

# **EQUITY RESEARCH**

Financial Advisers | Stockbroking & Research | Special Situations Financing www.argonaut.com +61 8 9224 6888

**SPEC BUY** 

Current Price \$0.46 Valuation \$0.90 TSR 96%

Code: Sector:			ASX:CTM Materials
Shares on Issue (m):			496
- Fully Diluted (m)			502
Market Cap (A\$m):			226
- Fully Diluted (\$m):			228
Cash (A\$m) (Estimate):			25
Debt (A\$m) (Estimate):			0
Enterprise Value (A\$m):			201
,			
52 wk High/Low (ps):		A\$0.96	A\$0.25
12m av. daily vol. (Mshs)	:		735
Advanced Projects			Stage
Jaguar	Sc	oping (DFS	
Jambreiro			PFS
Jaguar		Mt	Ni %
Measured		14.0	1.06
Indicated		72.6	0.81
Inferred		22.6	0.93
Key Metrics:			
	FY29e	FY30e	FY31e
P/E (x)	1.5	1.6	1.8
EV/EBITDA (x)	1.0	1.0	1.0
Financials:			
rillaliciais.	FY29e	FY30e	FY31e
Revenue (\$m)	352	350	343
EBIT (\$m)	256	244	230
NPAT (A\$m)	239	220	205
,	200	220	203
Directors			
Didier Murcia			Chairman
Darren Gordon	Ma	naging Dire	
Bruno Scarpelli			ve Director
Mark Hancock	N	on-Executi	
Chris Banasik		on-Executi	
Top Shareholders			%
McCusker Holdings Pty L	td		12.1
Harmanis			4.9
Sprott Inc.			4.0
Regal			4.0
Share Price Granh and to	rading vo	lumes (mel	h)



Please refer to important disclosures from page 13

Wednesday, 3 July 2024

# **Centaurus Metals (CTM)**

# **Jaguar Feasibility Outcomes**

Analyst | George Ross

# **Quick Read**

CTM has reported outcomes from the Jaguar Feasibility study. The Study outlines a robust nickel sulphide operation that is a standout amongst global peers. The project benefits greatly from a low-cost operating environment including US\$3.5c/kwh electricity. Jaguar is expected to produce nickel within the lowest AISC quartile of global producers. Nickel product will also be of very low greenhouse gas intensity. With the Study now complete, CTM will shift focus to partnership and financing discussions. We think CTM's value proposition will appeal to many suitors, particularly those seeking to diversify supply away from Indonesian nickel. Future catalysts include advancement of financing, finalisation of Jaguar permitting and potential discovery success as CTM's Boi Novo copper exploration project (See Recent Research).

### **Key Points**

Jaguar Feasibility Study: CTM estimates a Post-Tax NPV8 of A\$997M (US\$663M) and IRR of 31%. The study assumes US\$19,800/t nickel price (US\$8.98/lb). Construction is expected to begin Q2 CY2025 and operation ramp-up in Q4 CY2027. A 3.5Mtpa plant will treat a 63Mt Reserve grading 0.73% Ni. LOM recoveries to concentrate of 73% and nickel payability of 76%. Average total annual production is forecast at 18.7kt of nickel (14.2kt payable). Total pre-production capex of US\$371M and LOM deferred & sustaining capex of US\$237M. C1 cash cost of US\$2.3/lb total Ni (\$3.03/lb payable Ni), AISC US\$3.57/lb total Ni (US\$4.70/lb payable Ni). Further value add opportunities exist including inventory additions from a pending MRE update, underground mining potential, addition of ore sorting to provide feed from sub grade material and the possibility of integrating hydrometallurgical refinement.

With the Feasibility study now concluded, CTM will pursue financing options. In our modelling we assume a 40% sell down of the Jaguar project for ~\$180M. Achieving a better outcome than this would benefit our valuation.

Final permitting is expected to be finalised by early CY2025, enabling project construction to proceed in full.

