For personal use only

11 April 2016

ASX ANNOUNCEMENT

FEASIBILITY STUDY DELIVERS EXCELLENT RESULTS AT PILGANGOORA LITHIUM PROJECT

KEY FINDINGS OF FEASIBILITY STUDY

- Annual Production of 215,000 tonnes (average) of spodumene concentrate (steady state)
- LOM Net Revenue of A$1,562 million
- LOM Cash Generation of A$773.8 million
- NPV of A$382 million and IRR of 59.5% (10% discount rate)
- Project payback of 1.7 years
- Maiden Ore Reserve Estimate of 18.47Mt @ 1.07% Li_2O
- 18.47 Mt of total ore feed to produce 2.744 Mt of spodumene concentrate production
- LOM Strip Ratio of 2.7:1
- LOM Cash Cost (FOB) of A$298 per product tonne; Gross Margin of A$348 per tonne

Altura Mining Limited (ASX: AJM) ("Altura" or the "Company") is pleased to announce the results of the Project Feasibility Study (FS) completed on the 100% Altura owned Pilgangoora Lithium Project in Western Australia's Pilbara region.

Key outcomes of the FS include a project Net Present Value (NPV) of $382 million over an initial 12+ year mine life based on the current ore reserve estimate of 18.4 million tonnes. Life of Mine (LOM) cash cost of A$298 per tonne of spodumene concentrate, an attractive capital estimate of A$129 million including deferred capital and a payback period of 1.7 years.

Significant potential exists to increase both the current mineral resource of 35.7 million tonnes and ore reserve estimate via upgrading portions of the current inferred resources in order to convert to probable ore reserves and additional exploration drilling in previously untested areas of the tenements.

Altura's Pilgangoora deposit will be extracted by open pit methods enhanced by the shallow and thick mineralisation allowing spodumene ore to be mined from the commencement of mining. The FS has highlighted a very attractive LOM strip ratio of 2.7:1 providing Altura with a very low operational mining cost. The project contains a Maiden Ore Reserve estimate of 18.47Mt of Probable Reserves which underpins the initial 12 year mine plan. Low grade ore stockpiled during mining will be processed after year 12.

Altura has an extensive tenement holding in Pilgangoora and believes there is considerable upside for the project and will be commencing an extensive ongoing exploration programme this quarter to identify and prove up more resources and reserves.

Altura Mining Limited
ABN 39 093 391 774
Units 5 & 6, 25 Hamilton Street
Subiaco WA 6008
PO Box 1386
Subiaco WA 6904
T: +61 8 9488 5100
F: +61 8 9488 5199
E: cosec@alturamining.com
W: www.alturamining.com

The FS has been completed with contributions from industry leading professional service providers. Capital cost estimates and operating cost estimates are presented in Australian dollars and based on first quarter 2016 basis and carry an expected accuracy range of <+/-20%. The FS capital and operating cost estimates have been externally peer reviewed by integrated project service group Aquenta Consulting Pty Ltd (Aquenta).

Altura believes that any remaining approvals required in order to commence the development can be achieved within the planned development timeline. Altura's Pilgangoora Lithium project is ideally located in the well established Pilbara mining region of Western Australia with close proximity access to port and Asian markets. Production is planned for third quarter 2017 after a nine month construction period which will place Altura in an elite group of near term lithium supply companies.

Key Results and Assumptions

The outcomes from the FS are superior to those of the Mining Study in almost every area. Planned production of 215,000 tonnes per annum is 43% higher than that planned in the Mining Study. The Total Project EBITDA has increased from A$609m to $774m (+27%), with the payback now 354% sooner at 1.7 years, from annual cashflows averaging A$73.9 million for the first 11 years and A$64.1 million over the 14 year life. Total Cash Costs (FOB) in the FS is below A$300 per tonne, and some 7.6% lower than the Mining Study.

The total capital cost estimate is higher due to the planned higher annual production; however the capital cost per annual production tonnes is 11% lower than the Mining Study results. The project IRR at 59.5% is more than 40 percentage points higher than the Mining Study. See Table 1 below for Key Results and Assumptions Summary.

Table 1 – Altura Pilgangoora Lithium Project FS Key Results

Description	Units	FS Results	Mining Study	Variance
Average Annual Ore Feed to Plant	Mtpa	1.4	1.0	+40.0%
Total Ore Mined	Mt	18.47	18.92	-2.4%
Annual Spodumene Concentrate Production (steady state, years 1 -11 @ 6% Li_2O)	tonnes	215,000	150,000	+43.3%
Life of Mine (LOM)	years	14	19	-26.3%
Total Spodumene Concentrate Produced	Mt	2.74	2.89	-5.2%
LOM Strip Ratio	waste:ore	2.7:1	2.82:1	-4.3%
Spodumene Concentrate Market Price	US$	494	445	+11%
Capital Cost Estimate	A$M	129.3	97.6	+32.5%
Total Net Revenue	A$M	1,562	1,350	+15.7%
Project EBITDA	A$M	774	609	+27.1%
Total C1 Cash Cost *	A$M	690	707	-2.5%
Total Cash Cost FOB / tonne product **	A$	297.90	320.60	-7.6%
Net Present Value (NPV)	A$M	382	277	+37.9%
Internal Rate of Return (IRR)	%	59.5	42.5	+40.2%
Discount Rate	%	10	8	+25%
Project payback period	years	1.7	2.3	-35.3%
Exchange Rate	AUD:USD	0.7500	0.7500	-

** C1 Cash Costs are defined as the costs of mining, milling and concentrating, onsite administration and general expenses, property and production royalties not related to revenues or profits, metal concentrate treatment charges, and freight and marketing costs less the net value of the by-product credits*

*** Total Cash Cost FOB / tonne product are defined as all cash costs to free on board, including deferred capital expenditure, but excluding interest, tax and depreciation.*

For personal use only

Feasibility Study Scope

The FS has assessed strategic options for development, determined an economic open pit mine operation, production schedule and site layout for the preferred option, all works completed to date forms the basis for progressing to a Definitive Feasibility Study (DFS) with a further refined overall accuracy of +/- 15%. Altura plans to further tighten the overall accuracy via completion of its DFS which is expected to be delivered early in Q3 2017.

The JORC Code 2012 Edition prescribes that a Feasibility Study (FS) is of a higher level of confidence than a Pre-Feasibility Study (PFS) and would normally contain mining, infrastructure and process designs completed with sufficient rigour to serve as the basis for an investment decision or to support project financing. The level of accuracy in Altura's FS has been independently reviewed and is a quoted at +/-20% accuracy for both capital expenditure and operating expenditure. Altura also believes that any further approvals required in order to commence the development can be achieved within the planned development timeline.

The Feasibility Study scope includes, but is not limited to:

- Resource modelling;
- Hydrology and hydrogeology investigations and studies;
- Geotechnical investigations and studies (civil and mining);
- Heritage and environmental studies and surveys;
- Approvals and land tenure management;
- Open pit optimisation, mine design and planning;
- Metallurgical and materials handling testwork, reporting and analysis;
- Process design;
- Fixed Plant design;
- Road design and haulage studies;
- Preliminary design of non-process infrastructure, services and utilities;
- Market analysis;
- HR and operations management;
- Risk analysis;
- Capital cost estimation (+/- 20%);
- Operating cost estimation (+/- 20%);
- Preliminary project schedule;
- Financial evaluations and analysis;
- Preparation of a preliminary project execution strategy;
- Forward work plan; and

Third Party consultations including JV partners, third party mining companies, government departments and authorities, pastoralists and native title claim groups.

For personal use only

For personal use only

Overview

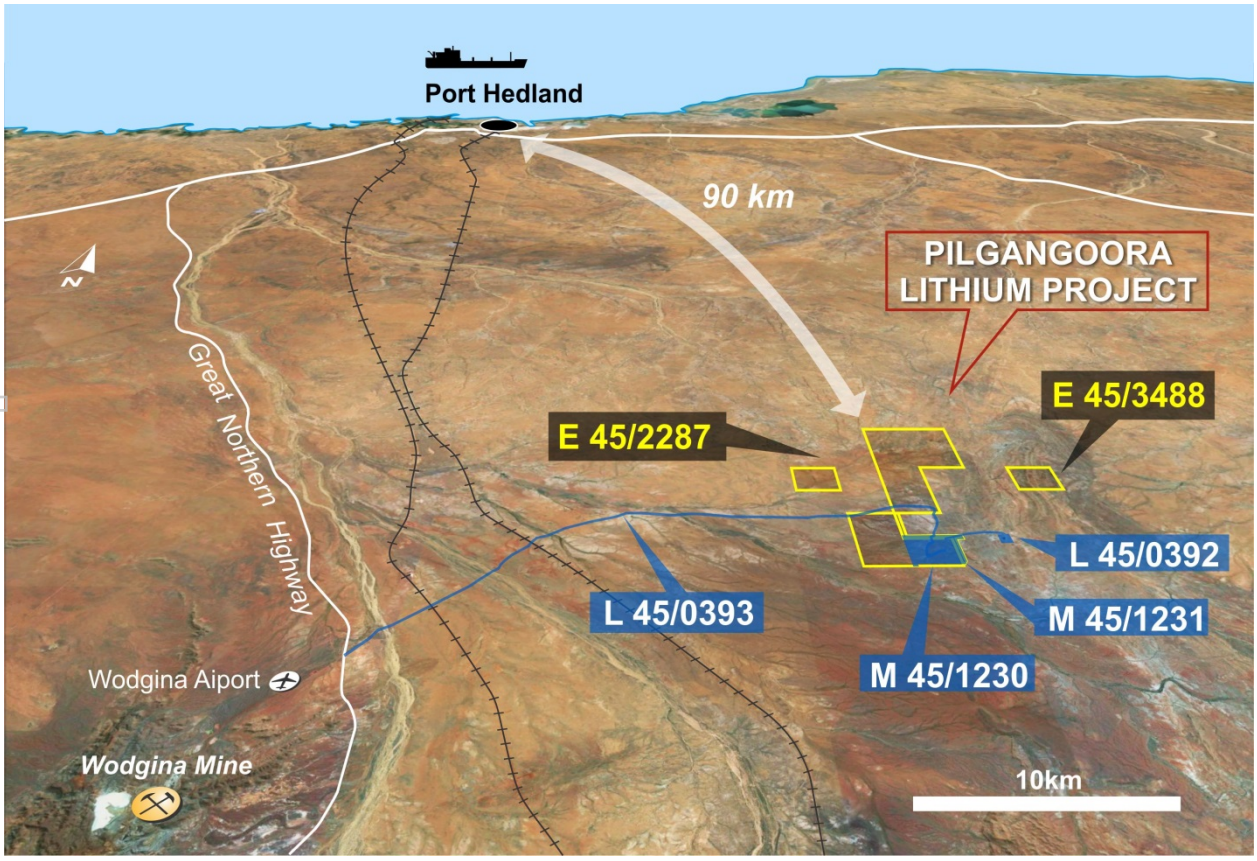
The Pilgangoora Lithium Project area is approximately 123km drive from the town of Port Hedland (Figure 1). Road access to the site is via the Great Northern Highway and then Shire roads and station tracks. The Pilgangoora Mining Lease Application tenements, covering the resource modelling area, are M45/1230 and M45/1231 and cover an area of 394 hectares. The objective is to develop the Pilgangoora Lithium Project on the basis of a concentrator Plant producing spodumene concentrate at 6% Li_2O from an average feed to a plant of between 1.15 – 1.20% Li_2O.

A scoping study was issued by METS Engineering (METS) in October 2012, based on an extensive drilling program carried out by Altura and a subsequent testwork program managed by METS. The scoping study reported positive results and concluded with a recommendation that Altura progress the project to prefeasibility stage.

The Feasibility Study (FS) has been completed at the end of Q1 2016 and undergone rigorous internal and external peer reviews. The Pilgangoora Lithium Project seeks to develop mining, processing, logistics and support infrastructure to commence mining and processing of 1.4Mtpa of ore to produce approximately 215,000 tonnes of lithium spodumene concentrate per annum, commencing Q3 2017. The life of mine (LOM) is expected to be 14 years, based on an indicated and inferred resource of 35.7Mt (JORC 2012).

Concentrate will be exported by ship from Port Hedland to lithium producers, predominantly in China, for further processing into a wide range of lithium chemicals, including lithium carbonate (standard and battery grade), lithium hydroxide, lithium metal, and lithium chloride.

Figure 1 – Altura Pilgangoora Lithium Project Location



For personal use only

Altura's 100% owned Pilgangoora Project comprises a series of spodumene bearing pegmatites in an area regionally known as Pilgangoora in the west Pilbara region of Western Australia. The area has been extensively explored in the past for a wide variety of minerals including, tin, tantalum, base metals, nickel and gold.

Altura started drill testing the pegmatites in mid-2010 after regional mapping and rock chip sampling completed in 2009 confirmed that the pegmatites were anomalous in lithium (Li) and that the grades were of potential economic significance. Extensional and infill drilling, along with further metallurgical and geochemical testwork enabled Altura to successfully define Indicated and Inferred pegmatite resources.

