

17 July 2023

Drilling completed at Pioneer Dome Lithium Project - Updated

Essential Metals Limited (ASX:ESS) (**Essential** or the **Company**) refers to the ASX announcement uploaded earlier today titled "Drilling completed at Pioneer Dome Lithium Project".

Please note that this announcement is being relodged with the addition of the JORC table at Appendix 2. Please disregard the earlier version of this announcement.

This ASX release has been approved by the Board of Directors.

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Further to its announcement of 8 June 2023, **Essential Metals Limited (ASX: ESS)** advises that the Reverse Circulation (RC) drilling programme designed to test three additional target areas at the Pioneer Dome Lithium Project in WA has now been completed.

No spodumene-bearing pegmatites were intersected (based on visual observation), however the multi-element assays are expected to be available in August and will assist in determining evidence of fractionation of the pegmatites and lithium enrichment.

KEY HIGHLIGHTS

- **South of Heller Deposit (DN_32 Li₂O Target):** Hole PDRC732 intersected two pegmatite lenses, respectively two and four metres thick, from 40m and 44m.
- **PEG003 (Ni sulphide and Li₂O Target):** Traces of sulphides (most commonly pyrite) were observed in all three holes. In PDRC744, two occurrences of trace lepidolite were noted at 20 to 21m (~2% lepidolite) and 27 to 28m (~1% lepidolite) in pegmatite.
- **PEG004 (Li₂O Target):** Trace (<1%) to minor lepidolite (<5%) was observed in multiple holes.

A total of 34 RC drill-holes (2,630m) were completed (see Table 1 for a summary of drilling statistics and Appendix 1 for hole details). The programme tested three lithium targets at Dome North (DN_32, DN_28/DN_30 and DN_04/DN_11) as well as one nickel-lithium target (PEG003) and a lithium target (PEG004) on the eastern flank of Pioneer Dome, as shown in Figure 1.

Table 1: RC drill program statistics.

Target	Location	Number of RC	Metres Drilled
DN_32	South of	10	752
DN_28/DN_30	East of	4	318
DN_04/DN_11	Between	8	480
PEG003	PEG003	3	400
PEG004	PEG004	9	680
TOTALS		34	2,630

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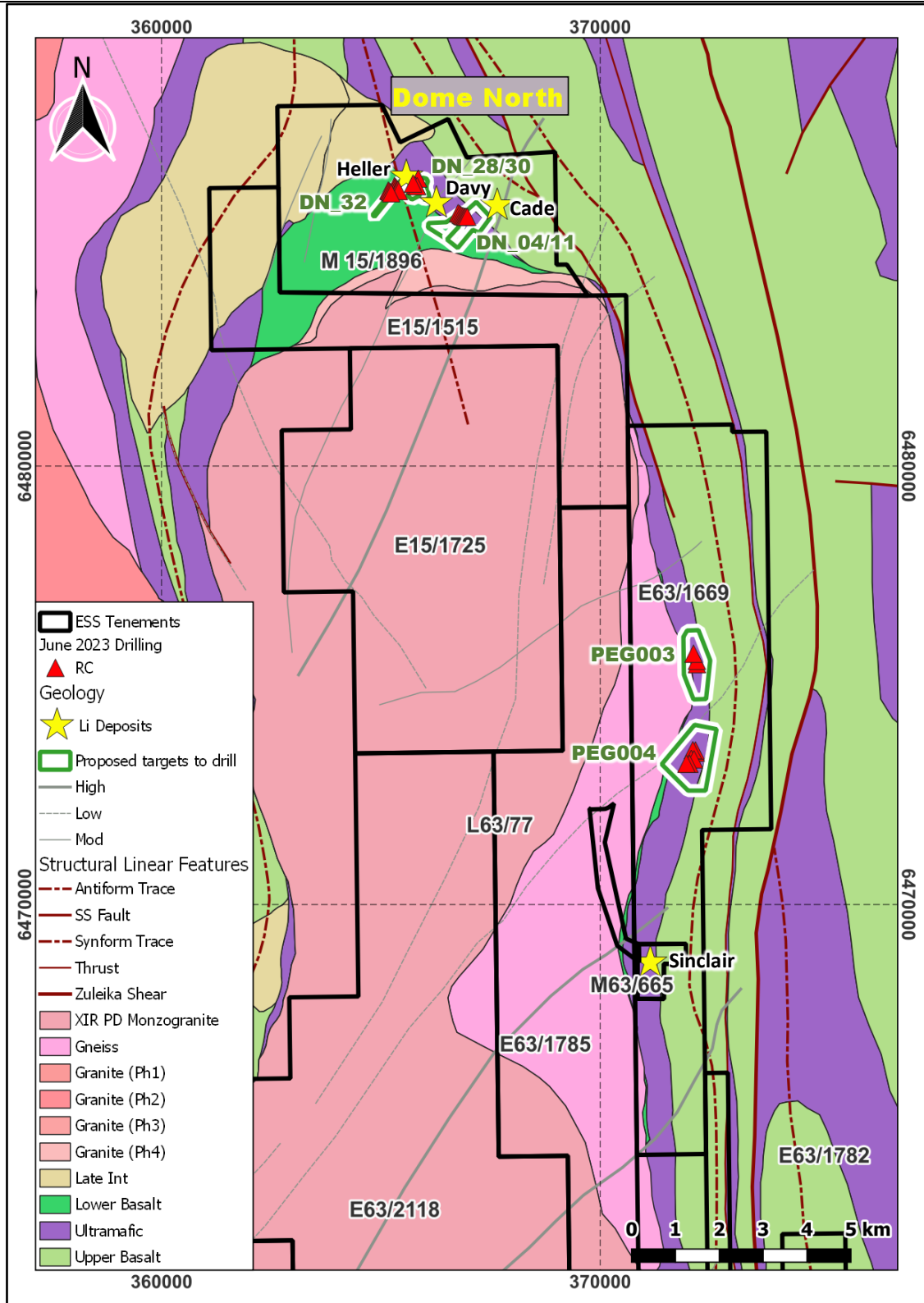


Figure 1: Targets drill tested and interpreted regional geology.