**Jambreiro Iron Ore Project:** Under our base assumptions we estimate a Post-Tax Build Date NPV(9) of A\$164M equivalent to \$0.20 per share for the Jambreiro Iron Ore project.

### **Recommendation & Price Target**

We maintain our Speculative Buy recommendation and Price Target of \$0.90 per share. The Jaguar DFS outlines a low-cost nickel sulphide player that is relatively unique within the developer space.



### Centaurus Metals (ASX:CTM)

(Assumed 60% Retention of Jaguar)

**Equities Research** 

Analyst: George Ross

Recommendation	Spec Buy
Current Price (A\$)	0.46
Price Target (A\$)	0.90
TSR	96%

Profit & loss (\$M)	Unit	2028E	2029E	2030E	2031E
Revenue	A\$M	331	352	350	343
+ Other income/forwards	A\$M	0	0	0	0
- Operating costs	A\$M	-126	-120	-120	-121
- Royalties	A\$M	-20	-21	-21	-20
- Corporate & administration	A\$M	-8	-8	-8	-8
Total Costs	A\$M	-154	-149	-149	-149
EBITDA	A\$M	177	203	201	194
- margin	%	52%	58%	57%	57%
- D&A	A\$M	65	53	44	37
EBIT	A\$M	242	256	244	230
+ Finance Income/Expense	A\$M	-14	-1	4	8
PBT	A\$M	228	255	248	239
- Tax expense	A\$M	-18	-16	-29	-34
- Remeasurement	A\$M	0	0	0	0
NPAT	A\$M	210	239	220	205

Cash flow (\$M)	Unit	2028E	2029E	2030E	2031E
+ Sales	A\$M	328	352	350	343
- Cash costs	A\$M	-166	-149	-149	-149
- Forwards	A\$M	0	0	0	0
- Tax payments	A\$M	-9	-17	-19	-35
- Stamp duty/other	A\$M	0	0	0	0
+ Interest & other	A\$M	-14	-1	4	8
Operating activities	A\$M	139	185	185	167
- Property, plant, mine devel.	A\$M	-13	-13	-13	-13
<ul> <li>Acquisition/ asset sale</li> </ul>	A\$M	0	0	0	0
- Exploration & evaluation	A\$M	0	0	0	0
Investment activities	A\$M	-13	-13	-13	-13
+ Borrowings	A\$M	-80	-150	-1	0
- Lease payments	A\$M	0	0	0	0
- Dividends	A\$M	0	0	0	0
+ Equity	A\$M	0	0	0	0
Financing activities	A\$M	-80	-150	-1	0
Cash change	A\$M	46	23	172	155

Balance sheet	Unit	2028E	2029E	2030E	2031E
Cash	A\$M	57	80	252	407
Receivables	A\$M	22	22	22	21
Inventories	A\$M	4	4	4	4
Other current assets	A\$M	0	0	0	0
Total current assets	A\$M	84	106	278	432
Property, plant & equip.	A\$M	0	0	0	0
Exploration Properties	A\$M	0	0	0	0
Investments/other	A\$M	0	0	0	0
Total non-curr. assets	A\$M	255	211	176	149
Total assets	A\$M	338	317	454	581
Trade payables	A\$M	20	20	20	20
Short term borrowings	A\$M	150	1	0	0
Other	A\$M	20	20	20	20
Total curr. liabilities	A\$M	190	41	40	40
Long term borrowings	A\$M	0	0	0	0
Other	A\$M	0	0	0	0
Total non-curr. liabil.	A\$M	0	0	0	0
Total liabilities	A\$M	190	41	40	40
Net assets	A\$M	148	276	414	541

Share Capital		2028E	2029E	2030E	2031E
New shs issued/exerciseable	M	0	0	0	0
Average issue price	ps	0.00	0.00	0.00	0.00
Total Cash Raised	A\$M	0	0	0	0
Ordinary shares - end	M	792	792	792	792
Diluted shares - end	M	792	792	792	792