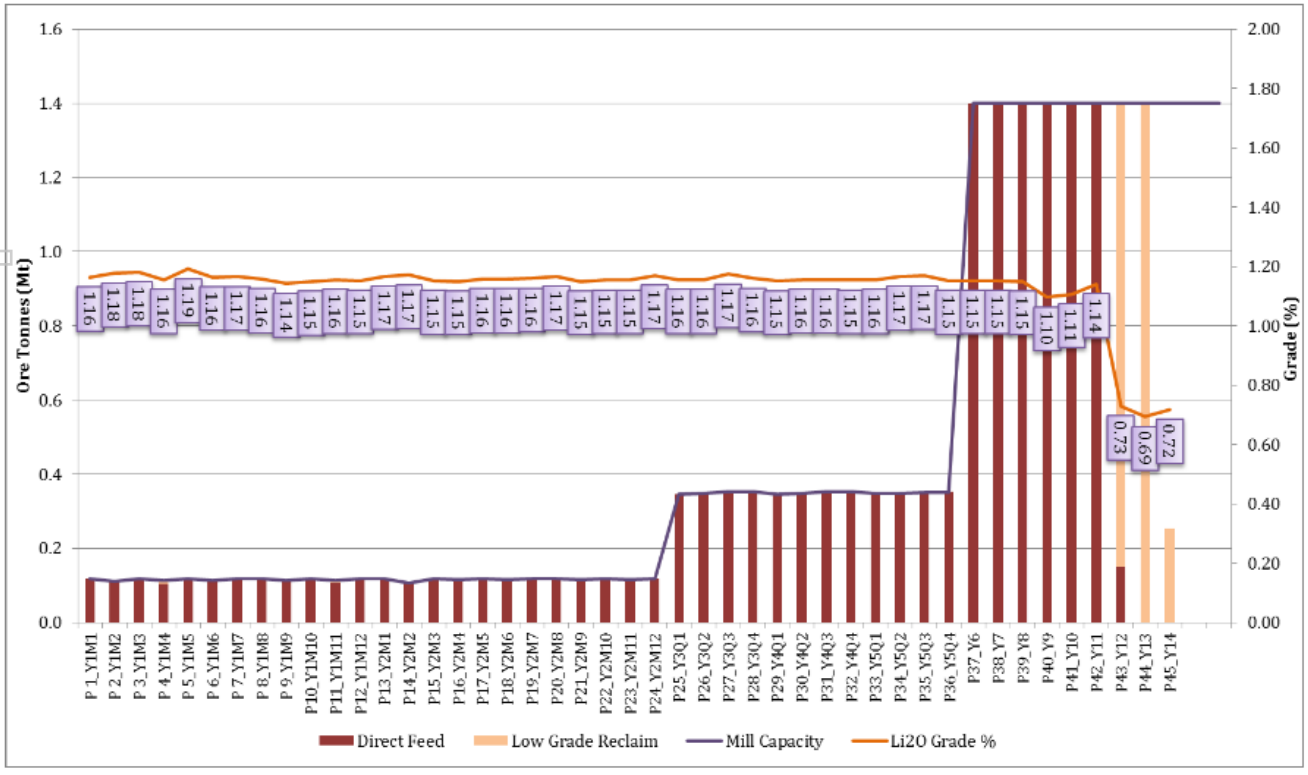
Altura intends to develop and produce from the Pilgangoora Lithium Project in 2017, which is planned to consist of a single open pit mine, on site processing plant and site facilities. Processed ore will be trucked to Port Hedland where it will be unloaded into a storage shed. On arrival of a chartered vessel, product will be loaded into Rotaboxes which are transported to port for loading either with the ships gear or shore based cranes.

Production Profile

The FS is based on an annual ore feed of circa 1.4 Mtpa to the process plant to deliver average annual output (steady state) of 215,000 tonnes annually of spodumene concentrate containing 6% Li_2O. The current LOM plan is based on direct feed of ore to the process plant from Years 1 -12 whilst building a low grade stockpile. Material from the low grade stockpile will be fed to the process plant in Years 12 – 14. The life of mine production target of 18.47 million tonnes is comprised entirely of Probable Ore Reserves (see Maiden Ore Reserve Estimate section).

Production levels and mill feed by source is detailed in Figure 2 (below), it should be noted that the schedule is displayed on monthly periods for Years 1 – 2, quarterly periods for Years 3 – 5 and annual increments for the remaining initial mine life.

Figure 2 – Altura Pilgangoora Lithium Project Mill Feed per Period by Source



Positive Financials

Cash flow modelling of the Altura Pilgangoora lithium project demonstrates a pre-tax, 100% equity Net Present Value (NPV) of A$382M (at a discount rate of 10%) with total earnings before interest, tax, depreciation and amortisation (EBITDA) cash flows over the FS 14 year project life of A$773.8M. The cash flow model utilises real dollars and therefore does not factor any inflationary impacts on revenue, operating and capital costs and uses an industry standard 10% discount rate. This generated an internal rate of return (IRR) of 59.5%. Table 2 below details the financial results summary and sensitivity of NPV to discount rates.

Table 2 – Altura Pilgangoora Financial Results Summary

Financial Results	Discount Rate	Result
Net Present Value	10%	A$382M
	8%	A$436.5M
	12%	A$336.0M
Internal Rate of Return		59.5%
Pay Back (nominal)		1.7 years
EBITDA (average steady state production)		A$73.9M pa*
Gross Margin (per tonne steady state)		A$348

**Based on Years 1 – 11 Production*

Project Financial Sensitivity

A Financial Sensitivity Analyses covering a number of scenarios have been completed on the project.

The key sensitivities and inputs examined were:

- Operating costs (OPEX)
- Capital costs (CAPEX)
- Revenue based on Spodumene Concentrate Price (6% Li_2O)

The results of the sensitivity analyses are detailed in the Table 3 with all amounts shown in A$. The key outcome is the sensitivity to revenue (spodumene ore price) which is greater than both OPEX and CAPEX. Open pit mining operations such as Altura's Pilgangoora are generally more susceptive to fluctuations in ore price therefore the result is not unusual. The upside however is that the project is very robust in regards to OPEX and CAPEX providing a long term stable platform in order to deliver strong cashflows and shareholder returns.

For personal use only

Table 3 – Altura Pilgangoora Financial Sensitivity Analysis

OPEX Sensitivity	Discount Rate		
	8%	10%	12%
-15%	$505.7M	$444.7M	$392.6M
-10%	$482.6M	$423.9M	$373.7M
-5%	$459.6M	$403.1M	$354.9M
0%	$436.5M	$382.3M	$336.0M
+5%	$413.4M	$361.5M	$317.1M
+10%	$390.3M	$340.7M	$298.3M
+15%	$367.3M	$319.9M	$279.4M

CAPEX Sensitivity	Discount Rate		
	8%	10%	12%
-15%	$455.8M	$401.6M	$355.3M
-10%	$449.4M	$395.2M	$348.9M
-5%	$442.9M	$388.8M	$342.4M
0%	$436.5M	$382.3M	$336.0M
+5%	$430.0M	$375.9M	$329.6M
+10%	$423.6M	$369.5M	$323.1M
+15%	$417.1M	$363.0M	$316.7M

ORE PRICE Sensitivity	Discount Rate		
	8%	10%	12%
-15%	$282.4M	$243.3M	$209.8M
-10%	$333.8M	$289.6M	$251.8M
-5%	$385.1M	$336.0M	$293.9M
0%	$436.5M	$382.3M	$336.0M
+5%	$487.8M	$428.7M	$378.1M
+10%	$539.2M	$475.0M	$420.2M
+15%	$590.5M	$521.4M	$462.2M

For personal use only

Maiden Ore Reserve Estimate

The Maiden Ore Reserve Estimate for Altura's 100% owned Pilgangoora Lithium Project totals 18.4Mt at 1.07% Li_2O and is classified as a Probable Ore Reserve estimate. The work has been compiled by Western Australian based mining consultants Orelogy Consulting Pty Ltd (Orelogy) as part of the FS with the results set out in Table 4 below. Altura Mining is extremely pleased with this validation of previous estimates and high conversion rate. Significant potential exists to increase both the mineral resource and ore reserve estimates via additional exploration drilling in previously untested areas of the tenements and upgrading portions of the current inferred resources in order to convert to probable ore reserves.

Table 4 – Altura Pilgangoora Ore Reserve Estimate (0.4% Li_2O Cut-off Grade)

JORC Category	Ore (million tonnes)	Li_2O (%)	Fe_2O_3 (%)	Contained Li_2O (tonnes)
Proven	-	-	-	-
Probable	18.4	1.07	1.7	198,390
Total Reserve	18.4	1.07	1.7	198,390

Orelogy Mining Consultants carried out open pit optimisation utilising Geovia Whittle software on the Indicated material only and used tenement boundaries as constraints. The non-mining related optimisation inputs and modifying factors utilised were derived from the PFS level work undertaken by others and comprised:

- processing costs for the revised 1.4Mtpa plant design by DRA Global Pty Ltd;
- 83% recovery of Li_2O based on the revised flow sheet and additional test work by Nagrom;
- recent concentrate handling costs provided by a logistics contractor;
- revised geotechnical slope parameters provided by Peter O'Brien & Assoc.;
- recent tendered contract mining rates;
- selling price of US$494/t of Spodumene at 6% Li_2O (based on the SignumBOX January 2016 Lithium Market Report).
- An exchange rate of 0.7500 AUD:USD.

The JORC Ore Reserve optimisation results were compared to the open pit design and schedules to ensure that the results are practical and economically achievable. The financial results derived from the subsequent mine design and scheduling process are consistent with the optimisation results and include allowances for mining dilution and ore losses; realistic modifications for mining practicalities; metallurgical, economic, marketing, legal, environmental, governmental and social factors.

The final open pit design incorporates 5 stages and was within +6% of the optimal shell, recovering 97% of the optimised pegmatite ore (refer to Figure 2).

Altura has previously released a JORC compliant Mineral Resource estimate completed by Western Australian based geological consultants Ravensgate Mining Industry Consultants. The initial Mineral Resource estimate released in September 2015 was based on a cut-off grade of 0.8% Li_2O, however the Orelogy Mining Study dated February 2016 determined that a breakeven cut-off grade of 0.4% Li_2O should be used. The revised Mineral Resource estimate released on 11 February 2016 to a cut-off grade of 0.4%Li_2O is set out in Table 5 below.

For personal use only

For personal use only

Table 5– Altura Pilgangoora Mineral Resource Estimate (0.4% Li_2O Cut-off Grade)

JORC Category	Tonnes (Mt)	Li_2O%	Fe_2O_3	Li_2O Tonnes
Measured	-	-	-	-
Indicated	26.7	1.05	1.73	239,000
Inferred	9.0	1.02	1.68	76,000
Total	35.7	1.05	1.72	315,000

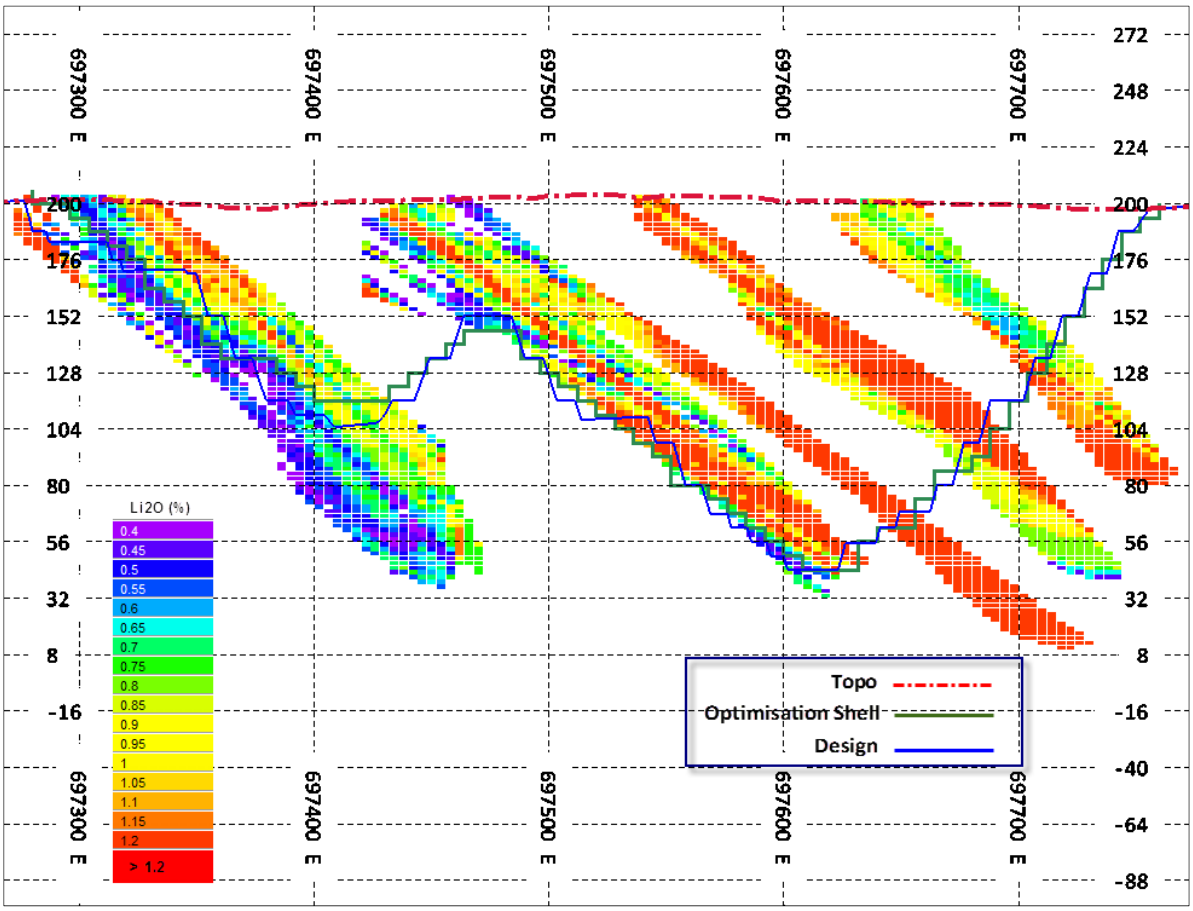
The Ore Reserve represents conversion of 69% of the Indicated Mineral resource. Inclusion of Inferred Resource material in the pit optimisation increases the potential pit inventory by 9% to 20.8Mt at 1.08% Li_2O.

The mine schedule delivered an average grade of 1.15% Li_2O over the first 12 years of the Life of Mine (LOM). A total of 2.9Mt of low grade material at 0.69% Li_2O was stockpiled until the end of the mine life before being reclaimed for processing over the final two years of operations. The strip ratio was relatively consistent over the life of mine at an average of 2.7:1, with a peak of 4.1:1 occurring in the first year, primarily driven by requirement for development of infrastructure.

The Inferred material captured within the pit designs and mine schedule were reported as waste.

No allowance for deleterious elements was made in the study as the QEMSCAN test work has shown that very low concentrations are reported in the product. The potential deleterious elements of Fe and Mn were of insufficient grade to affect spodumene product qualities or cut-off grade.

