6th July 2022

NEW LITHIUM PEGMATITES INTERSECTED AT WARATAH WELL PROJECT

The Board of Zenith Minerals Limited (ASX: ZNC) ("Zenith" or "the Company") is pleased to advise that new, thick, shallow dipping, lithium bearing pegmatites have been intersected at the Waratah Well project in Western Australia. The project is part of the Zenith Lithium Joint Venture with EV Metals Group.

- New, shallow slimline RC drilling, along 4 drill fences, to test an area covered by soil, has returned pegmatites in 22 out of 47 holes, over an area 2km x 1.5km.
- Pegmatites up to 24m thick in individual holes, with significant lithium results including:
  - **ZWWRC029 - 7m @ 0.67% Li_2O, including 3m @ 1.31% Li_2O in fresh rock at the base of a 24m thick pegmatite. Upper portion of pegmatite strongly weathered and possibly depleted in lithium.**
  - **ZWWRC030 – 22m @ 0.22% Li_2O including 1m @ 0.61% Li_2O, upper portion of the pegmatite also weathered.**
- Lithium minerals are dominantly petalite. A very positive change in lithium mineralogy.
- Deeper RC drilling is now planned to test these lithium rich pegmatites at depth and across strike in fresh rock.

Zenith Minerals Managing Director Michael Clifford commented: "We are very pleased with these latest drill results at Waratah Well. The program of shallow slimline RC drilling successfully achieved its aim of looking for pegmatites under soil cover. In addition, the pegmatites we intersected were the thickest (24m) and highest grade to date (3m @ 1.31% Li_2O). The lithium host mineral change to petalite is also highly encouraging, as this minerals chemistry and conditions for formation are much closer to the lithium mineral spodumene than the lithium micas, that were intersected further southwest in the prospect area. We are gaining some clear insights into zoning at Waratah Well and now plan to chase these new thick pegmatites well into fresh rock looking for our target lithium mineral, spodumene."

Background on Lithium Targets

An initial phase of 7 wide-spaced (1km spacing) RC drill holes were completed in early 2022 at the Waratah Well project to test a zone (>3km x >2km) of outcropping lithium-tantalum rich pegmatite dykes.

That initial drilling program confirmed the presence of widespread lithium bearing pegmatite dykes over a 4km zone, open to the north and east under soil cover (ASX Release 10-Mar-22). Individual drill holes intersected up to 21 cumulative metres of pegmatite, with individual pegmatites up to 11 metres in thickness.

ZENITH MINERALS

Corporate Details

Zenith Minerals Limited (ASX:ZNC)

ABN: 96 119 397 938

Issued Shares	343.9M
Unlisted options	14.3M
Mkt. Cap. ($0.26)	A$89M
Cash (31st Mar 22)	A$9.3M
Equities (31st Mar 22)	A$14.2M
Debt	Nil

Directors

David Ledger	Executive Chairman
Michael Clifford	Managing Director
Stan Macdonald	Non-Exec Director
Julian Goldsworthy	Non-Exec Director
Emma Scotney	Non-Exec Director
Nic Ong	Co Sec
Nick Bishop	CFO

Major Shareholders

Directors	3.4%
HSBC Custody Nom.	8.7%
Citicorp Nom	8.3%
BNP Paribas Nom	6.2%
EV Metals Group	2.9%

Our Vision

Zenith has a vision to maximise shareholder value through superior project generation and exploration activities.

Focus is on 100% owned Zenith projects, whilst partners progress multiple additional opportunities.

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Four holes, over a 4km long zone, intersected strongly anomalous lithium, with the two north-western most holes returning:

- ZWWRC004 - 12m @ 0.30%Li2O
- ZWWRC002 - 8m @ 0.22% Li2O

Mineralisation was identified as a mixture of holmquistite and trilithionite, not the target mineral, which is spodumene, but a confirmation of the presence of fertile lithium-ceasium-tantalum (LCT) pegmatite dykes.

The area north and east of the lithium mineralised drill holes is soil covered with no outcrop (Figure 1). This area was the priority zone for testing with four (4) fences of RC drill holes to test for pegmatites under the soil cover.

A total of 47 new, slimline RC holes (average depth 48m, max depth 90m) were completed for a total of 2,267m. The holes were drilled on 4 fences to provide reasonable coverage of the target area. The presence of pegmatites was confirmed, with 22 out of the 47 holes intersecting pegmatites, ranging in thickness from 1m up to 24m, the thickest pegmatite identified in the project area to date.

