

ASX Code: ESS

Capital Structure

Shares on issue: 151 million
Market cap: \$16m (at 10.5c)
Cash: \$4.4m (30 Jun 2020)
Debt: Nil

Corporate Directory

Non-Executive Chairman

Craig McGown

Managing Director

Timothy Spencer

Non-Executive Director

Paul Payne

Company Secretary

Carl Travaglini

Key Projects

Sole Funded

Golden Ridge (Ni, Au)
Dome North (Li)
Sinclair Mine (Cs)
Mavis Lake (Li)
Fairwater (Ni)

Free Carried to Decision to Mine

Acra (Au) 25%
Kangan (Au) 30%
Balagundi (Au) 25%

Investor Relations

Nicholas Read
Read Corporate
t: +61 8 9388 1474
e:
nicholas@readcorporate.com.au

ABN: 44 103 423 981
t: +61 8 9322 6974
e: info@essmetals.com.au
w: essmetals.com.au

G Floor, 72 Kings Park Rd,
West Perth, Western Australia
6005
PO Box 1787, West Perth
Western Australia 6872



23 July 2020

Dome North Lithium Project Update

Thick shallow high-grade intercept of 21m at 1.79% Li₂O from aircore drilling highlights potential to expand Cade Deposit as metallurgical test work progresses to second phase

HIGHLIGHTS

- An aircore (AC) drill programme was completed in June totalling 123 holes and 6,740m. All assays results have now been received.
- Drill hole PDAC386 at the Cade Deposit, intersected a thick high-grade zone of 23m of fresh pegmatite including **21m @ 1.79% Li₂O from 4 metres**, the highest grade intersection to date at Dome North.
- This intersection is substantially thicker and higher grade than what was modelled in the maiden JORC Resource Estimate for the Cade Deposit (refer ASX release 25 November 2019).
- An updated JORC Resource Estimate will now be prepared for the Dome North Lithium Project.
- The first phase of metallurgical test work using heavy liquid separation (HLS) on spodumene mineralisation from the Cade Deposit achieved lithia (Li₂O) recoveries of up to 33% (P100 6.3mm sizing) to obtain a 6% concentrate. The second phase of metallurgical test work is now underway to determine the best lithia recovery rates achievable via flotation. Results from this work are expected end-October.

Essential Metals Managing Director, Tim Spencer, said: *"The outstanding shallow intercept of 21m @ 1.79% Li₂O shows the Cade Deposit contains high lithia grades near surface, while drilling across the project has identified a number of other prospective areas for follow-up.*

The metallurgical test work is important for us to understand the best development route for the Dome North Lithium Project. The test work completed so far bodes well for achieving good recoveries in a DMS-flotation process route and we await completion of the second phase of test work to see if this is the case."

Essential Metals Limited (ASX:ESS) was formerly named Pioneer Resources Limited (ASX:PIO).

Essential Metals Limited (ASX: ESS) ('Essential Metals' or the 'Company') is pleased to provide an update on recent drilling and metallurgical test work programs at the Company's 100%-owned Dome North Lithium Project, located near Norseman, Western Australia.

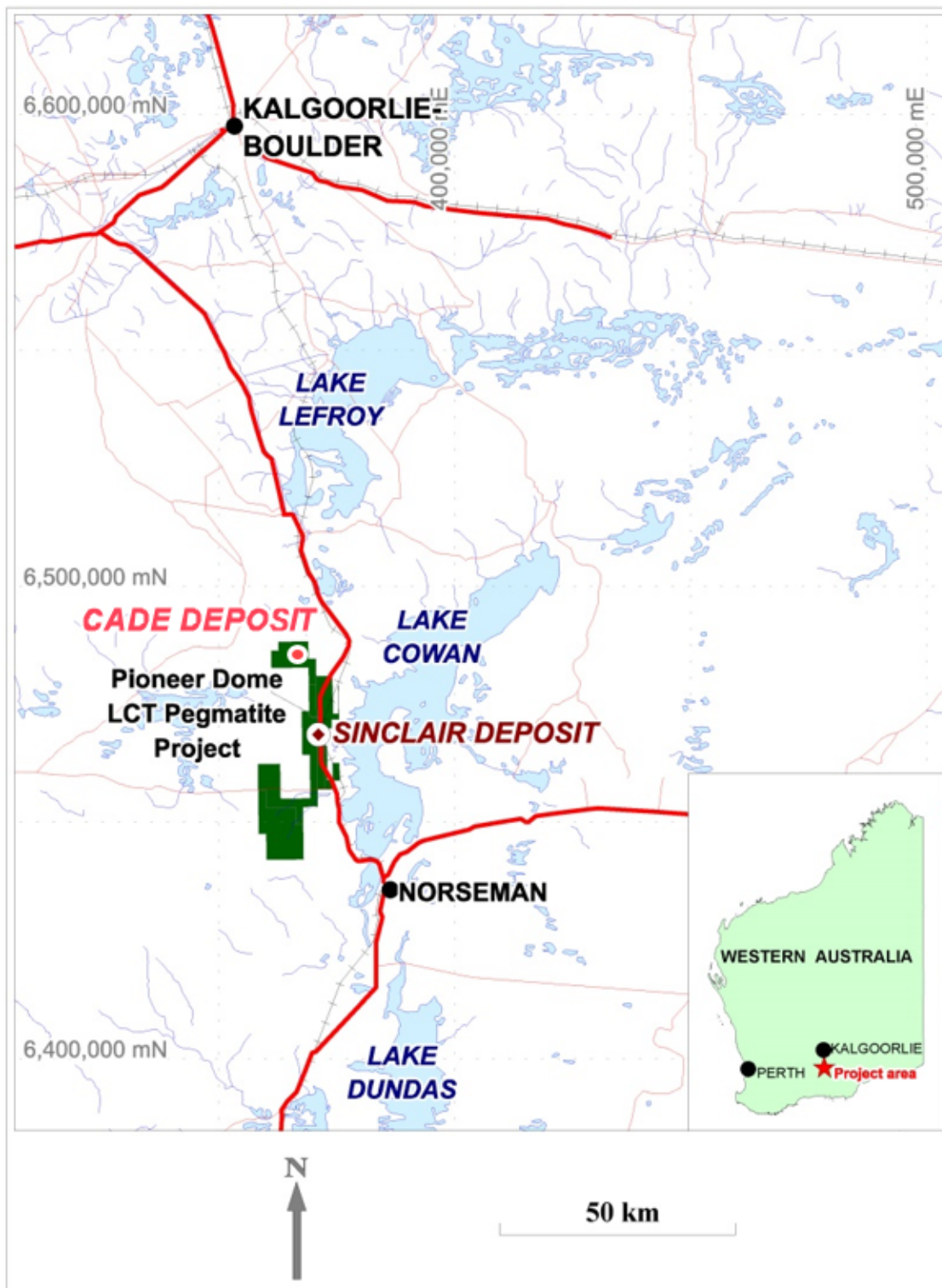


Figure 1: Location of the Cade and Sinclair Deposits within the Pioneer Dome LCT Project.
(LCT = Lithium, Caesium and Tantalum).

