

Zenith Discovers Major Lithium Pegmatite

Drilling intersects widespread thick lithium pegmatites at Split Rocks

Investment Highlights

- Drilling as part of an ongoing exploration campaign to scope the size of the host pegmatite and contained lithium mineralisation at the Rio Pegmatite has returned significant results. In the immediate area of Rio, a further 22 holes have now been completed (ZVRC029 to ZVRC050) in addition to the initial discovery drill section of 4 holes (ZVRC001 to ZVRC004). Assays are now available for 21 holes.
- New lithium drill results include:
 - ZVRC032 - 24m @ 0.7% Li₂O, incl. 3m @ 2.7% Li₂O & 1m @ 1.5% Li₂O within a broader interval of 104m @ 0.3 % Li₂O to end of hole
 - ZVRC037 - 25m @ 0.7% Li₂O, incl. 5m @ 1.1% Li₂O & 3m @ 1.1% Li₂O & 2m @ 1.2% Li₂O within a broader interval of 116m @ 0.3 % Li₂O
 - ZVRC040 - 12m @ 0.6% Li₂O, incl. 4m @ 1.2% Li₂O within a broader interval of 88m @ 0.3 % Li₂O to end of hole
 - ZVRC043 – 7m @ 1.3% Li₂O within a broader interval of 56m @ 0.3% Li₂O to end of hole
 - ZVRC044 – 10m @ 1.0% Li₂O within a broader interval of 62m @ 0.3% Li₂O
- New results are follow-up to discovery hole ZVRC002 that intersected:
 - 20m @ 1.0% Li₂O, incl. 10m @ 1.7% Li₂O within a broader interval of 108m @ 0.4% Li₂O
- Lithium pegmatite mineralisation is a mixture of eucryptite and petalite with minor spodumene and lepidolite identified to date.
- The amenability of eucryptite mineralisation to conventional treatment processes has been shown by positive sighter flotation testwork and bench scale calcination-leach tests, hence confirming the potential of eucryptite as a viable lithium target (ASX Release 26-Jul-22).
- Pegmatite outlined over >1200m length and >600m width, with lithium mineralised zone identified over >1200m with an open-ended higher-grade zone >450m length.
- Mineralisation remains open to the north, south, east and at depth with 15 of 22 holes drilled to date either ending in pegmatite or deemed too short to test the target.
- **Permits received for a further 84 RC and 84 diamond holes at Rio.**
- One RC rig to be joined by a diamond drill rig to enable deeper drill testing.
- Joint Venture partner approved budget for a further 60 RC and 10 diamond holes.
- Third drill rig to commence drilling at the Company's other lithium projects, Waratah Well and Mt Ida North, in late September.

Zenith Minerals Limited (ASX:ZNC) ("Zenith" or "the Company") is pleased to announce that follow-up RC drilling intersects widespread thick, lithium pegmatites at the Split Rocks project in Western Australia. The project is part of the Zenith Lithium Joint Venture with EV Metals Group.

Ongoing Lithium Exploration Program Delivers Success

Step-out drilling to establish the extent of lithium mineralisation in the Rio Pegmatite, in the northern part of the Split Rocks project, has been a success. Lithium mineralisation has now been outlined over >1200m of strike, remaining open to the north, south, east and at depth (Figures 2 - 5). Of the 22 holes drilled to date, 15 have either ended in pegmatite or are deemed to be too short to fully test the target zone.

Exploration will now be accelerated with the addition of a diamond drill rig that will enable testing of the full thickness of the lithium pegmatite target zone. The Company has now received permits for a further 84 RC and 84 diamond holes at Rio with our Joint Venture partner, EV Metals Group (EVM) approving budget for a further 60 RC and 10 diamond holes that are aimed at initially defining the size of the Rio Pegmatite system (Figure 2).

Zenith's Managing Director Michael Clifford said: "I am delighted to report on lithium exploration success at the Split Rocks project. New results from an initial 22 holes, that are part of an ongoing follow-up drill campaign, confirms we are onto a very significant lithium mineralised pegmatite. RC drilling over the past 6 weeks has been slower than planned, impacted by frequent high-rainfall events which necessitated moving the rig away from the Rio prospect to more accessible areas. The plan is to now accelerate drilling at Rio with a clear runway of greater than 160 permitted holes ahead of us. The RC rig will focus on 400m spaced step-out sections, working our way south, whilst a diamond drill rig explores the eastern and depth extents of the system."

Technical Details

The Split Rocks Project is located approximately 40km south of the regional town of Marvel Loch in the Goldfields Region of Western Australia and is being explored as part of the Zenith Lithium Joint Venture with EV Metals Group (ASX Release 13-Jan-22).

The project area lies immediately north of the Mt Holland Lithium Project that is being developed by Covalent Lithium (SQM and Wesfarmers) - Figure 1.

Drilling as part of an ongoing exploration campaign to scope the size of the host pegmatite and contained lithium mineralisation at Rio has returned significant lithium mineralisation (Figures 2- 5 and Tables 1 & 2). In the immediate area of the Rio pegmatite a further 22 holes have now been completed (ZVRC029 to ZVRC050) in addition to the initial discovery drill section of 4 holes (ZVRC001 to ZVRC004). Assay results are available for 21 holes.

New lithium drill results include:

- ZVRC032 - 24m @ 0.7% Li₂O, incl. 3m @ 2.7% Li₂O & 1m @ 1.5% Li₂O within a broad interval of 104m @ 0.3 % Li₂O to end of hole

- ZVRC037 - 25m @ 0.7% Li₂O, incl. 5m @ 1.1% Li₂O & 3m @ 1.1% Li₂O & 2m @ 1.2% Li₂O within a broad interval of 116m @ 0.3 % Li₂O
- ZVRC040 - 12m @ 0.6% Li₂O, incl. 4m @ 1.2% Li₂O within a broad interval of 88m @ 0.3 % Li₂O to end of hole
- ZVRC043 – 7m @ 1.3% Li₂O within a broad interval of 56m @ 0.3% Li₂O to end of hole
- ZVRC044 – 10m @ 1.0% Li₂O within a broader interval of 62m @ 0.3% Li₂O

New results are follow-up to discovery hole ZVRC002 that intersected:

- 20m @ 1.0% Li₂O, incl. 10m @ 1.7% Li₂O within a broad interval of 108m @ 0.4% Li₂O

Lithium pegmatite mineralisation identified to date is a mixture of eucryptite and petalite with minor spodumene confirmed by multiple methods including optical microscopy, SEM, Raman spectroscopy and XRD analyses, whilst some lepidolite has been identified in visual chip logging and XRD.

