ZNC.AX

11 December 2023

Rare Position in Next-Generation Lithium Project Development

NEED TO KNOW

- Split Rocks Project is one of only 6 identified WA lithium projects hosting a Mineral Resource outside the producers; drilling targets upgraded significantly
- Sector Consolidation Continues
- 2024 marks a potential catalyst-rich year

Rare industry position: Zenith Minerals (Zenith) has a position in emerging lithium projects that is overlooked by the market in our view, supported by the maiden Mineral Resource at Split Rocks and recent upgrading of exploration targets. We summarise other WA lithium prospects hosting a Mineral Resource in this report, identifying only 6 in total beyond the assets of the major lithium-producing companies.

Consolidation heats up: Given the scale of investments in lithium processing infrastructure globally and in WA, as well as the strong cash positions of major producers, high-quality development opportunities are sought after.

Sector exploration success being rewarded: Significant lithium drilling success at Azure Minerals, Delta Lithium and several other lithium explorers has lifted share prices substantially, highlighting the market's desire for exploration success. These examples demonstrate the potential re-rating Zenith could see in 2024 as investment in exploration unfolds over prospective lithium targets.

Clearer strategy to emerge in 2024: Zenith expects that the EV Metals (EVM) JV will conclude and Zenith will resume full ownership of Split Rocks and Waratah Well in early January 2024. This will position Zenith to focus on the forward work plan and to update the market on exploration and development in 2024.

Investment Thesis

Keeping it simple: Zenith has an extensive asset portfolio. The company plans to focus on the lithium portfolio, with targeted drilling campaigns leading to definition of resources and rapid monetisation of these assets. Zenith's 25% ownership in the Earaheedy Base Metals JV remains strategically important and presents options for Zenith.

Exploration drives Zenith; highly prospective portfolio: Zenith has exposure to highly prospective lithium exploration projects in the Tier-1 jurisdiction of WA.

Exposure to highly lucrative lithium-ion battery and electric vehicle (EV) value chain; M&A in the sector: The structural EV growth story places Zenith in an ideal position to take advantage of this high-growth market. M&A activity in greenfield lithium projects remains buoyant, most recently with a bid for Liontown Resources (ASX:LTR) by Albemarle and by SQM for Azure (ASX:AZS)

Valuation A\$0.54/Share (Previous A\$0.60)

Our valuation for Zenith is A\$0.54 – we value the lithium assets on EV/Resource and Earaheedy on a risked DCF. Our valuation of ZNC's assets has remained constant but our per share basis decreased due to an assumed a capital raising in 1HCY24 to fund the extensive exploration opportunities at Split Rocks. We see the continued success of drilling at the lithium assets and the further development of the Earaheedy project as the key driver of share price performance and moving closer to our valuation.

Risks

Key risks are lack of future exploration success, continued cash burn, commodity price weakness and any ongoing issues with the EV Metals JV. Report prepared by MST Access, a registered business name of MST Financial services ABN 617 475 180 AFSL 500 557 MST Access has been engaged and paid by the company covered in this report for ongoing research coverage. Please refer to full disclaimers and disclosures.



Equities Research Australia

Mining & Metals

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Zenith Minerals Ltd (ASX: ZNC) is an exploration company focused on discovery and advancement of battery metals resource projects, primarily lithium deposits. The company also has gold and base metals deposits with strong exploration potential.

Valuation	A\$0.54 previous (A\$0.60)
Current price	A\$0.14
Market cap	A\$49m
Cash on hand	A\$2.7m (30 September 2023)

Upcoming Catalysts and Newsflow

Period	
Jan 2024	Resolution of EV Metals JV
Jan 2024	Exploration: focus on drilling 83 targets Split Rocks

Share Price (A\$)



FINANCIAL SUMMARY:ZENITH MINERALS - 30 JUNE YEAR END

ZENITH MINERALS LIMITED

MARKET DATA						
Share Price	A\$/sh					0.14
52 week high/low	A\$/sh					0.26- 0.07
Valuation	A\$/sh					0.54
Market Cap (A\$m)	A\$m					49
Net Cash / (Debt) (A\$m)	A\$m					2
Enterprise Value (A\$m)	A\$m					47
Shares on Issue	m					352
Options/Performance shares	m					15
Other Equity	m					35
Potential Diluted Shares on Issue	m					402
INVESTMENT FUNDAMENTALS		Jun-22	Jun-23	Jun-24e	Jun-25e	Jun-26e
Reported NPAT	A\$m	1	(9)	1	0	(2)
Underlying NPAT	A\$m	1	(9)	1	0	(2)
EPS Reported (undiluted)	¢ps	0.4¢	(2.6¢)	0.2¢	0.1¢	(0.6¢)
EPS Underlying (undiluted)	¢ps	0.4¢	(2.6¢)	0.2¢	0.1¢	(0.6¢)
Underlying EPS Growth	%	63.6%	-694.6%	-105.7%	-12.8%	-538.1%
P/E Reported (undiluted)	х	n/m	n/m	93.2	106.8	(24.4)
P/E Underlying (undiluted)	х	n/m	n/m	93.2	106.8	(24.4)
Operating Cash Flow / Share	A¢	(0.26)	(0.43)	0.45	0.44	(0.27)
Price / Operating Cash Flow	х	(54.7)	(32.4)	31.3	32.2	(52.2)
Free Cash Flow / Share	A¢	(1.65)	(1.68)	(1.82)	(0.98)	(50.24)
Price / Free Cash Flow	х	n/m	n/m	(0.1)	(0.1)	(0.0)
Free Cash Flow Yield	%	n/m	n/m	n/m	n/m	n/m
Book Value / Share	A\$	0.08	0.05	0.08	0.10	0.09
Price / Book	Х	1.82	2.68	1.79	1.44	1.49
NTA / Share	A\$	0.08	0.05	0.08	0.10	0.09
Price / NTA	Х	1.82	2.68	1.79	1.44	1.49
Year End Shares	m	345	352	352	352	352
Market Cap (spot)	A\$m	48	49	49	49	49
Net Cash / (Debt)	A\$m	8	2	3	4	(173)
Enterprise Value	A\$m	40	47	46	45	222
EV/EBITDA	x	32.4x	n/m	105.2x	118.7x	n/m





