



## ASX RELEASE

# Integrated Pre-feasibility Study completed on schedule and maiden Ore Reserve declared for Mt Holland Lithium Project

18 December 2018

Kidman Resources Limited is pleased to announce that Covalent Lithium<sup>1</sup> has completed an integrated pre-feasibility study (**IPFS**) for the Mt Holland Lithium Project. The IPFS has confirmed the compelling business case for an integrated mine-to-refinery project producing refined, battery grade lithium hydroxide (**LiOH**).

On 22 October 2018, Kidman announced the results of a pre-feasibility study on the proposed Kwinana Lithium Refinery (the **Refinery**) and an updated scoping study on the proposed Mt Holland lithium mine and concentrator (**Mine & Concentrator**).<sup>2</sup> Furthermore, on 25 October 2018, Kidman announced that Covalent Lithium would streamline the separate studies being conducted on the Mine & Concentrator and Refinery into an IPFS on the integrated Mt Holland Lithium Project expected in 4Q 2018.<sup>3</sup>

The IPFS has now been completed and has confirmed the compelling outcomes from the previous studies on the Refinery and the Mine & Concentrator, including a highly attractive NPV and IRR.

Key outcomes from the IPFS include:

- Long-life, low-cost operation with projected annual average production of 45,254 tonnes of LiOH (Kidman share: 22,627 tonnes).
- Maiden Ore Reserve for the Earl Grey deposit of 94.2 million tonnes at 1.5% Li<sub>2</sub>O.<sup>4</sup>
- Conservative 5.5% Li<sub>2</sub>O concentrate grade adopted based on testing to date, which will be subject to optimisation during the Definitive Feasibility Study stage.
- Outstanding project economics in line with previous studies: post-tax NPV<sub>10%</sub> (nominal) of US\$2.2 billion, robust margins, rapid payback (3 years) and a strong IRR of 26.6%.<sup>5</sup>
- Total integrated capex of US\$737 million (Kidman share: US\$368 million) including contingencies, in line with the previous estimate.<sup>6</sup>
- C1 cash operating cost (net of by-products) of US\$4,507/t LiOH (excluding government royalties),<sup>7</sup> will be subject to further optimisation during the Definitive Feasibility Study stage.

<sup>1</sup> Covalent Lithium is an unincorporated joint venture owned by Kidman (50%) and Sociedad Quimica y Minera de Chile S.A. (**SQM**) (50%).

<sup>2</sup> Refer ASX announcement "Refinery PFS and updated Mine and Concentrator Scoping Study", 22 October 2018.

<sup>3</sup> Refer ASX announcement "Kidman Resources announces capex and working capital financing term sheet with SQM in respect of Mt Holland Lithium Project", 25 October 2018. The Mt Holland Lithium Project comprises the Mine & Concentrator, and the Refinery.

<sup>4</sup> Proved and Probable Ore Reserves. See the JORC Table 1 Statement in Appendix II.

<sup>5</sup> At Roskill pricing.

<sup>6</sup> Excludes owners' costs of US\$76 million (Kidman share US\$38 million) during construction.

<sup>7</sup> Integrated cash operating cost excludes cash cost for government royalties and includes by-product credits from excess concentrate production not used for Refinery.

**Table 1: Summary outcomes of IPFS (100% basis) – Base Case ~45,254 LiOH<sup>8</sup>**

Outcomes	Unit of Measure	Refinery PFS and Updated Scoping Study (Oct-18)	IPFS (Dec-18)
Estimated project life	years	47	47
Life of project revenue (real)	US\$ billion	33.5	33.3
Life of project EBITDA (real)	US\$ billion	22.0	21.2
Integrated Capital (excluding contingency)	US\$ million	601	609
Integrated Capital (including contingency)	US\$ million	755	737
Post-tax NPV <sub>10%</sub> nominal <sup>(i)</sup>	US\$ billion	2.3	2.2
Internal rate of return (IRR)	%	27.7	26.6
C1 cash operating cost (net of intermediate products) <sup>(ii)</sup>	US\$ / tonne LiOH	4,164 <sup>(iv)</sup>	4,507 <sup>(v)</sup>
Project payback	Years	3	3
Average LiOH price over first 10 years (real) <sup>(iii)</sup>	US\$ per tonne	14,074	14,074
Life of project assumed LiOH price (real) <sup>(iii)</sup>	US\$ per tonne	15,115	15,115

(i) NPV discount factors are presented on a nominal basis.

(ii) Integrated cash operating cost excludes cash cost for government royalties and is net of revenue from excess concentrate production not used for Refinery (being US\$578/t in the IPFS and US\$644/t in Refinery PFS and updated scoping study. Refer to Table 7 for a reconciliation of operating costs to those presented in the Refinery PFS and updated scoping study on the Mine & Concentrator.

(iii) Based on Roskill price estimates.

(iv) Inclusive of 15% contingency on Refinery operating costs. Refer to Table 7 for a reconciliation of operating costs to those presented in the Refinery PFS and updated scoping study on the Mine & Concentrator.

(v) IPFS includes zero contingency on Refinery operating costs reflecting greater certainty on operating costs.

Integrated capital expenditure in the IPFS is broadly in line with the Refinery PFS and updated scoping study on the Mine & Concentrator, with an increase in capital relating to the concentrator (driven by water treatment and non-process infrastructure) offset by a reduction in pre-strip mining costs and a reduction in the cost of engineering, procurement and construction following the appointment of WSP as project manager (as well as a partial reallocation of some of these to owners costs). Operating costs have moderately increased, largely due to the reduction in concentrate grade. Refer to Appendix I for further discussion.

As part of the IPFS, Kidman has also today announced its maiden Ore Reserve for the Earl Grey deposit at Mt Holland of 94.2 million tonnes at 1.5% Li<sub>2</sub>O. A JORC Table 1 Statement is included in Appendix II.

**Table 2: Ore Reserves for the Earl Grey Deposit**

Classification	Feed (Mt)	Grade Li <sub>2</sub> O (%)	Grade (Fe <sub>2</sub> O <sub>3</sub> ) (%)	Grade (Ta <sub>2</sub> O <sub>5</sub> ) (ppm)	Waste (Mt)	Total (Mt)
Proved	54.4	1.5	1.3	45	199	253
Probable	39.8	1.5	1.4	54	222	261
<b>Total</b>	<b>94.2</b>	<b>1.5</b>	<b>1.4</b>	<b>50</b>	<b>422</b>	<b>515</b>

Note: All figures have been rounded to appropriate significant figures and rounding errors may occur.

Kidman's CEO and Managing Director, Martin Donohue, said: "We committed to completing the IPFS for the Mt Holland Lithium Project before the year end and are pleased to have achieved this target. The study provides further support for the attractive economics of our long-life, vertically-integrated lithium hydroxide project. Importantly, with the forfeiture issue now settled, funding secured through to final investment decision and strong progress on our lithium hydroxide offtake agreements, we continue to make good progress towards development of this globally significant project."

<sup>8</sup> All financial assumptions are presented for the integrated Mt Holland Lithium Project (comprising the Mine & Concentrator and Refinery), on a 100% basis. Refer to Appendix 1 for further details.

The next stage in the development of the Mt Holland Lithium Project is a Definitive Feasibility Study which is expected to be completed in the first half of 2019, after which a final investment decision will be made.

Kidman is continuing discussions in relation to further offtake agreements with high quality counterparties, with the aim of securing binding contracts for approximately 75% of Kidman's full share of LiOH production (circa 22.6kt per annum of LiOH).

In addition, discussions with traditional debt financiers are progressing well and Kidman will continue to evaluate the most appropriate way to fund its share of capital expenditure for the project consistent with its strategy to maximise debt financing and minimise any equity contribution for the project.

**For more information:**

**Martin Donohue**

Managing Director & CEO

Tel: +61 3 9671 3801

Email: [info@kidmanresources.com](mailto:info@kidmanresources.com)

**Frederick Kotzee**

Chief Financial Officer

Tel: +61 3 9671 3801

Email: [info@kidmanresources.com](mailto:info@kidmanresources.com)

**For media:**

**Olivia Brown**

MorrisBrown Communications

Tel: +61 409 524 960

Email: [olivia@morris-brown.com.au](mailto:olivia@morris-brown.com.au)

**Hayley Morris**

MorrisBrown Communications

Tel: +61 407 789 018

Email: [hayley@morris-brown.com.au](mailto:hayley@morris-brown.com.au)

**ABOUT KIDMAN RESOURCES**

Kidman Resources Limited (ASX:KDR) is developing the world class Mt Holland Lithium Project in a 50:50 joint venture, called Covalent Lithium, with Sociedad Quimica y Minera de Chile S.A. (**SQM**), the world's largest lithium producer. The Mt Holland Lithium Project comprises a Mine & Concentrator and Refinery and will be a globally significant, low cost, integrated producer of battery-grade lithium hydroxide meeting increased demand from the electric vehicle market.

## Appendix I: IPFS vs. Refinery PFS and updated Mine & Concentrator Scoping Study

### A. IPFS Key Parameters

The IPFS was conducted by Covalent Lithium. Hatch Ltd, a leading international engineering and project company, was the main contributor to the Refinery design, operating and capital cost estimates with co-ordination of input from other key participants. A range of consultants contributed to the Mine & Concentrator component of the IPFS.

**Table 3: Refinery Key Parameters**

Parameter	Unit	Refinery PFS and Updated Scoping Study (Oct-18)	IPFS (Dec-18)
Spodumene concentrate feed rate	Dry tpa	315,000	345,000
Spodumene concentrate feed grade	Dry % Li <sub>2</sub> O	6.2%	5.5%
Refinery availability	%	90	90
Recovery of Lithium in Concentrate to LiOH	%	85	85
Average annual Refinery production	LiOH tpa	45,254	45,254
Li <sub>2</sub> O grade	-	Battery-grade	Battery-grade
Estimated Project Life	Years	47	47
Exchange rate	AUD/USD	0.75	0.72
Average LiOH price over life of project (real)	USD/t LiOH	15,115	15,115
Refinery capital cost (excl. contingency)	USD	335	310
Refinery capital cost (incl. contingency)	USD	436	389
Nominal post tax discount rate	%	10%	10%
Australian corporate tax rate	%	30%	30%

**Table 4: Mine & Concentrator Key Parameters**

Assumption	Refinery PFS and Updated Scoping Study (Oct-18)	IPFS (Dec-18)
Proposed construction start date	2H 2019	2H 2019
Start of Concentrator Production	2H 2020	2H 2020
Potential Mine Life (Years)	47	47
LOM plant feed (Mt)	94	94
Measured resources (%)	48	48
Indicated resources (%)	52	52
Inferred resources (%)	0	0
Mineralisation	Spodumene only <sup>(i)</sup>	Spodumene only <sup>(i)</sup>
Average annual plant throughput (Mtpa)	2.0	2.0
Average strip ratio (waste to plant feed) to 2040 <sup>(ii)</sup>	3.7	3.7
Average feed grade	1.5%	1.5%
Plant recovery	75%	75%
Potential annual concentrate production (tonnes) <sup>(iii)</sup>	364,803	411,233
Concentrate grade (Li <sub>2</sub> O)	6.2%	5.5%

(i) Other minerals treated as waste for the purposes of the study but offer an opportunity to optimise.