Figure 3 – Altura Pilgangoora Lithium – Cross-section showing orebody, optimal shell and pit design



Mining Process

Mining will be undertaken by conventional bulk mining methods utilising hydraulic excavators, dump trucks and drill and blast coupled to a ROM stockpile. Ore will be trucked directly from the blasted faces to the ROM stockpile and fed to the primary crusher using a Front-End Loader (FEL). Allowance has been made for blending from the ROM and external stockpiles. The planned mining operation is based on 12 hour shifts with 2 crews working 1 week (7 days) double shifts and 2 weeks (14 days) single shift.

The planned mining activities are as follows:

- Clearing of vegetation, stripping of topsoil and removal to storage location on site;
- Haul road construction and sheeting of ramps;
- Drilling and blasting of ore and associated waste including pre-splits on final walls;
- Loading of ore and waste from the pits; and
- Haulage of ore to the ROM pad and waste to dump areas.

The pit will be mined using 2 metre and 3 metre flitches for ore and waste respectively. This height gives reasonable production efficiency while keeping dilution to a minimum. In waste, the flitch height could be increased to improve efficiency within the limits of the equipment size. Table 6 (below) details the design parameters that have been used for the Pilgangoora pit designs.

Table 6 – Altura Pilgangoora: Pit Design Parameters

Parameter	Unit	Value
Bench Height	m	6
Batter Angle	Degrees	75
Stack Height	m	12
Stack Berm Width	m	10
Inter-ramp Angle (IRA)	Degrees	42.25
Geotechnical Catch berm interval	m	80
Catchment Berm Width	m	15
Ramp Width	m	24

The preliminary Pilgangoora pit design indicates a final pit of ~1,500m length (north-south), 185m to 500m width (east-west) and between ~46m and 199m depth, dependent on natural topography (Figure 4). Mining will be undertaken using a staged approach, commencing with a smaller pit mined at the northern limit of the deposit (Stage 1), advancing to the south in seven (7) stages to reach the ultimate designed pit.

Haul roads used by mine equipment need to accommodate Caterpillar 777 - 90t dump trucks. For the benches at the pit bottom (up to 40 metre overall height), a single lane ramp running width of 2 times the truck width was adopted at 10% gradient to reflect the lower traffic intensity on this section of the ramp and to minimise waste development. The dual lane ramp width is designed to be 24m wide and the single lane ramp width is designed to be 13 m wide.

All mine waste rock will be dumped external to the pit. A first pass waste rock dump (WRD) design has been developed to assess the possible locations and associated footprint required, and also for haul cost estimation. Within the open pit, water will be managed via ditching on benches and through sumps in the pit floor. The actual drain requirements will be assessed during operations based on the performance of the dewatering system as the requirements are likely to vary with mine depth. Flooding of the lower operating

For personal use only

bench following rainfall will be removed via a pumping system to either turkeys nests for use in dust suppression or to the overall site raw water storage system.

Figure 4 – Altura Pilgangoora Lithium Pit Layout

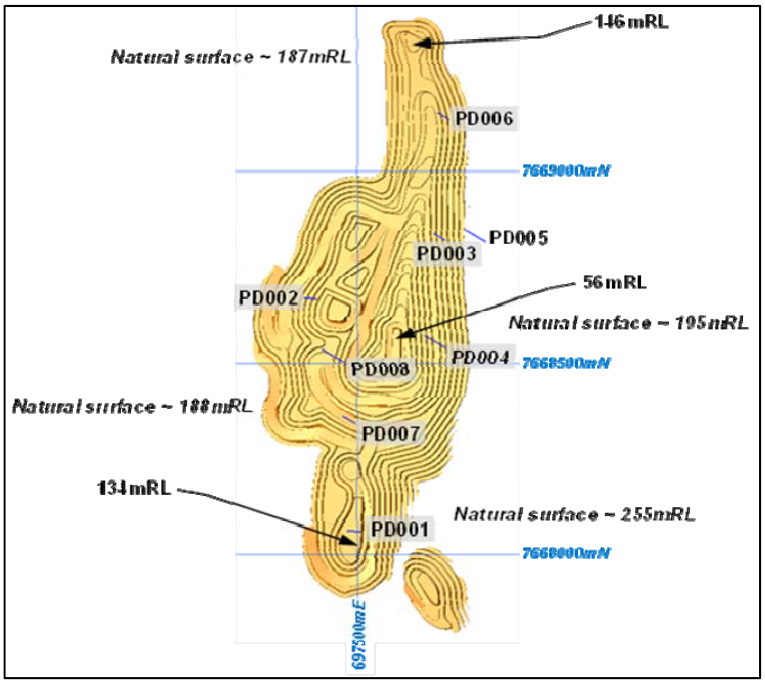
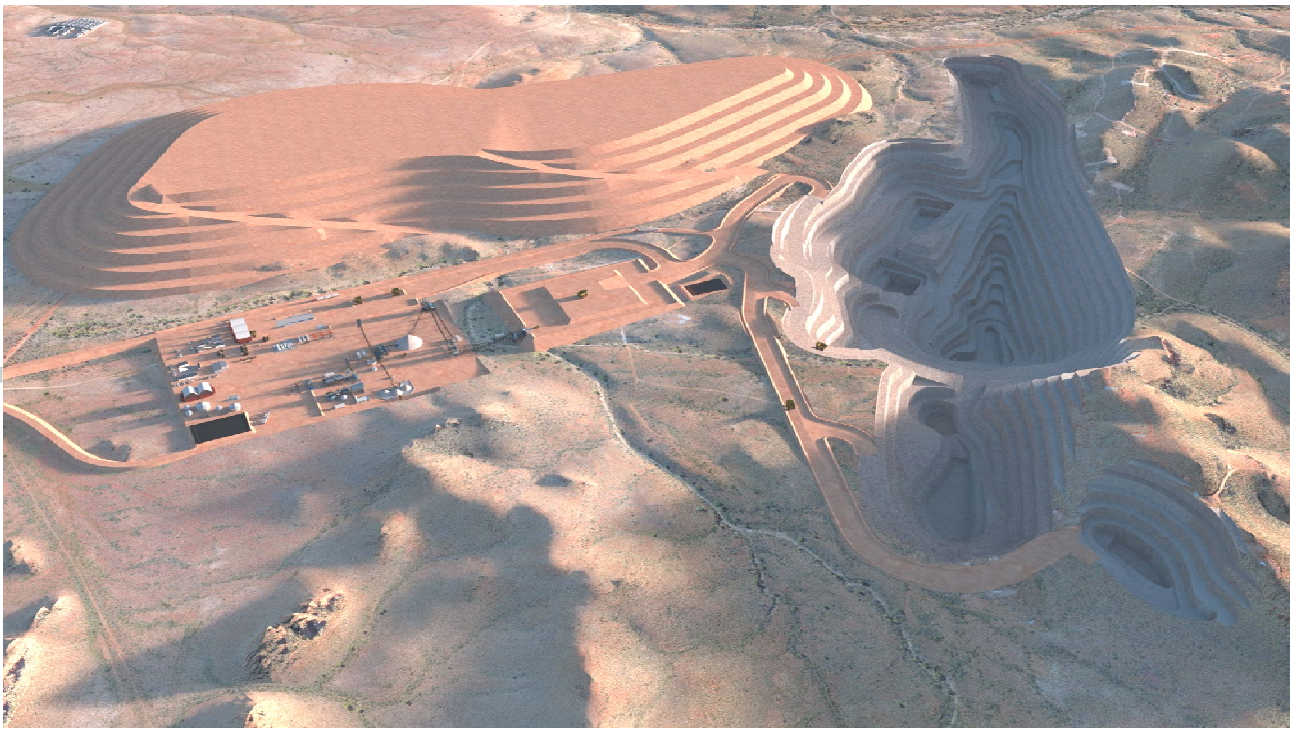


Figure 5 – Altura Pilgangoora Lithium Project – Pit and Waste Rock Dump 3D Model



For personal use only

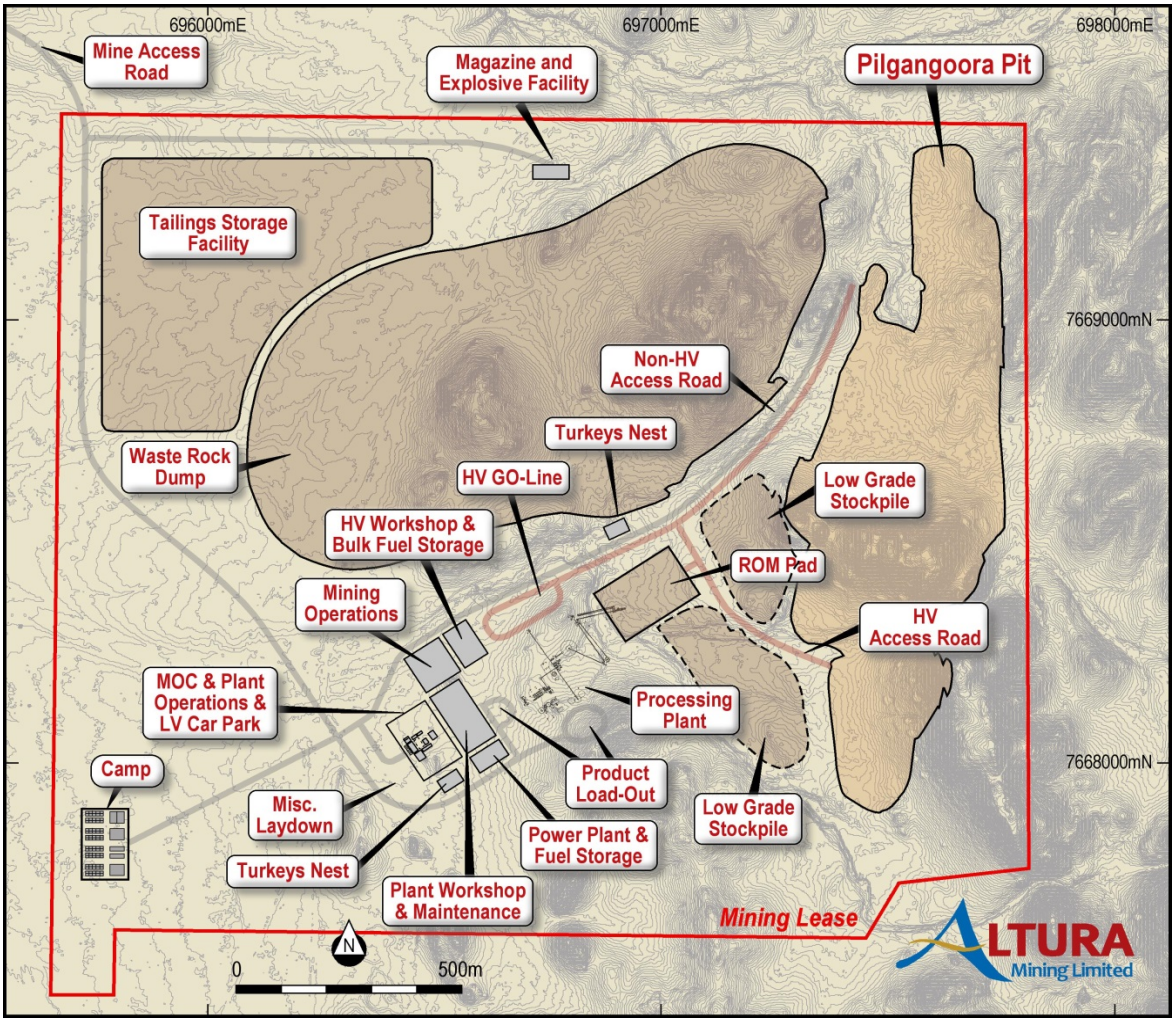
Mine Layout

The project has a relatively small footprint of ~400 hectares covered by 2 mining lease applications that are in the process of being upgrade to Mining Leases. The ore is mined from a single pit located on the eastern side of the mining lease application and stockpiled on the ROM stockpile adjacent to the pit. Process plant and site facilities are located immediately to the west of the pit with the ex-pit waste rock dump and the tailings storage facility located in the centre and north west of the tenement respectively.

The site layout is shown in Figure 6 and encompasses:

- Ultimate pit design
- Waste Rock Dump (WRD) design
- Run of Mine (ROM) Pad Design (with the short term stockpile of 45k LCM capacity
- Topsoil Stockpiles (separately for ultimate pit, WRD, ROM and all infrastructures)
- Ex-pit roads designed separately for Heavy Vehicle (HV) and Light Vehicle (LV)
- Process plant
- Allocated Areas for Workshops, Offices, Lab, Power Plant, HV Go line, LV Parking and Fuel Storage
- Allocated areas for Tailings Storage Facilities (TSF), Camp, Explosive Magazine and Turkey's Nest
- LOM LG stockpile designs (to accommodate ~3Mt low grade ore)

Figure 6 – Altura Pilgangoora Lithium Mine Layout



For personal use only

Process Plant

Altura commissioned DRA Global (DRA) to complete a minerals process study on the Pilgangoora Lithium Project in Western Australia. The study was to investigate the viability of a processing facility to process spodumene-containing ore into a concentrate to be sold in the lithium market. After due consideration of different processing options and throughputs, a 1.4 Mtpa process plant employing dense medium separation (DMS) and flotation technology was selected for the study.

Following a tender process, DRA were awarded a contract to produce a Feasibility Study (FS) incorporating the following scope:

- Review and revision of the Scoping Study process flow information;
- A design for the overall plant arrangement that clearly defines the total plant footprint;
- Process description;
- Equipment lists;
- Capital cost estimate, including design, engineering, procurement and construction to +/- 20% accuracy;
- Operating cost estimate to +/- 20% accuracy; and
- Options for segregating coarse and fine product streams.