Sector Issued Capital (Mshs) Market Cap (M)	Metals & Mining 496 A\$225M
Date	Tuesday 2 July 2024

	Date		т	uesday, 2 J	ulv 2024
Key Financials/Ratios	Unit	2029E	2030E	2031E	2032E
GCFPS	¢	93.5	93.6	84.6	84.8
CFR	Χ	0.5	0.5	0.5	0.5
EPS	¢	30.1	27.7	25.9	21.4
PER	Χ	1.5	1.6	1.8	2.1
Yield	%	0%	0%	0%	0%
Interest cover	X	32.0	0.0	0.0	0.0
ROCE	%	81%	54%	40%	27%
ROE	%	86%	53%	38%	25%
Gearing	%	0%	0%	0%	0%
Jaguar Project Performan	ce	2029E	2030E	2031E	2032E
Ore Mined					
Tonnage	Mt	3.5	3.5	3.5	3.5
Ni	%	0.80	0.81	0.79	0.78
Co	%	0.02	0.02	0.02	0.02
Payable Metal Produced					
Nickel	kt	15.6	15.7	15.4	15.1
Cobalt	kt	0.2	0.2	0.2	0.2
Payable Nickel Costs					
C1 Cost Net-BP	US\$/t Ni	2.93	2.92	2.97	3.02
AISC Net-BP	US\$/lb Ni	3.41	3.40	3.45	3.50
C1 Cost Ore Milled	US\$/t Ore	30.7	30.7	30.7	30.6
Nickel Forecast (Real)	US\$/lb Ni	8.06	8.06	8.06	8.06
Project Valuation				A\$M	A\$/sh
Jaguar Build Date Post-Tax	NPV(9)   100% Ow	nership		637	1.28
Jambreiro Build Date Post	191	0.39			

Company Valuation Summary	Spot		Foreca	ast
	A\$M	A\$/sh	A\$M	A\$/sh
Jaguar Post-Tax NPV(9) 60% Retained	315	0.39	366	0.45
Jaguar Optimisation Upside	47	0.06	55	0.07
Jambreiro Post-Tax NPV(9) 100% Ownership	244	0.30	164	0.20
Regional Exploration	20	0.02	20	0.02
Corporate Overheads	-65	-0.08	-65	-0.08
Cash (Estimate)	25	0.03	25	0.03
Debt	0	0.00	0	0.00
Future Unpaid Capital	141	0.18	141	0.18
<u>Valuation</u>	<u>727</u>	0.90	706	0.88
Price Target 50:50 Spot:Forecast			716	0.90

<sup>\*</sup> Valuation estimated on a capital diulted share basis

Directors & Management	
Didier Murcia	Chairman
Darren Gordon	Managing Director / CEO
Bruno Scarpelli	Executive Director
Mark Hancock	Non-Executive Director
Chris Banasik	Non-Executive Director
Natalia Streltsova	Non-Executive Director

rop shareholders		101 3113	70
McCusker Holdings Pty Ltd		60	12.1
Harmanis		24	4.9
Sprott Inc.		20	4.0
Regal		20	4.0
IGO		24	4.9
Jaguar Project Resources	Mt	Ni %	Co %
Measured	14	1.06	0.04
Indicated	73	0.81	0.02
Inferred	23	0.93	0.03
Total	109	0.87	0.03
	-05	0.07	0.00

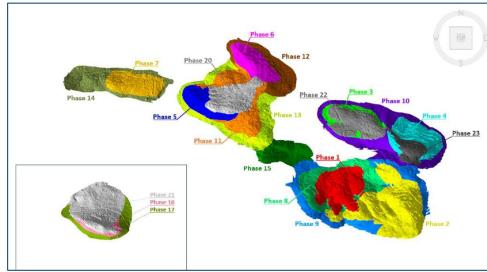


## **Jaguar DFS Outcomes**

Financial outcomes of the DFS include a post-tax NPV8 of US\$663M (A\$997M), IRR of 31% and capital payback of 2.7 years. Project outcomes include lowest quartile financial and greenhouse gas costs.

