

7 March 2018

Pantoro Limited (PNR)

Expanding to 100kozpa

Pantoro has achieved nine consecutive quarters of production growth and is about to commence its next phase, which targets an 80-100kozpa run rate by year end CY'18. The company will ramp up production from the Nicolson's underground, commence underground development at Rowdies/Wagtail and install an ore sorter to double the plant's capacity. We incorporate this expansion into our valuation and lift our target price to 36¢/sh (26¢/sh prior).

Rampup at Nicolsons and Rowdies/Wagtail

- The two lodes at Nicolsons underground, Johnston and Hall/Anderson, will ramp up to feed the plant at a rate of 320ktpa by DQ'18 (vs 167ktpa in DQ'17) before being offset by new production from Rowdies/Wagtail. We believe the significant development ahead of production and these two lodes acting as independent mining areas leave Pantoro well placed to achieve these targets.
- Pantoro will begin underground development at Rowdies/Wagtail in April following the release of an updated resource/reserve. It is our view that this will ramp up at a similar pace to Nicolson's and contribute ~100ktpa by JQ'19.

Processing Plant Expansion

 Ore sorting technology will enable Pantoro to double the capacity of the plant to 100kozpa for capex of A\$2.2m.
 The ore sorter, installed after the primary crusher, will reject 30-60% of the feed and effectively double the grade to the rest of the plant to give the production uplift.

Impact on Operating Costs

 Economies of scale are expected to lower mining unit costs by ~10% from A\$130/t to A\$117/t and for processing unit costs to fall by 27% from A\$43/t to A\$31/t. This should lead to AISC stabilising at ~A\$1,000/oz.

Mine Life

- It is our view that there is significant upside to the 183koz reserve and 377koz resource at Nicolsons.
 Depth extensions, from open deposits, at Nicolsons support our 565koz base case mining inventory.
- Brownfield discoveries from the highly prospective tenement package provide upside to our base case.

Price target (1xP/NPV) 36¢/sh (26¢/sh prior)

 Valuation includes expansion to 100kozpa and 2 years additional mine life beyond the current resource. BUY Share Price: A\$0.31

Target Price: A\$0.36

Company Data

Shares – ordinary (M)	785
Market capitalisation (\$M)	243
12 month low/high (\$)	0.17 / 0.31
Average monthly turnover (\$M)	12.6
GICS Industry	Materials

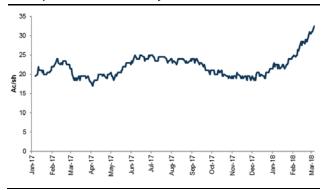
Financial Summary (fully diluted/normalised)

Year end June	2017A	2018F	2019F	2020F	2021F
Revenue (\$M)	64	92	144	158	156
Costs (\$M)	41	52	69	78	78
EBITDA (\$M)	23	40	75	79	78
NPAT (\$M)	6	23	41	46	47
EPS (¢ps)	1	3	5	6	6
EPS growth (%)	-205%	323%	75%	12%	3%
PER (x)	45	11	6	5	5
Free Cashflow (\$M)	20	29	59	63	62
FCFPS (¢ps)	2	4	7	8	8
PFCFPS (x)	13	9	4	4	4
Enterprise Value (\$M)	234	219	175	127	80
EV / EBITDA (x)	10	5	2	2	1
Payout ratio (%)	0%	0%	0%	0%	0%
Dividends (¢ps)	0	0	0	0	0

Board

Director	Position	Executive
Michael Jefferies	Chairman	Non-Executive
Paul Cmrlec	Managing Director	Executive
Scott Huffadine	Operations Director	Executive
Kyle Edwards	Director	Non-Executive

PNR - performance over one year



Disclosure and Disclaimer

This report must be read with the disclosure and disclaimer on the final page of this document



