

## SPEC BUY

Current Price \$0.82  
Target Price \$1.27

Code: **CTM**  
Sector: **Materials**

\* All figures in AUD unless stated otherwise

Shares on Issue (M):	<b>326</b>
- fully diluted (M)	<b>387</b>
Market Cap (\$M):	<b>267</b>
- fully diluted (\$M)	<b>318</b>
Cash (31 Dec 21)	A\$24m
Debt (31 Dec 21)	A\$0m
Net cash (\$M):	<b>24</b>
Enterprise value (\$M):	<b>243</b>

52 wk High/Low (ps):	<b>\$0.07</b>	<b>\$0.89</b>
12m av. daily vol. (Mshs):		<b>0</b>

### Key Metrics: (Scenario 1)

	FY25e	FY26e	FY27e
P/E (x)	10.1	3.0	2.6
EV/EBITDA (x)	2.2	1.1	1.2

### Financials: (Scenario 1)

	FY25e	FY26e	FY27e
Revenue (\$M)	192	384	384
EBIT (\$M)	56	143	157
NPAT (A\$M)	34	115	133

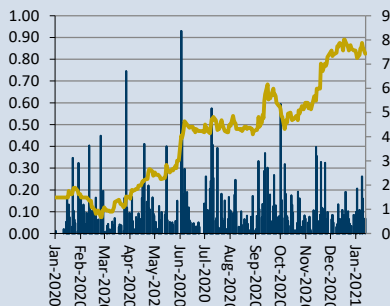
Net assets (\$M)	140	146	106
Op CF (\$M)	13	30	16

### Per share data: Scenario 1

EPS (c)	8.1	27.6	31.9
Dividend (cps)	0.0	0.0	0.0
Yield (%)	-	-	-
CF/Share (cps)	3.6	9.1	5.0

Prod (kt Ni)	7,975	15,950	15,950
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### Share Price Graph and trading volumes (msh)



Monday, 8 February 2021

## Centaurus Metals (CTM)

### Quality Improvement to Resources

Analyst: George Ross

### Quick Read

Centaurus Metals (CTM) has released ([CTM 04/02/2021](#)) an updated Mineral Resource Estimate (MRE) for the Company's flagship Jaguar nickel sulphide project located in Brazil. Guidance has also been provided for exploration during the coming year. We have upgraded our project valuation models based new resource modelling and revision of operational assumptions. Our new share price target of \$1.27 is based on simple average of two development scenarios.

### Main Points

#### Indicated Category Improvement:

The latest Jaguar resource estimate is reported as 58.5 Mt at 0.95% Ni for 557,800 tonnes of contained nickel metal. Near surface material is reported at 0.3% Ni cut-off grade as compared with the previous 0.5%. This change has resulted in global tonnage gains of 10.5Mt with a 0.13% reduction in Ni grade. CTM's latest MRE update greatly improved on Indicated classified tonnages from 11.5Mt in the previous estimate to 19.9Mt. Indicated classified material are expected to underpin scoping studies for two development scenarios due in March.

#### Plenty of drill metres to come:

Four diamond drill rigs are currently testing a variety of strike and depth extensions at existing deposits. An RC rig will test regional targets and is expected on-site within the next month.

#### Scoping studies due in March:

CTM has confirmed that two Scoping studies will be released in March. The first study will evaluate development of Jaguar as a conventional flotation operation (Scenario 1). The second study will consider development with an integrated 'value-add' circuit for production of a high purity nickel metal product (Scenario 2).

#### Revised valuations:

We have revisited our project valuations based on the latest resource update and revised input assumptions. Our raw NPV<sub>9</sub> valuations for Jaguar development Scenarios 1 & 2 are \$A458M and A\$936M respectively. We apply project maturity and technical viability risk factors to discount these valuations to A\$298M and A\$421M.

### Recommendation

Argonaut has increased CTM's price target to \$1.27ps based on the simple average of two company valuations incorporating alternate development scenarios. A SPEC BUY recommendation is maintained.

Please refer to important disclosures at end of the report (from page 12)

## Centaurus Metals

## Equities Research

Analyst: George Ross

## Scenario 1 - Standard Flotation Dev.

Recommendation	Speculative Buy
Current Price	\$0.82
Valuation	\$1.00

Sector	Metals & Mining
Issued Capital (Mshs)	326
Market Cap (M)	\$267
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Profit & loss (A\$M) 30 June	2021E	2022E	2023E	2024E
Sales Revenue	0	0	0	0
+ Other income/forwards	0	0	0	0
- Operating costs	0	0	0	-1
- Royalties	0	0	0	0
- Corporate & administration	-2	-2	-2	-4
<b>Total Costs</b>	<b>-2</b>	<b>-2</b>	<b>-2</b>	<b>-5</b>
<b>EBITDA</b>	<b>-2</b>	<b>-2</b>	<b>-2</b>	<b>-5</b>
- margin	0%	0%	0%	0%
- D&A	0	0	0	0
<b>EBIT</b>	<b>-2</b>	<b>-2</b>	<b>-2</b>	<b>-5</b>
+ Finance Income/Expense	0	0	0	-3
<b>PBT</b>	<b>-2</b>	<b>-2</b>	<b>-2</b>	<b>-8</b>
- Tax expense	0	0	0	1
- Impairments and other	0	0	0	0
<b>NPAT</b>	<b>-2</b>	<b>-2</b>	<b>-2</b>	<b>-7</b>

