

## Research Note

### WE LIKE IT WHEN A PLAN COMES TOGETHER

We are initiating coverage of Saturn Metals limited (STN), following the release of successive lots of drill results confirming the validity of the original exploration model.

- STN listed via IPO in March 2018 as a spin off from Peel Mining Limited (PEX), successfully raising \$7m in the process.
- The Company's main asset is the Apollo Hill gold deposit, located in the Leonora-Wiluna part of the Norseman-Wiluna Greenstone Belt. Sitting approximately 60 km south of Leonora, in the goldfields of Western Australia, Apollo Hill has a mineral resource estimate of **17.2Mt at 0.9g/t Au for 505,000oz Au**

**Mineralisation starts from surface and would be amenable to an open pit mining scenario**

- STN announced strategy was to upgrade the resource estimate in quality and quantity. The aim was to bring the resource estimate over the 1g/t psychological barrier and increase the resource base. (We expect a stepped approach to try and break through the "magical" number of a million ounces sometimes down the track - 2019 maybe).
- Ian Bamforth, STN Managing Director developed his geological career with Newmont Mining Corporation. His reading of the Apollo Hill deposit geology and resource estimate gave him ideas of targeted exploration with potential to increase tonnage and grade at Apollo Hill.
- STN conducted two rounds of drilling in the past three months. A first round of 35 RC holes completed at the end of May, and a round of 9 diamond core holes. Both drilling campaigns were aimed at proving the validity of the exploration strategy with the ultimate goal of delivering an upgraded resource estimate for Apollo Hill.
- STN announced assays results for all RC holes and 5 of the diamond holes. Results confirmed expectations with assays returning broad intervals of mineralisation grading more than 1g/t and clear higher grade intervals. Apollo hill contains two higher grade trends or shoots, named Armstrong and Eagle Trend. Chasing those trends and increasing drill density in those zones will help STN to increase the project's resource estimate grade.
- STN utilised Swick Mining Services (ASX:SWK) Orexplore GeoCore X10 Core Scanning Technology. Being based on X-Ray technology, this method cannot yet provide reliable gold assays but it allows visualisation of gold grains within the core, otherwise not visible by a logging geologist. The presence of coarse gold grains was sufficient to prompt immediate follow up drilling with another 35 RC holes program targeting Armstrong and Eagle Trends. This two rigs program started on 20 July.
- STN plan is coming together:
  - Apollo Hill infill drilling returned grades higher than the resource average (grade upgrade seems highly likely)
  - Extensional drilling along strike returned Apollo Hill style mineralisation (size upgrade seems very plausible)
  - Attractive exploration targets within the 1000km<sup>2</sup> tenement package which have not yet seen work.
- Based on \$9/resource ounce, STN looks very attractively priced compared to its peers and a resource upgrade in sight lead by trustworthy management completes nicely the investment case.

1 August 2018		
12mth Rating	Spec Buy	
Price	A\$	0.17
Target Price	A\$	na
12mth Total Return	%	na
<b>RIC: STN.AX</b>	<b>BBG: STN AU</b>	
Shares o/s	m	56.0
Free Float	%	100.0
Market Cap.	A\$m	9.5
Net Debt (Cash)	A\$m	
Net Debt/Equity	%	na
3mth Av. D. T'over	A\$m	0.006
52wk High/Low	A\$	0.22/0.15
2yr adj. beta		0.29
<b>Valuation:</b>		
Methodology	na	
Value per share	A\$	na
<b>Analyst:</b>	Xavier Braud	
<b>Phone:</b>	( +61) 8 9225 2813	
<b>Email:</b>	xbraud@psl.com.au	

#### Disclosure:

**Patersons Securities Limited acted on behalf of Saturn Metals Limited within the past year and have received fees for these services.**

**The analyst participated in the STN IPO and owns shares in the company.**

#### 12 Month Share Price Performance



Performance %	1mth	3mth	12mth
Absolute	6.3	(5.6)	0
Rel. S&P/ASX 300	4.6	(8.5)	0

## PRIME REAL ESTATE.

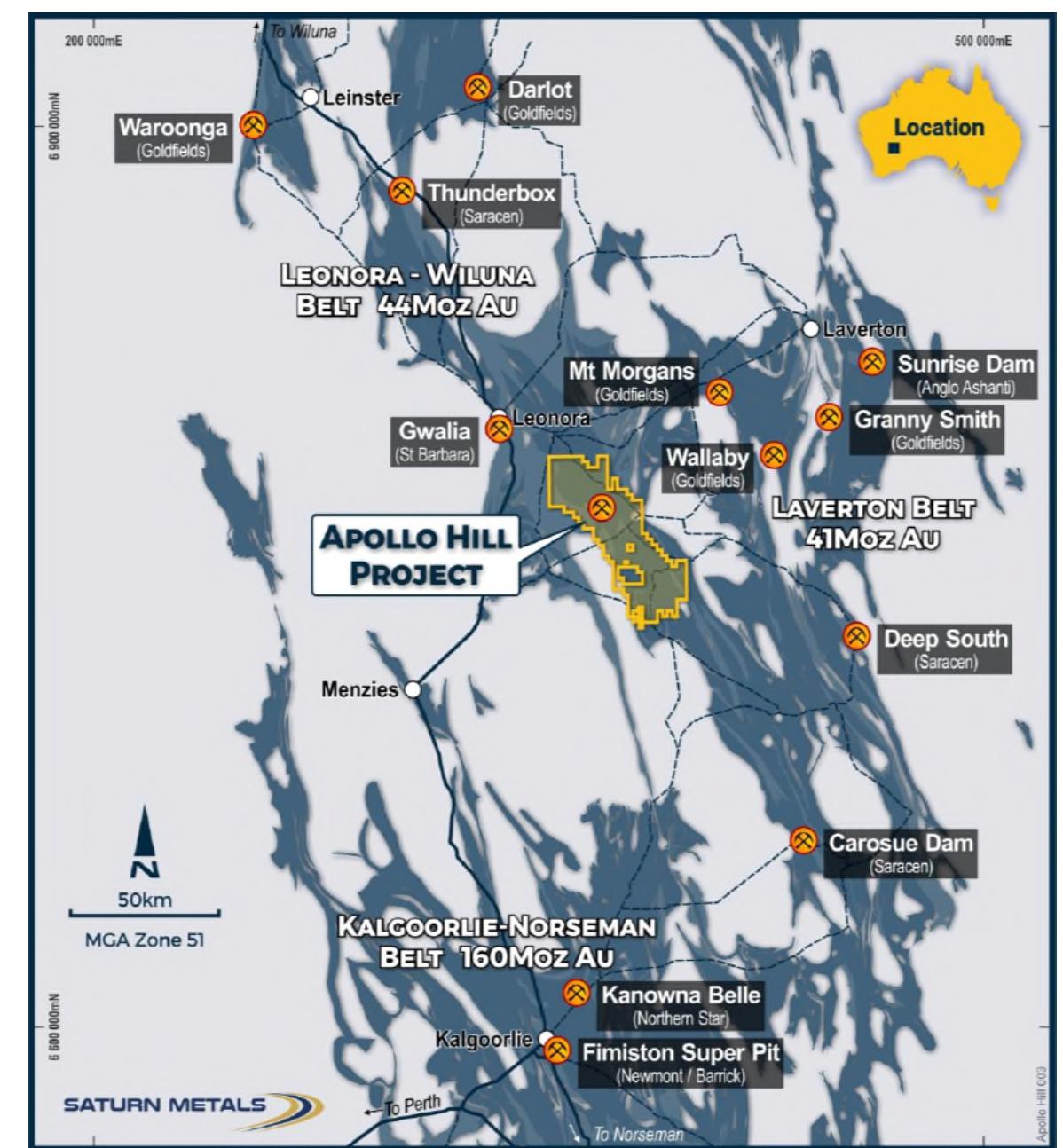
STN controls over 1000km<sup>2</sup> of contiguous tenure in a highly prospective region of the Goldfields of Western Australia.

The 0.5Moz Apollo Hill deposit is located 60km to the south east of Leonora.

The tenure broadly covers a 70km long stretch of greenstone belt. 60 km along strike to the north west is Gwalia operated by St Barbara and 130km along strike to the south east is Carosue Dam, operated by Saracen.

The main structural feature running through this belt is the Keith Kilkenny lineament, which can be generally described as a deep seated crustal structural corridor encompassing numerous shear zones and prospective for gold mineralisation.