Analysis

Source: Petra Capital

Pantoro Limi	tod (DI	/ID/											
6-Mar-18	ieu (Fi	VIX)					Share Price	(\$)	A\$0.31				
O-IVIAI-10							SOI	(Φ) (M)	785.1				
							Issued shares	(M)	24.9				
							Fully Diluted	(M)	810				
Year End June		00474	20105	00405	00005	22245	Mkt Cap.	(\$M)	A\$243M	20105	00405	00005	22245
PROFIT & LOSS	A\$M	2017A 63.9	2018F 92.0	2019F 144.2	2020F 157.6	2021F 156.0			2017A Resource	2018F	2019F Reserve	2020F	2021F
Revenue Operating Costs	A\$M	38.7	50.2	67.4	76.5	76.5	Halls Creek Project (May		Resource	г	(eseive		
Exploration	A\$M	0.0	0.6	0.6	0.6	0.6	Tonnes	Kt	1,600		773		
Other	A\$M	2.7	1.3	1.3	1.3	1.3	Gold grade	g/t	7.4		7.4		
EBITDA	A\$M	22.6	40.0	74.9	79.2	77.7	Contained gold	koz	377		182		
Depreciation & Amort.	A\$M	17.0	13.1	17.3	16.1	14.2							
EBIT	A\$M	5.6	26.9	57.6	63.1	63.5 (3.8)	Nicolsons - Underground	` ,	1053		580		
Net Interest Pre-Tax Profit	A\$M A\$M	0.0 5.5	(0.5) 27.3	(1.0) 58.6	(2.4) 65.5	67.3	Tonnes Gold grade	Kt g/t	9.3		7.7		
Tax	A\$M	0.0	3.9	17.6	19.7	20.2	Contained gold	koz	315		143		
Net Profit	A\$M	5.5	23.4	41.0	45.9	47.1	3						
Abnormal	A\$M	21.3	0.0	0.0	0.0	0.0							
Reported Profit	A\$M	26.8	23.4	41.0	45.9	47.1	Nicolsons						
Dividends Paid	A\$M	0.0	0.0	0.0	0.0	0.0	Production		407	0.47	000	400	400
Adjustments	A\$M	0.0	0.0	0.0	0.0	0.0	Ore milled Grade - gold	Mt g/t	167 7.6	247 7.4	390 7.4	400 8.0	400 8.00
CASHFLOW							Recovery Gold	9/t %	96%	92%	91%	91%	91%
Net Op Cash Flow	A\$M	19.5	32.5	75.5	79.8	78.3	Gold output	oz	39,149	54,213	84,553	93,623	93,623
Net Interest	A\$M	0.0	0.5	1.0	2.4	3.8	C1 Costs	A\$/oz	913	849	707	728	728
Tax Paid	A\$M	0.0	(3.9)	(17.6)	(19.7)	(20.2)	AISC	A\$/oz	1,147	1,057	937	949	948
Operating Cash Flow	A\$M	19.5	29.1	58.9	62.5	61.9							
Net Capex	A\$M	(20.6)	(16.5)	(11.6)	(12.0)	(12.0)	Cash Flow Forecasts Inc	I Debt & Equit	V				
Exploration	A\$M	(1.4)	2.3	(3.0)	(3.0)	(3.0)		r Debt & Equit	y				
Investing Cash Flow	A\$M	(21.9)	(14.2)	(14.6)	(15.0)	(15.0)	75 _]						
Free cash flow	A\$M	(2.4)	14.9	44.3	47.5	46.9							
Net Borrowings	A\$M	3.2	0.0	0.0	0.0	0.0	50 -	m-		o			
Dividends	A\$M A\$M	0.0 4.0	0.0	0.0 0.0	0.0	0.0						\	
Equity Issues Other	A\$M	(0.0)	0.0	0.0	0.0	0.0	25 -	_/				\	
Financing Cash Flow	A\$M	7.2	0.0	0.0	0.0	0.0						\	
ū							A\$m					\	
Net IncreaseCash	A\$M	4.7	14.9	44.3	47.5	46.9	-				1		
BALANCE SHEET													
Cash	A\$M	9.7	24.5	68.9	116.4	163.3							
Other Current	A\$M	6.5	6.5	6.5	6.5	6.5	-25	Fre	ee Cash	Flow			
Current Assets	A\$M	16.1	31.0	75.3	122.8	169.7			w Equity				
Fixed Assets Exploration	A\$M A\$M	32.1 2.3	48.6 4.7	60.2 7.1	72.2 9.5	84.2 11.9	50		ange in I		ngs		
Other	A\$M	0.0	0.0	0.0	0.0	0.0	-50 J FY16 FY17 I		Ü		Ū	2 5/24	EV0E
Non Current Assets	A\$M	34.4	53.3	67.3	81.7	96.1	FYIO FYI/I	FTIBFTI9	F120 F	121 - 12	22 F 12	3 F 1 Z 4	F 1 25
Total Assets	A\$M	50.5	84.3	142.7	204.6	265.9							
Borrowings	A\$M	0.0	0.0	0.0	0.0	0.0	REVENUE						
