



## SPEC BUY

Current Price **\$1.12**  
Valuation **\$1.79**

Friday, 17 December 2021

## Centaurus Metals (CTM)

### Leaps and Bounds

Analyst | George Ross

#### Quick Read

CTM continues its journey towards development of the Jaguar nickel sulphide project, Brazil. An updated Mineral Resource Estimate has almost certainly expanded project life beyond the 13 years proposed within CTM's Value-Add Scoping study. Advancing technical studies provide further certainty for project variables. Meanwhile, land acquisitions de-risk the pathway to development. IGO's acquisition of WSA provides some insight into what the Jaguar project may be worth if CTM were to be subject to corporate takeover.

#### Main Points

**New Resource:** The new Jaguar global Resource is reported as 80.6 Mt grading 0.91% Ni for 730,700 kt contained nickel. The new Resource contains 30% more nickel than the February MRE update with major tonnage increases to Jaguar South, Jaguar Central North and the addition of the Tigre deposit. We have used the new MRE to underpin a 17-year operational mine life in our valuation model.

**Technical Studies:** CTM's management team continue to push technical studies to inform the Q4 2022 scheduled Jaguar Project Definitive Feasibility Study. Recent and approaching work programmes include tests to characterise detailed mineralogy, ore sorting, comminution flotation and others. A newly designed Tailings Storage Facility adds 20% additional capacity beyond currently modelled requirements.

**Permitting & Landholdings:** An updated Mining Lease Application has been submitted to reflect an update in scope of the proposed Jaguar development. Environmental approval documentation been submitted. This documentation is required for a Preliminary License to allow project construction that is scheduled for finalisation in Q3 of 2022. Three properties have been purchased from landholders, reducing development risk.

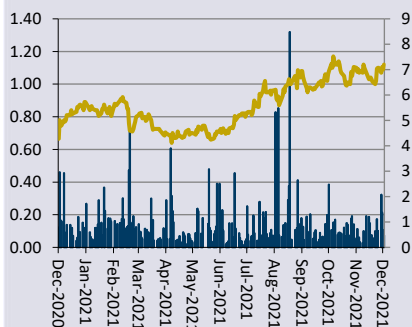
**IGO-WSA Takeover:** Western Areas' production profile and Resource base is similar to the medium-term outlook for Jaguar. The takeover of Western Areas by IGO for ~A\$950M provides some insight into what Jaguar might be valued at if CTM were subject to takeover by a larger corporate player.

#### Recommendation

We maintain a SPEC BUY and increase our valuation of CTM to A\$1.79 per share (prior \$1.40 per share). Changes to our NPV model include extension to mine life, ore sorting/processing assumptions and assumed nickel pricing.

Code:	CTM		
Sector:	Materials		
* All figures in AUD unless stated otherwise			
Shares on Issue (M):	358		
- fully diluted (M)	462		
Market Cap (\$M):	401		
- fully diluted (\$M)	517		
Cash (30 Sep 21)	A\$16m		
Debt (30 Sep 21)	A\$0m		
Net cash (\$M):	16		
Enterprise value (\$M):	385		
52 wk High/Low (ps):	\$0.64	\$1.17	
12m av. daily vol. (Mshs):	0.9		
<b>Key Metrics:</b>			
	FY25e	FY26e	FY27e
P/E (x)	188.2	2.3	2.2
EV/EBITDA (x)	12.2	0.7	1.1
<b>Financials:</b>			
	FY25e	FY26e	FY27e
Revenue (\$M)	92	555	555
EBIT (\$M)	20	291	288
NPAT (A\$M)	2	243	245
Net assets (\$M)	500	645	823
Op CF (\$M)	-2	246	237
<b>Per share data:</b>			
EPS (c)	0.4	49.3	49.8
Dividend (cps)	0.0	0.0	0.0
Yield (%)	-	-	-
CF/Share (cps)	-0.4	68.7	66.1
Prod (kt Ni)	3,718	22,308	22,308

