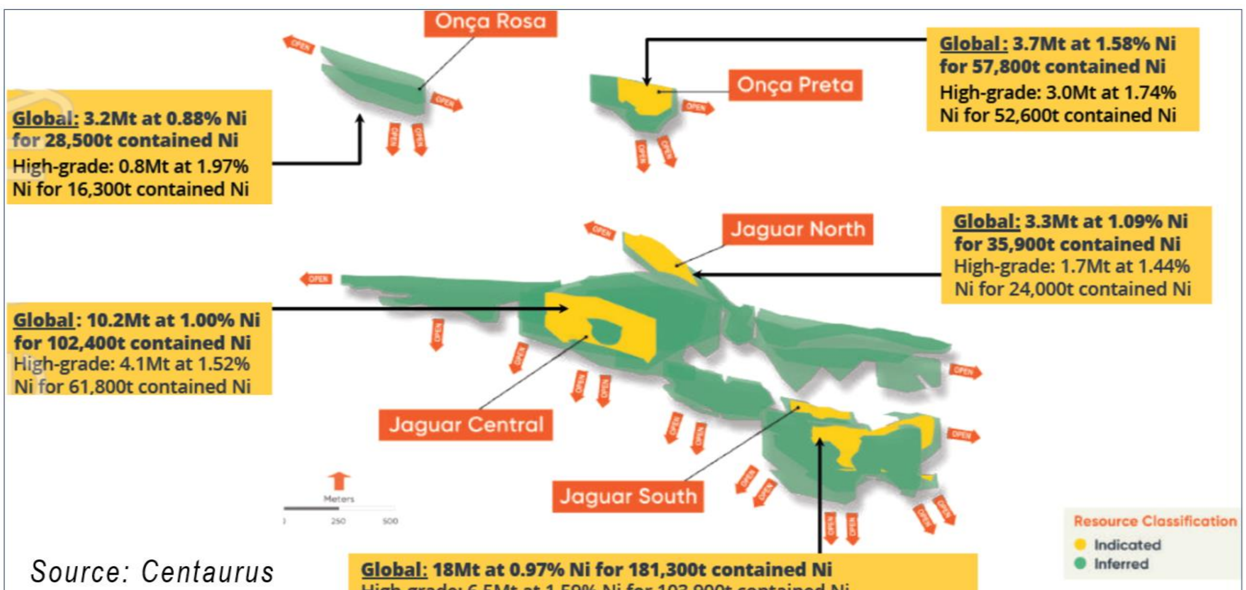
Ticker: CTM AU	**Cash 4Q20:** A$24m	**Project**: Jaguar
Market cap: A$257m	**Price:** A$0.78/sh	**Country:** Brazil
RECOMMENDATION (unc): BUY	*TARGET (up): C$1.20/sh*	*RISK RATING: HIGH*

Today's PEA sees a larger 2.7Mtpa project than expected, with the addition of UG inventory. This is balanced with grade lower than forecast, offset by capex and unit-opex well under our forecast for AISC of US$2.97/lb against SCPe US$4.22/lb, benefitting in part from sorting lower-grade pit material. Stepping back – we admire this strategy – the grade is driven by 'real worlding' right from the PEA, modelling 25-38% mining dilution and wide mining blocks. This isn't bad, it's a reflection of management with 'nothing to hide' and a PEA that hasn't had every optimisation possible. Why? Because it doesn't need to be – at 200kt Ni inventory, this is the largest undeveloped nickel sulphide asset globally with <$500m capex (ie excluding low-grade mega-capex). With little regional drilling Centaurus already dwarfs independent miners in Australia with 30-70kt of reserves, and is in line with TSX-listed developers trading much higher. ***We maintain our BUY rating but lifting our 0.5xNAV$_{7\%-8.00/lb}$ PT from A$1.05/sh to A$1.20/sh****. The NAV multiple reflects a deserved premium for scarcity value of pittable nickel sulphides and exploration upside. Our NAV only includes exploration at 5% of the asset NAV, a beatable level given 65,000m drilling planned this year vs. 74,500m in today's resource. As the only good-grade scale pittable nickel sulphide asset globally, Centaurus remains a conviction name for us, with the stock trading at ~0.36xNAV. A rough estimate of equity dilution puts 1xNAV production at ~$2.00/sh on 463m FD share count, indicative of the value of existing ore only. Thereafter,* ***upside*** *comes from (a) regional and near-mine drilling, including (b) UG mine-life extensions, both paused last year for M&I drilling in today's study, alongside (c) a POX study next month given local acid-neutralising material, water, and cheap hydro absent in Australian peers. Finally, (d) optimisations for the PFS include scheduling, cheaper mining and potential rail of concentrate.*