Cash flow (A\$M)	2021E	2022E	2023E	2024E
+ Revenue	0	0	0	0
- Cash costs	-2	-2	-2	-6
-Tax payments	0	0	0	1
+ Interest & other	0	0	0	-3
<b>Operating activities</b>	<b>-2</b>	<b>-2</b>	<b>-2</b>	<b>-8</b>
- Property, plant, mine devel.	0	0	0	-102
- Exploration	-6	-8	-2	-2
- Feasibility Studies	-6	-12	-12	0
<b>Investment activities</b>	<b>-12</b>	<b>-20</b>	<b>-14</b>	<b>-104</b>
+ Borrowings	0	0	0	120
- Dividends	0	0	0	0
+ Equity	5	24	0	4
<b>Financing activities</b>	<b>5</b>	<b>24</b>	<b>0</b>	<b>124</b>
<b>Cash change</b>	<b>-8</b>	<b>2</b>	<b>-16</b>	<b>11</b>

Balance sheet (A\$M)	2021E	2022E	2023E	2024E
Cash	18	21	44	55
Other Current Assets	0	0	0	0
<b>Total current assets</b>	<b>18</b>	<b>21</b>	<b>44</b>	<b>55</b>
Property, plant & equip.	0	0	0	102
Investments/other	0	0	0	0
<b>Total non-curr. assets</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>102</b>
<b>Total assets</b>	<b>18</b>	<b>21</b>	<b>44</b>	<b>158</b>
Trade payables	1	1	1	29
Short term borrowings	0	0	0	83
Other	1	1	1	25
<b>Total curr. liabilities</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>54</b>
Long term borrowings	0	0	0	83
Other	0	0	0	0
<b>Total non-curr. liabil.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>83</b>
<b>Total liabilities</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>137</b>
<b>Net assets</b>	<b>16</b>	<b>18</b>	<b>43</b>	<b>21</b>

Resources Feb 2021	Mt	Ni %	Cu %	Co ppm
Jaguar South (II)	18.7	0.97	0.05	206
Jaguar Central (II)	10.2	1.00	0.06	268
Jaguar North (II)	3.3	1.09	0.18	350
Jaguar Central North (I)	5.8	0.80	0.05	210
Jaguar North East (I)	8.3	0.78	0.09	253
Jaguar West (I)	5.7	0.80	0.04	150
Onca Preta (II)	3.3	1.58	0.09	558
Onca Rosa (I)	3.2	0.88	0.06	251
Total (II)	58.5	0.95	0.07	249

Financial ratios	2025E	2026E	2027E	2028E
GCFPS Diluted (A¢)	4	9	5	40
CFR (X)	22.5	9.0	16.3	2.1
EPS Diluted (A¢)	8	28	32	55
PER (X)	10.1	3.0	2.6	1.5
DPS (\$)	0%	0%	0%	0%
Yield (%)	0%	0%	0%	0%
Interest cover (X)	4	18	0	0
ROCE (%)	28%	98%	148%	159%
ROE (%)	28%	92%	148%	159%
Avg Gearing (%)	150%	92%	0%	0%

Operations summary	2025E	2026E	2027E	2028E
<b>Jaguar</b>				
Ore processed (Mt)	1.3	2.5	2.5	2.5
Ni Head grade (%)	1.1	1.1	1.1	1.4
Met. Recovery (%)	80	80	80	82
Share of Ni in Final Product (t)	11000	22000	22000	28535
Share of Payable Ni (t)	7975	15950	15950	20688
Cost per milled tonne (US\$/t)	61	63	66	64
Sustaining capital (\$M)	0.0	0.0	0.0	0.0
AISC (US\$/lb)	3.5	3.7	3.8	3.0
Growth capital (\$M)	103.0	1.4	0.9	42.0

Price assumptions	2025E	2026E	2027E	2028E
AUDUSD	0.72	0.72	0.72	0.72
Nickel (US\$/t)	16500	16500	16500	16500
Nickel (A\$/t)	22917	22917	22917	22917

Jaguar Project Valuation	A\$M	A\$/sh
Jaguar Project NPV9	458.3	1.41
Risk Discount (Scoping Study Maturity 35%)	35%	-0.49
Jaguar Project NPV9 (Risk Discounted 35%)	298	0.91

Company Valuation summary	A\$M	A\$/sh
Jaguar Project NPV9 (Risk Discounted 35%)	298	0.91
Jambreiro Project	10	0.03
Exploration, all sites	70	0.22
Corporate overheads	-18	-0.06
Cash and bullion	24	0.07
Debt	0	0.00
Tax benefit	0	0.00
Hedging	0	0.00
Option/equity dilution	-57	-0.17
<b>Total</b>	<b>327</b>	<b>1.00</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	Operation Manager
John Westdorp	Chief Financial Officer

Shares	2025E	2026E	2027E	2029E
New shs issued/exerciseable	0	0	0	0
Average issue price	0.00	0.00	0.00	0.00
Ordinary shares - end	417	417	417	417
Diluted shares - end	417	417	417	427