Payables	A\$M	11.2	11.2	11.2	11.2	11.2	Nicolsons	A\$M	65	90	144	158	156
Other Current Liab	A\$M A\$M	8.1 19.3	1.1 12.2	1.1 12.2	1.1 12.2	1.1 12.2	Total	A @ B A	GE.	90	144	150	156
Borrowings	A\$M A\$M	0.0	0.0	0.0	0.0	0.0	Total COSTS	A\$M	65	90	144	158	156
Provisions	A\$M	2.0	2.0	2.0	2.0	2.0	Nicolsons	A\$M	37	50	67	77	76
Other	A\$M	0.0	0.0	0.0	0.0	0.0	Corporate	A\$M	2	1	1	1	1
Non Current Liab	A\$M	2.0	2.0	2.0	2.0	2.0	Total	A\$M	39	51	69	78	78
Total Liabilities	A\$M	21.3	14.2	14.2	14.2	14.2	CAPEX						
Total Equity	A\$M	29.3	70.1	128.4	190.4	251.7	SIBC	A\$M	7.2	7.4	11.6	12.0	12.0
RATIO ANALYSIS EPS	¢	A\$ 0.7	A\$ 2.9	A\$ 5.1	A\$ 5.7	A\$ 5.8	Project Total	A\$M A\$M	13.3 20.5	9.2 16.5	0.0 11.6	0.0 12.0	0.0 12.0
PER	v			6.1	5.5	5.3	Total	Дфій	20.5	10.5	11.0	12.0	12.0
		45.3	1117	0.1		3%							
EPS Growth	x %	45.3 -205%	10.7 323%	75%	12%	3/0							
EPS Growth CFPS	х			75% 7.3	12% 7.7	7.6	ASSUMPTIONS						
CFPS PCFR	x %	-205% 2.4 12.9	323% 3.6 8.6				Exchange Rate	A\$/US\$	0.77	0.77	0.75	0.75	0.75
CFPS PCFR DPS	x % ¢ x ¢	-205% 2.4 12.9 0.0	323% 3.6 8.6 0.0	7.3 4.3 0.0	7.7 4.0 0.0	7.6 4.1 0.0	Exchange Rate Gold price	US\$oz	1,258	1,310	1,275	1,250	1,250
CFPS PCFR DPS Yield	x % ¢ x ¢ %	-205% 2.4 12.9 0.0 0%	323% 3.6 8.6 0.0 0%	7.3 4.3 0.0 0%	7.7 4.0 0.0 0%	7.6 4.1 0.0 0%	Exchange Rate						
CFPS PCFR DPS Yield Payout Ratio	x % ¢ x ¢ %	-205% 2.4 12.9 0.0 0% 0%	323% 3.6 8.6 0.0 0%	7.3 4.3 0.0 0% 0%	7.7 4.0 0.0 0% 0%	7.6 4.1 0.0 0% 0%	Exchange Rate Gold price Gold price	US\$oz	1,258	1,310	1,275	1,250 1,667	1,250 1,667
CFPS PCFR DPS Yield Payout Ratio Gearing ND/E	x % ¢ x ¢ % %	-205% 2.4 12.9 0.0 0% 0% -33%	323% 3.6 8.6 0.0 0% 0% -35%	7.3 4.3 0.0 0% 0% -54%	7.7 4.0 0.0 0% 0% -61%	7.6 4.1 0.0 0% 0% -65%	Exchange Rate Gold price Gold price NPV (+1Yr)	US\$oz	1,258	1,310	1,275	1,250 1,667 A\$M	1,250 1,667 A\$/sh.
CFPS PCFR DPS Yield Payout Ratio Gearing ND/E Interest Cover	x % ¢ x ¢ % %	-205% 2.4 12.9 0.0 0% 0% -33% 177.8	323% 3.6 8.6 0.0 0% 0% -35% na	7.3 4.3 0.0 0% 0% -54% na	7.7 4.0 0.0 0% -61% na	7.6 4.1 0.0 0% 0% -65% na	Exchange Rate Gold price Gold price NPV (+1Yr) Halls Creek Project	US\$oz	1,258	1,310	1,275	1,250 1,667 A\$M 179	1,250 1,667 A\$/sh. \$ 0.22
CFPS PCFR DPS Yield Payout Ratio Gearing ND/E Interest Cover EBITDA Margin	x % ¢ x ¢ % %	-205% 2.4 12.9 0.0 0% 0% -33%	323% 3.6 8.6 0.0 0% 0% -35%	7.3 4.3 0.0 0% 0% -54%	7.7 4.0 0.0 0% 0% -61%	7.6 4.1 0.0 0% 0% -65%	Exchange Rate Gold price Gold price NPV (+1Yr) Halls Creek Project Exploration	US\$oz	1,258	1,310	1,275	1,250 1,667 A\$M 179 50	1,250 1,667 A\$/sh. \$ 0.22 \$ 0.06
CFPS PCFR DPS Yield Payout Ratio Gearing ND/E Interest Cover	x % ¢ x ¢ % % x	-205% 2.4 12.9 0.0 0% -33% 177.8 35.3	323% 3.6 8.6 0.0 0% -35% na 43.4	7.3 4.3 0.0 0% 0% -54% na 51.9	7.7 4.0 0.0 0% 0% -61% na 50.2	7.6 4.1 0.0 0% 0% -65% na 49.8	Exchange Rate Gold price Gold price NPV (+1Yr) Halls Creek Project	US\$oz	1,258	1,310	1,275	1,250 1,667 A\$M 179 50 -5	1,250 1,667 A\$/sh. \$ 0.22

