3 October 2017

ASX Release

Kidman Resources Limited
ABN 88 143 526 096

Corporate Details:
ASX Code: KDR

Issued capital:
348.1M ordinary shares
47.45 listed options (KDRO)

***Substantial Shareholders*:**
EDM Nominees (9.34%)
Western Areas (5.0%)

Directors:
Non-Executive Chairman:
Peter Lester
Managing Director:
Martin Donohue
Non-Executive Director:
Brad Evans
Non-Executive Director:
David Southam

Chief Financial Officer:
Jason Eveleigh

Company Secretaries:
Justin Mouchacca
Melanie Leydin

Contact Details:

Kidman Resources Limited
Level 7,
24-28 Collins Street
Melbourne
Victoria 3000
Australia

Tel: +61 (0)3 9671 3801
Fax: +61 (0)3 9671 3523

Email:
info@kidmanresources.com.au

Website:
www.kidmanresources.com.au

Scoping Study for Earl Grey Lithium Project demonstrates robust economics and a solid basis for a Pre-Feasibility Study

SCOPING STUDY KEY RESULTS (100% Project basis):

- **Low strip ratio of 2.3, reducing to 1.9 after pre-strip;**
- **Low technical risk using open pit mining and conventional processing;**
- **Large scale resource provides significant opportunity to expand mine life at potentially higher annual processing rates; and**
- **Long mine life should support an investment in downstream refining infrastructure to produce lithium carbonate or hydroxide.**

The initial announcement of a transaction between Kidman (**Company**) and SQM occurred on 12 July 2017, and subsequently formally executed on 12 September 2017, has resulted in a 50:50 Joint Venture (**JV**) in the Earl Grey lithium deposit in return for an investment by SQM of US$110 million. The JV transaction was a milestone for the Company in allowing it to pursue its vision of transitioning from explorer, to developer, and ultimately a significant lithium production company. The transaction is subject to various customary conditions precedent, which are outlined in the announcement on 12 September 2017.

With the JV transaction documents now complete, Kidman is pleased to report the results of the Earl Grey Scoping Study (**Study**) on a 100% Project basis. Investors should note that Kidman will ultimately own a 50% economic interest in the Earl Grey Project.

The Study examined a base case scenario to produce a saleable concentrate for the export market. The defined production target was 47Mt at 1.4% Li_2O over a 25 year period. The Study, at this early juncture does not examine, nor factor, a potential refinery (as contemplated in the JV), as this will ultimately be considered in the next level of studies to be conducted by the JV parties.

The future inclusion of a potential refinery option will enhance Kidman's vision to differentiate through downstream participation in a long term sustainable business. The Company believes this vision will facilitate maximum shareholder benefit with Kidman planning to become a very significant participant in a burgeoning lithium market.

It is important to note that the Study results released today, do not contain the expected future benefits SQM should bring to the project's advancement, some benefits of which are already being experienced in early JV workflow and technical meetings.

The Study provides order of magnitude estimates of costs, production and financial metrics for developing the Earl Grey mine and concentrator only. There is also no consideration in this Study for a potential gold mining operation at Mt Holland. As noted earlier, upon completion of the mine and concentrator development, under the terms of the JV transaction, Kidman may also participate up to 50% in the development of a world class, downstream processing facility (refinery) to produce lithium hydroxide and/or lithium carbonate. Kidman will be able to leverage the expertise of SQM as a world leader in the production of these specialty products. Kidman will retain the sole marketing rights to its 50% share of lithium production providing optionality for refinery funding.

IMPORTANT INFORMATION

Cautionary Statements

The Study results should not be considered a profit forecast or production forecast. The Study is a preliminary technical and economic study of the potential viability of developing the Mt Holland Earl Grey lithium deposit by constructing a mine and concentrator to produce a concentrate for sale into the export. The Study referred to in this presentation is based on lower-level technical and preliminary economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Study will be realised.

The Production Target referred to in this presentation is based on 85% Indicated Resources and 15% Inferred Resources for the mine life covered under the Study. In accordance with the twenty five (25) year mine plan incorporated into the Study, the first 20 years of production will come exclusively from Indicated Resources. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Measured or Indicated Mineral Resources or that the Production Target or preliminary economic assessment will be realised.

The Study is based on the material assumptions outlined below. These include assumptions about the availability of funding. While the Company considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Study will be achieved. To achieve the potential mine development outcomes indicated in the Study, additional funding will be required. Investors should note that there is no certainty that the Company will be able to raise funding when needed however the Company has concluded it has a reasonable basis for providing the forward looking statements included in this announcement and believes that it has a "reasonable basis" to expect it will be able to fund the development of the Earl Grey lithium deposit.

To achieve the range of outcomes indicated in the Study, funding of in the order of USD$100 million will likely be required. Funding is available pursuant to the Joint venture agreement between Kidman and SQM which was completed with formal execution of the JV Agreement on 12 September 2017. It is also possible that Kidman could pursue other strategies to provide alternative funding options. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Study.

Forward Looking Statements

Some of the statements contained in this report are forward looking statements. Forward looking statements include but are not limited to, statements concerning estimates of tonnages, expected costs, statements relating to the continued advancement of Kidman's projects and other statements which are not historical facts. When used in this report, and on other published information of Kidman, the words such as "aim", "could", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements. Although Kidman believes that its expectations reflected in the forward-looking statements are reasonable, such statements involve risk and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements. Various factors could cause actual results to differ from these forward-looking statements include the potential that Kidman's projects may experience technical, geological, metallurgical and mechanical problems, changes in product prices and other risks not anticipated by Kidman.

Kidman are pleased to report this summary of the Study in a fair and balanced way. Kidman believes that it has a reasonable basis for making the forward-looking statements in this announcement, including with respect to any mining of mineralised material, modifying factors, production targets and operating cost estimates.

This announcement has been compiled by Kidman from the information provided by the various contributors of the Study. Kidman acknowledges and thanks all contributors to the Study.

EXECUTIVE SUMMARY

Earl Grey is a lithium deposit within Kidman's Mt Holland gold and lithium tenements, located approximately 105 km south-southeast of Southern Cross in the Yilgarn Mineral Field of Western Australia. The deposit and proposed operation is situated at the Mt Holland Project, also previously known as the Bounty Gold Mine, which was operated between 1988 and 2001, and comprised a number of gold open pits, an underground mine, a processing plant, waste rock dumps, tailings storage facilities and other infrastructure, including power and water. Recent focus has been on pursuing the work required to complete this Study and to negotiate and finalise the JV, recently announced, with global major lithium producer, SQM headquartered in Chile. The tenements still hold potential for the assessment of a gold operation based around several of the previously mined or identified gold deposits.

The location of the property is presented as Figure 1 with a tenement map shown as Figure 2. The proposed mining operation will occur on 100% owned Kidman tenure (noting earlier comments that this will likely transition to 50% ownership with the announcement of the JV with SQM).