Figure 1: Apollo Hill and STN Tenure Map



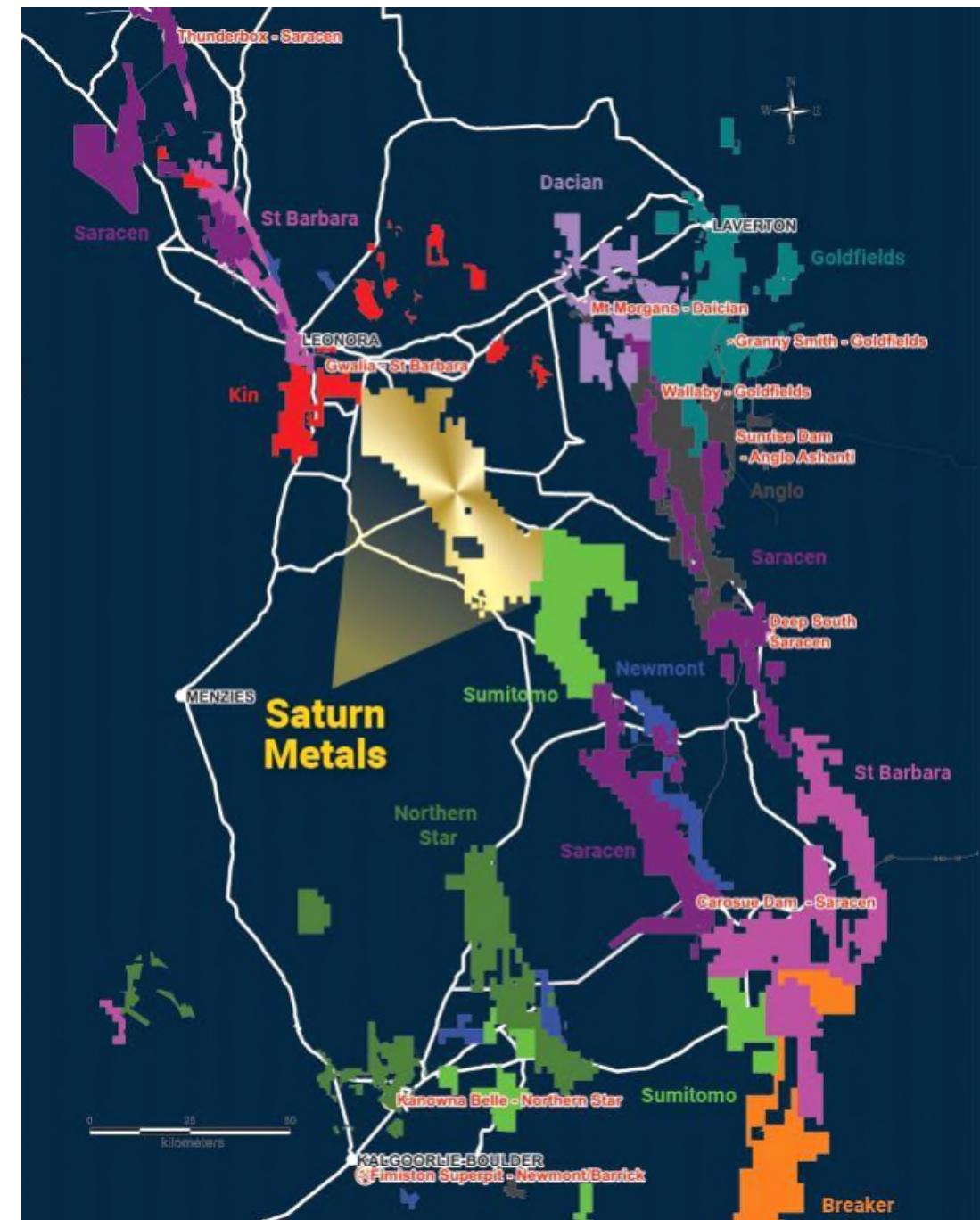
Source: Saturn Metals Limited

A quick look at the neighbours can certainly increase the level of confidence in the prospectivity of STN land package.

Along the same Keith Kilkenny lineament and covering the same greenstone belt we can find to the south east Sumitomo, Saracen, Newmont, St Barbara and to the northwest, Kin, Sarcen (again) and St Barabara (again too). All those names are certainly owing their bits of the greenstone belt for a good reason and we are lead to believe that it might be its endowment.

The Leonora-Wiluna segment of the Norseman-Wiluna greenstone belt has produced a mere 44Moz so far and certainly has a few more ounces to produce.

Figure 2: STM and Surrounding Neighbours Tenure Map



Source: Saturn Metals Limited

## A GOOD START WITH AN EXISTING RESOURCE AT 0.5MOZ

Originally, Peel Mining (PEX) had purchased the Apollo Hill project, with the views of doing what STN is currently doing.

Unfortunately for Peel, they got distracted from their original plan by a major discovery in the Cobar basin (Mallee Bull), followed by another discovery, still in the Cobar Basin (Wirlong) and another major discovery, and still in the Cobar basin (Wagga-Tank / Southern Nights), followed by the proof of concept of a new geological model, not far from the other two in the Cobar Basin again (Fenceline / The Bird).

With all their attention focussed on the Cobar Basin, it made sense for PEX to hand the Apollo Hill project to another team to see it get the attention it deserved.

STN was born from the spin out of Apollo Hill from PEX.

Not all junior company starts existence with a defined resource. STN was lucky enough to get started with 0.5Moz. Of course, if that half a million ounces had been a straightforward story, it would probably have been mined out in another cycle. The grade of the resource was probably the reason why it had not been developed. The average grade of 0.9g/t for the estimated 17.2Mt of ore present at Apollo Hill might have seemed too low to justify the development of the project.

There is a common theme in Western Australian gold exploration and mining. For long periods of time in mining cycles, exploration potential in the goldfields is underestimated. The general thought is that all the good deposits have been found and that there is no point putting all that hard exploration work and scarce money into a ground which is not going to deliver enough bounty. Then, at regular intervals, with a small shift in the economics of gold, all the projects left on the side for years start becoming appealing again.

Half a million ounces at 0.9g/t was certainly too light in grade to be attractive at a certain point in time. But now that companies like Regis Resources (RRL) have proved that 0.8g/t open pit material can be profitably mined in the goldfields, a 0.9g/t orebody certainly looks better.

On top of this consideration, with a new owner and a new management team come new sets of eyes. As we mentioned before, Ian Bamborough, now in charge of the project, has certainly developed an eye for gold deposits during his days as a development geologist for Newmont. We believe that the Peel mining team certainly had the same suspicion but they got distracted "en route".

Another recurring theme in gold exploration, collation of data. Over the past decades, explorers have certainly been recording an enormous amount of data; but all of that data is usually scattered across several databases. Most of the time, digital databases have serious intergenerational incompatibility issues, frequently topped up by variations in geological interpretations. But for who can patiently go through all of the historical data and rebuild a workable dataset, sometimes will come the reward of a new exploration model and the hope of a better and or bigger deposit to be found.

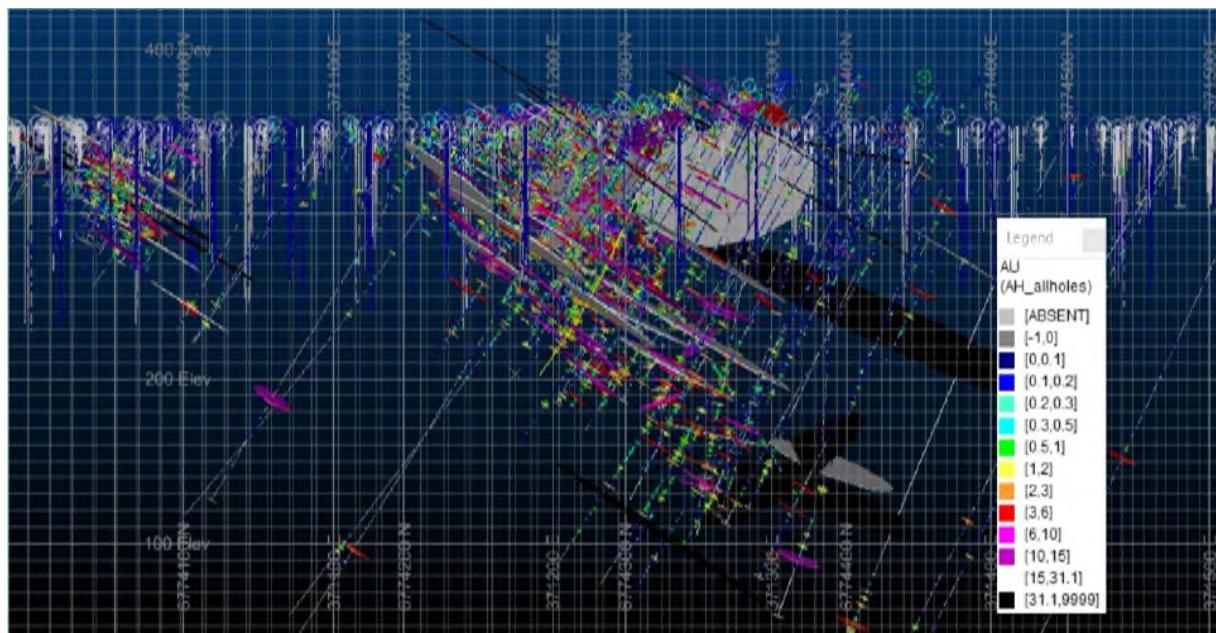
Apollo Hill looks, so far, like it has some of those characteristics.