Significant lithium results were intersected in 3 drill holes. With the higher lithium zones occurring at the base of the pegmatites in fresh rock, implying that the lithium may be depleted in the near surface weathered zone (Figure 2). Better results include:

- **ZWWRC029 - 7m @ 0.67% Li_2O, including 3m @ 1.31% Li_2O at the base of the 24m thick pegmatite, with the upper potion being strongly weathered.**

- **ZWWRC030 – 22m @ 0.22% Li_2O including 1m @ 0.61% Li_2O, upper portion of the pegmatite also weathered**

- **ZWWRC016 – 11m @ 0.13% Li_2O**

XRD analysis shows that the lithium minerals, of the better mineralised zones, are dominantly petalite with only minor lithium mica and holmquistite. The chemistry and conditions of formation of petalite are more like those of spodumene, than the lithium micas. This is a very positive change in lithium mineralogy compared to the southwest of the prospect area where lithium mica and holmquistite were the only lithium minerals identified.

Hence the intersection of thick pegmatite containing ore grade petalite (**3m @ 1.31% Li_2O**) is considered as a positive step forward in understanding the zonation of lithium at Waratah Well. Deeper RC drilling is now planned to test these petalite rich pegmatites at depth and across strike.

Background on the Waratah Well Project

The Waratah Well Project is located approximately 20km northwest of the regional town of Yalgoo in the Murchison Region of Western Australia.

- Tantalum and locally lithium bearing pegmatite sills and dykes crop out over a 3km x 2km area with a range of dips from 60^0 to flat lying and thickness from 0.5m to 21m – refer to ASX Release 27-Apr-18, 30-Apr-20 and 3-Nov-21).
- Lithium rock chip sample grades up to 2.09% Li_2O in the north-western portion of the target area.
- At the north-eastern end of the pegmatite outcrop area 14 closely spaced stacked dykes occur where surface composite rock chip sampling has returned tantalum grades including 262, 299, 360, 366, 421 & 573 ppm Ta_2O_5; this zone is open ended to N, NE & SE where it runs under surface soil cover.
- A second area of dykes returned similarly high tantalum values such as 323, 518, 616, 1184 ppm Ta_2O_5.
- A third zone of narrower dykes occurs in the northwest of the pegmatite belt but with very high grades of 708, 995, 1007, 1166 and 1221 ppm Ta_2O_5.

The key lithium target is the blind lithium spodumene mineralisation beneath the tantalum bearing dykes, a geological architecture similar to that noted at the Bald Hills lithium mine (formerly owned by ASX:TAW). A similar picture is also noted at Liontown's (ASX:LTR) Kathleen Valley lithium project whereby relatively narrow surface pegmatite dykes merge at depth to form a thick flat lying lithium spodumene rich sill (refer to ASX Release 24-Jan-22 for further details).