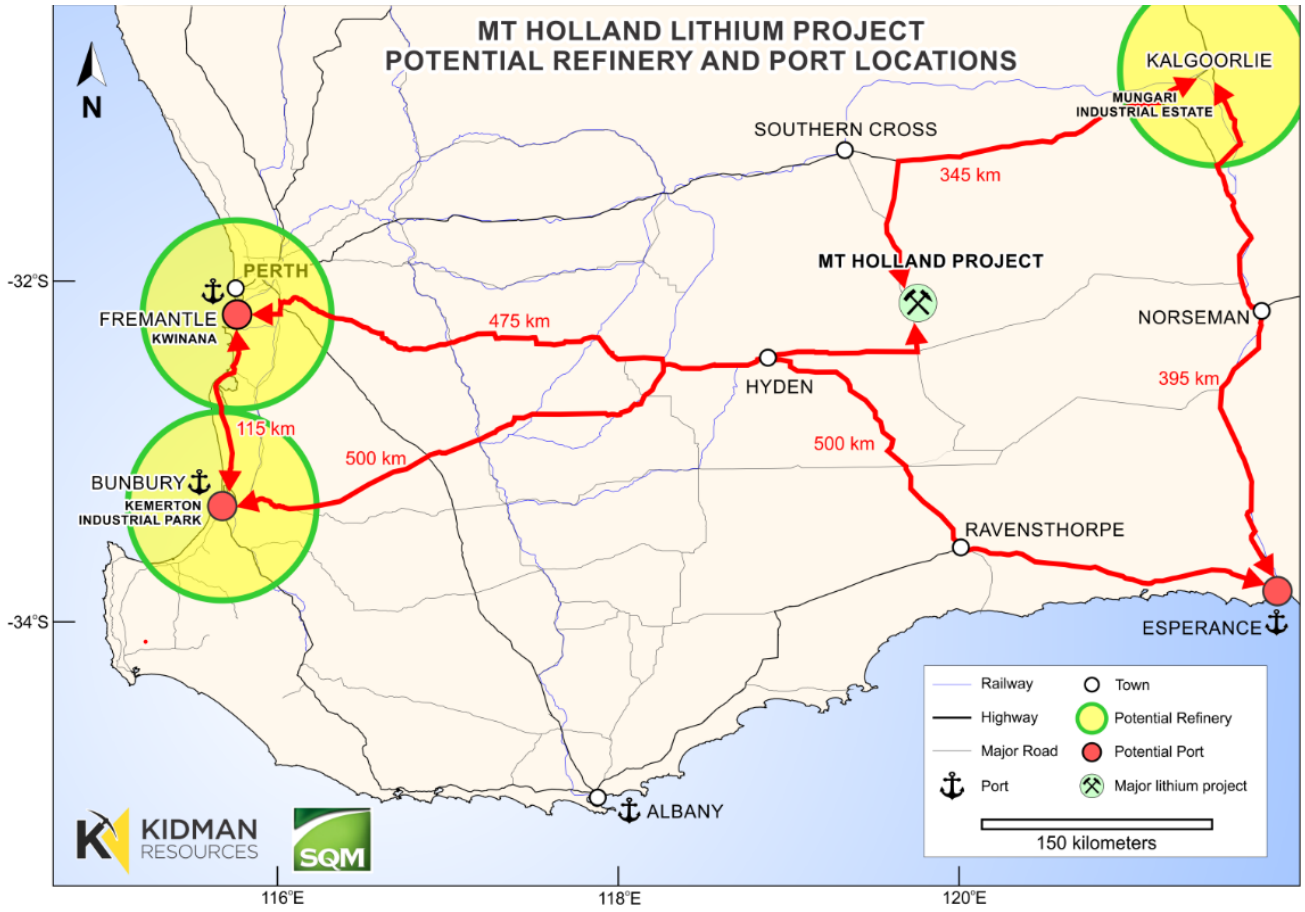

Figure 1: Project Location

The objective of the Phase 1 Earl Grey development is to mine lithium by using conventional processes to produce a marketable Li_2O concentrate. The concentrate will be transported in bulk by road to the Esperance port for overseas shipment.

Kidman has investigated a traditional processing flowsheet consisting of a 2.0 Mtpa concentrator circuit that contains a three-stage crushing circuit, primary dense media separation (DMS) plant with coarse and fine circuits, a secondary (fines) DMS circuit and a flotation plant to treat the high grade middlings from the second stage DMS. Thickening and a tailings disposal system is also required. An initial scoping-level mass balance and processing capital estimate was prepared by Primero Group Pty Ltd for a gravity only flow sheet. This was then superseded by the addition of a flotation circuit to boost yield and recovery. This combined gravity and flotation flowsheet was reviewed by CPC Project Design (CPC) who then provided estimates for capital and operating costs. Metallurgical testwork has shown that marketable concentrates of 5.8-6.0% Li_2O can be produced.

The project NPV is post tax and calculated on a 100% basis, discounted at 10%, and has been estimated via cash flow modelling. The deterministic sensitivity analysis of the base case NPV estimates have been calculated on a range of +/-30%. These estimates accommodate fundamental uncertainties at the scoping level of study and will be refined through feasibility level studies. The sensitivity analysis was undertaken on all of the key inputs to arrive at a range of project NPV's for any given sensitivity (concentrate price, plant recovery, mine grade, plant operating cost and base capital expenditure). The sensitivity analysis is tabulated in Table 7. The NPV is most sensitive to foreign exchange (US$:AUD$), concentrate price, recovery and grade. The NPV is less sensitive to base case capital expenditure and processing operating costs.

Considering the level of accuracy, the sensitivities and the reasonable estimate of potential cost variations, the base case Post tax $NPV_{10\%}$ is approximately US$565M, with a low-high range of US$430M - US$670M around the base case. Over the anticipated life of the project annual concentrate production will average 288Kt pa.
Unit costs will average US$205 per tonne of concentrate.

Material assumptions and key metrics for the Study are presented in Table 1.

Table 1: Material assumptions and key metrics for the Base Case (100% Project basis)

Parameter	Metric
Proposed start of construction	August 2018
Duration of Construction	10 – 12 months
Start of Production	First quarter FY 2019 /20
Potential Mine Life (Years)	25
Target LOM ore mined (Mt)	47
Indicated Resources (%)	85
Inferred Resources (%)	15
Annual ore throughput (Mtpa)	2.0
Life of Mine Strip ratio (waste to plant feed)	2.3 reducing to 1.9 after pre-strip
Average feed grade (% Li_2O)	1.4%
Plant Recovery	60%
Potential Annual Production (tonnes 6% Li2O concentrate)	288,000
Pre-production Capital Cost: (+/- 30%)incl. 20% contingency (USD$M)	111
WA Government Royalty rate (lithium concentrate)	5%
Average C1 Cash Cost (USD$/t concentrate)	205
Long Term Concentrate Price (USD$/t concentrate)	685
Approximate Lithium Carbonate Equivalent Units Produced	1 Million
Revenue from Payable Metals (USD$)	4,527
Gross operating expenses (USD$)	1,540
Base case Project Pre-Tax $NPV_{10\%}$ (USD$M)*	861 (A$1,148M)
Base case Project Post Tax $NPV_{10\%}$ (USD$M) (30% Corporate tax)*	565 (A$754M)
Range of Project Post Tax $NPV_{10\%}$ (USD$M) (30% Corporate tax)*	430-670 (A$573M to A$893M)
Project IRR	57%
USD : AUD Rate long term	0.75