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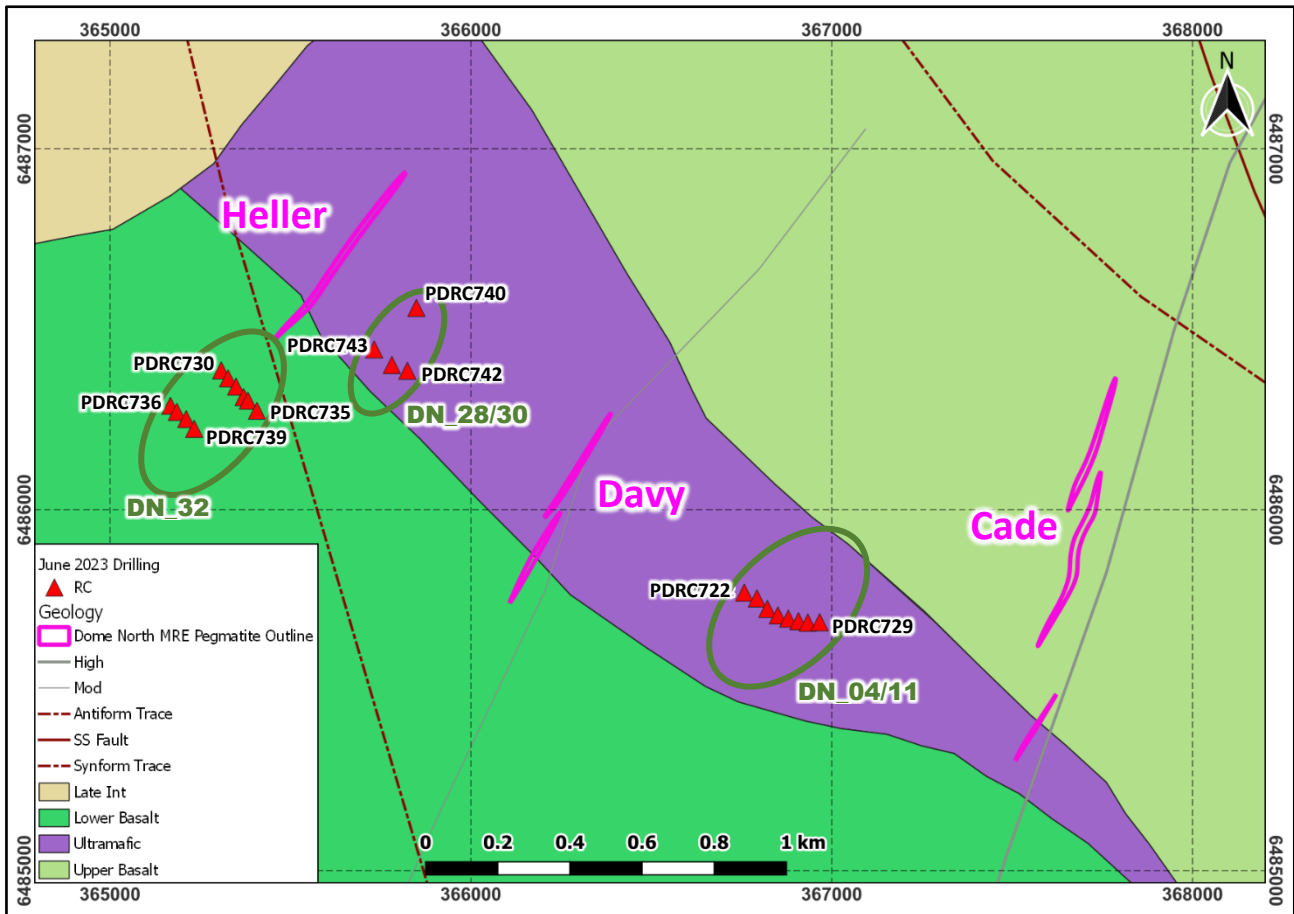


Figure 2: Collar locations of the RC drilling conducted at Dome North with respect to the outlines (yellow) of the known Dome North lithium deposits.

South of Heller – Target DN_32

Ten RC holes (PDRC730 to PDRC739) were drilled, totalling 752m, along the projected strike to the south-west of Heller, see Figure 2.

PDRC730 encountered 6m of granitic pegmatite from 54m and PDRC732 intersected two pegmatite lenses of two and four metres thickness from 40m and 44m. Neighbouring holes were drilled deeper than the nominal 60m to test the down-dip continuation, however these holes did not intersect any pegmatites.

Four holes on the southernmost line were drilled to test the southern strike extension, however no pegmatite was encountered in these holes.

East of Heller – Target DN_28/DN_30

Drilling conducted in July 2021 tested just beyond the north-eastern extent of sub-cropping pegmatite with the results indicating two possible interpretations. The first is that the pegmatite pinched out before the drilling (PDRC531 to PDRC533) and the second is that it is north-west dipping.

Mapping and reconnaissance carried out in late-2022 had identified a poorly exposed north-east trending pegmatite that did not appear to be effectively drill tested. Rock sampling indicates that this pegmatite was moderately to strongly fractionated (K/Rb: 44 to 22) and was lithium enriched (up to 1,134ppm Li₂O).

In the current drill programme, hole PDRC740 encountered two distinct granitic pegmatites at 18m and 58m, respectively. The interpretation is that the previously rock sampled sub-cropping pegmatite is dipping ~30 degrees to the north-west whilst the orientation of the deeper pegmatite is unknown.