AIRCORE DRILLING

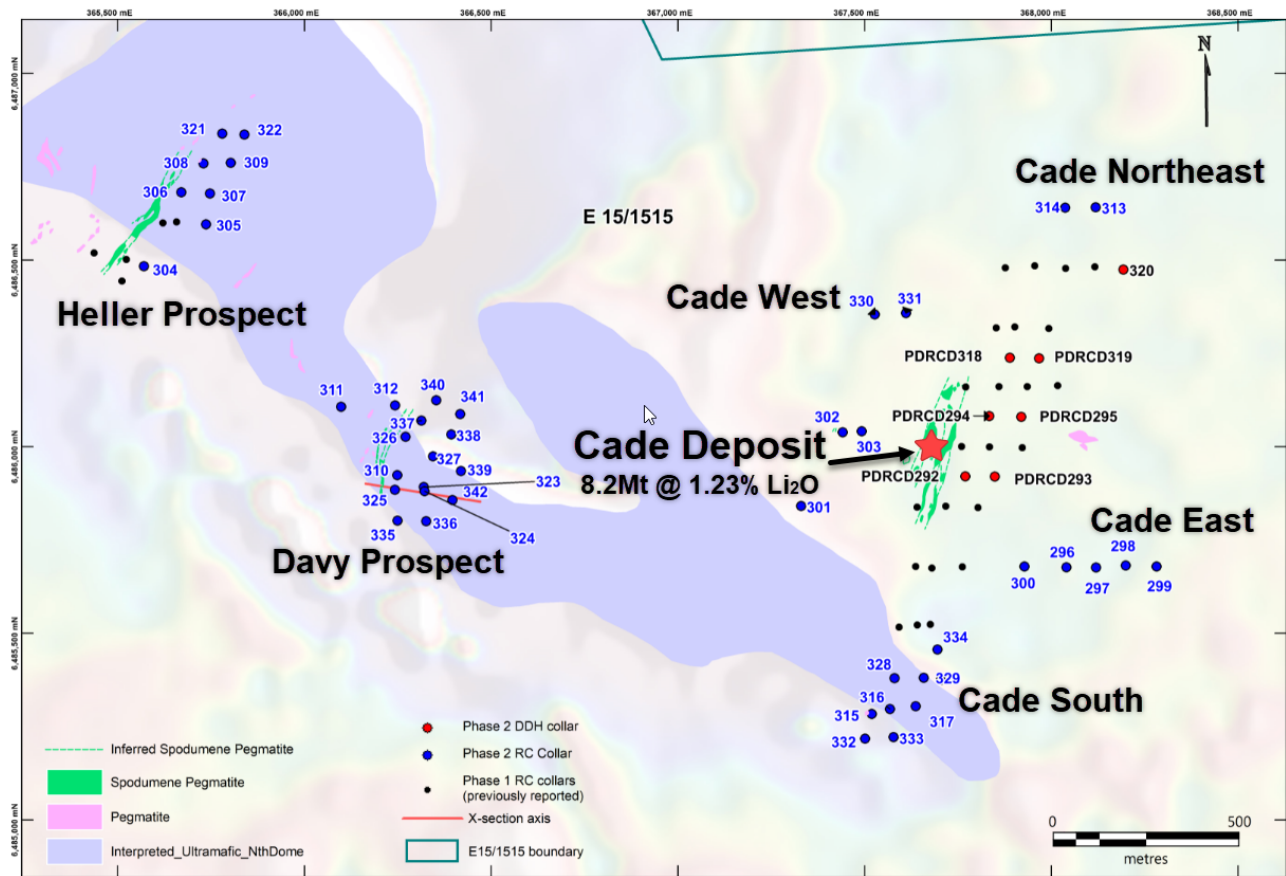


Figure 2: Plan view of the Dome North Lithium Project located in the northern zone of the greater Pioneer Dome Project highlighting the Cade Deposit, lithium prospects and previous drilling.

The aircore drilling programme carried out in June was aimed at utilising the lower cost drilling technique to explore for blind pegmatites in areas of poor or weathered outcrop exposure.

Significant spodumene mineralisation was intersected in five holes with a best intersection of **21m at 1.79% Li₂O from 4 metres** (down-hole) in drill hole PDAC386 at the Cade Deposit. This drill intersection has increased the width of the spodumene zone on this drill section by 14m, adding significant additional width to the resource envelope of the maiden JORC Resource Estimate (November 2019).

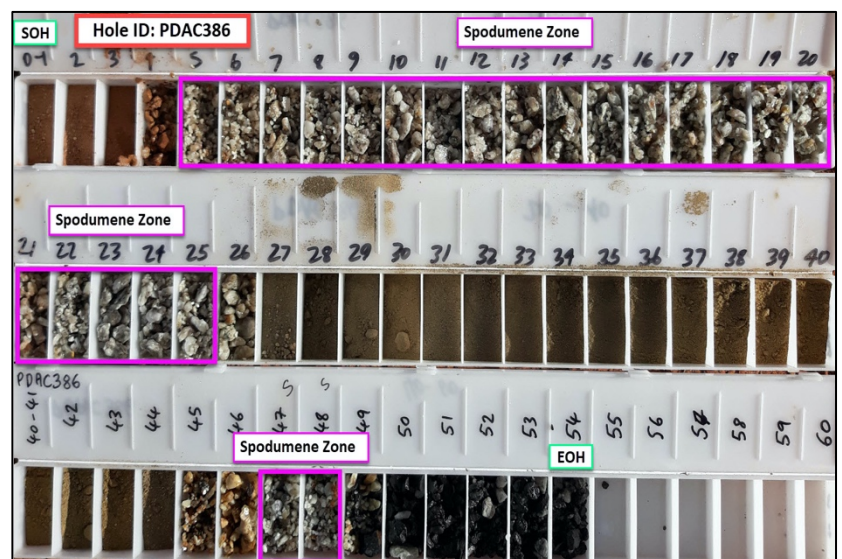


Figure 3: Drillhole PDAC386 chip tray with high grade spodumene zones of 21m @ 1.79% Li₂O from 4m and 2m @ 1.55% Li₂O from 46m.