Based on a detailed mineralogical investigation of 7 samples from the initial 4 drill holes – consulting geologist-mineralogist Dr Marcus Sweetapple noted: “The form of crystallization of eucryptite as either monomineralic cuttings, and either adjoining quartz or with subhedral-euhedral quartz inclusions, is suggested to indicate that eucryptite is part of a primary pegmatitic mineral assemblage, and has not been formed from the hydrothermal alteration or replacement of other lithium silicates. Eucryptite is interpreted to form relatively pure discrete bodies or units within the pegmatite and could therefore be in a form favourable for selective mining and processing. Although less petalite is noted in XRD done to date, from comparison with other known pegmatite bodies, it would be expected to be a volumetrically more important mineral species than eucryptite. In one sample, both petalite and spodumene were noted. These minerals, together with eucryptite, form a continuous series under different P-T conditions and their occurrence together is not unexpected.”

The amenability of eucryptite mineralisation to conventional treatment processes has been shown by positive sighter flotation testwork and bench scale calcination-leach tests, hence confirming the potential of eucryptite as a viable lithium target (ASX Release 26-Jul-22).

Lithium mineralisation extends well out into the wall rocks. A good example of this is in hole ZVRC039, the south-eastern most hole completed to date, that intersected 62m @ 0.2% Li₂O to end of hole, all within the mafic host rock. The lithium mineralisation is presumed to be holmquistite (lithium amphibole) and is indicative of a deeper pegmatite source below where the hole terminated.

Strongly anomalous LCT elements that occur in association with lithium (maximum value 4.0% Li₂O), include the following maximums: Cs 2,210 ppm, Rb >5,000 ppm, Nb 1,317 ppm, Ta 914 ppm, Be 482 ppm and Sn 0.1%.

The Rio pegmatite has now been outlined over >1200m length and 600m width, with a higher-grade central lithium mineralised zone identified over >450m length.

Forward Program

Lithium mineralisation at Rio remains open to the north, south, east and at depth with 15 of 22 holes drilled to date either ending in pegmatite or deemed too short to test target zone. Permits are now in place to enable drilling of up to a further 84 RC and 84 diamond holes in the immediate Rio area. The current RC rig will be joined by a diamond drill rig to enable deeper drill testing focusing on the eastern side and depth extents. Our joint venture partner ,EV Metals, has approved a budget for a further 60 RC and 10 diamond holes that will be completed at their cost.

A third drill rig will shortly commence drilling at the Company's other lithium projects, Waratah Well and Mt Ida North.