## Centaurus Metals

## Equities Research

Analyst: George Ross

## Scenario 2 - Flotation-POX Development

Recommendation	Speculative Buy
Current Price	\$0.82
Valuation	\$1.54

Sector	Metals & Mining
Issued Capital (Mshs)	326
Market Cap (M)	\$267
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Profit & loss (A\$M) 30 June	2021E	2022E	2023E	2024E
Sales Revenue	0	0	0	0
+ Other income/forwards	0	0	0	0
- Operating costs	0	0	0	-1
- Royalties	0	0	0	0
- Corporate & administration	-2	-2	-2	-4
<b>TOTAL COSTS</b>	<b>-2</b>	<b>-2</b>	<b>-2</b>	<b>-5</b>
<b>EBITDA</b>	<b>-2</b>	<b>-2</b>	<b>-2</b>	<b>-5</b>
- margin	0%	0%	0%	0%
- D&A	0	0	0	0
<b>EBIT</b>	<b>-2</b>	<b>-2</b>	<b>-2</b>	<b>-5</b>
+ Finance Income/Expense	0	0	0	-5
<b>PBT</b>	<b>-2</b>	<b>-2</b>	<b>-2</b>	<b>-10</b>
- Tax expense	0	0	0	2
- Impairments and other	0	0	0	0
<b>NPAT</b>	<b>-2</b>	<b>-2</b>	<b>-2</b>	<b>-9</b>

Cash flow (A\$M)	2021E	2022E	2023E	2024E
+ Revenue	0	0	0	0
- Cash costs	-2	-2	-2	-6
- Tax payments	0	0	0	1
+ Interest & other	0	0	0	-5
<b>Operating activities</b>	<b>-2</b>	<b>-2</b>	<b>-2</b>	<b>-10</b>
- Property, plant, mine devel.	0	0	0	-200
- Exploration	-6	-8	-2	-2
- Feasibility Studies	-6	-18	-12	0
<b>Investment activities</b>	<b>-12</b>	<b>-26</b>	<b>-14</b>	<b>-202</b>
+ Borrowings	0	0	0	200
- Dividends	0	0	0	0
+ Equity	5	24	0	26
<b>Financing activities</b>	<b>5</b>	<b>24</b>	<b>0</b>	<b>226</b>
<b>Cash change</b>	<b>-8</b>	<b>-4</b>	<b>-16</b>	<b>15</b>

Balance sheet (A\$M)	2021E	2022E	2023E	2024E
<b>Cash</b>	<b>18</b>	<b>15</b>	<b>44</b>	<b>59</b>
Other Current Assets	0	0	0	0
<b>Total current assets</b>	<b>18</b>	<b>15</b>	<b>44</b>	<b>59</b>
Property, plant & equip.	0	0	0	200
Investments/other	0	0	0	0
<b>Total non-curr. assets</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>200</b>
<b>Total assets</b>	<b>18</b>	<b>15</b>	<b>44</b>	<b>259</b>
Trade payables	1	1	1	43
Short term borrowings	0	0	0	139
Other	1	1	1	59
<b>Total curr. liabilities</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>102</b>
Long term borrowings	0	0	0	139
Other	0	0	0	0
<b>Total non-curr. liabil.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>139</b>
<b>Total liabilities</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>241</b>
<b>Net assets</b>	<b>16</b>	<b>12</b>	<b>43</b>	<b>18</b>

Resources Feb 2021	Mt	Ni %	Cu %	Co ppm
Jaguar South (II)	18.7	0.97	0.05	206
Jaguar Central (II)	10.2	1.00	0.06	268
Jaguar North (II)	3.3	1.09	0.18	350
Jaguar Central North (I)	5.8	0.80	0.05	210
Jaguar North East (I)	8.3	0.78	0.09	253
Jaguar West (I)	5.7	0.80	0.04	150
Onca Preta (II)	3.3	1.58	0.09	558
Onca Rosa (I)	3.2	0.88	0.06	251
Total (II)	58.5	0.95	0.07	249

Financial ratios	2025E	2026E	2027E	2028E
GCFPS Diluted (AC)	24	56	52	86
CFR (X)	3.4	1.5	1.6	0.9
EPS Diluted (AC)	18	50	58	82
PER (X)	4.5	1.7	1.4	1.0
DPS (\$)	0%	0%	0%	0%
Yield (%)	0%	0%	0%	0%
Interest cover (X)	5	18	82	156
ROCE (%)	28%	57%	54%	58%
ROE (%)	41%	61%	60%	62%
Avg Gearing (%)	150%	82%	16%	9%

Operations summary	2025E	2026E	2027E	2028E
<b>Jaguar</b>				
Ore processed (Mt)	1.3	2.5	2.5	2.5
Ni Head grade (%)	1.1	1.1	1.1	1.4
Met. Recovery (%)	86	86	86	82
Share of Ni in Final Product (t)	11825	23650	23650	29030
Share of Payable Ni (t)	11707	23414	23414	28740
Cost per milled tonne (US\$/t)	62	63	67	65
Sustaining capital (\$M)	0	0	0	0
AISC (US\$/lb)	3.5	3.6	3.8	3.1
Growth capital (\$M)	149	2	1	42

Price assumptions	2025E	2026E	2027E	2028E
AUDUSD	0.72	0.72	0.72	0.72
Nickel (US\$/t)	16500	16500	16500	16500
Nickel (A\$/t)	22917	22917	22917	22917

