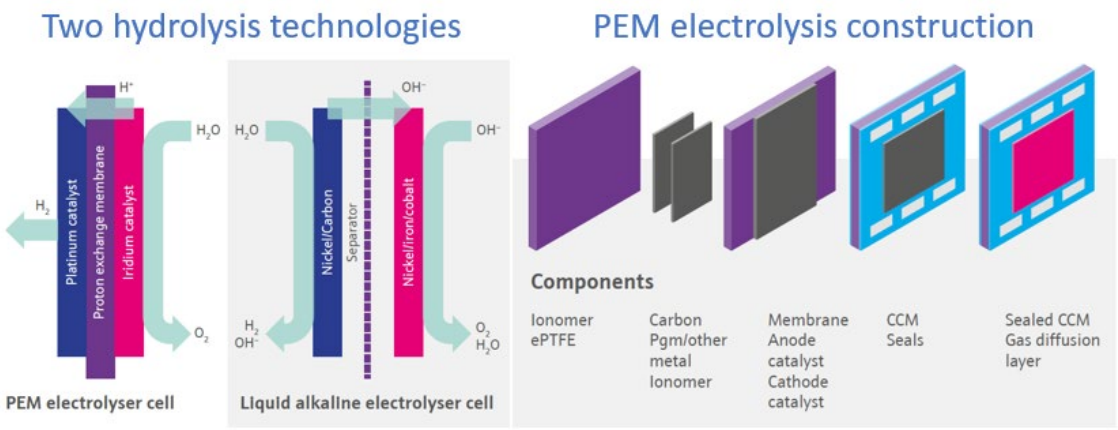
*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

## Hydrogen manufacture needs PGMs

Hydrogen is shaping up as the ideal battery. It can absorb unwanted solar or wind power when available, it can be stored for long periods without degradation, and it can be transported in existing pipelines over long distances at low cost. The scale of hydrogen production required to reach the world's decarbonization targets is sufficiently vast that whatever demand the PGMs lost in auto-catalysts is likely to be more than made up by the demands of the hydrogen economy.

Estimating future demand is a problem for forecasters because there is no real data on the likely rollout of hydrogen, like there was no data on the rollout of the motor vehicle from 1890 to 1920. However, being difficult to forecast doesn't mean it will not happen.

FIGURE 24 PEM ELECTROLYSIS IS LIKELY TO BE A MAJOR PGM CONSUMER IN THE FUTURE




*Source: Johnson Matthey Market Report May 2021*

Most of the current global hydrogen hydrolysis capacity uses the alkaline system which uses nickel electrodes, in an electrolyte of potassium hydroxide and water, with an asbestos separator. This technology is able to produce hydrogen of sufficient purity sufficient for use in fuel cells.

The technology that is likely to replace the alkaline system is the PEM (Polymer or Proton Electrolyte Membrane) Technology.

In the PEM electrolyser, the cathode is platinum/palladium and the anode is ruthenium oxide/iridium oxide. The separator that divides released oxygen and hydrogen and prevents them from recombining is typically titanium, and the anode (oxygen) side needs to be coated with platinum or palladium to prevent oxidation.

PEM electrolyser capital cost is currently higher than that of liquid alkaline systems due to the lower maturity level of the technology, but it is falling rapidly with optimisation and scale-up. The technology is benefiting from tremendous interest and investment because it possesses fundamental characteristics that facilitate its use in clean energy applications. The PEM electrolyses of the future will have much lower PGM loadings, driven by the need to reduce costs, but the capacity buildout is likely to be vast.

The advantages of PEM over alkaline technology (per Johnson Matthey) are:

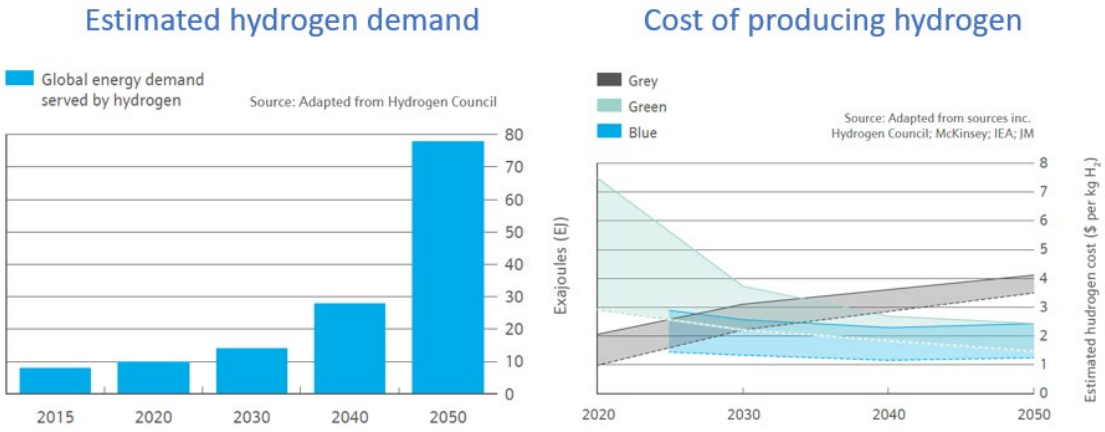
1. *It offers the potential to reach high current densities (current density is loosely equivalent to the amount of electricity 'converted' to gas per square metre of cell area). This means that PEM systems can be relatively compact compared to liquid alkaline electrolysers. A compact footprint is advantageous in space-limited applications, such as forecourt electrolysers, but the major benefit is that it allows for more significant economies of scale when scaling up to multi-megawatt systems.*
2. *PEM thus has the potential to have the lowest capital cost per megawatt in future bulk energy applications, which will operate at multi-megawatt or even multi-gigawatt scale.*
3. *Electricity from renewable power is inherently variable, and hence should ideally be paired with electrolysis technology that is highly responsive to changes in load and can operate efficiently at*