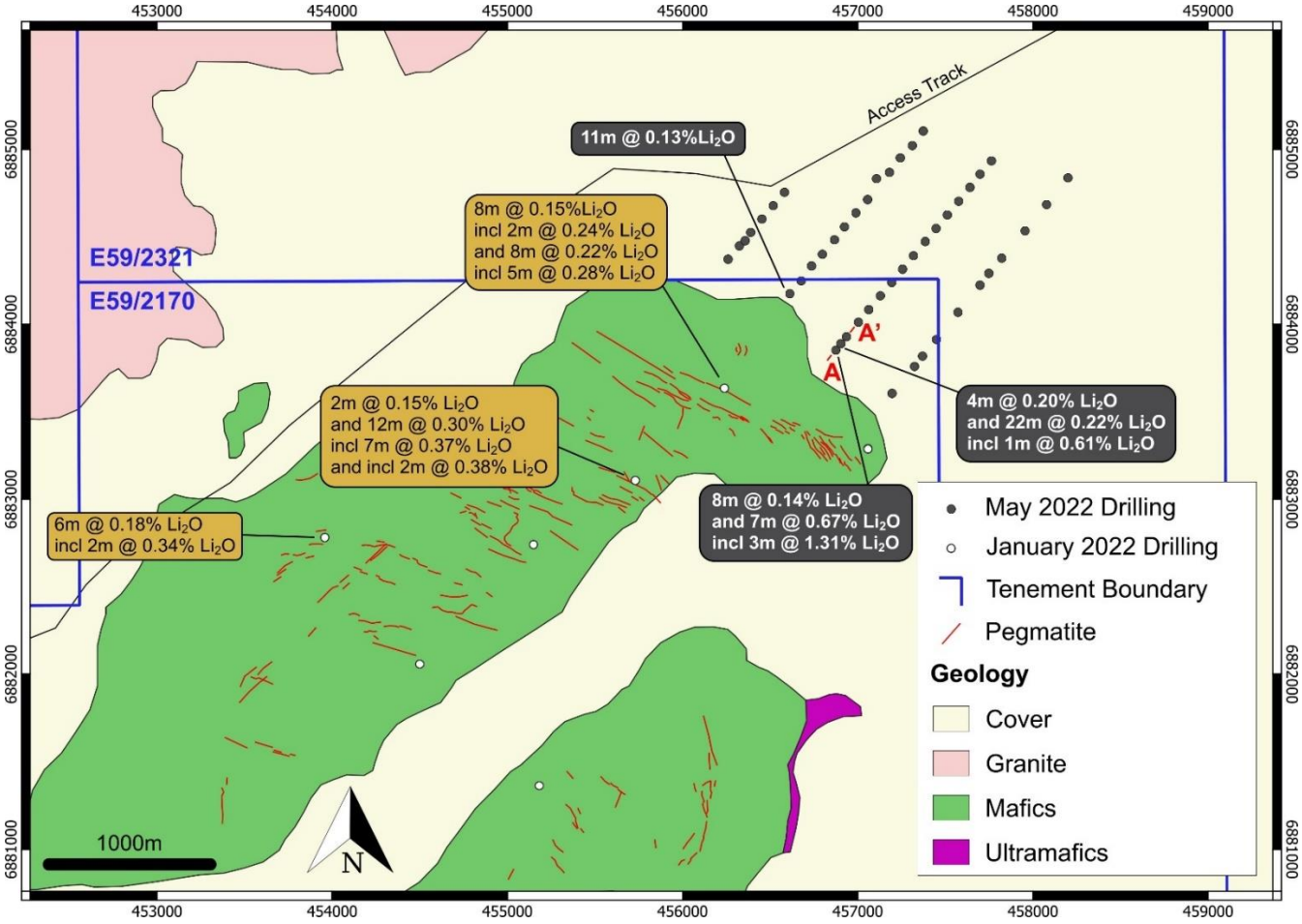

Figure 1: Waratah Well Lithium Prospect Area - Lithium Drilling Results and Location of Cross Section A-A' (refer Figure 2)