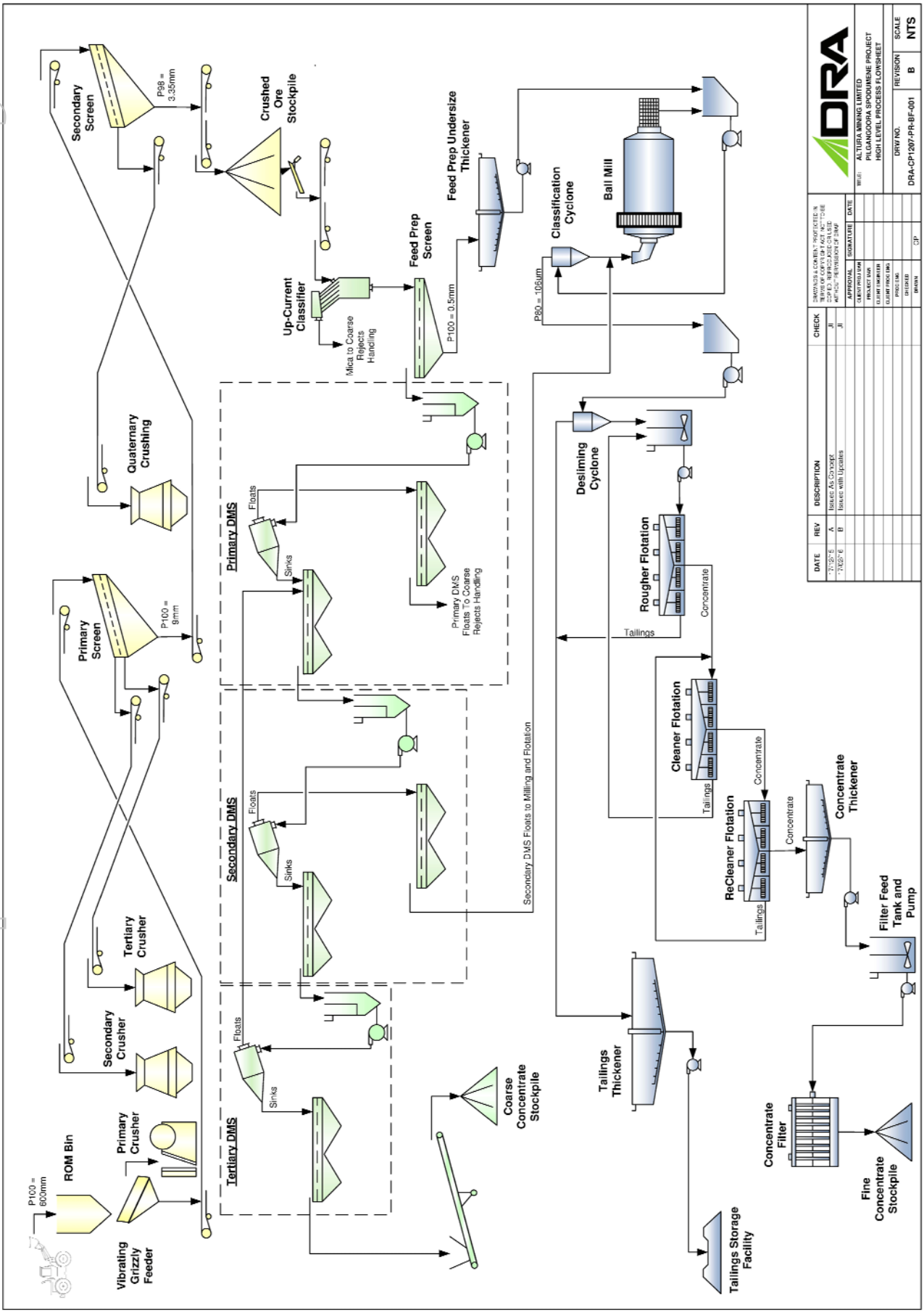
Following receipt of results from historical testwork, DRA designed the flowsheet and design criteria for a 1.4 million tonnes per annum (Mtpa) processing facility. The resulting plant flowsheet was developed employing four stages of crushing which reduce the run-of-mine (ROM) material down to -3.35mm. The crushing circuit is followed by three stages of DMS to produce a coarse (+0.5mm) lithium product. The fines material (-0.5mm) and the DMS middlings are milled to a P80 of -106um and beneficiated with flotation to achieve a fine lithium product. Figure 8 shows the high level process flow diagram.

The process plant was designed to process 1.4Mtpa of Pilgangoora lithium ore, beneficiating ROM ore to a 6.5% lithium concentrate. The plant creates both a coarse and fine concentrate, utilising industry standard separation techniques for hard rock spodumene production from a pegmatite ore body. A tailings storage facility (TSF) is required to accommodate fine tailings from the process plant and to facilitate recovery of process water. The mine will produce 420,000 tonnes of fines tailings per annum over 14 years.

Figure 7 – Altura Pilgangoora Process Plant 3D Model

For personal use only

Figure 8 – Altura Pilgangoora High Level Process Flow Diagram



For personal use only

Logistics and Port

In November 2015 Altura commissioned a transport and logistics study from Qube Bulk. This study was subsequently revised in March 2016. The objective of this study was to present a feasible methodology for transporting product from stockpiles at the mine to side of ship (Free on Board) of a bulk carrier vessel located at the multiuser port facility in Port Hedland. Constraints at the port due to the annualised production volumes and the nature of other products currently utilising the shiploader led to Qube specifying their Rotabox system as the most practical bulk loading system available.

The Qube report concluded that the following logistics chain provided the optimal solution:

- Double combination road trains will be loaded by front end loader (FEL) from the product stockpile with 55t of product.
- The double combination will travel to a storage shed in Wedgefield and side tip into a stockpile in the shed;
- On arrival of a prescribed vessel at port, FELs will load product from the stockpile in the shed into Rotaboxes. Each Rotabox has a capacity of 25t; and
- Double combinations will take the Rotaboxes to port, which are then removed from the trailers by the ships lifting gear, and tipped into the hold.

A double combination road train will travel to the Qube storage facility in Wedgefield, 15km South of Port Hedland port, and side tip into a storage shed. Two 9,000 tonne cells will be allocated in the shed for this operation. Stockpile management in the shed will be by will be by FEL.

Double road trains were selected over quads on the basis that the cost of the infrastructure upgrades to meet the standards needed to achieve Restricted Access Vehicles (RAV) 10 network certification, which is required for any roads that quads utilise, would be prohibitive. The relatively small volumes of product mean that the incremental operating cost per tonne of using doubles is preferable to the increased capital expenditure. Once the product has been delivered to the shed, the truck will return to the mine – a round trip of 254kms.

Figure 9 – Loading of a Rotabox (Source: Qube)

For personal use only

Capital Cost

The capital cost required to achieve the planned 215,000tpa is estimated at A$129.3 million including A$5 million deferred capital. These capital cost estimates exclude any contingencies on all items. The estimating methods that have been used are more detailed than the factoring approaches generally used at this stage of project development. These included quotations from vendors and suppliers specifically sought for this project, approximate quantities and unit rates sourced from quotations and historic projects and allowances based on past projects. A summary of the capital expenditure distribution is shown in Table 7 below:

Table 7 – Altura Pilgangoora Capital Expenditure Summary

Financial Results	Cost A$M
Site Establishment	$0.100
Mine Development	$6.080
Process Plant Equipment	$84.791
Process Plant Support Facilities	$0.497
Non Process Infrastructure	$8.357
Road and Rail Crossing Upgrades	$14.222
Owners Cost	$10.209
Deferred Capital	$5.000
TOTAL	$129.256

The capital cost estimates are presented in Australian dollars with a base date of first quarter 2016 and they carry an expected accuracy range of <+/-20%. The estimate excludes contingencies and any escalation. Aquenta has reported that the combination of better scope definition and greater level of design than typically provided at the feasibility stage of the project and the primarily deterministic methods of estimating support an assessment that the accuracy range for the Overall CAPEX and Overall OPEX estimates is <+/-20%.

The major capital cost component for the project is the process plant and associated infrastructure. The process plant design and cost estimates were provided by DRA and compared to recent responses to a request for tender issued to a number of internationally recognised minerals processing plant suppliers. Remaining capital items have been derived from direct quotations or recent actual costs from recent mine developments.

The following items have been excluded from the DRA compiled capital estimate; funding costs, study and investigation costs, licenses and any royalties, all recruitment and training costs for the owners operations staff, commissioning costs outside of vendor supply, any costs required to finalise the commissioning of the mine, and all other operating costs of the owner required to support the delivery of the project.

For personal use only

Operating Costs

The OPEX estimate for the process plant was developed by DRA who were the design engineers for the process plant. This estimate reflects the annual operating cost for the process plant. The estimate is split into fixed cost and variable costs. The estimate is based on an Owner operated model. The estimate is supported by a basis of estimate document which identified source of pricing, methodology, accuracy, assumptions and exclusions.

The total whole of life operating expenditure proposed for the project is estimated at $817,627,877. The project will be executed at a plant production feed rate of 1.4 Mtpa over an initial 14-year mine life. The mining estimate prepared by Orelogy is based on a Definitive Feasibility Study (DFS) level and contains mining costs sourced from contract miners in response to a Request for Quotation (RFQ).

The primary cost component (over 90%) of the mining estimate is the actual mining itself which has been market tested. The RFQ put to the market by Orelogy for the mining component requested quotations to have an accuracy range of -10% to + 15%. The balance of the Mining estimate comprised of Owner's costs with the cost of personnel representing the highest cost component. The cost of personnel has been calculated using the indicative number and type of personnel to manage the mining and market tested salaries with allowances for on costs. Therefore it is considered reasonable that the overall Mining Estimate falls within the range of -10% to +15%. Table 8 (below) details the Operating Cost Summary by cost sector.

DRA has estimated the operating costs associated with the operation of the 1.4Mtpa processing plant, including any associated in-plant facilities and infrastructure. The costs are based on an owner-operated model.

Table 8 - Operating Cost Summary (Production and Other)

Category	% of Total	A$ LOM	A$ / Product tonne
Mining	34.1%	279,169,835	101.72
Processing	37.8%	308,711,470	112.49
Leasing and Camp Operations	3.8%	30,888,515	11.26
Administration	0.6%	4,872,000	1.78
Load / Haulage / Rotabox	12.5%	101,923,925	37.14
Port Storage	0.4%	3,544,296	1.29
Power Plant	2.1%	17,357,760	6.32
Native Title and Pastoral Access	0.1%	910,000	0.33
Other Operating Cost	1.5%	12,143,200	4.42
Royalty (other)	1.7%	14,294,836	5.21
Marketing and discounts	5.4%	43,812,040	15.96
TOTAL	100.0%	817,627,877	297.93

DRA has stated that the process plant operating estimate has an accuracy range of -20% to + 20%. Aquenta has reported this is quite a tight accuracy range for a Feasibility Stage estimate, it is reasonable that this range could be achieved. The three major cost components (labour, power and reagents) which represent 81% of the total annual OPEX, are well defined and developed using market tested costs. DRA has specifically excluded a number of items from the Plant OPEX estimate. The majority of these items have been included in either the Overall CAPEX or Overall OPEX estimates.

For personal use only

Market and Pricing

Spodumene concentrate pricing has risen due to withdrawn market supply and compounding growth of battery applications. Talison Lithium has ceased the supply spodumene concentrate to the open market and will utilise their own conversion plant in Kwinana, Western Australia.

The Altura Pilgangoora Lithium Project has utilised a 6% Li_2O price of US$494 per tonne (FOB basis) based on the recent SignumBox Lithium Market Report dated January 2016 for sales from January – September 2015. There is recent market information such the General Mining / Galaxy Resources March 2016 announcement pertaining to an offtake contract with its Chinese based buyers to sell in advance of production 60,000t of 5.5% Li_2O spodumene concentrate for US$600 / tonne. The current modelled price is a significant discount to the current market and is considered conservative.

Altura intends to produce a Chemical Grade Concentrate from the Pilgangoora Project. The Chemical Grade concentrate market is undergoing significant upheaval and resultant robust Compounding Annual Rates of Growth (CAGR) driven primarily by an ever broadening set of applications for Lithium Battery Technology and cleaner sources of energy.

This broadening set of applications initially centred on consumer electronics and the first generation of Electric Vehicles. The Chemical Grade concentrate market is recently grown considerably and is forecast to continue on this trajectory with the second and third generation of Automotive technology with models such as Tesla's Model S and the recently launched Model 3 which has secured in excess of 325,000 pre orders.

In addition Lithium battery technology is finding new applications pertaining to home energy storage via the storage of energy from Solar Panels in large Lithium Batteries for use in peak energy periods. Significant growth is also forecast for Lithium consumption with large Electric Vehicles predominantly via Municipal Buses as Governments globally seek to limit urban pollution.

Altura recently signed a Memorandum of Understanding (MOU) with leading Chinese Battery maker Optimum Nano Group (ASX Announcement 29th February 2016) who supplies Electric Battery solutions to the growing Chinese Large Electric Vehicle (EV) market.

Sources such as SignumBox, Roskill and Stormcrow firmly believe that the world demand for Lithium will continue to grow, being driven mainly by the use of Lithium in larger batteries for electric cars and energy storage systems. A lithium demand in other applications is predicted to continue to grow at a steady state as seen historically. Estimates of the current and future demands for Lithium vary due to the general opacity of the world Lithium market and the lack of a spot pricing system. SignumBox estimates that world Lithium demand in 2015 was 158,000T LCE while Stormcrow places the number at 197,000T LCE.

Future growth is very dependent on technology changes, which makes forecasting demand for lithium difficult. Numerous lithium demand forecasts have been made in recent years that vary widely with forecasts for 2015 in the range of 138,500-265,000t for lithium carbonate equivalent (LCE) and by 2020 at between 174,800-500,000t LCE; the largest increase by end use is projected to be rechargeable batteries.

At the time of writing of this report the following non- binding agreements had been reached for product offtake:

- Letter of Intent (LoI) with Lionergy for a minimum of 100,000tpa up to 150,000tpa of lithium spodumene concentrate and
- Memorandum of Understanding (MOU) with Optimum Nano Batter Co, Limited for a minimum of 100,000tpa up to 150,000tpa of lithium spodumene concentrate

For personal use only

Study Accuracy

Aquenta has reported that the accuracy of an estimate is determined by the level of scope definition and the estimating method used. The AACE (American Association of Cost Engineers) practice note 18R-97 suggests a low range of -15% to -30% and high range of +20% to +50% at feasibility phase. These figures assume a factored estimating approach based on equipment costs and limited amount of design definition. This project is noted as being at Feasibility Stage, however, the level of design and estimate detail is more advanced than typically encountered at this stage. Major components of the project are reasonable well defined. DRA has established an equipment list for pricing in addition to preliminary models for concrete and SMP scope. The mining study is at DFS stage.