20ktpa Ni sulphide for SCPe NAV$_{7\%-\$8/lb}$ A$820m; 65,000m drilling builds momentum, PT lifted

The Jaguar PEA, delivered only ~18M since acquisition, is based on 30Mt @ 0.8% pittable and 3.2Mt @ 1.36% UG feed. Pittable material comprises 17Mt @ 1.05% Ni mill feed, with 13Mt @ 0.42% Ni upgraded to 3.8Mt @ 0.98% via sorting to 0.98% mill feed at 70% recovery. Mill feed of 24Mt @ 1.1% Ni and 78% recovery through a 2.7Mtpa float circuit to 16% concentrate produces 203kt Ni over 10 years. AISC of US$2.97/lb and capex of US$178m benefit from existing infrastructure to Vale's adjacent Onca Puma operation, low-cost hydro power and other inputs given the weak local currency. Next steps: a review of POX option shortly, **year-end PFS, 4Q22 DFS**, for **2H24 first production** with A$20m cash.

Figure 1. Resources mined in the scoping study



Source: Centaurus

Our view

We see three positives from today's study – bigger than expected, an UG coming faster than expected, and lower opex and capex than forecast. This more than offsets lower grades from mining dilution, exemplified by AISC of US$2.97/lb 30% under our forecast. In more detail, for a project with ~1% Ni, this project is big with 200kt Ni inventory comparing to just a third that for some domestic Australian peers fundamentally 'stuck' with komatiite shoots hosting only ~60kt Ni to ~1km depth. By value, we note the 28kt and 71kt reserves of Posiedon (POS AU, A$171m) and Mincor (A$421m mkt cap) command healthy valuations, while larger inventories such as Talon's 186kt NiEq commands USA-premium (C$737m attr. mkt cap). The 'mega capex' laterite RKEF projects firmly sit on the 'ESG naughty step' so will receive high-capex / poor ESG discount, while bulk low-grade projects simply suffer from the difficulty in finding half a billion capex or more. Next, the underground, which we had excluded from our model, has now been included with a 'starter reserve' of 3.2Mt. Although this is larger than the reserve at many new Australian discoveries, the shallow drilling and deep roots (mesothermal genesis) mean these economics can be used on future expansions, which we see as inevitable. Finally, this enabled the company to size the mill larger than expected, driving opex well ahead of our forecast. Capex is the standout at US$178m against our US$293m forecast, given near-infrastructure location next door to Vale's giant Onca Puma nickel laterite mine. Opex is similar, with processing costs 43% under our forecast benefitting from local labour, and cheap power – noting these inputs benefit from Brazilian real deflation without suffering from inflation given local sourcing.

Offsetting the wins above is a lower grade based primarily on conservative mining dilution. Lifting SMUs (smallest mining unit) to 5x4x5m dilutes grade from narrow structurally-controlled lodes with 25% dilution for Jaguar pits, and 38% for narrow Onca pits. Essentially this is a necessary evil for any structurally controlled asset. We see this as a good 'real world' change to the project, while peers more commonly 'take this hit' on conversion from scoping/PEA to PFS/DFS. Inventories were calculated at a conservative US$12,540/t, further validating the deliverability of pit optimisations, speaking to the company's 'nothing to hide' approach. Mining costs of US$2.57/t are similarly beatable in Brazil, so at this stage, we see it as another 'nothing to hide' input. Ore sorting feeds into the above – the hurdle low-grade peers face is low-grade concentrate and lower payability. An ore sorter is essentially a silica rejection circuit – sulphide deposits have a small, typically fixed percentage of non-recoverable nickel silicates, ~0.14% here. Here, 13Mt @ 0.42% upgrades to 3.8Mt @ 1.0% Ni via 13% mass pull / 70% recovery.