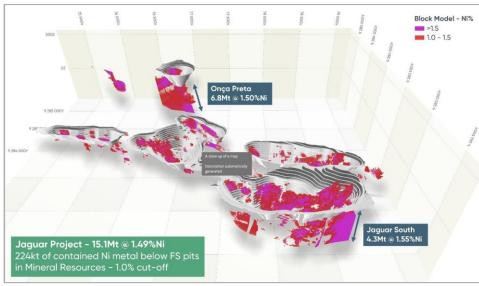
The Study scopes a 3.5Mtpa comminution and flotation plant with an initial 18-year mine life. Ore will be mined form multiple pits over the Jaguar series and Onca Preta deposits. The Study Ore Reserve of 63Mt Reserve grading 0.73% Ni is based on the November 2022 MRE totalling 109Mt at 0.87% Ni for 949kt of contained nickel metal.

Figure 1: Jaguar pits phasing with Onca Preta pits (see insert).



Source: CTM

Figure 2: Jaguar project pits with >1% Ni MRE model blocks.



Source: CTM

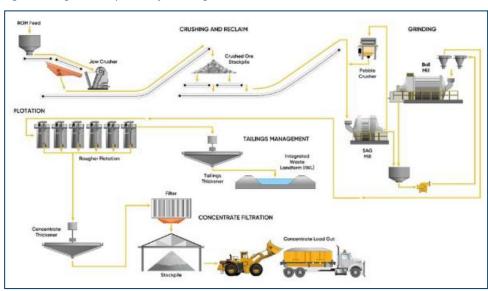
Mined ore will be processed at a central plant with conventional crushing, grinding, sulphide flotation and support circuits. CTM has completed extensive metallurgical tests across the Jaguar deposits and anticipates a life of mine nickel recovery of 73% for a 12.3%



Ni sulphide concentrate. Jaguar is expected to produce an average of 18.7kt of nickel in concentrate each year and up to 22kt in peak periods.

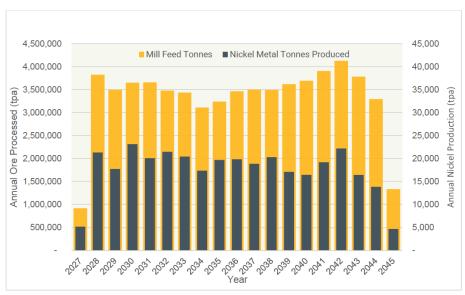
The high-quality concentrate will be suitable for either pyrometallurgical or hydrometallurgical refinement. CTM's interactions with potential offtake partners has suggested a 76% payability is reasonable. While both copper and cobalt will be returned to the concentrate neither is expected to provide significant byproduct credits.

Figure 3: Jaguar DFS process flow diagram.



Source: CTM

Figure 4: Annual processing throughput and metal produced.



Source: CTM

### Costs

The Study estimates preproduction capital of US\$371M including US\$68M for mine prestrip. Ero Copper's nearby 4Mtpa throughput Tucuma copper project was recently



completed at a cost of ~US310M, providing Argonaut with confidence of CTM's capital estimate.

The project benefits from a low-cost operating environment. Mining is expected to be completed by a 'mosquito fleet' of contractors. CTM will build a 38km long, 230kv transmission line to the nearby Onca Puma ferronickel operation, enabling connection to Brazil's national electricity grid. This will provide CTM with access to US\$3.5c/kwh low emission electricity.

CTM estimates a total C1 cost of US\$29.94/t milled or US\$2.30/lb of total contained nickel in concentrate (US\$3.03/lb payable Ni). Sustaining capital expenditure over life of mine is estimated at US\$237M. AISC over life of mine is US\$3.57/lb total nickel or US\$4.70 on a payable nickel basis. This cost profile positions Jaguar within the lowest AISC quartile of global nickel production (Figure 5).