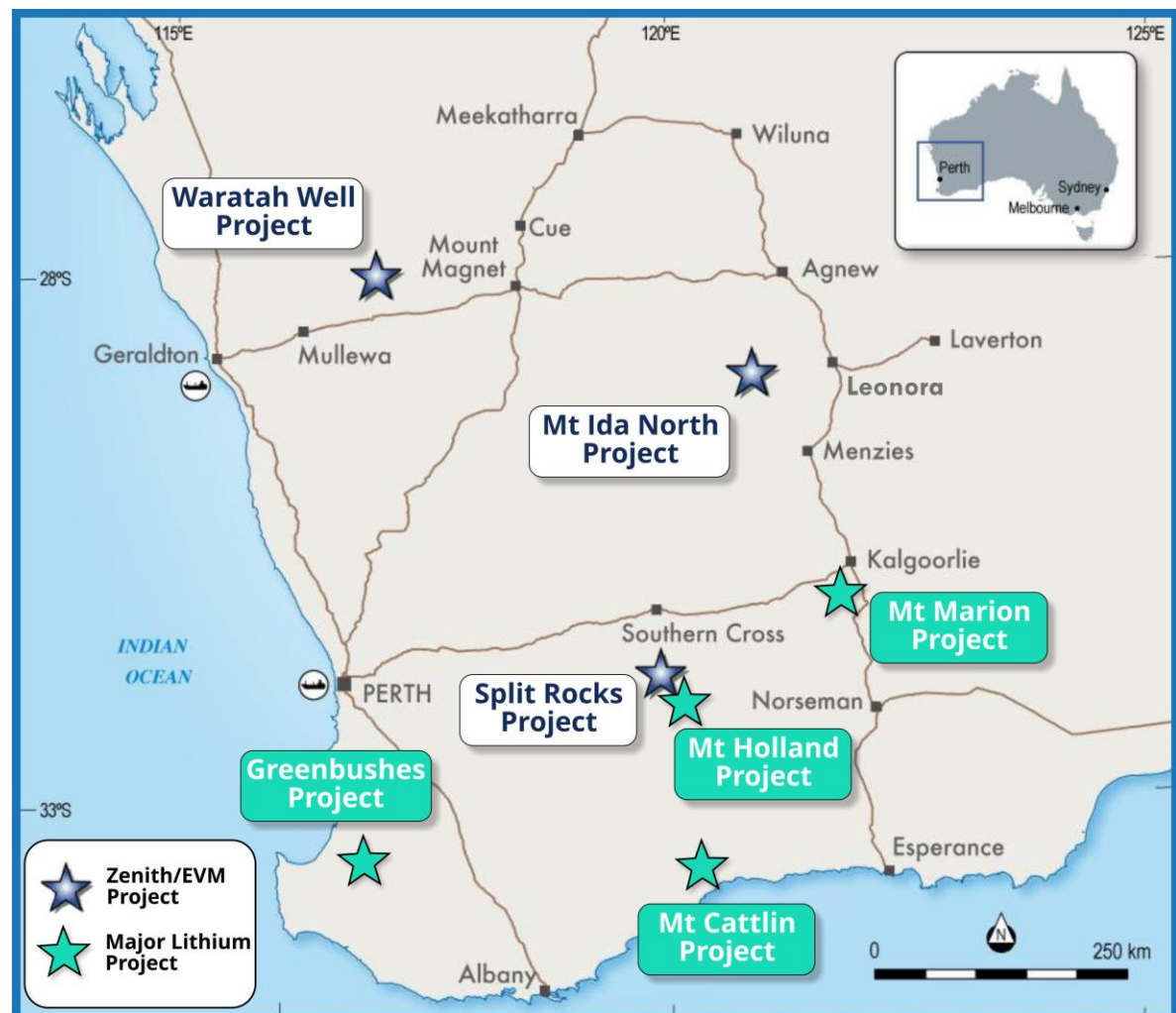


Figure 1: Map of Zenith's Lithium Projects

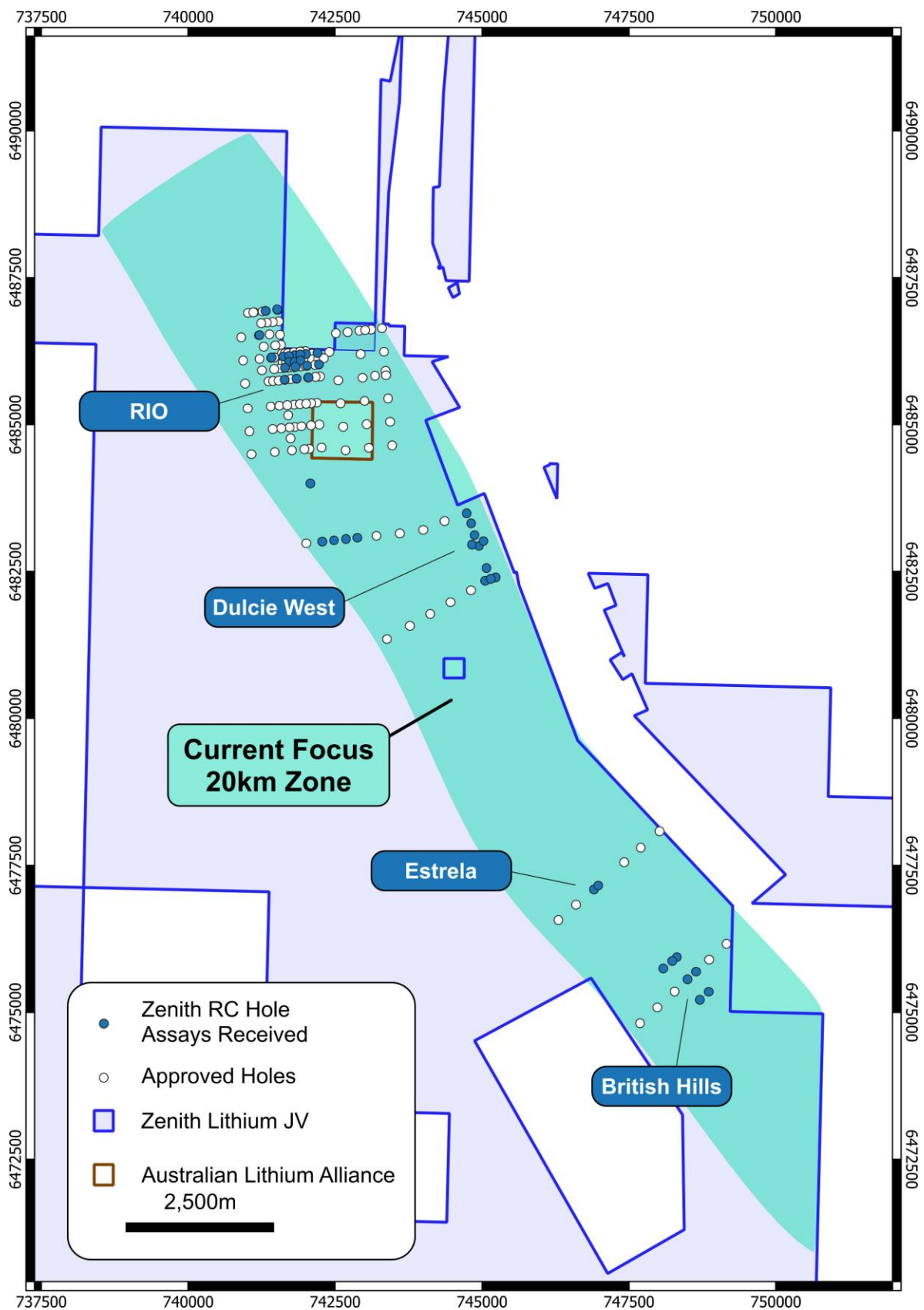


Figure 2: Split Rocks Lithium Pegmatite Target Zone and Approved Drill Holes

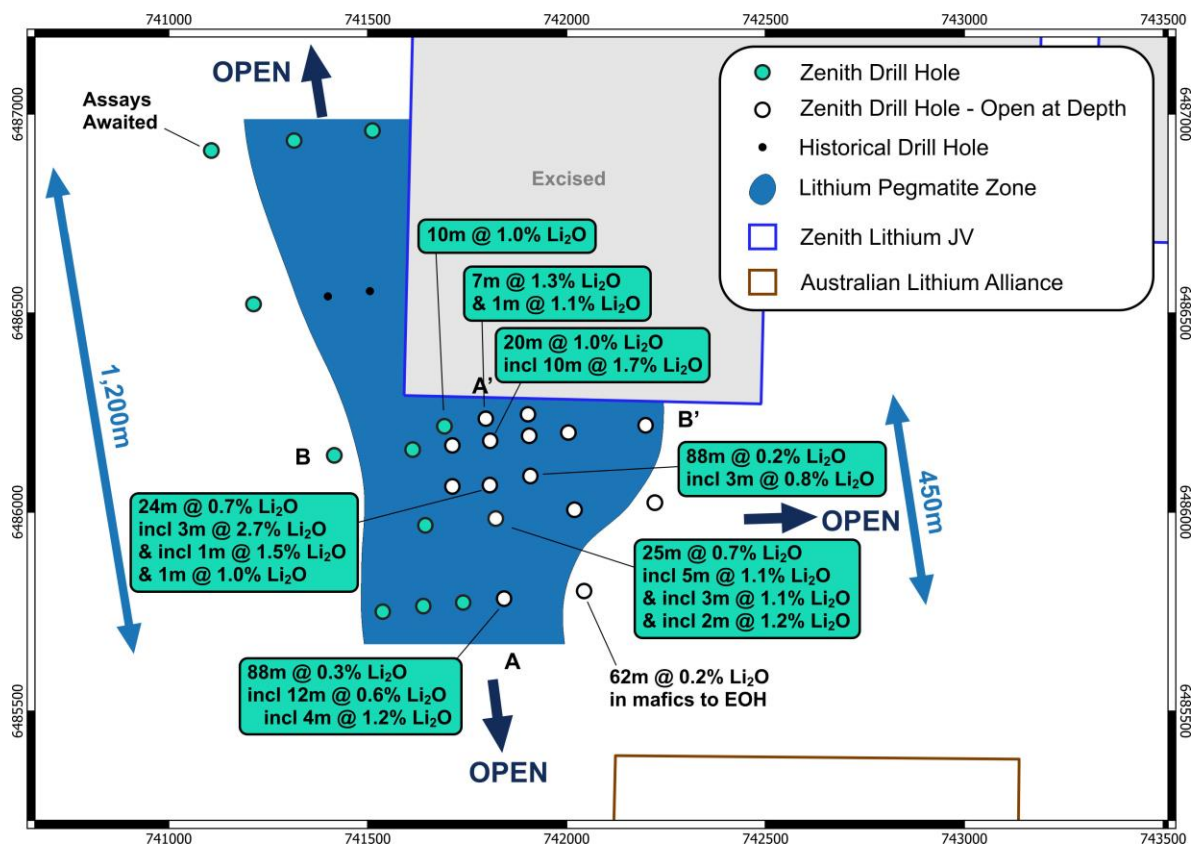


Figure 3: Rio Pegmatite – Map with Significant Lithium Drill Results

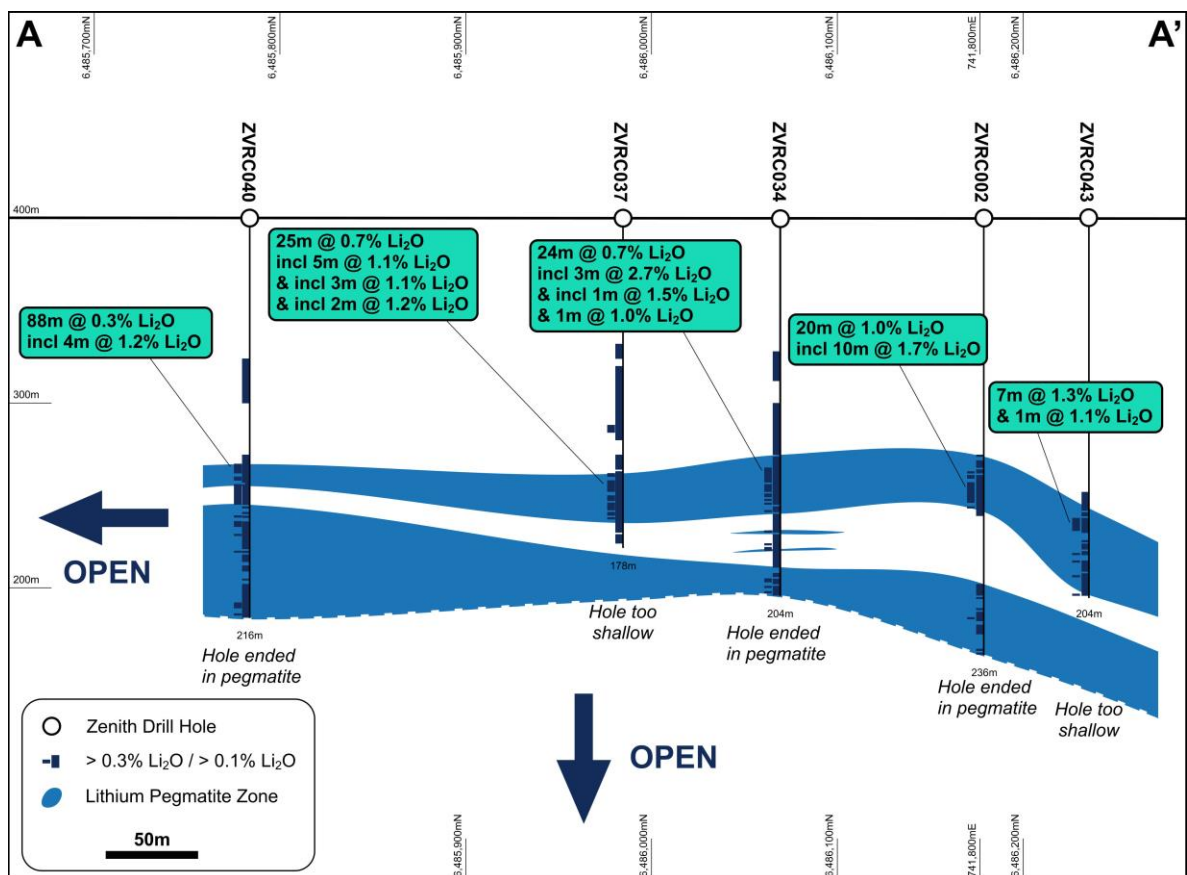


Figure 4: Rio Pegmatite – Long Section with Significant Lithium Drill Results

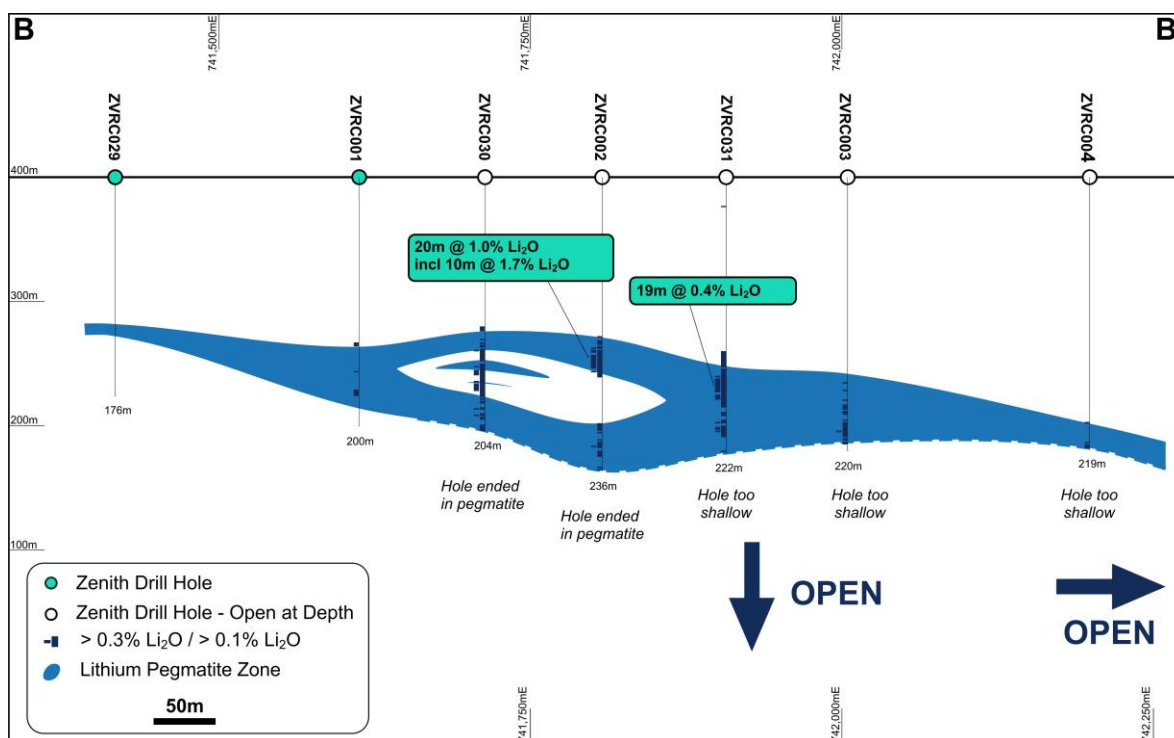


Figure 5: Rio Pegmatite – Cross Section with Significant Lithium Drill Results

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.

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About Zenith Minerals

Zenith Minerals Limited (ASX:ZNC) is an Australian-based battery minerals explorer leveraged to the increasing global demand for metals critical to the production processes of new energy industrial sectors.

The Company currently has three lithium projects all located in Western Australia. Split Rocks, located within the Southern Cross region mid-way between Perth and Kalgoorlie, is now being systematically explored