				Jun-26e
4	2	3	3	-
(2)	(11)	(2)	(2)	(2)
1	(9)	0	0	(2)
(0)	(0)	(0)	(0)	-
1	(9)	0	0	(2)
0	0	0	0	0
-	-	-	-	-
1	(9)	1	0	(2)
	-	-	-	-
1	(9)	1	0	(2)
	1 (0) 1 0 - 1 -	1 (9) (0) (0) 1 (9) 0 0 - - 1 (9) - -	(2) (11) (2) 1 (9) 0 (0) (0) (0) 1 (9) 0 0 0 0 - - 1 (9) 1 - - -	(2) (11) (2) (2) 1 (9) 0 0 (0) (0) (0) (0) 1 (9) 0 0 0 0 0 0 - - - 1 (9) 1 0 - - - -

Jun-22	Jun-23	Jun-24e	Jun-25e	Jun-26e
8	2	3	4	12
0	0	0	0	0
-	-	-	0	-
0	0	8	13	189
19	17	17	17	17
27	19	28	35	219
0	1	0	0	0
-	-	-	-	185
-	-	-	-	-
0	0	0	0	0
-	-	-	-	-
0	1	0	0	185
27	18	28	34	33
	8 0 - 0 19 27 0 - - - 0 - 0 - 0 0 -	8 2 0 0 - - 0 0 19 17 27 19 0 1 - - 0 0 - - 0 0 - - 0 0 - - 0 0 - - 0 0 - - 0 0 - - 0 1	8 2 3 0 0 0 - - - 0 0 8 19 17 17 27 19 28 0 1 0 - - - 0 1 0 - - - 0 0 0 - - - 0 0 0 - - - 0 0 0 - - - 0 0 0 - - - 0 0 0	0 0 0 0 0 0 0 0 8 19 17 17 27 19 28 0 1 0 - - 0 0 - - 0 0 - - 0 0 - - 0 0 - - 0 0 - - 0 0 - - 0 0 - - 0 1 0 0

Cashflow (A\$m)	Jun-22	Jun-23	Jun-24e	Jun-25e	Jun-26e
Cash From Operations	(1)	(2)	1	1	(1)
Interest	0	0	0	0	0
Tax	-	-	-	-	-
Net Cash From Operations	(1)	(2)	2	2	(1)
Capex	(0)	(0)	-	-	(175)
Exploration	(5)	(5)	(8)	(5)	(1)
Investments	(0)	0	-	-	-
Free Cash Flow	(6)	(6)	(6)	(3)	(177)
Equity	12	0	7	5	-
Borrowings	-	-	-	-	185
Dividend	-	-	-	-	-
Net Increase / (Decrease) in Cash	6	(6)	1	2	8

Source: MST Estimates; ZNC

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Split Rocks – Target-Rich Environment

Zenith has completed an extensive reassessment of existing and new geochemical data and has significantly expanded the number of targets for drill testing from 30 to 83.

The new targets all lie outside of Zenith's Rio Lithium Mineral Resource Estimate (11.9Mt @ 0.72% Li₂O).

Key highlights of the drill target expansion

Geochemical sampling has covered most of project – more planned: During 2022 and 2023, a total of 10,652 geochemical samples were collected across the Split Rocks project area, comprised of both auger and soil samples. Geochemical sampling has now covered approximately 80% of the project area with additional sampling planned.

83 lithium targets identified (up from 30 previously): New surface sample assays, a review of existing soil geochemical data and assessment of historical and Zenith drill data has resulted in a total of 83 lithium targets being defined within Zenith's large tenement holding at Split Rocks, a significant increase from the 30 targets previously reported in August 2023.

Targets include the very large (>9km long by 2km wide), untested Cielo Lithium Target.

The review reassessed the surface geochemical lithium anomaly threshold at 46ppm Li (or 100ppm Li₂O). This threshold was based on the surface geochemical signature surrounding the company's Rio lithium deposit, the soil anomaly covering the Mt Holland lithium deposit and other industry participants announcements that included soil anomalies that upon drill testing have successfully intersected significant lithium rich, caesium, tantalum (LCT) pegmatites.

Six additional targets require drill follow-up: Zenith's drill database has defined an additional six targets requiring drill follow-up that contain historic, near surface, weathered pegmatite drill intersections up to 50m thick. These are classified as LCT pegmatites, based on their geochemical character, further enhancing the highly prospective nature of the Split Rock project leases.

Forward program

Lithium mineralisation at Rio remains open to the north, south, east and at depth. Permits are now in place to drill a further 318 drill holes (159 RC and 159 Diamond Drill), while Permits of Work are in place for a further 193 AC drill holes, covering Cielo and 14 additional targets.

Zenith plans to recommence drilling once matters pertaining to the joint venture with EVM are resolved.

