PENINSULA ENERGY LIMITED

Research Note

TRADING NUCLEAR FALLOUT

Investment Highlights

- The nuclear fallout caused by the US President's judgement that foreign uranium imports do not pose a threat to national security is still playing out, and we now have until 11 October 2019 for the dust to completely settle. The President's conclusion was at odds with the of Commerce's domestic Department uranium quota recommendation, and the finding has caused a 35% drop in PEN's share price, similar falls witnessed in the other US uranium stocks. With the Permit to Mine licence amendment in hand and approval expected on the Source Material Licence amendment imminent, we believe PEN now looks oversold and we are therefore increasing our PEN rating to Buy with a valuation of \$0.26/share (prior: \$0.32/share).
- Working Group potential outcomes. With Trump rejecting the proposed quota system, we can't see him now recommending other quotas for US sourced uranium. Similarly, the implementation of tariffs is unlikely given the US relationship with key exporting nations, Russia and Kazakhstan. Therefore there are limited outcomes from the Working Group that could directly benefit US uranium producers. Instead, the outcomes are likely to be more focussed on the utilities/downstream aspects of the broader nuclear industry where subsidies or tax benefits for US sourced uranium could be implemented to incentivise buyers to purchase domestic uranium.
- Source Materials Licence (SML) amendment approval imminent. With the State review complete, and the public comment period now concluded with no comments submitted, we believe the approval of this licence amendment is a formality and just a question of 'when', not 'if' despite the previously mentioned timing which called for the decision by today.
- Increasing our rating to Buy (prior: Sell). Once the SML amendment is approved, PEN will be able to commence transitioning to low pH operations at Lance. The low pH field demonstration undertaken earlier this year showed the low pH increased uranium head grades from the current <10 mg/L to 35 to 45 mg/L. Once Lance gets up to its Stage 1 output (1.15 Mlb/y), the AISC is expected to reduce to around US\$40/lb.
- Valuation: \$0.26/share (prior \$0.32/share). Our PEN valuation is based on a DCF analysis of the three stage development of the Lance Projects, risk weighted at 60%. The price change is due to the lower share price which has an impact on the number of shares associated with potential equity requirements.

Year End Jun 30	2018A	2019F	2020F	2021F	2022F
Reported NPAT (\$m)	(9.1)	(14.8)	(18.3)	(10.4)	(6.6)
Recurrent NPAT (\$m)	(9.1)	(14.8)	(18.3)	(10.4)	(6.6)
Recurrent EPS (cents)	(3.9)	(6.0)	(7.5)	(4.3)	(2.7)
EPS Growth (%)	na	na	na	na	na
PER (x)	(5.1)	(3.3)	(2.7)	(4.7)	(7.4)
	(4.4)	(10,0)	(11.0)	0.0	11.0
EBITDA (\$m)	(4.1)	(10.0)	(11.9)	0.8	11.6
EV/EBITDA (x)	(12.4)	(7.5)	(7.5)	142.1	11.1
Free Cashflow	10.4	(10.7)	(24.6)	(19.7)	(18.4)
FCFPS (cents)	4.5	(4.4)	(10.1)	(8.0)	(7.5)
PFCF (x)	4.5	(4.6)	(2.0)	(2.5)	(2.7)
DPS (cents)	0.0	0.0	0.0	0.0	0.0
Yield (%)	0.0	0.0	0.0	0.0	0.0
Franking (%)	0.0	0.0	0.0	0.0	0.0



30 July 2019				
12mth Rating		BUY		
Price	A\$	0.20		
Target Price	A\$	0.26		
12mth Total Return	%	29.1		
RIC: PEN.AX		BBG: PEN AU		
Shares o/s	m	249.7		
Free Float	%	97.7		
Market Cap.	A\$m	49.9		
Net Debt (Cash)	A\$m	4.1		
Net Debt/Equity	%	5.1		
3mth Av. D. T'over	A\$m	0.153		
52wk High/Low	A\$	0.33/0.16		
2yr adj. beta		0.92		
Valuation:				
Methodology		DCF		
Value per share	A\$	0.26		
Analyst:	Cam Hardie			
Phone:	(+61) 3 9242 4153			
Email:	chardie@psl.com.au			



RESEARCH NOTE – PATERSONS SECURITIES LIMITED



Section 232 Outcome: Looking at What Was Said

In responding to the recommendations of the Department of Commerce's Section 232 investigation into the effect of uranium imports on the national security, President Trump stated:

"I do not concur with the Secretary's finding that uranium imports threaten to impair the national security of the United States as defined under section 232 of the Act. Although I agree that the Secretary's findings raise significant concerns regarding the impact of uranium imports on the national security with respect to domestic mining, I find that a fuller analysis of national security considerations with respect to the entire nuclear fuel supply chain is necessary at this time."