Share Price Graph and trading volumes (msh)



Please refer to important disclosures at the end of the report (from page 9)



**Centaurus Metals**

**Equities Research**

Analyst: George Ross

<b>Recommendation</b>	<b>Speculative Buy</b>
<b>Current Price</b>	<b>\$1.12</b>
<b>Valuation</b>	<b>\$1.79</b>

<b>Sector</b>	<b>Metals &amp; Mining</b>
<b>Issued Capital (Mshs)</b>	<b>358</b>
<b>Market Cap (M)</b>	<b>\$ 401</b>
<b>Friday, 17 December 2021</b>	

Profit & loss (A\$M) 30 June	Unit	2024E	2025E	2026E	2027E
Sales Revenue	A\$M	0	92	555	555
+ Other income/forwards	A\$M	0	0	0	0
- Operating costs	A\$M	-2	-49	-166	-171
- Royalties	A\$M	0	-4	-25	-25
- Corporate & administration	A\$M	-6	-8	-4	-4
<b>Total Costs</b>	<b>A\$M</b>	<b>-8</b>	<b>-61</b>	<b>-195</b>	<b>-200</b>
<b>EBITDA</b>	<b>A\$M</b>	<b>-8</b>	<b>31</b>	<b>359</b>	<b>355</b>
- margin		0%	34%	65%	64%
- D&A	A\$M	0	-11	-69	-66
<b>EBIT</b>	<b>A\$M</b>	<b>-8</b>	<b>20</b>	<b>291</b>	<b>288</b>
+ Finance Income/Expense	A\$M	-20	-18	-6	0
<b>PBT</b>	<b>A\$M</b>	<b>-28</b>	<b>3</b>	<b>285</b>	<b>288</b>
- Tax expense	A\$M	4	0	-43	-43
- Impairments and other	A\$M	0	0	0	0
<b>NPAT</b>	<b>A\$M</b>	<b>-23</b>	<b>2</b>	<b>243</b>	<b>245</b>

Cash flow (A\$M)	Unit	2024E	2025E	2026E	2027E
+ Revenue	A\$M	0	92	555	555
- Cash costs	A\$M	-8	-80	-269	-275
- Tax payments	A\$M	3	4	-35	-43
+ Interest & other	A\$M	-20	-18	-6	0
<b>Operating activities</b>	<b>A\$M</b>	<b>-25</b>	<b>-2</b>	<b>246</b>	<b>237</b>
- Property, plant, mine devel.	A\$M	-392	-5	-33	-20
- Exploration	A\$M	-2	-2	-2	-2
- Feasibility Studies	A\$M	0	0	0	0
<b>Investment activities</b>	<b>A\$M</b>	<b>-394</b>	<b>-7</b>	<b>-35</b>	<b>-22</b>
+ Borrowings	A\$M	240	0	0	0
- Dividends	A\$M	0	0	0	0
+ Equity	A\$M	164	0	0	0
<b>Financing activities</b>	<b>A\$M</b>	<b>404</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Cash change</b>	<b>A\$M</b>	<b>-15</b>	<b>-8</b>	<b>211</b>	<b>215</b>

Balance sheet (A\$M)	Unit	2024E	2025E	2026E	2027E
<b>Cash</b>	<b>A\$M</b>	<b>177</b>	<b>168</b>	<b>379</b>	<b>594</b>
Other Current Assets	A\$M	0	0	0	0
<b>Total current assets</b>	<b>A\$M</b>	<b>177</b>	<b>168</b>	<b>379</b>	<b>594</b>
Property, plant & equip.	A\$M	392	385	349	303
Investments/other	A\$M	0	0	0	0
<b>Total non-curr. assets</b>	<b>A\$M</b>	<b>392</b>	<b>385</b>	<b>349</b>	<b>303</b>
<b>Total assets</b>	<b>A\$M</b>	<b>568</b>	<b>553</b>	<b>729</b>	<b>897</b>
Trade payables	A\$M	56	13	42	37
Short term borrowings	A\$M	133	240	27	0
Other	A\$M	50	13	42	37
<b>Total curr. liabilities</b>	<b>A\$M</b>	<b>106</b>	<b>26</b>	<b>83</b>	<b>74</b>
Long term borrowings	A\$M	267	27	0	0
Other	A\$M	0	0	0	0
<b>Total non-curr. liabil.</b>	<b>A\$M</b>	<b>267</b>	<b>27</b>	<b>0</b>	<b>0</b>
<b>Total liabilities</b>	<b>A\$M</b>	<b>373</b>	<b>53</b>	<b>83</b>	<b>74</b>
<b>Net assets</b>	<b>A\$M</b>	<b>195</b>	<b>500</b>	<b>645</b>	<b>823</b>