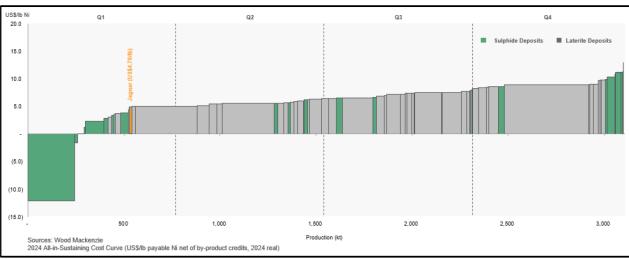


Figure 5: AISC nickel cost curve.

Source: CTM/Wood Mackenzie

Applicable royalties include a 2% Government Royalty, a 2% royalty to original project vendor Vale, and a 1.8% Royalty due to the Brazilian National Development Bank. During the first 10-years the project will be subject to a discounted 15% tax rate. For year 11 the project is subject to a 34% cumulative tax rate.

CTM's financial assumes a life of mine long term nickel price of US\$19,800/t. Exchange rates for USD/BRL, AUD/BRL and EUR/BRL are estimated at 5.30, 3.50 and 5.80 respectively.

### **Economic Outcomes and Sensitivities**

Under base case parameters the project generates a post-tax NPV8 of US\$663M. At spot nickel pricing of US\$17,000/t the project generates an NPV of US\$407M.

#### **Value-Add Opportunities**

Approximately 50,000m of drilling has been completed in the time since its release. We anticipate an updated MRE will boost mineable tonnes in a future release.

At this time the study exclusively considers open pit extraction. An additional 15.1Mt at 1.49% Ni for 224kt of contained nickel remains beneath planned pits. We expect future studies will evaluate the addition of underground mining at both Onca Preta and Jaguar South (Figure 2).



Ore sorting is currently excluded from development plans, we expect ore sorting technology will be added to the circuit as an incremental improvement at a later date. This should provide additional feed from lower grade mined material.

Opportunity exists for CTM to revisit it original plan to construct and operate hydrometallurgical refinement facilities on site for production of chemical product. This would require significant additional capital expenditure although would yield higher payabilities for economic metals. The current DFS does not include this option.

#### **Permitting**

Project permitting is now advanced with construction able to move ahead once the Installation Licence and Mining Licence are approved (expected Q4 CY24 & Q1 CY25 respectively).

### **Argonaut's Prior Jaguar Development Model Reconciliation**

Argonaut's prior development model reconciles well with CTM's Study outcomes. We had assumed a higher-grade inventory and higher metal recovery. Our costs per pound were relatively close to CTM Study figures.

Table 1: Comparison of CTM 2024 DFS and Argonaut's prior model.

		СТМ	Argonaut
Item	Unit	2024 DFS	May 2024
Initial Capex	US\$M	371	400
LOM Sus Capex	US\$M	237	223
Reserve/Inventory	Mt Ni %	63Mt @ 0.73%	60Mt @ 0.87%
Ni Recovery	%	73%	78%
Ni Payability	%	76%	75%
C1 Cost /t Milled	US\$	38.1	41.7
AISC /t Milled	US\$	41.9	50.2
C1 Cost /lb Payable	US\$	3.03	3.39
AISC /lb Payable	US\$	4.70	4.12
Long Term Ni Price	US\$	19,800	17,769
Post-tax NPV (8)	A\$M	773	875
Post-tax NPV (9)	A\$M	997	778

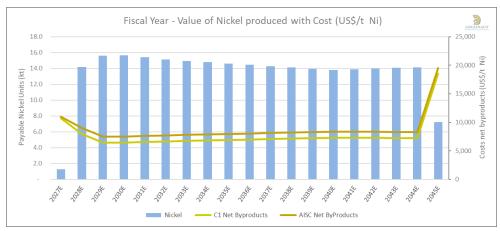
Source: CTM

# **Updated Argonaut Jaguar Model**

We have updated our Jaguar model for more consistency with CTM's Study outcomes. Our base case metal forecasts include a long-term real nickel price of US\$17,769/t Ni. Incorporating a 9% discount rate we estimate a Post tax Build-Date NPV 9 of A\$637M. By applying a US\$19,800/t nickel price a 8% discount rate we estimate a comparable NPV to CTM's Study.