(ii) LOM strip ratio 4.5.

(iii) Concentrate production over and above the Refinery required need assumed for the study to be sold to the market.

## B. Refinery Capital Cost Estimate

**Table 5: Refinery Capital Estimate**

Project Area	Unit	Refinery PFS and Updated Scoping Study (Oct-18)	IPFS (Dec-18)
Mechanical supply	US\$ million	98	96
Site preparation and civil works	US\$ million	5	5
Balance of direct costs	US\$ million	167	163
<b>Subtotal – direct costs</b>	<b>US\$ million</b>	<b>271</b>	<b>264</b>
Temporary construction facilities	US\$ million	10	9
Freight	US\$ million	1	10
Spares and first fills	US\$ million	8	8
Vendor assistance	US\$ million	1	1
EPC	US\$ million	46	18
<b>Subtotal – indirect costs</b>	<b>US\$ million</b>	<b>65</b>	<b>46</b>
<b>Total capital (excluding contingency)</b>	<b>US\$ million</b>	<b>335</b>	<b>310</b>
Contingency	US\$ million	101	79
<b>Total capital (including contingency)</b>	<b>US\$ million</b>	<b>436</b>	<b>389</b>

Refinery capital expenditure of US\$310 million (Kidman share US\$155m) excluding contingency decreased approximately US\$25 million. Various factors have contributed to this reduction, with the largest component being an US\$18 million re-allocation of the management component of the cost of engineering, procurement and construction to owners costs (refer to footnote 6 on page 1) reflecting the appointment of WSP as project manager, as well as a more general reduction in engineering and construction costs as they have become more refined due to more advanced studies. Other changes reflect further refinement of capital requirements.

## C. Mine & Concentrator Capital Cost Estimate

**Table 6: Mine & Concentrator Capital Cost Estimate**

Project Area	Unit	Refinery PFS and Updated Scoping Study (Oct-18)	IPFS (Dec-18)
Mine	US\$ million	76	31
Concentrator	US\$ million	129	210
Sitewide / offsite infrastructure	US\$ million	18	26
<b>Subtotal – direct costs</b>	<b>US\$ million</b>	<b>223</b>	<b>266</b>
Subtotal – indirect costs	US\$ million	43	33
<b>Total capital (excluding contingency)</b>	<b>US\$ million</b>	<b>266</b>	<b>299</b>
Contingency	US\$ million	53	49
<b>Total capital (including contingency)</b>	<b>US\$ million</b>	<b>319<sup>(i)</sup></b>	<b>348<sup>(ii)</sup></b>

(i) Capital excludes owner's cost (including spares, first fills and flights and accommodation) of US\$10.0 million.

(ii) Capital excludes owner's cost of US\$76.3 million (Covalent Lithium labour during construction, WSP contract, spares, first fills and flights and accommodation).

Mine & Concentrator capital expenditure of US\$299 million has increased by approximately US\$33 million. The increase in capital expenditure relating to the concentrator is primarily driven by non-process infrastructure including power connection and temporary power requirements, air strip and aerodrome needs and an increase to the cost of the water plant facility (which will optimise water treatment to enhance concentrate recoveries). This increase has been offset by a reduction in mining costs largely driven by pre-strip requirements being revised in light of updated estimations of the mining plan and due to increased understanding of the ore body's flat lying geometry.

## D. Operating Cost Reconciliation

**Table 7: Base Case Unit Costs**

<b>US\$ / tonne LiOH</b>	<b>Refinery PFS and Updated Scoping Study (Oct-18)</b>	<b>IPFS (Dec-18)</b>
C1 cash operating cost (excluding contingency)	4,487	5,085
+ Contingency	321	-
<b>C1 cash operating cost (including contingency)</b>	<b>4,808</b>	<b>5,085</b>
- Credits from excess concentrate production not used for Refinery	(644)	(578)
<b>C1 cash operating cost (net of by-product credits)</b>	<b>4,164</b>	<b>4,507</b>

Operating costs (inclusive of contingency) have increased slightly from the Refinery pre-feasibility study and updated scoping study on the Mine & Concentrator, from US\$4,808/t to US\$5,085/t. There is no contingency in the IPFS operating cost forecasts due to increased certainty around key items in the IPFS.

## E. Mine & Concentrator Operating Cost Estimate

**Table 8: Mine & Concentrator Operating Cost Estimate**

<b>Project area (US\$ per tonne of Concentrate delivered to Kwinana)</b>	<b>Refinery PFS and Updated Scoping Study (Oct-18)</b>	<b>IPFS (Dec-18)</b>
<b>Average to 2040</b>		
Mining	102	91
Processing	112	96
Transportation <sup>(i)</sup>	46	48
General and Administration	33	22
<b>Total operating cost<sup>(ii)</sup></b>	<b>293</b>	<b>257</b>
<b>Average Over Life of Mine</b>		
Mining	112	99
Processing	110	96
Transportation <sup>(i)</sup>	46	48
General and Administration	31	21
<b>Total operating cost<sup>(ii)</sup></b>	<b>299</b>	<b>264</b>

(i) Transport cost reflects cost of delivering tonnes of concentrate to Refinery.

(ii) Excludes cash cost for government royalties.

The lower than previous estimated mining and processing costs are mainly due to the higher throughput through the processing plant in the IPFS (411 Ktpa vs 365 Ktpa). The increased plant throughput is directly as a result of the lower concentrate grade (5.5% vs 6.2%).

## F. Sensitivity Analysis

A sensitivity analysis for the Mt Holland Lithium Project was carried out to determine the effects of key variables in relation to the post-tax NPV of US\$2.2 billion at a nominal discount rate of 10%. The results of the sensitivity analysis are presented in Table 9 below.

**Table 9: Project Sensitivity Analysis**

Sensitivity	Change from base case (US\$ million)	NPV (US\$ billion)
Base NPV		2.2
Discount rate +10%	-305	1.9
Discount rate -10%	+366	2.6
LiOH price +10%	+425	2.6
LiOH price -10%	-425	1.8
Spot LiOH price <sup>(i)</sup>	+674	2.9
Total capital cost +10%	-61	2.2
Total capital cost -10%	+61	2.3
Exchange rate +5%	+220	2.4
Exchange rate -5%	-220	2.0

(i) Spot scenario based on BMI Asia Lithium Hydroxide CIF spot price (sourced from Bloomberg) of US\$17,000/t as at 30 November 2018.

## G. Geology and Mineralisation

The Earl Grey pegmatite is hosted within a series of steeply dipping ultramafic and mafic rocks of Archaean age. The pegmatite consists of a main tabular body of approximately 1,000m in strike length, over 2,000m in dip extent, and thicknesses of up to 100m. This main pegmatite is flanked by several hanging wall and footwall dykes, and the main body itself branches into multiple dykes at its southern and eastern extents. The pegmatite dips 5-15° to the north west and is slightly offset by several north-south trending fault zones.

The mineralogy of the pegmatite consists of a simple albite-quartz-microcline-spodumene-petalite assemblage with minor biotite, muscovite and tourmaline. The only significant mineralogical variation across the deposit occurs within the lithium aluminosilicates; spodumene, petalite and several alteration phases occur in discrete domains. This zonation has been modelled through the detailed logging of 87 diamond drill holes, and the analysis of 1,272 samples by X-ray diffraction (XRD).

Spodumene is present in two forms at Earl Grey; a coarse form produced during initial crystallisation of the melt, and a finer spodumene-quartz intergrowth (SQI) derived from the isochemical inversion of petalite.

## H. Mineral Resource Estimate

The Mineral Resource estimate for the Earl Grey deposit was undertaken by Mining Plus Pty Ltd and was released by Kidman in March 2018. The global estimate is 189Mt at 1.5% Li<sub>2</sub>O. This is a high confidence estimate as over 91% of the material is classified as measured and indicated. The Mineral Resources have been reported at a cut-off of 0.5% Li<sub>2</sub>O within a pit shell and have an effective date of 19 March 2018.

## I. Geotechnical Studies

The geotechnical assessment was undertaken by Peter O'Bryan and Associates. This assessment was based on ten surface exploration holes, eight specifically located PQ geotechnical holes, examination of core photography from a further seven boreholes, and observations of rock mass and slope conditions within the existing Earl Grey, Jasmine and Darjeeling open pits. These pits were excavated to a depth of approximately 60m in the 1990's and are considered analogues of the expected rock mass conditions within a new pit which would be developed on the Earl Grey pegmatite. These pits remain largely intact, and exhibit very good wall stability. The table below summarises the design parameters adopted. During the optimisation process the slopes did not allow for ramps, therefore a nominal 30m wide ramp has been allocated in the overall wall angles input to the pit optimisation, with an allowance for an extra ramp pass every 100m in depth.

**Table 10: Design Parameters**

From (mRL)	To (mRL)	Rock mass description	Bench height(m)	Batter angle (m)	Berm width (m)	Inter-ramp angle (degrees)
445	415	Highly weathered	10	50	4	38.9
415	400	Moderately weathered	15	55	6	42.3
400	380	Slightly weathered	20	65	7	50.8
380	320	Fresh	20	70	7	54.5
320	Pit floor	Fresh	25	75	7	75.0

## J. Mining

Conventional open pit mining utilising experienced contractors will be adopted at Earl Grey (subject to further study). The mining method was evaluated for a traditional truck and hydraulic excavator (backhoe) operation, combined with suitable drill and blast. The operation evaluated different bench heights in different areas of the pit. In the pegmatite and waste contact zones, mining was determined to be standard 5m benches (2 x 2.5m flitches), and a 10m bench height was assumed for bulk waste mining outside of these zones. Ramp widths were maintained at a nominal 30m. A series of 15 pit designs (staged cutbacks) are planned with mining developing from the initial pits at the south end where the pegmatite comes to surface and proceeding in a northerly direction as the deposit is systematically mined down dip. Equipment (100t-200t excavators loading 100-200t trucks) has been selected and scheduled to meet the 2Mtpa plant throughput. Overall the pit design contained 94.2 million tonnes of ore at 1.5% Li<sub>2</sub>O and 421 million tonnes of waste at an overall strip ratio of 4.5 to 1. Dump trucks will haul ore to the ROM pad approximately 2km haul from the pit crest to the ROM. After various pit optimisations were performed using the geological block model which supports the Mineral Resource (described in Section 3 of Table 1 attached), along with detailed design (as described above) and scheduling, cash flow modelling and consideration of sensitivities with revenue factors and metallurgical recovery, the contained inventory of plant feed within the pit designs was considered to meet the requirements of an ore reserve. Stage 1 (Proven) is limited to pit 10 where the waste is contained within the area under application for disturbance. Stage 2 (Probable) extends excavation to pit 15 where the boundary of the pit is defined by the economic limits of the predominantly spodumene mineralisation. (Note that the optimisation of the resource focussed on the spodumene zones only, and excluded the petalite and mixed zones which were assumed to have no economic benefit). Refer Table 2.

The mine plan focussed on minimising land disturbance, with approximately 25% of the waste rock volume as in-pit backfill.