Deemed too low grade with a resource model possibly diluting some higher grades areas of the deposit, Apollo Hill has been left for STN to look after it and take it to another level where, hopefully, developing it will make sense to the broader mining community.

All this considered, STN, after its successful IPO had 0.5Moz in resource, \$7m in cash and ideas to grow the deposit bigger.

The plot on figure 3 can look confusing but it was the starting point for a re-interpretation of the Apollo Hill deposit mineralisation.

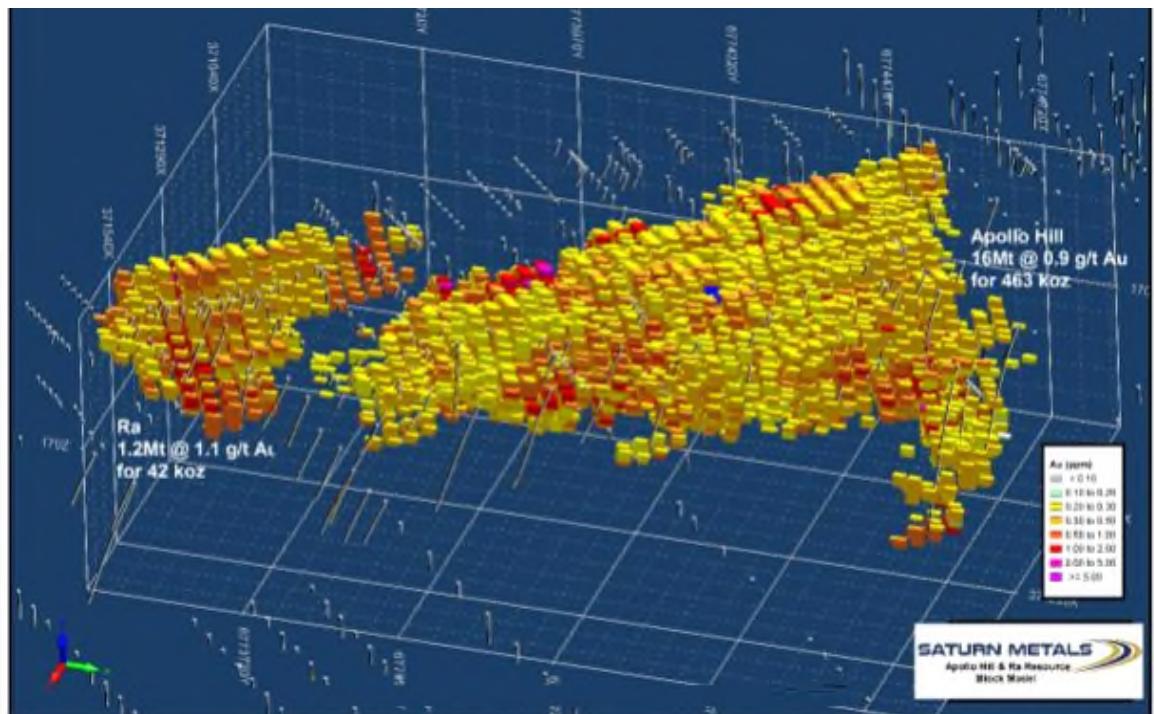
Figure 3: Plot of Apollo Hill consolidated dataset with gold assays.



Source: Saturn Metals Limited

The original block model representation (figure 4) is certainly more visually explicit but shows a large number of lower grade blocks (in yellow) probably resulting from internal dilution in the modelling.

Figure 4: Type Text Here



Source: Saturn Metals Limited

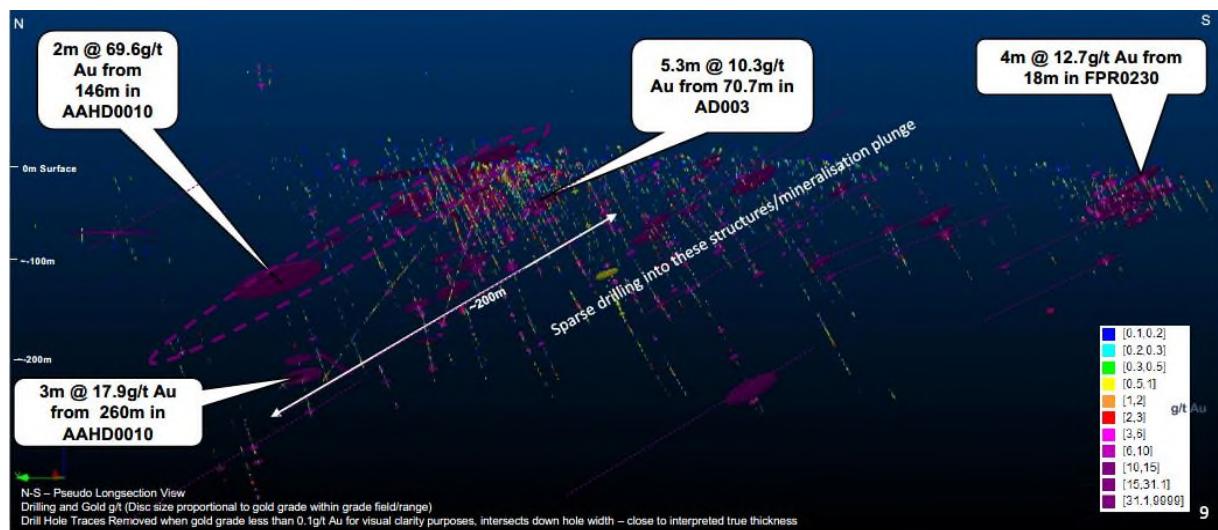
## STN PLAN: A RAPID RESOURCE UPGRADE.

### Maiden 35 Holes RC drilling program April-May 2018

There are two ways to upgrade an existing resource, increase its size, or increase its grade. In the case of Apollo Hill, it looked like both are possible.

Figure 5 is a different view of the drilling data displayed on figure n. With a different orientation and some fine tuning in the display, some zones with systematic higher gold grades in drilling appear. Those zones do not seem to have been fully realised in the original block model (figure 4)

Figure 5: Pseudo long section plot of Apollo Hill deposit drilling data



Source: Saturn Metals Limited

Quite often, the accuracy of a resource estimate block model is controlled by the level of confidence a resource geologist has in the continuity of mineralisation and grade. This level of confidence is often driven by drilling density. The smaller the separation between drillholes, the higher the confidence index in geology, mineralisation and grade continuity.

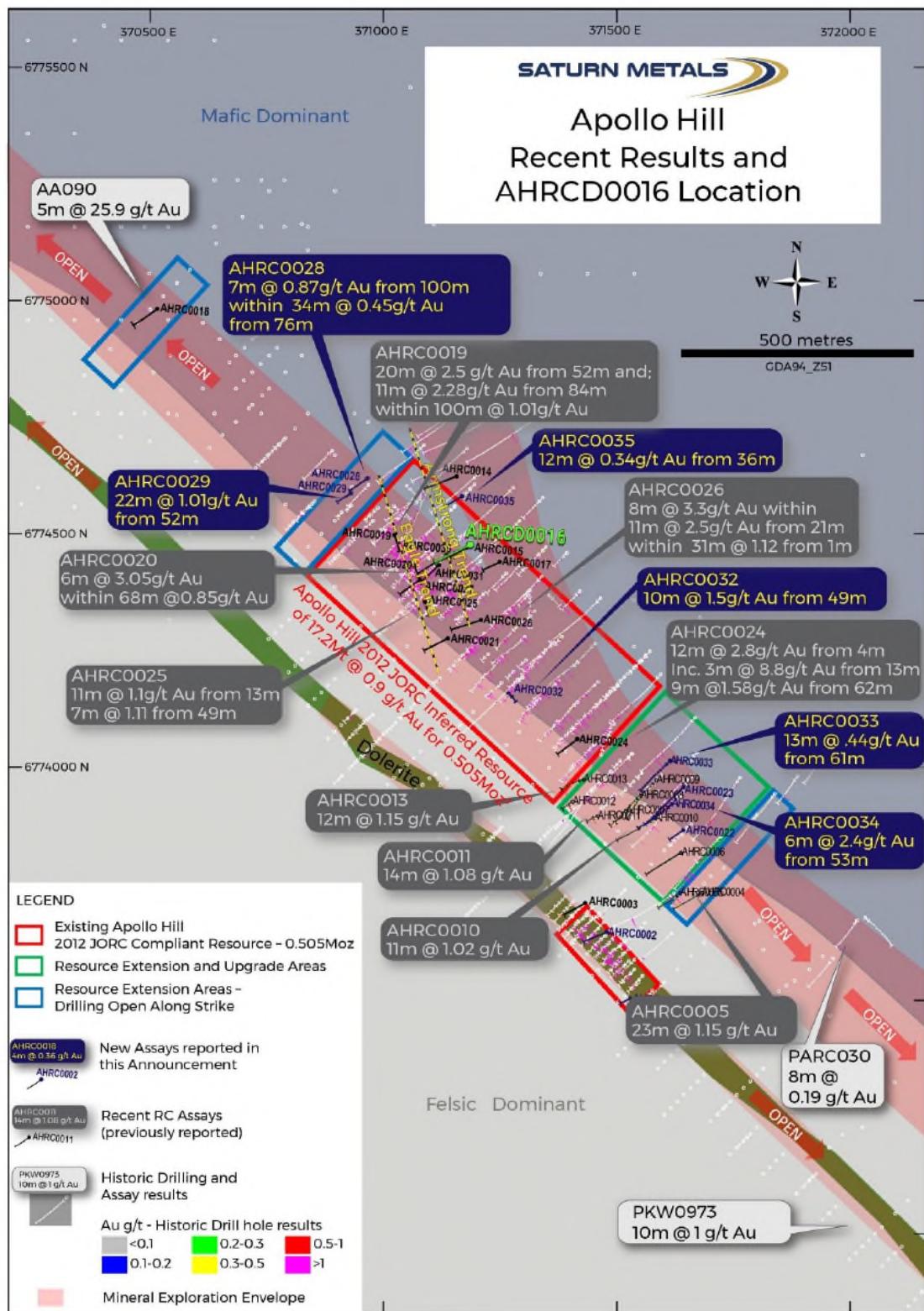
It appeared quickly that the higher grade zones within the deposit had not been drilled enough for the model to accurately reflect the presence of higher grade material within a lower grade envelope.