*low part-loads (<20%), thus maximising the use of available power. PEM technology performs highly effectively in variable operation, with rapid response times, an operation range of 0–100%, and the ability to operate safely in overload for periods if needed. Liquid alkaline electrolysers also have good load-following capabilities, which are often satisfactory for the application, but the technology is fundamentally less flexible than PEM.*

4. *PEM offers further advantages: due to the physical separation of the membrane, hydrogen can be produced under pressure on one side of the cell, while the oxygen side remains at atmospheric pressure, which is safer. PEM systems in use today typically offer direct hydrogen production at 30 to 50 bar vs atmospheric pressure at sea level of 1 bar (although electrochemical compression to much higher pressures in PEM systems has been demonstrated). Since many applications require compressed hydrogen, starting with a higher pressure reduces the energy needed for subsequent, expensive mechanical compression to the desired pressure.*
5. *Hydrogen is also generated on the 'dry' side of the cell (rather than on the 'wet' side, as in alkaline electrolysis) and thus does not need to be dried before use.*

PEM technology currently produces around 4% of electrolysed hydrogen, as a use of PGMs this application is very small. Forecasting future demand is problematic, but this is a new source of demand for PGMs and one that will grow very strongly.

FIGURE 25 HYDROGEN DEMAND FORECASTING IS VERY APPROXIMATE AT THIS EARLY STAGE




*Source: Johnson Matthey Market Report May 2021*

References:

Johnson Matthey Market Report May 2021 - http://www.platinum.matthey.com/services/market-research/pgm-market-report

Hydrogen production by PEM water electrolysis – A review - S.Shiva KumarV.Himabindu https://www.sciencedirect.com/science/article/pii/S2589299119300035

## Role of PGMs in hydrogen fuel cells

Fuel cells are electrochemical devices that convert the energy of a chemical reaction directly into electricity, with heat and water as by-products. The fuel and oxidant (oxygen or air) are supplied externally, enabling them to continue operating as long as they are fed. So, unlike batteries, they never "run out".

There are several different types of fuel cell but the most researched type is the proton exchange membrane (PEM) fuel cell, which contains platinum catalysts. PEM fuel cells are capable of being used in power generation for buildings, instead of batteries or generators in portable equipment and as replacements for the internal combustion engine in a vehicle.

Platinum and ruthenium play a large role in this technology. Platinum is the catalyst which converts hydrogen and oxygen to heat, water, and electricity. Palladium will likely also play a role in the fuel cell.

References:

http://www.platinum.matthey.com/about-pgm/applications/fuel-cells

https://ipa-news.com/index/pgm-applications/automotive/fuel-cells.html#:~:text=Platinum%20and%20ruthenium%20play%20a,is%20unknown%20yet%20how%20big.

## Capital Structure

**TABLE 12 CAPITAL STRUCTURE**

| | Issued M |
|---|---|
| Issued Shares M | 306.43 |
| Performance Rights M | 12.75 |
| **Canaccord Options (Expiring 24 Dec 2024)** | |
| Exercise Price A$1.25/sh | 7.50 |
| Exercise Price A$1.00/sh | 7.50 |
| Exercise Price A$0.75/sh | 7.50 |
| Diluted Capital M | 341.68 |

*Source: POD release 11 April 2022*

## Share Register

The company has no substantial shareholders.

The company's shares appear to be tightly held with average daily turnover being 0.16% of issued shares over the last three months, and average turnover over the last 12 months of A$200,000/day.

## Board and Management

### Clayton Dodd - Executive Chairman

Mr Clayton Dodd is a chartered accountant with more than 30 years' experience in finance and resources in Australia, South Africa and South America. He has held directorships in public companies listed on AIM, the ASX, the TSX and the JSE.