Table 1. Key operating and financial metrics for Jaguar PEA vs. SCPe

Jaguar (100%)	SCP old	CTM pea	Δ (%)
Pit inventory (Mt ore)	25.0	29.6	18%
Strip ratio (x)	6.0	6.0	0%
Grade (% Ni)	1.0%	0.8%	-22%
UG inventory (Mt ore)	2.5	3.2	28%
Grade (% Ni)	2.8%	1.4%	-51%
Nickel mined (000t Ni)	319	260	-18%
LOM average ROM (000t pa)	2,500	2,700	8%
Recovery (LOM, %)	78%	78%	0%
Production (avg, 000t Ni in con pa	22.1	20.3	-8%
Mine life (years)	11.3	10.0	-11%
Nickel price (US$000/t)	16,000	16,530	3%
Payability (%)	75%	75%	0%

	SCP old	CTM pea	Δ (%)
Pit mining cost (US$/t ROM)	2.50	2.57	3%
UG mining cost (US$/t ROM)	50.0	50.5	1%
Processing cost (US$/t ROM)	20.0	11.3	-43%
G&A cost (US$/t ROM)	2.50	2.13	-15%
Transport to China (US$/t con)	195	131	-33%
C1 cost (US$/lb, LOM average)	3.97	2.41	-39%
AISC (US$/lb, LOM average)	4.22	2.97	-30%
Initial capex (US$m)	293	178	-39%
LOM sustaining capex (US$m)	136	138	1%
AUD / USD	0.75	0.75	0%
Discount rate (%)	7.0%	8.0%	14%
Project NPV (A$m)	**705**	**604**	-14%
Asset IRR (%)	40%	54%	35%

Source: SCP estimates

Only just getting started with five rigs set to drive momentum

Upside is perhaps most linked to the 65,000m planned drilling this year. Structurally, this part-drilled asset allowed Centaurus to move from acquisition to scoping in ~18M. The downside is that took laser focus, with regional exploration only now ramping up. There is plenty to optimise also – such as mining costs discussed above. Another area is transport which is modelled as base-case 903km truck to the Vila do Conde port. The simple alternative is to use Vale rail, shortening trucking to 250km. The links to a trade-off study with concentrate off-take. Similarly, this option disappears entirely if a nickel metal / sulphate on-site option is used, per upcoming POX study. Ordinarily forward integrating worries investors – in this case POX is not being reviewed because it has to be, but for the simple reason of cheap local power, local acid-neutralising material and ample fresh water, all absent in Australian peers and hence lack of POX there. As reflected in the largely unchanged high-grade resource, Centaurus hasn't had to time to do deeper drilling as M&I drilling to support the upcoming scoping study was the priority. We expect drilling of deeper ore zones to lift the UG mine life materially.

Recommendation: maintain BUY rating, lift PT from A$1.05/sh to A$1.20/sh

We start by modelling per the PEA for A$583m NPV, in line with the published A$604m. Of note, our model shows slightly higher costs but near-identical LOM FCF, simply reflecting terminology with presented costs net of by-product credits. Very simply, we lift our flat-forward nickel price assumption to US$8/lb, maintaining our 0.5xNAV multiple. This takes our NAV from A$735m to A$820m. As such, **we maintain our BUY rating but lift our PT from 0.5xNAV$_{7\%\text{-}7.25/lb}$ to 0.6xNAV$_{7\%\text{-}8.00/lb}$.** The higher NAV multiple reflects de-risking from the scoping study and a deserved premium for nickel sulphides' scarcity value. Our NAV only includes exploration at 5% of the asset NAV, a beatable level given 65,000m drilling this year vs 74,500m in today's resource. As the only good-grade scale pittable nickel sulphide asset globally, Centaurus remains a conviction name for us, with the stock trading at ~0.36xNAV. A rough estimate of equity dilution puts 1xNAV production at ~$2.00/sh on 463m FD share count, indicative of the value of existing ore only.