A pair of scissor holes ~160m to the south-south-west intersected ~1m pegmatite of simple composition at 22m downhole, on the south-east dipping hole. This indicates that the pegmatite is dipping to the north-west and is potentially thinning to the south.

Between Cade and Davy – Target DN_04/DN_11

Shallow RC drilling conducted in July 2021 confirmed a >50ppm Li-in-regolith anomaly of ~300m wide (PDRC571 to PDRC576) within the lower saprolite position, beneath a maghemite bearing paleochannel. The presence of maghemite in the paleochannel explained the north-north-east trending magnetic feature, however, the source of Li anomalism remained uncertain.

The paleochannel has been interpreted to have eroded a fractured zone that is parallel to the strike of Davy and Cade pegmatites. It was interpreted that a LCT pegmatite could have intruded this interpreted structure, where it is in a dilational setting. Transported cover (up to 20m thick) precluded field mapping, auger, and soil sampling.

Eight RC holes (PDRC722 to PDRC729) were drilled for a total of 480m, see Figure 2. No pegmatite or granitic material was encountered in the drilling that can explain the geochemical anomaly.

Eastern Flank – Target PEG003

Previous RC drilling for LCT exploration identified significant nickel mineralisation (2m @ 3.2% Ni, 0.18% Cu and 132ppm Zn) within the ultramafic above the footwall contact. Conceptually, this could be interpreted as hanging wall mineralisation above a channel position. The low value of zinc (132ppm) indicates that the nickel is not related to an interflow sediment. Holes were planned to test the footwall contact of the ultramafic with the underlying basalt, which is the main nickel sulphide position for the Kambalda and Widgiemooltha deposits.

Three RC holes (PDRC744 to PDRC746 – see Figure 5) were drilled for a total of 400m. No massive sulphides were encountered with abundant sulphides noted in hole PDRC744 from 69 to 70m (~5%) and PDRC746 from 81 to 82m (~10%). Traces of sulphides (most commonly pyrite) were present throughout the holes.

In hole PDRC744, two occurrences of trace lepidolite were noted at 20 to 21m (~2% lepidolite) and 27 to 28m (~1% lepidolite).

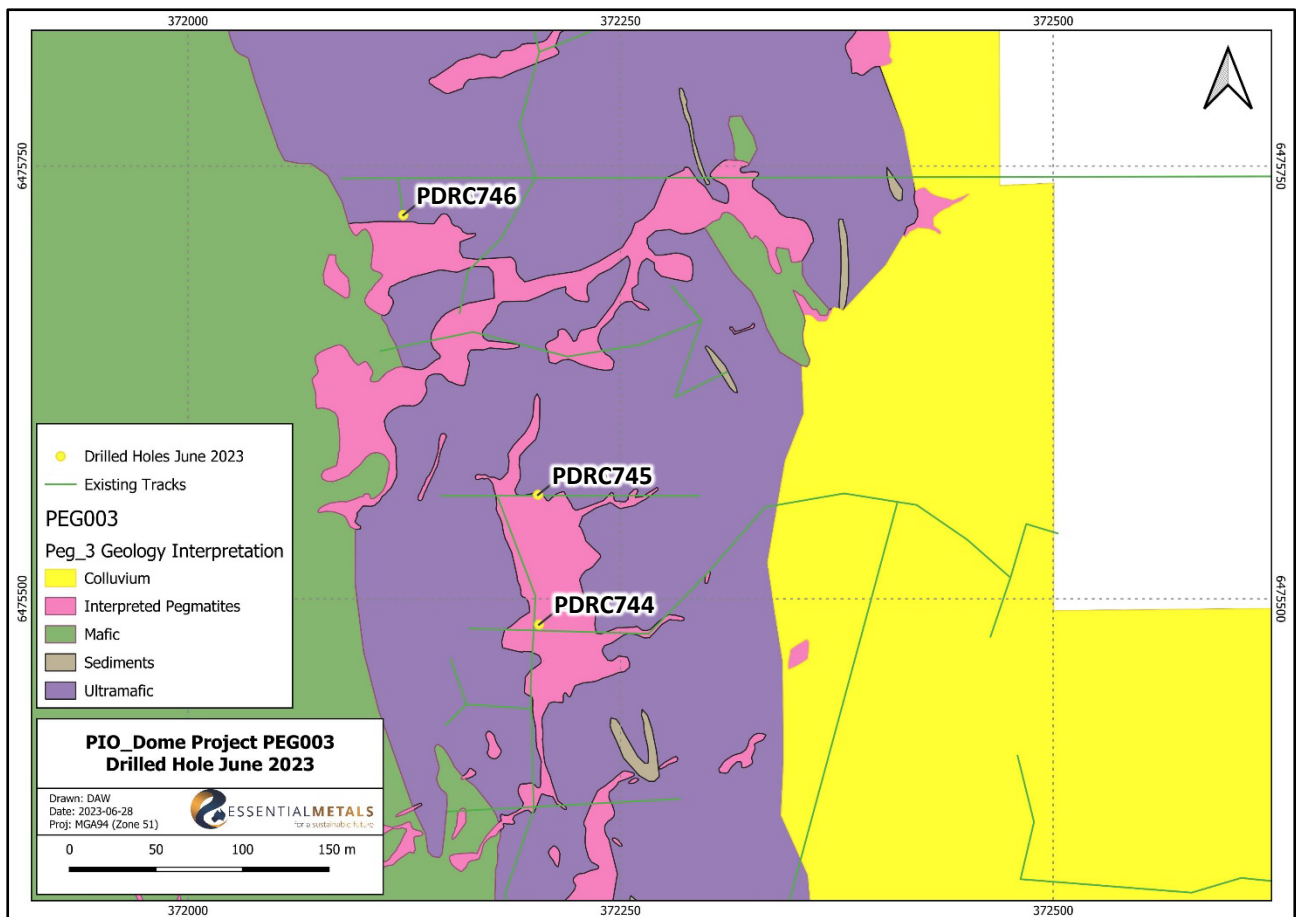


Figure 3: PEG003 RC holes drilled in June 2023 on interpreted geology.