In the early 1980's, Mr Dodd joined the ASX listed Magnet Group which included ASX listed Stirling Petroleum, Gem Exploration, Minerals Limited, and Monarch Petroleum. Mr Dodd has also held directorships or been involved in the creation of a number of companies including Atomaer Holdings, Sage Resources (a TSX listed company), Brinkley Mining (an AIM listed uranium company), and Braemore Resources (listed on AIM and JSE).

### Sam Rodda – Managing Director and CEO

Mr Rodda was appointed Managing Director on 11 April 2022, having been appointed CEO on 1 January 2022. He has 18 years of mining and management experience, and has held operational, technical and management roles at a number of large underground and open pit mining operations both in Australia and internationally with WMC, BHP Billiton and most recently with MMG Limited where he held the executive position of General Manager Operations and Technical Excellence reporting to the CEO.

### Roberto Castro - Non-Executive Director

Mr Roberto Castro has been working in commodities trade finance since 1988. He started his career working for trading companies before joining BNP Paribas where he was responsible for financing a wide portfolio of energy and mining trading companies. Roberto then founded Petrosca where he works as an independent financial consultant assisting commodity traders in a wide range of services.

### *Cathy Moises - Non-Executive Director*

Ms Cathy Moises has extensive knowledge and experience within the resource industry, having held senior roles for a number of the most prominent stock broking firms within Australia including McIntosh (now Merrill Lynch), County Securities (now Citigroup), Evans and Partners, where she was a partner, and most recently worked as Head of Research for Patersons Securities (now Cannacord Genuity).

Ms Moises holds a Bachelor of Science (Honours) with a major in Geology from Melbourne University, and a Diploma of Finance and Investment from the Securities Institute of Australia and currently serves as a Non-Executive Chair of Pacgold, Deputy Chair of Eastern Metals, and Non-Executive Director for Arafura Resources Limited, Australian Potash Limited and WA Kaolin Limited.

### *Rod Baxter - Non-Executive Director*

Mr Baxter is a seasoned Director and Business Executive, with extensive international and multi-sector experience. His leadership roles include Managing Director as well as Non-Executive Chairman of listed and unlisted companies, and he has operated across several different industry sectors in Australia and internationally.

Of significant importance to Podium's PGM operations at Parks Reef, in his early career he was involved in a number of operational and functional roles in the mining sector, including metallurgical, process engineering and project management.

This was followed by senior and general manager roles in commercial, strategy, new business ventures, and strategic corporate projects for Anglo Platinum, resulting in his appointment as a Divisional Director for Anglo Platinum with group-wide responsible for business optimisation, new mining ventures, and strategic corporate projects. He also held a dual role as Project Director for Anglo American plc.

Mr Baxter holds a BSc (Hons), a PhD and an MBA.

### *Jason Whittle – General Manager Projects*

Jason Whittle has commenced with the Company on 16 January 2022. Jason is an experienced metallurgist with an extensive track record of over 25 years in international mining projects and operations in Australia, Asia and South America across a range of commodities, including the processing and production of complex minerals.

### *Hannah Hudson - CFO and Company Secretary*

Hannah Hudson was appointed on 18 November 2021. She is a qualified Chartered Accountant and has held company secretarial and high level financial positions with a number of ASX listed and private companies over the last 17 years.



*Breakaway Research Pty Ltd, ABN: 39 602 490 906*
*AFSL 503622, 169 Blues Point Road, McMahons Point NSW 2060,*
*Australia t +61 2 9392 8011*

**Analyst Verification**

I, **Michael Harrowell**, as the Research Analyst, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

**Disclosure**

Breakaway Research Pty Ltd (AFSL 503622) and its associates, or consultants may receive corporate advisory fees, consultancy fees and commissions on sale and purchase of the shares of ***Podium Minerals Limited*** and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

We acknowledge that Senior Resource Analyst, **Michael Harrowell**, holds no shares in **Podium Minerals Limited**.

**Disclaimer**

Any observations, conclusions, deductions, or estimates of figures that have been made by Breakaway Research in this report should not be relied upon for investment purposes and the reader should make his or her own investigations. This publication has been issued on the basis that it is only for the information and exclusive use of the particular person to whom it is provided. Any recommendations contained herein are based on a consideration of the securities alone. In preparing such general advice no account was taken of the investment objectives, financial situation and particular needs of a particular person. Before making an investment decision on the basis of this advice, investors and prospective investors need to consider, with or without the assistance of a securities adviser, whether the advice is appropriate in light of the particular investment needs, objectives and financial circumstances of the investor or the prospective investor. Although the information contained in this publication has been obtained from sources considered and believed to be both reliable and accurate, no responsibility is accepted for any opinion expressed or for any error or omission that may have occurred therein.

**Breakaway Research Pty Ltd**
AFSL 503622 ABN: 39 602 490 906,
T+61293928011
169 Blues Point Road
McMahons Point NSW 2060