This intersection also demonstrates that the upper pegmatite zones (~40m from surface) are not depleted in lithium and, therefore, potential thick fresh zones of high grade spodumene mineralisation remain untested within the Cade Deposit

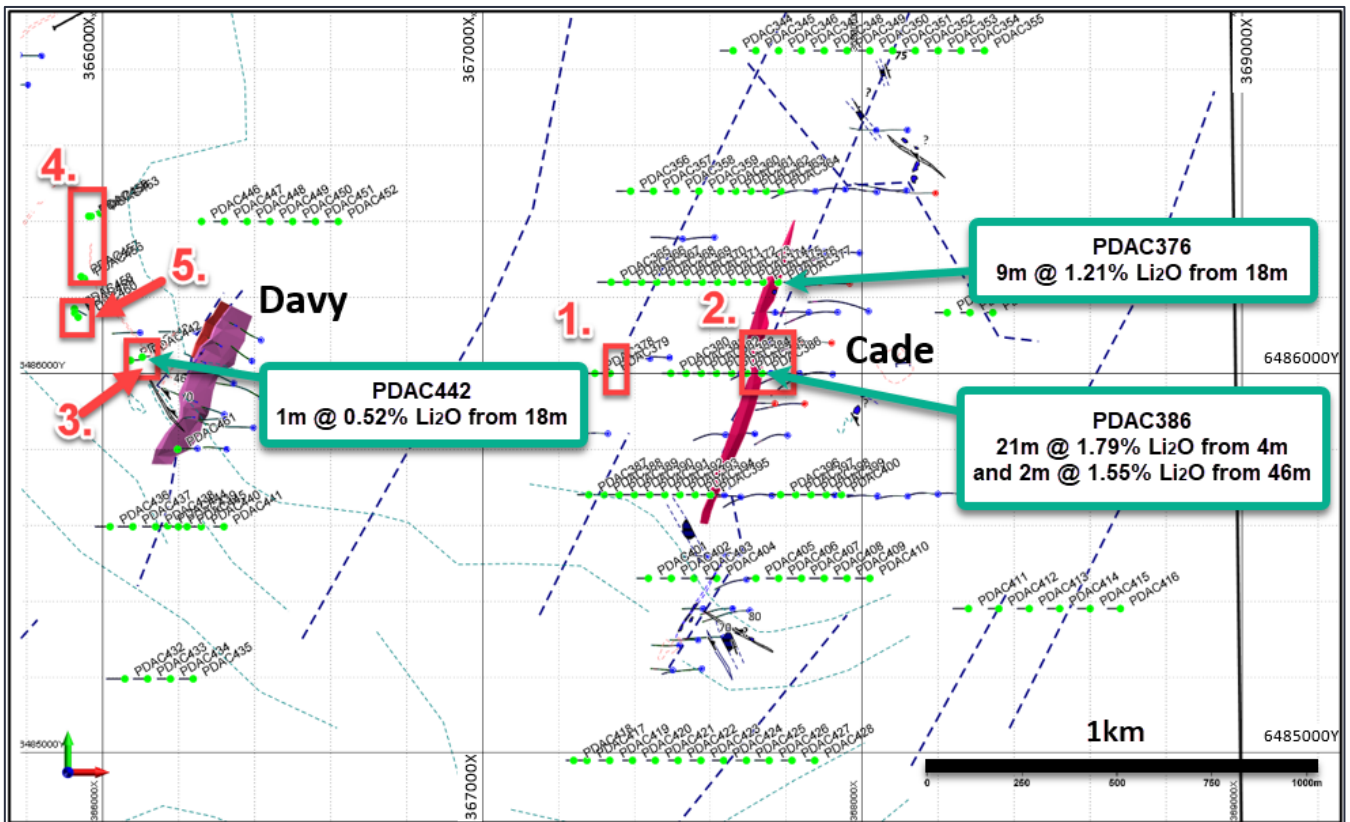


Figure 4: June 2020 aircore (AC) drilling completed – AC hole collars shown in green, 2019 RC collars in blue and 2019 DDH collars in red. The red polygons refer to the areas of fertile pegmatites intersected. The dashed blue lines are interpreted magnetic lineaments.

A second hole (PDAC376), drilled approximately 40m north and along strike of PDAC386, intersected **9m @ 1.21% Li₂O from 18 metres** (down-hole), also demonstrating that good lithia concentration occurs near surface.

Table 1 – Significant drilling intersections (0.5% Li₂O cut-off).

Hole ID	Type	East	North	Elevation	Depth (m)	Dip	Az	From	To	Length (m)	Li ₂ O (%)	Prospect
PDAC376	AC	367779.7	6486239.6	319.041	51	-60	270.12	18	27	9	1.21	CADE
PDAC384	AC	367656.7	6485998.9	331.538	47	-60	270.12	1	2	1	0.88	CADE
PDAC385	AC	367695.3	6485994.1	324.568	45	-60	270.12	41	42	1	0.58	CADE
PDAC386	AC	367737.3	6486000.9	340.67	54	-60	270.12	4	25	21	1.79	CADE
								46	48	2	1.55	
PDAC442	AC	366103.5	6486040.1	351.966	34	-55	84.12	18	19	1	0.52	DAVY

Note: significant drilling intersections are calculated using 0.5% Li₂O cut off, maximum 3m internal dilution and no external dilution.

Several narrow (1-10m) wide pegmatites were intersected in an area immediately west-northwest of the Davy Prospect (red polygons 3- 5 in Figure 4), which lies approximately 1.4 km west of the Cade Deposit.

The pegmatites are considered enriched in lithium with a best intersection of 1m @ 0.52% Li₂O from 18m within a 10m thick pegmatite intersected in PDAC442 (Figure 4). This area is untested along strike in both directions and remains highly prospective for discovery of additional LCT pegmatites.

Further work on analysis of 'near-misses' will be conducted by applying multi-element pathfinder criteria within country rocks. This analysis, combined with high resolution soil geochemistry over favourable magnetic structures (NNE-NE), will provide the platform for target generation under cover.

Geological surface mapping also continues at the Dome North Project in areas considered to be underexplored and untested by drilling. The Pioneer Dome Project remains highly prospective for discovery of new lithium enriched pegmatites.