Resource	Mt	Ni % Metal (kt)
Jaguar South (II)	27.6	0.93
Jaguar Central (II)	12.1	0.9
Jaguar North (II)	3.2	1.12
Jaguar Central North(II)	12	0.63
Jaguar North East (I)	9.1	0.84
Jaguar West (II)	7.3	0.74
Onca Preta (II)	5.2	1.52
Onca Rosa (I)	2.1	1.28
Tigre (II)	2	0.82
<b>Total Global MRE</b>	<b>80.6</b>	<b>0.91</b>

Financial ratios	2024E	2025E	2027E	2028E
GCFPS Diluted (AC)	-7	0	69	66
CFR (X)	0	0	1.6	1.7
EPS Diluted (AC)	-5	0	49	50
PER (X)	0	188	2.3	2.2
DPS (\$)	0	0	0%	0%
Yield (%)	0	0	0%	0%
Interest cover (X)	0	1	53	0
ROCE (%)	0	0	45%	35%
ROE (%)	0	0	44%	35%
Avg Gearing (%)	0	32%	19%	0%

Operations summary	2024E	2025E	2027E	2028E
<b>Jaguar</b>				
Ore processed (Mt)	0.0	0.4	2.5	2.5
Ni Head grade (%)	0.0	0.80	0.80	0.80
Met. Recovery (%)		90%	90%	90%
Share of Ni in Final Product (t)	0.0	3718	22308	22308
Share of Payable Ni (t)	0.0	3718	22308	22308
Cost per milled tonne (US\$/t)		124	72	74
C1 Costs (US\$/lb)	0.0	6.2	3.6	3.7
AISC (US\$/lb)		4.4	4.6	4.3
Growth capital (\$M)	0.0	5	33	20

Price assumptions	2024E	2025E	2027E	2028E
AUDUSD	0.75	0.75	0.75	0.75
Nickel (US\$/t)	17500	17500	17500	17500
Nickel (A\$/t)	23333	23333	23333	23333

Jaguar Project Valuation	A\$M	A\$/sh
Jaguar Project NPV9 AUD	1145	3.20
Risk Discount (Study Maturity -30% & Technical -15%)	-515	1.44
Jaguar Project NPV9 (Risk Discounted 45%)	630	1.76

Company Valuation summary	A\$M	A\$/sh
Jaguar Project NPV9 AUD	1145	3.20
Risk Discount (Study Maturity -30% & Technical -15%)	-515	-1.44
Jambreiro Project	10	0.03
Exploration, all sites	173	0.48
Corporate overheads	-40	-0.11
Cash and bullion (Sep 21)	16	0.04
Current debt	0	0.00
Tax benefit	0	0.00
Option/equity dilution	-147	-0.41
<b>Total</b>	<b>642</b>	<b>1.79</b>

Directors, management	
Didier Murcia	Chairman
Darren Gordon	Managing Director / CEO
Bruno Scarpelli	Executive Director
Mark Hancock	Non-Executive Director
Chris Banasik	Non-Executive Director
Roger Fitzhardinge	GM - Exploration & Growth
Wayne Foote	GM - Operations
John Westdorp	Chief Financial Officer