2



Investment Thesis

Pantoro is a rapidly growing, mid-sized, West Australian gold producer which has restarted and continually expanded the Halls Creek Project in the Kimberley Region of WA. The company has achieved nine consecutive quarters of production growth with a run rate of over 55kozpa achieved in DQ'17 and is expected to achieve a run rate of 80-100kozpa by year end CY'18 (Figure 1).

Pantoro's tenement package shows strong potential for extensions to known deposits and for brownfield and greenfield discoveries. The Nicolsons and Rowdies/Wagtail deposits are all open at depth and have shown remarkable continuity when drill tested, a 100m extension to depth adds 150koz to the mining inventory. We expect Pantoro to allocate greater focus towards exploration as the company becomes debt free in Apr-18. Prospects such as Western Reef and Paddock Well show good potential for near term advancement.

In this note we include the expansion to 80-100kozpa for the first time. In addition to increased production, cash costs fall (Figure 1) and our financial forecasts increase significantly (Figure 2).

Annual Prod (Old) (kozpa) Annual Prod (Expan.) (kozpa) C1 Cash Costs (Old) (A\$/oz) C1 Cash Costs (Expan.) (A\$/oz) AISC (Old) (A\$/oz) AISC (Expan.) (A\$/oz) 1,400 1,200 Actual Est 1,000 800 600 400 200 Q1'18 Q2'18 Q3'18 Q4'18 Q1'19 Q2'19 Q3'19 Q4'19 Q3'16 Q1'17 Q3'17 Q1'20 Q2'20 Q2'17 Q4'17 22,1 941

Figure 1: Production and cost forecasts with and without the expansion

Source: Petra Capital, Company Reports

Summary of Changes

Figure 2: Summary of Changes

•	-	_								
			FY18			FY19			FY20	
		Old	New	% chg	Old	New	% chg	Old	New	% chg
Revenue	A\$m	87	92	6%	85	144	70%	84	158	87%
EBITDA	A\$m	39	40	2%	40	75	85%	40	79	97%
EBIT	A\$m	20	27	33%	24	58	143%	26	63	142%
NPAT	A\$m	18	23	33%	17	41	141%	19	46	139%
EPS	A\$m	0	0	33%	0	0	141%	0	0	139%
DPS	A\$m	0	0	n/a	0	0	n/a	0	0	n/a
NDV// I										
NPV/sh	A\$/sh	0.26	0.36	39%						
Price Target	A\$/sh	0.26	0.36	39%						
Production										
Gold	koz	51	54	5%	50	85	69%	50	94	87%
AISC	A\$/oz	1052	1057	1%	1057	937	-11%	1057	949	-10%



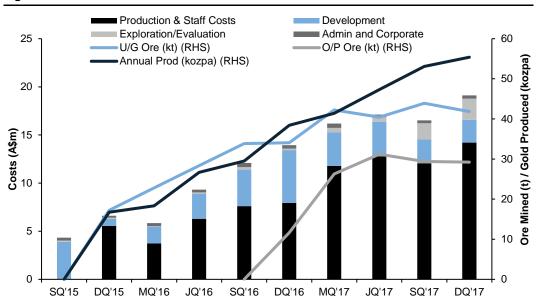
Looking back at the ramp up of Nicolsons

To better understand the likely ramp-up profile of the new Rowdies/Wagtail underground mine we take a detailed look at the ramp-up of the Nicolson's underground (Figure 3).

The original feasibility study was for a 130ktpa and 30kozpa, 4.5 year operation. Despite initially encountering poor ground conditions, the mine reached the targeted run rate within 12 months. The operation was further optimised to lift output to over 50kozpa (230kpta) which was achieved in a further 15 months.