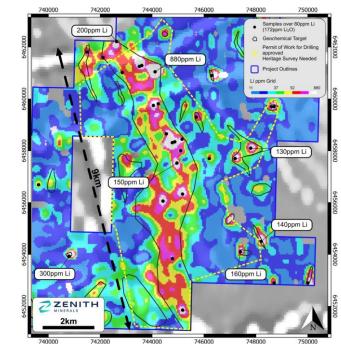


Figure 1: Location of Spllt Rocks

Source: MST Access, ZNC.

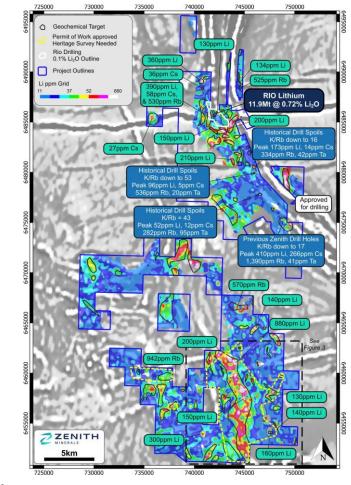
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Figure 2: Cielo Drill Targets



Source: MST Access, ZNC.

Figure 3: Split Rocks Drill Targets



Source: MST Access, ZNC.

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WA Lithium Projects: The Next Generation – Quality Exploration Prospects Rare, Getting Rarer

The ASX lithium sector has evolved rapidly over recent years via project development and industry consolidation, and a number of large established producers are now formulating strategies to the next generation of greenfield projects. As is often the case in the mining sector, explorers gain interest and momentum when large producers are cashed up and looking to bolster project pipelines.

There are currently 3 lithium hydroxide facilities in WA: Tianji, Covalent and Kemerton, with significant investment in a substantial supply infrastructure which requires lithium raw materials to underpin current production capacity as well as potential expansions. In addition, global downstream consumers are looking at WA's high-quality hardrock deposits as key sources of material.

Split Rocks is 1 of only 6 WA lithium projects (ex-majors) with a Mineral Resource

Zenith is favourably positioned as an established WA-focused lithium explorer and currently owns 1 of only 6 non-operating WA lithium prospects hosting an established JORC Mineral Resource: the cornerstone Split Rocks project. These 6 JORC lithium Mineral Resources in WA excludes those at the 8 operating mines, emphasising the need for additional investment in exploration to bolster the industry's new project pipeline.

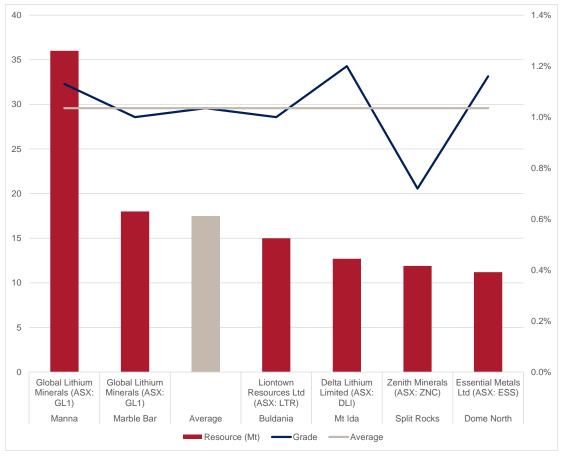


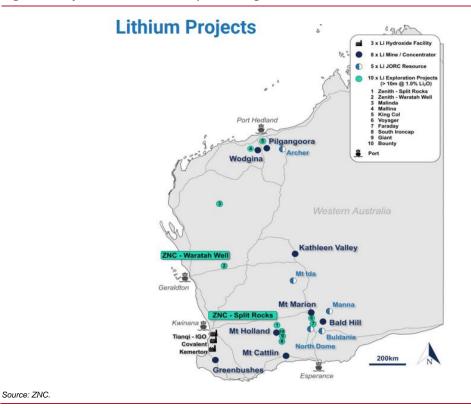
Figure 4: JORC lithium Mineral Resources sites

Source: MST Access, ZNC

Zenith also has a rare lithium exploration prospect at Waratah Well

Zenith also owns 1 (Waratah Well) of the 14 best lithium exploration prospects in WA, based on the criterion of drill intersections > 10m @ 1.0% Li₂O. Zenith will also be looking to advance exploration at this high-quality lithium development asset.

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Source: ZNC.

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Consolidation Continues to Heat Up

Bids and defensive deals show sector interest intensifying

The consolidation of the lithium sector has taken a significant turn upwards in 2023, with several bids and related defensive transactions taking place. ZNC's assets may attract industry participants looking to acquire or consolidate.

A potted history of lithium corporate activity in Australia

The past year has seen a substantial number of consolidation attempts in the Australian lithium space, some of which have been successful. In particular, SQM (the world's second-largest lithium chemicals maker) and Albemarle (one of the world's biggest diversified lithium companies) have clearly demonstrated their appetite for acquisitions in the lithium space in Australia.

Allkem–Livent merger: In May 2023, Allkem Limited (ASX: AKE) merged with Livent (NYSE: LTHM) to create a New York–listed US\$10.6b global lithium company. Both companies produce lithium from groundwater 'brines' in the high deserts of Argentina, with Allkem's flagship Olaroz operation about 200km north of where Livent produces lithium at Salar Del Hombre Muerto. Allkem also operates the Mt Cattlin hard rock lithium mine in WA.