Table 2. Old and new model assumptions and NPV for Jaguar

	CTM	SCP		Δ (%)
Jaguar (100%)	PEA	PEA	New	To SCP old
Pit inventory (Mt ore)	29.6	>>	>>	18%
Strip ratio (x)	6.0	>>	>>	0%
Grade (% Ni)	0.78%	>>	>>	-22%
UG inventory (Mt ore)	3.2	>>	>>	29%
Grade (% Ni)	1.36%	>>	>>	-51%
Nickel mined (000t Ni)	260	>>	>>	-18%
LOM average ROM (000t pa)	2,700	>>	>>	8%
Recovery (LOM, %)	78%	>>	>>	0%
Production (avg, 000t Ni in con pa)	20.3	>>	>>	-17%
Mine life (years)	10.0	>>	>>	-2%
Nickel price (US$000/t)	16,530	16,535	17,637	10%
Payability (%)	75.0%	>>	>>	0%

	CTM	SCP		
	PEA	PEA	New	To SCP old
Pit mining cost (US$/t ROM)	2.57	>>	>>	3%
UG mining cost (US$/t ROM)	50.5	>>	>>	1%
Processing cost (US$/t ROM)	11.3	>>	>>	-43%
G&A cost (US$/t ROM)	2.13	>>	>>	-15%
Transport to China (US$/t con)	131	>>	>>	-33%
C1 cost (US$/lb, LOM average)	2.41	2.66	>>	-33%
AISC (US$/lb, LOM average)	2.97	3.22	3.23	-23%
Initial capex (US$m)	178	>>	>>	-39%
LOM sustaining capex (US$m)	138	>>	>>	1%
AUD / USD	0.75	>>	>>	0%
Discount rate (%)	8.0%	>>	7.0%	0%
Project NPV (A$m)	604	583	752	7%
Asset IRR (%)	54%	40%	45%	13%

Source: SCP estimates

Why we like Centaurus Metals

1. Only >100kt Ni contained, <$500m capex, pittable nickel sulphide junior globally
2. Drilling of 65,000m this year likely drives resource growth vs. <75,000m in resource itself
3. Optionality on POX given water / limestone / cheap hydro not available in Australia
4. Good logistics including rail in a well-known mining jurisdiction
5. Quality 16% concentrate with low As, low Mg

Catalysts

1. 2Q21: Discrete POX-scenario scoping study
2. 4Q21/22: PFS/DFS
3. 2Q21: Lodge environmental license
4. 2024: Target first production

Research

Brock Salier (London) M: +44 7400 666 913 bsalier@sprott.com
Justin Chan (London) M: +44 7554 784 688 jchan@sprott.com
Brandon Gaspar (Toronto) M: +1 437 533 3142 bgaspar@sprott.com

Ticker: CTM AU	**Price / mkt cap:**	A78c/sh / A$257m	**P/NAV today:**	0.36x	**Country:** Brazil
Author: B Salier	**Rec/0.6xNAV7% PT:**	BUY, A120c/sh	**1xNAV7%4Q21 FF FD:**	A$1.68c/sh	**Asset:** Jaguar

Commodity price	CY20E	CY21E	CY22E	CY23E	CY24E
Ni price (US$/t)	17,637	17,637	17,637	17,637	17,637
Ni price (US$/t, payable)	13,228	13,228	13,228	13,228	13,228
1xNAV project valuation*	**A$m**	**o/ship**	**NAVx**	**A$/sh**	
Jaguar NPV (build start)	752	100%	0.50x	1.01	
Regional exploration @ 10%	37.6	100%	1.0x	0.10	
Cash 4Q20	24.1	100%	1.0x	0.06	
Cash from ITM options	7.0	100%	1.0x	0.02	
1XNAV A$ @ 1Q21	A$820m			1.19	
**Build start, ex fin. cost + G&A, dil. for optns not build*			*P/NAV today:*	0.36x	