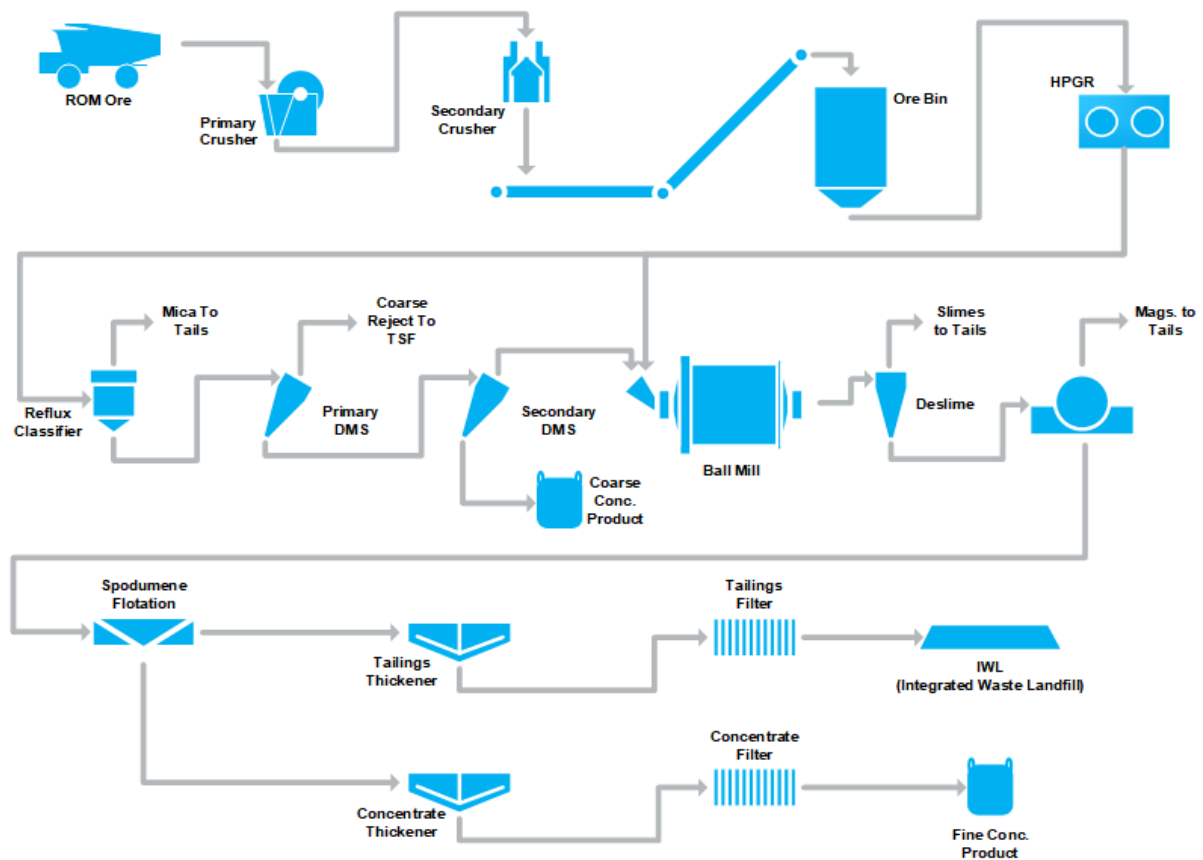
For the purposes of the study, a dilution factor of 104% and mining recovery of 98% have been used. This reflects the broad, well defined and sharp boundaries of the pegmatite/mafic waste rock contacts and has been determined after undertaking a process of regularising the Mineral Resource model using a wide range of block sizes to establish an effective standard mining unit of 5m x 5m x 2.5m. In practical terms detailed grade control will inform the mine planning & geology team to enable them to use non-horizontal and non-constant thickness flitches to expose mineralised pegmatite and mine the pegmatite cleanly will improve these figures. Mining costs were derived from the project-specific contractor pricing request information received in 2017 and mining costs were revalidated in 2018.

## K. Metallurgy

Metallurgical testwork has continued under the supervision and direction of Covalent Lithium. The variable grain size and fine grained nature of the spodumene has meant that liberation is a key issue and accordingly considerable testwork has focussed on feed preparation within a narrow size range. A two-stage process flowsheet has been determined to be optimal with dense media separation followed by flotation.

Bench scale testwork has been followed by pilot plant work to optimise reagents, conditioning time and other variables that influence flotation performance. The flowsheet is shown in the block diagram in Figure 1.

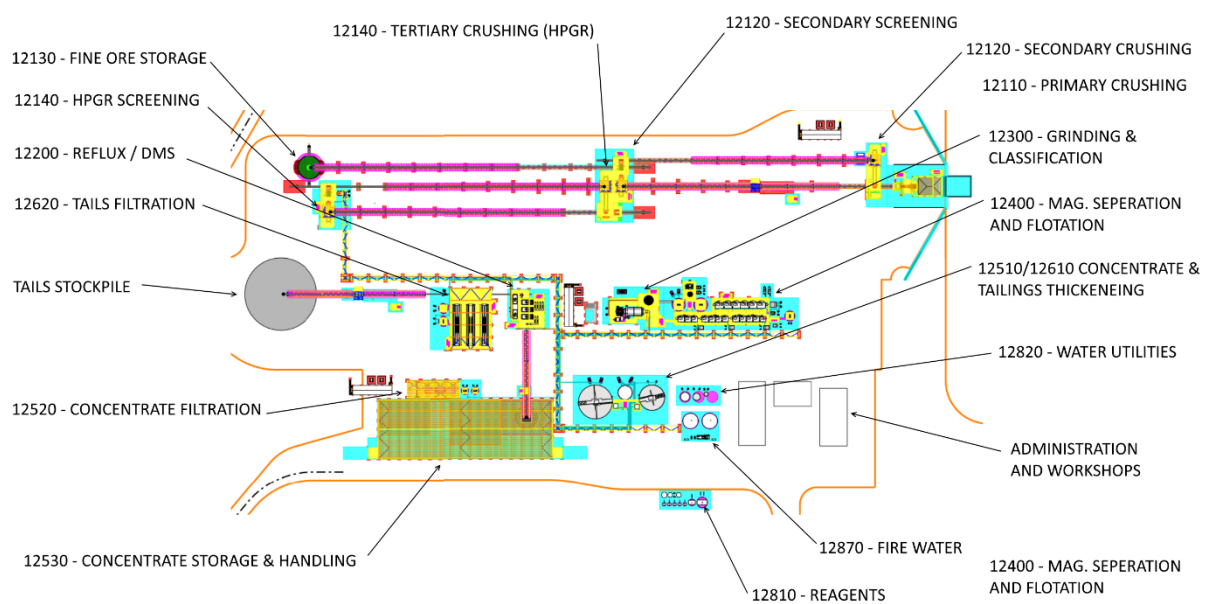
**Figure 1: Flowsheet Block Diagram**



The flowsheet has been determined to achieve 75% overall recovery of  $\text{Li}_2\text{O}$  at a grade of 5.5% and expected low values of deleterious elements recovered in the concentrate. The pegmatite by nature is described as hard and abrasive. Two stage crushing is followed by a

high-pressure grinding roll machine (HPGR), reflux classifier to remove mica, two stages of dense media separation (DMS) using ferrosilicon with rejects from the first stage going to tails and underflow from the second stage to final concentrate and overflow going to flotation. Flotation feed will be ground in a ball mill with subsequent de-sliming via cyclone cluster, then magnetic separation to remove iron and then the feed will go to a three-stage flotation circuit. All of the wet plant will use fresh water. Fresh water will be produced from the site raw water supply via a purpose-built water treatment plant using mechanical vapour compression. All waste streams will be combined, filtered and trucked from the plant to a dry stack tailings facility located to the south of the open pit. These dry stack tails will be co-mingled with open pit waste to form a safe, stable landform. Concentrate from the flotation plant will be filtered and combined with the gravity concentrate and stored in a concentrate storage shed for transportation to Kwinana.

**Figure 2: Concentrator Schematic Plan View**



The plant design and planning has incorporated the already disturbed footprint of the Bounty Gold Processing Plant, this has been done to minimise environmental impact on the Mt Holland site. During construction of the lithium concentrator old redundant infrastructure will be removed.

## **L. Concentrate Transportation**

Covalent Lithium has identified a road and rail supply chain solution from the Mt Holland Mine & Concentrator to Kwinana Rail Siding and then to the Kwinana Refinery as being the most cost-effective means of transportation.

This supply chain methodology entailed loading half height containers on site with a front-end loader and telehandler. The containers are then hauled by double Skel trailer combinations to the Koolyanobbing Rail Siding, a distance of 175km via the Marvel Loch-Forrestania Road. The containers are then railed from the Koolyanobbing Rail Siding to the Kwinana Rail Siding, a distance of 470km. They are then collected from the Kwinana Rail Siding and hauled to the Mason Road site at the Kwinana Refinery, a distance of approximately 4km then to be tipped off at the Refinery's storage facility. The containers are then returned to site using this rail and road combination.

## **M. Non-Process Infrastructure**

Non-process infrastructure consists of a 300-person accommodation camp, mine offices, stores, mining contractor workshop, bulk fuel storage facilities, explosive magazines, water supply, vehicle washdown, process water treatment plant and power supply. A new aerodrome will be constructed in an east west orientation to improve safety, minimise impacts to sensitive flora and ensure that the waste landforms (dry stack tails) can be maximised for limited footprint.

## **N. Environmental approvals**

The project is currently being assessed by the WA Environmental Protection Agency under Part IV of the *Environmental Protection Act 1986* (WA) and through the Commonwealth Department of Environment and Energy under the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**). The level of assessment is a Public Environmental Review. The key environmental factors were determined to be Flora and Vegetation and Terrestrial Fauna. Specifically, the presence of Declared Rare Flora *Banksia Sphaerocarpa var. dolichostyla* and the IronCap Hills vegetation complexes Priority Ecological Community and the presence of *Chuditch* and *Malleefowl*. These Species also triggered *Matters of National Environmental Significance* under the EPBC Act. Mt Holland is a highly disturbed brownfields site which was an operating gold mine in the past (circa 1990-2002) and is largely un-rehabilitated. Covalent have planned to re-utilise as much of the currently disturbed area as possible when siting new infrastructure and disturbance associated with development of the Mt Holland Lithium project in order to minimise new disturbance.

## **O. Risks**

The IPFS contains a number of areas for further study that were identified during the pre-feasibility study completed on the Refinery and the updated scoping study on the Mine & Concentrator. These are set out in the ASX announcement “Refinery PFS and updated Mine and Concentrator Scoping Study” dated 22 October 2018.

The risk relating to the applications for exemption from minimum expenditure obligations and forfeiture applications on Mt Holland tenements has now been resolved.