The estimating methods that have been used are more detailed than the factoring approaches generally used at this stage of project development. These included quotations from vendors and suppliers specifically sought for this project, approximate quantities and unit rates sourced from quotations and historic projects and allowances based on past projects.

The combination of better scope definition and greater level of design than typically provided at the feasibility stage of the project and the primarily deterministic methods of estimating support an assessment that the accuracy range for the Overall CAPEX and Overall OPEX estimates is within +20 to -20%.

Study Team

In order to complete and compile the FS a series of well credentialed independent professional service providers were engaged by Altura and managed by the in-house project development team. The main areas of focus and responsible contributors are detailed below. During the DFS phase Altura may continue with the current team potentially supplement to complete early in Q3 2016.

▪ Orelogy	Mining Study and Financial Modelling
▪ Ravensgate	Resource Estimation
▪ METS Engineering	Metallurgical Testwork
▪ Graeme Campbell	Waste Characterisation
▪ Qube	Logistics
▪ Significant Environmental	Environmental Studies
▪ Bennelongia	Environmental Studies
▪ Peter O'Brien	Geotechnical
▪ RPS Aquaterra	Surface Water
▪ Groundwater Development Services	Ground Water
▪ 4DG	Tailings Storage Facility Design
▪ DRA Global	Process Plant Design
▪ Nagrom	Metallurgical Work
▪ McMahons	Title Service

For personal use only

Upside Potential

Altura has identified areas for potential economic improvement as follows:

- Significant potential exists to increase mine life with the conversion of Inferred Mineral Resource into Indicated Mineral Resource based on planned additional drilling, this will allow potential increase in the ore available to be include in a revised Ore Reserve estimate.
- Altura has an extensive tenement footprint in the Pilgangoora area and there is potential to significantly increase its resource base and mine life
- Reduction in capital via acquisition or access to existing infrastructure and / or infrastructure sharing with adjacent project developers
- Completion of binding offtake agreements with partners that could potentially offer higher spodumene prices in line with the current market levels

ASX Additional Information & Material Assumptions

Mineral Resource Estimate (Summary Information Required by Listing Rule 5.8.1)

Geology and Geological

Lithium (spodumene) mineralisation is contained within clearly identified pegmatites dykes within the broader Pilgangoora region hosted within amphibolites, covering a strike of about 1600 metres and in a zone about 300 meters wide. The dykes range in thickness from 5-40m.

A regional pattern of zonation away from a nearby granite / greenstone contact has been observed with a simple quartz – microcline – muscovite pegmatite assemblage near the contact and changing to an albite-spodumene +/- muscovite at a distance of some 1 km from the contact. This is the approximate distance of the Pilgangoora pegmatites.

Sampling and Sub-sampling

Sample information used in the resource estimation was derived from diamond core and RC drilling. Drill samples were geologically logged and samples taken for lab analysis. During sample preparation, for both the RC and diamond drill samples, the whole sample was crushed to 2mm, rotary divided and a 500g (approximately) sample pulverised to -75microns. A 0.2 gm split was sent directly to a microwave-assisted dissolution.

Sample Analysis Method

Samples were dispatched to Ultra Trace Laboratories in Perth for earliest drilling programs and then subsequently to LabWest in Perth. Both laboratories are NATA certified. Analysis was carried out using microwave assisted HF acid digest with an ICP-OES and ICP-MS finish as required. The technique is considered an effective whole rock determination.

For personal use only

For personal use only

Drilling Techniques

A staged series of drilling programs commencing in August 2010 and extending through to March 2103 has covered the majority of the pegmatite field with 290 drill holes. In total there are 282 RC holes (including four water bore holes) for 24,649m and eight diamond core drill holes for 1,387.9m.

All drilling is aligned to a 40x40m grid covering the pegmatite field. The drill grid is deposit-based with locations and orientations shifting depending on the local dyke orientation. Down hole surveys readings were completed on 53 selected RC holes and their twinned Diamond holes over the extent of the Pilgangoora resource area. The surveys were completed by Down Hole Surveys of Perth, WA using a GyroSmart tool.

Estimation Methodology

Grade estimation using ordinary kriging was completed for one reportable element - Li_2O% using MineSight® software. Drill hole sample data was flagged using domain codes generated from 3D mineralisation domains and geological surfaces.

A single search ellipsoid was used to estimate each block. Sample data utilised was first composited according to the main Li2O% item to a 1m down-hole length. Grade continuity was measured using geostatistical techniques. Directional variograms were modelled using traditional and normal score transformation semivariograms.

Resource Classification

The Resource model uses a classification scheme based upon block estimation parameters including Kriging Variance, Number of composites in search ellipsoid informing the block cell and composite distance to block centroid.

Classification by the Competent Person has also taken into account a range of other modifying factors commencing with the geological understanding of the Pilgangoora pegmatites which is a primary requirement to producing a robust resource estimation model. The Mineral Resource Estimates have been carried for the Pilgangoora deposit in accordance with the JORC Code (2012 Edition).

Cut-off Grade

A revision of the previously used 0.8 0% Li2O lower cut-off following advice from Altura Mining Limited that a Prefeasibility Study (PFS) recently carried out by Engineering consultants Orelogy in November 2015 revealed that a lower operation economic cut-off was likely to prevail at Pilgangoora.

Ravensgate's opinion is that the use of a 0.40% Li2O lower cut-off as described from the Mt Cattlin based sensitivity analysis may now be used for reporting the lithium resource at Pilgangoora. The cut-off grade of a 0.40% Li2O for the stated Mineral Resource Estimate is determined from current economic parameters and currently reflects potential anticipated mining practices. This updated resource summary must be viewed with direct reference to the Orelogy Pre-Feasibility Study Mining report

Mining and Metallurgical Methods and Parameters and other modifying factors

The Mining PFS conducted by Orelogy combined with the recently completed Metallurgical testwork programme indicates that an open pit mining will be employed to recover ore. As part of the Mining PFS strategic mining schedules were generated using Maptek Evolution® on an annual calendar basis aiming to achieve the maximum value schedule from a number of different variations (scenarios).

For personal use only

The financial inputs, costs and processing parameters, used in pit optimisation were applied on the base case scheduling scenarios along with further sensitivity analysis inputs and variations advised by Altura.

Ore Reserve Estimate (Summary Information Required by Listing Rule 5.9.1)

This ASX announcement has been prepared in compliance with the JORC Code (2012) and the ASX Listing Rules. The Company has included the Table 1 Checklist of Assessment and Reporting Criteria for the Pilgangoora Lithium Project as prescribed by the JORC Code (2012) and the ASX Listing Rules.

The following is a summary of the pertinent information used in calculation of the Ore Reserve with full details provided in Table 1 Section 4 at the rear of this document.

Material Assumptions	
FS Capital and Operating Cost Accuracy Variance	<+/- 20%
Mining Method	Conventional open pit utilising drill and blast
Processing Method	4 stage crushing, reflux classifier, dense media separation circuit, ball mill, flotation and concentrator
Final Product Grade	Minimum 6% Li_2O concentrate
Average Annual Ore Feed to Plant	1.4 Mtpa
Total Ore Mined	18.47 Mt
Annual Spodumene Concentrate Production (steady state, years 1 - 11)	215,000 t
Life of Mine (LOM)	14 years
Total Spodumene Concentrate Produced	2.74 Mt
LOM Strip Ratio (waste:ore)	2.7:1
Spodumene Concentrate Market Price (6% Li2O FOB Basis)	US$494
Capital Cost Estimate	A$129.3M
Total C1 Cash Cost *	A$690M
Total Cash Cost FOB / tonne product **	A$297.90
Discount Rate	10%
Project payback period	1.7 years
Exchange Rate AUD:USD	0.7500

** C1 Cash Costs are defined as the costs of mining, milling and concentrating, onsite administration and general expenses, property and production royalties not related to revenues or profits, metal concentrate treatment charges, and freight and marketing costs less the net value of the by-product credits*

*** Total Cash Cost FOB / tonne product are defined as all cash costs to free on board, including deferred capital expenditure, but excluding interest, tax and depreciation.*

Material Assumptions

The material assumptions within the FS which support the Ore Reserve Estimate, the Production Targets and the forecast financial information derived from the Production Targets are disclosed in the body of the announcement and outlined in the ASX Additional Information – Material Assumptions section, with the exception of commercially sensitive information.

The mining costs used by Orelogy in the calculation of the Ore Reserve Estimate were based on the physicals derived from the LOM schedule developed by Orelogy, mining costs obtained from mining contractors with experience in WA hard rock operations and current diesel fuel prices and an owner cost component developed by Orelogy with input from Altura.

Criteria Used for the Classification of Ore Reserves

Ore Reserves were calculated only on the Indicated portion of the Mineral Resource Estimate and within the mining tenement boundary. The economic parameters used in pit optimisation were used to define a breakeven cut-off grade of 0.32% which was rounded up to 0.4% Li2O, consistent with the Mineral Resource. A Whittle4X™ pit optimisation, including sensitivity analysis, was completed. Slope design criteria, mining dilution, ore loss and processing recoveries were applied in the pit optimisation process together with mining, processing, transport and sales cost estimates, and revenue projections to form the basis for pit designs and subsequent mining and processing schedules. The Ore Reserve Estimate has been classified as Probable based on guidelines specified in the 2012 JORC code. The Mineral Resources in this report are reported inclusive of Ore Reserves.

Mining Method and Assumptions

A conventional open pit mine method was chosen as the basis of the FS. Ore is exposed at surface requiring minimal pre-stripping and pre-production mining activities. The mining approach was to simulate mining a clean ore product by minimising dilution, resulting in overall ore loss of 5% and 0% dilution. The diluted model was used for pit optimisation.

Processing Method and Assumptions

The pegmatite ore is planned to be processed using conventional crushing and screening followed by dense media separation (DMS). The coarse DMS concentrate product will go directly to final product while the fine fraction will be combined with the DMS middling fraction and processed through another circuit using grinding and flotation to produce a fine flotation concentrate that will also go to final product. All technologies proposed are proven and well tested with easily sourced components.

The process flow sheet was developed by DRA based on metallurgical test work by METS undertaken in 2012 and 2015. Comminution test work indicates rock of moderate hardness, resistant to failure by compression and highly abrasive. Beneficiation test work has indicated a process route to produce coarse and fine fractions of Spodumene concentrate at 6-7% Li2O.

Cut-off Grades

Please refer to the discussion on this item as set out in the previous section which deals with the summary information required by LR 5.8.1 for mineral resource estimates.

Estimation Methodology

Please refer to the discussion on this item as set out in the previous section which deals with the summary information required by LR 5.8.1 for mineral resource estimates.

Infrastructure

The Project is located in the West Pilbara region of Western Australia where good infrastructure is available for mining projects. A sealed highway provides access from Port Hedland to within 20km of the Project area. The

For personal use only

last stretch of access road will require upgrading for the traffic load. The Project currently has access to sufficient water for construction and one (1) year of operations with reasonable assumptions that further water can be sourced. Power will be produced on site using diesel generators. Product will be shipped via Port Hedland located 90km to the north. The site will operate on a fly-in fly-out basis with a village constructed to house operations personnel whilst on site.

Economic

The economic analysis is based on cash flows driven by the production schedule. The cash flow projections include:

- Initial and sustaining capital estimates.
- Mining, processing and concentrate logistics costs to the customer based on FOB pricing.
- Revenue estimates based on concentrate pricing adjusted for fees, charges and royalties.
- Closure costs.
- Company tax estimates.
- A 10% discount factor

Spodumene pricing was based on forecasts from the January 2016 SignumBOX Lithium market report with revenue and cost factors based on variable head grade averaging 1.15% Li2O for 12 years, processing recoveries applied at 83%, spodumene price of US$494/t for 6% Li2O content, exchange rate of 0.7500 AUD:USD, transportation charge of A$33.78/wet tonne, port charge of A$4.52/wet tonne.

Other Non-Mining Modifying Factors

Stakeholder support has been strong during property acquisition and through the permitting process. The Company has held meeting with Department of Water & Department of Mining & Petroleum, and indicates that mining proposal will be ready for submission in June 2016.

The Lithium market will continue to grow driven by the use of lithium in larger batteries for electric cars (>60%) and energy storage systems. There are currently 24 projects under development based on recovery of spodumene from pegmatites. Altura is well advanced in development of the Project and is able to capitalise on projected shortfalls in demand. Metallurgical test work and chemical analysis of the spodumene concentrate has shown that it is suitable for the Lithium battery market.

The Company has signed two MOU / LOI for offtake, each of 100,000 tonnes minimum to 150,000 tonnes maximum of concentrate with leading Chinese battery producers. The MOU / LOI and discussion with alternative third parties have been taken into account in the selection of plant size.

For personal use only

Competent Persons Statements

The information in this report that relates to the Mineral Resource for the Pilgangoora lithium deposit is based on information compiled by Mr Stephen Hyland and Mr Bryan Bourke. Mr Hyland is a Fellow of the Australasian Institute of Mining and Metallurgy and Mr Bourke is a Member of the Australian Institute of Geoscientists. Mr Hyland is a principal consultant at Ravensgate and has sufficient experience that is relevant to the style of mineralisation under consideration and to the activity of mineral resource estimation to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bourke is the Exploration Manager of Altura Mining Limited and has had sufficient experience that is relevant to the style of mineralisation and to the type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Hyland and Mr Bourke consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to the Ore Reserve for the Pilgangoora lithium deposit is based on information compiled by Mr Jake Fitzsimons. Mr Fitzsimons is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Fitzsimons is a principal consultant at Orelogy Consulting Pty Ltd and has sufficient experience that is relevant to the style of mineralisation under consideration and to the activity of ore reserve estimation to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Fitzsimons consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

About Altura Mining Limited (ASX: AJM)

"Altura is building a leading position in the independent supply of lithium raw materials, with a world class lithium project at Pilgangoora ready to set the platform and be the first new hard rock supplier in 2017. The Altura team has a track record of delivering mining projects with Pilgangoora the most advanced stage, near term producing lithium project; solid offtake partners and a market providing substantial growth opportunities to ensure positive shareholder returns."