Eastern Flank – Target PEG004

Previous mapping identified a north trending lepidolite zone with selective rock samples returning values up to 2.77% Li_2O , that had not been previously drilled. Additional field work in late-2022 sampled available pegmatitic drill spoils from nickel exploration holes conducted in the 1990's and the assays inferred an increasing fractionation (K/Rb: 89 to 60) southwards with an accompanied increase in lithium values. This potentially indicated more fractionated, and lithium enriched pegmatites present to the south under a thin veneer of transported cover.

The drilling was planned to assist in determining the thickness and orientation of the lepidolite bearing pegmatite as well as understanding the thickness and zonation of pegmatites associated with the drill spoils.

Nine RC holes (PDR747 to PDR755) were drilled totalling 680m, see Figure 6. East-West oriented scissor holes (PDR748-PDR753) defined two to four metres wide pegmatites on the western holes, indicating that the lepidolite bearing pegmatite is dipping ~45 degrees to the west (Figure 7) with a strike length over 200m. Approximately 10% lepidolite was noted in PDR752 from 29 to 31m (downhole).

Hole PDR747 that was drilled in a southward direction adjacent to the aforementioned lepidolite bearing pegmatite. It intersected the pegmatite from 27m to 33m with trace lepidolite observed from 30-31m (~2%), as well as the interpreted east-west trending pegmatite from 43m to 110m. Assay results are awaited to determinate fractionation and LCT enrichment.

The western hole (PDR755) of the most southern scissor pair encountered 66m thick granitic pegmatite from surface.

In hole PDR754, two pegmatites were noted with the first one 6m wide from three metres (down-hole) and the second one was 12m thick from 59m (downhole). No lithium minerals were identified within these pegmatites.

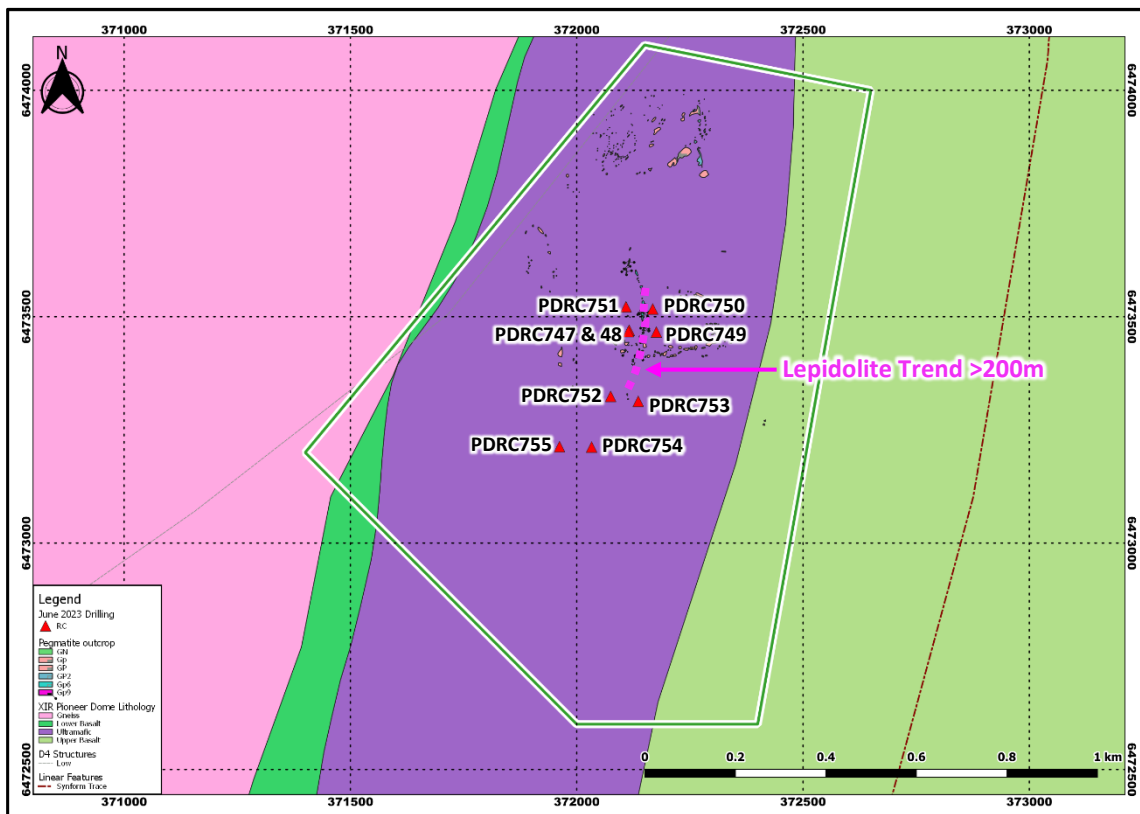


Figure 4: RC holes drilled in June 2023 with interpreted Lepidolite bearing pegmatite.