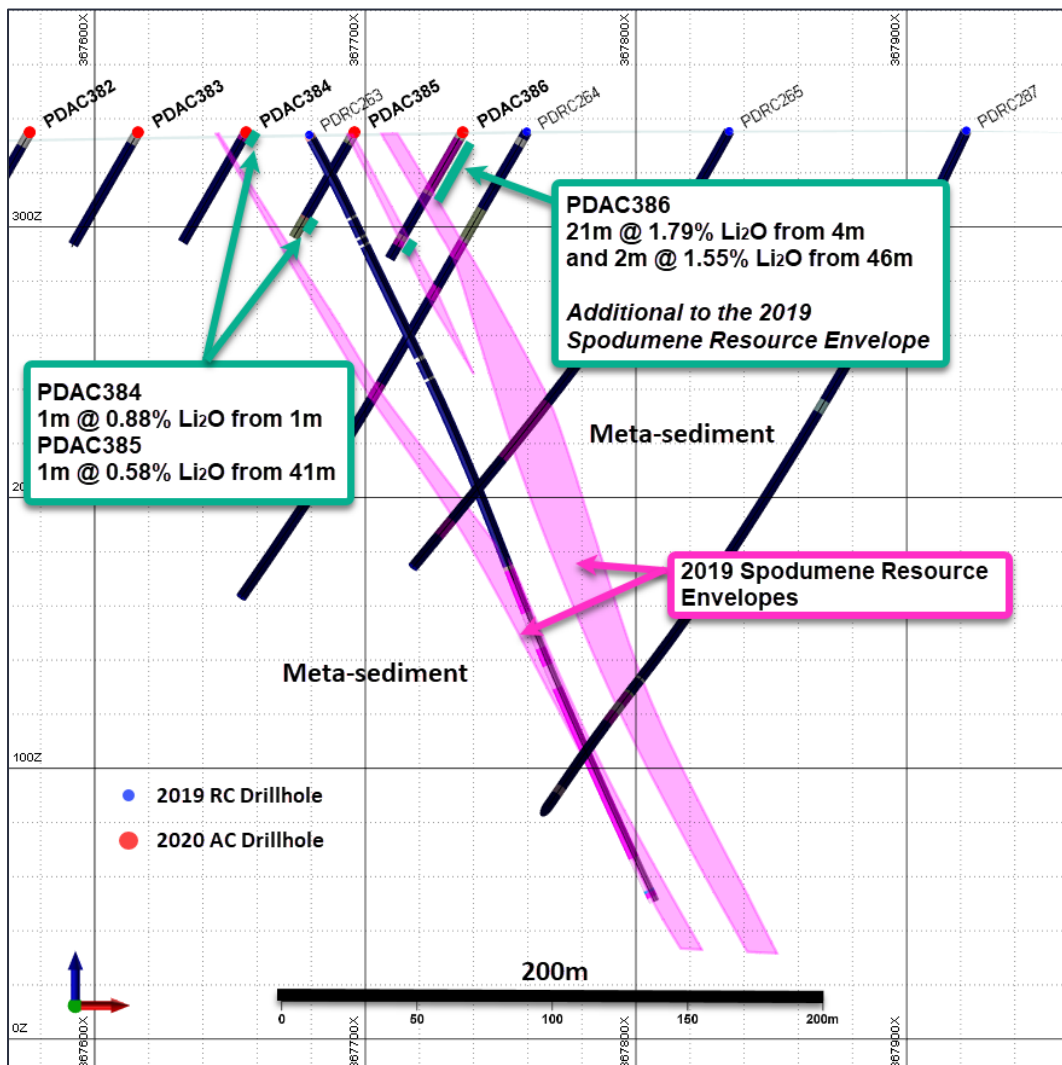


Figure 5: Cross section on northing 6486000mN looking north through the Cade Deposit with significant intersections from the June 2020 AC drilling relative to the 2019 spodumene resource envelopes.

RESOURCE UPDATE

An update to the maiden JORC Inferred Resource Estimate reported 25 November 2019 will be completed during the September Quarter.

METALLURGICAL TEST WORK ON THE CADE DEPOSIT

The Cade Deposit is the largest mineralised pegmatite discovered to date within the Dome North Lithium Project area. The first drilling programme was completed in August 2019 and a maiden JORC 2012 Inferred Resource Estimate of 8.2Mt @ 1.23% Li₂O was reported in November (*refer ASX release dated 25 November 2019*).

In December 2019, a second drilling programme was completed. This programme included six diamond-tailed drill holes to further delineate the Cade Deposit and provide representative core samples for metallurgical test work to be undertaken by Primero, a leading engineering group with extensive experience with West Australian hard rock spodumene deposits.

In February this year, the selected samples were dispatched to Nagrom Laboratories and various 'heavy liquid separation' (HLS) and mineralogy test work programs were undertaken. HLS lab scale test work is used as a proxy for lithia recoveries from a dense media separation (DMS) processing route, with the latter typically achieving a recovery rate that is lower than the HLS results.

The work demonstrated that a lithia recovery rate of 33% at 6% concentrate grade was achieved at a relatively coarse crush size (>6mm) for spodumene gravity recovery. This was achieved using a two stage HLS flowsheet which included recrushing and reprocessing of mid-grade coarse material. Recovery from inclusion of the reprocessing step was approximated using the same HLS test method and size by assay test work results.

The chart below (**Figure 6**) highlights the improvement in lithia recovery rates by finer crushing (Pass 100%: 10mm versus 6.3mm) and recoveries when imputing a re-crushed mid-sized material and retreatment component.