## Appendix II: JORC Table 1 Statement

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>This table relates to drill holes completed and used in March 2018 Resource Estimation. This MRE has then been used to establish the IPFS reported in this announcement. The Tables below have already been reported (KDR ASX Announcement 19 March 2018) when the 2018 Mineral Resource Estimation was completed, please refer to this announcement for further detail.</li> <li>Reverse circulation (RC) drill holes that are included in the resource estimation modelling (section 3); BWRC001 – 005, CEG002 – 004, CEG006 – 007, EGH001 – 009, KDJR001 – 002, KEER001, KEER005 – 006, KEER012 – 015, KEGR002, KEGR006, KEGR008 – 016, KEGR018 – 021, KEGR023, KEGR025 – 026, KEGR028, KEGR030, KEGR032, KEGR034, KEGR036 – 064, KEGR006 – 099, KEGR104 – 115, KEGR117 – 258.</li> <li>Diamond Drill holes (DD) that are included in the resource estimation modelling (section 3); KEGM001 – 068, KEGR001, KEGR003 – 005, KEGR007, KEGR017, KEGR022, KEGR024, KEGR024, KEGR027, KEGR029, KEGR031, KEGR033, KEGR035, KEGR116</li> <li>All metallurgical / geotechnical / Mineral Resource definition drill holes target spodumene-bearing pegmatite within and adjacent to the maiden Earl Grey Lithium Mineral Resource announced 14th December 2016.</li> <li>All drill holes used have had sample intervals selected from them by KDR personnel; on average over 1m intervals, based on return interval and geological logging.</li> <li>Selected core sample intervals from cored holes were taken from the core trays by lengthwise quarter (or half) core cutting method as per industry standard practice.</li> <li>Samples were selected on a basis of pegmatite intersection in which notable spodumene occurs, or other notable geological features and hence are not an entirely unbiased sample. Sampling is relevant to the type of deposit being studied and within best industry practice.</li> <li>Samples were forwarded to a certified laboratory for analysis where they were weighed, crushed, reweighed, pulverised and split to produce a ~200g pulp subsample to use in the assay process. <ul style="list-style-type: none"> <li>Earl Grey drilling included 37,503 total samples from the drill holes (Appendix 1, KDR ASX Announcement 19 March 2018), were assayed by inductively coupled plasma mass spectrometry (ICP-MS) or optical emission spectroscopy (ICP-OES)</li> <li>1,001 field duplicate samples were in evidence within the reported sampled intervals.</li> <li>1,293 check/standard samples were in evidence within the reported sampled intervals.</li> <li>818 Samples were analysed by XRD for mineralogy determination</li> <li>1,095 pulps samples were submitted for independent laboratory testing</li> </ul> </li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>RC drilled holes (KEGR designation) were drilled by RC technique at a standard RC drilling diameter (92mm – 132mm).</li> <li>Diamond drill holes (KEGM designation) were drilled by DD method using a standard NQ2 (47.6mm), HQ (63.5mm), or PQ (85mm) diameter core technique; this is an industry standard core size.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Recoveries for RC pre-collar and RC drill holes are not apparent, however are expected to be 70-90% in this geological / geomorphological setting.</li> <li>Recoveries for the DD drill core are in the order of 95-100%.</li> <li>Recoveries are notably less where shear zones or other structural disruptions have been intersected.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All drill holes were geologically logged and recorded within a database by KDR.</li> <li>Selected sampled intervals from the reported drill holes have been logged and compiled into a database.</li> <li>Both quantitative and qualitative geological information captured by KDR was imported and consolidated into a database, for interpretation, analysis, and verification purposes.</li> <li>All drill hole data includes: <ul style="list-style-type: none"> <li>Geological logging over geological and alteration basis, dependent on observed changes for various parameters (e.g. lithology, mineralogy, weathering, structural occurrence, etc.)</li> <li>Drill core intervals were also logged on a geotechnical basis and structural orientation measurements recorded.</li> <li>Drill core was routinely photographed on core tray basis.</li> </ul> </li> <li>The geological logging is compiled with appropriate attention to detail.</li> <li>High level of standard practice is apparent in the detail of the logging by KDR.</li> <li>The database has hence been used for interpretation, geological and resource modelling purposes.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Select sample intervals were sub-sampled on a near to 1 metre basis within geological boundaries. Interval samples of less than 1m are restricted by geological, alteration or other notable feature boundaries.</li> <li>Core samples were marked up prior to logging and sampling as per standard industry practice.</li> <li>The core samples selected were cut lengthwise by diamond blade saw to give two half core lengths and halved again for quarter core samples in PQ drilling. This is normal industry practice.</li> <li>One half, or one quarter, of the selected core sample was collected and bagged, marked up and forwarded to a laboratory for analysis. The remainder of the sample length split samples have been retained.</li> <li>RC holes for sampling were cone and quarter split directly from the cyclone, with ¼ of the split being bagged as the sample for analysis. It is standard industry practice to either retain a ¼ split for future studies and or to retain a chip tray of the spoils for future viewing.</li> <li>A total of 37,503 samples for Earl Grey were collected from a total drilled length of 68,699.9 over 351 drill holes.</li> <li>The NATA accredited laboratory is registered to ISO 9001:2008 chemical analyses standards. They use industry best practice in the sample preparation facility and within the laboratory.</li> <li>The sample preparation procedure used includes the following: <ul style="list-style-type: none"> <li>Sort all samples and note any discrepancies to the submittal form</li> <li>Record a received weight (WEI-21) for each sample,</li> <li>Crush samples to 6mm nominal (CRU-21),</li> <li>Record a crushed samples weight,</li> <li>Split any samples &gt;3.2Kg using a riffle splitter (SPL-21),</li> <li>Generate internal laboratory duplicates for nominated samples, assigning a 'D'</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>o suffix to the sample number,</li> <li>o Pulverise samples in LM5 pulveriser until grind size passes 90% passing 75µm (PUL-23),</li> <li>o Check pulverise size on 1:20 wet screen (PUL-QC),</li> <li>o Take ~ 100g work master pulp for 0.2g sample for sodium pentoxide fusion with ICP-OES or ICP_MS finish.</li> <li>• The elements the samples were assayed for in the laboratory are: Al<sub>2</sub>O<sub>3</sub>, As, Be, CaO, Co, Cr<sub>2</sub>O<sub>3</sub>, Cu, Fe<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O, Li<sub>2</sub>O, MgO, MnO, Ni, Pb, S, SiO<sub>2</sub>, TiO<sub>2</sub>, Zn, Cs, Nb, Rb, Sn, Ta, Th, and U; plus, for select sections; Au.</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• For the all samples reported the elemental concentrations has been determined as per the outline in the preceding item. Those results for the completed drill holes are listed in Appendix 2 of KDR ASX Announcement 19 March 2018.</li> <li>• No down hole geophysical survey results are reported.</li> <li>• Limited field QAQC has been supplied by KDR for the reported intervals.</li> <li>• 37,503 Earl Grey samples were assayed by inductively coupled plasma mass spectrometry (ICP) or mass spectrometry (MS)</li> <li>• Including 1,001 duplicate samples from Earl Grey were submitted for the reported sampled intervals. This is 2.7% of the total number of samples for Earl Grey.</li> <li>• A further included 1293 check / standard samples were submitted for the reported sampled intervals. This is 3.4% of the total number of samples for Earl Grey,</li> <li>• QAQC is also reliant upon high standard laboratory practice and supply of laboratory internal QAQC data.</li> <li>• The QAQC samples analysed by KDR, in addition to laboratory QAQC checks, have indicated the assaying shows acceptable levels of accuracy and precision.</li> </ul>
<p><b>Verification of sampling and assaying</b></p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Twin holes have been used with no significant variation between assay grades. The difference falls within error margin of the sampling technique.</li> <li>• Industry standard practice is assumed for activities which occurred prior to KDR.</li> <li>• Primary historical data and any re-logging / new sampling data have been compiled into the KDR database. This database has undergone a process of validation, evaluation and consolidation by KDR. This is standard practice and is expected to continue as the project progresses.</li> <li>• The technical expert has reviewed a large number of extracts from the drill hole logs and drill hole data, these have been cross referenced to requested laboratory certificates as part of the technical expert audit process, no major discrepancies or inconsistencies have been noted.</li> <li>• No adjustments or calibrations to the original assay data have been made, all original data is maintained within the database.</li> <li>• All reported intercept intervals are normalised to the sample interval – weighted average method. These have been audited and compiled by the technical expert.</li> </ul>

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• All co-ordinates are MGA94 zone 50S grid datum.</li> <li>• Vertical regional level (RL) is assumed to be Australian height datum (AHD) level as the drill holes have an average RL of 445m whilst a local topographic peak at Mount Holland is 473m above sea level.</li> <li>• The drill holes location points were surveyed by hand held GPS initially.</li> <li>• Differential survey of drill collars from exploration programmes is normally conducted at a later stage. All Earl Grey holes reported have been surveyed by an independent survey contractor using DGPS.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• The reported results are based on selective sampling of target identified core (spodumene-bearing pegmatite) from completed drill holes reported (refer to Appendix 1 KDR ASX Announcement 19 March 2018) at the Earl Grey Deposit.</li> <li>• Samples were selected on a basis of core return interval of pegmatite occurrence; hence may not be an entirely unbiased sample. Though this is common practice for such type of drilling and deposit.</li> <li>• The spacing of the drill holes being reported (refer to figure 5, Appendix 1 and Appendix 2, KDR ASX Announcement 19 March 2018) alone are sufficient to establish a high degree of geological and grade continuity appropriate for Mineral Resource and Ore Reserve reporting.</li> <li>• Combined with all previous drilling results (refer to preceding KDR ASX announcements covering drill holes KEGR001 to KEGR0181, KEGM001 to KEGM043 and maiden Mineral Resource at Earl Grey Deposit) a high degree of geological control, continuity and confidence is evident.</li> <li>• Geotechnical and metallurgical drill holes are adding a high degree of confidence and quantification data for the planning of mining operations.</li> <li>• All reported intervals are weighted average grades over the summed thicknesses, this is normal industry practice.</li> <li>• Historical and previous KDR drill hole data and surface mapping indicate a high number of pegmatite intersections within the Mt Holland Project leases (refer to ASX Announcement 21 September 2016) and occurrences in application E77/2244 to the north. It is not known if all these intersections are spodumene bearing.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• The orientation and other locality details of the completed drill holes used in this MRE are given in Appendix 1 KDR ASX Announcement 19 March 2018.</li> <li>• The orientation of the drill holes in relation to the pegmatites sampled, as interpreted by KDR, are shown on the sections Figures 1 and Figure 4 KDR ASX Announcement 19 March 2018.</li> <li>• Initial geological modelling indicates the majority of drill holes intersected the pegmatite at relatively acute angles (less than 90°), and therefore the intersect length is not considered a representations of the pegmatite true thickness.</li> <li>• Current understanding indicates that in the main pegmatite has a gentle north-westerly dip in the drilled section but steepens with depth below the Earl Grey pit area and shallows slightly again to the north west.</li> <li>• However elsewhere in the Mount Holland Project there are other pegmatite occurrences which appear to be southeast dipping and others which are near vertical.</li> <li>• The pegmatites can be truncated by east – northeast trending fracture (fault?) zones.</li> <li>• Relationship of the pegmatites and local or regional structures has not been fully established.</li> <li>• Pegmatites may intrude along fracture zones, the control for pegmatite intrusion orientation has not been fully determined.</li> <li>• Several occurrences of shallow angle outward trending narrow extensions (apophysis) from the main pegmatite have been noted in the drilling. These have been included in the Earl Grey geological model.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Sample chain of custody is managed by KDR via batch sheets and/or computerised batch files, as well as email trail between KDR, transporters and laboratory.</li> <li>• Samples were collected and stored on site prior to delivery to the laboratory in Perth by KDR personnel.</li> <li>• Whilst in storage samples are kept in a locked yard.</li> <li>• Tracking sheets/files are used to track the progress of batches of samples.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• Internal review of sampling techniques as well as data handling and validation is conducted by KDR as part of due diligence and continual review of protocols.</li> <li>• A previous technical expert visited site 8 March 2017 and discussed the current drilling programme, handling and sampling procedures with KDR staff. The TE was satisfied with all responses, observation of practices and the high standard of work being conducted.</li> </ul>



## Section 2 Reporting of Exploration Results

Note that criteria listed in the preceding section also apply to this section.