* The NPV is calculated from a Decision to Mine date in the first half of 2018

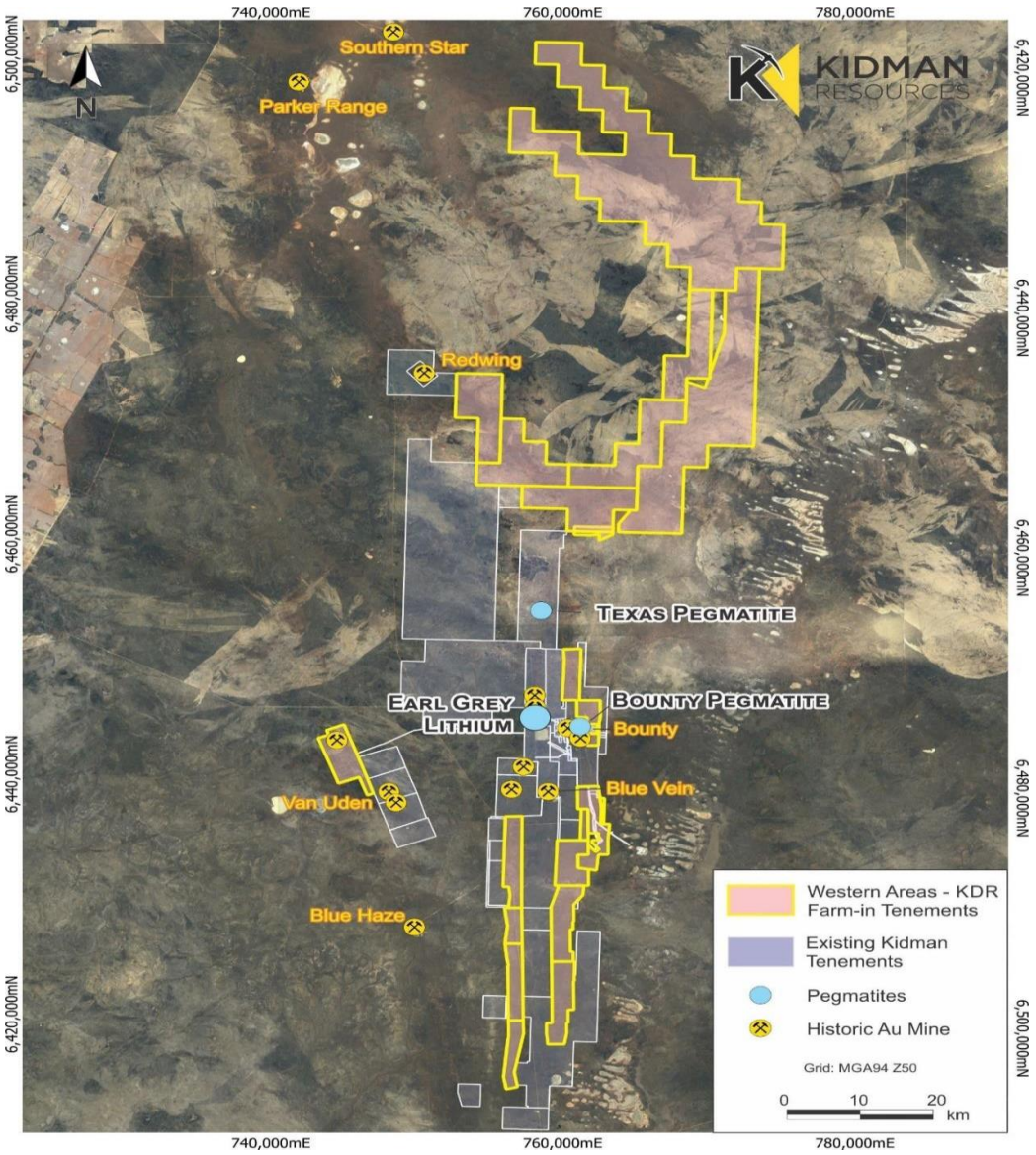

Figure 2: Tenement Map

The general arrangement of the proposed Mt Holland mine site area is presented in Figure 3.

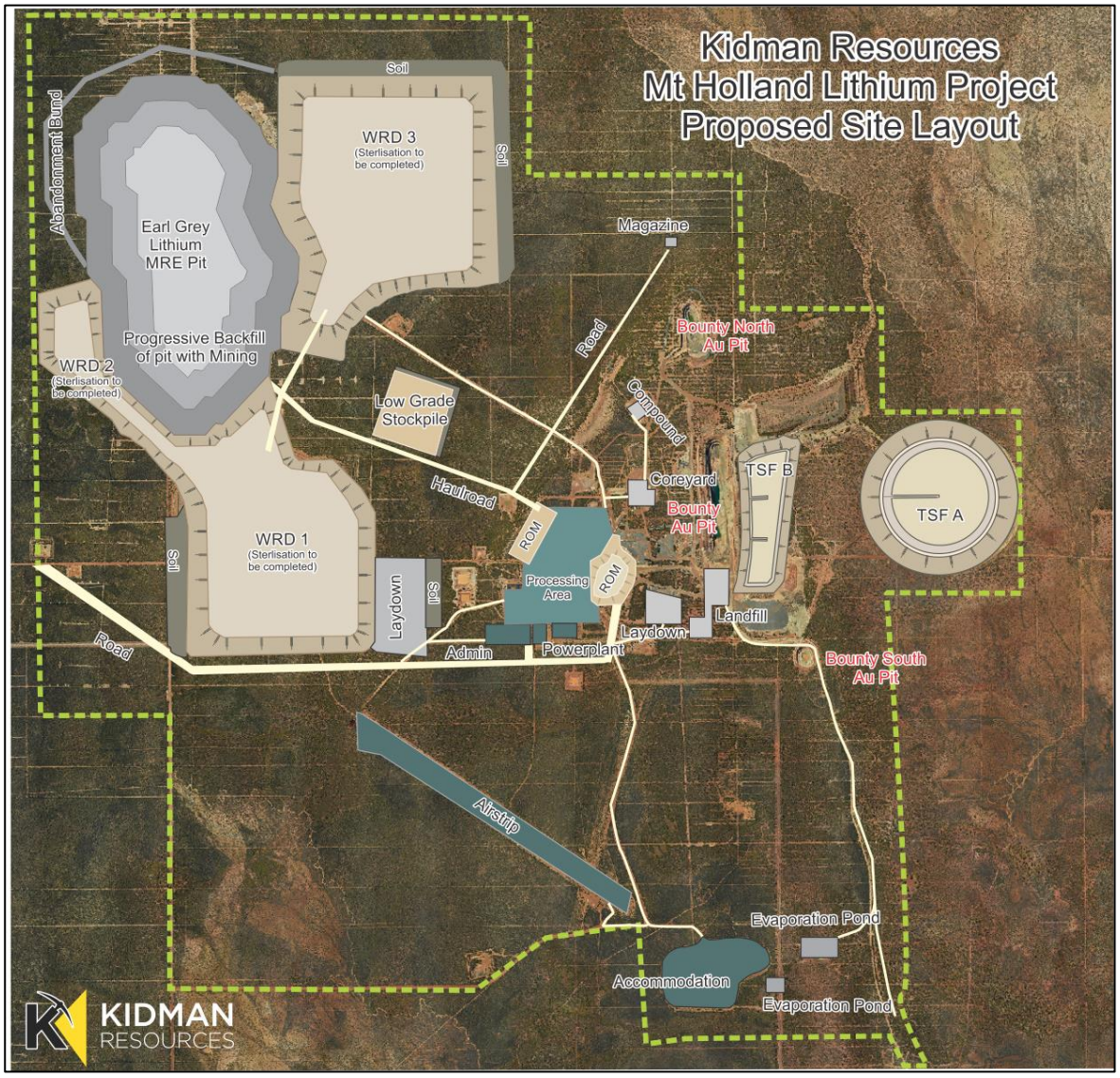

Figure 3: General Arrangement of the Mt Holland mine site

For further information on the company's portfolio of projects please visit www.kidmanresources.com.au

Media:
Martin Donohue
Managing Director
+61 3 9671 3801
info@kidmanresources.com.au

Competent Persons Statement

Mineral Resource Estimate:

The information in this announcement that relates to the Estimation and reporting of Mineral Resources was extracted from Kidman's ASX announcement dated 5 December 2016 entitled 'Maiden Resource Establishes Earl Grey as a World-Class Lithium Deposit", which is available to view on the company's website at www.kidmanresources.com.au. The information in this announcement fairly represents information compiled or reviewed 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.

Production Target and Scoping Study:

The information in this release that relates to the estimation of the mineral resources underpinning the Production Target and Scoping Study has been compiled by Mr. Chris Williams BE (Mining). Mr. Williams is a full-time employee of Kidman Resources Limited. Mr. Williams 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 the other 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. Williams 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.

1. Geology

The Mt Holland site is located within a north-south trending Archaean greenstone belt comprised of mafic and ultramafic rocks with minor intercalated metasedimentary rocks, which has long been prospective for gold and base metals. During 2016, Kidman discovered a substantial lithium deposit now named the Earl Grey lithuium deposit at the Mt Holland site.