under the terms of the joint venture between Zenith and EV Metals Group (EVM). It covers landholdings of approximately 660km² in the Forrestania greenstone belt immediately north of the established Mt Holland lithium deposit. Waratah Well, located approximately 20km northwest of the regional town of Yalgoo in the Murchison Region holds a lithium-caesium-tantalum pegmatite target with ongoing exploration. More recently, Zenith acquired a third lithium prospect, the Mt Ida North Project, located approximately 95km west of the regional town of Leonora in WA's Goldfields Region.

In January 2022, Zenith entered into a joint venture with EVM, a global battery materials and technology company focussed on the production of high purity chemicals and battery materials required in rechargeable batteries for electric vehicles and renewable energy storage. EVM can earn a 60% interest in the lithium rights in these projects, with Zenith retaining a 40% project share, under terms that sees Zenith funded through to bankable feasibility on any of the project developments. Any lithium concentrate produced from these projects will provide critical raw material supply for the Yanbu complex, Saudi Arabia, as part of an integrated global supply chain currently being developed by EVM. This will contribute to meeting the growing demand for stable, long-term supplies of critical raw materials, high purity chemicals and cathode active materials. The number of Australian-based lithium/battery metal projects currently in the JV could be further expanded over time if appropriate acquisition opportunities present themselves.

Zenith Minerals also holds an extensive portfolio of gold and base metal projects that includes 100% interest in Split Rocks Gold adjacent to the lithium site, 100% of the Develin Creek copper/zinc project in northern Queensland, 100% of the Red Mountain gold project in Queensland and a 25% interest in the Earaheedy zinc/lead project in Western Australia. It is proposed that these assets will be transferred into a separate ASX-listed company called Mackerel Metals Ltd.

To learn more, please visit www.zenithminerals.com.au

This ASX announcement has been authorised by the Board of Zenith Minerals Limited.