STN original plan was to go and drill holes into those higher grade zones to try and find mineralisation with grades higher than the resource estimate average grade.

Mobilisation of a drill rig is a costly exercise and timely availability of drill rigs is more than often problematic. So, when a drill rig is available and mobilised to a project, it is always worth utilising to the maximum.

In STN case, the first drilling program also included drilling outside the original resource model to increase the size of the deposit.

Figure 6: Maiden RC drilling campaign results map.



Source: Saturn Metals Limited

The map on figure 6 shows results of the maiden 35 holes RC drilling program. With the location of the first follow-up diamond drill hole. It also highlights the zones of resource upgrade and extension.

Figure 7: Maiden RC drilling program reported assays results

Hole #	From (m)	To (m)	Interval (m)	Au Grade (g/t)
AHRC0001				No significant Assays
AHRC0002				No significant Assays
AHRC0003	27	31	4	0.54
AHRC0004	25	35	10	0.45
	44	52	8	0.39
	93	109	16	0.33
including	107	109	2	1.44
AHRC0005	11	34	23	1.15
including	11	17	6	2.26
and	13	14	1	11.74
AHRC0006	43	72	29	0.26
	109	123	14	0.25
	30	32	2	2.66
AHRC0007	72	91	19	1.02
AHRC0008	41	55	14	0.41
AHRC0009	0	17	17	0.34
	100	109	9	0.34
	142	151	9	0.31
AHRC0010	38	49	11	1.02
	63	65	2	1.1
AHRC0011	10	24	14	1.08
AHRC0012	11	25	14	0.94
including	19	25	6	1.91
	26	38	12	0.5
	58	64	6	0.96
AHRC0013	93	105	12	1.15
AHRC0014	60	64	4	1.03
AHRC0015	30	33	3	0.73
AHRC0017	5	25	20	0.55
AHRC0018	52	56	4	0.36
AHRC0019	7	107	100	1.01
including	50	97	47	1.88
and	52	72	20	2.5
including	52	56	4	6.9
and	84	95	11	2.28
AHRC0020	0	68	68	0.85
including	6	12	6	3.05
AHRC0021	6	39	33	0.66
	62	72	10	0.39
AHRC0022	31	97	66	0.37
AHRC0023	129	158	29	0.64
AHRC0024	4	16	12	2.28
including	13	16	3	8.8
including	13	14	1	23.9
	41	123	82	0.42
including	62	71	9	1.58
AHRC0025	4	8	4	0.59
	13	24	11	1.1
	20	28	8	0.6
	31	33	2	1.9

	45	61	16	0.7
	49	56	7	1.11
	56	70	14	0.61
	76	89	13	0.57
	100	108	8	0.38
	116	117	1	1.25
AHRC0026	1	32	31	1.12
including	21	32	11	2.5
	38	52	14	0.25
	62	63	1	1.43
	71	119	48	0.45
including	82	93	11	1.08
AHRC0027	4	45	41	1.43
including	8	24	16	2.76
	56	74	18	0.4
	81	91	10	0.28
AHRC0028	24	25	1	0.96
	31	32	1	0.86
	76	110	34	0.45
	100	107	7	0.87
AHRC0029	52	74	22	1.01
	52	63	11	1.49
	79	84	5	0.86
AHRC0030	0	12	12	0.51
	81	92	11	0.63
	85	92	7	0.92
	110	153	43	0.91
including	114	150	36	1.04
and	124	129	5	3.76
and	124	128	4	4.29
AHRC0031	14	16	2	1.09
including	45	58	13	0.64
	56	95	39	0.73
including	64	82	18	1.09
and	64	69	5	1.97
and	88	90	2	2.14
AHRC0032	4	20	16	0.37
	29	43	14	0.3
	49	59	10	1.5
	64	74	10	0.46
	69	74	5	0.73
AHRC0033	61	74	13	0.44
	129	133	4	0.64
	181	182	1	1.6
AHRC0034	53	59	6	2.41
	78	94	16	0.62
	104	118	14	0.29
	155	165	10	0.44
	177	178	1	1.26
AHRC0035	36	48	12	0.34

Source: Patersons Securities Limited / Saturn Metals Limited

The table in figure 7 is a compilation of all the drilling results reported by STN to the ASX.

The maiden 35 holes RC drilling highlighted numerous zones of grades far greater than the average 0.9g/t reported in the resource estimation. With those new holes in higher grade zones, it is expected that STN will be able to come back with an upgraded resource model integrating higher grade zones and delivering an overall improved resource grade.

### **Follow up diamond drilling program June-July 2018**

Directly following up on the encouraging results from the maiden RC drilling program, STN continued its resource upgrade strategy by conducting a 9 diamond core holes drilling program.

Diamond core gives a lot more geological information than RC chips. The drilling of diamond holes by STN was part of the logical steps to better define the mineralisation at Apollo Hill, with the aim of modelling the deposit more accurately.