Atlantic Lithium rejects Assore offers: On 15 November 2023, WA-linked Atlantic Lithium (ASX: A11) knocked back a major offer from its major shareholder, South Africa–based Assore International Holdings, for the second time in as many months. The 63c-a-share offer valued Atlantic at about A\$386m and follows another non-binding offer from Assore, at the same offer price of 63c, in the previous month. Atlantic Lithium is focusing on bringing online Ghana's first lithium mine – the Ewoyaa project.

Albemarle abandons proposed Liontown takeover: Liontown Resources (ASX: LTR) rejected the advances of US-based Albemarle (NYSE: ALB) 3 times in 5 months, and then announced on 4 September 2023 that it would allow Albemarle to conduct a limited period of exclusive due diligence. Despite the numerous takeover attempts, on 16 October 2023, Albemarle abandoned its proposed takeover of Liontown Resources in the face of a series of raids on the miner's share register by Gina Rinehart. Ms Rinehart spent nearly A\$1b building a blocking stake in the miner, with her company Hancock Prospecting picking up a strategic 19.9% holding in Liontown Resources.

Essential takeover by Develop Global: Another Australian-based lithium miner, Essential Metals (ASX: ESS), has been taken over by an Australian-based exploration company, Develop Global (ASX: DVP) in a deal likely to be valued at about A\$150m. The deal comprises 1 Develop Global share for every 6.18 Essential Metals shares held. Mineral Resources is Essential's largest shareholder with a 19.9% holding and has a 12.8% stake in Develop Global.

SQM attempting Azure takeover: On 25 October 2023, Chile's Sociedad Quimica Y Minera de Chile (SQM) attempted to buy out the rest of Azure Minerals (ASX: AZS) that it does not own for US\$900m (A\$3.50/share). Azure previously knocked back an offer of \$2.31/share from SQM. A day later, Gina Rinehart began accumulating shares in Azure, dashing SQM's hopes of taking full ownership of Azure. SQM has indicated that it will abandon its deal with Azure if any single shareholder accumulates a 19% stake. Additionally, Mineral Resources increased its stake in Azure from 12.29% to 13.6%.

Lithium Exploration Success Review: Drilling Success Drives Significant Upside

Recent drilling success in the lithium sector in Australia has turbo-charged share price performance and demonstrates the potential of Zenith's lithium portfolio. We look at Azure Minerals (AZS) and Delta Lithium (DLI) as case studies of some recent drilling success stories.

Azure Minerals: Andover Project in WA delivers outstanding results

Drilling results: During 2023, AZS has had outstanding lithium exploration results at its Andover project in the Pilbara region of WA. The strong results have seen AZS set an exploration target of 100-240Mt @ 1.0%-1.5% Li₂O.

Market reaction: The market has reacted very strongly to the exploration results, with the stock appreciating 350% since the first major exploration success was announced in June 2023 and prior to the takeover bid form SQM.

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Delta Lithium: Yinnetharra Project exploration success spurs share price

DLI is advancing the Mt Ida Lithium Project towards production while conducting an aggressive exploration program at the highly prospective Yinnetharra Lithium Project.

Drilling results: DLI's Mt Ida project has a Mineral Resource Estimate of 14.6Mt @1.2% Li₂O. However, drilling success at the Yinnetharra Lithium Project in 2023 has driven a re-rating of the stock. DLI has noted that the M1 deposit within Yinnetharra is mineralised from surface, with widths of greater than 50m intercepted over 650m of strike.

Market reaction: Since the Yinnetharra exploration results were announced in April 2023, the stock has appreciated 46%.

Exploration roundup – share prices perform strongly after exploration success

Figure 7 reviews the exploration success of WA lithium companies in 2023. All have had significant share price appreciation post the exploration success. We believe further exploration success from Zenith would represent a key driver of the share price going forward, as well as acting as a potential catalyst for corporate activity.

Figure 7: WA lithium exploration projects with drill intersections >10m @ 1% Li₂O