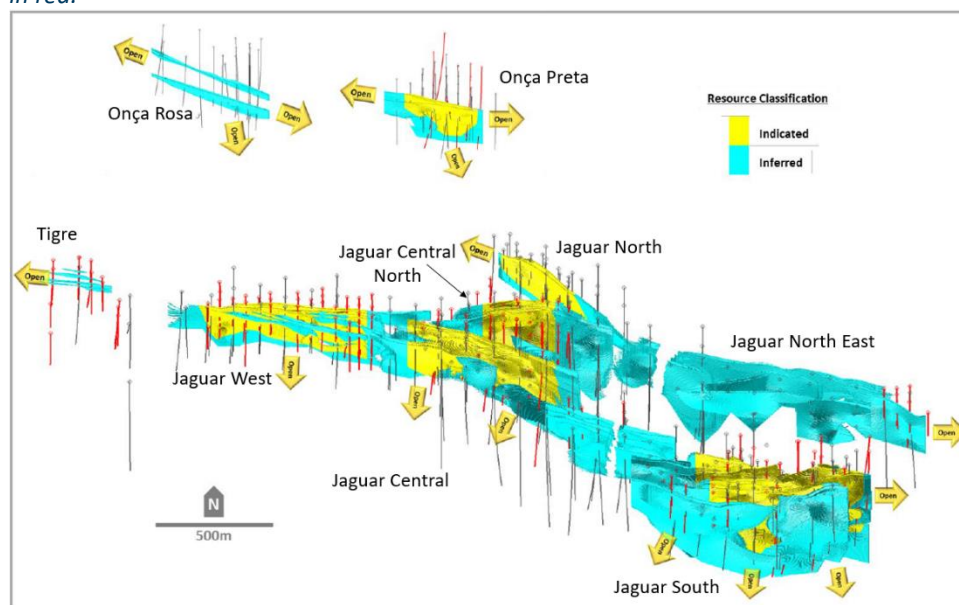
Shares	2024E	2025E	2027E	2029E
New shs issued/exerciseable	92	0	0	0
Average issue price	1.8	0	0	0
Ordinary shares - end	492	492	492	492
Diluted shares - end	492	492	492	492

## Jaguar leaps to 80.6 Mt at 0.91% Ni

The Jaguar Resource just got bigger

On the 13<sup>th</sup> of December CTM reported an updated Mineral Resource Estimate (MRE) for the Jaguar Nickel Sulphide Project, Brazil. The new Jaguar Global Resource is reported as 80.6 Mt grading 0.91% Ni for 730,700 kt contained nickel, including a predominantly shallow Indicated component of 43.4 Mt grading 0.92% (Figure 4). For formal reporting purposes, open pit Resources are reported above a 0.3% Ni cut-off and underground Resources reported above a 0.7% cut-off. At a higher universal cut-off grade of 1% Ni, Jaguar reports a high-grade Resource of 22.4 Mt grading 1.59% Ni for 354.8 kt of contained metal (Figure 2).

Figure 1: Jaguar MRE model domains with classifications and drill holes. New holes shown in red.



Indicated Resources are mostly close to surface

Source: CTM

Figure 2: Jaguar MRE reported at various cut-off grades.