On a regional scale, the Southern Cross – Forrestania Greenstone Belt extends over 300km. The belt is regionally folded with a north-plunging synform which has steep east, and shallow west limbs. Within the eastern domain, the Bounty sequence overlies the mafic and ultramafic basal rocks which sit above a granitoid basement. The Mt Holland Gold Field covers southern sections of the Archaean Southern Cross – Forrestania Greenstone Belt. Two distinct lithostratigraphic units exist within the belt; 1) an ultramafic metavolcanic suite, and 2) a sequence of overlying immature clastic metasediments.

The greenstones are predominantly mafic and ultramafic flows generally intercalated with banded iron formations (BIF), cherts, and clastic sediments. The Belt is enclosed by syntectonic granitoids. The Eastern Domain mafic-ultramafic basal rocks comprise a thick sequence of tholeiitic basalts with minor high-Mg basalts and exhalative sediments. The Western Domain consists of clastic metasediments which lie upon a younger intrusive granitoid (west). The Central Domain consists mainly of pelitic and psammitic schists, thin BIF lenses and bands of graphitic schists. Two major shear zones in the Forrestania Belt separate the three domains.

The Mt Holland Shear defines the Central and Eastern Domains. Likewise, the Van Uden Shear separates the Central and Western Domains. Within the Mt Holland District three basic varieties of pegmatite have been recognised historically. These include;

- Complex zoned pegmatite containing spodumene and albite in addition to coarse perthite and quartz;
- Albitic aplite rich in black tourmaline and commonly containing cassiterite; and
- Coarse cleavelanditic albite veins with minor apatite and spodumene

These pegmatites appear to be abundant on the eastern margin of the Forrestania Greenstone belt, where several of Kidman's tenements occur. Amongst these are the known Earl Grey lithium bearing pegmatites and the voluminous, but currently untested, Texas pegmatites.

2. Mineralisation

The Earl Grey mineralisation is hosted by three pegmatite sills which are typically 900m wide, and dip north at around 15 degrees over 1,400m in strike length. The hangingwall and main pegmatites outcrop at surface and all three pegmatites display geological continuity to 300 m depth from surface at the northern end of the deposit. The main pegmatite body varies in thickness from 15 m to 50 m over the length of the deposit.

Lithium-bearing minerals in the pegmatites are predominantly spodumene and petalite, with trace amounts of eucryptite also noted in petrology work. The geochemistry of the pegmatites is indicative of a highly fractionated lithium-caesium-tantalum (LCT) type pegmatite. Li_2O content varies from 0.5% – 4.0%.

Kidman has created an alumino-silicate model based on 312 data points each being represented by the results of an XRD test to determine mineralogy of the sample. The samples have been taken from drill pulps typically representing every third metre interval down hole. The drill holes are the original resource drill holes (drilled by Kidman between August 2016 and November 2016). Samples have been taken from 16 drill holes spread across the deposit. Verification of the model is continuing with additional samples to be collected for XRD determination over the next six months. During the period SQM completed their due diligence for their investment into the Project, another 117 samples were taken randomly across the deposit and submitted for XRD determination. The results of these tests were compared to the model and found to correspond extremely well with low variance observed. All XRD work has been done at ALS mineral laboratories in Balcatta Perth.

The intersection of the alumino silicate model (Zonation model) with the resource blocks inside the pit design which represents the Production target produces the following results by tonnage; 76% spodumene, 13% mixed (spodumene plus petalite) and 11% petalite. These have been applied within the financial modelling with petalite material assumed to be mined and stockpiled and processing deferred to the end of the mine life.

Photo 1: Earl Grey Landscape

3. Mineral Resource Estimate

Mining Plus Pty Ltd (Mining Plus) generated a Mineral Resource in December 2016 for the overall Earl Grey deposit which included all available drilling results. The Earl Grey resource estimate has been classified and reported in accordance with the JORC Code (2012) and associated guidelines, and is based on the data supplied by Kidman. Table 4 presents the November 2016 Mineral Resource estimate above a 0.5% Li_2O whole rock assay grade cut-off.

The information presented here is extracted from the ASX report entitled "Maiden Resource Establishes Earl Grey as a World-Class Lithium Deposit" released on 14 December 2016 and is available on the website www.kidmanresources.com.au.

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

Table 2 December 2016 Earl Grey Mineral Resource at 0.5% Li_2O cut-off

Domain	Li_2O Cut-Off	Indicated			Inferred			Indicated and Inferred		
		Mt	Li_2O%	Li_2O Mt	Mt	Li_2O%	Li_2O Mt	Mt	Li_2O%	Li_2O Mt
HW lode	0.50%	-	-	-	7.70	1.4	0.11	7.7	1.4	0.11
Main Lode	0.50%	78.5	1.44	1.1	35.00	1.46	0.51	113.5	1.45	1.64
FW Lode	0.50%	-	-	-	6.80	1.32	0.09	6.8	1.32	0.09
Total		78.5	1.44	1.1	49.50	1.43	0.07	128.0	1.44	1.84

The preceding statements of Mineral Resources conforms to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2012 Edition. All tonnages reported are dry metric tonnes. Minor discrepancies may occur due to rounding to appropriate significant figures

The scoping study reported here focused on an initial mining area in the shallower southern end of the Resource.

4. Geotechnical Study

Peter O'Bryan & Associates (PBA) undertook a geotechnical review of the Earl Grey project. An assessment of ground conditions influencing the stability of the slopes of the proposed open pit was undertaken to provide preliminary recommendations for wall design parameters. Ten boreholes were initially logged by PBA. In addition there was a thorough examination of the geotechnical conditions in the existing Earl Grey open pit (previously mined for gold) and the Jasmine and Darjeeling open pits (further north, also mined for gold). These open pits provide a strong analogue comparison to be made to the proposed new Earl Grey lithium open pit as it is expected to be excavated in very similar materials. Earl Grey and Jasmine & Darjeeling (all current pits) have been standing open for 15 to 20 years and show very little deterioration of berms and batters. Preliminary advice on slope angles has been adopted in preliminary mine designs which support the production target.

Additional geotechnical work has been undertaken but is not complete at this stage. This includes Siro vision mapping of the Earl Grey pit and additional logging of borehole. Results are consistent with initial observations of rock strength and weathering.

5. Mining

The Earl Grey deposit is shallow dipping and amenable to open pit mining. The pegmatite host rock is generally hard (UCS values ranging from 130 to 200MPa), the ore-waste boundary is clearly defined and an assumed production rate of 2.0Mtpa favours a truck and excavator mining fleet.

There are no Ore Reserves estimated at the Project at this stage, however the newly formed joint venture with SQM will be converting Indicated Resources to Ore Reserves as part of the feasibility study update

Mining Plus Pty Ltd generated an unclassified optimisation shell for evaluation purposes, which was based on the recoverable Mineral Resource estimate. The optimisation shell cannot be defined as an Ore Reserve under JORC (2012) guidelines. This shell is outlined in Figure 4 depicting a long section view with a resource outline.

Mining Plus undertook an iterative optimisation process using both traditional open-cut single-phase single-pit scenarios and multi-phase, open-cut strip mining scenarios. The work concluded that the potential open pit size is independent of the development strategy, however there is a significant increase in value as the treatment rate is increased and realised revenue increases. The base case optimisation of the entire published Resource resulted in 109 million tonnes of potential mill feed at a feed grade of 1.4% Li_2O, and a Life of Mine strip ratio of 3.0-3.2:1. Mining dilution was estimated at 5% and shells were optimised at an overall 45-degree slope angle. 5% ore loss was allowed. This scoping study focused on the initial 25 year pit and used a production target of 2.0Mtpa of plant feed at a grade of 1.4% Li_2O to mine a total of 47Mt of the optimised resource. The design pit incorporating the production target has an overall strip ratio of 2.3 to 1.

The Production Target is based on 85% Indicated Resources and 15% Inferred Resources. It is estimated that the first 20 years of proposed mine production will be sourced from Indicated resources. Kidman cautions that there is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised. The stated production target is based on Kidman's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.