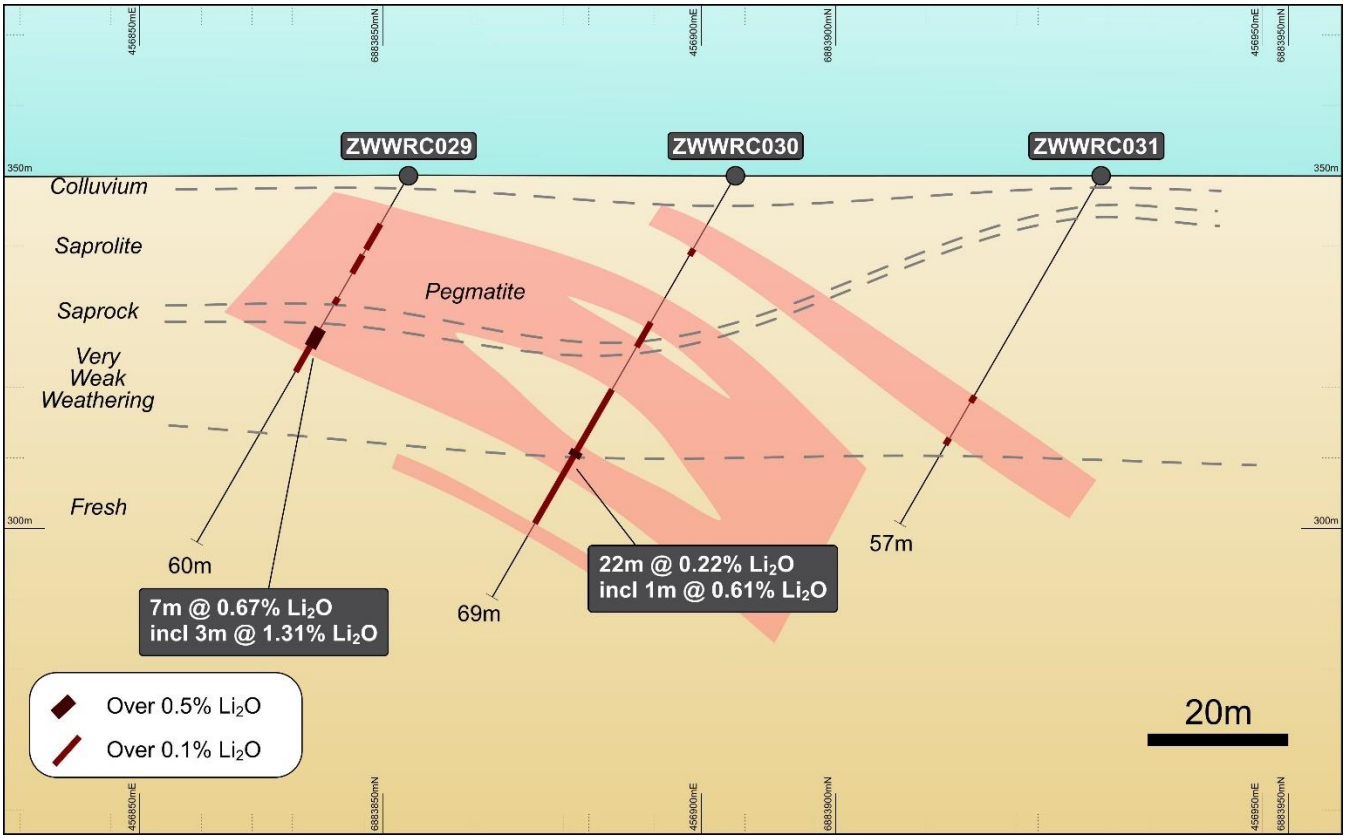

Figure 2: Waratah Well Lithium Prospect Drilling Cross Section A-A' (refer Figure 1 for Location Details)

Table 1: Significant Lithium Drilling Results at Waratah Well

Hole ID	From (m)	To (m)	Interval (m)	Li_2O (%)	Cs (ppm)	Rb (ppm)	Ta (ppm)
ZWWRC009	NSR						
ZWWRC010	NSR						
ZWWRC011	NSR						
ZWWRC012	NSR						
ZWWRC013	NSR						
ZWWRC014	NSR						
ZWWRC015	NSR						
ZWWRC016	7	18	11	0.13	145	1794	39
ZWWRC017	NSR						
ZWWRC018	NSR						
ZWWRC019	NSR						
ZWWRC020	NSR						
ZWWRC021	NSR						
ZWWRC022	NSR						
ZWWRC023	NSR						
ZWWRC024	NSR						
ZWWRC025	NSR						
ZWWRC026	NSR						
ZWWRC027	NSR						
ZWWRC028	NSR						
ZWWRC029	8	16	8	0.14	111	2565	62
and	20	21	1	0.16	110	3760	28
and	**25**	**32**	**7**	**0.67**	**65**	**1707**	**33**
incl	**28**	**28**	**3**	**1.31**	**66**	**2473**	**28**
ZWWRC030	12	13	1	0.12	320	1250	5
and	24	28	4	0.20	687	2433	15
and	35	57	22	0.22	130	844	12
incl	**45**	**46**	**1**	**0.61**	**112**	**2920**	**82**
ZWWRC031	36	37	1	0.13	306	2800	44
and	43	44	1	0.11	119	1250	23
ZWWRC032	NSR						
ZWWRC033	NSR						
ZWWRC034	NSR						
ZWWRC035	NSR						
ZWWRC036	NSR						
ZWWRC037	NSR						
ZWWRC038	33	34	1	0.15	809	3900	68
and	42	43	1	0.12	198	2160	19
ZWWRC039	NSR						
ZWWRC040	NSR						
ZWWRC041	NSR						
ZWWRC042	NSR						
ZWWRC043	NSR						
ZWWRC044	NSR						