For further information, please visit www.alturamining.com or phone:
James Brown, Managing Director on + 61 (0)427 988 898

For personal use only

JORC Code, 2012 Edition

SECTION 1 – SAMPLING TECHNIQUES AND DATA

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

Criteria	Commentary
Sampling techniques	• The Pilgangoora deposit was sampled by RC and diamond drilling. • Drilling for samples for assay was undertaken on a regularly spaced grid. All ore intervals and their contacts into barren wall rock were sampled. • RC samples were collected at 1m sub-samples for assay were split directly from a rig-mounted riffle splitter into a uniquely numbered calico bag. The remaining material was collected directly off the cyclone into a numbered plastic bag and kept on site for geological logging and chip sampling. • Diamond drilling (DD) was HQ2 diameter triple tube, removed from the tube and transferred to 4x1m HQ core trays. Core was matched, marked up and logged. Cut half core from mineralised zones was sent for assay. Assay lengths were determined by the geologist, based on the nature and location of the mineralisation logged in the core. • Mineralisation was initially determined visually and confirmed by geological logging and geochemical assays.
Drilling techniques	• The RC and diamond drilling was undertaken by Altura Mining's PRD2000 multipurpose rig rated at 1120 cfm @350 psi. The RC drilling used a 51/2" (132mm) face sampling hammer, the diamond drilling used HQ (63.5mm internal) coring. RC was sampled from the surface. Diamond holes were pre-collared to 3m and then coring commenced. • No core orientation was undertaken.
Drill sample recovery	• No direct recovery measurements of reverse circulation samples were performed. Sample recovery at the rig is visually estimated for loss per sample interval. • Representative drill chips were collected by an Altura geologist and placed in 2m intervals in chip trays. • HQ core was recovered in nominal 3m runs and marked by the drillers core block. The core was later marked in metre intervals and recovery measured. • RC sample recovery was maximised by stopping drilling at the metre interval and air-flushing the cyclone contents through the splitter to maximise recovery. • Diamond drilling was targeted at maximum core recovery. Recovery exceeded 95%. • The assay results of duplicate RC and paired DD hole samples do not show sample bias caused by a significant loss of/gain in lithium values caused by loss of fines.
Logging	• All RC and DD holes were logged by Altura geologists. The RC logging is undertaken on 1m intervals documenting the lithologies, colour, hardness, texture, alteration and mineralisation using the Altura standardised logging codes. The same attributes were recorded for DD core with geological boundaries logged to 10cm accuracy. • The logging is considered quantitative in nature. • All DD holes were measured for RQD and their structural data (joints, faults/fractures & natural breaks measured & documented). • Photographs of RC chip trays or core trays were taken for the full length of all holes. • All recovered RC and DD intersections were logged.
Sub-sampling techniques and sample preparation	• RC samples were normally dry. If water was present, it was expelled from the hole before sample was collected. Samples were riffle split on the rig to provide a 1/8th sample. • Diamond core was ½ or ¼ cut (for check sampling and metallurgical purposes) with sampling from the same side where possible. • Sample Preparation: For both the RC and DD the whole sample was crushed to 2mm, rotary divided and a 500g (approximately) sample pulverised to -75microns.

For personal use only

Criteria	Commentary
	A 0.2 gm split was sent directly to a microwave-assisted dissolution. HF acid MADs are performed in sealed vessels at temperatures up to 200°C and pressures up to 20 Bar. Digests are controlled with respect to microwave power, vessel temperature and vessel pressure to achieve reproducible digestion conditions across a wide range of sample materials. • One pegmatite duplicate from each drill hole was analysed. The range between the two sets of data was 10-15%. LabWest inserts check samples in each assay batch (see below). • The drill sample sizes are considered appropriate to represent the spodumene mineralisation, based on the size of the spodumene crystals (up to 50cm) and the thickness and overall consistency of mineralisation within the pegmatite hosts.
Quality of assay data and laboratory tests	• Initially, the samples were dispatched to Ultra Trace Laboratories in Perth. All subsequent submissions were sent to LabWest in Perth. Both laboratories are NATA certified. • Li, Al_2O_3%, CaO%, Fe_2O_3%, K_2O%, MgO%, MnO%, Na_2O%, P_2O_5%, SO_3% and TiO_2% were assayed using microwave assisted HF acid digest with an ICP-OES finish, while U, Th, Nb, Rb, Ta and Cs were similarly digested with an ICP-MS finish. The technique is considered an effective whole rock determination. • No geophysical tools, spectrometers or hand-held XRF instruments were used in determining any of the data included in this resource. • Insertion of one of three certified reference standards by Altura/ LabWest at a rate of one in every 25 samples with a minimum of one standard per drill hole. Field duplicates were inserted at a rate of one per drill hole. Internal lab splits (post-crushing) and repeats (from pulps) are inserted at the rate of one per 25 samples. LabWest randomly inserted in-house standards to check their internal QC sampling. • Random, blind re-submission of pulps following analysis to an external lab (Ultra Trace). • The QC samples (field duplicates and lab splits and lab internal standards have indicated the assaying shows acceptable levels of accuracy and precision.
Verification of sampling and assaying	• Ravensgate personnel viewed photos of the chip trays and the diamond core and confirmed the ore intervals from assay data. The core and RC chips also viewed on site at Pilgangoora. • Some significant intersections from the RC program were twinned by the eight hole diamond drilling program. • Drill hole geological and geotechnical logging was undertaken on-site by Altura geologists. Assay data was provided by the laboratories as certified data files. All survey, assay and geology data was entered into Excel spreadsheets and/or exported to Datashed then Geobank (Micromine). Data validation and cross-checking is conducted through the Micromine automated verification function. • Lithium assay data were initially recorded as Li. It is general industry practice to present lithium results as Li_2O so where this has been done a conversion factor of 2.153 has been applied.
Location of data points	• All drill hole collars were surveyed by Heyhoe Surveys, Geraldton, WA using a Trimble R6 RTK GPS system with an accuracy of +/- 0.02m in the horizontal and +/- 0.03m in the vertical relative to control station Pilg1. Pilg1 was established by R6 RTK GPS using SSM KM3 Marble Bar38 (horizontal) and SSM R610 (vertical). • Down hole surveys were completed on selected RC holes and their twinned DD holes over the extent of the Pilgangoora resource area. The surveys were completed by Downhole Surveys of Perth, WA using a GyroSmart tool. • Grid co-ordinates are Map Grid of Australia (MGA) and GDA94 Zone 50. AHD elevations use the Ausgeoid98 Geodic model. • The nature of the topography is such that the current number of survey points and their accuracy is considered adequate for the topographic control required for this resource calculation.
Data spacing and	• RC holes were drilled on a nominally spaced 40m x 40m grid pattern covering the

For personal use only

Criteria	Commentary
distribution	strike extent of the Pilgangoora pegmatite zone. • The grid pattern is considered an adequate spacing for establishing geological and grade continuity both along strike and down dip. From outcrop mapping and costean exposures, the pegmatite dykes exhibit consistency over distances exceeding 40m and data acquired from drill holes at this spacing is considered adequate for the definition of the Inferred and Indicated categories of the JORC code. • No sample compositing has been applied within the resource area.
Orientation of data in relation to geological structure	• The strike of the pegmatite dykes is between 015 and 030 degrees and the mineralised dykes generally dip at 25 - 35 degrees to the east. Most of the RC holes were drilled at 60 degree dips on azimuths between 270 degrees and 300 degrees. This enabled accurate measurement of the true width of the mineralisation. • All ore zones occur inside the pegmatites and are relatively homogeneous. No structural control on the distribution of mineralisation within the pegmatites has been identified. The drill orientation does not introduce a sampling bias.
Sample security	• The chain of custody for sampling procedures and sample analysis is managed by Altura Mining geologists and field technicians. • Sample material was geologically logged and sample bags removed at the time of drilling or at the end of the drill line. • Samples were stored onsite temporarily while the batch was made up and totals checked before being transported by Altura personnel to Port Hedland. • The samples were delivered by Toll-Ipec to Ultra Trace in Cannington or LabWest in Malaga which checked bags and totals for the batch before commencing sample preparation. • The remainder of RC samples were left onsite. Remaining DD core and RC chip samples are stored in secure facilities on site. • Assay pulps are retained in permanent storage by Altura.
Audits or reviews	• A review of sampling techniques and a thorough data review have been undertaken by Ravensgate for this resource estimate. Current methods comply with industry standards. The insertion of blank samples by Altura in each of their submitted batches was recommended.

For personal use only

SECTION 2 - REPORTING OF EXPLORATION RESULTS

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Mineral tenement and land tenure status	• The deposit lies within E45/2287 and P45/2758 held 100% by Altura Exploration P/L and E45/2363 held by Atlas Operations Pty Limited. The Altura tenements are covered by MLA45/1230 and the Atlas tenement by MLA45/1231. All the M's were applied for on 01-11-2012. • All tenements covering the deposit are in good standing and there is no known impediment to obtaining a licence to operate.
Exploration done by other parties	• There has been no exploration for lithium completed on this ground by other parties.
Geology	• Altura's Pilgangoora lithium project occurs at the southern end of a zone of pegmatite intrusives within the synformal Pilgangoora greenstone belt. The pegmatites are hosted within amphibolites which have a mafic/ultramafic volcanic origin. • From the drilling completed to date, lithium (spodumene) mineralisation is identified within clearly observable pegmatites dykes hosted within amphibolites present in the broader Pilgangoora region. The dykes extend over a strike of about 1600 metres and within a zone about 300 meters wide. • The majority of the pegmatites are dykes striking 020^0-025^0 with dips of 25^0-35^0 to the southeast. The dykes range in thickness from 5-20m and at least one dyke in the area identified as C1 is observed to be much thicker at approximately 30-40m thick. The local geology is shown in Figure 4 of the main report. • The reason for this structural and or geological control is not fully understood however the distance from the granite contact is such that mineralisation in the pegmatite is confined to lithium and rubidium with relatively low values for tin and tantalum or other associated minerals. A regional pattern of zonation away from a nearby granite / greenstone contact has been observed with a simple quartz – microcline – muscovite pegmatite assemblage near the contact and changing to an albite-spodumene +/- muscovite at a distance of some 2kms from the contact. This is the approximate distance of the Pilgangoora pegmatites.
Drill hole Information	• Significant results were reported in the stipulated format (excepting RL's) in an ASX announcement on 22.06.2015. Detailed results of deposit-restricted programs were reported to the ASX on 02.03.2011, 15.03.2011, 09.05.2011, 16.06.2011, 05.07.2011, 03.08.2011 and 08.05.2012. Mineralisation widths reported were > 3m.
Data aggregation methods	• There have been no weighting or averaging techniques used in determining this resource estimate. There has been no cutting of high grade intercepts as the nature of spodumene distribution in pegmatite lenses and the evidence of continuity from drill assay results is sufficient to accept higher grade values are consistent between the intercepts. Limited outlier composites have had some area of influence restriction applied according to localised geostatistics. • No metal equivalent values are reported.
Relationship between mineralisation widths and intercept lengths	• The drill holes were almost all drilled at right angles to the strike of the pegmatite dykes. In the Northern, Central and Southern deposit grids, the grid base line was oriented due north. At the eastern half of the East deposit and the southern part of the Central deposit, the drill grid lines were oriented at 120°-300°. In the early exploration phase of the northern part of the Central deposit, 27 holes were drilled due north to determine the dimensions of the mineralised pegmatite swells in this area. • All drill holes were angled at 60°. The mineralised dykes regularly dip around 30° and range between 25° and 35° thus, reported thicknesses are about 10-15% greater than true thickness. • Calculated true widths were not reported.

For personal use only

Criteria	Commentary
Diagrams	• A copy of the deposit outline and drill hole locations is shown in Figure 4 of the main report. • Selected cross section plans of the deposit are shown in Figure 5 of the main report.
Balanced reporting	• Significant results were reported in the ASX announcement of 22.06.2015. Detailed results of deposit-restricted programs were reported on 02.03.2011, 15.03.2011, 09.05.2011, 16.06.2011, 05.07.2011, 03.08.2011 and 08.05.2012. Internal high-grade zones are identified in the tables. • Significant results were reported for intercepts of over 8m grading > 1% Li_2O. The original cut-off grade for reporting detailed results was 0.3% Li_2O. • Drill hole location plans and representative sections accompanied the assay results.
Other substantive exploration data	• Preliminary metallurgical studies show that a concentrate grading over 6% Li_2O can be produced. • 283 density measurements have been completed on diamond drill core. • RQD measurements and preliminary hardness tests. • Assays to date have not indicated any potential deleterious or contaminating substances.
Further work	• On 22.06.2015 Altura announced the commencement of a full feasibility study of which this resource estimate is the first component. • The aim is to identify discrete high grade areas (1.7-1.9% Li_2O) in the deposit that can be mined at low cost. • Given the scope of the planned operation, work in the immediate future will concentrate inside the established resource boundaries. It is recommended that the feasibility study include a small-scale close-spaced drilling program on near-surface high grade ore to confirm estimated bench volumes and the short range variability of lithium content in the mineralisation. • Further drilling will be undertaken in these areas where there is a requirement for further geological or geotechnical information identified during the resource estimate. • An airborne photogrammetry survey will be undertaken. • Additional metallurgical sample acquisition and testwork will be required for assessment of the most efficient processing route.