Jaguar Project Valuation	A\$M	A\$/sh
Jaguar Project (NPV9)	935.9	2.87
Risk Discount (Scoping Study Maturity 35% + Technical 20%)	55%	-1.58
Jaguar Project (Risk Discounted)	421	1.29

Company Valuation summary	A\$M	A\$/sh
Jaguar Project (Risk Discounted)	421	1.29
Jambreiro Project	10	0.03
Exploration, all sites	142	0.44
Corporate overheads	-18	-0.06
Cash and bullion	24	0.07
Debt	0	0.00
Tax benefit	0	0.00
Hedging	0	0.00
Option/equity dilution	-78	-0.24
<b>Total</b>	<b>501</b>	<b>1.54</b>

## Directors, management

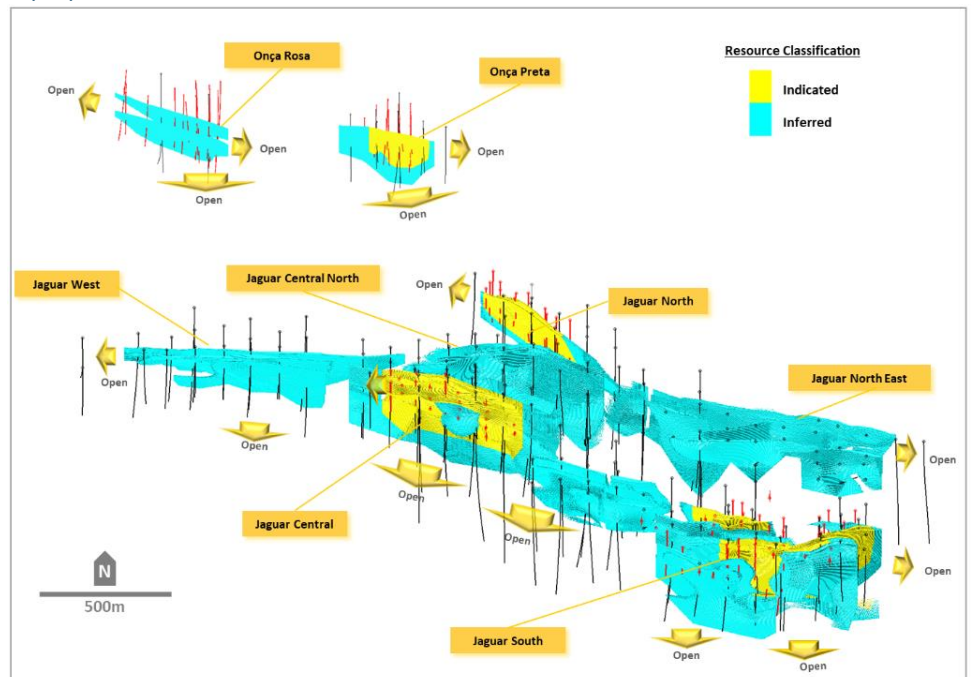
Didier Murcia	Chairman
Darren Gordon	Managing Director / CEO
Bruno Scarpelli	Executive Director
Mark Hancock	Non-Executive Director
Chris Banasik	Non-Executive Director
Roger Fitzhardinge	Operation Manager
John Westdorp	Chief Financial Officer

Shares	2025E	2026E	2027E	2029E
New shs issued/exerciseable	0	0	0	0
Average issue price	0.00	0.00	0.00	0.00
Ordinary shares - end	437	437	437	437
Diluted shares - end	437	437	437	447

## Resource Quality Improvement

CTM's latest Mineral Resource Estimate (MRE) has focused on classification improvement rather than additional tonnes and grade. Indicated classified resources were improved at key deposits: Jaguar South, Jaguar Central, Jaguar North and Onca Preta. We expect deposits with Indicated resources to underpin upcoming Scoping Studies scheduled for early and late March.

Figure 1: Jaguar Project MRE Indicated and Inferred classified Mineral Resources published 04/02/2021. Isometric view towards the North.



Source: CTM 04/02/2021

**Lowering of cut-off grade results in increased tonnages at expense of grade**

The new Jaguar Project Global MRE is reported as 58.5 Mt at 0.95% Ni for 557,800 tonnes of contained nickel metal. The updated global MRE CTM is reported at a 0.3% cut-off grade for shallow material (<200m depth from surface), down from 0.5%. The cut-off grade for material below 200m remained static at 1.0% Ni.

Table 1: New Jaguar Project Global MRE with changes to nickel ore tonnage, grade and contained metal compared with the June 2020 MRE release.

Deposit	Tonnage (Mt)	Ni (%)	Contained Ni (t)
Jaguar South (II)	18.7 ↑ 3.2	0.97 ↓ -0.13	181,300 ↑ 10,600
Jaguar Central (II)	10.2 ↑ 2.8	1.00 ↓ -0.13	102,400 ↑ 19,000
Jaguar North (II)	3.3 ↑ 0.5	1.09 ↓ -0.05	35,900 ↑ 3,600
Jaguar Central North(I)	5.8 ↑ 0.7	0.80 ↓ -0.05	46,700 ↑ 3,600
Jaguar North East (I)	8.3 ↑ 1.3	0.78 ↓ -0.07	64,900 ↑ 5,400
Jaguar West (I)	5.7 ↑ 1.2	0.80 ↓ -0.10	45,200 ↑ 4,200
Onca Preta (II)	3.3 ↓ -0.3	1.58 ↓ -0.01	53,000 ↓ -3,600
Onca Rosa (I)	3.2 ↑ 1.1	0.88 ↓ -0.61	28,500 ↓ -2,400
<b>Total Global MRE</b>	<b>58.5 ↑ 10.5</b>	<b>0.95 ↓ -0.13</b>	<b>557,800 ↑ 40,300</b>