The study assumed the pit would be developed in multiple stages over the 25-year period, with the first stage providing plant feed for years 1 to 6. Development of the pit would be undertaken using conventional drilling and blasting in 5 m benches, with broken material excavated on 2.5 m flitches.

Plant feed will be trucked to a ROM pad for transfer to the processing plant. Low grade will be transported to a separate stockpile located to the immediate southeast of the pit. Petalite mined in the pit would be stockpiled to be treated at the end of mine life.

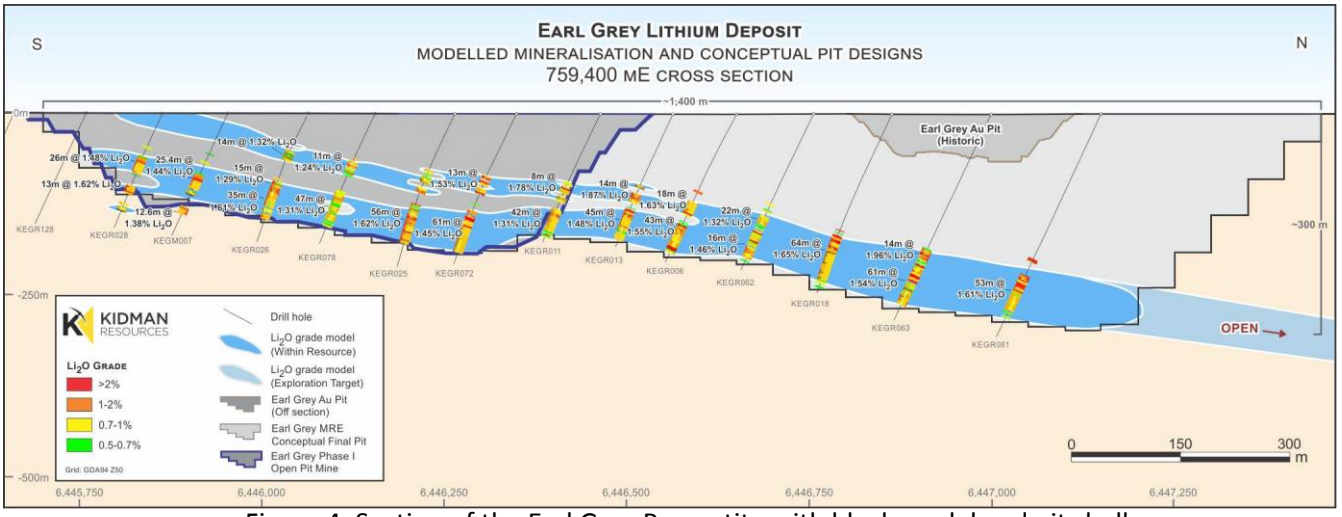

Figure 4: Section of the Earl Grey Pegmatite with block model and pit shell

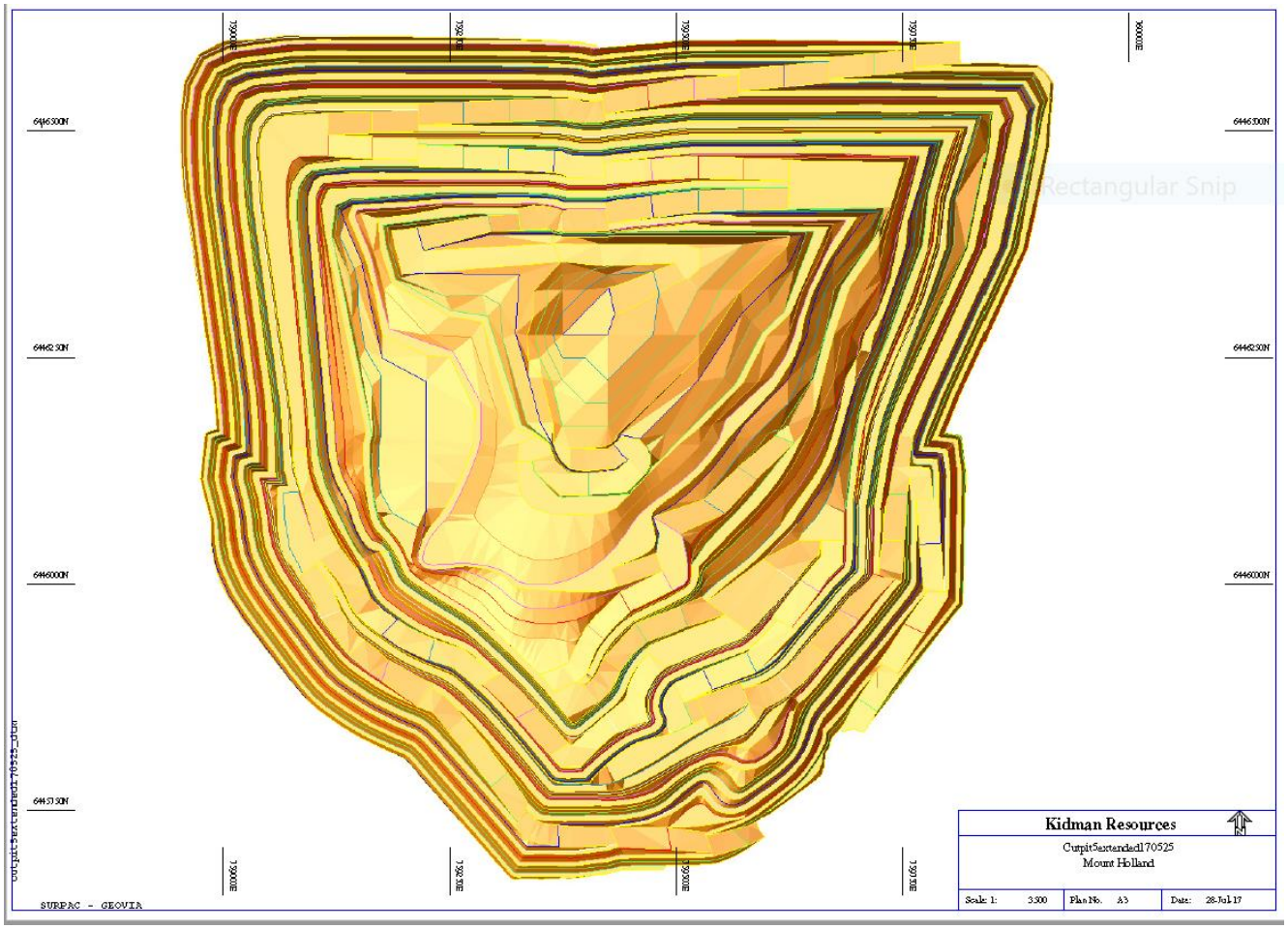

Figure 5: Plan View of detailed pit design to support the 47Mt Production Target

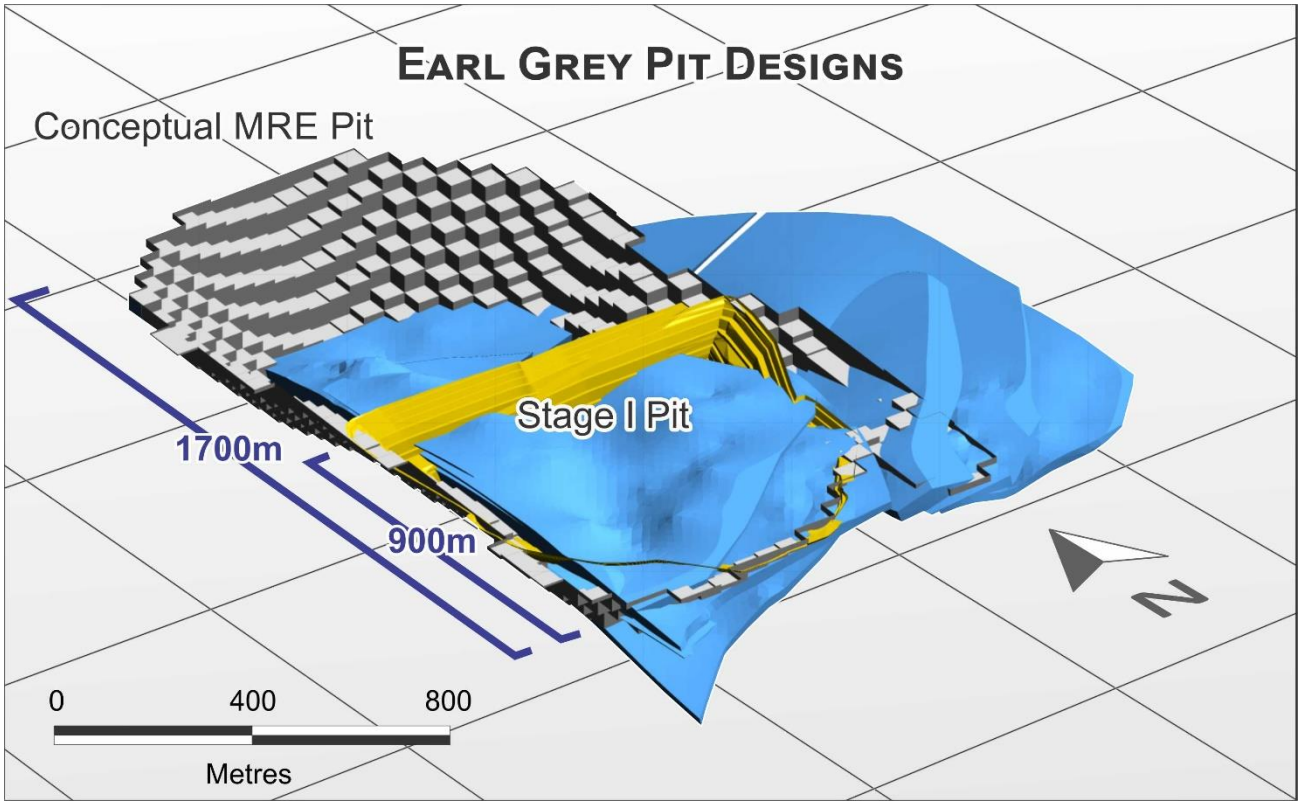

Figure 6: Isometric view of the pit design within the larger long term conceptual pit

The excavation will commence with a starter pit at the southern end of the deposit which will contain approximately 12Mt of production feed (~ first 6 years). After that pit is excavated, the mining front will be divided into a series of 160m to 200m wide panels. Each panel will be aligned east-west across the orebody and sequentially excavated, advancing down plunge to the economic limit of open pit mining. The earlier (shallower) mined-out panels would be backfilled with waste from the advancing panels. Within each of the main panels there will be a series of open pits that will be progressively mined and connected to form the ultimate pit walls. This progresses north in a number of stages until a final pit wall is formed to the north at approximately 6446600mN. This excavation is depicted above in Figure 5 and an isometric view is presented in Figure 6. The lithium bearing pegmatite continues dipping away to the north and the pit could be extended further north by approximately 800m at similar incremental strip ratios.

6. Metallurgical testwork

All testwork has been completed at Nagrom in Perth. Kidman retained Trinol to direct the testwork including developing the scope of work and to provide interpretation of the results.

The first phase of testwork completed in December 2016, examined basic gravity DMS and flotation response. Results were mixed and reflected early on that understanding the mineralogy was critical.

The second phase of testwork commenced in January 2017 to current, was conducted on a 600kg sample of drill core selected from new diamond drilling within the starter pit area representing the first 5- 8 years of production. Selected core samples were subjected to characterisation tests by HLS to test gravity response and X-ray diffraction (XRD) to establish the mineralogy. Over 120 samples were tested to provide representivity for the test work program.

The testing regime to determine dominant mineralogy consisted of crushing the samples to 10mm and then undertaking HLS testing at densities of 2.5 and 2.8. HLS sink and float fractions were then examined by XRD. Results showed that the mineralisation was dominated by spodumene.

Further HLS testing was then done at 1mm size to assess the absolute recovery that could be achieved by gravity and this showed that good recoveries could be obtained. However, a crush size of 2mm for the cleaner DMS stage was chosen to limit the quantity of fines generated.