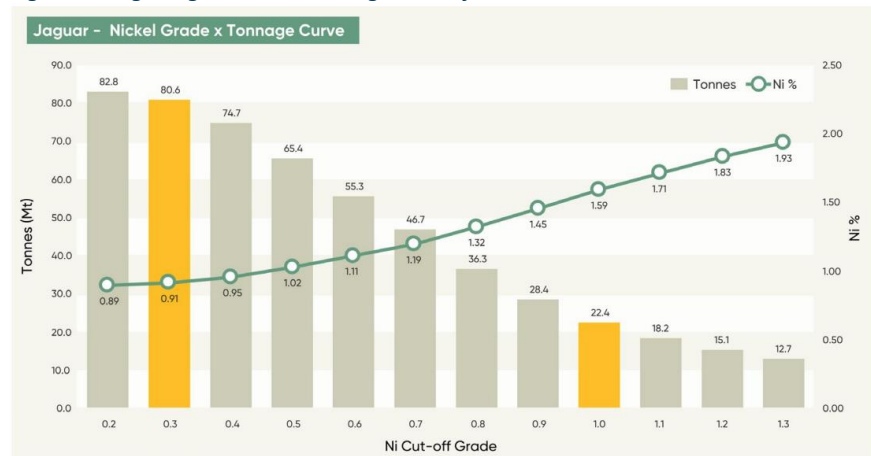
Ni% Cut-off Grade		Tonnes Mt	Grade				Metal Tonnes			
In-pit	Below pit		Ni %	Cu %	Co ppm	Zn %	Ni	Cu	Co	Zn
0.2	0.7	82.8	0.89	0.06	251	0.36	736,500	50,600	20,800	296,300
0.3	0.7	80.6	0.91	0.06	256	0.36	730,700	50,100	20,600	293,900
0.4	0.7	74.7	0.95	0.07	267	0.38	709,800	48,800	19,900	283,800
0.5	0.7	65.4	1.02	0.07	285	0.40	667,800	46,000	18,700	264,300
0.6	0.7	55.3	1.11	0.08	308	0.43	612,300	44,600	17,900	246,000
0.7	0.7	46.7	1.19	0.08	330	0.45	556,400	38,800	15,400	208,400
0.8	0.8	36.3	1.32	0.09	363	0.49	478,700	33,200	13,200	176,900
0.9	0.9	28.4	1.45	0.10	397	0.53	411,800	28,300	11,300	149,400
1.0	1.0	22.4	1.59	0.11	429	0.56	354,800	23,900	9,600	124,400
1.1	1.1	18.2	1.71	0.11	458	0.57	311,400	20,600	8,400	104,600
1.2	1.2	15.1	1.83	0.12	485	0.58	274,800	17,700	7,300	87,900
1.3	1.3	12.7	1.93	0.12	507	0.59	245,500	15,300	6,400	74,700

Source: CTM

Only sulphide and transitional ore types are reported, with oxide ore excluded. The MRE covers eight deposits that were part of the previous February 2021 MRE and also includes the new 'Tigre' discovery. Total contained nickel metal has risen from 567 kt to 731 kt, a 30% increase on the February 2021 MRE.



Figure 3: Jaguar grade and tonnage curve for the December 2021 MRE.



Source: CTM

**Big shifts in the Resource come from Jaguar South and Central North**

The biggest shifts to MRE tonnages (Figure 5) include the addition of 8.9 Mt to the Jaguar South deposit, representing a 42% increase in contained metal (now 27.6 Mt for 258 kt contained nickel metal). The Jaguar Central North deposit has increased 6.2 Mt to 12Mt (76 kt contained nickel). The global average Resource grade has slipped slightly to 0.91% Ni down ~0.05% Ni. The reported MRE now includes estimate grades for copper, cobalt and zinc. While of relatively low abundance, these will contribute towards a mixed sulphate precipitate by-product.

Figure 4: Jaguar Project MRE reported December 2021.

Resource	Mt	Ni %	Cu %	Co ppm	Zn %	Cont. Ni (kt)
Jaguar South (II)	27.6	0.93	0.05	208	0.15	258
Jaguar Central (II)	12.1	0.90	0.06	259	0.48	109
Jaguar North (II)	3.2	1.12	0.19	354	1.25	35
Jaguar Central North(II)	12.0	0.63	0.04	186	0.61	76
Jaguar North East (I)	9.1	0.84	0.10	278	0.51	77
Jaguar West (II)	7.3	0.74	0.03	163	0.11	54
Onca Preta (II)	5.2	1.52	0.09	642	0.48	79
Onca Rosa (I)	2.1	1.28	0.09	353	0.05	27
Tigre (II)	2.0	0.82	0.08	296	0.03	16
<b>Total Global MRE</b>	<b>80.6</b>	<b>0.91</b>	<b>0.06</b>	<b>256</b>	<b>0.36</b>	<b>731</b>

Source: Argonaut with CTM data.