Source: Argonaut

*Table 2: New Jaguar Project High-Grade MRE with changes to nickel ore tonnage, grade and contained metal compared with the June 2020 MRE release.*

Deposit	Tonnage (Mt)	Ni (%)	Contained Ni (t)
Jaguar South (II)	6.5 ↓ -0.5	1.59 ↑ 0.01	103,900 ↓ -7,000
Jaguar Central (II)	4.1 ↑ 0.0	1.52 ↑ 0.08	61,800 ↑ 2,400
Jaguar North (II)	1.7 ↑ 0.2	1.44 ↓ -0.06	24,000 ↑ 1,900
Jaguar Central North(I)	1.3 ↓ -0.1	1.18 ↑ 0.00	15,800 ↓ -100
Jaguar North East (I)	1.3 ↑ 0.0	1.47 ↑ 0.02	19,500 ↑ 300
Jaguar West (I)	1.2 ↑ 1.0	1.44 ↓ -0.02	17,300 ↓ -600
Onca Preta (II)	2.8 ↓ -0.1	1.75 ↑ 0.00	48,300 ↓ -3,400
Onca Rosa (I)	0.8 ↓ -0.3	1.97 ↓ -0.23	16,300 ↓ -7,900
<b>Total High-Grade MRE</b>	<b>19.7 ↓ -0.9</b>	<b>1.56 ↑ 0.00</b>	<b>306,900 ↓ -600</b>

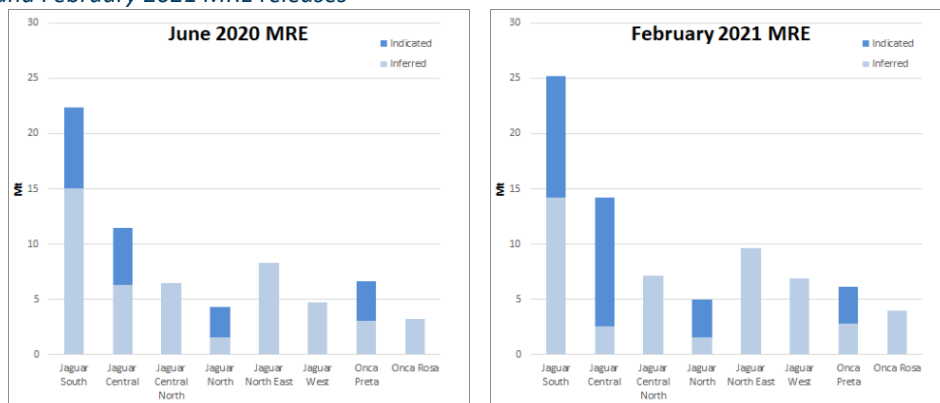
Source: Argonaut

The previously quoted MRE was 48Mt at 1.08% Ni for 517,500 tonnes of nickel metal. From a raw number standpoint this equates to a 22% (10.5 Mt) increase in total tonnage and 7% increase in contained nickel metal on the previously reported Global MRE. Gains to reported tonnage and contained metal were made at the expense of nickel grade, down to 0.95% Ni from 1.08% Ni in the previously reported Global MRE.

If the previous and current MREs are compared with the same cut-off parameters (0.3% <200m depth from surface, 1.0% >200m depth from surface), total tonnage was increased marginally by 3Mt, grade was reduced by 0.04% Ni and total contained nickel metal was increased by 8,300 tonnes. This matches our previous predictions for incremental tonnage increases and maintenance of grade ([Argonaut 02/02/2021](#)). The High-Grade MRE component of the Global MRE remained relatively static across most deposits.

The real progress achieved in this update was growth in resources classified as Indicated. Global Indicated resource tonnage grew from 11.5Mt in June 2020 to 19.9Mt in this release. The largest gains to Indicated tonnages were at Jaguar Central and South (Figure 2). The Onca Preta, Jaguar South, Jaguar Central and Jaguar North deposits now hold 54%, 44%, 82% and 68% Indicated resources respectively.

*Figure 2: Comparison of deposit size and JORC classification for Jaguar Project June 2020 and February 2021 MRE releases*