On this basis, a conceptual flowsheet was developed consisting of a coarse (-10+5.6mm) and fines (-5.6+0.3mm) primary dense media separation followed by re-crushing the concentrate or sinks fractions from both primary cyclones to a nominal size of 2mm and feeding this to a secondary DMS cyclone. Some this work was repeated at 1mm.

Results indicated that the yield at the secondary DMS was 5-6% of the total mass at a grade of 5.8 % Li_2O with an overall lithia recovery of 18-20%. Additionally the middlings fraction generated had high grades of 2.5-3.4% Li_2O. The gravity work was repeated with primary crush size at 6mm. Results were similar. Further work is currently being undertaken to optimise the primary crush size to achieve best overall gravity recovery.

In parallel with this gravity testwork, a 200kg sub-sample from the original 600kg had been prepared for flotation testwork. Early testwork in Phase 1 demonstrated that Earl Grey ore was typically fast floating using standard oleic acid as a collector at ~ pH 8.0. Some of these tests were performed in saline water with no real effect on recovery and/or grade. Subsequently 18 different sighter tests have been conducted on the material from the 200kg sub sample in Perth tap water. Test 6 with standard oleic acid and subsequently tests 15 and 17 on the higher grade middlings composite demonstrated that a combination of a 180um grind size, standard oleic acid and a magnetic separation stage prior to flotation gave the highest consistent recovery.

It should be noted that these are bench scale tests and are not fully optimised at this stage so a cautionary view should be adopted.

Combining the results of gravity concentration and flotation, resulted in mass yields of approximately 15-20% with grades of 5.7% to 6.0% Li_2O and recoveries of 60-64%. These results are sensitive to head grade and further optimisation is planned.

Overall, satisfactory mass yields and grades can be obtained through a combined gravity and flotation flowsheet. However we expect that SQM's expertise in mineral processing will be very beneficial in optimising grade, recovery and yield at the concentrator.

Other metallurgical testwork conducted by Nagrom included the estimate of comminution characteristics. As the source Earl Grey material is pegmatite, it was expected to be hard and abrasive. The Bond Ball mill work index was measured at (two results) 17.0 and 19.9 kwh/t and the Bond Rod Mill work index at 20.0 and 20.4 kwh/t. The Crusher work index was 12.8 kwhr/t and an abrasion index of 0.59.

A number of UCS results were also obtained. These averaged a UCS of 160Mpa from eight samples.

The results of comminution work indicates that the pegmatite is moderately hard, tough and abrasive and the design of any comminution circuit needs to take full account of these results.

7. Plant design

CPC was engaged by Kidman to provide an order of magnitude level processing plant design for the Project. Kidman consider the process technology selected to be well-proven and a technically low risk conventional production route. The design is based on a processing plant designed to treat 2.0 Mtpa of pegmatite ore at an overall plant availability of 85% at a nominal grade of 1.4% Li_2O targeting a 5.8% to 6.0% Li_2O concentrate grade.