Figure 8: Logging STN first diamond drill hole in Apollo Hill deposit



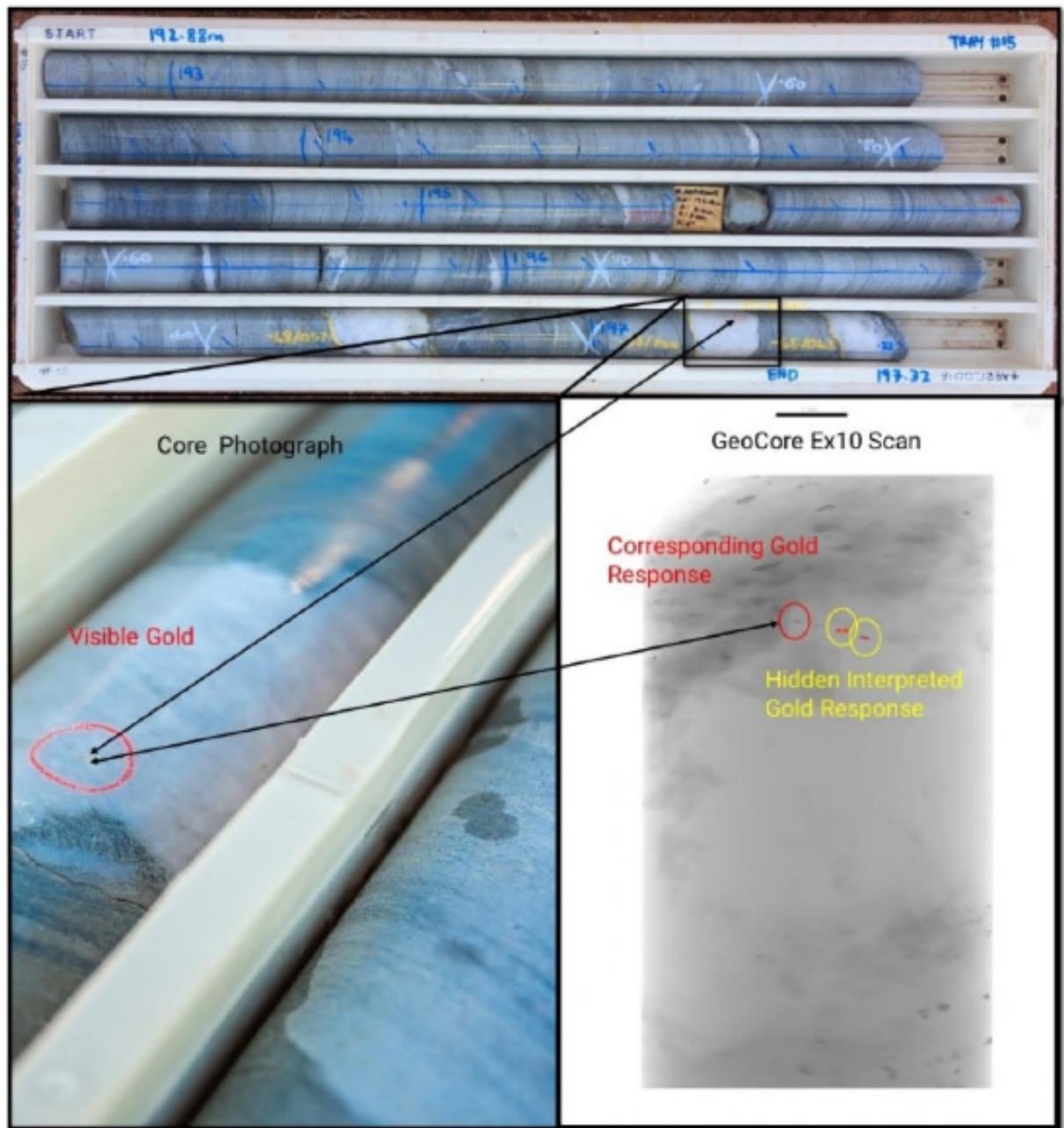
Source: Saturn Metals Limited

STN elected to use innovative technology in the processing of the diamond drill core. Swick Mining Services (SWK) is rolling out the Orexplore GeoCore X10 core scanning technology. This technology is an application of medical X-Ray imagery and technology to core samples.

At this stage of development, as it is the case with all X-Ray technology used in mineral exploration, the level of detection for gold does not allow the Orexplore GeoCore X10 to deliver gold assays, however, the powerful imagery can show the presence of gold grains within the core.

Apollo Hill mineralisation is dominated by coarse grain gold hosted in quartz veins in a shear zone. This style of mineralisation makes core from STN perfectly suited for the use of the Orexplore technology.

Figure 9: Apollo Hill core, visible gold mineralisation and GeoCore Ex10 image of the visible gold.



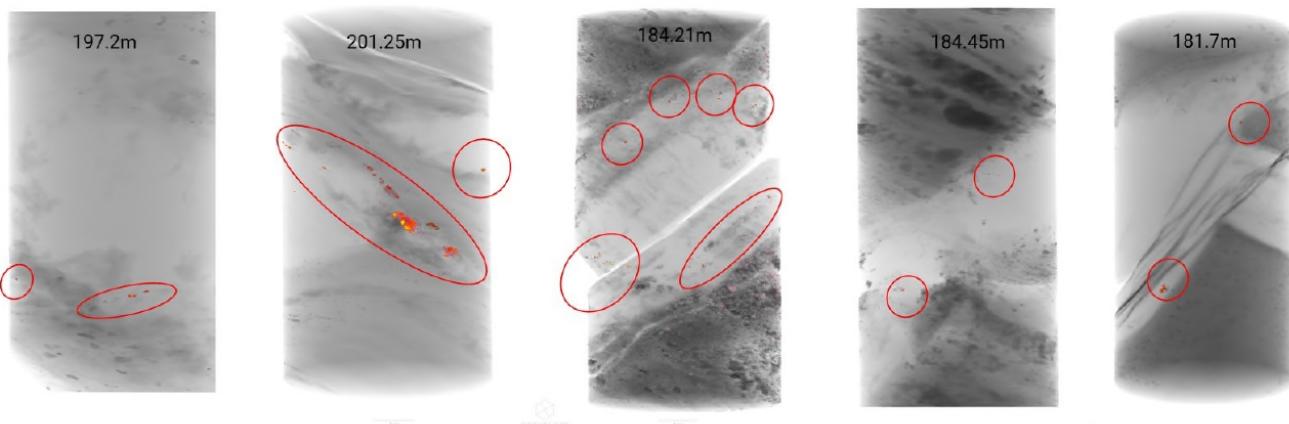
Source: Saturn Metals Limited

Visible gold is often synonymous with significant grade. As the Orexplore technology allows the visualisation of gold grains within quartz veins, then STN has an indication of potential high grade mineralisation before receiving the full results of laboratory assays.

This technology helped confirm the presence of gold mineralisation in Apollo Hill core and prompted STN to fast track a second RC resource drilling campaign, infilling drilling spacing between diamond holes.

Figure 10: Core images using the Orexplore technology showing gold grains within quartz veins. Drillhole AHRCDD0016

GeoCoreEx10 Scan of 10cm Core Sections Highlighting Interpreted Gold Grains in AHRCDD0016



Source: Saturn Metals Limited

Diamond and RC drilling have so far confirmed the existence and continuity of the high grade Armstrong shoot at Apollo Hill. The other high grade shoot, (Eagle) has not yet been properly drilled.

Figure 11: diamond drilling assays results to date

Hole #	From (m)	To (m)	Interval (m)	Au Grade (g/t)
AHDD0003	173.8	198	24.2	1.22
	173.8	185	11.2	1.77
	184	184.4	0.4	15.8
	196.6	198	1.4	5.8
	196.6	197	0.4	9.98
	202.6	203.6	1	9.8
	18.9	29.9	11	0.44
	49	50	1	3.64
	78	79	1	1.01
	85	92.8	7.8	1.12
AHDD0005	91.8	92.3	0.5	11.95
	101	102	1	1.55
	121.5	122.5	1	1.93
	132	133	1	4.2
	89	92.8	3.8	2.05
	92.3	92.8	0.5	14.6
AHDD0007	98	101	3	0.97
	125	131.5	6.5	0.72
	including	140	1	2.54
AHRCDD0016	and	146	15	0.8
	and	220.5	7.4	2.01
		223.2	0.4	17.55
		227.6	0.3	12.5

Source: Patersons Securities Limited / Saturn Metals Limited

At the time of writing, assays for 5 diamond holes are still pending.

## ANOTHER UPSIDE: THE REGIONAL EXPLORATION POTENTIAL

If STN started with an existing resource and a strategy to improve it, the whole tenure under control covers over 1000km<sup>2</sup> of prospective ground.

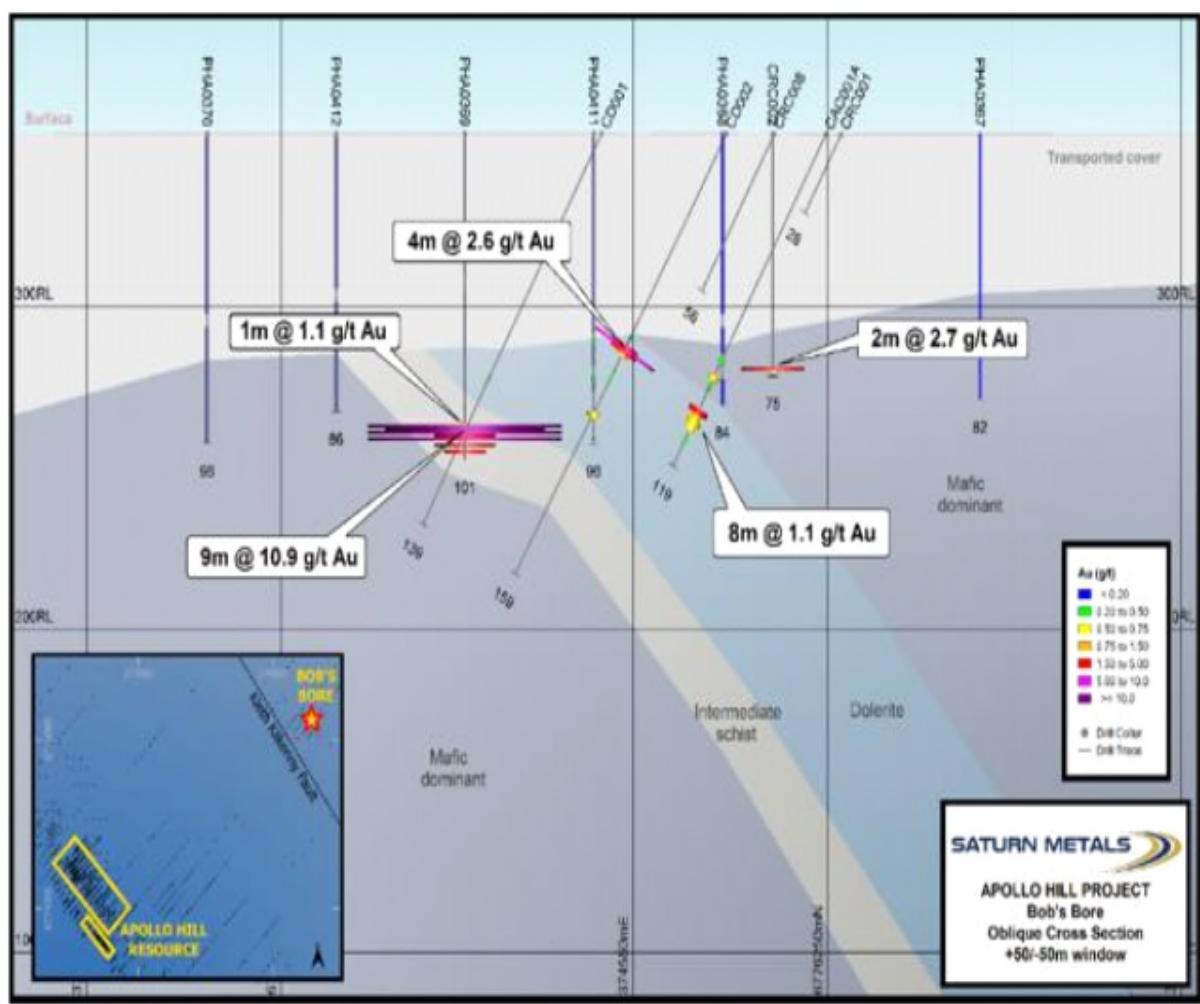
Some historical exploration has already taken place and several regional targets can also add quickly to STN gold inventory.