Source: Argonaut

Source: Argonaut

**High grade resource remains relatively static**

**Indicated resources greatly improved at Jaguar South and Central**

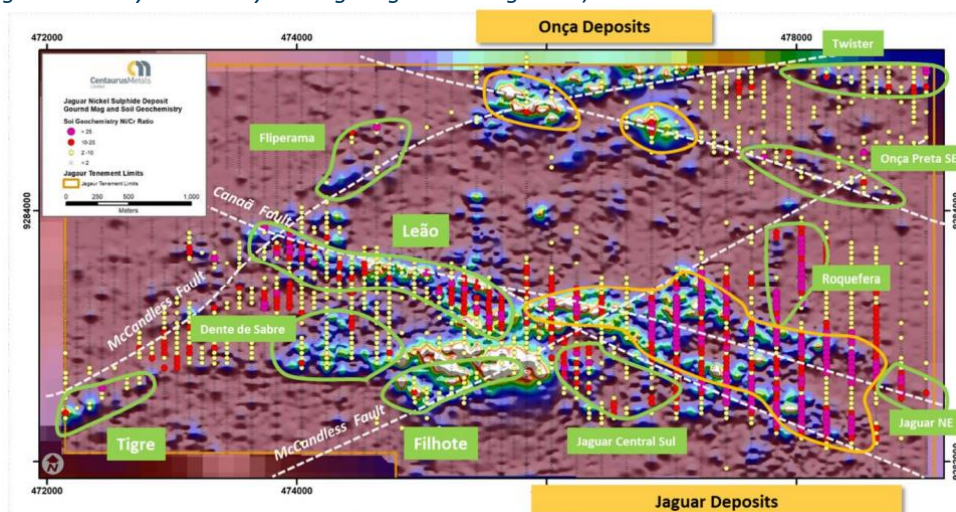
## Plenty of drill metres to come

We don't believe investors should be concerned with apparent stagnation in resource growth. All existing deposits remain open at depth and CTM has flagged drilling in 2021 will target strike and plunge extensions of existing deposits driven by downhole electromagnetic (DHEM) geophysics and structural targets. This activity is being completed by four diamond drill rigs on double shifts.

CTM has also indicated RC drilling will proceed at ten regional targets yet to be systematically tested (Figure 3). These prospects are a mix of historic, geochemical and geological targets within the broader tenure package. Historic drilling at the Filhote prospect intersected weak, yet tantalising palladium (18m @ 0.35g/t Pd) mineralisation. Nickel is often associated with platinum group elements and potential does exist to identify economic grade mineralisation within the greater Jaguar system. An RC rig will be used to test Filhote and other regional targets.

**4 diamond and 1 RC rig to provide ongoing news flow and fuel resource expansion**

Figure 3: Regional targets at the Jaguar Nickel Project. Plan view with Ni/Cr ratio soils geochemistry over analytical signal ground magnetics).



Source: CTM 04/02/2021

## Scoping studies due in March

CTM has confirmed they will release separate scoping studies for both a 'Base Case' and 'Value-Add Case'.

**Scoping studies will provide guidance on two development scenarios**

The release of the Base Case study is scheduled for early March and will scope development of Jaguar as a conventional flotation operation for production of a 16% Ni concentrate from 80% recovery.

The Value-Add Case is scheduled for late March and will evaluate inclusion of a hydrometallurgical circuit for production of nickel metal. Capital and operational costs for this case are expected to be materially higher.

As previously reported the benefits of secondary refinement after sulphide concentration include:

- Provide the opportunity to optimise flotation processing for metal recovery over grade
- Higher relative metal payability as compared with a nickel sulphide concentrate which is typically between 70-75% of LME. For a metal product payability is expected to be 100% LME pricing
- Potential for premium pricing driven by tailored, high purity products
- Lower transport costs due to reduced final product volumes
- A higher recovery of sulphides from ore feed will reduce acid forming activity within tailings

## Revised Project Valuation

We have returned out two recently published development scenario valuations ([Argonaut 02/02/2021](#)) based on assumptions driven by this new release and further research. Our two project development scenarios remain:

### Improving our valuation based on new resource data and refined assumptions

Scenario 1: Open pit operation with flotation concentrator

Scenario 2: Open pit operation with flotation concentrator and POX circuit

For this revision, we have included a new pit at Jaguar North in addition to those at the Jaguar Central, Onça Preta and Jaguar South deposits. Predicted mineable ore inventories have been modified to accommodate the latest resource release with slight changes to tonnages and grade. The initial modelled mine life has now been extended beyond eight years with treatment of 23.1Mt of ore. We have slightly tuned our pre-strip, strip ratios and mining costs to reflect changes to pit design. Metal pricing, exchange rate, discount rate and royalty rate have all been maintained.

We have applied a 35% risk discount to both scenario NPV<sub>9</sub> calculations due to the early stage of feasibility maturity. This value will be relaxed over time with graduation to Pre-Feasibility (25%) and Definitive Feasibility (15%) levels of study to reflect reduction in potential error. An additional 20% risk discount has been applied to the valuation of Scenario 2 to reflect our uncertainty regarding the potential cost and viability of a POX and refinement circuit.

If technically and financially feasible, Scenario 2 remains a compelling development scenario with a material increase in total payable nickel metal compared with a conventional development. Scenario 1 is modelled to generate between 16-21kt of payable nickel metal per year compared with 22kt-29kt for Scenario 2. This production gap is driven by both increased nickel recoveries (82% vs 86%) at the sulphide concentrator phase and increased payability for the final product (72.5% vs 99%).

Based on these modifications, our current raw NPV<sub>9</sub> valuation for Scenario 1 (conventional flotation development) is \$A458M with a 35% risk discounted valuation of A\$298M. Our raw value estimate for the Scenario 2 development option (inclusion of POX circuit) is A\$936M and discounted by a factor of 55% to A\$421M.

Table 3: Detailed discounted cash flow model assumptions for development of Jaguar with and without inclusion of POX circuit. All values in US dollars unless specified.

