



ESSENTIAL METALS

for a sustainable future

3 November 2021

Diamond drilling programme underway at Dome North Lithium Project

Drilling designed to infill Dome North Resource and to provide additional metallurgical samples for the Davy and Cade Deposits

HIGHLIGHTS

- A new ~1,000m diamond drilling programme is due to start this week in the Dome North area to target near-surface (oxide/transition) mineralisation at both the Cade and Davy deposits to obtain samples for bulk density measurements and for confirmatory metallurgical test work.
- Final assay results received from the August 2021 Reverse Circulation (RC) drilling programme, which has provided important new data in and around the Dome North Resource that will be used to further target mineralised pegmatites in that area.
- Previously reported results from August RC drilling programme included the following excellent intersections in the upper zone of the **Cade Deposit**¹:
 - **21m @ 1.08% Li₂O from surface** (PDRC589)
 - **24m @ 1.29% Li₂O from surface** (PDRC590)
 - **15m @ 1.06% Li₂O from 47m** (PDRC591)
 - **26m @ 1.46% Li₂O from 51m** (PDRC592)

Essential Metals Managing Director, Tim Spencer, said: *"The RC drill programme completed in August has been pivotal in demonstrating the quality of the Dome North Resource, with evidence that unweathered spodumene mineralisation exists very close to the surface. It has also provided information that will be very useful in targeting new mineralised pegmatites in the vicinity of the current lithium Resource."*

"With all assay results from this programme integrated into the geological model, we have a new round of diamond drilling about to start to provide further confidence in the Dome North Resource in terms of the metallurgical characteristics in the upper zones of the Cade and Davy deposits, as well as increasing the amount of lithium within the Indicated Resource category."

¹ Refer ASX announcement 15 October 2021 – High grade assay results from Cade Deposit

ASX Code: ESS

Corporate Profile

Shares on issue: 240,839,974
Cash: \$9m (30 Sep 2021)
Debt: Nil

KEY PROJECTS

LITHIUM Pioneer Dome
GOLD Golden Ridge
GOLD Juglah Dome

Joint Ventures (ESS %)

1x lithium project (51%)*
2x nickel projects (20-25%)**
4x gold projects (25-30%)**
*Sale is subject to an option agreement
** Free carried to a decision to mine

Corporate Directory

Non-Executive Chairman
Craig McGown

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PIONEER DOME LITHIUM PROJECT

The Pioneer Dome Project (ESS: 100%) is located 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 Resource² of 11.2Mt @ 1.21% 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 the Bald Hill Mine, the Mt Marion Mine and the Buldania Project. 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.

DIAMOND HOLE DRILL PROGRAMME

A ~1,000m diamond drilling programme has commenced within the Dome North area of the Pioneer Dome Lithium Project (Figure 1) and is expected to be completed by mid-December.

This programme follows on from the 5,934m Reverse Circulation (RC) drill programme completed in August, for which all assays have now been received.