**Discovery Tigre adds new tonnes**

Figure 5: December 2021 Jaguar MRE with changes from the February 2021 MRE.

Deposit	Tonnage			Grade			Contained Metal		
	Mt	Δ Mt	Gain/Loss	Ni (%)	Δ Mt	Gain/Loss	Ni (t)	Δ Mt	Gain/Loss
Jaguar South (II)	27.6	↑ 8.9	48%	0.93	↓ -0.04	-4%	257,800	↑ 76,500	42%
Jaguar Central (II)	12.1	↑ 1.9	19%	0.90	↓ -0.10	-10%	109,100	↑ 6,700	7%
Jaguar North (II)	3.2	↓ -0.1	-3%	1.12	↑ 0.03	3%	35,400	↓ -500	-1%
Jaguar Central North(I)	12	↑ 6.2	107%	0.63	↓ -0.17	-21%	76,000	↑ 29,300	63%
Jaguar North East (I)	9.1	↑ 0.8	10%	0.84	↑ 0.06	8%	76,700	↑ 11,800	18%
Jaguar West (I)	7.3	↑ 1.6	28%	0.74	↓ -0.06	-8%	54,000	↑ 8,800	19%
Onca Preta (II)	5.2	↑ 1.5	41%	1.52	↓ -0.06	-4%	78,800	↑ 21,000	36%
Onca Rosa (I)	2.1	↓ -1.1	-34%	1.28	↑ 0.40	45%	26,600	↓ -1,900	-7%
Tigre (II)	2	↑ 2.0	100%	0.82	↑ 0.82	100%	16,200	↑ 16,200	100%
<b>Total Global MRE</b>	<b>80.6</b>	<b>↑ 21.7</b>	<b>37%</b>	<b>0.91</b>	<b>↓ -0.05</b>	<b>-5%</b>	<b>730,700</b>	<b>↑ 168,000</b>	<b>30%</b>

Source: Argonaut with CTM data

The new discovery Tigre represents only a minor contributor to global tonnes, although does highlight the potential for exploration discovery to yield further gains to Resources.

Eight diamond rigs continue to target resource extensions, improve resource classification quality and probe for new discoveries. Eleven rigs will be operational from February 2022. The next Resource update is scheduled for Q3 2022 and will be incorporated into a Definitive Feasibility Study in the same quarter.

## Development Studies Pick up the Pace

While continuing to expand Jaguar’s resource base, CTM is accelerating a broad range of studies in preparation for the Q4 CY2022 DFS.

### Metallurgy & Processing

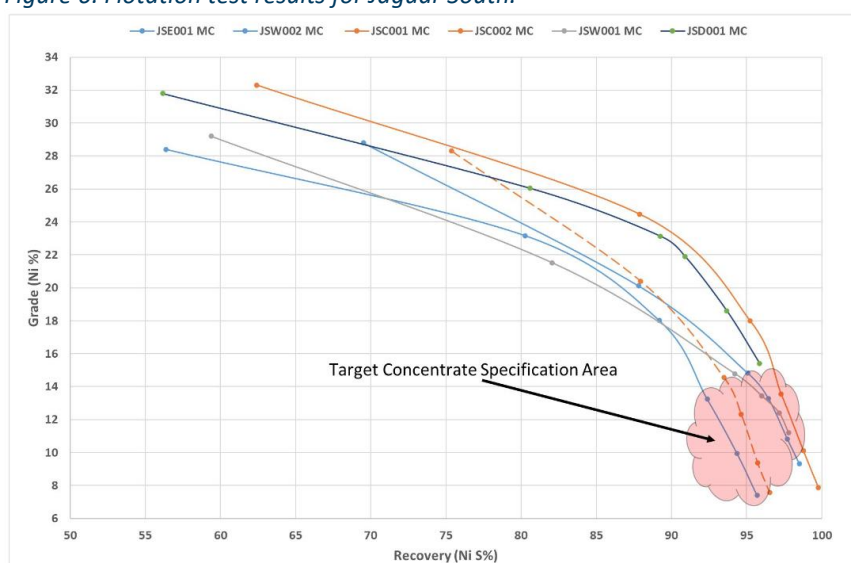
CTM has initiated an extensive ore mineralogy characterisation study on 228 composites. These sample represent more than 95% of Jaguar mineralisation and will provide important ore mineral variability data to inform process planning.