The processing of ore to produce concentrates will comprise several stages:

a) Crushing: ROM ore is fed to a three (3) stage crushing operation comprising of a primary jaw crusher, a dry triple deck sizing screen, secondary and tertiary crushers and fine ore storage bin at a design throughput of 2.0 Mtpa, producing P80 10 mm crushed ore to be fed to a DMS Circuit;
b) Dense Media Separation Circuit: The DMS circuit will separate material based on its specific gravity, using fine ferrosilicon as a separation medium. The DMS circuit will consist of a washing screen and primary coarse and fine DMS circuit, a fines crusher followed by a secondary DMS circuit and associated conveyors and pumps;
c) Fine Grinding Circuit: The fine grinding circuit will reduce the primary washing screen fines and secondary DMS cyclone floats to a final product size of P80 =180 µm, suitable for flotation using a single stage closed circuit rod mill;

d) Flotation Circuit: The milled ore will be subjected to three stages of spodumene flotation to recover a spodumene concentrate. A conventional flotation methodology will be used;
e) Tailings: Pulp discharged from the tailings thickener will be pumped directly to the tailings storage facility. Decant from the tailings storage facility will be returned to the process water pond for reuse in the plant;
f) Concentrate Handling: The spodumene flotation concentrate will be thickened, filtered and stored in a purpose built storage facility immediately adjacent to the processing plant, prior to transport off-site.; and
g) Reagents: Ferrosilicon, flocculant and flotation reagents will be the main reagents used within the process plant. A spodumene specific collector (oleic acid), dispersant sodium silicate, soda ash and frother will be used in both the rougher, cleaner and recleaner flotation circuits.

The final lithium oxide concentrate product will be stored in a purpose-built storage facility immediately adjacent to the processing plant, prior to transport to the Esperance port for export to overseas markets.

8. Tailings Storage

Gravel rejects will be managed as fresh waste rock or used as a construction material. Fine tailings will require management within dedicated tailings storage facilities which will be achieved by refurbishment and raising of one of the existing facilities (TSF1), and development of a new facility which will abut TSF1. The tailings will be transferred via slurry pipeline from the processing plant to the TSF's. Slurry densities are expected to range from 50-60% solids. The TSF's will allow solids to settle out and excess water to be reclaimed and returned to the processing plant for reuse. Design and operation of the TSF's will be undertaken in accordance with the Australian Committee on Large Dams (ANCOLD) guidelines and the DMP Code of Practice: Tailings Storage Facilities in WA (2013).

9. Water Supply

The Earl Grey project is likely to require approximately 1.0-1.5 GL of water per annum. Water requirements, including use for processing, accommodation village and dust suppression around the mine site, will be met by pit dewatering, groundwater abstraction and water recycling.

Pit dewatering volumes are expected to be very low, with inflow rates of approximately 3 to 4 L/s. A dewatering system will be installed to remove all groundwater from the pit. Water removed from the pit will be pumped to the processing plant predominantly for use in processing and dust suppression.

There is an existing borefield located approximately 8 km southeast of the accommodation village. The borefield consists of seven production bores and a number of observation bores situated within the Mt Hope caprock aquifer. Water was abstracted from the borefield between 1988 and 2002 at a rate of up to 275,000 kL/annum, although recoverable storage volumes of the aquifer have been estimated to be approximately 20,000,000 kL (URS 2002). Groundwater quality in the borefield is hypersaline, with total dissolved solids (TDS) concentrations varying between 73,000 mg/L and 87,000 mg/L.

In addition there is a large stored volume of water within the Bounty Underground mine workings (now abandoned). When Bounty was fully developed recorded water inflows were approximately 28l/sec. Water quality is similar to the borefield. Kidman proposes to refurbish the existing borefield and will apply for a new groundwater licence under Section 5C of the Rights in Water and Irrigation Act 1914.

10. Power Supply

The site is currently connected to the Western Power grid via a 132KV line coming in from Moorine Rock. There is a step down transformer and switching facility adjacent to the assumed location for the processing plant at Mt Holland. The current connection serves the existing exploration camp (domestic load only). The ability for Western Power to supply the envisaged new 2.0Mtpa processing facility is being further investigated and is considered an opportunity to provide redundancy and/or supplementary capacity. The line from Moorine Rock has capacity but the limiting factor is the supply from Perth to Moorine Rock and the commitments to other customers. However pricing from Western Power may offer a competitive advantage over diesel generators so this will continue to be investigated.

Electrical power for the new processing plant will be produced on site using diesel generators.

The diesel generators will be located in the processing plant area and will have ready access for fuel transfers and power reticulation. Power will be generated at 11 kV and reticulated to a substation for stepping down to lower voltages for use across the site. It is envisaged that a contractor will build the power station and operate it under a Power Purchase Agreement to Kidman.

The processing plant load is estimated to be 7MW. During construction and prior to the commissioning of the power plant, power will continue to be supplied from the Western Power substation and temporarily from portable generators.

11. Diesel supply

Diesel will be needed for all mining equipment, light vehicles and the trucks moving concentrate and will be transported to site by road. Storage in the processing plant area will be in self -bunded tanks. Diesel will also be required for the power station.

The storage capacity will provide a substantial contingency for expected supply interruptions which are currently only envisaged to be due to wet weather affecting road closures on the gravel sections of the Marvel Loch to Forrestania Road.

12. Communications

Existing communication systems will be upgraded at the project site to include:

a) Internet and telephone 50/50mbps network via point to point microwave signal over four new and two existing point to point towers back to Kalgoorlie;
b) 3G mobile network via 3G/4G range extender; and
c) UHF and VHF radio communications

13. Roads and Transport Routes

The property can be accessed via the sealed National Highway 1 (Great Eastern Highway) from Perth to Southern Cross. Then via Parker Range Road and onto the Marvel Loch – Forrestania Road which is a well maintained gravel road predominantly in the Yilgarn Shire. Alternative access is also available via sealed secondary roads from Perth to the wheat belt town of Hyden and then north on the Marvel Loch – Forrestania Road to the project area.

Purpose built on-site roads will be constructed where required to provide safe and controlled passage for light and heavy traffic and or mobile earthmoving equipment. Use of Local Government Agency (LGA) roads will be by specific agreement with the respective LGA based on the purpose for which the road use is intended.

14. Accommodation Village

During the construction phase of the Earl Grey project, the exploration camp which already has a capacity of 24 rooms with ablutions will be upgraded and expanded then utilised for a period of one year as a construction camp. A permanent accommodation village has been included in the Earl Grey project planning with a maximum capacity for a planned 200-person workforce. The accommodation village will be located in the same area as the historical Mt Holland accommodation camp and will use existing disturbed land as far as practicable.

15. Airstrip

In addition to utilising labour from the local area, the Earl Grey project will operate a fly-in/fly-out workforce. Kidman will re-furbish and utilise the existing Mt Holland airstrip, located within the Mt Holland site. The Mt Holland airstrip is in very good condition and will be upgraded at minimal cost to initially allow regular servicing by 19 seat charter flights from Perth.

16. Esperance Port

Concentrate would be trucked in bulk for export through the Port of Esperance, Western Australia, approximately 400km by road from the Mt Holland site. Port studies are currently preliminary in nature.

Photo 2: Esperance Port Facilities

17. Environmental Impact Study

In May 2017, formal documentation was submitted to the state Environmental Protection Authority (EPA) and Commonwealth Department of Environment and Energy to support a Section 38 referral under the Environmental Protection Act 1986 and Environment Protection and Biodiversity Conservation Act 1999. The documentation provides detailed information on the proposed operations and the management and mitigation measures that will be implemented to minimise impacts to conservation significant species, contribute to regional conservation programs and reduce the existing State rehabilitation liability associated with the abandoned Mt Holland Mine Site. During baseline surveys the presence of Chuditch and Malleefowl were in significant numbers were noted, both of these species are declared vulnerable and are protected under the Commonwealth EPBC Act. A species of banksia, *Banksia Spherocarpa* is also present in the project area and is a Declared Rare Flora (DRF) species.

The Commonwealth Department of Environment and Energy has assessed the Project as a Controlled Action and the WA EPA has determined that a formal assessment is required. The level of assessment set by the EPA is a Public Environmental Review (PER). Kidman are working with all stakeholders to ensure that all significant environmental factors which may be impacted by the development of the project can be suitably managed and their effects mitigated. The existing bi-lateral agreement between the Commonwealth DoEE and the EPA means that there will be only one assessment process which will be managed by the Western Australian EPA.