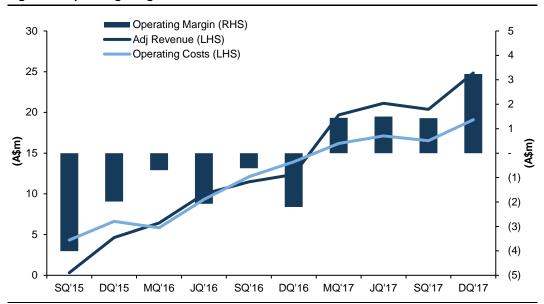
Pantoro adopted a capital light development strategy and invested in underground development as the mine progressed. That incremental development allocation meant that Nicolsons did not become operating cash flow positive until 18 months after commencing production in MQ'18 (Figure 4).

Figure 3: Costs at Nicolsons



Source: Petra Capital, Company Reports

Figure 4: Operating Margin at Nicolsons



Source: Petra Capital, Company Reports



Nicolsons Expansion

Pantoro is targeting an 80-100kozpa run rate by the end of CY'18, which is a little less than double the current run rate of 55kozpa. The company will use ore sorting technology as a low capex method of expanding the effective capacity of the plant, lifting throughput to between 315ktpa and 525ktpa. Recent drilling is expected to be integrated into a new Mineral Resource and Ore Reserve due to be completed and released by the end of the MQ'18. The construction of the underground portal at Rowdies/Wagtail is expected to commence in Apr-18. We expect a steady increase in run rate throughout 2018, reaching an 80kozpa run rate by year end.

Processing

Processing Plant

Pantoro is targeting a low capex upgrade to double production from the Halls Creek processing plant through the application of ore sorting technology. A Steinert Multi-Sensor Ore Sorter will be installed after the primary jaw crusher (-10mm) and will reject 30-60% of the material as waste and effectively lift the mill feed from ~7g/t to between 10g/t and 18g/t (Figure 5). The primary jaw crusher will process 400ktpa of ore, but the rejection rate of 30-60% will mean that the rest of the plant will drop to a processing rate of between 160-280ktpa and will need little modification given it is currently operating at 240ktpa. Total capex for the ore sorter and minor plant modifications is expected to be A\$2.2m.

Figure 5: With and Without an Ore Sorter

	No Ore Sorter	Ore	Sorter
		Downside Case	Upside Case
Prior to Ore Sorter			
Tonnes (ktpa)	400	400	400
Reserve Grade (g/t)	7.35	7.35	7.35
Oz (koz)	95	95	95
Rejection (%)	0%	30%	60%
Ore Sorter Recovery (%)	n/a	97%	97%
Post Ore Sorter			
Tonnes (ktpa)	400	280	160
Grade (g/t)	7.35	10.19	17.82
Oz (koz)	94.5	91.7	91.7
Recovery (%)	98%	98%	98%
Gold Production (koz)	92.6	89.9	89.9



Processing Costs

We expect processing unit costs to fall 28% from ~A\$43/t to A\$31/t as the processing plant incorporates ore sorting in the expansion from 230ktpa to 400ktpa. The primary jaw crusher will process a higher number of tonnes, but the introduction of the ore sorter will ensure that the remainder of the plant will continue operating close to its current rate.

Pantoro do not directly disclose mining, processing, or general/admin cash costs, and instead disclose a consolidated C1 cash cost. This means that our historic unit processing costs are based on estimates not actual data.

In Figure 6 we take our A\$43/t estimate of current processing unit costs and assign fixed and variable costs to the typical operating cost breakdown of a CIP plant. Fixed costs are unchanged on a A\$m basis, whilst variable costs are unchanged on an A\$/t basis but increase in A\$m. This simplified calculation gives us a rough estimate on the unit processing costs, which falls 28% from A\$43 to A\$31/t. (Figure 7 & Figure 8)