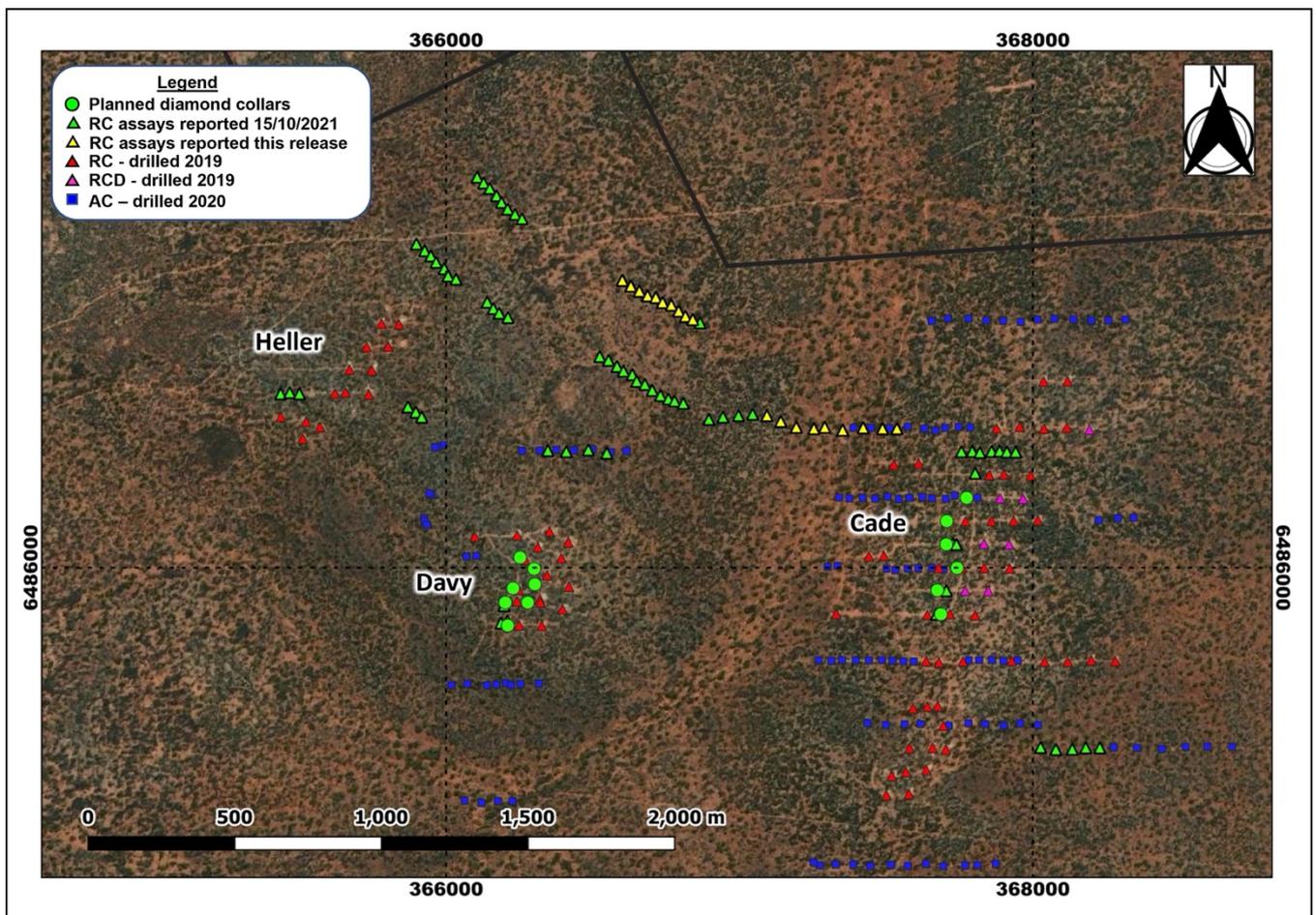


Figure 1 – Plan view of the Dome North area with the planned diamond holes shown as green circles.

² Refer ASX announcement 29 September 2020 – Dome North Resource upgrade



The two main objectives of the diamond drilling programme are:

1. Increase confidence in the Lithium Resource by converting areas across the upper zones of the Cade and Davy deposits from the Inferred to Indicated Resource categories by infill drilling and by measuring the bulk density of the upper zone material.
2. Use samples from drill core to conduct confirmatory metallurgical test work. Previous test work was conducted on fresh rock samples from the Cade Deposit, so this programme will focus on confirming that the upper zone at Cade has similar metallurgical characteristics. Test work will also be conducted on core from the Davy Deposit, including three diamond holes drilled into the fresh rock position of the Davy pegmatite.

The programme will comprise 13 holes totalling approximately 1,000m.

Subject to laboratory workloads and the upcoming end-of-year holiday period, assays are anticipated to be received in March 2022. Once the assays have been received, intervals from the drill core will be selected for metallurgical test work, with the test work expected to take 6 – 8 weeks.

In parallel, work is continuing on transitioning the Dome North area to a 'development ready' status. This includes applying for a Mining Lease and conducting various environmental and hydrology studies as well as obtaining up to date capital and operating cost parameters.

AUGUST DRILL PROGRAMME – ALL ASSAY RESULTS NOW RECEIVED

The 5,934m Reverse Circulation (RC) drill programme within the Dome North area at the Pioneer Dome Project was completed in late August. As announced on 15 October³, four RC holes drilled in the upper zone of the Cade Deposit returned broad high-grade intercepts, with highlights of:

- **21m @ 1.08% Li₂O from surface** (PDRC589)
- **24m @ 1.29% Li₂O from surface** (PDRC590)
- **15m @ 1.06% Li₂O from 47m** (PDRC591)
- **26m @ 1.46% Li₂O from 51m** (PDRC592)

Also, hole PDRC519, located at the southern end of the Davy deposit, returned encouraging assays of:

- **7m @ 1.02% Li₂O from 21m**, including 3m @ 1.44% Li₂O; and
- **9m @ 0.62% Li₂O from 42m**

All remaining assays have now been received from this programme, with no additional significant intersections (>0.5% Li₂O) returned. However, a full interpretation of the drill results is required to understand the presence of any near misses or further opportunities around the Cade, Davy and Heller spodumene deposits.