Table 1: Drill Collar Details

Hole ID	Hole Type	Easting	Northing	Depth (m)	Dip	Pegmatite Thickness (m)
ZVRC029	RC	741417	6486144	176	-90	1, 10
ZVRC030	RC	741714	6486169	204	-90	4, 15, 3, 4, 1, 27 (eoh)
ZVRC031	RC	741907	6486193	222	-90	70 (eoh)
ZVRC032	RC	741714	6486066	210	-90	23, 43 (eoh)
ZVRC033	RC	741910	6486092	216	-90	9, 5, 19 (eoh)
ZVRC034	RC	741808	6486069	204	-90	10, 20, 2, 1, 15 (eoh)
ZVRC035	RC	742223	6486025	204	-90	NIL
ZVRC036	RC	742021	6486007	204	-90	30 (eoh)
ZVRC037	RC	741823	6485985	178	-90	27
ZVRC038	RC	741646	6485968	192	-90	35, 2
ZVRC039	RC	742045	6485803	150	-90	NIL
ZVRC040	RC	741844	6485784	216	-90	12, 10, 50 (eoh)
ZVRC041	RC	741641	6485765	175	-90	43
ZVRC042	RC	741904	6486247	198	-90	54 (eoh)
ZVRC043	RC	741798	6486236	204	-90	47 (eoh)
ZVRC044	RC	741694	6486217	228	-90	18, 48
ZVRC045	RC	741513	6486960	216	-90	8, 15, 3, 2
ZVRC046	RC	741316	6486935	240	-90	37, 2, 3, 5, 5
ZVRC047	RC	741741	6485774	228	-90	64
ZVRC048	RC	741539	6485751	216	-90	33, 2
ZVRC049	RC	741214	6486524	171	-90	19, 8
ZVRC050	RC	741108	6486910	216	-90	4, 10, 2, 12, 8, 8

Note: (eoh) denotes pegmatite extends to the end of the hole and therefore full thickness is unknown

Table 2: Significant Lithium Drill Results

Hole ID	From (m)	To (m)	Interval (m)	Li ₂ O (%)	Cs (ppm)	Rb (ppm)	K (%)	Be (ppm)	Nb (ppm)	Ta (ppm)	Sn (ppm)	Lithology	Li ₂ O Cut-off (%)
ZVRC001	133	136	3	0.2	15	137	0.7	2	7	1	6	All	0.1
and	156	157	1	0.1	47	540	1.0	19	30	13	38	All	0.1
and	171	176	5	0.1	84	770	3.9	6	35	8	23	All	0.1
ZVRC002	128	236	108	0.4	104	1205	2.9	8	42	11	21	All	0.1
incl	137	157	20	1.0	81	1652	3.1	7	56	14	15	Pegmatite	0.3
	143	153	10	1.7	61	977	1.7	8	77	21	10	Pegmatite	1.0
and	216	217	1	0.4	83	390	0.7	9	25	10	19	Pegmatite	0.3
ZVRC003	165	215	50	0.1	119	1092	2.9	14	29	12	27	All	0.1
incl	204	205	1	0.3	253	820	2.3	5	20	24	38	Pegmatite	0.3
ZVRC004	197	198	1	0.1	186	180	1.6	1	3	1	1	All	0.1
and	213	218	5	0.1	110	698	2.9	8	20	6	19	All	0.1
ZVRC029				NSR									
ZVRC030	120	204	84	0.2	75	910	2.4	10	27	8	33	All	0.1
incl	138	139	1	0.3	21	219	0.8	8	5	5	25	Pegmatite	0.3
and incl	139	140	1	0.4	35	131	0.7	6	5	5	25	Mafics	0.3
and incl	152	153	1	0.4	54	1182	2.5	18	46	5	65	Pegmatite	0.3
and incl	156	172	16	0.3	97	446	1.2	6	14	7	31	Mafics	0.3
and incl	186	192	6	0.2	62	807	1.7	18	59	14	40	Pegmatite	0.3
ZVRC031	23	24	1	0.1	96	188	1.3	5	5	5	25	All	0.1
and	140	211	51	0.2	78	913	2.3	23	37	11	36	All	0.1
incl	160	179	19	0.4	75	910	1.4	46	25	10	28	Pegmatite	0.3
and incl	197	205	8	0.2	117	743	1.0	31	130	35	63	Pegmatite	0.3
and	220	221	1	0.1	117	1042	2.7	53	25	5	63	All	0.1

Table 2: Significant Lithium Drill Results

Hole ID	From (m)	To (m)	Interval (m)	Li ₂ O (%)	Cs (ppm)	Rb (ppm)	K (%)	Be (ppm)	Nb (ppm)	Ta (ppm)	Sn (ppm)	Lithology	Li ₂ O Cut-off (%)
ZVRC032	124	166	42	0.2	94	1193	0.2	21	71	26	39	All	0.1
incl	134	150	16	0.3	133	2035	3.8	44	157	58	47	Pegmatite	0.3
and	175	210 (eoh)	35	0.1	113	798	2.2	19	30	15	34	All	0.1
incl	186	187	1	0.3	128	1137	1.5	54	54	1	75	Pegmatite	0.3
ZVRC033	56	76	20	0.1	32	151	1.0	8	9	12	31	All	0.1
and	124	212	88	0.2	98	528	1.2	9	23	10	43	All	0.1
incl	148	151	3	0.4	70	150	0.7	3	5	5	25	Mafics	0.3
and incl	151	152	1	0.3	257	455	0.7	24	5	5	25	Pegmatite	0.3
and incl	157	160	3	0.8	43	460	0.8	10	38	10	34	Pegmatite	0.3
and incl	174	175	1	0.5	293	1961	2.1	61	67	18	107	Pegmatite	0.3
and incl	179	180	1	0.6	15	106	0.8	3	5	5	25	Mafics	0.3
and incl	197	201	4	0.5	823	2457	2.1	29	144	67	163	Pegmatite	0.3
and incl	207	208	1	0.5	164	1132	1.0	128	54	22	90	Pegmatite	0.3
ZVRC034	72	88	16	0.2	312	292	0.6	5	5	5	54	All	0.1
	100	204 (eoh)	104	0.3	127	838	1.4	15	33	11	59	All	0.1
	135	159	24	0.7	157	1669	2.4	14	43	13	70	Pegmatite	0.3
	135	138	3	2.7	55	219	0.4	54	19	20	56	Pegmatite	1.0
	142	143	1	1.5	163	522	0.8	5	71	15	25	Pegmatite	1.0
	169	170	1	0.6	508	3173	3.2	7	119	15	202	Pegmatite	0.3
	176	179	3	0.4	563	1289	1.6	4	29	9	72	Mafics	0.3
	179	180	1	0.4	457	1962	2.0	6	67	16	105	Pegmatite	0.3
	195	203	8	0.4	207	1249	1.2	62	85	21	81	Pegmatite	0.3