### Bob's Bore:

Bob's bore is a regional target, located 3.5km to the north east of Apollo Hill deposit with limited historical drilling.

A reported interval of 9m at 10.9g/t Au in a shallow historical hole is certainly worthy of follow up drilling.

Figure 12: Bob's bore cross section showing historical drilling and assays results



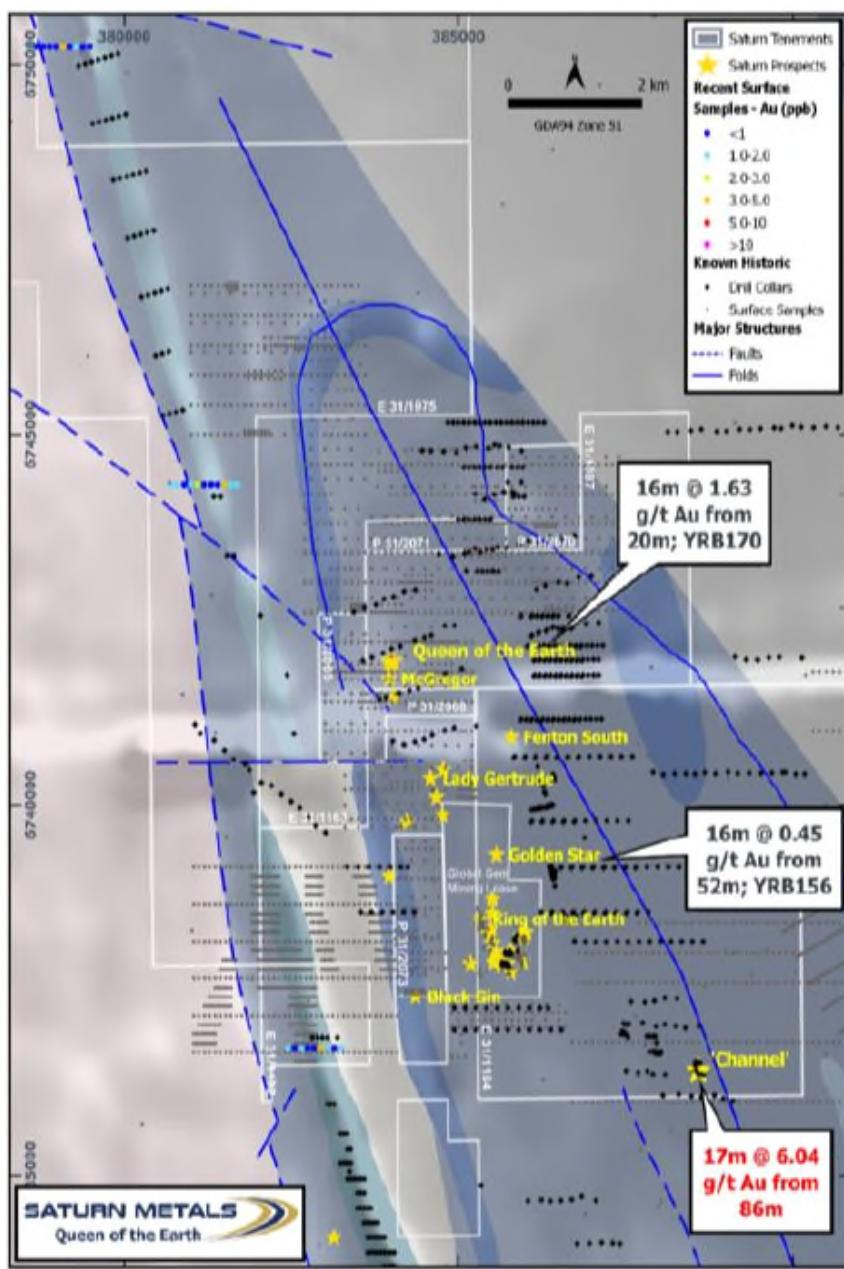
Source: Saturn Metals Limited

## **Yerilla shear:**

The Yerilla shear is another walk-up target within STN tenement package. Historical results include 17m at 6.04g/t Au from 86m in an RC hole and several areas of gold anomalism associated with structural features such as folding and faulting.

The Yerilla shear is a second advanced target with potential to deliver more positive results for STN.

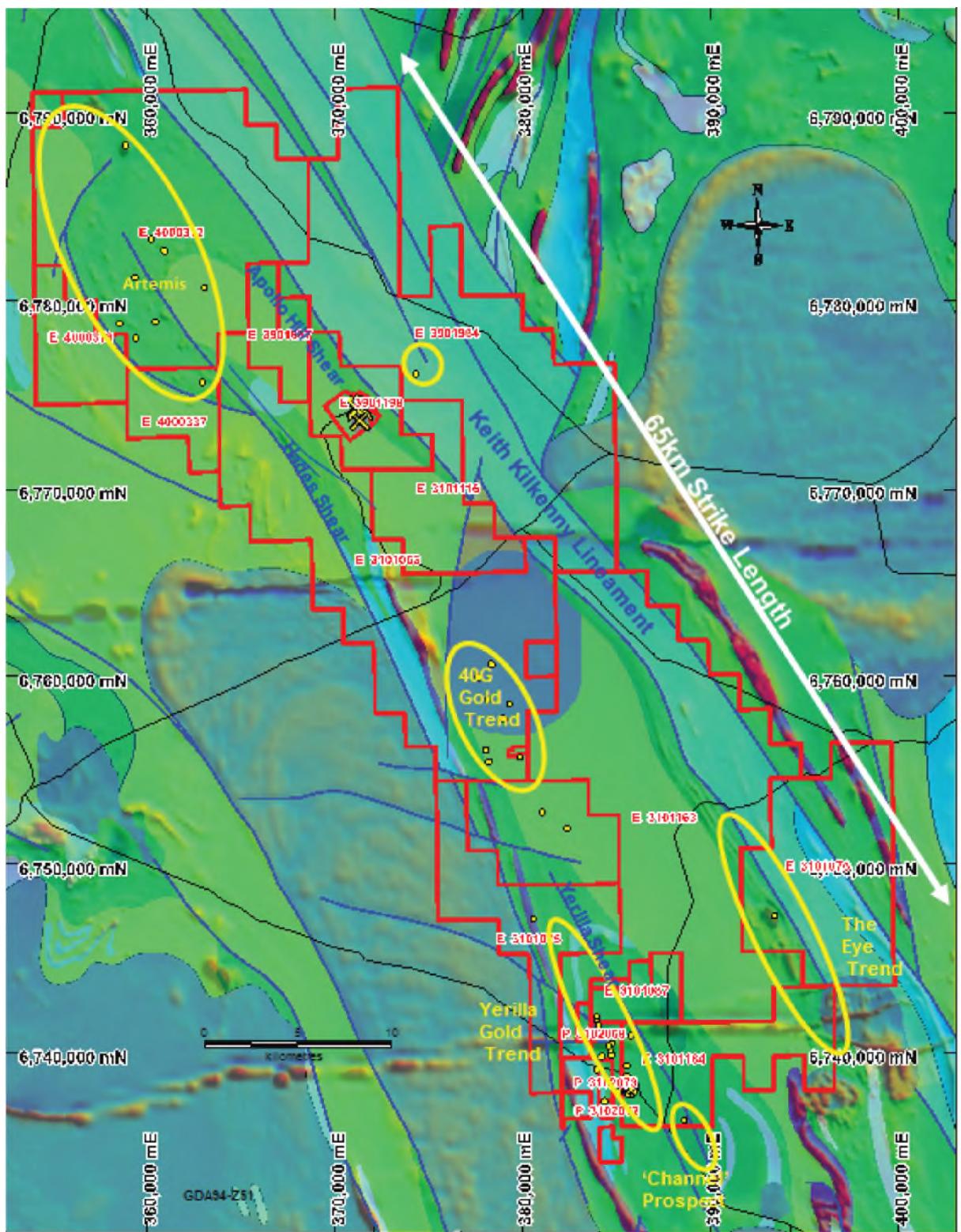
Figure 13: Yerilla Shear historical work map