Hole ID	From (m)	To (m)	Interval (m)	Li_2O (%)	Cs (ppm)	Rb (ppm)	Ta (ppm)
ZWWRC045	NSR						
ZWWRC046	NSR						
ZWWRC047	NSR						
ZWWRC048	NSR						
ZWWRC049	NSR						
ZWWRC050	NSR						
ZWWRC051	NSR						
ZWWRC052	NSR						
ZWWRC053	NSR						
ZWWRC054	NSR						
ZWWRC055	NSR						

Broad interval – 0.1% Li_2O cutoff; maximum 2m internal dilution

Incl – 0.5% Li_2O cutoff; no dilution

Table 2: Waratah Well Drill Collar Table

Hole ID	Hole Type	Easting	Northing	Depth (m)	Dip	Azimuth	Pegmatite Thickness (m)
ZWWRC009	SLRC	456260	6884372	24	-60	220	NIL
ZWWRC010	SLRC	456324	6884448	24	-60	220	4
ZWWRC011	SLRC	456389	6884525	18	-60	220	NIL
ZWWRC012	SLRC	456453	6884601	36	-60	220	NIL
ZWWRC013	SLRC	456517	6884678	20	-60	220	NIL
ZWWRC014	SLRC	456582	6884754	39	-60	220	NIL
ZWWRC015	SLRC	456357	6884478	45	-60	220	2, 2
ZWWRC016	SLRC	456612	6884175	57	-60	220	2, 3, 2, 1
ZWWRC017	SLRC	456677	6884248	52	-60	220	NIL
ZWWRC018	SLRC	456736	6884333	48	-60	220	NIL
ZWWRC019	SLRC	456798	6884400	42	-60	220	1
ZWWRC020	SLRC	456867	6884483	45	-60	220	3
ZWWRC021	SLRC	456924	6884557	42	-60	220	1
ZWWRC022	SLRC	456989	6884637	39	-60	220	NIL
ZWWRC023	SLRC	457057	6884713	48	-60	220	2, 1
ZWWRC024	SLRC	457107	6884832	51	-60	220	NIL
ZWWRC025	SLRC	457181	6884868	45	-60	220	NIL
ZWWRC026	SLRC	457243	6884951	60	-60	220	NIL
ZWWRC027	SLRC	457311	6885021	25	-60	220	NIL
ZWWRC028	SLRC	457374	6885104	42	-60	220	NIL
ZWWRC029	SLRC	456875	6883852	60	-60	220	24
ZWWRC030	SLRC	456903	6883889	69	-60	220	4, 5, 8, 5, 2
ZWWRC031	SLRC	456936	6883929	57	-60	220	7, 2, 1, 3
ZWWRC032	SLRC	457004	6884012	48	-60	220	3
ZWWRC033	SLRC	457063	6884084	48	-60	220	7
ZWWRC034	SLRC	457129	6884163	39	-60	220	5
ZWWRC035	SLRC	457194	6884239	45	-60	220	NIL

Hole ID	Hole Type	Easting	Northing	Depth (m)	Dip	Azimuth	Pegmatite Thickness (m)
ZWWRC036	SLRC	457256	6884315	42	-60	220	NIL
ZWWRC037	SLRC	457318	6884392	51	-60	220	2, 2, 2, 1
ZWWRC038	SLRC	457385	6884473	51	-60	220	3, 4
ZWWRC039	SLRC	457447	6884548	45	-60	220	NIL
ZWWRC040	SLRC	457511	6884625	45	-60	220	NIL
ZWWRC041	SLRC	457576	6884703	45	-60	220	NIL
ZWWRC042	SLRC	457640	6884782	45	-60	220	NIL
ZWWRC043	SLRC	457698	6884858	45	-60	220	NIL
ZWWRC044	SLRC	457763	6884934	87	-60	220	3
ZWWRC045	SLRC	457196	6883605	33	-60	220	NIL
ZWWRC046	SLRC	457324	6883759	42	-60	220	1, 2
ZWWRC047	SLRC	457449	6883913	48	-60	220	4
ZWWRC048	SLRC	457572	6884069	42	-60	220	1, 1
ZWWRC049	SLRC	457698	6884224	60	-60	220	NIL
ZWWRC050	SLRC	457822	6884378	75	-60	220	2, 1
ZWWRC051	SLRC	457955	6884534	57	-60	220	NIL
ZWWRC052	SLRC	458078	6884684	78	-60	220	1
ZWWRC053	SLRC	458200	6884837	90	-60	220	1
ZWWRC054	SLRC	457370	6883818	42	-60	220	NIL
ZWWRC055	SLRC	457748	6884291	76	-60	220	NIL