To complement mine ore grade material, CTM plans to pre-sort low grade (0.3-0.6% Ni) open pit ‘waste’ into ~1% plant feed. Ore sorting pilot testing completed in 2021 successfully generated ~1% nickel product through ~30% mass recovery. CTM is currently shipping three tonnes of PQ core for additional test work. 1.3 tonnes of this material will be used for Ore Sorting tests scheduled for completion by the end of March 2022.

Comminution tests on 24 spatially dispersed samples has identified moderate range ball work indices of 13-18 kWh/t for a P80 75µm primary grind. Additional PQ core will be utilised in further tests during January of 2022.

CTM recently completed extensive flotation tests on 21 composites representing >95% of known Jaguar resource mineralisation. The adopted Pressure Oxidation processing route enables CTM to optimise flotation processing for recovery over grade. This recent campaign of tests has demonstrated sulphide recoveries between 90-99% across deposits. An example of these results for Jaguar South are presented in Figure 6.

Figure 6: Flotation test results for Jaguar South.



Source: CTM

**CTM remains busy on technical studies**

**Flotation tests indicate high flotation recoveries possible for POX circuit feed**

A recently completed programme of batch pressure oxidation tests on blended flotation samples has demonstrated that pressure and temperature conditions can be optimised significantly lower than those proposed in the 2021 Value-Add Scoping Study ([Link](#)). Reductions in these conditions enables the use of less sophisticated autoclave vessels for



pressure oxidation, reducing technical risk, along with capital and operating costs. Two additional phases of continuous leach tests will be completed in Q1 of 2022.

### 37km of upgraded roads complete

#### Infrastructure

In Q4, Tailings Storage Facility (TSF) designs were modified to store an additional 20% more tailings than current project specifications. Upgrades to site access and local roads continue within the Sao Felix do Xingu Municipality. To date, over 37km of roads have been improved including 36 bridges/culverts. This activity has provided benefits to both CTM and the local populace. Power line alignment studies and consultation with stakeholders continues. Power will be provided from the Tucuma 138kV sub-station.

### Permitting well advanced

#### Permitting and Landholding Updates

In August CTM lodged key environmental approval documentation, the Environmental Impact Assessment (“EIA/RIMA”), with the State environmental authority SEMAS in the State of Pará. The documents were drafted with operating parameters aligned to the Value-Add Scoping study released earlier this year. Approval of the EIA/RIMA is expected during Q3 of 2022 and will facilitate grant of a Preliminary Licence enabling construction of plant and equipment to commence on site.

In early November CTM lodged an updated Mining Lease Application, revising that submitted by Vale in 2013. The new MLA accounts for revisions in the scale and scope of mining and processing activities in line with recent studies.

During 2021 CTM has secured three land holdings totalling over 2,000 Ha over key Jaguar Project mine and infrastructure areas. These acquisitions eliminate landholder communication and logistical hurdles previously impacting exploration and de-risk the pathway to development.

#### Implication of IGO – Western Areas Takeover

On the 16<sup>th</sup> of December IGO (ASX:WSA) made a takeover offer for Australian nickel miner Western Areas (ASX: WSA). The deal results in an enterprise value for WSA of approximately A\$950M.