For personal use only

SECTION 3 – ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	Commentary
Database integrity	• All of the data used has been from recent (post 2009) exploration drilling conducted by Altura. The database consists of new data which has been manually and electronically input from the original paper copies of drill logs, survey sheets and electronic assay sheets and digitised from hand drafted cross sections and geological plans interpreted by the Altura geology team. • Ravensgate reviewed a recently supplied Microsoft Access database of the drilling information for the Pilgangoora deposit area which was extracted from Altura's in-house data-set. The database contains 290 drill collar records for the recent Altura drilling data within the overall Pilgangoora Project Area. The databases supplied and used were dated 24 July 2015 and 10 August 2015. It is understood this is the most recent version of the database available. • The total of 290 drill holes includes 278 RC drill holes, 8 diamond holes and 4 water bore holes which were available for review at Pilgangoora. • Altura undertook a program of drill hole collar survey and validation. All recent drill holes were picked up using DGPS with an established base station control stations in the vicinity of the Pilgangoora deposit. Holes were converted to the one grid and checks on the grid transformation were made by picking up pre-existing drill hole collars where possible. All collar information was rationalised by Altura and thus served to increase confidence in the site survey data.
Site visits	• A site visit has been carried out by Ravensgate on July 29th 2015. Ravensgate has reviewed in reasonable detail, geological outcrop, rock chip sample locations, costean locations, and drill pad locations and hole collars. Also reviewed were RC chips, diamond core as well as drilling and sampling equipment. Ravensgate is of the opinion that project development and management have been given appropriate attention. Ravensgate has reviewed the previous resource estimation work and the drilling data on which this is based. Additional understanding of the project was gained by the site visit which is important prior to mining and future disturbance near surface mineralised exposures at Pilgangoora.
Geological interpretation	• The confidence in the geological interpretation is good. The Pilgangoora deposit is a typical shear/faulted initiate pegmatite dyke swarm with numerous relatively narrow shallow dipping spodumene bearing pegmatite dykes clearly evident and outcropping at surface. The Pilgangoora pegmatite field lies within amphibolite units of mafic to ultramafic volcanic origin contained in the Pilgangoora greenstone belt. The main pegmatite dykes are broadly oriented north-northeast to south-southwest with a strike of 020-025 degrees with shallow to moderate easterly dips of 25-35 degrees and up to 50 degrees locally. • The 2010 to 2012 RC and diamond drilling programs were used to confirm and validate the main pegmatite dyke lengths and thicknesses confirming the continuity of spodumene distribution and lithium grade. • Data mainly comprises geological logging and geochemical analysis of drill chips and drill core. No assumptions on the data have been made. • The pegmatite dykes are generally planar in geometry for the most part, with some lensing and 'pinching" observed locally which is typical of a structurally imitated pegmatite dyke swarm. • The mineralised envelopes for Pilgangoora were based on drill intercepts of nominally >0.30% Li_2O using maximum of 2m (2 samples) internal dilution. The logged spodumene percentage was used as a guide for the wireframes. The mineralised zone wireframes were extrapolated to the edges of the drilling along and perpendicular to the strike to maintain geological consistency. Data from rock chip sampling, mapping and costean investigation from the 2009 exploration program was also used as a guide. Detailed logging of RC drill chips and diamond core was completed during 2012 and this information transferred to geological logging database. This provided a more robust control for the pegmatite and resource wireframe generation.

For personal use only

Criteria	Commentary
	• All mineralised envelopes where aligned with the known interpreted mineralisation trend. No obvious fault systems were interpreted to off-set mineralisation trends to a significant amount.
Dimensions	• The Pilgangoora mineralisation total length of the main Pilgangoora lithium mineralisation domain is approximately 1670 metres. Mineralisation thickness is variable in the order of 5-20 metres. Interpreted mineralisation has been modelled to approximately 280m down dip.
Estimation and modelling techniques	• Grade estimation using ordinary kriging was completed for one reportable element – Li_2O%. Drill hole sample data was flagged using domain codes generated from 3D mineralisation domains and geological surfaces. Sample data was composited per element to a 1m down-hole length. There were no residual composites internal to mineralisation domain wireframes. Intervals with no assay were excluded from the compositing routine. The influence of extreme grade values were examined utilising top cutting analyst tools (grade histograms, log probably plots and coefficients of variation). A nominal 0.30% Li_2O cut-off was used to interpret wireframes of mineralisation. • Grade continuity was measured using geostatistical techniques. Directional variograms were modelled using traditional and normal score transformation semivariograms. • MineSight® software was utilised. • Checked against a previous JORC 2004 resource estimate completed in September 2012. • It is not anticipated that by-products could be produced and no assumptions were made of by-products. • No other elements or non-grade variables were estimated. • The following parameters were adopted based on this analysis: a parent block size of 4.0mE x 8.0mN x 2.0mRL; minimum and maximum number of composites of 1 and 24; no sub-blocking or discretisation (all domains). • A single search ellipsoid was used to estimate each block. Sample data utilised was first composited according to the main Li2O% item to a 1m down-hole length. • One search passes was used for interpolation of grade into the blocks of each AREA domain. Any un-estimated blocks were left 'as is'. Hard boundaries were applied between all estimated domains. • No detailed assumptions have been made with regard to modelling of selective mining units, except future mining is expected to be using standard excavator and truck methods. The block sized utilised is in line with the general mining method assumptions • No correlation between any variables is required as Li_2O% was the only economic element considered. • Refer to Estimation and Modelling Techniques section above. A range of outlier grade restriction was applied to all mineralised wireframes within given AREA domains. • The influence of extreme grade values were examined utilising top cutting analysis tools (grade histograms, log probably plots and coefficients of variation). • Some non-assayed intervals are present in the database. These have been interpreted as non-mineralised intervals and assigned zero grade for the purposes of block grade estimation. In situations where non-mineralised intervals are included within broader mineralised intervals these non-mineralised intervals were incorporated into the interpreted solids. • Model validation was carried out graphically and statistically to ensure that the block model grades accurately represent the input drill hole data. A number of methods were employed to validate the block model including: global mean comparison; visual comparison; trend plot comparison. The global mean comparison between drill composite grades and model grades within each of the mineralised zone wireframes shows that, globally, the estimates validate well within all well informed domains for both deposits. Cross sections were viewed on-screen and showed a good comparison between the drill hole data and the

For personal use only

Criteria	Commentary
	block model grades. A volume comparison between the volume of the block model cells within each mineralised zone and the volume of the corresponding wireframe. The results were in acceptable limits. • Grade interpolations that were completed using three estimation methods: nearest neighbour, inverse distance squared and ordinary kriging. The global block model statistics for the ordinary kriging model were compared to the global inverse distance squared and nearest neighbour model values. Globally, there is close agreement between the ordinary kriging model and inverse distance squared model and nearest neighbour model. Comparisons were made using all blocks. • The visual comparisons of block model grades with composite grades for each of the three zones and ore bodies show a reasonable correlation between the values. No significant discrepancies were apparent from the sections and plans reviewed. In some outlying portions of the model larger discrepancies are reflected as a result of lower drill density. There is a degree of smoothing apparent from the ordinary kriging, which reflects the data density to a great extent. • Block Model validation was carried out graphically and statistically to ensure that the block model grades accurately represent the input drill hole data. A number of methods were employed to validate the block model including: - Global mean comparison, - Visual comparison, and - Bench trend plot comparison. • The global mean comparison between drill composite grades and model grades within each of the mineralised zone wireframes for the Li_2O% item shows that globally, the estimates compare favourably within all the well drilled parts of the main mineralised domains. Some localised bench variations are observed with the bench trend plots. These areas of variation are due to the inherent bench variability and non-stationarily of the composite data locally. • Cross sections were viewed on-screen and showed a good comparison between the drill hole data and the block model grades. A volume comparison between the volume of the block model cells within each mineralised zone and the volume of the corresponding wireframe was carried out to ensure coding methods were within acceptable limits.
Moisture	• The tonnages are estimated on a dry basis.
Cut-off parameters	• A nominal cut-off of 0.30% Li_2O was used to define the mineralised envelope, based on a change of population on a probability plot. • A revision of the previously used 0.8 0% Li2O lower cut-off following advice from Altura Mining Limited that a Prefeasibility Study (PFS) recently carried out by Engineering consultants Orelogy in November 2015 revealed that a lower operation economic cut-off was likely to prevail at Pilgangoora. Ravensgate reviewed the Orelogy work and agreed that a revision of the Li2O(%) reporting lower cut-off is warranted following the release of some updated economic cut-off findings from the Prefeasibility Study. An ultimate schedule based upon publically available financial inputs from the Mt Cattlin Operation was also adopted by Orelogy for sensitivity analysis and evaluation. • Ravensgate has reviewed the information contained Orelogy's Prefeasibility Study report relating to the economic parameters and cut-off grades referred to in report sections relating to : - Data and Model Review. - Mining Cost Estimate. - Development of Mine Design Criteria. - Pit Optimisation. - Scheduling • Ravensgate's opinion is that the use of a 0.40% Li2O lower cut-off as described from the Mt Cattlin based sensitivity analysis may now be used for reporting the lithium resource at Pilgangoora. The cut-off grade of a 0.40% Li2O for the stated Mineral Resource Estimate is determined from current economic parameters and currently reflects potential anticipated mining practices.

For personal use only

Criteria	Commentary
	• Ravensgate cautions the reader that this updated resource summary can only be viewed with direct reference to the Orelogy Pre-Feasibility Study report and the use of the revised reporting lower cut-off is contingent upon the findings and recommendations from this report. These findings and recommendations may change at a future time due to fluctuations in mining costs and lithium market conditions.
Mining factors or assumptions	• Future mining or mineral extraction at the Pilgangoora deposit is anticipated to be initially open pit mining. No other assumptions on mining methodology have been made.
Metallurgical factors or assumptions	• Altura completed comminution and metallurgical studies for a 2012 Scoping study and established that a > 6% Li_2O spodumene concentrate can be produced using well tested and conventional gravity and dense media separation techniques. This work was completed using HQ size diamond core from representative drill holes located in different location of the pegmatite resource. Altura has since completed 5 additional representative HQ diamond holes in the pegmatite resource and these will be used for additional comminution and metallurgical studies. • Orelogy considered a previous METS Scoping Study report (Nov 2012) which was based on preliminary laboratory testwork and assumed a concentrate grade of 6.0% Li_2O could be achieved. Orelogy has proceeded with the PFS on the basis that this is sufficient metallurgical test work to justify the 0.35% Li_2O project break-even cut-off. Previous work was based on higher head grades associated with higher cut-offs. Ravensgate is in agreement with Orelogy's viewpoint such that a 0.35% Li_2O lower cut-off is now deemed acceptable for a resource reporting. Ravensgate understands that metallurgical test work is in progress and that once the expected positive results from this work are established. • The Li_2O Cut-Off Grade (COG) was based on the following using the basic formula: COG = Process cost / (Recovery * Price): Initial Breakeven COG = **Process cost / (Recovery * Price)** = 23.52 / (0.866 * 77.80) **= 0.3491% Li_2O** • Strategic schedules were generated using Maptek Evolution® on an annual calendar basis aiming to achieve the maximum value schedule from a number of different variations (scenarios). • The financial inputs, costs and processing parameters, used in pit optimisation were applied on the base case scheduling scenarios along with further sensitivity analysis inputs and variations advised by Altura.
Environmental factors or assumptions	• It has been assumed that there are no environmental factors which would prevent the eventual economic extraction of these deposits. Detailed environmental surveys and assessments will form a part of a feasibility study. Desk top environmental studies were completed over the Pilgangoora and a search of the DER database for Threatened Ecological Communities and threatened flora and fauna has been undertaken with no communities or species being identified. A EPBC protected matters search was also undertaken with no listed flora communities of concern. In October 2013 Altura's environmental consultants completed a Level 2 Flora and vegetation and a Level 1 Fauna field survey within the Pilgangoora project area and noted that no threatened communities had been recorded from this work. In the near future it is expected waste material will be tested for pH, pHFOX and EC. The results of the testing are expected to show that the pegmatite material to be close to neutral or slightly alkaline, and is very unlikely to generate acidity. Groundwater tests to date show variation from low salinity to moderately saline.

For personal use only

Criteria	Commentary
Bulk Density	• A total of 283 bulk density measurements have been recorded using 10 – 20 cm sections of fresh whole HQ size diamond core – these measurement included both pegmatite ore and waste rock. Measurements were carried out using the water displacement - Archimedes method. The fresh/un-oxidised core was waterproofed by wrapping in thin plastic film and placed in water with the displacement recorded. • All bulk density measurements were on fresh competent rock. The thin plastic wrapping inhibited any moisture absorption. • Only one lithological unit occurs with the mineralisation – pegmatite. No other unit intersected the mineralisation.
Classification	• The Resource model uses a classification scheme based upon block estimation parameters including Kriging Variance, Number of composites in search ellipsoid informing the block cell and composite distance to block centroid. These inputs were used to derive relative confidence levels or 'quality of estimate index' (QLTY item) within the block model) which has a range of 1 to 3, where QLTY=1, 2 or 3 represents high, medium or low confidence respectively. • Table 15 in the main resource estimation report summarises the criteria used to assist with the assignment of QLTY item values in the block model specific to all the known Pilgangoora mineralisation, coded as the ZON1=1-19 mineralisation domains. • The three QLTY item parameters are further condensed into an unbiased RCAT item describing the confidence of the localized resource base in the block model. Preliminary Resource Classification Item – (RCAT) Values 1-3 – (Nominally ('Meas'), 'Ind' and 'Inf' [(1), 2 or 3] - Condensed from QLTY Item. No Measured resources for Pilgangoora are reported at this time. • The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. • Classification by the Competent Person has also taken into account a range of other modifying factors commencing with the geological understanding of the Pilgangoora pegmatites which is a primary requirement to producing a robust resource estimation model. The validation of the block model shows good correlation of the input data to the estimated grades. • The Mineral Resource estimate appropriately reflects the view of the Competent Persons.
Audits or reviews	• No reviews or audits of the Ravensgate resource estimation have been undertaken, but an external audit is planned.
Discussion of relative accuracy / confidence	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource into the Measured, Indicated and Inferred categories as per the guidelines of the JORC Code 2012. • Approximately 10% of the inferred material has been extrapolated. Preparation of this resource report has been by a consultancy which is fully independent Preparation of this report has incorporated a peer review process as part of Ravensgate's QA procedures. This report has included an independent QAQC review of the drill data collected by Altura Mining Ltd. • This statement relates to a global estimate of tonnes and grade. • No production data is available.