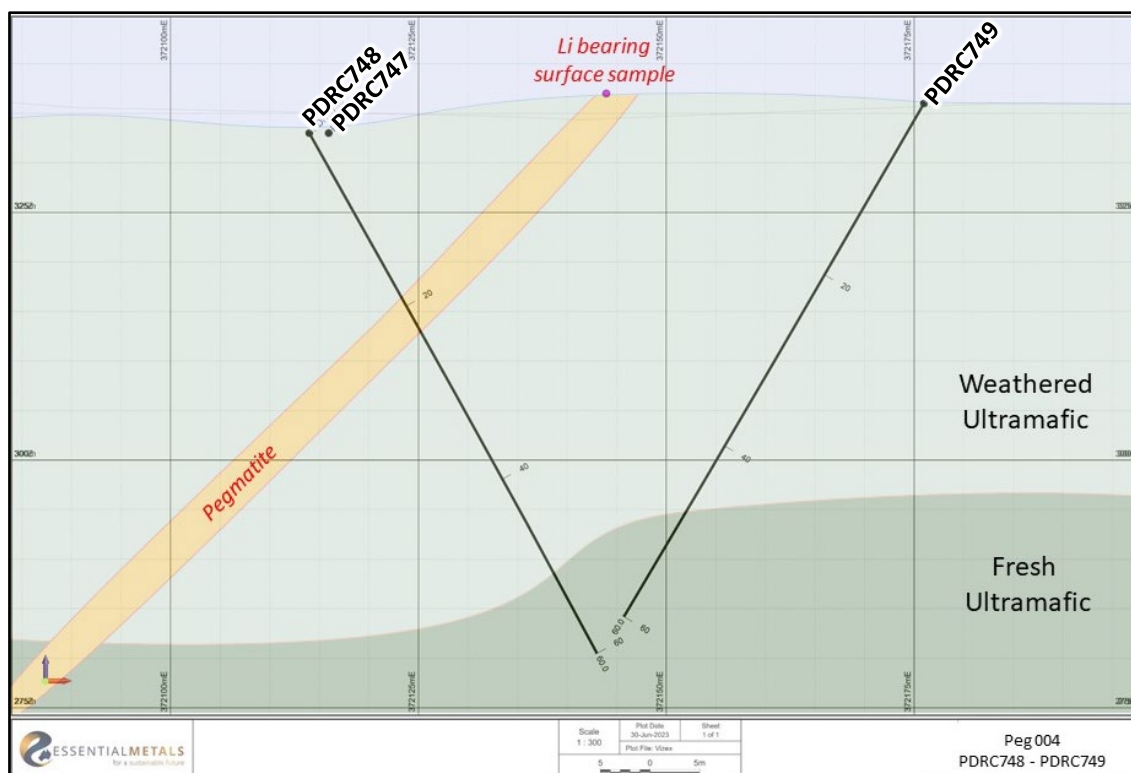


Figure 5: Cross-section (looking north) of PDR748 and PDR749. Note that in PDR748 a 3m wide pegmatite was encountered and it is interpreted to dip ~45 degrees to the west within ultramafic package.

NEXT STEPS

- Receipt of multi element assays for the drill programme and interpretation of the results.
- Drill planning to obtain samples for further metallurgical test work.
- Water exploration drilling for future processing water sources.

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PIONEER DOME LITHIUM PROJECT

The 450km² Pioneer Dome Project (ESS: 100%) is in the core of Western Australia’s lithium corridor in the Eastern Goldfields, approximately 130km south of Kalgoorlie and 275km north of the Port of Esperance. A Mineral Resource¹ of 11.2Mt @ 1.16% Li₂O has been defined at Dome North in the northern area of the Project. The southern Yilgarn area is recognised as being well-endowed with spodumene deposits, including Pioneer Dome, the Bald Hill Mine, the Mt Marion Mine, the Manna Project and the Buldania Project – all of which are located within a 90km radius. The world-class Greenbushes Deposit, the Mt Holland Mine and the Mt Cattlin Mine are located further west, south-west and south-south-west, respectively.