And:

"I agree with the Secretary that the United States uranium industry faces significant challenges in producing uranium domestically and that this is an issue of national security. The United States requires domestically produced uranium to satisfy Department of Defense (DOD) requirements for maintaining effective military capabilities — including nuclear fuel for the United States Navy's fleet of nuclear-powered aircraft carriers and nuclear-powered submarines, source material for nuclear weapons, and other functions. Domestic mining, milling, and conversion of uranium, however, while significant, are only a part of the nuclear supply chain necessary for national security, including DOD needs."

So according to Trump, uranium imports do not threaten to impair the national security as is defined by Section 232 of the Trade Expansion Act, yet they do raise significant concerns about national security when it comes to mining uranium. The US imports approximately 93% of its uranium requirements.

The above Section 232 response come after comments made by the US Administration in 2017 where it stated that nuclear power is "a very important part" of its energy strategy. As part of that discussion, small modular reactors were an example of where investment may be made in future. In addition, there has been more recent discussion about subsidizing nuclear plants that were struggling to compete with renewables and natural gas.

If not a Domestic Quota, Why Not Tariffs?

President Trump has not been one to shy away from imposing tariffs as part of his America First economic policy. Self-proclaimed "Tariff Man" Trump has imposed tariffs solar panels, washing machines(!), steel and aluminium and he is considering tariffs on imported cars and auto parts. So why not uranium tariffs?

The main issue raised by the original Section 232 petitioners was associated with uranium production from state-sponsored producers in Russia, Kazakhstan, Uzbekistan and China where we estimate the US purchased approximately 13 Mlbs from these countries in 2017. The Section 232 Petitioners were recommending a domestic quota for uranium, but a tariff on imports from these countries would also serve the same purpose. However, the implementation of tariffs is unlikely given the US relationship with key exporting nations, Russia and Kazakhstan. Uzbekistan and China currently produce relatively small quantities of uranium, so tariffs on these countries would result in little impact to the US uranium producers.

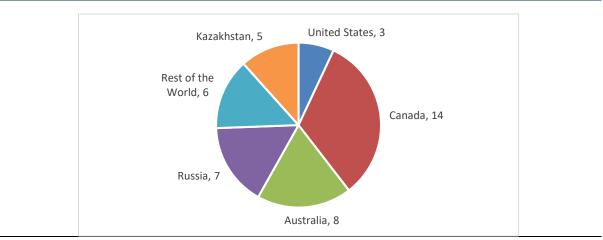


Figure 1: Where the US Sources its Uranium (Mlb/y)

Source: Energy Information Administration

RESEARCH NOTE – PATERSONS SECURITIES LIMITED



Establishment of the US Nuclear Fuel Working Group

As part of the Section 232 investigation outcomes. The US President has established the United States Nuclear Fuel Working Group. The Working Group is required to examine the current state of domestic nuclear fuel production to reinvigorate the entire nuclear fuel supply chain, "consistent with United States national security and nonproliferation goals." The Working Group, is required to submit a report to the President setting forth the Working Group's findings and making recommendations to further enable domestic nuclear fuel production, if needed, by 11 October 2019.

The US uranium industry pushes up against one of Trump's pet issues: nuclear power, where he has previously asked the Energy Department to develop policies to support the industry, and the Administration has made efforts to bail out nuclear plants facing early retirement because of natural gas and renewable energy.

The Working Group is required to develop recommendations for reviving and expanding domestic nuclear fuel production. We believe that, outside of tariffs on uranium imports, there is limited scope in the Working Group to directly benefit the US uranium producers, and that the outcomes are likely to focus on the utilities/downstream aspects of the broader nuclear industry where subsidies of tax benefits for US sourced uranium may incentivise US utilities to purchase uranium sourced domestically.