		tern Australia Lithium Exploration Project			
Project Name	Reference	Owner	Highest Li2O% Intersection		
			29m @ 1.36% Li2O from 38m		
Kangaroo Hills	ASX: FBM 20 March 2023	Future Battery Minerals	7m @ 1.0% Li2O from 198m		
			2m @ 1.68% Li2O from 1m		
	ASX: ZNC 4 April 2022		20m @ 1.0% Li2O (incl. 10m @ 1.7% Li2O)		
	ASX: ZNC 14 February 2023		8m @ 1.1% Li2O		
Rio		ZNC	22m @ 0.7% Li2O (incl 8m @ 1% Li2O)		
	ASX: ZNC 24 April 2023		15m @ 0.8% Li2O (incl 4m @ 1.8% Li2O)		
	ASX. 2110 24 April 2025		9m @ 0.5% Li2O (incl 3m @ 1.1% Li2O)		
			14m @ 1.0% Li2O (incl. 8m @1.5% Li2O)		
Waratah Well	ASX: ZNC 24 January 2023	ZNC	10m @ 1.4% Li2O (incl 6m @ 2.0% Li2O)		
			27m @ 0.8% Li2O (incl 12m @ 1.2% Li2O)		
			55.6m @ 1.16% Li2O from 94m		
	A 5Y - DDT 20 January 2022		15m @ 1.52% Li2O from 95m		
	ASX: RDT 20 January 2023		15m @ 1.36% Li2O from 118.8m		
			12.4m @ 1.22% from 137.2m		
A. P 1.		Bulle title in	28.9m @ 1.11% Li2O from 122m		
Malinda	ASX: RDT 3 April 2023	Delta Lithium	17m @ 1.13% Li2O from 61m		
	ASX: RDT 14 April 2023		29m @ 1.39% Li2O from 121m		
			21m @ 1.13% Li2O from 71m		
			17m @ 1.06% Li20 from 52m		
			12m @ 1.38% Li2O from 155m		
	ASX: AZS 13 February 2023		7.2m @ 1.51% Li2O from 317m (incl. 3.1m @ 1.87% Li2O)		
			105m @ 1.26% Li2O from 256.3m (incl. 42.1m @ 2.51% Li2O from 259m,		
	ASX: AZS 13 June 2023		22.8m @ 3.57% Li20 & 0.5m @ 5.02% Li20)		
	ASX: AZS 20 June 2023	-	112.4m @ 1.05% Li20 from 263.3m (incl. 30.3m @ 1.18% Li20 from 263.3m,		
			13.5m @ 1.55% Li20 from 280.1m, 59m @ 1.24% Li20 from 316.7m, 10.1m @		
			1.7% Li20 from 330.4m & 16.5m @ 1.57% Li20 from 353.5m))		
			52.5m @ 1.36% from 14.1m (incl. 28.3m @ 1.83% from 14.8m & 3.6m @ 3.21		
			· · ·		
			Li20 from 14.8m)		
			209.4m @ 1.42% Li2O from 219m (incl. 126.2m @ 1.72% from 219m, 565.1m		
	ASX: AZS 4 August 2023		@ 2% Li2O from 219m & 19.7m @ 1.54% Li2O from 401.6m)		
	_		183.1m @ 1.25% Li2O from 170.5m (incl 58.9m @ 1.46% Li2O from 170.5m,		
		_	30m @ 1.55% Li2O from 284m & 11.2m @ 1.85% Li2O from 332.9m)		
Andover		Azure	167.7m @ 1.31% Li2O from 168.4m (incl. 89.1m @ 1.55% Li2O from 168.4m &		
	ASX: AZS 21 August 2023		30.5m @ 2.03% Li2O from 215.3m)		
			100m @ 1.52% Li2O from 194m (incl. 21m @ 1.67% Li2O from 210m & 46m @		
			1.77% Li2O from 248m)		
			104.7m @ 1.61% Li2O from 325.8m (incl. 16.8m @ 2.1% Li2O from 325.8m &		
			31.8m @ 1.95% Li2O from 363.3m)		
			132.3m @ 1.25% Li2O from 122.2m (incl. 46.8m @ 1.58% Li2O from 122.2m)		
			101m @ 1.22% Li2O from 132m (incl. 30m @ 1.93% Li2O from 132m & 6m @		
	ASX: AZS 18 September 2023		2.04% Li2O from 184m)		
	ASA: A25 10 September 2025		55.4m @ 1.75% Li2O from 174.4m (incl. 10.9m @3.28% Li2O from 203.9m)		
			77.3m @ 1.35% Li2O from 225.8m (incl. 50m @ 1.72% Li2O from 253.1m)		
			16m @ 1.4% Li2O from 4m (incl. 6m @ 2.25% Li2O from 12m)		
			23m @ 1.6% Li2O from 172m (incl. 7m @ 2.26% Li2O from 173m & 8m @		
			2.07% Li2O from 183m)		
	ASX: WC8 12 October 2023		52m @ 1.3% Li2O from 117m		
			85m @ 1.5% Li2O from 133m (incl. 9m @ 3% Li2O from 199m & 13m @ 2.3%		
Tabba Tabba		Wildcat Resources	Li2O from 136m)		
	ASX: WC8 23 October 2023		38m @ 1.1% Li2O from 132m		

Source: MST Access, ZNC.

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Refresher on the EV Metals (EVM) JV

What were the original terms of the JV?

As per the original JV agreement between Zenith and EVM, EVM can earn a 60% interest in the lithium rights on two lithium projects, Split Rocks and Waratah Well, with Zenith retaining a 40% project share. Under the agreement, Zenith is fully funded by EVM through to a bankable feasibility study (BFS) on any project development, which must be completed by January 2024. The BFS must have a Mineral Resource of a minimum of 35Mt @ 1.2% Li2O and be capable of producing 330,000 tonnes of spodumene concentrate with a grade of not less than 6% Li₂O for a minimum of a 10-year period.

What's the current status of the partnership?

Zenith has incurred \$1.4m in expenses on behalf of the JV assets which should have been paid for by EVM. The outstanding funds have been fully impaired in the accounts of Zenith, which is now taking formal action to recover the debt.

As far as Zenith is aware, the BFS has not yet commenced. Zenith does not believe that EVM will be able to complete the BFS within the earn-in period and is preparing to reassume full control of a 100% interest in the Split Rocks and Waratah Well lithium projects in early January 2024.

EVM has had financing issues and has therefore not had funds to apply to the Zenith JV projects, with no drilling completed on the Split Rocks and Waratah Well projects in 2023, a period when competitor projects were the subject of significant exploration activity as well as the focus of corporate M&A.

What happens next?

If EVM fails to deliver a BFS on the Split Rocks and Waratah Well lithium projects by January 2024, 100% of the assets revert back to Zenith as well as all drilling, geological, geophysical, metallurgical and relevant financial data. We consider the possibility of EVM meeting its obligations to be very low and expect the assets to revert to Zenith in January 2024.

Upon full control of these projects being regained, Zenith intends to update the market on its plans to advance these assets towards development.