Asset value: 1xNPV *project* @ build start (A$m, ungeared)*					
	6.00/lb	7.00/lb	8.00/lb	9.00/lb	10.00/lb
Group NAV (A$m)	13,228	15,432	17,637	19,842	22,046
9.0% discount	235	480	724	967	1,209
7.0% discount	284	552	820	1,087	1,352
5.0% discount	340	636	931	1,224	1,516
Ungeared project IRR:	21%	34%	45%	55%	65%
Group NAV (A$/sh)	13,228	15,432	17,637	19,842	22,046
9.0% discount	0.63	1.28	1.94	2.59	3.24
7.0% discount	0.76	1.48	2.20	2.91	3.62
5.0% discount	0.91	1.70	2.49	3.28	4.06

**Project level NPV, excl finance costs and central SGA, discounted to build start*

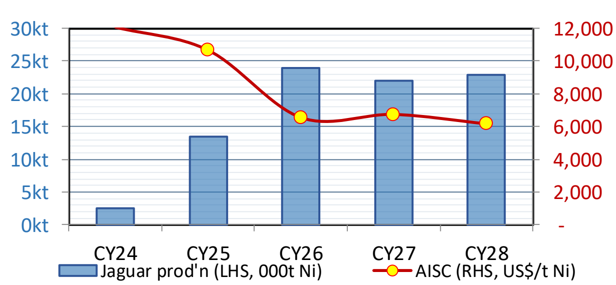
SOTP *company* valuation	1Q21	1Q22	1Q23	1Q24	1Q25
Jaguar NPV	642	687	737	867	1,123
Centra G&A & fin. costs	(47)	(41)	(36)	(34)	(23)
Net cash prior quarter	24.1	15.3	8.8	58	(137)
Cash from ITM options	7.0	7.0	7.0	7.0	7.0
NAV (A$m)	626	669	717	898	970
FD share count (m)	*373*	*373*	*463*	*463*	*463*
1xNAV7%/sh FF FD (A$/sh)	1.68	1.79	1.55	1.94	2.09
ROI (% pa)		130%	41%	35%	28%

Exit value: 1xNAV/sh *company* @ 2024 first production (A$, geared)^					
1xNAV (A$/sh)	13,228	15,432	17,637	19,842	22,046
9.0% discount	0.52	1.20	1.89	2.59	3.30
7.0% discount	0.63	1.35	2.09	2.84	3.59
5.0% discount	0.74	1.52	2.32	3.12	3.92

Exit value: 1xNAV/sh *company* @ 2024 first production (A$, geared)^					
1xNAV (A$/sh)	13,228	15,432	17,637	19,842	22,046
9.0% discount	0.43	0.95	1.46	1.98	2.49
7.0% discount	0.49	1.03	1.58	2.13	2.67
5.0% discount	0.55	1.13	1.72	2.30	2.88

Production (Y1 from 3Q2	CY24	CY25	CY26	CY27	CY28
Jaguar production (000kt Ni	2.4	13.5	23.9	22.0	22.9
C1 cost (US$/t Ni)	11,339	9,933	5,692	5,503	5,077
AISC cost (US$/t Ni)	12,072	10,659	6,549	6,746	6,169

AISC = C1 + sustaining capex + central G&A, C3 = AISC + depreciation



Resource/Inventory	Mt	Ni %		Mt	Ni %
	2Q20 JORC			SCP inventory	
M&I	11.5	1.29%		29.6	0.78%
Inferred	36.4	1.01%			
Total	48.0	1.08%	Total	29.6	0.8%

Funding: uses		Funding: sources	
Capex (A$m)	237	Cash 4Q20 (A$m)	24.1
Drilling/FS cost (A$m)	14.5	SCPe debt (A$m)	153.9
Working cap >DFS (A$m)	14.9	SCPe equity@0.6NAV (A$m)	118.4
G&A and fin. cost (A$m)	12.0	Total sources (A$m)	296.5
Total uses: group (A$m)	278.2	Drilling / buffer (A$m)	18.3

Share data (m)	Basic	FD	3Q22 (FF FD)
Shares (m)	329.5	373.4	463.2

Ratio analysis	CY20E	CY21E	CY22E	CY23E	CY24E
Shares out (m)	325.9	325.9	463.2	463.2	463.2
EPS (Ac/sh)	-	-	-	-	-
CFPS before w/c (A$/sh)	-	-	-	-	-
EV (A$m)	230.0	238.9	352.6	303.7	498.4
FCF yield (%)	-	-	-	-	-
PER (x)	-	-	-	-	-
P/CF (x)	-	-	-	-	-
EV/EBITDA (x)	-	-	-	-	157.5x