Zenith Lithium Joint Venture

Zenith is being developed as a pure lithium company to refocus on minerals containing lithium and related metals required for rechargeable lithium-ion batteries for electric vehicles and renewable energy storage ("Battery Minerals"), backed by a new alliance with the EV Metals Group (EVM), as detailed in ASX Release 13-Jan-22. Key commercial terms of the Zenith Lithium Joint Venture with EVM include:

- EVM may earn a 60% interest in the lithium rights in two initial 100% owned Zenith projects, namely Waratah Well and Split Rocks (Figure 3), by sole funding the completion of a feasibility study within 24 months, with Zenith retaining a 40% project share.
- On and from completion of a feasibility study, Zenith and EVM will form a joint venture in respect of the project lithium rights. EVM will sole fund expenditure to a decision to mine, following which the parties will be required to fund future joint venture expenditure in accordance with their respective percentage shares.
- EVM must arrange all financing for the development, construction and commissioning of any future mine including Zenith's share. Zenith must repay its proportionate share of the project finance including interest from the sale of its proportionate share of minerals produced.
- EVM to spend a minimum of A$7M on exploration on the projects, in 24 months, before being able to voluntarily withdraw provided that if EVM does not complete a feasibility study within 24 months it will be deemed to have withdrawn and will not earn an interest in the project lithium rights.
- The agreement includes a joint venture over Zenith's Split Rocks and Waratah Well projects in Western Australia, as well as a non-exclusive right to bring additional projects to the joint venture by either party, to explore for lithium/EV metals.
- In addition, EVM or its nominees subscribed for 20,000,000 ordinary ZNC shares @ $0.30 cents per share (representing a premium of 20% above the then VWAP for ZNC shares for the preceding 10 Business Days) raising A$6M (Placement), with funds applied to source new lithium opportunities, near term advancement of its gold and base metals portfolio and working capital (ASX Release 19-Jan-22).

Figure 1: Zenith Lithium Joint Venture - Project Locations (stars) and Alliance Project (square)

Australian Lithium Alliance

Zenith and EV Metals Group have also agreed to work together on a non-exclusive basis to assess lithium opportunities in Australia under a strategic initiative referred to herein as the Australian Lithium Alliance (ALA). Zenith and EV Metals Group will each fund their respective share of costs on assessing, exploring and any future development capital on a 40% - 60% basis respectively, with EV Metals Group owning marketing rights to any offtake. Each party will bring to the arrangement their respective technical, financial and management skills to assess lithium opportunities. The Mt Ida North option agreement announced to the ASX on 23-May-22 is being pursued under the ALA partnership.

The ALA is a separate arrangement to the existing Zenith Lithium Joint Venture with EV Metals Group that is detailed below and in ZNC ASX Release dated 14-Jan-22.

Demerger of Gold and Base Metals Assets

To allow the Zenith team to focus on activities to generate Battery Minerals projects, ZNC is planning to demerge the non-Battery Minerals projects, including base metals and gold assets into a new Company to be listed on ASX. Any such demerger will be subject to ZNC Board approval, tax advice favourable to ZNC, as well as shareholder, ASX, ASIC and other regulatory approvals. ZNC shareholders to benefit by way of an in-specie distribution of the shares in the new listed Company. Further updates and information on the Demerger will be provided by Zenith in due course.

Competent Persons Statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Michael Clifford, who is a Member of the Australian Institute of Geoscientists and an employee of Zenith Minerals Limited. Mr Clifford has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Clifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Material ASX Releases Previously Released

The Company has released all material information that relates to Exploration Results, Mineral Resources and Reserves, Economic Studies and Production for the Company's Projects on a continuous basis to the ASX and in compliance with JORC 2012. The Company confirms that it is not aware of any new information that materially affects the content of this ASX release and that the material assumptions and technical parameters remain unchanged.

Authorised for release by the Zenith Minerals Limited Board of Directors – 6th July 2022

For further information contact Zenith Minerals Limited:

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Phone +61 8 9226 1110

Zenith Minerals Limited (ASX:ZNC)

Zenith has a vision to maximise shareholder value through superior project generation and exploration activities.