The US Nuclear Industry

Nuclear reactors generated 807 TWh in 2018, around 20% of total electrical output, however as aging plants are retired, and the pipeline of new projects is minimal, this is forecast to decline to 11% by 2050. According to the World Nuclear Association, the USA has 99 operating nuclear power reactors in 30 states, operated by 30 different power companies. Since 2001 these plants have achieved an average capacity factor of over 90%, generating up to 807 TWh per year and accounting for about 20% of the total electricity generated. The average capacity factor has risen from 50% in the early 1970s, to 70% in 1991, and it passed 90% in 2002, remaining at around this level since. In 2016 it was a record 92.5%, compared with wind 34.7% (EIA data). The industry invests about \$7.5 billion per year in maintenance and upgrades of the plants.

Almost all the US nuclear generating capacity comes from reactors built between 1967 and 1990, and until 2013, there had been no new construction starts since 1977. In 2015, average generating cost of reactors was US\$36.27/MWh including fuel and capital.

The US has two reactors under construction and expected to be online by 2022. A further eight reactors are planned for construction (albeit with no expected construction start dates). Assuming an average 60-year reactor life, only two reactors will be decommissioned in the next decade.

June Quarter Summary

PEN made contracted delivery of 106,000 lb of U_3O_8 in the June quarter at an average price of US\$34.43/lb. PEN expects the average realised cash price will be just under US\$40/lb for the remainder of 2019, however September quarter production is expected to be negligible given PEN's decision to idle alkaline based production activities and focus on completion of the low pH field demonstration.

Production of 8,491 lbs U_3O_8 in the June quarter was 45% below the March quarter due to the natural decline of head grades and the decision to reduce chemical addition. This will also assist in the transition to a low pH operation once all licence amendments are received. The reduced production will not impact near and mid-term sales obligations.

No drying runs were conducted in the June quarter, with the next drying scheduled to occur in the September quarter.

Figure 2: Quarter Summary						
		Jun-18	Sep-18	Dec-18	Mar-19	Jun-19
U ₃ O ₈ Recovered (Production)	lb	38,001	40,940	20,332	15,413	8,491
U ₃ O ₈ Dried & Drummed	lb	43,553	30,835	14,445	23,325	0
Total U3O8 Sales	lb	0	0	100,000	0	106,000
Revenue	US\$m	0.0	0.0	4.5	0.0	3.6
Realised Price	US\$/Ib	-	-	45.0	-	34.4

Source: Peninsula Energy, Patersons Securities

RESEARCH NOTE – PATERSONS SECURITIES LIMITED



Significant portions of PEN's committed sales for 2019 and 2020 can be either Lance production or from market purchases, therefore the Company is not dependent on Lance production to meet all its delivery commitments over the next 18 months.

PEN remains in advanced negotiations with other parties to sell a portion of an interest in an existing long-term uranium sale and purchase agreement for an upfront cash consideration. We do not consider it essential that PEN sells the portion to assist with near term funding requirements.

The Company had cash and cash equivalents of US\$8.5m and US\$17.05m of drawn debt at 30 June 2019.