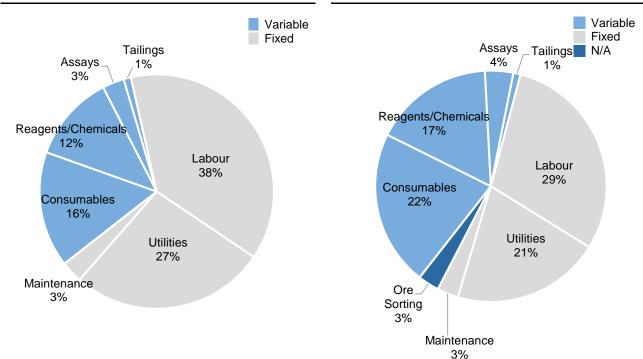
Figure 6: Processing cost estimates

		230ktpa			400ktpa				
	%	A\$/t	A\$m	Costs	%	A\$/t	A\$m		
Reagents/Chemicals	12%	5.2	1.2	Variable	17%	5.2	2.1		
Consumables	16%	6.9	1.6	Variable	22%	6.9	2.8		
Utilities	27%	11.3	2.6	Fixed	21%	6.5	2.6		
Maintenance	3%	1.4	0.3	Fixed	3%	0.8	0.3		
Labour	38%	16.1	3.7	Fixed	30%	9.3	3.7		
Tailings	1%	0.3	0.1	Variable	1%	0.3	0.1		
Assays	3%	1.2	0.3	Variable	4%	1.2	0.5		
Ore Sorting	0%	0.0	0.0	n/a	3%	1.0	0.4		
Total	100%	42.5	9.8		100%	31.3	12.5		

Source: Journal of Mining and Metallurgy, Petra Capital

Figure 7: 230ktpa - Cost breakdown

Figure 8: 400ktpa - Cost breakdown



Source: Journal of Mining and Metallurgy, Petra Capital

Source: Journal of Mining and Metallurgy, Petra Capital



Mining Overview

Current Operations

Pantoro restarted production at the Halls Creek project in early 2015. The project consists of the Nicolsons underground and the recently completed Rowdies and Wagtail open pits (Figure 9).

Pantoro's initial focus at Halls Creek was the Nicolson's underground which consists of two offset, parallel lodes called Johnston and Hall/Anderson (Figure 10). This high grade underground mine is currently operating at a rate of ~170ktpa, with a weighted average grade for the last 12 months of 7.7g/t. The company has invested heavily in underground development and now has over 100m of vertical development ahead of the current stoping front at Halls/Anderson. This represents 1.5 years of production at 100kozpa and should give the company flexibility in ramping up production to align with the plant expansion.

In late CY'16, Pantoro commenced production at the Rowdies and Wagtail open pits. These pits produced ~130kt @ 4.6g/t for 23koz, versus an initial reserve of 96.5kt @ 5.5g/t for 17koz and were complete in DQ'17. They provided an important source of base load feed for the plant which was expanded from 130ktpa to >200ktpa. These orebodies continue at depth and PNR proposes to start development of underground operations in Apr-18.

Figure 9: Nicolsons Project

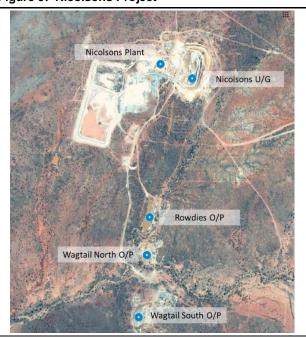
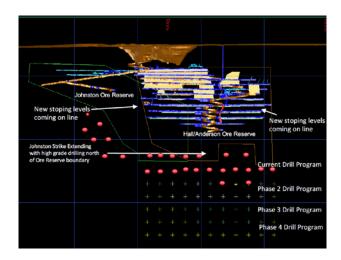


Figure 10: Nicolsons Underground



Source: Company Reports



Expansion

Pantoro expect to increase production from the Nicolson's underground mine 76% from 170ktpa to 300ktpa by June 2018 and up 110% to 360ktpa through DH'18. It is our view that Pantoro is well placed to achieve this target given the two lodes (Johnston and Halls/Anderson) can be accessed independently and can be viewed as separate ore sources. The development ahead of current production at Halls/Anderson also provides the potential to commence more stoping fronts, which provides greater flexibility within the production schedule.

Despite being well placed to achieve these targets we take a more conservative view, and assume a run rate of 360ktpa on a sustainable basis is achieved in Q1'CY19 rather than DH'18 (Figure 11).

Mining Costs

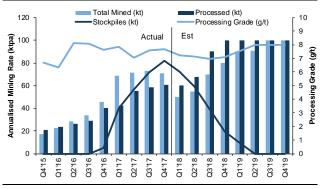
Pantoro do not directly disclose mining, processing or general/admin cash costs, and instead disclose a consolidated C1 cash cost. Our best estimates of this breakdown are in Figure 12 and the corresponding unit mining costs in Figure 11. We do note that some exploration costs were reclassified out of the C1 cash cost category and into exploration between JQ'17 and SQ'17. We believe underground unit mining costs have been averaging around A\$130/t, and we expect that higher mining rates will achieve economies of scale equivalent to a fall in unit costs of around 10% to A\$117/t.