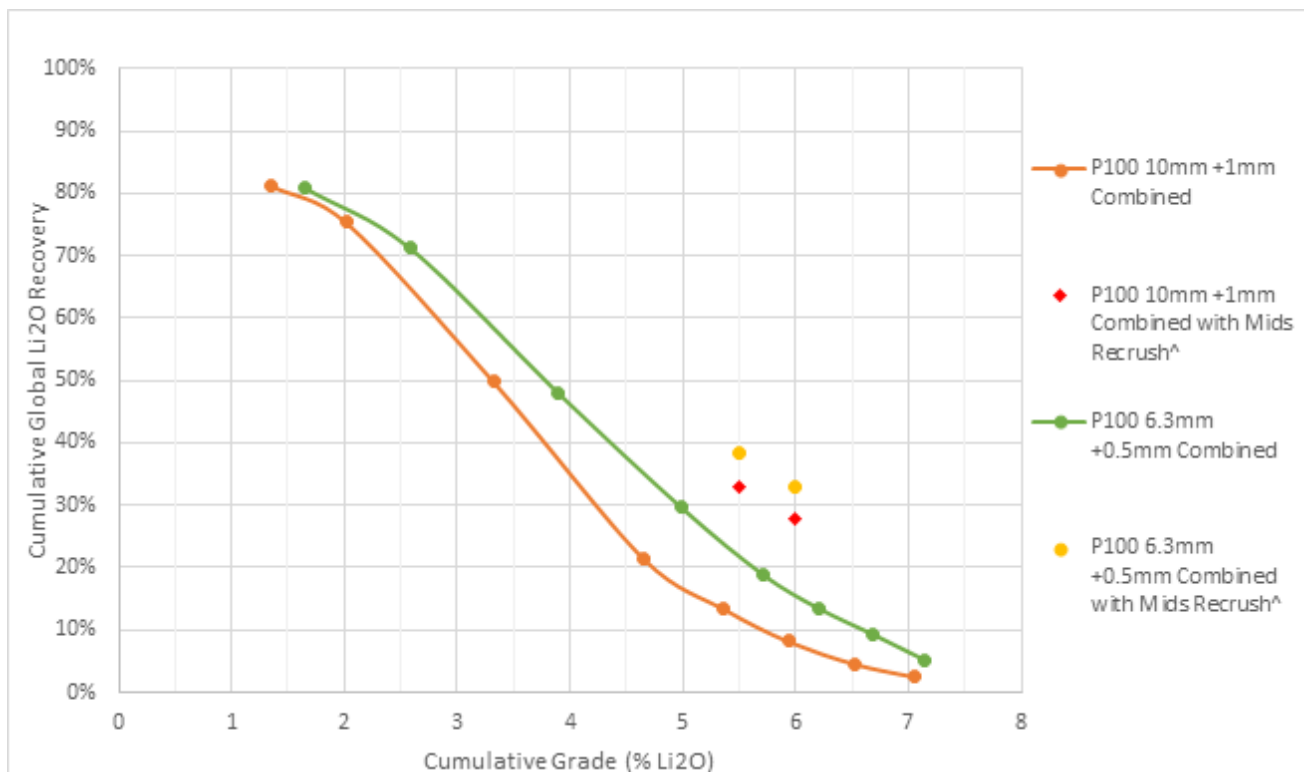


Figure 6: Comparison of lithia (Li₂O) recovery rates at two crush sizings – P100: 10mm & 6.3mm. ^The 'Mids Recrush' recovery dot points are based on imputed values.

The next stage of testing will involve multiple flotation tests conducted on a composite head sample, with final results expected by end-October. These will provide guidance on overall lithia recoveries for a combined DMS-flotation process route and a 'whole-of-ore' flotation process route.

This ASX release has been approved by the Board of Directors

For further information:

Tim Spencer, Managing Director
Essential Metals Limited
T: +61 8 9322 6974
E: tspencer@essmetals.com.au

Investor Relations

Nicholas Read
Read Corporate
T: +61 8 9388 1474
E: nicholas@readcorporate.com.au

About Essential Metals Limited

Following successful completion of the Sinclair Caesium Mine, Essential Metals is now a well-funded and active explorer focused on key global demand-driven commodities, looking for its next opportunity to create shareholder wealth through exploration and project development. The Company operates a portfolio of strategically located lithium, caesium, gold, nickel and cobalt projects in mining regions in Western Australia, plus a high-quality lithium asset in Canada.

Lithium:

- The **Pioneer Dome LCT Project** is highly prospective for lithium, evidenced by the discovery of multiple spodumene bearing pegmatites in the Dome North area. It includes the Cade Deposit, on which a maiden JORC Inferred Resource of 8.2 million tonnes @ 1.23% Li₂O was estimated in November 2019.
- The Company holds a 51% Project interest in the **Mavis Lake Lithium Project**, Canada where Company drilling has intersected spodumene.

Gold:

- The **Golden Ridge Project** is 100% owned by the Company. Exploration over the past 40 years has identified multiple gold prospects but the effort and focus has been on nickel. The gold potential is being reappraised and existing and newly identified prospects will be actively explored.
- **Other Projects** in the Company's portfolio have historically been considered prospective for gold and a detailed review is being undertaken.

Gold Farmin/Joint Ventures: Essential Metals has three free-carried interests with well credentialed JV partners:

- **Acra JV Project** near Kalgoorlie W.A.: Northern Star Resources Limited (ASX:NST) has earned a 75% Project Interest and continues to fully fund exploration programmes until a decision to mine with Essential Metals retaining a 25% interest.
- **Kangan Project** in the West Pilbara W.A: A farmin & JV agreement with Novo Resources Corp (TSXV:NVO) and Sumitomo Corporation will fully fund gold exploration programmes until a decision to mine is made, with Essential Metals retaining a 30% interest.

- **Balagundi Project:** A farmin & JV agreement with where Black Cat Syndicate Limited (ASX:BC8) is earning a 75% interest in the Project located at Bulong, near Kalgoorlie, W.A. Black Cat will then fully fund gold exploration programmes until a decision to mine is made, with Essential Metals retaining a 25% interest.

Nickel: The **Blair-Golden Ridge Project** includes the suspended Blair Nickel Sulphide Mine, located between Kalgoorlie and Kambalda, WA. Near-mine target generation is continuing, with the Company announcing a new disseminated nickel sulphide drilling discovery at the Leo Dam Prospect in 2018, highlighting the prospectivity of the greater project area and this work has now been progressed by recent drilling.

Cobalt: Also found as a wide-spread hydromorphic layer throughout the eastern Golden Ridge Project, cobalt is another commodity with demand expanding in response to its requirement in the manufacture of cobalt-based batteries in certain electric vehicles and electricity stabilisation systems (powerwalls). Other uses for cobalt include in the manufacture of super-alloys, including jet engine turbine blades, and for corrosion resistant metal applications.

Competent Person Statements

The information in this report that relates to Exploration Results is based on information supplied to and compiled by Mr Stuart Kerr. Mr Kerr is a full-time employee of the Company. Mr Kerr is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 Kerr consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to metallurgical test work for the Dome North Lithium Project has been reviewed by Mr Joshua Paterson who is a member of the Australasian Institute of Mining and Metallurgy. Mr Paterson is an employee of Primero Ltd and has sufficient experience relevant to the style of processing response and type of deposit under consideration, and to the activities undertaken, 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 Paterson consents to the inclusion in the report of a summary based upon his information in the form and context in which it appears.

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 previous market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Forward Looking Statement

This announcement contains 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.

APPENDIX 1 – JUNE 2020 AIRCORE DRILL HOLE STATISTICS

- Significant Li₂O intersection determined using 0.5% Li₂O cut-off, maximum 3m internal dilution, no external dilution.