Income statement	CY20E	CY21E	CY22E	CY23E	CY24E
Revenue (A$m)	-	-	-	-	43.1
COGS (A$m)	-	-	-	-	38.9
Gross profit (A$m)	**-**	**-**	**-**	**-**	**4.3**
G&A (A$m)	1.7	2.8	3.6	4.3	1.0
Exploration (A$m)	6.9	6.0	3.0	-	-
Finance costs (A$m)	-	-	-	-	10.8
Tax (A$m)	-	-	-	-	-
Other (A$m)	0.3	0.4	0.4	0.4	3.0
Net income (A$m)	**(8.8)**	**(9.2)**	**(7.0)**	**(4.7)**	**(10.5)**

Cash flow statement	CY20E	CY21E	CY22E	CY23E	CY24E
EBITDA (A$m)	(8.9)	(9.2)	(7.0)	(4.7)	3.2
Add share based (A$m)	0.3	0.4	0.4	0.4	0.1
Net change wkg cap (A$m)	-	-	-	0.3	14.9
Cash flow ops (A$m)	**(8.5)**	**(8.8)**	**(6.6)**	**(4.6)**	**(22.4)**
PP&E - build + sust. (A$m)	0.5	-	-	65.0	172.3
PP&E - expl'n (A$m)	-	-	-	-	-
Cash flow inv. (A$m)	**(0.7)**	**-**	**-**	**(65.0)**	**(172.3)**
Share issue (A$m)	24.8	-	-	118.4	-
Debt draw (repay) (A$m)	-	-	-	-	153.9
Cash flow fin. (A$m)	**24.8**	**-**	**-**	**118.4**	**153.9**
Net change in cash (A$m)	14.4	(8.8)	(6.6)	48.8	(40.8)

Balance sheet	CY20E	CY21E	CY22E	CY23E	CY24E
Cash (A$m)	24.1	15.3	8.8	57.6	16.8
Acc rec. + invet. (A$m)	0.3	0.3	0.3	0.1	27.7
PP&E & expl'n (A$m)	4.7	4.7	4.7	69.7	239.1
Total assets (A$m)	**29.2**	**20.3**	**13.8**	**127.4**	**283.7**
Debt (A$m)	-	-	-	-	153.9
Accounts payable (A$m)	0.6	0.6	0.6	-	12.8
Others (A$m)	24.4	15.6	9.0	57.6	44.5
Total liabilities (A$m)	**1.1**	**1.1**	**1.1**	**0.5**	**167.2**
Shareholders' equity (A$m)	153.7	154.1	154.5	273.3	273.4
Reserves (A$m)	(6.6)	(6.6)	(6.6)	(6.6)	(6.6)
Retained earnings (A$m)	(119.0)	(128.2)	(135.2)	(139.8)	(150.3)
Liabilities + equity (A$m)	**29.2**	**20.3**	**13.8**	**127.4**	**283.7**

Source: SCP estimates

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TENDER: The analyst recommends tendering shares to a formal tender offering

UNDER REVIEW: The stock will be placed under review when there is a significant material event with further information pending; and/or when the research analyst determines it is necessary to await adequate information that could potentially lead to a re-evaluation of the rating, target price or forecast; and/or when coverage of a particular security is transferred from one analyst to another to give the new analyst time to reconfirm the rating, target price or forecast.

NOT RATED ((N/R): The stock is not currently rated

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9	The analyst has been reimbursed for travel expenses for a site visit by the issuer	NO

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Summary of recommendations as of March 2021	
BUY:	32
HOLD:	0
SELL:	0
UNDER REVIEW:	0
TENDER:	0
NOT RATED:	0
TOTAL	32

[1] As at the end of the month immediately preceding the date of issuance of the research report or the end of the second most recent month if the issue date is less than 10 calendar days after the end of the most recent month