<b>Timing</b>				
Start Construction	2024			
Start/End Mining	2025/2033			
Initial Mine Life	8+ years			
<b>Mining</b>				
Open Pits	Jaguar Central	Onça Preta	Jaguar South	Jaguar North
Timing	2025-2026	2027	2027-2032	2027-2032
Ore Inventory	7Mt at 1.1% Ni	1.5Mt at 1.6% Ni	13Mt at 1.1% Ni	1.6 Mt at 1.1% Ni
Final Pit Depth	200m	120m	200m	120m
Pre-Strip tonnage	8 Mt	5 Mt	13 Mt	5 Mt
Strip Ratio (Excl PS)	1:6.1	1:6.0	1:4.0	1:6.2
Mining Costs	~\$3.3/t	~\$3.4/t	~\$3.5/t	~\$3.5/t
Distance from Mill	1km	3km	1km	1km
<b>Processing</b>				
Scenario	<b>Sulphide Concentrator Only</b>		<b>Sulphide Concentrator with POX Circuit</b>	
Mill Annual Throughput	2.5 Mt			
LOM Throughput	23.1 Mt			
Ni/Cu/Co Conc grade	16%/0.7%/0.1%		10%/0.4%/0.2%	
Ni/Cu/Co Recovery	82%/88%/28%		86%/92%/94%	
Processing Costs	\$15/t		\$25/t	
Product Transport	\$625 /t Ni Metal		\$104 /t Ni Metal	
<b>Production Statistics</b>				
Final Product/s	Ni-Cu-Co sulphide concentrate (~16% Ni)		Semi-refined metal & sulphates (>99% Ni)	
Ni in Product	20kt-28kt		22kt-29kt	
Ni/Cu/Co Payability	72.5%/70%/70%		>99%/90%/50%	
Payable Ni	16-21kt		22kt-29kt	
AISC (average)	~\$3.2/lb Ni		~\$3.8/lb Ni	
<b>Financial Factors</b>				
Royalty Rate	5.6%			
Tax Rate	15%			
AUD/USD FX	0.72			
Ni Price Forecast	\$16,500			
Discount Rate	9%			
<b>Capital Expense</b>				
Scenario	<b>Sulphide Concentrator Only</b>		<b>Sulphide Concentrator with POX Circuit</b>	
Develop. Capex (Excl PS)	\$150M		\$265M	
Pre-Strip (LOM)	\$78M		\$78M	
<b>Project Valuation</b>				
Base 2021 NPV <sub>9</sub>	A\$458M		A\$936M	
Risk Discount Factors	Scoping Study Maturity -35%		Scoping Study Maturity -35%	
	Risk Discount = -A\$160M		Technical Risk -20%	
			Risk Discount = A\$515M	
NPV <sub>9</sub> (Risk Discounted)	A\$298M		A\$421M	

Source: Argonaut

Both scenarios appear winners at a 9% discount rate



## Company Valuation

We have estimated CTM's Company valuation based on the two development scenarios and potential debt and equity funding.

Based on Scenario 1 we have determined an implied CTM value of A\$327M or A\$1.00ps and for Scenario 2 we value CTM at A\$501M or A\$1.54ps. For the purposes of a single valuation figure, we have derived a simple average of these two valuations being A\$414M, equivalent to A\$1.27ps.

*Figure 4: CTM valuation based on Scenario 1 development scenario.*

Company Valuation summary	A\$M	A\$/sh
Jaguar Project NPV9 (Risk Discounted 35%)	298	0.91
Jambreiro Project	10	0.03
Exploration, all sites	70	0.22
Corporate overheads	-18	-0.06
Cash and bullion	24	0.07
Debt	0	0.00
Tax benefit	0	0.00
Hedging	0	0.00
Option/equity dilution	-57	-0.17
Total	327	1.00

Source: Argonaut

*Figure 5: CTM valuation based on Scenario 2 development scenario.*

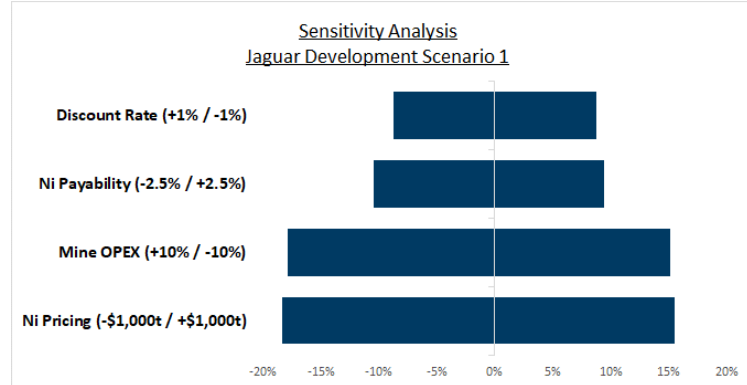
Company Valuation summary	A\$M	A\$/sh
Jaguar Project (Risk Discounted 55%)	421	1.29
Jambreiro Project	10	0.03
Exploration, all sites	142	0.44
Corporate overheads	-18	-0.06
Cash and bullion	24	0.07
Debt	0	0.00
Tax benefit	0	0.00
Hedging	0	0.00
Option/equity dilution	-78	-0.24
Total	501	1.54

Source: Argonaut

## Key Risks to valuation

CTM's valuation is driven by successful development of the Jaguar project. A sensitivity analysis of select project variables is presented in Figure 6. Greatest sensitivities are related to nickel pricing and operational expenditure.

Figure 6: Project NPV sensitivity analysis for Jaguar development Scenario 1.