Selected Uranium Share Price Performance

Figure 3: Share Price Performance	e of Selected Uraniur	n Stocks						
		Price	Month to Date	1 Month	3 Months	12 Months	FY to Date	YTD
A4/US\$ Exchange Rate	AUDUSD	0.69	-1.7%	-1.7%	-2.0%	-6.8%	-1.7%	-2.2%
ASX-200 Index	XJO	6,826	3.1%	3.1%	6.9%	8.3%	3.1%	20.9%
PHYSICAL URANIUM INVESTORS								
Yellow Cake PLC	YCA.LSE	213.00	4.2%	4.2%	0.7%	-2.3%	4.2%	-7.0%
Uranium Participation Corp.	U.TSX	4.31	2.6%	2.6%	0.5%	-4.0%	2.6%	-3.8%
URANIUM COMPANIES WITH US I	NTERESTS							
Azarga Uranium Corp.	AZZ.TSX	0.21	-16.0%	-16.0%	-6.7%	-14.3%	-16.0%	-20.8%
Cameco Corp.	CCJ.NYS	9.12	-15.0%	-15.0%	-18.9%	-15.8%	-15.0%	-19.6%
Energy Fuels Inc.	EFR.TSX	2.42	-40.5%	-40.5%	-41.7%	-33.7%	-40.5%	-37.5%
Laramide Resources Ltd	LAM.TSX	0.24	-28.8%	-28.8%	-38.2%	-24.2%	-28.8%	-47.2%
Peninsula Energy	PEN.ASX	0.20	-35.5%	-35.5%	-31.0%	-41.2%	-35.5%	21.2%
Ur-Energy Inc.	URE.TSX	0.79	-36.3%	-36.3%	-31.3%	-19.4%	-36.3%	-11.2%
Uranium Energy Corp.	UEC.AME	0.94	-31.2%	-31.2%	-31.7%	-42.9%	-31.2%	-24.6%
SELECT ASX-LISTED URANIUM C	OMPANIES							
Bannerman Resources	BMN.ASX	0.04	-4.4%	-4.4%	-14.0%	-37.7%	-4.4%	13.2%
Berkeley Energia	BKY.ASX	0.30	-14.3%	-14.3%	-14.3%	-61.5%	-14.3%	76.5%
Boss Resources	BOE.ASX	0.05	22.7%	22.7%	8.0%	-26.0%	22.7%	-8.5%
Energy Resources of Australia	ERA.ASX	0.24	20.5%	20.5%	-4.1%	-43.4%	20.5%	-4.1%
Paladin	PDN.ASX	0.15	20.0%	20.0%	7.1%	-30.2%	20.0%	-16.7%
Vimy Resources	VMY.ASX	0.07	25.0%	25.0%	-8.5%	-48.0%	25.0%	25.0%

Source: Patersons Securities, Iress. Share Price as at close 29 July 2019.

PENINSULA ENERGY LIMITED (PEN.AX)	Price	\$0.20
Valuation		
	A\$m	\$/share
Lance Projects, risked at 60%	154	0.30
Karoo Projects, South Africa	0	0.00
Net Cash (Debt)	(10)	(0.02)
Corporate Costs	(13)	(0.03)
Total Valuation	131	0.26

Reserves & Resources				
	Tonnes	Grade	U ₃ O ₈	U ₃ O ₉
	(M)	(ppm)	(MIb)	(Mkg)
Lance Projects Resource Estimate, as	at 31 Decem	ber 2017.		
Measured	3.8	488	3.9	1.9
Indicated	10.9	495	11.9	5.4
Inferred	36.3	476	38.1	17.3
Total	51	479	53.9	24.5