Hole ID	Type	East	North	Elevation	Depth (m)	Dip	MAG_Azi	From	To	Length (m)	Li ₂ O (%)	Prospect
PDAC344	AC	367655.8	6486848.6	317.839	68	-60	270	No significant assays				NORTH DOME
PDAC345	AC	367710.9	6486856.4	316.397	35	-60	270	No significant assays				NORTH DOME
PDAC346	AC	367781.1	6486856.6	319.762	19	-60	270	No significant assays				NORTH DOME
PDAC347	AC	367842	6486849.9	324.328	40	-60	270	No significant assays				NORTH DOME
PDAC348	AC	367899.7	6486848.3	331.057	54	-60	270	No significant assays				NORTH DOME
PDAC349	AC	367959.5	6486845.4	339.709	58	-60	270	No significant assays				NORTH DOME
PDAC350	AC	368016.9	6486852.9	338.507	61	-60	270	No significant assays				NORTH DOME
PDAC351	AC	368074.2	6486855.7	338.507	46	-60	270	No significant assays				NORTH DOME
PDAC352	AC	368138.5	6486854	337.065	55	-60	270	No significant assays				NORTH DOME
PDAC353	AC	368200.4	6486850.1	332.019	54	-60	270	No significant assays				NORTH DOME
PDAC354	AC	368258	6486849.6	329.135	67	-60	270	No significant assays				NORTH DOME
PDAC355	AC	368316.5	6486852.7	328.894	63	-60	270	No significant assays				NORTH DOME
PDAC356	AC	367389.3	6486480.8	325.77	74	-60	270	No significant assays				NORTH DOME
PDAC357	AC	367448.5	6486480.5	328.414	69	-60	270	No significant assays				NORTH DOME
PDAC358	AC	367512.2	6486479.2	331.778	62	-60	270	No significant assays				NORTH DOME
PDAC359	AC	367574.2	6486485	333.701	42	-60	270	No significant assays				NORTH DOME
PDAC360	AC	367631.4	6486477.9	330.336	37	-60	270	No significant assays				NORTH DOME
PDAC361	AC	367669	6486471.7	331.057	38	-60	270	No significant assays				NORTH DOME
PDAC362	AC	367702.6	6486480.9	334.182	41	-60	270	No significant assays				NORTH DOME
PDAC363	AC	367747.3	6486483.9	336.344	52	-60	270	No significant assays				NORTH DOME
PDAC364	AC	367787.3	6486482	332.019	55	-60	270	No significant assays				NORTH DOME
PDAC365	AC	367340.2	6486240.9	325.289	72	-60	270	No significant assays				NORTH DOME
PDAC366	AC	367375.1	6486237.6	323.367	74	-60	270	No significant assays				NORTH DOME
PDAC367	AC	367420.6	6486240	325.53	70	-60	270	No significant assays				NORTH DOME
PDAC368	AC	367463.3	6486236.9	328.654	66	-60	270	No significant assays				NORTH DOME
PDAC369	AC	367506.3	6486243.3	328.894	64	-60	270	No significant assays				NORTH DOME
PDAC370	AC	367543.9	6486235	322.646	51	-60	270	No significant assays				NORTH DOME
PDAC371	AC	367580.3	6486239.7	323.607	54	-60	270	No significant assays				NORTH DOME
PDAC372	AC	367624.4	6486242.6	331.057	52	-60	270	No significant assays				NORTH DOME
PDAC373	AC	367657.1	6486237.9	332.019	49	-60	270	No significant assays				NORTH DOME
PDAC374	AC	367704.2	6486236.4	327.452	49	-60	270	No significant assays				CADE
PDAC375	AC	367734.1	6486247.7	309.668	51	-60	270	No significant assays				CADE
PDAC376	AC	367779.7	6486239.6	319.041	51	-60	270	18	27	9	1.21	CADE
PDAC377	AC	367812.1	6486239.7	326.01	50	-60	270	No significant assays				CADE
PDAC378	AC	367300.8	6486003.2	328.654	54	-60	270	No significant assays				NORTH DOME
PDAC379	AC	367333.8	6486006.3	333.22	61	-60	270	No significant assays				NORTH DOME
PDAC380	AC	367502	6485996.7	332.98	45	-60	270	No significant assays				NORTH DOME
PDAC381	AC	367531.7	6485991.8	326.731	45	-60	270	No significant assays				NORTH DOME
PDAC382	AC	367574.2	6485996.3	325.77	45	-60	270	No significant assays				NORTH DOME
PDAC383	AC	367609.8	6485997.7	326.972	49	-60	270	No significant assays				CADE
PDAC384	AC	367656.7	6485998.9	331.538	47	-60	270	1	2	1	0.88	CADE
PDAC385	AC	367695.3	6485994.1	324.568	45	-60	270	41	42	1	0.58	CADE
PDAC386	AC	367737.3	6486000.9	340.67	54	-60	270	4	25	21	1.79	CADE
								46	48	2	1.55	
PDAC387	AC	367270.3	6485681.7	329.375	60	-60	270	No significant assays				NORTH DOME
PDAC388	AC	367313.7	6485679.5	329.375	54	-60	270	No significant assays				NORTH DOME
PDAC389	AC	367594.3	6485677.5	335.143	63	-60	270	No significant assays				CADE
PDAC390	AC	367349.9	6485681.9	332.499	65	-60	270	No significant assays				NORTH DOME
PDAC391	AC	367397.1	6485681	322.405	57	-60	270	No significant assays				NORTH DOME