For personal use only

SECTION 4 - ESTIMATION AND REPORTING OF ORE RESERVES

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	• The Mineral Resource estimate used as a basis for the conversion to Ore Reserves was published by Altura Mining Ltd (the Company) on 14 September 2015 with S. Hyland of Ravensgate Pty Ltd as the Competent Person. The Mineral Resource was reported using a cut-off grade of 0.8% Li2O but contained grades down to 0.2% Li2O. • Following a PFS Mining Study by Orelogy Consulting Pty Ltd published on 11 February 2016, the Mineral Resource estimate was revised to report at a breakeven cut-off grade of 0.4% Li2O as follows: o Indicated Resource of 26.7 Mt at 1.05% Li2O & 0.6% Fe o Inferred Resource of 9.0 Mt at 1.02% Li2O o There were no Measured materials reported. • The Mineral Resources are reported Inclusive of Ore Reserves.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	• Mr. H. Parhoon of Orelogy Consulting Pty Ltd (Orelogy) visited the Pilgangoora Lithium Project site on 29th February 2016 on behalf of, Mr. J. Fitzsimons of Orelogy, the Competent Person. The following observations were made: o Access to site is easily achieved from Port Hedland via sealed road for most of the journey and reasonable quality unsealed road for the last 20km. o The site is green-fields with very sparse vegetation. Terrain is relatively flat in the vicinity of the orebody with small hillocks in the proposed area for the waste rock storage facility. o A dry creek bed passes through the centre of the proposed pit discharging to a flat flood plain to the west. The catchment area for this waterway appears small. Diversion bunds will be needed to control any incidental flows. o Drill core sections in both ore and waste were examined, and displayed competent rock qualities from shallow depths. o The white coloured pegmatite ore is easily distinguishable from the dark grey to black mafic waste rocks.
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. 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	• A Pre-Feasibility study was undertaken as the basis for conversion of Resources to Reserves. The study was compiled by the Company with input from a number of independent consultants as follows: o Geology – Ravensgate Consulting Pty Ltd (Ravensgate) o Mining – Orelogy Consulting Pty Ltd (Orelogy) o Metallurgical testing – Mineral Engineering Technical Services Pty Ltd (METS) o Metallurgy & Processing – DRA Pacific Pty Ltd (DRA) o Groundwater Development Services Pty Ltd (GDS) o Geotechnical – Peter O'Brien & Assoc. (POBA) • The Study is due to be published in March 2016.

For personal use only

	Factors have been considered	• The Study was underpinned by a mine plan that was based on the Pilgangoora Indicated Resources and metallurgical test work to derive plant recoveries and Spodumene qualities. • Mine planning included pit optimisations, pit designs, mining and processing scheduling, cost estimations and economic analysis to ensure the project is technically achievable and economically viable. • Slope design criteria, mining dilution, ore loss and processing recoveries were applied in the pit optimisation process together with mining, processing and transport cost estimates, commodity pricing estimates and royalties to generate optimised pit shells which form the basis for pit designs and the mine plan.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	• The economic parameters used in pit optimisation were used to define a breakeven cut-off grade of 0.32% which was rounded up to 0.4% Li_2O, consistent with the Mineral Resource. • The potential deleterious elements of Fe and Mn were of insufficient grade to affect Spodumene product qualities or cut-off grade. • Application of ore loss and dilution factors were applied at the 0.4% Li_2O cut-off grade.
Mining factors or assumptions	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). 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. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised	• A Whittle4X™ pit optimisation, including sensitivity analysis, was completed. Slope design criteria, mining dilution, ore loss and processing recoveries were applied in the pit optimisation process together with mining, processing, transport and sales cost estimates, and revenue projections to form the basis for pit designs and subsequent mining and processing schedules. • A conventional open pit mine method was chosen as the basis of the FS. Ore is exposed at surface requiring minimal pre-stripping and pre-production mining activities. • A small scale mining fleet, utilising 200t excavators matched with 90t rear dump trucks, was selected using contract mining services. • Inter-ramp slope angles of 58° were used based on geotechnical guidance provided by Peter O'Brien and Assocs. Orelogy derived a ramp width of 24m based on the selected truck size. The resulting overall slope angles on the final pit range from 45° to 58° in fresh rock and 29° to 46° in oxide material. • An allowance for grade control was made based on a dedicated RC drilling program and 2m sampling interval. • The Ore Reserve estimate from the FS was based on the Mineral Resource released on 14 September 2015 with S. Hyland of Ravensgate Pty Ltd as the Competent Person. • Major assumptions for pit optimisation include: 0.4% Li_2O cut-off grade; ore production rate of 1.4Mtpa; 83% recovery of Li_2O as 6% Spodumene concentrate; net price of A$480/t Conc.; overall processing cost of A$21.25/t ore; and waste mining

For personal use only

	in mining studies and the sensitivity of the outcome to their inclusion. The infrastructure requirements of the selected mining methods.	cost at surface of A$2.62/t mined. • Mining dilution was applied to Indicated Ore using two steps: o edge dilution applied at the 0.4% Li_2O cut-off grade for the ore-waste boundary; o block smoothing to account for the internal mixing of ores for ore grade delineation and blasting effects. • The mining approach was to simulate mining a clean ore product by minimising dilution, resulting in overall ore loss of 5% and 0% dilution. The diluted model was used for pit optimisation. • Mine design criteria, used for detailed pit design, include: o 6m blast bench height mined in 3 x 2m flitches; o minimum mining width of 38m applied between cutbacks and 16m at the base of stages; o ramp width of 24m and 10% gradient suited to the 90t dump trucks. • Inferred material was included in a pit optimisation, run to ensure infrastructure was not located on potential economic resource. • Mining Infrastructure was limited to ROM pad, haul roads, workshops and other buildings for a Contract mining operation.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. 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. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	• The process flow sheet was developed by DRA based on metallurgical test work by METS undertaken in 2012 and 2015. • Comminution test work indicates rock of moderate hardness, resistant to failure by compression and highly abrasive. • Beneficiation test work has indicated a process route to produce coarse and fine fractions of Spodumene concentrate at 6-7% Li_2O. • The pegmatite ore is planned to be processed using conventional crushing and screening followed by dense media separation (DMS). The coarse DMS concentrate product will go directly to final product while the fine fraction will be combined with the DMS middling fraction and processed through another circuit using grinding and flotation to produce a fine flotation concentrate that will also go to final product. • All technologies proposed are proven and well tested with easily sourced components. • Samples used for metallurgical test work were sourced from 5 holes distributed evenly across the deposit to derive an average recovery of 83% as used in the pit optimisation. • Potential deleterious elements have been observed at low concentration in the test work samples (e.g. Iron averaging 1.7% Fe head grade downgrading to approximately 0.4% Fe in float concentrate and 0.01% in DMS concentrate). • No bulk sampling work has been undertaken as yet. • The Ore Reserve has been produced based on a 6% Li_2O Spodumene Concentrate.
Environmental	The status of studies of potential environmental	• Site visits and environmental studies were completed over the Project areas and a search of

For personal use only

	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	the Department of Environmental Regulation database for threatened ecological communities has not identified any threatened species in the Project area. • Geochemical testing of waste rock indicates that: o There is no known presence of fibrous material. o The waste rock is generally benign in nature and there are not expected to be any environmental impacts from long term waste rock storage. • Current geochemical testing of tailings indicates that the process residues are neutralising.
Infrastructure	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.	• The Project is located in the West Pilbara region of Western Australia where good infrastructure is available for mining projects. • A sealed highway provides access from Port Hedland to within 20km of the Project area. The last stretch of access road will require upgrading for the traffic load. • The Project currently has access to sufficient water for construction and one (1) year of operations with reasonable assumptions that further water can be sourced. • Power will be produced on site using diesel generators. • Product will be shipped via Port Hedland located 90km to the north. • The site will operate on a fly-in fly-out basis with a village constructed to house operations personnel whilst on site.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private	• Project Capital was derived on the following basis: o The overall plant layout and equipment sizing was prepared with sufficient detail to permit an assessment of the engineering quantities for the majority of the facilities for concrete, steelwork, and mechanical items. The layouts enabled preliminary estimates of quantities to be taken for all areas. o Unit rates for labour and materials were derived from DRA's database of quotations from fabricators and contractors experienced in the scale and type of work in the region. o Budget pricing for equipment was obtained from reputable suppliers with the exception of low value items which were costed from DRA's database of recent project costs o A number of items were costed by outside consultants under the control of the Company. These included the port, external access roads, Tailings Storage Facility (TSF), water reticulation and environmental / social costs. o The Company provided costs for Owners team and other related indirect expenses. o Contingency has been applied to account for the accuracy of the estimate. o Mining capital costs include site establishment costs and mobilisation of the Contract mining fleet and pre-production costs. The contract mining operation has no mining fleet capital

For personal use only

		expenditure as these costs are incorporated in the contract mining costs. Pre-production includes clearing and stockpiling of topsoil. • Process Plant Operating costs were compiled by DRA using first principal estimation and industry experience for projects of a similar size and nature. o Manning level and pay rates were derived by DRA to suit the propose process plant and scale of operation for the Western Australia location. o Consumables pricing were sourced from the DRA database and vendor quotes where applicable o Flotation reagent consumption based on metallurgical test work, the production schedule and factored from similar operations. o Crushing and grinding energy and consumables were derived from the comminution test work at Bureau Veritas Minerals Laboratory. • Mine operating expenditure was based on mining volumes and other physicals applied to the Contract unit rates supplied by BGC Contracting Pty Ltd. The Owners team for Mine Management and Technical services were based on personnel levels required to manage the operation and the Hays 2016 salary guide. • Due to the low concentration of Fe and Mn in the Pegmatite ore, no allowance was made for deleterious elements. • Exchange rates were provided by the Company based on the rate at time of publication however it is consistent with exchange data over the last 12 months. • Transport and port charges were derived from quotations by reputable suppliers. • Allowances were made for marketing and grade variability in revenue factors. • Allowances were made for state government royalties, Native title agreements and pastoral agreements in the revenue factors.
Revenue factors	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. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	• Spodumene pricing was based on forecasts from the January 2016 SignumBOX Lithium market report. • Spodumene revenue factors were: o Variable head grade averaging 1.15% Li_2O for 12 years o Processing recoveries applied at 83%. o Spodumene price of US$494/t for 6% Li_2O content o Exchange rate of 0.75 AUD:USD o Transportation charge of A$33.78/wet tonne o Port charge of A$4.52/wet tonne o State royalty of 5% o Native title royalty of 0.8% for 10 years increasing to 1.0% thereafter o Marketing and grade variability penalty of 7%.
Market assessment	The demand, supply and stock situation for the particular	• The market assessment was based on the January 2016 SignumBOX Lithium market report.

For personal use only

	commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	• The Lithium market will continue to grow driven by the use of lithium in larger batteries for electric cars (>60%) and energy storage systems. • Forecast for 2016 lowered due to slow down in Chinese economy with an average growth rate of 7% thereafter. • There are currently 24 projects under development based on recovery of Spodumene from pegmatites. Altura is well advanced in development of the Project and is able to capitalise on projected shortfalls in demand. • Metallurgical test work and chemical analysis of the Spodumene concentrate has shown that it is suitable for the Lithium battery market. • The Company has signed two MOU for offtake, each of 100,000 tonnes minimum to 150,000 tonnes maximum of concentrate with leading Chinese battery producers. • The MOU and discussion with alternative third parties has been taken into account in the selection of plant size.
Economic	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. NPV ranges and sensitivity to variations in the significant assumptions and inputs	• The economic analysis is based on cash flows driven by the production schedule. The cash flow projections include: o Initial and sustaining capital estimates. o Mining, processing and concentrate logistics costs to the customer based on FOB pricing. o Revenue estimates based on concentrate pricing adjusted for fees, charges and royalties. o Closure costs. o Company tax estimates. o A 10% discount factor. • The Mining PFS released in March 2016 showed a positive NPV and the accuracy of this forecast is expected to be improved upon with more detailed capital and operational pricing in the overall project feasibility study due for release in early April 2016.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	• Stakeholder support has been strong during property acquisition and through the permitting process. • The Company has held meeting with Department of Water & Department of Mining & Petroleum, and indicate that mining proposal will be ready for submission in June 2016.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral	• Naturally occurring risks identified are: o Limited geotechnical data is available for regional ground structures that may affect wall stability. The risk of large scale wall failure can be mitigated through on-going geotechnical site investigation and wall monitoring programs during operations. A failure will not prevent the ore from being extracted but will add mining costs and cause delays. o There is a small risk of flooding from cyclonic activity. In general, rainfall is low in this part of Australia and cyclonic activity only occurs through the summer months. Production and cash flow delays are expected to be minimal.

For personal use only

	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.	• Native Title agreements and Pastoral access are agreed in principal and are not seen as an impediment to the development timeline. • The Company has granted exploration permits covering area and has lodged application for M45/1230 and M45/1231 covering sufficient area for the open pit, plant and other infrastructure. There no apparent impediments to obtaining all government approvals required for the project. • Road access is currently contingent on an agreement with the adjacent tenement holder, Pilbara Minerals, to develop the access road jointly. Additional capital will be required to develop the access road if Pilbara Minerals do not proceed with this course of action. • Current raw water supply is sufficient for the construction phase and the first year of operations after which additional water resources need to be found. The Company is in negotiation with a third party for access to available water sources and has made application for water exploration permits for nearby targets. If these options are unsuccessful, additional targets at greater distance can be followed up.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• Probable Ore Reserves were determined from Indicated resource material as per the guidelines. As there is no Measured resource material, there are no Proven Ore Reserves.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	• Ore Reserve estimates have been reviewed internally by Orelogy as an independent consultancy. No material flaws have been identified and the Ore reserve is considered appropriate at a PFS level of study. • No external reviews or audits have been undertaken on the Ore Reserve.
Discussion of relative accuracy/ confidence	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	• The Ore Reserve is the outcome of the Pre-Feasibility Study that has taken into account geological, metallurgical, geotechnical, process engineering and mining engineering considerations. It has a nominal accuracy of +/- 205%. • The Project has a high NPV and is robust in terms of cost variations. It is sensitive to price variations for Spodumene and mining recovery of the ore from within the pit. • All estimates are based on local costs in Australian dollars. • There are no known undisclosed areas of uncertainty. • There has been no production to date, so no comparison or reconciliation of data can be made. Standard Industry practices have been used in the estimation process.

For personal use only

	accuracy and confidence of the estimate. 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. 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. 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.	

For personal use only