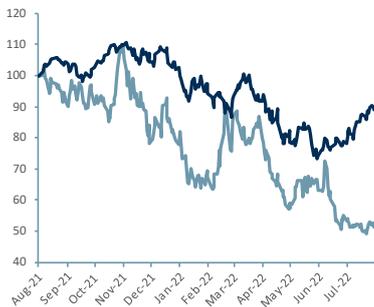


CIC

52 Wk. Lo/Hi

2.52 – 5.94



PPTA (lighter line) Nasdaq market vs price relative

Thursday, 18 August 2022

Close Price	2.70
52 wk Range Low	2.52
52 wk Range High	5.94
MCAP (m)	\$170.07
EV (m)	\$134.10
Index: Public	XNAS & TSX
Financial YE	31-Dec
Reporting Currency	USD
Listing Currency	USD

Business Activity

Mining E&P

Key Metrics

Gross debt (m)	\$0.12
Cash (m)	\$36.09
Net Debt (Cash) (m)	-\$35.97
Net Operating Cash (m)	-\$26.39
Revenue (m)	N/A
Net Income (loss) (m)	-\$29.41

Key Ratios

(Net Cash) / Shareholder Equity %	-21.15%
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Mining Sector Research

Nasdaq Market Index

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Perpetua Resources Corp.

Core Investment Case Update

Perpetua Resources Corp. (Nasdaq: PPTA; TSX: PPTA) is a gold-antimony-silver deposits developer in the stable mining jurisdiction of Stibnite-Yellow Pine, Idaho. PPTA's Stibnite open-pit gold (Au) project is one of the highest-grade US deposits Compared with the 2020 FS after-tax NPV of \$1.86bn (assumptions: 5% discount rate, gold \$1,850/oz) Antimony (M+I 206Mlbs) is a potentially exciting byproduct. PPTA's MCap is at an ~90% discount to the FS suggesting a significant potential mispricing. Since our last CIC PPTA has released 1Q + 2Q highlights and added Kopernik to its institutional investor holdings list. PPTA has also begun water quality improvement activities on site after working with the US EPA and USDA for >3 years to obtain permission to conduct time critical, early action clean-up actions.

- EBITDA 1H22A US\$ (12.6)m vs. (23.8)m y/y, Δ+11.2m;
- Exploration cost 1H22A US\$ (8.87)m vs. (12.58)m y/y, Δ+3.71m;
- EPS FD 1H22A US\$ (0.20) vs. (0.39) y/y, Δ+0.19;
- NCO+CAPEX 1H22A US\$ (11.76)m vs. (13.99)m, Δ+2.23m.

USD (m)	MCAP	EV	RoA %	RoE %	NCO	Levered FCF
2022	170.07	134.10	-18.88%	-33.93%	-26.39	-14.71

Multiples	EV/ Revs	P/ S	Fwd PE	BV/ Share	P/ B	Current
2022	N/A	N/A	N/A	1.60	1.73	4.51

Investment Case

Perpetua Resources Corp - Responsible Mining. Critical Resources. Clean Future. - focused on redeveloping the Stibnite Gold Project (Idaho), abandoned after 100 years. PPTA's Stibnite project boasts high grade gold @ 2.2 g/t (est. for years 1-4 with M + I resource of 6 Moz Au @ 1.42 g/t). The 2020 feasibility study suggests superior economics with an after-tax NPV of \$1.86bn (assumptions: 5% discount rate, gold \$1,850/oz).and is the only domestic source of the critical mineral antimony (M+I 206Mlbs @0.07%).

Top tier gold mine –The 2020-feasibility study recorded gold reserves at 4.8 Moz, making Stibnite one of the largest independent gold projects in the US. Stibnite **could become one of the two largest US independent gold producing mines** with an average annual production of 463 Koz during years 1-4. The project's exceptional grade and low strip ratio place it in the lowest quartile of the industry cost curve (AISC cost at \$438/oz in years 1-4).

Gold – PPTA's superior project economics: PPTA completed a feasibility study on the Stibnite Gold Project in Dec 2020. The study suggests robust project economics of 22% IRR at \$1,600/oz gold and ~28% IRR at \$1,850/oz gold. Assuming a capital markets' median WACC of 10% vs. PPTA's IRRs suggest the project is well worth pursuing.

Antimony – PPTA could reduce US critical minerals supply chain risk: Perpetua Resources plans to supply ~35% of US antimony demand. *Antimony is a critical mineral used in batteries; solar panels; wind turbines and defense (ammunition, nuclear weapons, explosives) etc.*. Currently, China and Russia dominate global antimony supply, controlling more than 75% of production.