Figure 11: Mining rates and underground unit costs



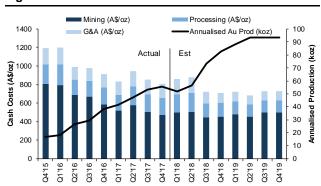
Source: Petra Capital, Company Reports

Figure 13: Stockpile movements



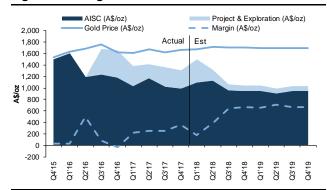
Source: Petra Capital, Company Reports

Figure 12: Cash costs



Source: Petra Capital, Company Reports

Figure 14: Margin chart



Source: Petra Capital, Company reports



Mine Life

Resource and Reserve

The Nicolson's project has a resource of 377koz at 7.4g/t and a reserve of 183koz at 7.4g/t (Figure 15 and Figure 16) giving a resource life of 3.7 years and a reserve life of 1.8 years at a 100kozpa run rate.

Pantoro are in the process of compiling an updated resource and reserve with further drilling underway to continue extending the deposit along strike and at depth. Given the continuity of the orebodies to date, we take the view the Johnston and Hall/Anderson lodes will continue at depth and are comfortable assuming a 5.5 year mine life at the 100kozpa rate.

Figure 15: Halls Creek Mineral Resources (April 2017)

		Measured			Indicated			Inferred			Total	
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
Nicolsons	150,000	16.4	79,000	707,000	8.2	185,000	195,000	8.0	50,000	1,053,000	9.3	315,000
Wagtail	-	-	-	261,000	4.1	34,000	69,000	3.8	8,000	329,000	4.0	42,000
Rowdies	-	-	-	80,000	3.5	9,000	69,000	2.0	5,000	149,000	2.8	14,000
HG Stockpiles	16,000	7.1	4,000	-	-	-	-	-	-	16,000	7.1	4,000
LG Stockpiles	31,000	1.9	2,000	-	-	-	-	-	-	31,000	1.9	2,000
Total	197,000	13.4	85,000	1,048,000	6.8	229,000	333,000	5.9	63,000	1,578,000	7.4	377,000

Source: Pantoro Limited

Figure 16: Halls Creek Ore Reserves (April 2017)

	Proven				Probable		Total			
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	
Nicolsons Underground	136,000	10.6	46,000	443,000	6.8	97,000	579,000	7.7	143,000	
Nicolsons Pits	31,000	12.4	12,000	23,000	8.4	6,000	54,000	10.7	19,000	
Wagtail	-	-	-	93,000	5.2	16,000	93,000	5.2	16,000	
Rowdies	-	-	-	-	-	-	-	-	-	
HG Stockpiles	16,000	7.1	4,000	-	-	-	16,000	7.1	4,000	
LG Stockpiles	31,000	2.0	2,000	-	-	-	31,000	2.0	2,000	
Total	214,000	9.4	64,000	560,000	6.6	119,000	773,000	7.4	183,000	

Source: Pantoro Limited



Near Mine Extension

The lode sequence throughout the broader Halls Creek package is thought to be controlled by two regional, parallel, dextral slip structures called the Archer Fault and Forrest Structures that run roughly North-South. Mineralisation at Nicolson's and Rowdies/Wagtail is shear zone hosted within lodes that run at an acute angle to this regional shear and both deposits have a 45° plunge component (Figure 17 and Figure 18). Importantly both Nicolson's and Rowdies/Wagtail deposits are open along plunge, at depth highlighting the likelihood of growth within the resource and reserve.

We estimate that for every 100m of vertical extension at Nicolsons will add ~150koz to the resource.

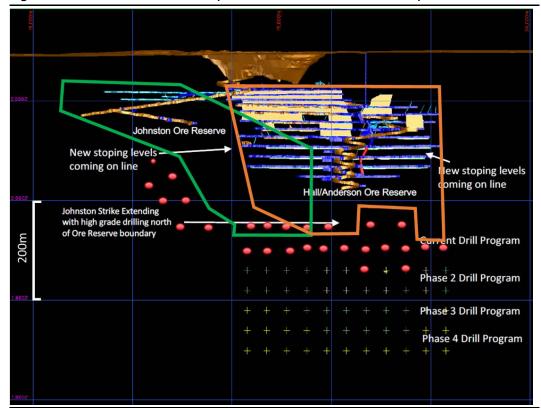


Figure 17: Extensions at Nicolsons (Johnston and Hall/Anderson lodes)