Hole ID	Type	East	North	Elevation	Depth (m)	Dip	NAT_Azi	From	To	Length (m)	Li2O (%)	Prospect
PDAC392	AC	367441.4	6485681.2	324.088	60	-60	270		No significant assays			NORTH DOME
PDAC393	AC	367485.8	6485681.7	331.297	39	-60	270		No significant assays			NORTH DOME
PDAC394	AC	367521.7	6485680	336.825	49	-60	270		No significant assays			CADE
PDAC395	AC	367559.2	6485677.6	338.988	51	-60	270		No significant assays			CADE
PDAC396	AC	367781.8	6485681	341.872	61	-60	270		No significant assays			CADE
PDAC397	AC	367948.7	6485680	332.74	62	-60	270		No significant assays			CADE
PDAC398	AC	367817.8	6485681.8	341.391	55	-60	270		No significant assays			CADE
PDAC399	AC	367861.1	6485681.3	335.864	65	-60	270		No significant assays			CADE
PDAC400	AC	367901	6485678.7	339.949	67	-60	270		No significant assays			CADE
PDAC401	AC	367436.8	6485464.9	341.151	61	-60	270		No significant assays			CADE
PDAC402	AC	367499.7	6485458.7	343.795	58	-60	270		No significant assays			CADE
PDAC403	AC	367563.1	6485461.7	339.469	65	-60	270		No significant assays			CADE
PDAC404	AC	367617.6	6485462.4	341.872	57	-60	270		No significant assays			CADE
PDAC405	AC	367714.1	6485456.4	338.507	50	-60	270		No significant assays			CADE
PDAC406	AC	367781	6485464.5	338.507	65	-60	270		No significant assays			CADE
PDAC407	AC	367837.9	6485461.7	342.593	76	-60	270		No significant assays			CADE
PDAC408	AC	367901.1	6485456.7	341.632	77	-60	270		No significant assays			CADE
PDAC409	AC	367957.3	6485464.2	338.267	71	-60	270		No significant assays			CADE
PDAC410	AC	368018.2	6485458.8	336.825	75	-60	270		No significant assays			CADE
PDAC411	AC	368276.8	6485381.9	329.135	81	-60	270		No significant assays			NORTH DOME
PDAC412	AC	368355.2	6485380	327.933	59	-60	270		No significant assays			NORTH DOME
PDAC413	AC	368440.4	6485376.3	319.281	63	-60	270		No significant assays			NORTH DOME
PDAC414	AC	368521.7	6485383.7	323.607	64	-60	270		No significant assays			NORTH DOME
PDAC415	AC	368595.9	6485384.5	325.77	66	-60	270		No significant assays			NORTH DOME
PDAC416	AC	368680.2	6485383.3	326.01	68	-60	270		No significant assays			NORTH DOME
PDAC417	AC	367274.2	6484976.4	326.972	75	-60	270		No significant assays			NORTH DOME
PDAC418	AC	367253.1	6484986.1	338.267	39	-60	270		No significant assays			NORTH DOME
PDAC419	AC	367328.9	6484978.9	342.593	57	-60	270		No significant assays			NORTH DOME
PDAC420	AC	367388.4	6484978.4	339.709	51	-60	270		No significant assays			NORTH DOME
PDAC421	AC	367445.9	6484973.5	340.911	45	-60	270		No significant assays			NORTH DOME
PDAC422	AC	367516.5	6484977.5	342.833	51	-60	270		No significant assays			NORTH DOME
PDAC423	AC	367574	6484974.6	335.143	57	-60	270		No significant assays			NORTH DOME
PDAC424	AC	367636.4	6484980.8	337.306	59	-60	270		No significant assays			NORTH DOME
PDAC425	AC	367695.7	6484973.5	337.065	57	-60	270		No significant assays			NORTH DOME
PDAC426	AC	367770.1	6484975.4	338.988	76	-60	270		No significant assays			NORTH DOME
PDAC427	AC	367812.4	6484977.3	337.546	57	-60	270		No significant assays			NORTH DOME
PDAC428	AC	367874.3	6484981.2	336.825	44	-60	270		No significant assays			NORTH DOME
PDAC429	AC	368225.3	6486163.3	335.623	63	-60	270		No significant assays			NORTH DOME
PDAC430	AC	368290.5	6486169.7	330.336	49	-60	270		No significant assays			NORTH DOME
PDAC431	AC	368344.4	6486171.6	330.817	31	-60	270		No significant assays			NORTH DOME
PDAC432	AC	366063.7	6485198.2	339.709	96	-60	270		No significant assays			NORTH DOME
PDAC433	AC	366121.5	6485191	341.151	75	-60	270		No significant assays			NORTH DOME
PDAC434	AC	366176.4	6485197.4	334.902	69	-60	270		No significant assays			NORTH DOME
PDAC435	AC	366226.9	6485196.5	336.344	72	-60	270		No significant assays			NORTH DOME
PDAC436	AC	366017.9	6485595.4	338.748	78	-60	270		No significant assays			NORTH DOME
PDAC437	AC	366072.6	6485600	338.267	78	-60	270		No significant assays			NORTH DOME
PDAC438	AC	366139.1	6485595.1	339.949	69	-60	270		No significant assays			NORTH DOME
PDAC439	AC	366204.6	6485602.6	353.167	77	-60	270		No significant assays			NORTH DOME
PDAC440	AC	366253.7	6485600.3	348.842	80	-60	270		No significant assays			NORTH DOME

Hole ID	Type	East	North	Elevation	Depth (m)	Dip	NAT_Azi	From	To	Length (m)	Li2O (%)	Prospect
PDAC441	AC	366316.7	6485601.1	342.112	54	-60	270	No significant assays				NORTH DOME
PDAC442	AC	366103.5	6486040.1	351.966	34	-55	84	18	19	1	0.52	DAVY
PDAC443	AC	366069.7	6486037.4	357.734	68	-60	84	No significant assays				DAVY
PDAC444	AC	366171.1	6485598	340.43	65	-60	270	No significant assays				NORTH DOME
PDAC445	AC	366221.5	6485595.6	341.391	81	-60	270	No significant assays				NORTH DOME
PDAC446	AC	366259.1	6486401.7	346.919	19	-60	270	No significant assays				NORTH DOME
PDAC447	AC	366319.1	6486402.5	345.477	55	-60	270	No significant assays				NORTH DOME
PDAC448	AC	366375.5	6486405.5	343.795	37	-60	270	No significant assays				NORTH DOME
PDAC449	AC	366436.5	6486403.5	336.825	58	-60	270	No significant assays				NORTH DOME
PDAC450	AC	366498.3	6486406.6	338.748	42	-60	270	No significant assays				NORTH DOME
PDAC451	AC	366561.3	6486396.9	333.941	65	-60	270	No significant assays				NORTH DOME
PDAC452	AC	366615.4	6486400.8	331.297	68	-60	270	No significant assays				NORTH DOME
PDAC453	AC	365991.9	6486421.7	349.082	20	-55	290	No significant assays				NORTH DOME
PDAC454	AC	365969.7	6486414.5	355.09	12	-60	90	No significant assays				NORTH DOME
PDAC455	AC	365962.5	6486413.9	356.292	12	-60	90	No significant assays				NORTH DOME
PDAC456	AC	365950.7	6486249.8	349.082	18	-55	120	No significant assays				NORTH DOME
PDAC457	AC	365943	6486254.9	349.322	47	-60	120	No significant assays				NORTH DOME
PDAC458	AC	365924.9	6486170.2	346.438	63	-55	118	No significant assays				NORTH DOME
PDAC459	AC	365926.4	6486159.4	344.996	16	-60	315	No significant assays				NORTH DOME
PDAC460	AC	365935.1	6486147.6	340.911	36	-60	315	No significant assays				NORTH DOME
PDAC461	AC	366197	6485800.4	348.361	61	-75	85	No significant assays				DAVY
PDAC462	AC	373085.6	6480699.4	298.853	42	-60	270	No significant assays				Eastern_UM
PDAC463	AC	373131.5	6480699.3	311.35	31	-60	270	No significant assays				Eastern_UM
PDAC464	AC	373170.8	6480697.9	307.505	33	-60	270	No significant assays				Eastern_UM
PDAC465	AC	373211.8	6480695.6	304.621	16	-60	270	No significant assays				Eastern_UM
PDAC466	AC	373253.6	6480701.2	308.947	30	-60	270	No significant assays				Eastern_UM

Notes: Hole locations were measured by handheld GPS with accuracy +/-3m.