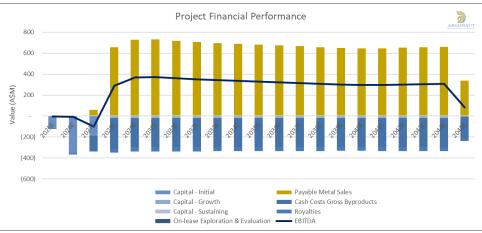


Figure 6: Argonaut's Jaguar mining inventory tonnage and grade profile with tonnes milled.



Source: Argonaut

Figure 7: Jaguar financial performance with sales revenues, costs and EBITDA.

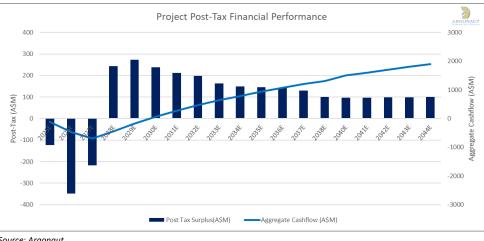


Source: Argonaut

Figure 8: Jaguar Post-Tax financial performance with aggregate cashflow.

Our updated model includes refreshed costs and technical parameters consistent with CTM's DFS

CTM's study reconciles relatively well with our previous model



Source: Argonaut

Figure 9: Jaguar project Argonaut Model sensitivity analysis.

The 2019 Jambreiro PFS evaluated an operation of 1Mtpa 65% Fe

Source: Argonaut

Table 2: Jaguar Project Resources by deposit.

Resource	Mt	Ni %	Cu %	Co ppm	Zn %	Ni Metal (kt)
Jaguar South (II)	35.8	0.91	0.05	211	0.12	327
Jaguar Central (II)	12.5	0.81	0.05	239	0.47	100
Jaguar North (II)	3.2	1.15	0.18	383	1.19	37
Jaguar Central North(II)	14.2	0.62	0.04	191	0.57	88
Jaguar North East (I)	16.8	0.75	0.11	279	0.51	126
Jaguar West (II)	8.7	0.72	0.03	167	0.12	63
Onca Preta (II)	14.2	1.23	0.09	534	0.19	174
Onca Rosa (I)	1.9	0.98	0.07	282	0.03	19
Tigre (II)	2.0	0.77	0.07	271	0.03	15
Total Global MRE	109.2	0.87	0.07	268	0.32	949

Source: CTM

# **Jambreiro Iron Ore Project**

CTM's second major Brazilian asset the Jambreiro Iron Ore Project remains largely ignored by the market. The project is located 250km north-east of the city of Belo Horizonte. Jambreiro incorporates three deposits containing a mix of friable, semi-compact and colluvium itabirite iron ore grading an average 28% Fe. The key commercial benefit of concentrate produced from itabirite ore is its quality. The concentrate is high grade with very low phosphorous, alumina and silica content.

# **Argonaut Jambreiro Model**

We have completed a detailed project production and financial model for Jambreiro using modified 2019 PFS assumptions. Under our base model parameters, we estimate a Build Date Post-Tax NPV(9) of A\$191M, valued at A\$161M today (construction starting 2027).

Our model assumes production of 1Mtpa of 65% Fe concentrate over an 18-year mine life. We estimate an AISC operating cost of A\$41.44/t ore milled resulting in an AISC of A\$50.49/t 62% Fe product produced. We assume initial capital requirements of A\$80M (up from \$60M in the 2019 PFS) and have escalated operating costs.