Annual production (lb) 81,639 86,183 Production Rate (U3O8/day) 425 233 Profit & Loss (A\$m) 2018A 20191 Total revenue 13.2 7.8 Operating costs (14.9) (14.4 Exploration expensed 0.0 0.0 Corporate & admin (2.7) (2.2 Other expenses 0.3 (1.1 EBITDA (4.1) (10.0) DD&A (2.2) (1.4 EBIT (6.3) (11.3) Net interest income (expense) (2.8) (3.2 Tax expense 0.0 -0.0 Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 <	930	500,000
Total revenue 13.2 7.8 Operating costs (14.9) (14.4 Exploration expensed 0.0 0.0 Corporate & admin (2.7) (2.2 Other expenses 0.3 (1.1) EBITDA (4.1) (10.0) DD&A (2.2) (1.4 EBITDA (4.1) (10.0) DD&A (2.2) (1.4 EBIT (6.3) (11.3) Net interest income (expense) (2.8) (3.2 Tax expense 0.0 -0.3 DIVAT (underlying) (9.1) (14.8) Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 Cash Flow (A\$m) 2018A 20191 EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid 2.2 1.4 Other Operating Cash Flow (2.2) (1.4 Other Operating Cash Flow 0.0 0.0 Operating Cash Flow (12.1) (14.5) Capital expendi		1,370
Total revenue 13.2 7.8 Operating costs (14.9) (14.4 Exploration expensed 0.0 0.0 Corporate & admin (2.7) (2.2 Other expenses 0.3 (1.1 EBITDA (4.1) (10.0) DD&A (2.2) (1.4 EBITDA (4.1) (10.0) DD&A (2.2) (1.4 EBIT (6.3) (11.3) Net interest income (expense) (2.8) (3.2 Tax expense 0.0 -0.3 DIluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 Cash Flow (A\$m) 2018A 20191 EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid 2.2 1.4 Other Operating Cash Flow (9.1) (14.5) Capital expenditure 0.0 0.0 Capital expenditure 0.0 0.0 Exploration expenditure 0.0 0.0 Equity Raised <		
Operating costs (14.9) (14.4 Exploration expensed 0.0 0.0 Corporate & admin (2.7) (2.2 Other expenses 0.3 (1.1 EBITDA (4.1) (10.0) DD&A (2.2) (1.4 EBITDA (6.3) (11.3) Net interest income (expense) (2.8) (3.2) Tax expense 0.0 -0.3 Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 Cash Flow (A\$m) 2018A 20191 EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid (2.8) (3.2) Tax Paid 2.2 1.4 Other Operating Cash Flow (14.5) (2.2) Capital expenditure (3.0) (0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.0 Exploration expenditure 0.0 0.0	7 5	2021F
Exploration expensed 0.0 0.0 Corporate & admin (2.7) (2.2 Other expenses 0.3 (1.1 EBITDA (4.1) (10.0 DD&A (2.2) (1.4 EBIT (6.3) (11.3) Net interest income (expense) (2.8) (3.2) Tax expense 0.0 -0.3 NPAT (underlying) (9.1) (14.8) Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 Cash Flow (A\$m) 2018A 20191 EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid (2.8) (3.2) Tax Paid 2.2 1.4 Other Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.0 Capital expenditure 0.0 0.0 Exploration expenditure 0.0 0.0 Equity Raised 0.0 0.0	1.5	16.1
Corporate & admin (2.7) (2.2 Other expenses 0.3 (1.1 EBITDA (4.1) (10.0 DD&A (2.2) (1.4 EBIT (6.3) (11.3 Net interest income (expense) (2.8) (3.2 Tax expense 0.0 -0.3 NPAT (underlying) (9.1) (14.8) Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid (2.2) (1.4 Diluted EPS (cps) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid (2.2) (1.4 Other Operating Cash Flows 0.0 0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Exploration expenditure 0.0 0.0 Dividends 0.0 0.0 </td <td>(16.1)</td> <td>(11.8)</td>	(16.1)	(11.8)
Other expenses 0.3 (1.1 EBITDA (4.1) (10.0) DD&A (2.2) (1.4 EBIT (6.3) (11.3) Net interest income (expense) (2.8) (3.2 Tax expense 0.0 -0.3 NPAT (underlying) (9.1) (14.8) Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid (2.8) (3.19) Other Operating Cash Flows 0.0 0.0 Operating Cash Flow (2.2) (1.4 Other Operating Cash Flows 0.0 0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Dividends 0.0 0.0 Dividends 0.0 0.0 Dividends 0.0 0.0 Dividends 0.0 0.0 <t< td=""><td>0.0</td><td>0.0</td></t<>	0.0	0.0
EBITDA (4.1) (10.0) DD&A (2.2) (1.4 EBIT (6.3) (11.3) Net interest income (expense) (2.8) (3.2 Tax expense 0.0 -0.3 NPAT (underlying) (9.1) (14.8) Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 DS (cps) 0.0 0.0 Cash Flow (A\$m) 2018A 20191 EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid (2.8) (3.2 Tax Paid 2.2 1.4 Other Operating Cash Flows 0.0 0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure 0.0 0.0 Exploration expenditure 0.0 0.0 Exploration expenditure 0.0 0.0 Dividends 0.0 0.0 0.0 Dividends 0.0 0.0 0.0	(2.3)	(2.3)
DD&A (2.2) (1.4 EBIT (6.3) (11.3) Net interest income (expense) (2.8) (3.2 Fax expense 0.0 -0.3 NPAT (underlying) (9.1) (14.8) Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 Cash Flow (A\$m) 2018A 20191 EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid 2.2 (1.4 Dther Operating Cash Flow (2.2) (1.4 Other Operating Cash Flow 0.0 0.0 Depreciation - Cash Flow (2.2) (1.4 Other Operating Cash Flow 0.0 0.0 Depreting Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Exploration expenditure 0.0 0.0 Dividends 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (1	(1.1)	(1.2)
EBIT (6.3) (11.3) Net interest income (expense) (2.8) (3.2) Fax expense 0.0 -0.3 NPAT (underlying) (9.1) (14.8) Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 Cash Flow (A\$m) 2018A 20191 EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4) Vet Interest Paid (2.8) (3.2) Tax Paid 2.2 1.4 Dther Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.0 Capital expenditure (3.0) (0.8) Exploration expenditure 0.0 0.0 Dividends 0.0 0.0 Operating Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Capital expenditure 0.0 0.0 Capital expenditure 0.0 0.0 Capital expenditure 0.0 0.0 Capital expenditure 0.0 0.0	(11.9)	0.8