Source: Company Reports, Petra Capital

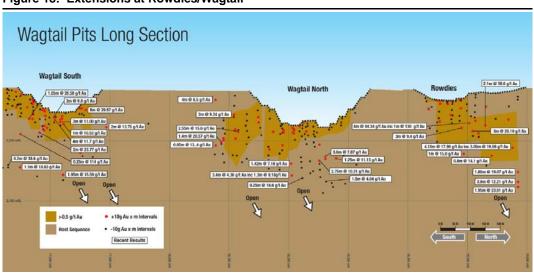


Figure 18: Extensions at Rowdies/Wagtail

Source: Company Reports



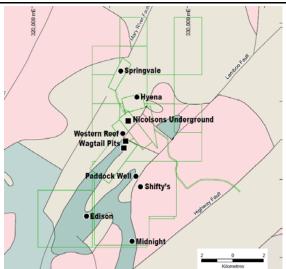
Brownfield Exploration

The Nicolsons project is highly prospective having had little modern day systematic exploration prior to the acquisition by Pantoro. The company are now systematically drill testing old prospects that have been highlighted by historic mining or exploration records. Targets in the area are typically narrow vein, high grade lodes, similar to the areas currently being mined at Nicolsons (Figure 19).

- Western Reef Located within 1km of the Nicolson's plant. Historical records show that 410oz was mined @ 9.4g/t in 2001, but no extensional drilling was conducted. First pass RC drilling results by Pantoro showed shallow high grade mineralisation which the company intend to follow up with diamond drilling to determine the depth potential in 2018. Pantoro's RC results include;
 - o 2m @ 12.1g/t Au from 12m inc 1m @ 15.7g/t Au
 - o 2m @ 6.7g/t Au from 16m inc 1m @ 12.1g/t Au
 - o 1m @ 4.9g/t Au from 13m
- Shifty's Located 3.7km from the Nicolson's plant. Three diamond holes were drilled into areas near historic drilling which proved the existence of a gold system but additional drilling is required to identify higher grade areas and better test the potential. Diamond drillhole results include;
 - o 1m @ 2.7g/t Au from 23m
 - o 0.5m @ 4.1g/t Au from 31m
- Paddock Well Located 3.1km from the Nicolson's plant. Some of the best intersections to date outside of the Nicolsons trend which Pantoro aim to follow up in CY'18. Drillholes include;
 - o 0.7m @ 40.5g/t Au, 385g/t Ag, 7.44% Pb and 4.07% Zn
 - o 2m @ 12.7g/t Au, 131g/t Ag, 2.54% Pb and 2.9% Zn
 - o 2m @ 4.8g/t Au, 30.4g/t Ag
- Midnight Located 7.5km from the Nicolson's plant. Located from historic rock chip results and magnetic anomaly. Additional evaluation is required to understand the prospectivity of the deposit. Drilling results include;
 - o 2m @ 1.1g/t from 28m
 - o 4m (composite) @ 0.5g/t from 16m
- Springvale Located 3km from the Nicolson's plant. Possibly a different style of mineralisation
 to Nicolsons. Identified from historic copper/gold drilling intersections. Two holes by Pantoro hit
 weak copper and gold mineralisation over 1m more work is required to understand this system
 and determine prospectivity.

To date drilling has largely been reconnaissance at these prospect. We expect Pantoro to follow up in 2018 with more drilling to assess the likelihood of being brought into the mine plan.

Figure 19: Prospects at the Nicolsons project



Source: Company Reports



Greenfield Exploration and Acquisitions

Pantoro has made two low cost acquisitions, the Grants Creek project in Oct-17 for A\$50k and the Mary River project in Jan-18 for A\$80k. These are located 120km and 50km from the Nicolson's plant respectively (Figure 20). Grants Creek includes a non-JORC resource of 11koz at 4.9g/t and Mary River includes some historic high grade drill intersections that need to be followed up. Each of these projects appear highly prospective and have had limited modern exploration.

Pantoro is strategically placed with the only gold processing plant within a 300km radius which positions it to acquire similar, prospective assets at relatively low costs. This strategy increases our confidence that Pantoro will be able to continue to add value and mine life to the Nicolson's project into the future.

Grants Creek HALLS CREEK Nicolson's Project Mary River Project 20km

Figure 20: Nicolson's Project with recent acquisitions of Grants Creek and Mary River



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