Our NPV estimate is based on a 9% discount rate and long-term Fe 62% reference forecast price of US\$90/t, equivalent to a mine gate FOB price of US\$50/t (A\$77/t). Spot pricing

Several pits would be used to source friable itabirite iron mineralisation



for Fe 62% product is ~US\$133/t. Additional value could be added assuming positive DR studies, however, for the moment we exclude this upside.

Royalties and other similar charges are estimated at 10%. We apply a flat 34% tax rate over life of mine.

An updated EIA/RIMA was lodged in September 2023 with the environmental agency in Minas Gerais State, Supram, for Jambreiro. All environmental licences required to build Jambreiro (3Mtpa scale potential) were previously held by the Company but lapsed during the period when the Project was put on hold. New approvals are anticipated to be received in Q3 2024.

Table 3: Argonaut Jambreiro Model key variables and parameters.

Argonaut Jambreiro Project Mode	ricy variables a rarameters		
Pre-Tax Project Value (9% DR)		Jaguar Performance LOM	
Pre-tax Current NPV	227 A\$M	Tonnes Mined (LOM)	40.0 Mt
Pre-tax Build Date NPV	271 A\$M	Tonned Benefiated (pa)	2.3 Mt
		Ore Metal Grades	
Post-Tax Project Value (9% DR)		Fe	29.10 %
Post-tax Current NPV	161 A\$M		
Post-tax Build Date NPV	191 A\$M		
		Metal Payabilities	
		Fe	100 %
Operation Start Date	1/01/2027		
Initial Capital Cost	80 A\$M		
Process Plant Design Rate	0.94 Mtpa	Payable (Avg pa/LOM)	Avg pa   LOM
		Fe	1   17.9 Mt
Long Term Forecast Metal Prices			·
Fe 62%	90 US\$/t		
Adjusted Mine Gate FOB	50 US\$/t	C1 Cost /t ore Milled	29.3 A\$/t
•		AISC Cost /t ore Milled	35.8 A\$/t
AUDUSD	0.65 x		.,
		Payable Costs	
Tax Rate	34.00 %	C1 Net Byproducts	41.44 A\$/t Fe
		AISC Net ByProducts	50.49 A\$/t Fe
Royalties and Other Charges	10.00 %	AIC Net ByProducts	51.20 A\$/t Fe

Source: Argonaut

Figure 10: Argonaut Jambreiro mining schedule with ore tonnes and grade.

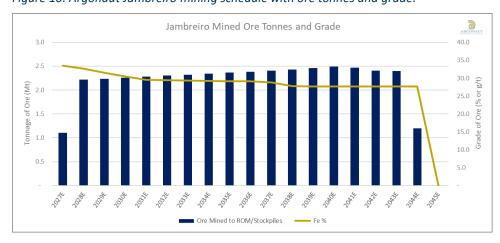


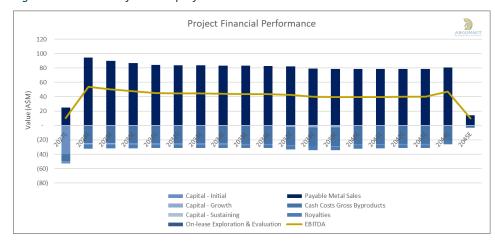


Figure 11: Jambreiro value of metals produced with C1 and AISC costs.



Aggregate post tax cashflow of almost A\$500M over life of mine

Figure 12: Jambreiro financial performance with costs and EBITDA.



Our Jambreiro Build Date NPV increases to A\$228M at a 7% discount rate

Figure 13: Argonaut model Jambreiro Post-Tax financial performance with surplus and aggregate cashflow.

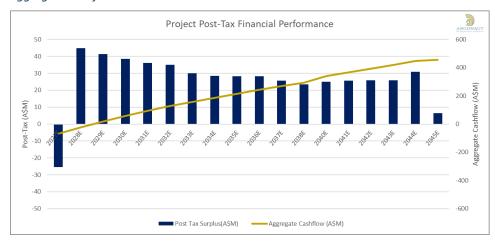




Figure 14: Sensitivity analysis for Argonaut's Jambreiro project development.