Net interest income (expense) (2.8) (3.2) Tax expense 0.0 -0.3 NPAT (underlying) (9.1) (14.8) Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 Cash Flow (A\$m) 2018A 20191 EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid (2.8) (3.2) Tax Paid 2.2 1.4 Other Operating Cash Flows 0.0 0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Dividends 0.0 0.0 Dividends 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A	(0.6)	(1.0)
Tax expense 0.0 -0.3 NPAT (underlying) (9.1) (14.8) Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 Cash Flow (A\$m) 2018A 20191 EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid (2.8) (3.2) Tax Paid 2.2 1.4 Other Operating Cash Flows 0.0 0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 111.4 98.3 Creditors 3.2 2.4	(12.5)	(0.2)
NPAT (underlying) (9.1) (14.8) Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 Cash Flow (A\$m) 2018A 20191 EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid (2.8) (3.2) Tax Paid 2.2 1.4 Other Operating Cash Flows 0.0 0.0 Deprediation expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Prec Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3	(5.8)	(10.2)
Diluted EPS (cps) (3.9) (6.0) DPS (cps) 0.0 0.0 Cash Flow (A\$m) 2018A 2019I EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4 Net Interest Paid (2.8) (3.2) Tax Paid 2.2 1.4 Other Operating Cash Flows 0.0 0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Pree Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4 <td>0.0</td> <td>0.0</td>	0.0	0.0
DPS (cps) 0.0 0.0 Cash Flow (A\$m) 2018A 20191 EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4) Net Interest Paid (2.8) (3.2) Tax Paid 2.2 1.4 Other Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8) Exploration expenditure 0.0 0.0 Free Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Exploration expenditure 0.0 0.0 Exploration dependent 12.0 4.9 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt)	(18.3)	(10.4)
Cash Flow (A\$m) 2018A 20191 EBIT (Cash Flow) (6.3) (11.3) Depredation - Cash Flow (2.2) (1.4) Net Interest Paid (2.8) (3.2) Tax Paid 2.2 1.4 Other Operating Cash Flows 0.0 0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Free Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4	(7.5)	(4.3)
EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4) Net Interest Paid (2.8) (3.2) Tax Paid 2.2 1.4 Other Operating Cash Flows 0.0 0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Free Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4	0.0	0.0
EBIT (Cash Flow) (6.3) (11.3) Depreciation - Cash Flow (2.2) (1.4) Net Interest Paid (2.8) (3.2) Tax Paid 2.2 1.4 Other Operating Cash Flows 0.0 0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Free Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4	2020F	2021F
Deprediation - Cash Flow (2.2) (1.4 Net Interest Paid (2.8) (3.2 Tax Paid 2.2 1.4 Other Operating Cash Flows 0.0 0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Free Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4		(0.2)
Net Interest Paid (2.8) (3.2) Tax Paid 2.2 1.4 Other Operating Cash Flows 0.0 0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Prec Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Equity Raised 0.0 0.0 Dobt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4		(1.0)
Tax Paid 2.2 1.4 Dther Operating Cash Flows 0.0 0.0 Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Free Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4	(5.8)	(10.2)
Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8) Exploration expenditure 0.0 0.0 Free Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4	0.6	1.0
Operating Cash Flow (9.1) (14.5) Capital expenditure (3.0) (0.8) Exploration expenditure 0.0 0.0 Free Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 2019 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4	0.0	0.0
Capital expenditure (3.0) (0.8 Exploration expenditure 0.0 0.0 Free Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Creditors 3.2 2.4	(18.3)	(10.4)
Exploration expenditure 0.0 0.0 Free Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4		(10.2)
Free Cash Flow (12.1) (15.3) Dividends 0.0 0.0 Dividends 0.0 0.0 Equity Raised 0.0 0.0 Dobb drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4	0.0	0.0
Dividends 0.0 0.0 Equity Raised 0.0 0.0 Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4		(20.6)
Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4	0.0	0.0
Debt drawn (repaid) (4.6) 4.4 Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Cash 12.0 4.9 Cash 2018A 20191 Cash 12.0 4.9 Creditors 3.2 2.4	0.0	0.0
Net Change in Cash (16.7) (10.9) Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 20191 Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4	35.0	40.0
Cash at Period End 12.0 4.9 Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 2019I Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4		19.4
Net Cash (Debt) (4.1) (26.0) Balance Sheet (A\$m) 2018A 2019I Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4	14.8	34.8
Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4		(60.9)
Cash 12.0 4.9 Total Assets 111.4 98.3 Creditors 3.2 2.4	2020F	2021F
Total Assets 111.4 98.3 Creditors 3.2 2.4	14.8	34.8
Creditors 3.2 2.4	115.0	144.6
		2.4
15.7 0.5	1.4	0.0
Non-current Borrowings 0.4 30.6	2.4	95.6
Provisions 10.6 10.8	0.0	10.8
Total Liabilities 30.6 34.6	0.0 55.6	109.5
	0.0 55.6 10.8	109.5
Shareholders Funds 81.5 65.0	0.0 55.6	