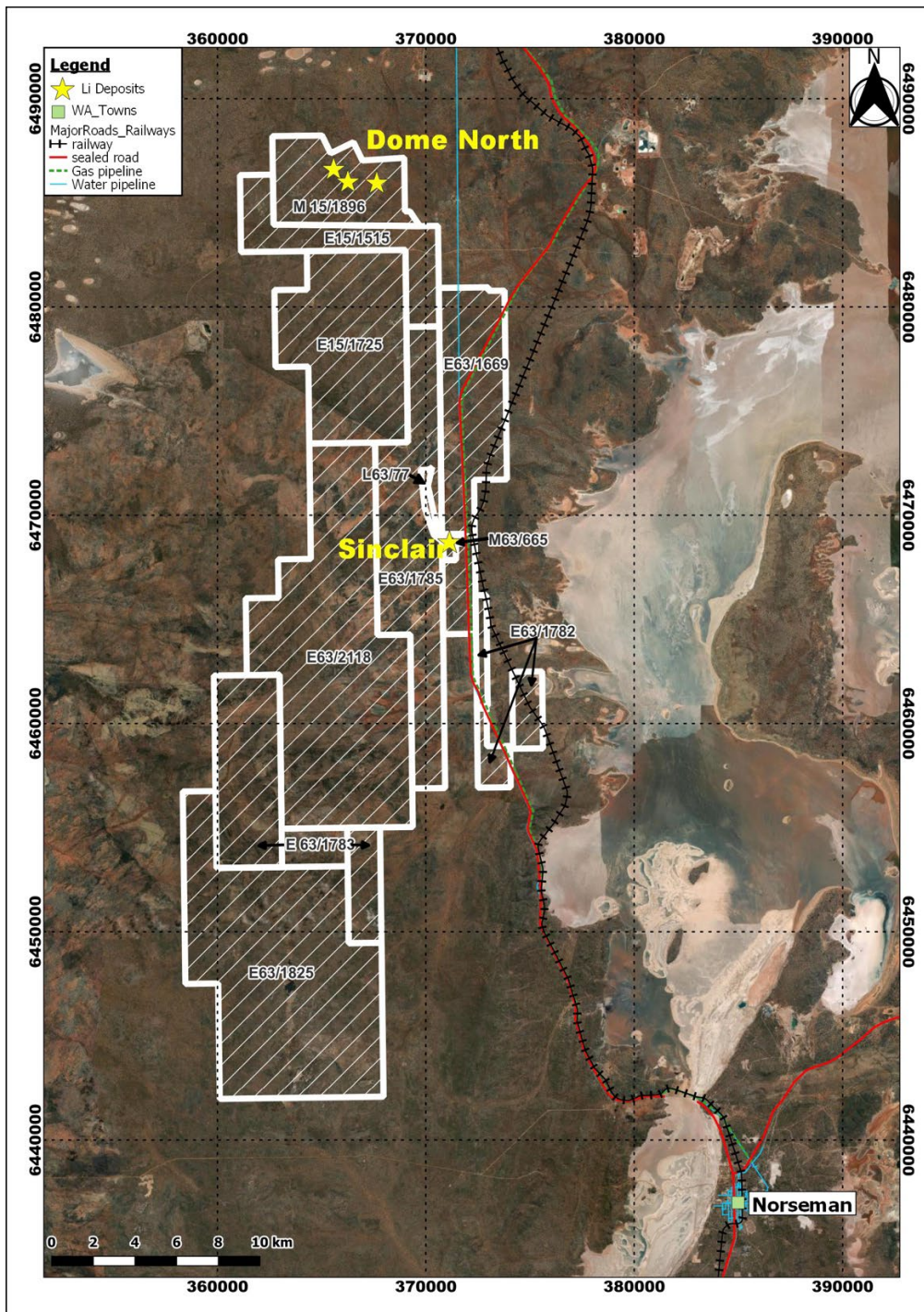


Figure 6 – Pioneer Dome Lithium Project lithium deposits, tenements and major infrastructure.

¹ Refer ASX:ESS announcement 20 December 2022 “Dome North Resource upgrade”

ABOUT ESSENTIAL METALS LIMITED

Essential Metals is a well-funded and active explorer/developer focussed on the discovery of lithium and other key global demand-driven commodities, for the creation of shareholder wealth through exploration and project development. The Company operates three strategically located lithium and gold projects in Western Australia.

100% OWNED AND MANAGED PROJECTS:

- **LITHIUM:** The **Pioneer Dome Lithium Project** is highly prospective for lithium-caesium-tantalum (LCT) mineral systems and includes the **Dome North Lithium Mineral Resource** of 11.2 million tonnes @ 1.16% lithium (Li₂O) including 8.7 million tonnes @ 1.23% lithium (Li₂O) within the Indicated Category.²
- **GOLD:** The **Juglah Dome Project** is located 60km east-south-east of Kalgoorlie and is highly prospective for gold and has potential for VHMS style polymetallic deposits.
- **GOLD:** The **Golden Ridge Project** is located ~20km south-east of Kalgoorlie, WA. Our activities are focussed on reappraising known prospects as well as identifying new areas within the large land tenure.

JOINT VENTURE INTERESTS:

- **GOLD:** The **Acra Project** is near Kalgoorlie. Northern Star Resources Limited (ASX:NST) has earned a 75% Project Interest and continues to fully fund exploration programmes until approval of a Mining Proposal by DMIRS is received with Essential Metals holding a 25% interest.
- **GOLD:** The **Kangan Project** is in the West Pilbara and part of a joint venture with Novo Resources Corp (TSXV:NVO), who will fund 100% of gold exploration programmes until a decision to mine is made, with Essential Metals holding a 30% interest in precious metals and 100% of all other minerals.
- **GOLD:** The **Balagundi Project** is subject to a farmin & JV agreement where Black Cat Syndicate Limited (ASX:BC8) is earning a 75% interest in the Project located at Bulong, near Kalgoorlie. Black Cat will then fully fund exploration programmes until completion of a bankable feasibility study with Essential Metals retaining a 25% interest in all minerals.
- **GOLD:** The Company holds a 25% interest, free-carried interest up to a decision to mine, in all minerals except 20% for nickel rights in the **Larkinville Project** near Kambalda, WA, with Maximus Resources Ltd (ASX:MXR).
- **NICKEL:** The nickel mineral rights on the **Blair-Golden Ridge Project**, which includes the suspended Blair Nickel Sulphide Mine, are subject to a Farmin/Joint Venture with Australian Nickel Company Ltd, a nickel exploration specialist which is earning up to a 75% interest. The Company will retain a 25% interest, free-carried interest up to a decision to mine.
- **NICKEL:** The Company holds a 20% (nickel only) interest, free-carried to a completion of a feasibility study which recommends that commercial mining operations be commenced, in the **Wattle Dam project** near Kambalda, WA, with Maximus Resources Ltd (ASX:MXR).
- **NICKEL:** The Company holds a 20% interest, free carried up to completion of a feasibility study which recommends the establishment of a mining area, in the **Maggie Hays project** near Lake Johnson, WA, with Poseidon Nickel Ltd (ASX:POS).

² Refer ASX announcement 20 December 2022 "Dome North Resource upgrade".

Forward Looking Statement

This announcement may contain forward-looking statements which involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

Reference to previous market announcements

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The company confirms that the form and context in which Exploration Results or Competent Person's findings are presented have not been materially modified from the original market announcements.

Exploration Results – Competent Person Statement

Mr Andrew Dunn (MAIG) holds the position of Exploration Manager and is employed full-time by Essential Metals Limited. Mr Dunn is eligible to receive equity-based securities in Essential Metals Limited under the Company's employee incentive schemes. Mr Dunn compiled the technical aspects of this Announcement pertaining to Exploration Results, which is based on and fairly represents information compiled by Mr Dunn. Mr Dunn is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to this style of mineralisation and type of deposit under consideration and to the activity that is being reported on 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 Dunn consents to the inclusion in the report of the matters in the form and context in which it appears.