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

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³ Refer ASX announcement 15 October 2021 – High grade assay results from Cade Deposit



ABOUT ESSENTIAL METALS LIMITED

Essential Metals is a well-funded and active explorer focussed on the discovery of 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 @ 1.21% lithium (Li₂O).⁴
- **GOLD:** The **Juglah Dome Project** is located 60km east-south-east of Kalgoorlie and is considered to be 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:

- **LITHIUM:** The Company holds a 51% Project interest in the **Mavis Lake** Project, Ontario, Canada where drilling has intersected spodumene (now subject to a sale option agreement with Critical Resources Limited – refer ASX announcement 25 October 2021).
- **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) and Sumitomo Corporation (TYO:8053), who will jointly fund 100% of gold exploration programmes until a decision to mine is made, with Essential Metals holding a 30% interest.
- **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 gold exploration programmes until a decision to mine is made, with Essential Metals retaining a 25% interest.
- **GOLD:** The Company holds a 25% free-carried interest (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 Crest Investment Group, a nickel exploration specialist which is earning up to a 75% interest. The Company will retain a 25% free-carried interest up to a decision to mine.
- **NICKEL:** The Company holds a 20% free-carried interest (nickel only) in the **Wattle Dam** project near Kambalda, WA, with Maximus Resources Ltd (ASX:MXR).

⁴ Refer to ASX announcement dated 29 September 2020 “Dome North Lithium Project – 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 Work - Competent Person Statement

Mr Andrew Dunn (MAIG), Exploration Manager who is employed full-time by Essential Metals Limited, compiled the technical aspects of this Report. Mr Dunn is eligible to receive equity-based securities in Essential Metals Limited under the Company's employee incentive schemes. Mr Dunn is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to this style of mineralization 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.



Table 1 – Significant intersections returned to date from the Dome North RC drilling*.

Area	Hole ID	MGA94_z51 East	MGA94_z51 North	RL	Dip	Azimuth	Hole Depth (m)	From (m)	To (m)	Width	Li ₂ O%
Cade East	PDRC501	368027	6485382	342	-60	270	62				NSA
Cade East	PDRC502	368079	6485375	340	-60	270	98				NSA
Cade East	PDRC503	368135	6485376	339	-60	270	90				NSA
Cade East	PDRC504	368181	6485381	337	-60	270	90				NSA
Cade East	PDRC505	368229	6485381	339	-60	270	90				NSA
Cade North	PDRC506	367757	6486399	335	-60	270	60				NSA
Cade North	PDRC507	367794	6486400	337	-60	270	60				NSA
Cade North	PDRC508	367820	6486396	339	-60	270	60				NSA
Cade North	PDRC509	367860	6486400	340	-60	270	66				NSA
Cade North	PDRC510	367887	6486401	340	-60	270	60				NSA
Cade North	PDRC511	367912	6486398	340	-60	270	60				NSA
Cade North	PDRC512	367942	6486398	338	-60	270	60				NSA
Davy	PDRC513	366524	6486726	342	-60	300	60				NSA
Davy	PDRC514	366554	6486713	341	-60	300	60				NSA
Davy	PDRC515	366583	6486692	342	-60	300	60				NSA
Davy	PDRC516	366605	6486676	342	-60	300	60				NSA
Davy	PDRC517	366635	6486664	343	-60	300	60				NSA
Davy	PDRC518	366187	6485810	347	-60	250	78				NSA
Davy	PDRC519	366209	6485817	338	-60	270	78	21	28	7	1.02
							Including	24	27	3	1.44
								42	51	9	0.62
DN_21 & 6	PDRC520	363651	6485243	377	-60	20	60				NSA
DN_21 & 6	PDRC521	363639	6485222	374	-60	15	54				NSA
DN_21 & 6	PDRC522	363627	6485193	372	-60	15	48				NSA
DN_21 & 6	PDRC523	363615	6485166	372	-60	15	48				NSA
DN_21 & 6	PDRC524	364186	6485059	364	-60	20	60				NSA
DN_21 & 6	PDRC525	364167	6485026	364	-60	20	60				NSA
DN_21 & 6	PDRC526	364155	6485001	365	-60	20	60				NSA
DN_21 & 6	PDRC527	364147	6484971	365	-60	20	60				NSA
Heller	PDRC528	365436	6486598	360	-60	270	60				NSA
Heller	PDRC529	365467	6486602	360	-60	270	60				NSA
Heller	PDRC530	365500	6486598	360	-60	270	60				NSA
Heller	PDRC531	365870	6486553	359	-60	310	60				NSA
Heller	PDRC532	365897	6486535	360	-60	310	60				NSA