Table 2: Significant Lithium Drill Results

Hole ID	From (m)	To (m)	Interval (m)	Li ₂ O (%)	Cs (ppm)	Rb (ppm)	K (%)	Be (ppm)	Nb (ppm)	Ta (ppm)	Sn (ppm)	Lithology	Li ₂ O Cut-off (%)
	195	196	1	1.0	384	2737	2.2	98	111	41	173	Pegmatite	1.0
ZVRC035				NSR									
ZVRC036	168	175	7	0.2	31	302	1.1	3	13	5	45	All	0.1
and	185	204 (eoh)	19	0.2	129	1724	2.8	19	44	13	214	All	0.1
incl	189	190	1	0.3	101	2221	2.4	13	62	5	116	Pegmatite	0.3
and incl	198	203	5	0.5	251	2212	1.9	52	91	35	583	Pegmatite	0.3
ZVRC037	60	176	116	0.3	111	377	1.1	15	13	7	38	All	0.1
	112	116	4	0.3	146	353	0.8	164	5	10	62	Mafics	0.3
	138	163	25	0.7	126	1181	2.3	20	36	14	62	Pegmatite	0.3
	143	148	5	1.1	110	879	1.5	22	24	10	46	Pegmatite	1.0
	152	155	3	1.1	155	636	0.9	12	34	13	58	Pegmatite	1.0
	159	161	2	1.2	181	434	0.6	3	35	15	62	Pegmatite	1.0
ZVRC038	88	92	4	0.1	14	56	0.7	3	5	5	25	All	0.1
and	123	124	1	0.1	49	222	1.5	3	5	5	59	All	0.1
and	140	164	24	0.1	82	583	2.5	8	18	6	80	All	0.1
ZVRC039	88	150 (eoh)	62	0.2	504	632	1.0	36	11	10	39	All	0.1
incl	108	112	4	0.4	2210	1719	2.1	35	10	5	96	Mafics	0.3
and incl	132	136	4	0.3	655	1567	1.4	235	47	50	66	Mafics	0.3
ZVRC040	76	100	24	0.1	539	445	0.5	4	5	5	36	All	0.1
and	128	216	88	0.3	179	1387	3.1	26	31	21	58	All	0.1
incl	133	145	12	0.6	236	2967	5.0	81	78	101	45	Pegmatite	0.3
	134	138	4	1.2	148	1683	2.5	12	20	7	25	Pegmatite	1.0

Table 2: Significant Lithium Drill Results

Hole ID	From (m)	To (m)	Interval (m)	Li ₂ O (%)	Cs (ppm)	Rb (ppm)	K (%)	Be (ppm)	Nb (ppm)	Ta (ppm)	Sn (ppm)	Lithology	Li ₂ O Cut-off (%)
	145	155	10	0.4	263	764	1.0	37	17	12	37	Mafics	0.3
	161	172	11	0.3	174	2283	3.5	47	57	16	92	Pegmatite	0.3
	180	181	1	0.4	179	1263	3.4	15	19	12	25	Pegmatite	0.3
	208	215	7	0.3	267	950	2.5	20	19	8	66	Pegmatite	0.3
ZVRC041	141	163	22	0.2	137	662	2.5	10	20	5	34	All	0.1
incl	153	158	5	0.3	188	690	2.5	11	21	5	48	Pegmatite	0.3
ZVRC042	144	146	2	0.1	122	819	3.0	3	28	5	93	All	0.1
and	157	198 (eoh)	41	0.2	99	1230	2.2	28	37	8	100	All	0.1
incl	164	176	12	0.4	96	1257	2.1	60	31	18	79	Pegmatite	0.3
ZVRC043	148	204 (eoh)	56	0.3	92	1114	2.9	12	27	8	84	All	0.1
incl	162	169	7	1.3	126	1271	1.4	12	46	12	105	Pegmatite	1.0
and incl	181	186	5	0.2	147	2168	4.5	15	28	10	76	Pegmatite	0.3
and incl	193	194	1	1.1	309	1995	3.3	44	44	30	211	Pegmatite	1.0
and incl	203	204 (eoh)	1	0.3	90	423	1.0	37	20	5	101	Pegmatite	0.3
ZVRC044	116	178	62	0.3	64	813	2.1	4	10	5	31	All	0.1
incl	140	150	10	1.0	169	2554	5.2	6	5	5	14	Pegmatite	0.3
	140	143	3	1.9	87	1410	2.9	6	5	5	25	Pegmatite	1.0
	149	150	1	1.3	385	185	0.7	5	5	5	25	Pegmatite	1.0
and incl	176	177	1	0.4	34	75	1.2	3	5	5	25	Mafics	0.3
and	191	220	29	0.1	101	652	2.0	9	22	5	36	All	0.1
ZVRC045	151	154	3	0.2	45	1057	3.9	3	27	5	25	All	0.1

Table 2: Significant Lithium Drill Results

Hole ID	From (m)	To (m)	Interval (m)	Li ₂ O (%)	Cs (ppm)	Rb (ppm)	K (%)	Be (ppm)	Nb (ppm)	Ta (ppm)	Sn (ppm)	Lithology	Li ₂ O Cut-off (%)
and	168	232	64	0.1	33	240	2.1	6	9	6	25	All	0.1
ZVRC046	89	90	1	0.1	27	265	3.1	3	5	5	25	All	0.1
and	149	154	5	0.1	15	162	2.6	3	5	5	25	All	0.1
ZVRC047	124	200	76	0.1	107	958	2.8	13	18	7	30	All	0.1
incl	145	149	4	0.4	82	1546	2.4	7	44	7	41	Pegmatite	0.3
and incl	169	171	2	0.3	40	312	2.1	22	23	28	25	Pegmatite	0.3
and incl	191	192	1	0.3	176	706	2.8	16	20	5	25	Pegmatite	0.3
ZVRC048	125	126	1	0.5	40	423	1.1	15	49	18	25	Pegmatite	0.3
and	140	144	4	0.1	77	622	2.5	7	18	5	47	All	0.1
and	157	159	2	0.1	23	144	0.8	3	12	5	25	All	0.1
ZVRC049				NSR									
ZVRC050				Assays Awaited									