The EPA guidelines for approval timeframes estimate that a proponent can expect an overall timeframe of approximately one year. Kidman cautions that both Commonwealth and State approvals are required but we are working closely with the regulators to ensure that DMA's have confidence in Kidman's ability to manage and mitigate environmental impacts of the project.

The Earl Grey project has the potential to provide a net environmental benefit to the region by providing a practical means of rehabilitating a significant portion of the State disturbance liability at the abandoned Mt Holland Mine Site, in combination with a commitment to contribute to regional conservation programs.

The Project has already received strong WA Government support and is currently being assessed as a Project of State Significance. This will ensure a smoother pathway through the various levels of Government approvals.

18. Estimated Financials

A financial evaluation was completed using the base case production target of 47 million tonnes of potential mill feed at a feed grade of 1.4% Li_2O, and a Life of Mine strip ratio of 2.3:1. The results of cash flow modelling, discounted at 10%, produced the estimates presented in Table 3 to 6.

Table 3 Estimated Financial Statistics (100% Project basis)

	Unit	Total
Pre-Tax $NPV_{10\%}$ Real	USD M	861
Post Tax $NPV_{10\%\ (Tax\ rate\ at\ 30\%)}$ Real	USD M	565
Revenue from payable metal	USD M	4,711
Internal rate of return	%	57%

Table 4 Estimated Key Performance Indicators

	Unit	Total
Average Annual EBITDA	USD M	118
C1 Cash Cost	USDt/Con.	205

Capital Expenditure

CPC provided an order of magnitude capital cost for the concentrator. The estimate has an accuracy of ±35%. Capital cost expenditure (for the processing plant alone is estimated to be USD$67.5M as of Q3 2017. The scoping study assumes an overall Life of Mine Capital Expenditure of USD $154 million, which includes a contingency charge of 20% on the initial plant capital. This figure includes all infrastructure, access/haul roads, mining, camp, water supply, concentrator, and tailings dam and sustaining capital.

Table 5 Estimated Capital Cost Summary (100% Project basis)

Capital Expenditure	USD M
Initial Capital Costs Plant(excluding Contingency)	67.5
Contingency (Initial capital)	14.5
Infrastructure Capital & Mine Development	29
Sustaining capital over 25 years	43
TOTAL LOM* **	154

****** Small difference in total is due to rounding***

Operating Expenditure

Overall operating expenditure costs have been estimated based on life-of-mine tonnage and grade information, processing costs for the processing plant, output tonnages, and sales revenues, with an overall Life of Mine estimated C1 operating cost of USD$205 per tonne of concentrate produced.

Table 6 Estimated Operating Cost Summary

Operating Expenditure	USD per tonne of ore	USD per concentrate tonne
Mining	6	40
Processing	14	87
Site Administration	3	19
Freight	9	57
TOTAL* **	32	205

****** Small difference in total is due to rounding***

Foreign Exchange

All capital and operating prices are provided in US dollars. Once the capital pricing estimates have been refined, sensitivities on the foreign exchange rate will be considered in the context of project economics. The long term FX value of 1AUD = USD0.75 was used in converting A$ values to US$.

Commodity Pricing and Sales Contracts

Independent product pricing forecasts have not been obtained for the scoping level study. Kidman plan to commence production of Lithium concentrate at a time when product prices are expected to remain strong. Kidman has not established any contracts or committed any of its production pursuant to an off-take agreement at this time.

Forward estimate "Real" and "Nominal" commodity prices are commercial in confidence. The methodology in the commodity forecasts was based on the following: Current market reviews of suppliers, consumers, reviews of global consumption, new markets, trends, Strengths Weaknesses Opportunities Threats (SWOT) analysis, historical and future trends of supply and demand in "Real" and "Nominal" prices. Only real commodity pricing was used for financial analysis in the scoping study.

Royalties

Royalties were included in the financial analysis as being distributed to the Western Australian government at the rate of 5.0% of the royalty value of the lithium concentrate. This rate is the ad valorem rate which applies to concentrate material as defined under the Mining Regulations 1981 (Regulation 85).

Corporate Tax

All cashflows are reported both pre-tax and post-tax. The corporate tax rate is assumed to be 30%.

Discount rate

The discount rate was calculated to be 10% using a Weighted Average Cost of Capital calculation, assuming Joint Venture financing to A$150M and utilising the current one month LIBOR of 1.2% as the risk free rate. Kidman is assumed to have a market beta of 1. The discount rate is in line with other similar projects.

R&D Tax concessions

Opportunities to receive tax credits for research and development (R&D) work associated with the project are being investigated and are being documented to allow contemporaneous substantiation on monies receivable. No R&D tax concessions have been applied to the estimated cash flows.

Sensitivity analysis

The investment case was subjected to a sensitivity analysis on the Net Present Value against a number of key variable parameters: Concentrate price, Li_20 grade, metallurgical recovery and plant operating costs. The inputs utilised for the sensitivity analysis were based on -30% to +30% deterministic ranges.

The analysis showed the Project to be most sensitive to the product price, Li_20 grade and plant recovery with a strong increase in the NPV with an increase in each of these variables. The Project has a very positive estimated Net Present Value across a wide range of deterministic input ranges, including a 20% decrease in the product price.

Table 7: Deterministic sensitivity analysis showing sensitivity to Pre-tax $NPV_{10\%}$ by variable (values in USD) on a 100% Project basis

Parameter	70%	80%	90%	100%	110%	120$	130%
Concentrate Price	438	579	720	861	1,002	1,143	1,284
Recovery	475	604	732	861	990	1,118	1,247
Grade	578	672	767	861	955	1,050	1,144
Processing Opex	928	906	883	861	839	816	794
Base Capital	889	879	870	861	852	843	834
FX	1017	975	925	861	788	695	575

19. Risk

A risk workshop was carried out in May 2017. Risks and opportunities for the project were identified and classified according to the likelihood and consequence of their occurrence. Risk mitigation strategies were outlined and Kidman has commenced planning the actions required to implement the strategies which are presently underway where appropriate.

The major risks identified were, accurately estimating the modifying factors moving from resource to reserve and in particular; overall Li_2O recovery in the plant, the plant operating cost, identifying the mineralogy within the deposit (i.e. distribution of different lithium minerals), and other metallurgical characteristics which may have an effect on plant performance.

The mitigating strategies to reduce these risks is to undertake more metallurgical testwork to refine the potential flow sheet , to optimize and improve recoveries, perform additional tests on the physical characteristics of the potential plant feed (work indices, hardness and abrasion index) and to examine all levels of engineering design that will improve efficiencies and lower unit costs (materials handling, water use, minimize power, choice of materials in key areas of the plant to reduce maintenance costs).

The testwork will come from new drill core and currently Kidman is drilling a diamond drill programme utilizing PQ core to generate a target sample mass of 17tonnes. It is envisaged that some testwork will be completed in Perth and other testwork including a pilot plant will be undertaken in Chile.

The PQ diamond core drilling is also part of a major resource drill-out that is being undertaken in a staged process to ensure that resource estimation accuracy can be improved. 24,000m of additional diamond and reverse circulation drilling is currently planned and underway. As part of this programme a further 2000 samples are scheduled for XRD analysis with the first 300 being submitted this week.

Following the drilling and additional XRD identification work mine design & potential mine scheduling can be completed to a higher level of accuracy. The geotechnical work (currently underway but not completed) will also be incorporated into any new mine designs.

20. Opportunity

The positive results of the Scoping Study highlight the potential long life of the Earl Grey project beyond the initial 25 years contemplated in this Scoping Study. This long life may support an investment in downstream refining infrastructure to produce lithium carbonate. Kidman have begun studies to assess this opportunity to add value and will provide an update on progress as information comes to hand.

The partnership with SQM brings further opportunities to improve the Project value due to their track record of technical success in their operations and knowledge and operating experience to the Project particularly with respect to mineral processing.