WSA’s forecast Forrester nickel production is 16-17kt for FY2022 with approximately 5 years of scheduled mine life remaining. WSA’s Odysseus operation is expected to produce nickel in sulphide concentrate for a period of 10 years from FY23 reaching up to 21ktpa between 2028-2031. The Odysseus development is expected to cost between A\$150-170M in capital expenditure. WSA’s total Resources are quoted as 84.9Mt at 1.1% Ni for 941kt of contained nickel metal.

### Western Areas takeover provides some insight into transactional value of Jaguar and CTM

CTM are well on track to define Resources of similar scale and grade to WSA’s current inventory. CTM’s resource base is already arguably better than WSA’s due to being closer to surface and exploitable via open pit mining methods. The Jaguar project 20kt output is on par with that expected from the Odysseus development.

With an ever-shrinking list of nickel sulphide developers and miners on the ASX we speculate it is only a matter of time before bigger fish take a closer look at CTM for and the high-quality Jaguar Nickel Sulphide project.

Figure 7: Comparison of Western Areas vs Centaurus Metals

	Western Areas (WSA)	Centaurus Metals (CTM)
<b>Project Locations</b>	Western Australia	Brazil
<b>Resource Base</b>	84.9 Mt at 1.1% Ni	80.6Mt at 0.91% Ni
<b>Reserve Base</b>	13.3 Mt at 2.1% Ni	
<b>Current Production</b>	Forrestania 16-17ktpa Ni in Sulphide Con (Next 4-5 years)	None
<b>Future Operation</b>	<u>Odysseus</u>	<u>Jaguar</u>
Annual Production	21ktpa Ni in Sulphide Con	22ktpa Ni in Sulphate Con
Mine Type	Underground	Open Pit + Underground
Potential Life	10 years from FY23	17 years from FY25
Capex Required	A\$150-170M	A\$409M (US\$294M)
<b>Market Capitalisation</b>	\$1,100M	\$401M
<b>Current Cash</b>	\$148M	\$16M

Source: Company reports and Factset

## Valuation

Our risked net asset valuation for CTM is A\$1.79 per share. This includes a Jaguar project discounted cashflow model incorporating a 9% discount rate. We have also applied a conservative 45% additional risk loading to reflect study maturity (30%) and the unusual POX processing route (15%). These risks will be progressively unwound as studies advance. Without the 45% risk adjustment the Jaguar project generates an NPV<sub>9</sub> of A\$1,145 equivalent to \$3.20 per share.

**Valuation A\$1.79 per share with room to move higher through project de-risking**

Company Valuation summary	A\$M	A\$/sh
Jaguar Project NPV9 AUD	1145	3.20
Risk Discount (Study Maturity -30% & Technical -15%)	-515	-1.44
Jambreiro Project	10	0.03
Exploration, all sites	173	0.48
Corporate overheads	-40	-0.11
Cash and bullion (Sep 21)	16	0.04
Current debt	0	0.00
Tax benefit	0	0.00
Option/equity dilution	-147	-0.41
<b>Total</b>	<b>642</b>	<b>1.79</b>

Recent improvements to the Jaguar MRE have provided us with the confidence to expand our current mine life to 17 years, with first sulphate production ramping up from early 2025. Process feed will be sourced from open pit and underground operations. Our 17-year mining schedule include 46 Mt of open pit material with an average grade of 0.8% Ni and 10 Mt of ~1% Ni underground material. The operational model incorporates pre-sorting of lower grade waste from the open pit. Underground mining is scheduled for 2027 and will continue through until 2041.

Our model simulates steady state production of ~100 kt of nickel sulphate product per annum, containing just under 22kt of nickel metal. We use a US\$17,500/t nickel metal price with a 106% payability to reflect a market premium for purified nickel sulphate. We have also included a \$1,000 mixed sulphate (Zn-Cu-Co) precipitate credit per tonne of nickel produced.

## Key Risks to valuation

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### **Metallurgical performance**

Provisional metallurgical testing has been completed upon a limited set of samples and is unlikely to accurately represent true future performance. Additional test-work is required to de-risk economic extraction of metals from project ore using POX.

### **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 ~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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