Dome North Lithium Mineral Resource – Competent Person Statement

The information in this report that relates to the Dome North Lithium Project Mineral Resource is based on information compiled by Mr Andrew Dunn (Exploration Manager and permanent employee of Essential Metals Limited) and Mr Lauritz Barnes (consultant with Trepanier Pty Ltd). Mr Dunn is eligible to receive equity-based securities in Essential Metals Limited under the Company's employee incentive schemes. Mr Dunn and Mr Barnes are both members of the Australian Institute of Geoscientists. Mr Dunn and Mr Barnes both have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Dunn is the Competent Person for the database (including all drilling information), the geological and mineralisation models plus completed the site visits. Mr Barnes is the Competent Person for the construction of the 3-D geology / mineralisation model plus the estimation. Mr Dunn and Mr Barnes consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

Dome North Mineral Resource by deposit and category: (0.3% Li₂O cut-off grade)

Deposit	Classification	Tonnes (Mt)	Li₂O %	Ta₂O₅ ppm	Contained Li₂O (T)	Fe₂O₃ %
Cade	Indicated	6.9	1.26	49	88,000	0.44
	Inferred	1.3	0.88	49	11,000	0.44
Davy	Indicated	1.6	1.08	81	18,000	0.54
	Inferred	0.6	0.89	73	4,000	0.58
Heller	Inferred	0.7	1.02	76	8,000	0.72
Total	Total	11.2	1.16	57	129,000	0.48

Note: Appropriate rounding applied.

**Appendix 1 – Hole Details for June 2023 RC Drilling**

Target	Hole_ID	Hole Type	Max Depth (m)	MGA94 Zone 51 Easting	MGA94 Zone 51 Northing	RL	Azimuth	Dip
DN_04/11	PDRC722	RC	60	366758	6485770	356	290	-60
DN_04/11	PDRC723	RC	60	366793	6485754	337	290	-60
DN_04/11	PDRC724	RC	60	366822	6485725	339	290	-60
DN_04/11	PDRC725	RC	60	366851	6485707	342	290	-60
DN_04/11	PDRC726	RC	60	366880	6485698	333	290	-60
DN_04/11	PDRC727	RC	60	366908	6485691	336	293	-60
DN_04/11	PDRC728	RC	60	366934	6485687	335	290	-60
DN_04/11	PDRC729	RC	60	366967	6485688	336	293	-58
DN_32	PDRC730	RC	72	365308	6486386	340	315	-60
DN_32	PDRC731	RC	140	365327	6486364	353	317	-61
DN_32	PDRC732	RC	60	365349	6486341	350	315	-60
DN_32	PDRC733	RC	120	365370	6486312	351	317	-60
DN_32	PDRC734	RC	60	365382	6486302	351	315	-60
DN_32	PDRC735	RC	60	365407	6486274	348	315	-60
DN_32	PDRC736	RC	60	365167	6486288	346	315	-60
DN_32	PDRC737	RC	60	365185	6486271	346	319	-59
DN_32	PDRC738	RC	60	365211	6486251	349	315	-60
DN_32	PDRC739	RC	60	365233	6486224	349	315	-60
DN28/30	PDRC740	RC	66	365849	6486559	352	120	-60
DN28/30	PDRC741	RC	72	365781	6486401	355	120	-60
DN28/30	PDRC742	RC	60	365824	6486385	364	300	-60
DN28/30	PDRC743	RC	120	365732	6486444	368	116	-61
PEG003	PDRC744	RC	120	372203	6475485	341	270	-60
PEG003	PDRC745	RC	120	372202	6475560	349	271	-61
PEG003	PDRC746	RC	160	372124	6475722	351	273	-60
PEG004	PDRC747	RC	120	372116	6473470	338	179	-60
PEG004	PDRC748	RC	60	372114	6473467	337	90	-61
PEG004	PDRC749	RC	60	372176	6473466	332	270	-60
PEG004	PDRC750	RC	60	372168	6473517	339	270	-60
PEG004	PDRC751	RC	60	372109	6473522	336	89	-60
PEG004	PDRC752	RC	60	372075	6473324	329	92	-60
PEG004	PDRC753	RC	60	372136	6473313	327	272	-61
PEG004	PDRC754	RC	100	372033	6473212	326	267	-60
PEG004	PDRC755	RC	100	371962	6473213	331	90	-61

Appendix 2

JORC Code 2012 Table 1 Section 1 – Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut Faces, 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. 	<ul style="list-style-type: none"> Industry-standard reverse circulation drilling with a face-sampling hammer was used to collect the sample.
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<ul style="list-style-type: none"> The rig had sufficient air pressure and volume to keep the majority of samples dry, however, any wet samples were recorded. All of the reported significant intersection were dry samples. Where pegmatites were expected to be intersected near existing mineralised ones then individual one metre samples were collected using a cyclone and a cone splitter into sub samples of nominal 3.0kg weight. The cyclone was cleaned regularly to minimise contamination. Duplicate samples and Certified Reference Standards were inserted at regular intervals to provide quality checks for assays. The standards and duplicates associated with the reported intersections are within acceptable limits.
	<ul style="list-style-type: none"> 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Reverse circulation drilling was used to obtain 1 m samples for pegmatites intersected near existing mineralised ones and they were sub-sampled by a rig mounted cone splitter to produce a nominal 3.0 kg samples. Else, three-metre composite samples for intervals using an aluminium scoop from the sample piles to produce a nominal 3.0 kg samples. These samples are to crushed and pulverised by pulp mill to nominal P80/75um to produce a pulverised sample for analysis. Lithium exploration package of elements will be digested by a four-acid digestion and determined with a Mass Spectrometer (Intertek analysis code 4A Li48-MS). Any over range Li values will be re-analysed by a sodium peroxide zirconium crucible fusion with Mass Spectrometry (MS) finish.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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). 	<ul style="list-style-type: none"> Reverse Circulation Drilling. <ul style="list-style-type: none"> 4.5-inch (114mm) drill rods. 5-inch (127mm) diameter face-sampling hammer.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. 	<ul style="list-style-type: none"> During RC drilling the geologist recorded occasions when sample quality was poor, sample return was low, when the sample was wet or compromised in another way.
	<ul style="list-style-type: none"> Measures taken to maximise sample recovery and ensure representative nature of the samples. 	<ul style="list-style-type: none"> Sample recovery was good during the drilling.