Broad interval – 0.1% Li₂O cut-off; maximum 8m dilution

Incl – 0.3% Li₂O cut-off; maximum 4m dilution

Incl – 1.0% Li₂O cut-off; maximum 2m dilution

>5000ppm Rb = 5000ppm Rb

JORC Tables

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	1m reverse circulation drill samples were collected at depths ranging from 0 to 240m depth. Samples were collected via a cyclone.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Samples are considered to be representative of the intervals sampled.
	<i>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.</i>	Reverse circulation drilling was used to obtain 1 m samples from which 2 kg was pulverised with analysis for lithium by sodium peroxide fusion with ICPMS finish.
Drilling techniques	<i>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.).</i>	Reverse circulation face sample drill bit.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Visual estimates of recovery were recorded by the field geologist.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Large capacity drill rig with booster compressor using reverse circulation face sample bit ensured good recoveries through-out the drill program.
	<i>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.</i>	Acceptable overall sample recoveries through-out drill program no bias likely.

Logging	<i>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.</i>	All drill samples were logged by a qualified geologist and descriptions recorded in a digital data base.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	Qualitative logging, representative sample retained for each drill metre.
	<i>The total length and percentage of the relevant intersections logged.</i>	100%
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No core
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	Rotary splitter for each 1m sample.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	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 ICPMS finish.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	~200g of sample was pulverised and a sub-sample was taken in the laboratory and analysed.
Sub-sampling techniques and sample preparation - continued	<i>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.</i>	Duplicate samples were taken in the field and analysed as part of the QA/QC process
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	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	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	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 ICPMS finish.
	<i>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.</i>	<p>Lithium pegmatite mineralisation identified to date is a mixture of eucryptite and petalite with minor lepidolite and spodumene confirmed by multiple methods including optical microscopy, SEM, Raman spectroscopy and XRD analyses.</p> <p>Semi-quantitative XRD analysis was used to determine the mineral species of lithium mineralised zones.</p> <p>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.</p> <p>Only crystalline material present in the sample will give peaks in the XRD scan. Amorphous (non-crystalline) material will add to the background. The</p>

		<p>search match software used was Eva 4.3. An up-to-date ICDD card set was used. The X-ray source was cobalt radiation.</p> <p>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.</p> <p>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.</p>
	<p><i>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.</i></p>	<p>Blanks, certified reference material for lithium, and duplicate samples were included in the analytical batches and indicate acceptable levels of accuracy and precision. XRD analyses of 6 mineralised intervals confirms the host lithium minerals as eucryptite and petalite. The high-grade zone is dominantly eucryptite with lower grade intervals containing petalite.</p>
Verification of sampling and assaying	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p>	<p>At least 2 Zenith company personnel have been to the prospect area and observed samples and representative drill chip samples</p>
	<p><i>The use of twinned holes.</i></p>	<p>Nil</p>
	<p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p>	<p>Field data were recorded in a field laptop and then entered into a database.</p>
	<p><i>Discuss any adjustment to assay data.</i></p>	<p>No adjustments were made.</p>
Location of data points	<p><i>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.</i></p>	<p>Sample location is based on GPS coordinates +/- 5m accuracy</p>
	<p><i>Specification of the grid system used.</i></p>	<p>The grid system used to compile data was MGA94 Zone 50</p>
Location of data points – continued	<p><i>Quality and adequacy of topographic control.</i></p>	<p>Topography control is +/- 10m.</p>
	<p><i>Data spacing for reporting of Exploration Results.</i></p>	<p>RC holes drilled at nominal 1km x 1km spacing.</p>

Data spacing and distribution	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 vertical and is close to representing true width thickness of the flat lying gently 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.	<p>Split Rocks exploration and prospecting licences are held by a wholly owned subsidiary of Zenith Minerals Limited.</p> <p>EV Metals Group (EVM) may earn a 60% interest in the lithium rights in two initial 100% owned Zenith projects Waratah Well and Split Rocks by sole funding the completion of a feasibility study within 24 months, with Zenith retaining a 40% project share.</p> <p>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.</p> <p>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</p>

		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. Refer ASX Release 14-Jan-22 for further details.
	<i>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.</i>	Tenements are exploration licences. There are no known impediments to obtaining a licence to operate in the area
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Refer to ASX release 21st March 2019 for details on the background of historic exploration activity.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	Archaean pegmatite hosted lithium.
<i>Drill hole Information</i>	<i>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:</i>	Refer to Figures and Tables in body of text of this ASX release.
	<i>o easting and northing of the drill hole collar</i>	
	<i>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i>	
	<i>o dip and azimuth of the hole</i>	
	<i>o down hole length and interception depth</i>	
	<i>o hole length.</i>	
	<i>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.</i>	
<i>Data aggregation methods</i>	<i>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.</i>	High-grade intersections are length weighted average grades with minimum cut -off grade of 1.0%Li ₂ O and no internal dilution, whilst lower grade intersections are length weighted average grades with minimum cut-off grade of 0.3% Li ₂ O and maximum internal dilution of 2m.
	<i>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.</i>	As above and included in Tables.
<i>Data aggregation</i>	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalents used.

<i>methods - continued</i>		
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Drilling is angled -90 degrees and based on current interpretation is thought to be representing true width thickness of the flat lying pegmatite zones however further drilling is required to confirm this interpretation.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	As above
	<i>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').</i>	Mineralised intervals reported are down-hole lengths but are believed to be close to true thickness
<i>Diagrams</i>	<i>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.</i>	Refer to Figures and Tables in body of text of this ASX release.
<i>Balanced reporting</i>	<i>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.</i>	Refer to Figures and Tables in body of text of this ASX release.
<i>Other substantive exploration data</i>	<i>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.</i>	No other meaningful or material exploration data to be reported at this stage.
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Follow-up drilling in progress.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Refer to figures in body of this report.