This will result in Zenith obtaining 2 years of technical data for 'free' as well as 100% of the assets, a positive result for Zenith. We estimate approximately \$7m has been spent on drilling for the projects.

Outlook for Zenith: 2024 an Inflection Point – Catalyst Rich with Many Milestones

Zenith remains favourably positioned in a highly attractive sector, in our view. We highlight the strategic potential within the current portfolio and emphasise the strong progress that should be evident in 2024 as work advances.

With full ownership of the EVM JV likely to revert to Zenith in January 2024, and with it the historical drilling records and intellectual property, we expect Zenith will provide an update to its development plans shortly thereafter. This marks the next key milestone for Zenith after the recent maiden Mineral Resource defined at Split Rocks of 11.9mt grading 0.72% Li₂O, confirming the prospectivity of the region and providing confidence for Zenith to invest and define the broader geological potential. We believe that once this occurs, 2024 represents a potential inflection point as the strategy refocuses on the vast untested portfolio of exploration targets.

We expect that over the next 12 months key potential milestones include:

- the continued deployment of targeted exploration focused on the further >83 targets identified at Split Rocks
- the commencement of work on the next program of drilling at Rio, Permits are now in place to drill a further 318 drill holes (159 RC and 159 Diamond Drill).
- Drilling to commence on the prospective Cielo target with Permits of Work are in place for a further 193 AC drill holes, covering Cielo and 14 additional targets.
- further rationalisation of the portfolio to focus on WA lithium, which could include the sale of
 projects which have demonstrated value including Red Mountain (gold) and Earaheedy (leadsilver-zinc).

As such, over the near term, Zenith's strategic focus and project portfolio has the potential to further differentiate itself within the lithium sector, providing significant opportunity for value. Potential supplies of key battery metal inputs from dependable geopolitically stable regions such as WA are also becoming more appealing, and provide further fundamental strength to the lithium sector. If so, the reemergence of potential JV partners on highly favourable terms is likely to remain a feature for explorers such as Zenith.

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Valuation: Risked Sum of the Parts

Valuation of A\$0.54/share (Previous A\$0.60)

Our base-case valuation for Zenith is A\$0.54/share. Figure 8 summarises each of the components of our sum-of-the-parts-based valuation. We value the lithium assets on EV/Resource and Earaheedy on a risked DCF. Our valuation of ZNC's assets has remained constant but our per share basis decreased due to an assumed a capital raising of A\$7m in 1HCY24 to fund the extensive exploration opportunities at Split Rocks.

Figure 8: Zenith valuation summary

NPV OF PROJECTS	A\$M	EQUITY VALUE A\$/SHARE FULLY DILUTED	Previous Valuation	Valuation Methodology
Lithium Projects	126	0.32	0.35	Comparable Companies
Earaheedy Zinc/Lead Project	79	0.20	0.20	Risked Project NPV
Other Gold & Base Metals	20	0.07	0.08	MST Estimate
Investments in Listed Companies	4	0.02	0.02	Listed Value
ENTERPRISE NPV	229	0.60	0.65	
Add: Cash	2	0.01	0.03	At 30 September 2023
EQUITY VALUE PRE SG&A	231	0.62	0.68	
SG&A	(30)	(0.07)	(0.08)	NPV of Corporate Costs
EQUITY VALUE	201	0.54	0.60	

Source: Company data, MST estimates.

Overview: elements of our Zenith sum-of-the-parts valuation

The following projects form the basis of our valuation of Zenith, discussed in more detail throughout this section.

Early-stage lithium projects, including:

- Split Rocks
- Waratah Well.

At this stage, we have ascribed no value to Hayes Hill as it is a very early-stage project. We will review the valuation of this asset as drilling results are released.

Gold and base metals projects, including:

- Earaheedy zinc–lead project: the most advanced project in the portfolio, with a currently defined Mineral Resource Estimate of 94mt @ 3.1% Zn+Pb and 4.1g/t Ag
- · Early-stage gold and base metals exploration projects, including:
 - Split Rocks (gold)
 - Red Mountain (gold).

Listed investments: various shareholdings with a total value last disclosed at A\$4m.

Valuation of lithium resource for early-stage lithium projects Split Rocks and Waratah Well – comparing with EV/Resource of peers

Finding an alternative to DCF for early-stage projects

Discounted cash flow (DCF) analysis is generally accepted as the most suitable valuation methodology for mining projects in operation or with a reasonably predictable operating framework, such as that defined in a feasibility study. Another valuation method for projects that have a defined resource is to look at the EV/Resource being paid and compare to a market multiple to ascertain if the underlying resource of the company is being valued in line with market multiples.

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Earlier-stage mining projects, such as those which make up some of Zenith's current suite of assets, require alternative valuation methodologies to be used, given the inputs required to formulate a reasonable DCF are yet to be defined and we do not have a resource on which to base a market multiple. Some alternative methods include:

- comparable companies: infers a valuation based on the market capitalisation of comparable listed companies. Note that this is the method that we use for Zenith's lithium projects as we compare the underlying value of exploration tenements
- comparable transactions: the value of similar properties which have been exchanged, commonly referencing value per unit of contained metal or ground area
- joint venture terms: the value implied by terms agreed under a JV to acquire an interest in an asset
- appraised value (or past exploration expenditure): the total of prior expenditure incurred on an exploration tenement
- prospectivity enhancement multiplier: an applied multiple of past exploration expenditure incurred depending on an assessment of whether the expenditure has added value and the stage of development to which the project has advanced
- geoscience (Kilburn) method: a technical assessment of exploration property value based on factors such as the location relative to other known mineralisation, drilling intercepts available, exploration targets defined and geological patterns.