Source: Argonaut

### POX Circuit Capital Costs

For the purposes of this report capital costs for the Pressure Oxidation (POX) circuit scenario and associated accessory infrastructure have been estimated by Argonaut at approximately US\$115M. This is based on costs for other POX operations but there are few good analogues.

### Mineable inventory

Argonaut has completed in-house resource evaluations and estimates based upon incomplete drill hole information available to the market through public company announcements. Grade variability within and external to reported significant intercepts remain largely undefined and may influence the bulk tonnage grade of assumed mineable inventories. Modelled mineable grade-tonnage inventories are based upon technical speculation rather than formal pit optimisation studies.

### 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.

### Marketable product quality

Mineralisation at the Jaguar prospect is considered atypical to common magmatic nickel sulphide deposits. Sulphide concentrate characterisation results released to date have not indicated issues with deleterious abundances. An academic study completed during Vale's custodianship did identify a positive correlation between nickel and fluorine abundance associated with accessory fluorapatite. We believe a risk to sulphide concentrate payability may exist due to the presence of deleterious fluorine. Incorporation of a POX circuit with sulphate product output should eliminate this risk.

### **Commodity Pricing**

Value estimates are based on consensus long term commodity price forecasts. A \$1,000 difference to the price of nickel over the modelled life of mine will result in a ~15-18% shift in project valuation.

### **Costs**

Cost assumptions are based on incomplete information or informal estimates. Operating and capital costs assumptions rely on 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. A 1.0% change to the discount rate shifts project values by approximately 9%.

**Ian Christie** | Head of Research  
+61 8 9224 6872 [ichristie@argonaut.com](mailto:ichristie@argonaut.com)

**John Macdonald** | Director, Metals & Mining Research  
+61 8 9224 6835 [jmacdonald@argonaut.com](mailto:jmacdonald@argonaut.com)

**George Ross** | Analyst, Metals & Mining Research  
+61 8 9224 6840 [georger@argonaut.com](mailto:georger@argonaut.com)

**Royce Haese** | Analyst, Metals & Mining Research  
+61 8 9224 6869 [rhaese@argonaut.com](mailto:rhaese@argonaut.com)

#### **INSTITUTIONAL SALES - PERTH:**

**Chris Wippl** | Executive Director, Head of Institutional Sales  
+61 8 9224 6875 [cwippl@argonaut.com](mailto:cwippl@argonaut.com)

**Damian Rooney** | Director Institutional Sales  
+61 8 9224 6862 [drooney@argonaut.com](mailto:drooney@argonaut.com)

**John Santul** | Consultant, Sales & Research  
+61 8 9224 6859 [jsantul@argonaut.com](mailto:jsantul@argonaut.com)

**Josh Welch** | Institutional Dealer  
+61 8 9224 6868 [jwelch@argonaut.com](mailto:jwelch@argonaut.com)

**George Ogilvie** | Institutional Dealer  
+61 8 9224 6871 [gogilvie@argonaut.com](mailto:gogilvie@argonaut.com)

#### **INSTITUTIONAL SALES – HONG KONG:**

**Damian Rooney** | Director Institutional Sales  
+61 8 9224 6862 [drooney@argonaut.com](mailto:drooney@argonaut.com)

#### **CORPORATE AND PRIVATE CLIENT SALES:**

**Glen Colgan** | Managing Director, Desk Manager  
+61 8 9224 6874 [gcolgan@argonaut.com](mailto:gcolgan@argonaut.com)

**Kevin Johnson** | Executive Director, Corporate Stockbroking  
+61 8 9224 6880 [kjohnson@argonaut.com](mailto:kjohnson@argonaut.com)

**James McGlew** | Executive Director, Corporate Stockbroking  
+61 8 9224 6866 [jmcglew@argonaut.com](mailto:jmcglew@argonaut.com)

**Geoff Barnesby-Johnson** | Senior Dealer, Corporate Stockbroking  
+61 8 9224 6854 [bj@argonaut.com](mailto:bj@argonaut.com)

**Ben Willoughby** | Senior Dealer, Corporate Stockbroking  
+61 8 9224 6876 [bwiloughby@argonaut.com](mailto:bwiloughby@argonaut.com)

**Philip Grant** | Senior Dealer, Corporate Stockbroking  
+61 8 9224 6834, [pgrant@argonaut.com](mailto:pgrant@argonaut.com)

**Rob Healy** | Dealer, Private Clients  
+61 8 9224 6873, [rhealy@argonaut.com](mailto:rhealy@argonaut.com)

**Cameron Prunster** | Dealer, Private Clients  
+61 8 9224 6853 [cprunster@argonaut.com](mailto:cprunster@argonaut.com)

**James Massey** | Dealer, Private Clients  
+61 8 9224 6849 [jmassey@argonaut.com](mailto:jmassey@argonaut.com)

**Chris Hill** | Dealer, Private Clients  
+61 8 9224 6830, [chill@argonaut.com](mailto:chill@argonaut.com)

**Harry Massey** | Dealer, Private Clients  
+61 8 9224 6829, [hmassey@argonaut.com](mailto:hmassey@argonaut.com)

**Jonas Dorling** | Assoc. Dealer / Prov. Fin. Advisor, Private Clients  
+61 8 9224 6837, [jdorling@argonaut.com](mailto:jdorling@argonaut.com)

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