Key Australian gold and base metal projects include:

Earaheedy	Zinc	Western Australia	25% free carry to BFS

New major zinc discovery to be fast tracked with extensive accelerated exploration program underpinned by a recent $40M capital raising by partner Rumble Resources Limited (ASX:RTR) (ASX Releases 28-Apr-21, 2-Jun-21, 8-Jun-21, 18-Oct-21, 13-Dec-21, 21-Dec-21, 31-Jan-22, 7-Feb-22, 21-Feb-22, 9-Mar-22, 26-May22).

Develin Creek	Copper - Zinc	Queensland	100% Owned

Inferred Mineral Resource 2.57Mt @ 1.76% Cu, 2.01% Zn, 0.24g/t Au & 9.6g/t Ag (ASX Release 15-Feb-15). Massive sulphides intersected at 2 new prospects Wilsons North & Snook.

Sulphide City (ASX Release 5-Jul-21).	**34m @ 3.5% Cu+Zn**	**29m @ 3.5% Cu+Zn**
	incl 10m @ 6.0% Cu+Zn	**incl 12.3m @ 6.7% Cu+Zn**

Red Mountain	Gold	Queensland	100% Owned

Drilling is following-up the high-grade near surface gold and silver intersected in the maiden & subsequent drill programs (ASX Releases 3-Aug-20 & 13-Oct-20, 9-Nov-20, 21-Jan-21, 19-May-21).

Results incl:	**13m @ 8.0 g/t Au**	**15m @ 3.5 g/t Au**
	5m @ 10.4 g/t Au	**12m @ 4.9 g/t Au**

Split Rocks	Gold	Western Australia	100% Owned

Zenith drilling returned - high-grade near surface gold mineralisation at multiple targets (ASX Release 5-Aug-20, 2-Sep-20, 19-Oct-20, 28-Oct-20, 15-Jan-21, 11-Mar-21, 21-Apr-21, 24-Jun-21, 30-Sep-21, 18-Jan-22). Results include:

Dulcie North	**32m @ 9.4 g/t Au, incl 9m @ 31.4 g/t Au**	**16m @ 1.3 g/t Au**
Dulcie Laterite Pit	**2m @ 14.5 g/t Au**	**18m @ 2.0 g/t Au**
	14m @ 3.5 g/t Au	
Estrella	**2m @ 9.8 g/t Au**	
Dulcie Far North	**5m @ 5.6 g/t Au**	**3m @ 70 g/t Au**
Water Bore	**3m @ 6.6 g/t Au**	
Scotts Grey	**8m @ 4.1 g/t Au**	**4m @ 4.8 g/t Au**

Investments

43.9M shares in Bradda Head Holdings Limited (AIM)

3.88M shares in Rumble Resources Limited (ASX:RTR)

2.5M shares in American Rare Earths (ASX:ARR)

0.5M shares in Nickel-X Limited (ASX:NKL)

JORC Tables

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	1m reverse circulation drill samples were collected at depths ranging from 0 to 90m depth. Samples were collected via a cyclone.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Samples are considered to be representative of the intervals sampled.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Slimline Reverse circulation drilling was used to obtain 1m samples from which 2 kg was pulverised with analysis for lithium by sodium peroxide fusion with ICP-MS & OES finish.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	Slimline Reverse circulation face sample bit
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Recovery of all samples was estimated visually
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Reverse circulation face sample bit ensured good recoveries throughout the drill program
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Acceptable overall sample recoveries throughout drill program no bias likely.

Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	All drill samples were logged by a qualified geologist and descriptions recorded in a digital data base.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Qualitative logging, representative sample retained for each drill metre
	The total length and percentage of the relevant intersections logged.	100%
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	No core
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Rotary splitter for each 1m sample.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were analysed at Nagrom Laboratories in Perth, 2 kg was pulverised and a representative subsample was analysed for lithium by sodium peroxide fusion with ICP-MS & OES finish.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	~200g of sample was pulverised and a sub-sample was taken in the laboratory and analysed.
Sub-sampling techniques and sample preparation - continued	*Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*	No duplicate samples were taken in the field.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Each sample was approximately 2kg in weight which is appropriate to test for the grain size of material sampled.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Samples were analysed at Nagrom Laboratories in Perth, 2 kg was pulverised and a representative subsample was analysed for lithium by sodium peroxide fusion with ICP-MS & OES finish.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Semi-quantitative XRD analysis was used to determine the mineral species of lithium mineralised zones. The sample was supplied by the client to Microanalysis Australia for the above-mentioned analyses. A representative sub-sample was removed and lightly ground such that 90% was passing 20 µm. Grinding to this size helps eliminate preferred orientation. Only crystalline material present in the sample will give peaks in the XRD scan. Amorphous (non-crystalline) material will add to the background. The search match software used was Eva 4.3. An up-to-date ICDD card set was used. The X-ray source was cobalt radiation. No standards were used in the quantification process. The concentrations were calculated using the normalized reference intensity ratio method where the intensity of the 100% peak divided by the published I/Ic