2018A

0.77

21.8

2018A

Commodity Assumptions

Uranium Price (US\$/lb)

Production Summary

US\$/A\$

2019F

0.72 26.9

2019F

Ratios	2018A	2019F	2020F	2021F
P/E (x)	-5.1	-3.3	-2.7	-4.7
Enterprise Value	50.8	75.0	89.8	109.8
EV/EBITDA (x)	-12.4	-7.5	-7.5	142.1
EV/Free Cash Flow	4.9	(7.0)	(3.6)	(5.6)
PFCF (x)	4.5	(4.6)	(2.0)	(2.5)
DPS (cents)	0	0	0	0
Div. Yield (%)	na	na	na	na
Franking (%)	na	na	na	na

Directors & Management	
Name	Position
John Harrison	Non-Executive Chairman
Wayne Heili	Managing Director / CEO
Harrison (Hink) Barker	Non-Executive Director
Mark Wheatley	Non-Executive Director
David Coyne	Finance Director / CFO

Top Shareholders (as at 30 June 2019)		
	Shares (m)	%
Paradice Invesmtnet Management	24.0	9.8
Resource Capital Funds	22.6	9.2
Pala Investments Limited	12.2	5.0
BlackRock Inc	11.6	4.7
Mirae Asset Global Investments	4.6	1.9
Top 5 Shareholders	75.0	30.6

All information and advice is confidential and for the private information of the person to whom it is provided and is provided without any responsibility or liability on any account whatsoever on the part of this firm or any member or employee thereof.

PATERSONS

2021F

0.73

45.0

2021F

Year End 30 June

2020F

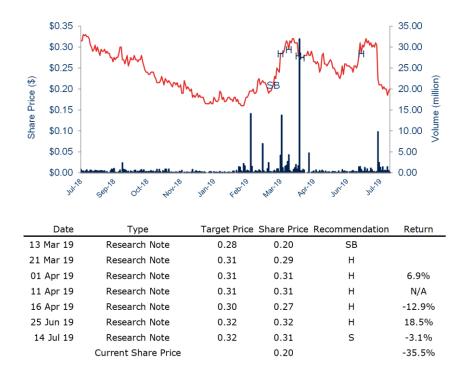
0.73

40.0

2020F



Recommendation History



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.

RESEARCH NOTE – PATERSONS SECURITIES LIMITED





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

ARU Patersons Securities have acted for Arafura Resources (ARU) within the past two years and have received fees for these services. AKM Patersons Securities have acted for Aspire Nmining Limited (AKM) within the past two years and have received fees for these services. AXL Patersons Securities have acted for Axsesstoday Limited (AXL) within the past two years and have received fees for these services. BOF Patersons Securities have acted for Boss Resources Limited (BOE) within the past two years and have received fees for these services. BRB Patersons Securities have acted for Breaker Resources NL (BRB) within the past two years and have received fees for these services. Patersons Securities have acted for Blackstone Minerals Limited (BSX) within the past two years and have received fees for these services. BSX BUX Patersons Securities have acted for Buxton Resources Limited (BUX) within the past two years and have received fees for these services. CSS Patersons Securities have acted for Clean Seas Seafood Limited (CSS) within the past two years and have received fees for these services. GLL Patersons Securities have acted for Galilee Energy Limited (GLL) within the past two years and have received fees for these services. IBG Patersons Securities have acted for Ironbark Zinc Limited (IBG) within the past two years and have received fees for these services. NUS Patersons Securities have acted for Nusantara Resources (NUS) within the past two years and have received fees for these services. PEX Patersons Securities have acted for Peel Mining Limited (PEX) within the past two years and have received fees for these services. Patersons Securities have acted for ReadCloud Limited (RCL) within the past two years and have received fees for these services. RCL STN Patersons Securities have acted for Saturn Metals Limited (STN) within the past two years and have received fees for these services. SYA Patersons Securities have acted for Sayona Mining Limited (SYA) within the past two years and have received fees for these services. VMY Patersons Securities have acted for Vimy Resources Limited (VMY) within the past two years and have received fees for these services. WKT Patersons Securities have acted for Walkabout Resources Ltd (WKT) within the past two years and have received fees for these services. XTE Patersons Securities have acted for Xtek Limited (XTE) within the past two years and have received fees for these services. NXS Patersons Securities have acted for Next Science Limited (NXS) within the past two years and have received fees for these services.