Area	Hole ID	MGA94_z51 East	MGA94_z51 North	RL	Dip	Azimuth	Hole Depth (m)	From (m)	To (m)	Width	Li ₂ O%
Heller	PDRC533	365917	6486518	359	-60	310	60				NSA
Heller	PDRC534	365899	6487113	348	-60	310	78				NSA
Heller	PDRC535	365927	6487090	348	-60	310	60				NSA
Heller	PDRC536	365948	6487072	348	-60	310	60				NSA
Heller	PDRC537	365966	6487050	349	-60	310	60				NSA
Heller	PDRC538	365994	6487028	349	-60	310	60				NSA
Heller	PDRC539	366007	6487003	348	-60	310	60				NSA
Heller	PDRC540	366034	6486992	347	-60	310	60				NSA
Heller	PDRC541	366140	6486913	347	-60	310	60				NSA
Heller	PDRC542	366161	6486891	347	-60	310	60				NSA
Heller	PDRC543	366181	6486875	347	-60	310	60				NSA
Heller	PDRC544	366211	6486860	347	-60	310	60				NSA
Heller	PDRC545	366106	6487343	341	-60	310	60				NSA
Heller	PDRC546	366128	6487323	341	-60	310	60				NSA
Heller	PDRC547	366149	6487304	339	-60	310	66				NSA
Heller	PDRC548	366172	6487279	341	-60	310	60				NSA
Heller	PDRC549	366189	6487256	341	-60	310	60				NSA
Heller	PDRC550	366210	6487233	345	-60	310	60				NSA
Heller	PDRC551	366235	6487215	344	-60	310	60				NSA
Heller	PDRC552	366259	6487200	342	-60	310	60				NSA
Davy	PDRC553	366347	6486403	346	-60	270	60				NSA
Davy	PDRC554	366410	6486399	348	-60	270	60				NSA
Davy	PDRC555	366485	6486405	346	-60	270	60				NSA
Davy	PDRC556	366548	6486394	345	-60	270	60				NSA
Davy	PDRC557	366650	6486641	341	-60	300	60				NSA
Davy	PDRC558	366678	6486630	339	-60	300	60				NSA
Davy	PDRC559	366703	6486610	339	-60	300	60				NSA
Davy	PDRC560	366731	6486592	341	-60	300	60				NSA
Davy	PDRC561	366758	6486580	340	-60	300	60				NSA
Davy	PDRC562	366779	6486573	339	-60	300	60				NSA
Davy	PDRC563	366809	6486565	339	-60	300	60				NSA
Cade North	PDRC564	366896	6486510	338	-60	270	78				NSA
Cade North	PDRC565	366944	6486518	338	-60	270	78				NSA
Cade North	PDRC566	366997	6486523	338	-60	270	78				NSA
Cade North	PDRC567	367045	6486528	338	-60	270	78				NSA
Cade North	PDRC568	367094	6486523	336	-60	270	72				NSA
Cade North	PDRC569	367141	6486503	335	-60	270	72				NSA
Cade North	PDRC570	367194	6486483	334	-60	270	80				NSA



Area	Hole ID	MGA94_z51 East	MGA94_z51 North	RL	Dip	Azimuth	Hole Depth (m)	From (m)	To (m)	Width	Li ₂ O%
Cade North	PDRC571	367254	6486478	334	-60	270	80				NSA
Cade North	PDRC572	367291	6486483	334	-60	270	78				NSA
Cade North	PDRC573	367352	6486473	332	-60	270	78				NSA
Cade North	PDRC574	367422	6486481	332	-60	270	78				NSA
Cade North	PDRC575	367488	6486478	333	-60	270	78				NSA
Cade North	PDRC576	367537	6486478	333	-60	270	60				NSA
Davy	PDRC577	366601	6486988	338	-60	300	60				NSA
Davy	PDRC578	366630	6486968	337	-60	300	60				NSA
Davy	PDRC579	366659	6486951	337	-60	300	60				NSA
Davy	PDRC580	366687	6486935	337	-60	300	60				NSA
Davy	PDRC581	366715	6486929	337	-60	300	60				NSA
Davy	PDRC582	366738	6486912	335	-60	300	60				NSA
Davy	PDRC583	366768	6486903	336	-60	300	60				NSA
Davy	PDRC584	366793	6486882	335	-60	300	60				NSA
Davy	PDRC585	366816	6486864	336	-60	300	60				NSA
Davy	PDRC586	366841	6486853	333	-60	300	60				NSA
Davy	PDRC587	366866	6486842	334	-60	300	60				NSA
Davy	PDRC588	366198	6485870	352	-60	270	42				NSA
Cade	PDRC589	367672	6485840	340	-60	270	42	0	21	21	1.08
							Including	1	2	1	1.02
							Including	4	6	2	1.11
							Including	7	21	14	1.24
Cade	PDRC590	367706	6485921	344	-60	270	60	0	24	24	1.29
								26	27	1	0.63
								28	29	1	0.56
								31	38	7	0.68
							Including	37	38	1	1.02
Cade	PDRC591	367728	6486082	338	-60	270	70	47	62	15	1.06
							Including	47	48	1	1.21
							Including	49	52	3	1.10
							Including	53	56	3	1.13
							Including	57	61	4	1.52
Cade	PDRC592	367760	6486080	337	-60	270	84	51	77	26	1.46
							Including	51	76	25	1.50
Cade North	PDRC593	367804	6486325	340	-60	270	42				NSA