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>KDR has acquired the Mt Holland package of tenements.</li> <li>M77/1080 is a granted mining lease covering 897.8 Ha held by Montague Resources Australia Pty Ltd, it was granted on 19 May 2004 for a period of 21 years. Earl Grey pegmatite deposit lies wholly with M77/1080.</li> <li>KDR has also entered an Earn-In arrangement with WSA (see ASX Announcement 20 March 2017)</li> <li>KDR has formed a JV with Sociedad Quimica y Minera de Chile SA (NYSE: SQM), whereby both KDR and SQM will hold a 50% interest the Earl Grey Lithium Project, a joint venture business has been established as referred to in this announcement Covalent Lithium.</li> <li>No cultural heritage issues have been reported.</li> <li>Environmental monitoring and studies and review are ongoing. The current process being undertaken should not impact upon the project development.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Potential first recognised in 1980 by Harmark – Au and Ni</li> <li>In 1985 Aztec conducted soil sampling of the tenement which highlighted a number of discrete zones with values ranging from 100ppb-1000ppb Au within a broad anomalous trend and significant anomalism around the future Bounty pit. The anomalies were then tested with RAB drilling.</li> <li>During 1986 further RAB and follow-up RC intersected the main body of gold (Au) mineralisation which was eventually drilled out on 20x12m. The Au mineralisation was recognised as being associated with the pyrite and pyrrhotite.</li> <li>Transient Electromagnetic surveys (TEM) were conducted over and along strike of the Bounty deposit further delineating the Mineral Resource. This found that the data was dominated by a westerly dipping, near vertical semi-continuous conductive zone, which thickens to the south and extends over the length of the survey. This is associated with sulphides within and peripheral to the contacts of the Bounty horizon.</li> <li>In 1989 mining of the Bounty pit started.</li> <li>The total material mined from the Bounty, West and North Bounty pits was 640,000t @ 5.55g/t Au or 114,000oz Au.</li> <li>Minor RAB and occasional RC drilling was undertaken north and south testing for strike extension. This effectively closed off the Au Mineral Resource to the north but left it open to the south.</li> <li>In 1997 Forresteria drilled a number of holes to the east of the pit to test for potential nickel mineralisation.</li> <li>No known previous exploration focussed on lithium.</li> </ul>

## Geology

- *Deposit type, geological setting and style of mineralisation.*

### **Regional Geology**

- The Forresteria greenstone belt is located within the Southern Cross Domain of the Archean Youanmi Terrane, one of several major crustal blocks that form the Archean Yilgarn Craton of south western Australia.
- The Forresteria greenstone belt and its northern extension, the Southern Cross greenstone belt, form a narrow 5-30 km wide curvilinear belt that trends north-south over a distance of 250 km.
- The greenstone comprises a lower mafic-ultramafic volcanic succession, and an upper sedimentary succession intruded and bounded by granitoid batholiths.

### **Local Geology (Earl Grey)**

- The Earl Grey pegmatite was emplaced into the steeply dipping north-south trending amphibolite facies mafic and ultramafic lithologies of the Mid-Eastern ultramafic belt in the central Forresteria greenstone belt.
- The Archean stratigraphy youngs to the west, displaying the typical mafic-ultramafic-sedimentary succession of the belt. Basal tholeiitic and high-Mg basalts in the east are mostly fine to medium grained amphibolites after basalt and dolerite, and primarily composed of hornblende, actinolite and plagioclase with minor tremolite. The komatiitic ultramafic succession is a talc-chlorite ( $\pm$  serpentinite, tremolite, anthophyllite) schist, with remnant spinifex texture occasionally still visible. There is some repetition of the mafic and ultramafic lithologies, although it is unclear whether this is structural or stratigraphic. A narrow, discontinuous sulphidic banded iron formation occurs within the ultramafic sequence and hosts most gold mineralisation along the Twinings gold trend.
- The Mid-Eastern ultramafic belt overlies to the west by a porphyroblastic quartz-andalusite-garnet-staurolite-biotite schist and represents a deformed basal unit of the upper sedimentary succession. The contact between the upper and lower successions appears to be at least partly structural and has historically been interpreted as a major regional shear zone. Further west of this contact, the sedimentary units are less deformed and composed mostly of fine pelitic to carbonaceous schists and shales.
- Several Proterozoic dolerite dykes intersect the area, with the largest being the ~400m wide Binneringie Dyke.

### **Pegmatite (Earl Grey)**

- The Earl Grey pegmatite is a massive albite-spodumene type pegmatite of the lithium-caesium-tantalum (LCT) family of pegmatites. The pegmatite lacks any concentric zonation and is composed of a simple albite-spodumene-quartz-microcline dominated composition with accessory muscovite, biotite, petalite and tourmaline.
- Spodumene ( $\text{LiAlSi}_2\text{O}_6$ ) is the dominant lithium mineral throughout the pegmatite. The far western and eastern margin of the deposit also contain petalite ( $\text{LiAlSi}_4\text{O}_{10}$ ). Other trace lithium phases include eucryptite, bikitaite, cookeite, elbaite, holmquistite, lithian micas, and amblygonite-montebrazite.
- The geometry of the pegmatite is simple, consisting of a thick (30-90m), flat lying main body with hangingwall and footwall splays up to 30m in thickness.
- Several other LCT pegmatites are known from the region and remain to be investigated. These include albite-spodumene, complex spodumene, and complex lepidolite type pegmatites, some of which contain historic records of tantalum and tin bearing phases in addition to lithium. Geochemistry indicates extreme levels of fractionation and rare-element enrichment,

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>with the zonation of the pegmatite field still under investigation.</li> <li>Ongoing geological logging and interpretation work will assist KDR's understanding of this zonation.</li> </ul>
<b>Drillhole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Details of the completed drill holes reported are listed in Appendix 1 KDR ASX Announcement 19 March 2018.</li> <li>The interception depths of the pegmatite intervals for the completed drill holes are given in Appendix 2 KDR ASX Announcement 19 March 2018.</li> <li>All previous drill holes at Earl Grey pegmatite deposit have been outlined in preceding announcements, as listed in "Other substantive exploration data" section below.</li> <li>All horizontal co-ordinates are MGA94 zone 50S grid datum.</li> <li>Vertical regional level (RL) is assumed to be Australian height datum (AHD) level as the drill holes have an average RL of 445m whilst a local topographic peak at Mount Holland is 473m above sea level.</li> <li>The drill holes location points were surveyed by hand held GPS initially.</li> <li>Re-survey of the drill hole collar co-ordinates was undertaken by KDR for all drill holes reported by a subcontractor using survey industry standard differential GPS technique.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated</li> </ul>	<ul style="list-style-type: none"> <li>DD drill holes are logged and generally sampled on ~1m intervals basis within logged geological boundaries</li> <li>All drill holes being used have had sample intervals selected from them by KDR personnel; on average over 1m intervals, based on return interval and/or geological logging</li> <li>For assay results greater than (&gt;) 0.5% Li<sub>2</sub>O a weighted average result has been reported: <ul style="list-style-type: none"> <li>The assay results are weight averaged to the individual sample lengths over the combined interval.</li> </ul> </li> <li>No metal equivalent has been used.</li> <li>No top cut has been applied.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>The relationship between sample interval lengths to the pegmatite orientation and drill core orientation is not fully understood. However, the inclination of the drill to the opposing dipping trend of the pegmatite implies that the drill sample length of 1m is less than 1m vertical distance.</li> <li>Sample intervals are restricted by geological contacts and changes where applicable.</li> <li>Initial modelling indicates the drill holes intersect pegmatite at acute angles.</li> <li>Interpretation shown in Figure 1, 4 and 5 (KDR ASX Announcement 19 March 2018) indicates drill holes intersect the pegmatite at acute angles and do not reflect true thickness over the pegmatite in the logged intersects.</li> <li>Pegmatite true thickness intersection is estimated at 5 – 80 m in length from the reported drill holes at Earl Grey. Work to define the continued trend and variability of the pegmatite is ongoing.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Diagrams of the location of the drill holes have been provided in Figures 4-7 (KDR ASX Announcement 19 March 2018).</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Results reported constitute all known results for lithium mineralisation within pegmatite at the Earl Grey Deposit.</li> <li>All sample assay results to date for the pegmatite intersection in drill holes listed in Appendix 1 are reported in Appendix 2 (KDR ASX Announcement 19 March 2018).</li> <li>Appendix 2 (KDR ASX Announcement 19 March 2018) is a summary of the announced weighted average lithium mineralisation intersections from the drilling refer Appendix 1 (KDR ASX Announcement 19 March 2018) at the Earl Grey deposit.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The results reported for the completed drill holes alone are sufficient in numbers to enable a preliminary geological interpretation only of the pegmatite section drilled by these holes.</li> <li>The spacing of the completed drill holes being reported (Appendix 1 and Appendix 2, KDR ASX Announcement 19 March 2018) alone are sufficient to establish a high degree of geological and grade continuity appropriate for Mineral Resource and Ore Reserve reporting.</li> <li>Combined with all previous drilling results (refer to preceding KDR announcements (refer to section: <i>Other substantive exploration data</i>) at Earl Grey Deposit to date; a higher degree of geological control, continuity and confidence is gained; enabling revision of the 2016 resource modelling and definition to be undertaken.</li> <li>Systematic sampling and multi element assaying of the pegmatites has not historically been conducted and has only been undertaken by KDR during its tenure.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Any further sampling of spodumene pegmatite intersection from drill holes from within the Mount Holland Project (including Earl Grey Deposit) undertaken by KDR will be reported in accordance with reporting standards.</li> <li>Results of analyses of samples outstanding, pending or future will be reported in accordance to the 2012 JORC Code.</li> <li>This work has been and is part of continued and ongoing work aimed at improving the geological knowledge, mineralogy and geochemistry of the mineralised pegmatite at Earl Grey Deposit, extension of the maiden Mineral Resource (December 2016), and planning of mining operations.</li> <li>Continued project-wide geological review and database consolidation is expected to assist in locating further historically mapped pegmatites and or other pegmatites not previously identified.</li> </ul>

## Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>The geological logging and sampling information is loaded and stored into a referential SQL database by Colwyn Lloyd of Geobase.</li> <li>Import validation protocols are in place. Database validation checks are run routinely on the database.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Lisa Bascombe and David Billington of MP undertook a site visit on the 9th and 10th of November 2016 in order to review the drilling, sampling and logging practices employed by Kidman and to view the geology as evident in the drill core.</li> <li>Not applicable</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>The geological interpretation is considered robust due to the nature of the geology and mineralisation.</li> <li>Surface diamond and reverse circulation (RC) drill holes have been logged for lithology, structure, alteration and mineralisation data.</li> <li>Pegmatite lithology wireframes were produced as a vein system in Leapfrog using geochemical criteria; <math>\text{SiO}_2 &gt; 70\%</math> and <math>\text{Fe}_2\text{O}_3 &lt; 3\%</math>. These were validated against lithological logging data, and structural data from diamond core. The pegmatite mineralogy wireframes were produced in Leapfrog from both XRD analyses, and visual mineralogical logs in diamond core. Weathering surfaces have been generated in Leapfrog from geological logging data.</li> <li>Due to the consistent nature of the pegmatite identified in the area, no alternative interpretations have been considered.</li> <li>The <math>\text{Li}_2\text{O}</math> % mineralisation interpretation is contained wholly within the pegmatite geological unit.</li> <li>The pegmatites are found to be variable in strike and dip extent over the length of the deposit, and of variable thickness. They are intersected and offset by two major shear zones. <math>\text{Li}_2\text{O}</math> % mineralisation within the fresh pegmatite is zoned, and primarily controlled by the dominant mineralogy; spodumene and petalite dominated assemblages are enriched compared to altered (cookeite) and Li-absent assemblages. <math>\text{Li}_2\text{O}</math> % mineralisation is depleted in weathered pegmatite.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource</li> </ul>	<ul style="list-style-type: none"> <li>The Earl Grey pegmatites strike northeast-southwest over a length of 1,300 m, and dip northwest at around <math>10^\circ</math> over 2,100 m. Several hanging wall pegmatites outcrop at surface. The main pegmatite displays geological continuity to 300 m depth from surface at the northern end of the deposit, while the hanging wall and footwall pegmatites are of shorter range and less continuous. The main pegmatite body varies in thickness from 15m to 90 m over the length of the deposit.</li> </ul>

Criteria	JORC Code explanation	Commentary																						
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>Grade estimation of Li<sub>2</sub>O%, Fe<sub>2</sub>O<sub>3</sub>% and Ta ppm has been completed using Ordinary Kriging (OK) into 58 fresh mineralogical/pegmatite domains and 5 fresh pegmatite domains using Maptek Vulcan 10.1.4 software. Grade assignment of Li<sub>2</sub>O %, Fe<sub>2</sub>O<sub>3</sub>% and S% has been undertaken in the non-pegmatite waste, oxide and transitional pegmatite material. Compositing has been undertaken within domain boundaries at 1m with a variable length of 0.2m. Top-cutting of Ta ppm has been undertaken in 1 fresh pegmatite domain. Variography has been completed in Supervisor 8.7 software on a mineralogical domain basis where enough data is present. Domains with too few samples have grouped or borrowed variography. The Mineral Resource estimate has been validated using visual validation tools, mean grade comparisons between the block model and composite grade means and swath plots comparing the composite grades and block model grades by Northing, Easting and RL.</li> <li>No assumptions have been made regarding recovery of any by-products.</li> <li>The drillhole data spacing is typically 50 m by 50 m with areas of extensional drilling at 100 m by 100 m in the down-dip and strike extents.</li> <li>The block model parent block size is 50 m (X) by 50 m (Y) by 5 m (Z), however the area of 50 m by 50 m drilling has a parent block size of 25 m (X) by 25 m (Y) by 2.5 m (Z). A sub-block size of 5 m (X) by 5 m (Y) by 0.5 m (Z) has been used to define the mineralisation edges, with the estimation undertaken at the parent block scale. <ul style="list-style-type: none"> <li>Pass 1 estimations have been undertaken using a minimum of 8 and a maximum of 35 samples into a search ellipse of varying sizes by area. A sample per drillhole limit of 5 samples/drillhole has been applied in all domains. A minimum number of drillholes requirement of 3 has been applied to the infill drilled area.</li> <li>Pass 2 estimations have been undertaken using a minimum of 8 and a maximum of 35 samples into a search ellipse 50% larger than the pass 1 ellipse in all 3 directions. A sample per drillhole limit of 5 samples/drillhole has been applied in all domains.</li> <li>Pass 3 estimations have been undertaken using a minimum of 4 and a maximum of 35 samples into the same search ellipse as pass 2. No sample per drillhole limit has been applied.</li> </ul> </li> <li>The search ellipses and variographic rotations applied during the estimation of all domain blocks has been determined using the hangingwall and footwall surface of each pegmatite within the dynamic anisotropy function in Maptek Vulcan v10.1.4 (LVA).</li> <li>No selective mining units are assumed in this estimate.</li> <li>No correlation between variables has been assumed.</li> <li>The pegmatite, mineralogy and weathering wireframes generated within LeapFrog have been used to define the domain codes by concatenating the three codes into one. The drillholes have been flagged with the domain code and composited using the domain code to segregate the data. Hard boundaries have been used at all domain boundaries.</li> <li>The influence of extreme sample distribution outliers has been reduced by top-cutting where required. The top-cut levels have been determined using a combination of histograms, log probability and mean variance plots. Top-cuts have been reviewed and applied on a domain by domain basis.</li> <li>Model validation has been carried out, including visual comparison between composites and estimated blocks; check for negative or absent grades; statistical comparison against the input drillhole data and graphical plots.</li> </ul>																						
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>The tonnes have been estimated on a dry basis.</li> </ul>																						
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied</li> </ul>	<ul style="list-style-type: none"> <li>For the reporting of the Mineral Resource Estimate, a 0.5 Li<sub>2</sub>O% cut-off within a Whittle pit shell has been used.</li> </ul>																						
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>A whittle pit optimisation has been run in order to generate a pit shell wireframe for reporting purposes. The mining assumptions/parameters applied to the optimisation are <table border="1" data-bbox="874 1688 1339 1991"> <thead> <tr> <th colspan="2">Mining Factors or Assumptions</th> </tr> </thead> <tbody> <tr> <td>Mining Factors</td> <td></td> </tr> <tr> <td>Mining Recovery</td> <td>95%</td> </tr> <tr> <td>Dilution</td> <td>5%</td> </tr> <tr> <td>Mining Cost per bcm</td> <td>\$ 9.15</td> </tr> <tr> <td>Processing cost per tonne</td> <td>\$ 22.00</td> </tr> <tr> <td>Transport and port Cost per tonne concentra</td> <td>\$ 72.20</td> </tr> <tr> <td>Li<sub>2</sub>O Price per tonne \$USD</td> <td>\$ 685.00</td> </tr> <tr> <td>Ta<sub>2</sub>O<sub>5</sub> price per lb \$USD</td> <td>\$ 40.00</td> </tr> <tr> <td>Royalty</td> <td>5%</td> </tr> <tr> <td>Forex</td> <td>\$ 0.75</td> </tr> </tbody> </table> </li> <li>Waste mining was limited to JV mining leases</li> </ul>	Mining Factors or Assumptions		Mining Factors		Mining Recovery	95%	Dilution	5%	Mining Cost per bcm	\$ 9.15	Processing cost per tonne	\$ 22.00	Transport and port Cost per tonne concentra	\$ 72.20	Li <sub>2</sub> O Price per tonne \$USD	\$ 685.00	Ta <sub>2</sub> O <sub>5</sub> price per lb \$USD	\$ 40.00	Royalty	5%	Forex	\$ 0.75
Mining Factors or Assumptions																								
Mining Factors																								
Mining Recovery	95%																							
Dilution	5%																							
Mining Cost per bcm	\$ 9.15																							
Processing cost per tonne	\$ 22.00																							
Transport and port Cost per tonne concentra	\$ 72.20																							
Li <sub>2</sub> O Price per tonne \$USD	\$ 685.00																							
Ta <sub>2</sub> O <sub>5</sub> price per lb \$USD	\$ 40.00																							
Royalty	5%																							
Forex	\$ 0.75																							