	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No assays have been received.
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Geological information was captured during drilling. This included lithology, mineralogy, alteration, texture, recovery, weathering and colour. The details captured were considered appropriate.
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, Face, etc) photography. 	<ul style="list-style-type: none"> Logging has primarily been qualitative, but it includes quantitative estimates of mineral abundance. A representative sample of each RC drill metre was sieved and retained in chip trays for future reference.
	<ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> The entire length of the drill holes was geologically logged.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	<ul style="list-style-type: none"> RC drilling - For pegmatites intersected, individual one metre samples were collected via a rig mounted cone splitter. All samples were dry. Individual samples were approximately 3kg. Three metre composites were collected for the remainder of the drill holes. This involved representative scoop composites from the sample piles. The sample collection, sampling and sub-sampling is considered standard industry practise for the exploration stage of project.
	<ul style="list-style-type: none"> Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	<ul style="list-style-type: none"> Cyclones are routinely cleaned. Geologist recorded any evidence of sample contamination, when present. Geologist observed and recorded sample recoveries to track representivity.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Duplicate field samples were routinely taken at a rate of 1 per 30 samples for RC drilling. Assays have yet to be returned.
	<ul style="list-style-type: none"> Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> The sample size is considered appropriate for the style of deposit being sampled.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	<ul style="list-style-type: none"> The sample preparation and assay method used is considered standard industry practice and is appropriate for the deposit.
	<ul style="list-style-type: none"> For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 	<ul style="list-style-type: none"> NA
	<ul style="list-style-type: none"> Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Standard Reference Materials were inserted at a rate of 1 per 30 samples. Duplicate field samples were routinely taken at a rate of 1 per 30 samples for RC drilling. Assays are yet to be returned.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	<ul style="list-style-type: none"> N/A.

	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	<ul style="list-style-type: none"> The geological and sampling information were collected in MDS software, validated in Micromine and then uploaded to the Company's SQL drilling database.
	<ul style="list-style-type: none"> Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> The assays are yet to be returned.
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The collar locations of the holes have been surveyed by handheld GPS.
	<ul style="list-style-type: none"> Specification of the grid system used. 	<ul style="list-style-type: none"> MGA94 (Zone 51)
	<ul style="list-style-type: none"> Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> SRTM was used to validate the RL. This is sufficient for the exploration holes. Any holes to be used in MRE will be surveyed by differential GPS.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 	<ul style="list-style-type: none"> Drill spacing was variable due to the different objectives, it ranged from 80 to 300m spaced panels with drill holes 40 to 80m apart.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All drilling was exploratory in nature and hence drilling is insufficient to establish geological continuity.
	<ul style="list-style-type: none"> Whether sample compositing has been applied. 	<ul style="list-style-type: none"> N/A.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<ul style="list-style-type: none"> Down hole intercept widths are estimated to closely approximate true widths based on the interpretation of the pegmatite bodies and the orientation of the drilling.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> The Company uses standard industry practices when collecting, transporting and storing samples for analysis. Drilling pulps are retained by the Company off site.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Sampling techniques for assays have not been specifically audited but follow common practice in the Western Australian exploration industry. Assay data and quality control samples are periodically audited by an independent consultant.

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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> The drilling reported herein is entirely within M15/1896 and E63/1669. The tenements are located approximately 40-60km north of Norseman, WA. The Company is the registered holder of the tenements and holds a 100% unencumbered interest in all minerals within the tenement. The tenement is on vacant crown land. The Ngadju Native Title Claimant Group has a determined Native Title Claim which covers the Pioneer Dome project.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> At the time of this report M15/1896 and E63/1669 are in Good Standing. To the best of the Company's knowledge, other than industry standard permits to operate there are no impediments to Company's operations within the tenements.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> There has been no previous LCT exploration drilling or sampling on the Pioneer Dome project other than that carried out by the Company. Previous mapping by the Western Australian Geological Survey and Western Mining Corporation (WMC) in the 1970's identified several pegmatite intrusions, however, these were not systematically explored for Lithium.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Project pegmatites are consistent with records of highly differentiated Lithium Caesium Tantalum (LCT) pegmatite intrusion. This type of pegmatite intrusions are the target intrusions of hard rock lithium deposits. The Dome North deposits are classified as a Spodumene sub type and is highly enriched in Lithium.
Drill hole Information	<ul style="list-style-type: none"> 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, including easting and northing of the drill hole collar, elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth plus 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. 	<ul style="list-style-type: none"> Refer to Appendix 1 of this announcement.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should 	<ul style="list-style-type: none"> N/A



	<p><i>be stated and some typical examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none">• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none">• <i>These relationships are particularly important in the reporting of Exploration Results.</i>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	<ul style="list-style-type: none">• N/A
<i>Diagrams</i>	<ul style="list-style-type: none">• <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>	<ul style="list-style-type: none">• Refer to figures in this report.
<i>Balanced reporting</i>	<ul style="list-style-type: none">• <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>	<ul style="list-style-type: none">• All of the drill details for the latest drill programme have been provided in this announcement.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none">• <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>	<ul style="list-style-type: none">• All meaningful and material exploration data has been reported.
<i>Further work</i>	<ul style="list-style-type: none">• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>• <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>	<ul style="list-style-type: none">• Interpret remaining assay results when they have been received.