Attractive current valuation with multiple near-term catalysts: The current EV of PPTA is ~8% of its estimated gold + antimony project FS NPV if we reduce the FS gold price assumption to \$1,750/oz, suggesting significant undervaluation. The company is on track for the 2023E permitting decision for the Stibnite project. Once permitted, there is potential for a valuation re-rating. There is further valuation upside potential via PPTA's ESG + metrics programme. PPTA is developing a low carbon future project.

Catalysts

Completion of draft environmental impact statement 3Q22E; Final EIS 2Q23E, Final permitting decision 4Q23E; Rising gold price; Rising antimony demand / supply tightening (ammunition usage and innovation (EVs / clean energy)).

Operational Strategy

Perpetua Resources: strategy is to advance its Stibnite project to commercial production. To achieve this, PPTA has planned six key steps over the next five years:

- Issue of a supplemental draft environmental impact statement (SDEIS) 3Q22E;
- Final EIS and draft record of decision – publication 2Q23E;
- Final record of decision (ROD) – publication 4Q23E;
- Ancillary permits and financing expected 1Q24;
- Construction and legacy restoration to begin 2024E;
- Commercial production start scheduled for 2027E.

PPTA's Stibnite Gold Project is designed to source gold responsibly and is the **only potentially domestic mined source of critical / clean tech metal, antimony**, essential for clean energy and defense supply chains.

Sustainable approach to increasing US domestic production of antimony:

PPTA's goal is to develop a modern and sustainable way of mining for a low carbon future.

Through its development of antimony, a critical mineral for clean energy and defense supply chains, Perpetua plans to reduce the US's reliance on imported antimony from China and Russia. Together, China and Russia account for more than 75% of the current global supply.

Perpetua's Stibnite Gold Project forward thinking restoration and mitigation plans will improve water quality, restore fish passage blocked for decades, and clean tailings and waste sites. Perpetua's CEO's credentials lead us to infer this program is likely to exceed requirements and metrics rather than simply meet them.

In August 2021, the company announced an agreement with the Bill Gates-backed startup Ambri Inc. to supply enough antimony to build at least 13 GWh of Ambri's new liquid metal batteries.

A 2021 feasibility study estimated initial capex of US\$ 1.26bn for a 15-year life of mine (LoM) producing an average annual 297k oz of gold and 115m lbs of antimony.

New Developments

ESG / Sustainability

PPTA partnership with IMCO Construction - water quality improvements at Stibnite – work began July 12, 2022. This historical mining district has undergone 100 years of degradation via tailings, high levels of arsenic and antimony, and other waste.

The US’s Environmental Protection Agency (EPA) and Department of Agriculture (USDA) have granted Perpetua permission for “critical early action cleanup activities”.

Perpetua released its 2021 Sustainability Report on June 24, 2022. The report highlights achievements and progress towards the advancement of the company’s Environmental, Social and Governance (ESG) goals and vision for responsible mining.

PPTA Sustainability Highlights 2021:

- 100% safe fuel hauls
- 118 months without any reportable spills (>1 liter)
- 73 months without any lost time incidents (time lost from work due to injury)
- 67% of the executive management is female
- 33% of the board of directors is gender/ethnically diverse
- 44% of site operations are solar powered
- 83 community presentations and meetings delivered
- Adopted Sustainability Accounting Standards Board (SASB) framework
- Aligned with the United Nations Sustainable Development Goals (UN SDGs)
- Launch of an independent citizen’s water monitoring program
- Ambri Inc. Antimony supply agreement
- Began water quality cleanup activities at Stibnite

Exhibit 1: [News flow summary since PPTA CIC Apr 28, 2022](#)

Aug 15, 2022	– Announces 2Q 2022 highlights
Jul 12, 2022	– Begins water quality early clean-up activities at Stibnite
Jun 24, 2022	– Published 2021 Sustainability Report
Jun 22, 2022	– Receives first permit Clean Air Act Permit to Construct
Jun 21, 2022	– Applauds US Congress for action on antimony supply chain
Jun 9, 2022	– Selects IMCO Construction for water quality clean-up at Stibnite
Jun 6, 2022	– Kopernik Global Investors LLC welcomed as new shareholder
May 26, 2022	– Reports 2022 annual meeting results
May 16, 2022	– Announces 2022 1Q 2022 highlights