Criteria	JORC Code explanation	Commentary																																																																																																																													
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<table border="1"> <thead> <tr> <th colspan="2">Metallurgical Factors or Assumptions</th> </tr> </thead> <tbody> <tr> <td>Predominantly Spodumene</td> <td>60.0%</td> </tr> <tr> <td>Mixed Species adjusted for reduced unit revenue and increased transport costs</td> <td>49.1%</td> </tr> <tr> <td>Predominantly adjusted for reduced unit revenue and increased transport costs</td> <td>42.6%</td> </tr> <tr> <td>Alteration Materials adjusted for reduced unit revenue and increased transport costs</td> <td>47.7%</td> </tr> <tr> <td>Albite Zone adjusted for reduced unit revenue and increased transport costs</td> <td>60.0%</td> </tr> <tr> <td>Tantalum</td> <td>25.0%</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td>Cut off grade Li<sub>2</sub>O%</td> <td>0.50%</td> </tr> </tbody> </table>	Metallurgical Factors or Assumptions		Predominantly Spodumene	60.0%	Mixed Species adjusted for reduced unit revenue and increased transport costs	49.1%	Predominantly adjusted for reduced unit revenue and increased transport costs	42.6%	Alteration Materials adjusted for reduced unit revenue and increased transport costs	47.7%	Albite Zone adjusted for reduced unit revenue and increased transport costs	60.0%	Tantalum	25.0%			Cut off grade Li <sub>2</sub> O%	0.50%																																																																																																											
Metallurgical Factors or Assumptions																																																																																																																															
Predominantly Spodumene	60.0%																																																																																																																														
Mixed Species adjusted for reduced unit revenue and increased transport costs	49.1%																																																																																																																														
Predominantly adjusted for reduced unit revenue and increased transport costs	42.6%																																																																																																																														
Alteration Materials adjusted for reduced unit revenue and increased transport costs	47.7%																																																																																																																														
Albite Zone adjusted for reduced unit revenue and increased transport costs	60.0%																																																																																																																														
Tantalum	25.0%																																																																																																																														
Cut off grade Li <sub>2</sub> O%	0.50%																																																																																																																														
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made</li> </ul>	<ul style="list-style-type: none"> <li>A detailed waste material characterisation and classification program has been undertaken by MBS environmental in 2017.</li> <li>No provision for the encapsulation of sulphidic waste has been included in the MRE pitshell optimisation.</li> </ul>																																																																																																																													
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit,</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Bulk density values have been calculated from 5,270 measurements collected on site using the water immersion method. Data has been separated into lithological/weathering datasets in the waste and mineralogical/weathering datasets in the pegmatites; and mean density values derived. Densities have been assigned several material types and to the waste dump fill material due to a lack of density data.</li> </ul> <table border="1"> <thead> <tr> <th rowspan="2">Lithology by Weathering</th> <th colspan="2">Oxide</th> <th colspan="2">Transitional</th> <th colspan="2">Fresh</th> </tr> <tr> <th>Number of samples</th> <th>Density</th> <th>Number of samples</th> <th>Density</th> <th>Number of samples</th> <th>Density</th> </tr> </thead> <tbody> <tr> <td>Komatiitic Basalt</td> <td>9</td> <td>2</td> <td>51</td> <td>2.85</td> <td>473</td> <td>2.95</td> </tr> <tr> <td>Komatiite</td> <td>46</td> <td>2</td> <td>44</td> <td>2.6</td> <td>353</td> <td>2.9</td> </tr> <tr> <td>Andesite</td> <td>14</td> <td>1.9</td> <td>45</td> <td>2.8</td> <td>274</td> <td>2.9</td> </tr> <tr> <td>High Mag Basalt</td> <td>127</td> <td>1.8</td> <td>204</td> <td>2.75</td> <td>925</td> <td>2.95</td> </tr> <tr> <td>Sediments</td> <td>nil - assigned</td> <td>1.8</td> <td>6</td> <td>2.7</td> <td>132</td> <td>2.95</td> </tr> <tr> <td>BIF</td> <td>nil - assigned</td> <td>2.2</td> <td>6</td> <td>2.8</td> <td>84</td> <td>3</td> </tr> <tr> <td>Internal Waste</td> <td>1</td> <td>1.8</td> <td>5</td> <td>2.75</td> <td>39</td> <td>2.9</td> </tr> <tr> <td>Dolerite</td> <td>nil - assigned</td> <td>2</td> <td>nil - assigned</td> <td>2.8</td> <td>38</td> <td>2.95</td> </tr> <tr> <th>Lithology by Weathering and Mineralogy</th> <th>Number of samples</th> <th>Oxide</th> <th>Number of samples</th> <th>Transitional</th> <th>Number of samples</th> <th>Fresh</th> </tr> <tr> <td>Pegmatite - SQI</td> <td>46</td> <td>2</td> <td>118</td> <td>2.6</td> <td>1,092</td> <td>2.7</td> </tr> <tr> <td>Pegmatite - Mixed</td> <td>2</td> <td>2</td> <td>10</td> <td>2.5</td> <td>206</td> <td>2.6</td> </tr> <tr> <td>Pegmatite - Petalite</td> <td>nil - assigned</td> <td>2</td> <td>nil - assigned</td> <td>2.5</td> <td>275</td> <td>2.6</td> </tr> <tr> <td>Pegmatite - Mixed Eastern</td> <td>nil - assigned</td> <td>2</td> <td>11</td> <td>2.5</td> <td>192</td> <td>2.6</td> </tr> <tr> <td>Pegmatite - Alteration</td> <td>2</td> <td>1.6</td> <td>nil - assigned</td> <td>2.5</td> <td>99</td> <td>2.6</td> </tr> <tr> <td>Pegmatite - Albite</td> <td>nil - assigned</td> <td>2</td> <td>nil - assigned</td> <td>2.5</td> <td>44</td> <td>2.6</td> </tr> <tr> <td>waste dump fill</td> <td>nil - assigned</td> <td>2</td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>The selection of bulk density samples is determined by the logging geologist and is undertaken in a manner to determine the density of all material types. The diamond drill core is competent and does not display evidence of voids or vugs.</li> <li>Density has been assigned to the waste dump fill material. The densities applied are considered appropriate for this material.</li> </ul>	Lithology by Weathering	Oxide		Transitional		Fresh		Number of samples	Density	Number of samples	Density	Number of samples	Density	Komatiitic Basalt	9	2	51	2.85	473	2.95	Komatiite	46	2	44	2.6	353	2.9	Andesite	14	1.9	45	2.8	274	2.9	High Mag Basalt	127	1.8	204	2.75	925	2.95	Sediments	nil - assigned	1.8	6	2.7	132	2.95	BIF	nil - assigned	2.2	6	2.8	84	3	Internal Waste	1	1.8	5	2.75	39	2.9	Dolerite	nil - assigned	2	nil - assigned	2.8	38	2.95	Lithology by Weathering and Mineralogy	Number of samples	Oxide	Number of samples	Transitional	Number of samples	Fresh	Pegmatite - SQI	46	2	118	2.6	1,092	2.7	Pegmatite - Mixed	2	2	10	2.5	206	2.6	Pegmatite - Petalite	nil - assigned	2	nil - assigned	2.5	275	2.6	Pegmatite - Mixed Eastern	nil - assigned	2	11	2.5	192	2.6	Pegmatite - Alteration	2	1.6	nil - assigned	2.5	99	2.6	Pegmatite - Albite	nil - assigned	2	nil - assigned	2.5	44	2.6	waste dump fill	nil - assigned	2				
Lithology by Weathering	Oxide			Transitional		Fresh																																																																																																																									
	Number of samples	Density	Number of samples	Density	Number of samples	Density																																																																																																																									
Komatiitic Basalt	9	2	51	2.85	473	2.95																																																																																																																									
Komatiite	46	2	44	2.6	353	2.9																																																																																																																									
Andesite	14	1.9	45	2.8	274	2.9																																																																																																																									
High Mag Basalt	127	1.8	204	2.75	925	2.95																																																																																																																									
Sediments	nil - assigned	1.8	6	2.7	132	2.95																																																																																																																									
BIF	nil - assigned	2.2	6	2.8	84	3																																																																																																																									
Internal Waste	1	1.8	5	2.75	39	2.9																																																																																																																									
Dolerite	nil - assigned	2	nil - assigned	2.8	38	2.95																																																																																																																									
Lithology by Weathering and Mineralogy	Number of samples	Oxide	Number of samples	Transitional	Number of samples	Fresh																																																																																																																									
Pegmatite - SQI	46	2	118	2.6	1,092	2.7																																																																																																																									
Pegmatite - Mixed	2	2	10	2.5	206	2.6																																																																																																																									
Pegmatite - Petalite	nil - assigned	2	nil - assigned	2.5	275	2.6																																																																																																																									
Pegmatite - Mixed Eastern	nil - assigned	2	11	2.5	192	2.6																																																																																																																									
Pegmatite - Alteration	2	1.6	nil - assigned	2.5	99	2.6																																																																																																																									
Pegmatite - Albite	nil - assigned	2	nil - assigned	2.5	44	2.6																																																																																																																									
waste dump fill	nil - assigned	2																																																																																																																													
<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's</li> </ul>	<ul style="list-style-type: none"> <li>The resource classification has been applied to the MR estimate based on the drilling data spacing, grade and geological continuity, and data integrity.</li> <li>The classification takes into account the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity.</li> <li>The classification reflects the view of the Competent Person.</li> </ul>																																																																																																																													

Criteria	JORC Code explanation	Commentary																														
	<i>view of the deposit.</i>																															
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>This Mineral Resource estimate for Earl Grey has not been audited by an external party.</li> </ul>																														
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available</li> </ul>	<ul style="list-style-type: none"> <li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</li> <li>The statement relates to a local estimate of tonnes and grade within the pit shell at a cut-off of 0.5 Li<sub>2</sub>O%.</li> </ul> <table border="1" data-bbox="804 483 1406 658"> <caption>Mineral Resource Estimate for the Earl Grey Deposit - March, 2018</caption> <thead> <tr> <th>Classification</th> <th>Tonnes</th> <th>Li<sub>2</sub>O%</th> <th>Fe<sub>2</sub>O<sub>3</sub>%</th> <th>Li<sub>2</sub>O Tonnes</th> <th>Li<sub>2</sub>O cut-off</th> </tr> </thead> <tbody> <tr> <td>Measured</td> <td>66,000,000</td> <td>1.58</td> <td>1.18</td> <td>1,042,800</td> <td>0.5%</td> </tr> <tr> <td>Indicated</td> <td>106,000,000</td> <td>1.52</td> <td>1.09</td> <td>1,611,200</td> <td>0.5%</td> </tr> <tr> <td>Inferred</td> <td>17,000,000</td> <td>1.11</td> <td>1.20</td> <td>188,700</td> <td>0.5%</td> </tr> <tr> <td><b>TOTAL</b></td> <td><b>189,000,000</b></td> <td><b>1.50</b></td> <td><b>1.13</b></td> <td><b>2,842,700</b></td> <td><b>0.5%</b></td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>No production records exist</li> </ul>	Classification	Tonnes	Li <sub>2</sub> O%	Fe <sub>2</sub> O <sub>3</sub> %	Li <sub>2</sub> O Tonnes	Li <sub>2</sub> O cut-off	Measured	66,000,000	1.58	1.18	1,042,800	0.5%	Indicated	106,000,000	1.52	1.09	1,611,200	0.5%	Inferred	17,000,000	1.11	1.20	188,700	0.5%	<b>TOTAL</b>	<b>189,000,000</b>	<b>1.50</b>	<b>1.13</b>	<b>2,842,700</b>	<b>0.5%</b>
Classification	Tonnes	Li <sub>2</sub> O%	Fe <sub>2</sub> O <sub>3</sub> %	Li <sub>2</sub> O Tonnes	Li <sub>2</sub> O cut-off																											
Measured	66,000,000	1.58	1.18	1,042,800	0.5%																											
Indicated	106,000,000	1.52	1.09	1,611,200	0.5%																											
Inferred	17,000,000	1.11	1.20	188,700	0.5%																											
<b>TOTAL</b>	<b>189,000,000</b>	<b>1.50</b>	<b>1.13</b>	<b>2,842,700</b>	<b>0.5%</b>																											



## Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul style="list-style-type: none"> <li>An updated classified Mineral Resource estimate (19 March 2018) formed the basis of the Ore Reserve estimate. The Competent Person is Mr David Billington.</li> <li>66Mt Measured @ 1.58% Li<sub>2</sub>O.</li> <li>106Mt Indicated @ 1.52% Li<sub>2</sub>O.</li> <li>17Mt Inferred @ 1.11% Li<sub>2</sub>O.</li> <li>Modifying factors are determined from Pre-Feasibility Study.</li> <li>Mineral Resources are not additional to Mining Reserves.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person has undertaken a site visit during November 2016. During the visit existing pit voids were noted from previous gold mining periods, drill hole locations, diamond core, RC chips and existing site infrastructure were inspected.</li> </ul>
<b>Study status</b>	<ul style="list-style-type: none"> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<ul style="list-style-type: none"> <li>Ore Reserve studies have been supported by a Pre-Feasibility Study (December 2018).</li> <li>The Ore Reserve is supported by studies on metallurgical test work on the predominantly Spodumene Mineralisation.</li> <li>All material modifying factors have been considered and applied.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>Geological domaining and wireframing was based on a 0.50 % Li<sub>2</sub>O cut-off.</li> <li>Cut-off grade calculation was based on inputs used in the optimisation.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> <li>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	<ul style="list-style-type: none"> <li>The anticipated mining method is conventional open pit, drill blast, truck and excavator and selective ore mining.</li> <li>Mining is planned to start at the south end of the pit and progress northwards in nominally 100m wide strips</li> <li>The strip mining allows for back filling of the mining void from strip 4 onwards.</li> <li>Mining tonnage recovery is estimated 98% and mining dilution is estimated at 4% based on regularization to a standard mining unit of 5m x 5m 2.5m.</li> <li>Geotechnical specifications are provided by expert consultant (P O'Bryan and Associates, with reference to site visit, core logging, rock property testing and assessment.</li> <li>Pit wall parameters and inter-ramp wall angles reflect the weathering states. Angles assumed were: Oxide 39 degrees, Transitional 51 degrees and Fresh Rock 54 degrees.</li> <li>Mining widths reflect 100t equipment.</li> <li>Mining infrastructure has been allowed for in the Pre-Feasibility Study.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>• <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li>• <i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li>• <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li>• <i>Any assumptions or allowances made for deleterious elements.</i></li> <li>• <i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></li> <li>• <i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<ul style="list-style-type: none"> <li>• The metallurgical recovery is planned using crush, classifying, reflux classifiers and dense media separation, then milling, desliming, magnetic separator and flotation to produce a mineral concentrate to match current testwork. Concentrate will be treated through calcination, acid roast, purification, glauber salt and two-stage lithium crystallization to produce battery grade lithium hydroxide.</li> <li>• Metallurgical processes are designed for nominal 2Mpta ore feed.</li> <li>• Hydrometallurgical process recovery is estimated at 85%.</li> <li>• Process recovery to concentrate is estimated at 75% for Li<sub>2</sub>O for predominantly Spodumene Mineralisation and 0% for predominantly Petalite, 0% for mixed species, 0% for altered species and 0% for the albite mineralisation.</li> <li>• Tantalum recovery is estimated at 0%.</li> <li>• No allowance for mica content has been made for Li<sub>2</sub>O concentrate.</li> <li>• No specific moisture specification has been set for export hence transport and port costs are estimated for dry tonnes of concentrate.</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>• <i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Baseline studies have been undertaken and all environmental impacts are understood and can be readily managed and offset as required.</li> <li>• Environmental approval under Part IV of the Environmental Protection Act 1986 is currently being sought for mining and processing of spodumene mineralisation.</li> <li>• Existing disturbed areas associated with the historical Mt Holland Gold Mine will be preferentially utilised where practicable.</li> <li>• Conservation significant flora and fauna habitat will be avoided where possible and management measures implemented to minimise indirect impacts.</li> <li>• Environmental Approvals relate to Stage 1 of the Feasibility Studies.</li> <li>• The footprint for waste materials has been calculated with the addition of a 10% swell factor.</li> <li>• Stage 2 of the Feasibility Study exceeds the current approval areas with a swell of 33%.</li> <li>• It is anticipated that all impacts associated with Stage 2 of the project can be readily managed and offset as required.</li> <li>• Feasibility Studies include minimising disturbance to that which is necessary for project development with progressive rehabilitation in accordance with mine plan to reduce the Mine Rehabilitation Fund liability.</li> <li>• Feasibility Studies include an estimate of closure costs that will be reviewed and updated in the Mine Closure Plan every 3 years.</li> <li>• Tailings and waste material characterisation studies are underway. The study results will be outlined in a Mining Proposal and Closure Plan for the project, will inform operational and closure designs and management of waste landforms and tailings storage facilities.</li> <li>• Hypersaline water will be extracted and treated for use in processing.</li> <li>• Salt crystalline product will be co-located in the Tailings Storage Facility.</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>• <i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Mt Holland has been an operating site, however significant infrastructure has been decommissioned and has been allowed for in the Pre-Feasibility Study.</li> <li>• Care has been taken to reuse the current disturbed area for the Lithium project to minimise disturbance areas.</li> </ul>