RESEARCH NOTE – PATERSONS SECURITIES LIMITED



IMPORTANT WARNING AND DISCLAIMER

Important Notice: [©]Patersons Securities Limited 2019. The contents contained in this document 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 or use 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 advice (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 direct or 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 individual financial circumstances and investment objectives.

Disclosure: Patersons, its directors and/or employees may eam 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 did not influence Patersons in giving the advice contained in this report. Details of any interests, which is relevant to any personal advice to you, 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 '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 of these ranges because of price movements and/or market volatility.

This Document is not to be passed on to any third party without our prior written consent.

Patersons Securities Limited ABN 69 008 896 311 AFSL 239 052.

Participant of ASX Group; Participant of NSX; Participant of Chi-X Australia; Stockbrokers and Financial Advisers Association Principal Member.

Research

Cathy Moises, Head of Research Commodifies Industrials (+61 3) 9242 4030 E: cmoises@psl.com.au Cathy Moises, Head of Research Martyn Jacobs, Industrial Analyst (+61 3) 9242 4030 T: (+61 3) 9242 4153 James Farr, Analyst E: cmoises@psl.com.au E: mjacobs@psl.com.au T: (+61 8) 9263 1215 E: jfarr@psl.com.au Xavier Braud, Resources Analyst Allan Franklin, Industrial Analyst (+61.8) 9225 2813 T: (+61 3) 9242 4155 Jacob Ballard, Research Assistant E: xbraud@psl.com.au E: afranklin@psl.com.au (+61 3) 9242 4031 E: jballard@psl.com.au Phil Carter, Research Analyst Cam Hardie, Resources Analyst T: (+61 8) 9225 2819 (+61 3) 9263 1215 Strategy & Economics E: chardie@psl.com.au E: pcarter@psl.com.au Greg Galton, Director Private Wealth Phil Carter, Research Analyst T: (+61 8) 9263 1612 T: (+61 8) 9225 2819 E: ggalton@psl.com.au E: pcarter@psl.com.au

James Farr Analyst

E: jfarr@psl.com.au

T: (+61 8) 9263 1215

Daniel Veasey, Associate Analyst T: (+61 8) 9225 2818 E: dveasey@psl.com.au

Institutional

Dan Bahen, Director, Head of Institutional	Phil Schofield, Executive Director, Institutional	Chris Kelly, Institutional Sales Adviser
Dealing	T: (+61 2) 8238 6223	T: (+61 3) 9242 4078
T: (+61 8) 9263 1274	E: pschofield@psl.com.au	E: ckelly@psl.com.au
E: dbahen@psl.com.au		
	Sandy Wylie, Director, Institutional Dealing	Jeremy Nugara, Institutional Sales Trader /
Tom Bahen, Director, Institutional Sales	T: (+61 8) 9263 1232	Operator
T: (+61 8) 9263 1180	E: swylie@psl.com.au	T: (+61 3) 8803 0166
E: tbahen@psl.com.au		E: jnugara@psl.com.au
	Paul Doherty, Director, Institutional Dealing	
Michael Brindal, Director, Institutional Equities	T: (+61 3) 8803 0108	Artie Damaa, Institutional Sales and Trading
T: (+61 8) 9263 1186	E: pdoherty@psl.com.au	T: (+61 2) 8238 6215
E: mbrindal@psl.com.au		E: adamaa@psl.com.au



patersons@psl.com.au