The azimuth is magnetic north degrees and measured at the time of drill rig line up using a SUUNTO sighting compass.

APPENDIX 2 – DOME NORTH LITHIUM PROJECT – JORC CODE 2012 TABLE 1 CRITERIA

Section 1 Sampling Techniques and Data

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

Dome North Project – AC Drilling July 2020

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"> Aircore (AC) samples from holes drilled from surface reported. Sample piles were laid out on the ground with three metre composite samples or single metre samples collected in calico bags by sampling 3 consecutive sample piles or single piles respectively, using an aluminium scoop. pXRF analysis was undertaken on each 1m sample using a Bruker S1 Titan 600 handheld portable XRF analyser for internal use, and not reported herein.
	<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"> Industry-standard Aircore drilling, using a face-sampling blade bit. Duplicate samples and Certified Reference Standards were inserted at regular intervals to provide assay quality checks. The standards and duplicates reported 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"> Aircore drilling was used to obtain 1 m samples which were laid out in order directly onto the ground. 3 consecutive samples were aggregated to form a 3.0kg sample or a single sample was collected through mineralised zones for 3.0kg. Samples crushed and pulverised by pulp mill to nominal P80/75um to produce a 50-gram charge for analysis. A zirconium bowl is used to grind the sample to be analysed to minimise Fe contamination for the mineralised pegmatite samples only. Standard exploration package of elements were analysed by a four acid digestion with a Mass Spectrometer (MS) determination (Intertek analysis code 4A-Li / MS 48). Any over range samples were re analysed by a sodium peroxide zirconium crucible fusion analysed by inductively coupled plasma optical (atomic) emission spectrometry (Intertek analysis code FP1/OE).
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"> Aircore drilling using a 90mm blade bit or face sampling hammer in hard rock.
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 drilling the geologist recorded occasions when sample quality is poor, sample return was low, when the sample was wet or compromised.
	<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 is generally good for AC drilling using the equipment described when dry. The sample is considered 'fit for purpose'.
	<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"> Because the sample is used for geochemistry only, no study has been made.
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"> Lithological logs exist for these holes in a database. Fields captured include lithology, mineralogy, sulphide abundance and type, alteration, texture, veining, weathering and colour.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<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 is qualitative, and a representative sample is retained in a chip tray 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 hole is geologically logged.
	<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"> 1 m samples which were laid out in order directly onto the ground. 3 consecutive samples were aggregated to form a 3.0kg sample. Three metre composites were collected for the entire length of the drill holes. Single metre samples were taken through pegmatite lithology. The sample collection and sampling for this style of drilling is considered standard industry practise and fit for purpose.
	<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 looks for evidence of sample contamination, which was recorded where present.
	<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"> Standard Reference Material is included at a rate approximately 1 per 30 samples. Duplicate field samples are routinely inserted at approximately 1 per 30 samples. Laboratory quality control samples were inserted by the laboratory with the performance of these control samples monitored by the laboratory and the company.
Quality of assay data and laboratory tests	<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.
	<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. A zirconium bowl is used to grind the sample to be analysed to minimise Fe contamination for the mineralised pegmatite samples.
	<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"> The Company owns a Bruker S1 Titan 600 handheld XRF instrument which it used to assist the geologist with lithology and lithogeochemistry. Results are for Company use alone. Standards, blanks and duplicates have been analysed with Bruker pXRF to ensure the instrument is operating as expected and correctly calibrated.
Verification of sampling and assaying	<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"> Standards and laboratory checks have been assessed. Standards show results within acceptable limits of accuracy, with good precision in most cases. Internal laboratory checks indicate very high levels of precision.
	<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 are calculated by experienced staff with these intersections checked by other staff. 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 Company has a digital SQL drilling database where information is stored. The Company uses external consultants to load and validate data and appraise quality control samples.
Location of data points	<ul style="list-style-type: none"> Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> The Company has not applied any adjustment to assay data.
	<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"> Collar surveys were completed using a hand-held GPS with an accuracy of +3 metres
	<ul style="list-style-type: none"> Specification of the grid system used. 	<ul style="list-style-type: none"> MGA94 (Zone 51)
Location of data points	<ul style="list-style-type: none"> Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Topographic control is from a hand-held GPS, and is approximate, but fit for purpose. The Company owns a

Criteria	JORC Code explanation	Commentary
		Digital Terrain Model (DTM) which can be used to supersede elevation data.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 	<ul style="list-style-type: none"> Drill hole traverses were nominally 200 - 400m apart. Individual holes were nominally 40 – 80m-spaced.
	<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"> The drilling reported herein and outside of the Cade deposit, there has been insufficient work conducted to allow the estimation of a mineral resource. The Cade deposit has an existing Inferred Resource of 8.2M tonnes at 1.23% Li₂O.
	<ul style="list-style-type: none"> Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Mineralised pegmatite samples were taken as 1m samples with 3m composite samples taken for unmineralised portions of the drillhole.
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"> The orientation of the drilling was designed to intersect the magnetic features interpreted to host pegmatite intrusions at perpendicular angles. At Cade, the drilling is designed perpendicular to known mineralisation. Areas that are unknown the data is insufficient to make an assessment.
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 in a designated storage container.
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.

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 Pioneer Dome drilling reported herein is entirely within E15/1515 and E63/1669 which are granted Exploration Licences. The tenements are located approximately 60km N 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 tenements are 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 Statement E15/1515 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 the 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 lithium exploration drilling or sampling on the Pioneer Dome Project other than 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 or associated elements.
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 intrusions. These type of pegmatite intrusions are the targets of hard rock lithium deposits. The Sinclair Deposit is classified as a petalite/lepidolite sub-type and the Cade Deposit is classified as the albite-spodumene sub-type.
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"> Intersections noted are from 1m sample intervals unless stated. Li₂O intercepts calculated using 0.5% cut off with a maximum 3m internal dilution and no external dilution. Assays in Appendix 1 are of the interval sampled. There are no metal equivalent values reported.

Criteria	JORC Code explanation	Commentary
	<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 and considered close to true width at Cade due to perpendicular orientation of the drillhole towards the mineralised structure. In areas of blind geology, the downhole width is reported.
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 and tables 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"> Comprehensive reporting of drill details has been provided in Appendix 1 and other tables within 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"> Geological mapping, litho-geochemical analysis, and target generation. The nature and scale of further drilling is yet to be determined Metallurgical test work at the Cade Deposit continues.