Maiden resource at Split Rocks – EV/Resource a good metric given stage of projects

The announcement of a maiden resource at Split Rocks is a strong start to a potentially large lithium precinct at Split Rocks. This has given us the ability to value Split Rocks on an EV/Resource basis. Given the successful drilling campaigns to date at Waratah Well, we believe that it is at now at a stage where we can also look at potential valuations of the asset when a maiden resource is released.

In our view, the three companies that provide the best comparison for Zenith are Liontown Resources (LTR), Delta Lithium (DLI) (formerly Red Dirt Metals) and Global Lithium (GLI). These three ASX-listed companies have delivered a maiden resource for their respective projects in the highly prospective southwest Australian lithium corridor.

The announcement of a maiden resource at Split Rocks is a strong start to a potentially large lithium precinct at Split Rocks. This has given us a basis on which to value Split Rocks on an EV/ Resource basis. Given the successful drilling campaigns to date at Waratah Well, we believe that it is at now at a stage where we can also look at potential valuations of the asset when a maiden resource is released.

Greenfield lithium projects are becoming increasingly attractive for midstream and downstream EV and LiB market participants. Vertical integration is being viewed as a strategy to negate cost inflation due to supply-side pressures. For example, Tesla has consistently reiterated that it will explore M&A opportunities upstream in the lithium space to reduce exposure to the potential supply crunch.

General Information		Project Information	Resour	Discount applied*	EV/Contained Li2O		
Company	EV	Project	Resource	Li20%	Li2O	%	Х
	(A\$m)		Mt	%	kt		
Liontown	3,573	Kathleen Valley	156.0	1.4%	2184.0	0%	1530.8
Liontown		Anna	15.0	1.0%	150.0	0%	
Global Lithium	261	Manna	36.0	1.1%	406.8	0%	444.
Global Lithium		Marble Bar	18.0	1.0%	180.0	0%	
Delta Lithium	284	Mt Ida - Lithium -WA	14.6	1.2%	175.2	50%	810.
						Average	928.

Figure 9: ASX-listed lithium-focused explorers

Note: We have applied a 50% discount to the EV/Resource calculation for Delta Lithium. The reasoning behind this is that DLI has had significant drilling success at the Yinnetharra Lithium Project, which has driven significant share price appreciation. Yinnetharra does not have a resource calculated as yet, so we have discounted the EV/Resource to reflect this. We consider that Mt Ida represents approximately 50% of the value of DLI.

Source: MST.

Based on the average EV/Resource for DLI and ESS, we attain the following valuations, which total A\$126.1m for Zenith's advanced lithium assets:

- Split Rocks: A\$79.5.0m
- Waratah Well: A\$46.4m.

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Valuation of gold and base metals projects

Earaheedy zinc-lead project (75% Rumble Resources, 25% Zenith): risked project NPV

The Earaheedy zinc–lead project is a significant discovery and has an Inferred Mineral Resource of 94Mt @ 3.1% Zn+Pb and 4.1g/t Ag. While the project remains subject to continuous drilling and advancement, the Mineral Resource provides further support for our conceptual valuation estimate using DCF analysis. We highlight that our assumptions are based on our high-level estimates with reference to the size of the current Mineral Resource, and the actual operational parameters under any future feasibility study may turn out to be significantly different to our assumptions. Further, an economically viable project may not emerge from the current exploration target.

In order to populate our DCF analysis, we make the following assumptions:

- conversion of 50mt of the current 94mt Mineral Resource into an Ore Reserve, with a grade marginally below the current resource grade of 3.1%, implying an allowance for mining dilution noting potential for a higher-grade subset of the resource to be selectively targeted and ongoing prospective exploration upside
- a 10-year mine-life with first production in FY27
- mill throughput rates of 5mtpa
- pre-production capital expenditure of A\$700m
- zinc price of US\$3,500/t
- lead price of US\$2,000/t
- 77/23 zinc/lead production split (in line with Mineral Resource)
- AISC of A\$1,250/t.

On this basis, we derive an unrisked 100% NPV for the Earaheedy Project of A\$780m, to which we apply a 60% risk discount given the early stage of development.

Zenith's equity stake has an implied valuation on this basis of A\$78m.

The current market EV of Rumble Resources (RTR) is A\$60m. If we assume that 25% of that is attributable to Zenith, the EV of Earaheedy based on the current market price is \$15m. We see substantial value over and above the current market valuation of Earaheedy.

Other gold and base metals exploration projects: high-level MST estimate

We apply a nominal valuation of A\$20m to the remaining gold and base metals projects. We have arrived at this high-level estimate based on a review of the projects and their current prospectivity and potential.

We see strong option value in these assets, particularly the Split Rocks asset in WA.

The district is well recognised for gold deposits, with a gold endowment of 10Moz around the Parker Dome. Management has recognised the potential for large-scale gold deposits. Outstanding results include:

- Dulcie North: 32m @ 9.4 g/t Au, including 9m @ 31.4 g/t Au
- Dulcie Laterite Pit: 2m @ 14.5 g/t Au, 18m @ 2.0 g/t Au, 14m @ 3.5 g/t Au, 3m @ 17.9 g/t Au
- Estrella: 2m @ 9.8 g/t Au
- Dulcie Far North: 5m @ 5.6 g/t Au, including 4m @ 6.8 g/t Au, 4m @ 10.2 g/t Au
- Water Bore: 3m @ 6.6 g/t Au
- Scott's Grey: 8m @ 4.1 g/t Au, 12m @ 1.7 g/t Au.