Source: *Saturn Metals Limited*

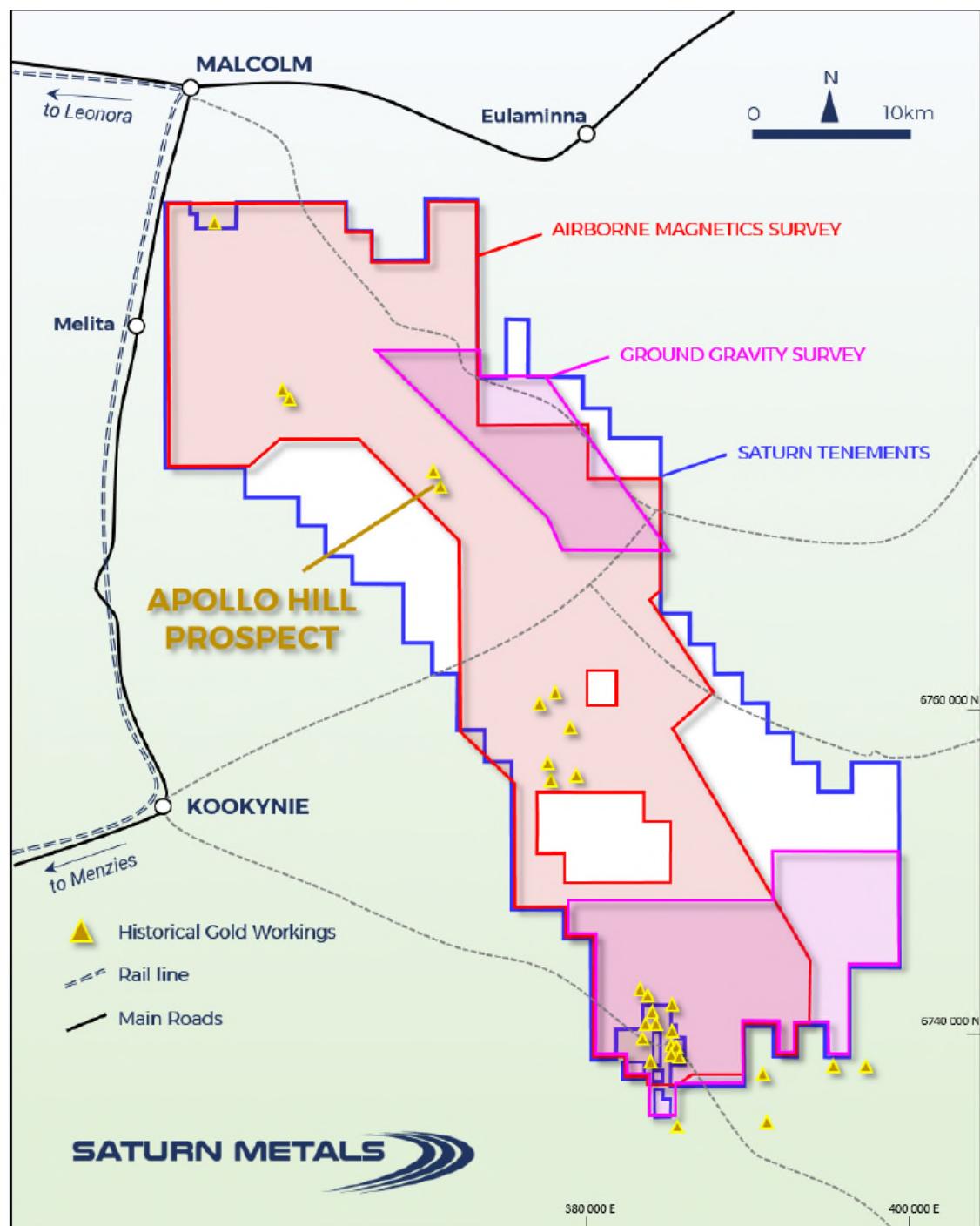
Both Bob's bore and Yerilla shear are advanced exploration projects. We can easily see several other new targets coming out of further regional exploration work by STN.

Figure 14: STN Tenure map with regional exploration targets highlighted



Source: Saturn Metals Limited

Figure 15: Regional exploration: geophysical surveys map



Source: Saturn Metals Limited

## BACKING THE (A) TEAM WHO WILL MAKE THE PLAN COME TOGETHER

A great story is the combination of several ingredients. A good project is necessary but not sufficient. A good jurisdiction is, again, necessary but not sufficient, and the list of ingredients goes on with timing, market sentiment, commodity price, etc... And of course: people.

STN has a team which we see very capable of delivering more gold in a short time frame.

Biographies have been taken from STN IPO prospectus:

### **Mr Ian Bamborough, BSc (Hons), MSc, MBA, MAIG, GAICD. Managing Director**

Mr Bamborough is a geologist with 20 years leadership experience in the mining industry. Mr Bamborough developed his career with Newmont Mining Corporation and was more recently managing director of ASX listed Spectrum Rare Earths Limited. Mr Bamborough has previously served as a director on the Northern Territory Mining Board.

### **Mr Robert Tyson, BAppSc, GDipAppFin, MAusIMM, Executive Chairman**

Mr Tyson is a geologist with more than 20 years resources industry experience having worked in exploration and mining-related roles for companies including Cyprus Exploration Pty Ltd, Queensland Metals Corporation NL, Murchison Zinc Pty Ltd, Normandy Mining Ltd and Equigold NL. Mr Tyson is the managing director of Peel Mining Limited, a role he has held for 11 years since the Company's inception.

### **Mr Andrew Venn, BBus, GDipAppFin, FFin, Non-Executive Director**

Mr Venn has over 20 years mining industry experience and currently holds a senior executive position for a major mining contractor. Mr Venn has previously held senior positions across financing and operations for Argonaut Limited, Orica Mining Services and ICI Explosives and is a Fellow of the Financial Services Institute of Australia.

### **Mr Ryan Woodhouse, Company Secretary**

Mr Woodhouse has 10 years of experience in the mining and energy industries in the area of accounting and governance. He holds a Bachelor of Commerce from Curtin University and is a member of the Institute of Chartered Accountants.

## BUSY TIME AHEAD:

STN has committed to its plan of delivering an upgraded resource estimate for the Apollo Hill deposit and exploring the large tenement package to find more gold regionally.

Figure 16: Schedule table of planned work until Dec. 2018

Planned Exploration Activity	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Physicals
Airborne Magnetics													~750km <sup>2</sup>
Ground Gravity													~250km <sup>2</sup>
Apollo & Ra RC Resource Drilling													~7,000m
Apollo & Ra Extensional Drilling													~2,500m
Apollo Plunging Shoot Drilling (RC DDH)													~2,500m
Geological & Resource Model													
Regional Geochemistry Programs													
Regional Aircore Drilling													~9,000m
Regional RC & DDH Drilling													~1,900m

Source: Saturn Metals Limited

## CONCLUSION: STN IS A CHEAP AND EFFICIENT ENTRY IN THE GOLD SECTOR.

STN raised \$7m in the IPO cash at the end of June is \$4.98m (From Appendix 5B, cash at 30/06/2018)

At \$0.17/sh, with 56 million issued shares, STN has a market capitalisation of \$9.5m

With the current resource inventory at 0.505Moz Au, STN is trading at an ev/oz of \$9/oz which seems very cheap in the current market.

## Recommendation History



Date	Type	Target Price	Share Price	Recommendation	Return
Mar-18					

**Stock recommendations:** Investment ratings are a function of Patersons expectation of total return (forecast price appreciation plus dividend yield) within the next 12 months. The investment ratings are Buy (expected total return of 10% or more), Hold (-10% to +10% total return) and Sell (> 10% negative total return). In addition, we have a Speculative Buy rating covering higher risk stocks that may not be of investment grade due to low market capitalisation, high debt levels, or significant risks in the business model. Investment ratings are determined at the time of initiation of coverage, or a change in target price. At other times the expected total return may fall outside of these ranges because of price movements and/or volatility. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. This Document is not to be passed on to any third party without our prior written consent.



**1300 582 256**  
**patersons@psl.com.au**  
**www.psl.com.au**

### **Patersons Securities Limited Disclosure of Interest**

Patersons Securities and its respective officers and associates may have an interest in the securities or derivatives of any entities referred to in this material

Patersons Securities does, and seeks to do, business with companies that are the subjects of its research reports.