* NSA= No Significant Assays. Intersections calculated using 0.5% Li₂O lower cut-off and including assays calculated using 1.0% Li₂O lower cut-off.



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 were crushed and pulverised by pulp mill to nominal P80/75um to produce a pulverised sample for analysis. Lithium exploration package of elements were digested by a four-acid digestion and determined with a Mass Spectrometer (Intertek analysis code 4A Li48-MS). Any over range Li values were 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 	<ul style="list-style-type: none"> There has been no correlation recognised between sample recoveries and grade.



	<p><i>may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	
Logging	<ul style="list-style-type: none"> <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> 	<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"> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, Face, etc) photography.</i> 	<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"> <i>The total length and percentage of the relevant intersections logged.</i> 	<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"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> 	<ul style="list-style-type: none"> RC drilling - For pegmatites intersected near existing mineralised ones, 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"> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> 	<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"> <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> 	<ul style="list-style-type: none"> Duplicate field samples were routinely taken at a rate of 1 per 30 samples for RC drilling. Laboratory quality control samples were inserted by the laboratory with the performance of these control samples monitored by the laboratory and the company. Analysis of the aforementioned measures indicated that the sampling was representative and reliable.
	<ul style="list-style-type: none"> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<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"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> 	<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"> <i>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.</i> 	<ul style="list-style-type: none"> NA
	<ul style="list-style-type: none"> <i>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.</i> 	<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. Laboratory quality control samples were inserted by the laboratory with the performance of these control samples monitored by the laboratory and the company. Analysis of the aforementioned measures indicated that the sampling was representative and reliable.



<p>Verification of sampling and assaying</p>	<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"> Significant intersections were calculated by geological staff with these intersections checked by the Exploration Manager. The significant assay results were compared to the logging to confirmed they matched the spodumene zones. No holes have been twinned.
	<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 Company has adjusted the lithium (Li) assay results to determine Li₂O grades. This adjustment is a multiplication of the elemental Li assay results by 2.1527.
<p>Location of data points</p>	<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.
<p>Data spacing and distribution</p>	<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"> Current data is sufficient to establish geological at the Cade, Davy and Heller deposits. All other drilling is 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"> The reported intersections were from 1m samples, no composites were included.
<p>Orientation of data in relation to geological structure</p>	<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"> The geometry of the spodumene mineralisation at Cade, Davy and Heller is broadly has a north-north-east striking and dips steeply to the east. The majority of the drill holes tested the mineralisation at a near optimal orientation. 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.
<p>Sample security</p>	<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.
<p>Audits or reviews</p>	<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. The 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 Dome North drilling reported herein is entirely within E15/1515 which is a granted Exploration Licence. The tenement is located approximately 60km north of Norseman, WA. The Company is the registered holder of the tenement 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 E15/1515 was 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 tenement.
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 be stated 	<ul style="list-style-type: none"> Weighted average Li₂O assays within the release are calculated using 0.5% Li₂O lower cut-off grade, minimum thickness 1m, with a maximum of 4m of internal waste and no external dilution. Including assays are calculated using 1.0% Li₂O lower cut-off grade. All reported intersections are from 1 metre samples. There are no metal equivalent values reported.



	<p>and some typical examples of such aggregations should be shown in detail.</p> <ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	<ul style="list-style-type: none"> Downhole lengths are reported. The current geological interpretation, based on drilling and mapping, suggests that the true widths approximate the down hole widths.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to figures in this report.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All of the drill details for the latest drill programme have been provided in this announcement.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All meaningful and material exploration data has been reported.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Interpret drill results to determine if there are any near misses or further opportunities. Carry out planned diamond drilling to convert Inferred material in the MRE to the Indicated category. Drill planning to extend the current MRE.