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Positive catalysts for the share price and valuation

We believe that Zenith has significant potential for further valuation upside and highlight a number of key milestones/catalysts which may deliver valuation upside over the near term.

Successful lithium exploration results

Further exploration success at Split Rocks in particular, and Waratah Well would accelerate the potential to develop the project and provide further optionality, as well as potentially improve the valuation if exploration results support the advancement of an economic feasibility study and/or corporate interest. Further exploration success at the other lithium assets would be positive for the stock as well.

Resolution of the EVM Joint Venture

The EVM JV requires EVM to fund and complete the feasibility studies for Split Rocks and Waratah Well by January 2024 to earn a 60% share in the lithium rights at these sites. If, as we expect, EVM does not complete the feasibility studies in the prescribed time, the assets revert to Zenith, inclusive of all the exploration data to date. The resolution of the EVM JV issues or alternatively the reversion of the assets back to Zenith would be a positive for the stock.

Corporate activity

The lithium sector in WA is proving to be of interest to both domestic and international operators.

Further exploration results

Exploration success at any of Zenith's gold and base metal projects would be a significant positive for the stock if a viable project begins to take shape.

Early project delivery

The early commencement of projects would provide earlier cash flows and reflect positively on management, which would likely increase the valuation.

Further consolidation of the portfolio

Further consolidation of the portfolio and simplification could be seen as a positive development and a share price catalyst.

Risks

Disappointing lithium exploration results

Any disappointment in further lithium exploration results would undermine the economic viability of the projects and reduce the likelihood of an economic project proceeding into development and construction. This would be a negative development for the valuation, especially as Zenith turns its focus to lithium assets.

Reserves and Resources risk

The testing and appraisal of existing projects may not lead to reserve definition, which would be negative for the stock as it would undermine the potential of developing an economically viable project.

Delays in obtaining required approvals

Any delays to the approvals process would be detrimental to the project timeline and the valuation.

Changes in regulatory framework

Regulatory changes such as royalty rates or changes to permitting requirements may alter the risk profile of the company and would potentially be detrimental to the stock price.

Legal issues – EVM

We see this risk as minimal, given that Zenith has a binding agreement returning the lithium assets to Zenith if EVM fails to deliver on the JV obligations. However, any legal disputes resulting from a potential dissolution of the JV could be detrimental to the stock price.

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Appendix 1: Why Lithium Is Important – A Refresher

Critical in EV batteries – demand for decades to come

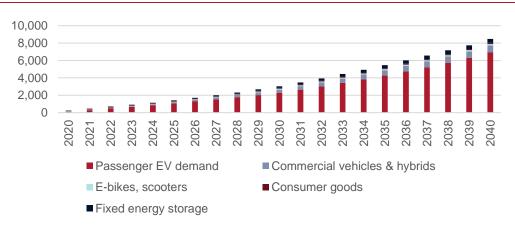
Lithium and its chemical compounds have a wide range of applications: heavy greases, additives for metal production and glasses/ceramics. However, the primary use of lithium more recently and into the future is in lithium-ion batteries for consumer electronics, electric vehicles (EVs) and energy storage. A typical EV battery might contain the equivalent of ~10kg of pure lithium metal, in the form of chemical compounds such as Li_2CO_3 or LiOH.

Fully electric passenger EVs (also known as battery electric vehicles or BEVs) will be the key driver of lithium-ion battery demand, and therefore lithium, for decades to come.

If we assume global sales of 33.3m vehicles in 2030 and 86.9m vehicles in 2040, this implies a BEV penetration rate of 35% and 75%, respectively, of total passenger vehicle sales. These assumptions imply that the crossover point, when BEVs will become the majority of sales, will occur in ~2034.

Other sources of demand for lithium-ion batteries include commercial vehicles and hybrids, e-bikes, scooters, consumer electronics and tools, and fixed energy storage. Under these assumptions, lithium-ion battery installations would grow at ~23% CAGR to 2030 and ~16% CAGR to 2040. Given current lithium use intensity in batteries (t/GWh), and only very modest growth in industrial applications and other uses, these assumptions suggest lithium demand will grow from ~550kt Lithium Carbonate Equivalent in 2021 to 2,745kt in 2030 (5x) and 7,400kt in 2040 (13.5x).

Figure 10: Assumed global lithium-ion battery installations – demand dominated by EVs (Gwh)



Source: MST Emerging Research.

US government policy adds another dimension

The US Energy Act classifies lithium as a critical mineral, meaning that it plays a significant role with respect to US national security, the economy, renewable energy development and infrastructure.

In early 2022, in response to escalating energy prices, Russia's invasion of Ukraine, and the US goal of achieving a clean power grid by 2035, US President Joe Biden authorised the Defense Production Act. This act supports the production and processing of minerals and materials used for large-capacity batteries, such as lithium, boron, cobalt, graphite, and manganese. The directive aims to secure American production of critical materials to bolster a clean energy economy and reduce reliance on other nations, particularly China, for the minerals and materials to power America's clean energy future.

It should be noted that lithium is also on the European Union's critical minerals list.

With US and European policymakers looking for critical minerals to be supplied by either domestic or 'allied' sources, we see this as a plus for all Australian-based lithium explorers, developers and producers. We believe this policy agenda may lead to potential offtake agreements, funding, project investment or straight-out corporate takeover offers from US or European-based interests (for example, see the recent bid from Albemarle for Liontown).

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