Sources: ACF Equity Research, Company reports

Financial Summary

Exhibit 2: Quarterly summary analysis

Summary Q analysis US\$ (m)	2Q22A	1Q22A	Δ q/q	2Q22A	2Q21A	Δ y/y
Income Statement						
Operating Loss	(6.39)	(6.26)		(6.39)	(7.55)	
Depreciation	(0.01)	(0.01)		(0.01)	(0.01)	
EBITDA	(6.37)	(6.25)	(0.12)	(6.37)	(7.54)	1.17
Exploration cost	(4.31)	(4.56)	0.25	(4.31)	(6.00)	1.69
EPS	(0.10)	(0.10)	0.00	(0.10)	(0.28)	0.18
Cash Flow Statement						
NCO	(5.03)	(6.68)	1.66	(5.03)	(6.41)	1.38
Purchase of building equipment	(0.10)	0.00		(0.10)	(0.03)	
Proceeds from sale of equipment	0.04	0.00		0.04	0.00	
NCO+CAPEX	(5.08)	(6.68)	1.61	(5.08)	(6.45)	1.37

Sources: ACF Equity Research, Company reports

Exhibit 3: Semi-annual summary analysis

Summary H analysis US\$ (m)	1H22A	1H21A	Δ y/y
Income Statement			
Operating Loss	(12.65)	(23.81)	
Depreciation	(0.03)	(0.02)	
EBITDA	(12.62)	(23.79)	11.17
Exploration cost	(8.87)	(12.58)	3.71
EPS	(0.20)	(0.39)	0.19
Cash Flow Statement			
NCO	(11.71)	(13.96)	2.25
Purchase of building equipment	(0.10)	(0.03)	
Proceeds from sale of equipment	0.04	0.00	
NCO+CAPEX	(11.76)	(14.00)	2.23

Sources: ACF Equity Research, Company reports

Management Team

➤ CEO, Laurel Sayer.



Laurel is the President & CEO of Perpetua Resources since 2016. Prior to this Laurel spent two years on the PPTA board 2014-16. Laurel was President & CEO of Midas Gold Inc (Idaho) between 2016-2021, which became Perpetua Resources in February 2021. She has been an Executive Director of Idaho Coalition of Land Trusts (ICOLT) – promoting private land conservation. Laurel was Natural Resources / INI Director (US House of Representatives)

and as such she has 20+ years of experience in public policy working with Idaho Congressman Mike Simpson and the Idaho United States Senator Mike Crapo, with an emphasis on natural resource issues.

➤ CFO, Jessica Largent.



Jessica is Perpetua's Chief Financial Officer. She joined Perpetua in early 2021 and retains responsibility for leading the company's investor relations team alongside her financial role. Prior to PPTA, Jessica was at Newmont Gold (NYSE:NEM), where she was VP of Investor Relations. Jessica has 15+ years' experience in the mining industry with a focus on investor relations, finance, accounting, and planning. Jessica's previous employers include Rio Tinto and

Turquoise Hill Resources.

➤ VP, External Affairs, Mckinsey Lyon.



Mckinsey is Perpetua's VP, External Affairs since 2017 and leads the direct advocacy and social license development for the Stibnite Gold Project. Before joining Perpetua Resources, Mckinsey was a partner at Gallatin Public Affairs delivering client counsel on, and execution of, communications, government relations and stakeholder engagement strategies. Clients included Shoshone Bannock Tribe, Midas Gold Corp and the City of Boise. Mckinsey

has a bachelor's degree in History from Santa Clara University.

Risks

Funding risk – The company estimates that the total initial capital cost for the Stibnite Project is approximately \$1,263m. This is a significant capital investment requiring a mixture of funding structures (debt and equity). New equity issuance creates a significant risk of current shareholder dilution, whilst debt will increase interest costs for the company. If the company is unable to raise either equity or debt capital for its exploration and development activities, it will adversely impact the timelines for its projects and may cause abandonment of the projects. Management is of the view that 60-70% of Perpetua's project capital can be raised as debt and engaged Endeavour Financial in Feb 2021 as its financial advisor for project financing.

Commodity price risk – PPTA's operational strategy is dependent on the market price of gold, silver and antimony. Commodity prices are by their nature, volatile, and a potential fall in these key commodity prices could lead to its projects becoming uneconomic and so unviable.

Permits and regulatory risk – PPTA's mining activities are subject to extensive permitting requirements, which can be costly to comply with and involve extended timelines. Specifically, the company is subject to the National Environmental Policy Act (NEPA) review, which is extensive and involves several actions, including public scoping, coordination with cooperating agencies, the release of environmental impact statements followed by public comment, and the issuance of a final record of decision.

Personnel - Small and mid-sized companies are more dependent on their C-suite/executive management teams than large and mega-cap global companies. The loss of key personnel can have a disproportionate impact on valuation and investor perception compared to similar events at larger more mature (often ex-growth) companies.

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