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Costs</b>	<ul style="list-style-type: none"> <li>• <i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li> <li>• <i>The methodology used to estimate operating costs.</i></li> <li>• <i>Allowances made for the content of deleterious elements.</i></li> <li>• <i>The source of exchange rates used in the study.</i></li> <li>• <i>Derivation of transportation charges.</i></li> <li>• <i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></li> <li>• <i>The allowances made for royalties payable, both Government and private.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Plant treatment costs were developed by Covalent Lithium and processing consultant Hatch Pty Ltd during the Pre-Feasibility Study.</li> <li>• Cost are in line with reported costs from current Li<sub>2</sub>O producers in Western Australia.</li> <li>• Mining costs reflect the mid-range of five site specific contractor prices obtained in July/August 2018 utilising the first 10 years of the Pre-Feasibility schedule.</li> <li>• Lithium hydroxide (LiOH) C1 cost US\$ 4,507/t (nett of by-products and government royalties).</li> <li>• Allowance has been made for a state government Royalty of 5% on spodumene and announced 3.75% on lithium hydroxide.</li> </ul>
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li>• <i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i></li> <li>• <i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Revenue factors. Lithium hydroxide - US\$15,115/t.</li> <li>• Lithium concentrate - US\$475/t</li> </ul>
<b>Market assessment</b>	<ul style="list-style-type: none"> <li>• <i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li> <li>• <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li> <li>• <i>Price and volume forecasts and the basis for these forecasts.</i></li> <li>• <i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Current market demand exceeds current production supporting current prices, however market expectations are that supply and demand for lithium hydroxide will move toward equilibrium, and this is provided for in the selected price protocol.</li> <li>• Weighted average prices assumed to be US\$15,115/t lithium hydroxide.</li> <li>• For concentrates sales the expectation from test work is the production of a fine grained concentrate above 5.5% Li<sub>2</sub>O.</li> <li>• For concentrates sales pricing has applied a discount to the 6% Li<sub>2</sub>O market price for concentrate.</li> </ul>
<b>Economic</b>	<ul style="list-style-type: none"> <li>• <i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i></li> <li>• <i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Pre-Feasibility economics are sufficient to support development of the project.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>• <i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i></li> </ul>	<ul style="list-style-type: none"> <li>• There are no registered native title claims over the project area. Heritage surveys will be conducted prior to commencement of construction in accordance with the Aboriginal Heritage Act.</li> <li>• Consultation will continue with all key stakeholders including, conservation groups, affected landholders, shire councils, infrastructure providers and regulatory authorities.</li> <li>• The project environmental review document will be advertised for public comment and all comments will be taken into consideration and addressed within the ERD.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Other</b>	<ul style="list-style-type: none"> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person recognises the Perth Mining Warden's recent recommendation to the Minister for Mines and Petroleum (Western Australia) to refuse applications for exemption from minimum expenditure obligations on Mt Holland tenements from 2014-2016 (prior to Kidman's tenure).</li> <li>Following execution of a deed of settlement with the involved parties, the objections to the applications for exemption have been withdrawn and forfeiture applications at Mt Holland dismissed.</li> <li>The Minister for Mines and Petroleum advised Kidman that he had granted exemption certificates for all relevant tenements on 13<sup>th</sup> December 2018.</li> <li>Stakeholder engagement has been positive with regard to conversion to a lithium mining operation. No additional significant stakeholder objections are anticipated.</li> <li>An Environmental Management System will be established that will focus on minimising clearing of native vegetation, directly avoiding significant flora species and progressively rehabilitating disturbed areas to reduce the effect on the habitat of the conservation significant species.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<ul style="list-style-type: none"> <li>Ore Reserves are directly classified from Mineral Resources, Measured to Proven, Indicated to Probable. However the stage 2 in pit measured material has been classified Probable due to status of approvals.</li> <li>The Ore Reserve result reflects the Competent Persons view of the deposit.</li> <li>15Mt of predominantly spodumene Inferred Mineral Resource and all classifications of other Lithium mineralisations have been identified within the pit design. This material has not been included in the Ore Reserve, though stockpile capacity has been set aside for future use.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<ul style="list-style-type: none"> <li>No external audits and reviews have been conducted on the Ore Reserves.</li> <li>The Ore Reserve estimate has been prepared by Mining Plus Pty Ltd for Covalent Lithium. Internal reviews have been conducted by Kidman, SQM and Covalent Lithium personnel.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>Modifying factors have been applied reflecting designed practice and costs and metallurgical test work both in terms of cost and recovery.</li> <li>Designed mining and grade control practices to reflect changes the nature of geological setting and the intended use of the Li<sub>2</sub>O concentrate for battery feedstock.</li> <li>Stockpiles have included based on their tonnes and grades, physical properties and metallurgical test work subject to recovery with the improved metallurgical process.</li> </ul>

## Disclaimer

### Important Notice

This announcement has been prepared and issued by Kidman Resources Limited (the **Company**). It contains information about the Company's activities current as at the date of the announcement. The information is provided in summary form and does not purport to be complete. This announcement is not to be distributed (nor taken to have been distributed) to any persons in any jurisdictions to whom an offer or solicitation to buy shares in the Company would be unlawful. Any recipient of the announcement should observe any such restrictions on the distribution of this announcement and warrants to the Company that the receipt of the announcement is not unlawful. The announcement does not constitute, and should not be considered to constitute, an offer or invitation to subscribe for or purchase any securities in the Company or as an inducement to make an offer or invitation with respect to those securities.

This announcement contains forecasts which are based on various assumptions. While the Company has endeavoured to ensure that these assumptions are reasonable, the Company cannot factor in future events which are not foreseeable. Therefore, it is possible that the forecasts may not be achieved.

To the maximum extent permitted by law, no representation, warranty or undertaking, express or implied, is made and, to the maximum extent permitted by law, no responsibility or liability is accepted by the Company or any of its officers, employees, agents or consultants or any other person as to the adequacy, accuracy, completeness or reasonableness of the information in this announcement.

To the maximum extent permitted by law, no responsibility for any errors or omissions from this announcement whether arising out of negligence or otherwise is accepted. Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.

The information, forecasts, assumptions or conclusions expressed in this announcement should be read in conjunction with the Company's other periodic and continuous disclosure announcements lodged with the Australian Securities Exchange (**ASX**), which are available on the Company's website ([www.kidmanresources.com.au](http://www.kidmanresources.com.au)). No representation or warranty, express or implied, is made in relation to the fairness, accuracy or completeness of the information, opinions and conclusions expressed in this announcement.

All currency mentioned in this announcement is in US dollars (**US\$**) unless otherwise stated.

### Forward-looking Statements

This announcement contains certain statements which may constitute forward-looking statements. Such statements are only predictions and are subject to inherent risks, uncertainties and other factors which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward-looking statements. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements involve known and unknown risks and are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability, and tenure disputes.

Forward-looking statements in this announcement are based generally on the Company's beliefs, opinions and estimates as of the dates the forward-looking statements that are made, and no obligation is assumed to update forward-looking statements if these beliefs, opinions and estimates should change or to reflect other future developments. Although the Company believes the outcomes expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in forward-looking statements. While the Company has made every reasonable effort to ensure the veracity of the information presented in this announcement, it cannot expressly guarantee the accuracy and reliability of the estimates, forecasts and conclusions contained herein.

### Competent Person

**Exploration:** The information in this release that relates to sampling techniques and data, exploration results, geological interpretation and exploration targets has been reviewed by Mr. M. Green BSc (Hons), MAusIMM. Mr. Green is an employee of the Company; Mr. Green is a shareholder of Kidman Resources. Mr. Green is a member of the Australasian Institute of Mining and Metallurgy. He has sufficient experience with the style of mineralisation 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 ('The JORC Code')." Mr. Green consents to the inclusion in this report of the contained technical information in the form and context in which it appears.

**Mineral Resource Estimate:** The information in this release that relates to the Estimation and Reporting of Mineral Resources has been compiled by Mr. David Billington BE (Mining). Mr. Billington is a full-time employee of Mining Plus Pty Ltd and has acted as an independent consultant on the Earl Grey Deposit Mineral Resource estimation. Mr. Billington is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience with the style of mineralisation, deposit type 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 ('The JORC Code')." Mr. Billington consents to the inclusion in this report of the contained technical information relating the Mineral Resource Estimation in the form and context in which it appears.

**Ore Reserve Estimate:** The information in this release that relates to the Estimation and Reporting of Ore Reserves has been compiled by Mr. David Billington BE (Mining). Mr. Billington is a full-time employee of Mining Plus Pty Ltd and has acted as an independent consultant on the Earl Grey Deposit Ore Reserve estimation. Mr. Billington is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience with the style of mineralisation, deposit type 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 (‘The JORC Code’).” Mr. Billington consents to the inclusion in this report of the contained technical information relating the Ore Reserve Estimation in the form and context in which it appears.