### **Patersons Securities Corporate Relationship Disclosure**

- 88E Patersons Securities have acted for 88 Energy Ltd (88E) within the past year and have received fees for these services.
- AGR Patersons Securities have acted for Aguia Resources Ltd (AGR) within the past year and have received fees for these services.
- AGY Patersons Securities have acted for Argosy Minerals Ltd (AGY) within the past year and have received fees for these services.
- AJL Patersons Securities have acted for AJ Lucas Group Ltd (AJL) within the past year and have received fees for these services.
- AKM Patersons Securities have acted for Aspire Mining Ltd (AKM) within the past year and have received fees for these services.
- AO1 Patersons Securities have acted for AssetOwl Limited (AO1) within the past year and have received fees for these services.
- AXL Patersons Securities have acted for Axsesstoday Ltd (AXL) within the past year and have received fees for these services.
- BOE Patersons Securities have acted for Boss Resources Ltd (BOE) within the past year and have received fees for these services.
- BRB Patersons Securities have acted for Breaker Resources NL (BRB) within the past year and have received fees for these services.
- BUX Patersons Securities have acted for Buxton Resources Ltd (BUX) within the past year and have received fees for these services.
- CSS Patersons Securities have acted for Clean Seas Seafood Ltd (CSS) within the past year and have received fees for these services.
- CTL Patersons Securities have acted for Centennial Mining Ltd (CTL) within the past year and have received fees for these services.
- DRG Patersons Securities have acted for Draig Resources Ltd (DRG) within the past year and have received fees for these services.
- DRO Patersons Securities have acted for DroneShield Ltd (DRO) within the past year and have received fees for these services.
- GLL Patersons Securities have acted for Galilee Energy Ltd (GLL) within the past year and have received fees for these services.
- IBG Patersons Securities have acted for Ironbark Zinc Ltd (IBG) within the past year and have received fees for these services.
- IPT Patersons Securities have acted for Impact Minerals Ltd (IPT) within the past year and have received fees for these services.
- NUS Patersons Securities have acted for Nusantara Resources (NUS) within the past year and have received fees for these services.
- PEX Patersons Securities have acted for Peel Mining Ltd (PEX) within the past year and have received fees for these services.
- PGO Patersons Securities have acted for Primary Gold Ltd (PGO) within the past year and have received fees for these services.
- RCL Patersons Securities have acted for Readcloud Limited (RCL) within the past year and have received fees for these services.
- SYA Patersons Securities have acted for Sayona Mining Ltd (SYA) within the past year and have received fees for these services.
- UVU Patersons Securities have acted for UUV Aquabotix Ltd (UVU) within the past year and have received fees for these services.
- VMY Patersons Securities have acted for Vimy Resources Ltd (VMY) within the past year and have received fees for these services.
- WKT Patersons Securities have acted for Walkabout Resources Ltd (WKT) within the past year and have received fees for these services.
- XAM Patersons Securities have received corporate advisory fees from Xanadu Mines Ltd (XAM) within the past year.
- XTE Patersons Securities have acted for Xtek Ltd (XTE) within the past year and have received fees for these services.



1300 582 256

[patersons@psl.com.au](mailto:patersons@psl.com.au)

[www.psl.com.au](http://www.psl.com.au)

## Research

Cathy Moises - Head of Research

Phone: (+61 3) 9242 4030

Email: [cmoises@psl.com.au](mailto:cmoises@psl.com.au)

James Farr - Research Assistant

Phone: (+61 8) 9263 1215

Email: [jfarr@psl.com.au](mailto:jfarr@psl.com.au)

Daniel Veasey - Research Assistant

Phone: (+61 8) 9225 2818

Email: [dveasey@psl.com.au](mailto:dveasey@psl.com.au)

## Strategy & Economics

Tony Farnham - Economic Strategist / Analyst

Phone: (+61 2) 9258 8973

Email: [tfarnham@psl.com.au](mailto:tfarnham@psl.com.au)

Greg Galton - Private Wealth, Analyst

Phone: (+61 8) 9263 1612

Email: [ggalton@psl.com.au](mailto:ggalton@psl.com.au)

## Commodities

Cam Hardie - Analyst

Phone: (+61 3) 9242 4153

Email: [chardie@psl.com.au](mailto:chardie@psl.com.au)

Simon Tonkin - Senior Analyst

Phone: (+61 8) 9225 2816

Email: [stonkin@psl.com.au](mailto:stonkin@psl.com.au)

Xavier Braud - Analyst

Phone: (+61 8) 9225 2813

Email: [xbraud@psl.com.au](mailto:xbraud@psl.com.au)

## Industrials

Martyn Jacobs - Analyst

Phone: (+61 3) 9242 4153

Email: [mjacobs@psl.com.au](mailto:mjacobs@psl.com.au)

Jon Scholtz - Analyst

Phone: (+61 8) 9225 2836

Email: [jscholtz@psl.com.au](mailto:jscholtz@psl.com.au)

Hira Sakrani - Associate Analyst

Phone: (+61 3) 9242 4052

Email: [hsakrani@psl.com.au](mailto:hsakrani@psl.com.au)

## Institutional Dealing

Dan Bahen

Phone: (+61 8) 9263 1274

Email: [dbahen@psl.com.au](mailto:dbahen@psl.com.au)

Michael Brindal

Phone: (+61 8) 9263 1186

Email: [mbrindal@psl.com.au](mailto:mbrindal@psl.com.au)

Artie Damaa

Phone: (+61 2) 8238 6215

Email: [adamaa@psl.com.au](mailto:adamaa@psl.com.au)

Paul Doherty

Phone: (+61 3) 8803 0108

Email: [pdoherty@psl.com.au](mailto:pdoherty@psl.com.au)

Chris Kelly

Phone: (+61 3) 9242 4078

Email: [ckelly@psl.com.au](mailto:ckelly@psl.com.au)

Jeremy Nugara

Phone: (+61 3) 8803 0166

Email: [jnugara@psl.com.au](mailto:jnugara@psl.com.au)

Phil Schofield

Phone: (+61 2) 8238 6223

Email: [pschofield@psl.com.au](mailto:pschofield@psl.com.au)

Sandy Wylie

Phone: (+61 8) 9263 1232

Email: [swylie@psl.com.au](mailto:swylie@psl.com.au)

**Important Notice:** Copyright 2017. The Contents contained in this report are owned by Patersons Securities Limited ('Patersons') and are protected by the Copyright Act 1968 and the copyright laws of other countries. The material contained in this report may not be copied, reproduced, republished, posted, transmitted or distributed in any way without prior written permission from Patersons. Modification of the materials for any other purpose is a violation of the copyrights and other proprietary rights of Patersons.

**Disclaimer:** Patersons believes that the information or advise (including any financial product advice) contained in this report has been obtained from sources that are accurate at the time of issue, but it has not independently checked or verified that information and as such does not warrant its accuracy or reliability. Except to the Extent that liability cannot be excluded. Patersons accepts no liability or responsibility for any indirect loss or damage caused by any error in or omission from this report. You should make and rely on your own independent inquiries. If not specifically disclosed otherwise, investors should assume that Patersons is seeking or will seek corporate finance business from the companies disclosed in this report.

**Warning:** This report is intended to provide general securities advice, and does not purport to make any recommendation that any securities transaction is appropriate to your particular investment objectives, financial situation or particular needs. Prior to making any investment decision, you should assess, or seek advice from your adviser, on whether any relevant part of this report is appropriate to your financial circumstances and investment objectives.

**Disclosure:** Patersons, its directors and/or employees may earn brokerage, fees, commissions and other benefits as a result of a transaction arising from any advice mentioned in this report. Patersons as principal, its directors and/or employees and their associates may hold securities in the companies the subject of this report, as at the date of publication. These interests do not influence Patersons in giving the advice contained in this report. Details of any interests may be obtained from your adviser. Patersons as principal, its directors and/or employees and their associates may trade in these securities in a manner which may be contrary to recommendations given by an authorised representative of Patersons to clients. They may sell shares the subject of a general 'Buy' recommendation, or buy shares the subject of a general 'Sell' recommendation.

**Stock recommendations:** Investment ratings are a function of Patersons expectation of total return (forecast price appreciation plus dividend yield) within the next 12 months. The investment ratings are Buy (expected total return of 10% or more), Hold (-10% to +10% total return) and Sell (> 10% negative total return). In addition we have a Speculative Buy rating covering higher risk stocks that may not be of investment grade due to low market capitalisation, high debt levels, or significant risks in the business model. Investment ratings are determined at the time of initiation of coverage, or a change in target price. At other times the expected total return may fall outside these ranges because of price movements and/or volatility. Such interim deviations from specified ratings will be permitted but will become subject to review by Research Management. This Document is not to be passed to any third party without prior written consent.