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Our Valuation integrates build of both the Jaguar and Jambreiro projects

Source: Argonaut

## **Corporate Level Valuation**

Our corporate level valuation assumes construction of Jaguar will be begin early-mid CY2025, with operations ramping up from mid-CY2027. We assume capital requirements would be provided by a 40% selldown of the project for A\$178M, equivalent to 40% of our Build Date NPV discounted by 30%. Funding shortfalls would be provided by debt and an equity raising. Using our base case assumptions, CTM's assumed 60% retained stake in Jaguar is today valued at NPV(9) A\$366M.

We include an allowance for further value-add optimisations including new inventory from the pending MRE, potential for underground mining, ore sorting additions and possibility of hydrometallurgical circuit integration.

The Jambreiro Iron Ore project remains CTM's sleeper project. Our base case NPV(9) model generates a current value of A\$164M, or \$0.32 per share for 100% of the project. Our model assumes development would begin at the beginning of January 2026, funded by equity and debt.

We include \$20M in value for regional exploration projects including Boi Novo.

Corporate overheads are presented as a the NPV of modelled heady company future outgoings. We estimate \$25M in current cash and equivalents with no major debt.

Per share valuations are based on a diluted capital position including potential future unrealised capital requirements.

Table 4: CTM company level net asset valuation.

Company Valuation Summary	Spo	ot	Forecast	
	A\$M	A\$/sh	A\$M	A\$/sh
Jaguar Post-Tax NPV(9) 60% Retained	315	0.39	366	0.45
Jaguar Optimisation Upside	47	0.06	55	0.07
Jambreiro Post-Tax NPV(9) 100% Ownership	244	0.30	164	0.20
Regional Exploration	20	0.02	20	0.02
Corporate Overheads	-65	-0.08	-65	-0.08
Cash (Estimate)	25	0.03	25	0.03
Debt	0	0.00	0	0.00
Future Unpaid Capital	141	0.18	141	0.18
Valuation	<u>727</u>	0.90	<u>706</u>	0.88
Price Target 50:50 Spot:Forecast			716	0.90

<sup>\*</sup> Valuation estimated on a capital diulted share basis

Price Target of A\$0.90 per share maintained



Source: Argonaut

## **Recommendation & Price Target**

We maintain our Speculative Buy recommendation and Price Target of \$0.90 per share. The Jaguar DFS outlines a low-cost nickel sulphide player that is relatively unique within the developer space. Output from the project will be viewed as attractive by refiners and downstream users seeking to diversify supply beyond Indonesian nickel.

## **Key Risks to valuation**

### **Timelines**

Our discounted cash flow model is time dependant. Any delay to scheduled development or production will adversely effect on our valuation.

### Metallurgical performance

Sulphide concentrate characterisation studies have concluded that fluorine is present at manageable levels for pyrometallurgical refiners. Deleterious elements are less of an issue for hydrometallurgical refiners.

### **Commodity Pricing**

Value estimates are based on consensus long term commodity price forecasts. A 10% difference to the price of nickel over the modelled life of mine will result in a  $\sim$ 25% shift in project valuation.

#### Costs

Cost assumptions are based on operating and capital costs from CTM documentation and our knowledge of industry rates.

### **Exploration success**

Valuation assumes that future exploration and investments achieve acceptable returns. Subjective value is attributed to exploration assets at Jaguar.

### Interest rates/discount rates

Argonaut takes cash flow risk into account when choosing discount rates for different projects. Our valuation is sensitive to the discount rate used.



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The publishing analyst holds CTM shares.

Argonaut Securities Pty Ltd acted as Joint Lead Manager and Joint Bookrunner in respect of the Placement to raise approximately \$35M announced in July 2023 and received fees commensurate with this service. Argonaut holds or controls 759,976 CTM shares.

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