		value for each mineral phase is summed and the relative percentages of each phase calculated based on the relative contribution to the sum. This method allows for slight attention to be paid to preferred orientation but is limited in considering other factors including but not limited to; variable crystallinity, alteration, fluorescence, substitution and lattice strain. Chemical assay data (XRF/ICP) was supplied by the client as an elemental relative abundance/concentration indicator. The XRD concentration of the interpreted phases (below) may have been adjusted in consideration of the chemical assay.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Blanks and certified reference material for lithium were included in the analytical batches and indicate acceptable levels of accuracy and precision. XRD analyses of 5 mineralised intervals confirms the host lithium host minerals as petalite and minor lepidolite, holmquistite.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	At least 2 Zenith company personnel have been to the prospect area and observed samples and representative drill chip samples
	The use of twinned holes.	Nil
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Field data were all entered into a database
	Discuss any adjustment to assay data.	No adjustments were made.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Sample location is based on GPS coordinates +/-5m accuracy
	Specification of the grid system used.	The grid system used to compile data was MGA94 Zone 50
Location of data points – continued	*Quality and adequacy of topographic control.*	Topography control is +/- 10m.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	RC holes drilled at nominal 100 x 200m spacing.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	There is insufficient information to calculate a mineral resource
	Whether sample compositing has been applied.	Simple weight average mathematical compositing applied

Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	All Zenith drilling is angled at -60 degrees to the SW and is close to representing true width thickness of the gently NE dipping lithium mineralisation, based on the current geological interpretation. Further drilling is required to confirm this interpretation.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No bias based on current interpretation of shallow dipping lithium mineralisation
Sample security	*The measures taken to ensure sample security.*	All samples were taken by Zenith personnel on site and retained in a secure location until delivered directly to the laboratory by Zenith personnel.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	The sampling techniques and data have been reviewed by two company personnel who are qualified as Competent Persons

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	*JORC Code explanation*	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	Waratah Well is one of two projects being explored under the Zenith Lithium Joint Venture with EV Metals Group (refer to ASX Release 13th January 2022), where, among other terms, EVM may earn a 60% interest in the lithium rights in the Waratah Well project by sole funding the completion of a feasibility study within 24 months, with Zenith retaining a 40% project share. The project is located on the Gabyon pastoral lease and is subject to native title claims
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	All tenements are 100% held by Zenith and are in good standing with no known impediment to future granting of a mining lease
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	No previous lithium exploration in this area
Geology	*Deposit type, geological setting and style of mineralisation.*	Target is lithium hosted as the mineral spodumene in pegmatites, akin to deposits such as Greenbushes, Mt Marion, Wodgina and Pilgangoora all located in Western Australia
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*	Drill collars are provided in Table 2 whilst significant lithium results are included in Table 1.
	o easting and northing of the drill hole collar	
	o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	

	o dip and azimuth of the hole	
	o down hole length and interception depth	
	o hole length.	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	Simple arithmetic weight averaging with minimum cut-off grade of 1000ppm Li_2O with a maximum of 2m internal dilution
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	As above and included in Tables
Data aggregation methods - continued	*The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No metal equivalents used
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	All Zenith drilling is angled at 60 degrees and based on current interpretation is thought to be representing true width thickness of the gently northeast dipping lithium mineralisation however further drilling is required to confirm this interpretation
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	As above
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	Length reported are down-hole lengths but are believed to be close to true thickness
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to Figures 1 & 2 and Tables 1 - 2 and descriptions in body of text
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Refer to Figures 1 & 2 and Tables 1 - 2 and descriptions in body of text

Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	No other meaningful or material exploration data to be reported at this stage
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Additional deeper RC drilling planned to test follow-up on the new thick pegmatite intersection.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to Figures 1 & 2