

2 November 2015

## ASX ANNOUNCEMENT

### PILGANGOORA LITHIUM UPDATE

#### TESTWORK RETURNS REMARKABLE RESULTS PRODUCING HIGH GRADE SPODUMENE CONCENTRATES CONTAINING UP TO 97% SPODUMENE

- Heavy Liquid Separation (HLS) testwork on Altura's Pilgangoora Lithium project samples results in **lithium oxide (Li<sub>2</sub>O) grades from 7.30% up to 7.79%**.
- **Spodumene content from 90.9% to 97.0%** in corresponding samples.
- Froth flotation testwork demonstrates the potential to significantly increase the lithium recovery of the overall project whilst still achieving a high purity lithium concentrate product.
- Test results confirm significant potential for project to deliver high grade and low impurity spodumene concentrate to the lithium market.

**Altura Mining Limited (ASX: AJM) ("Altura" or the "Company")** is pleased to announce that recent testwork conducted by Midas METS Engineering on composite diamond drillhole samples from Altura's 100% owned Pilgangoora Lithium project has produced remarkable results with **lithium oxide (Li<sub>2</sub>O) grades up to 7.79% with a spodumene content of up to 97%**.

The heavy liquid separation (HLS) testwork performed by Midas METS Engineering on composites from four diamond drill holes PD004, PD005, PD006 and PD007.

Further testwork aimed at processing the middlings and the fine ore is currently underway at Nagrom under the supervision of Midas METS Engineering. The material is scheduled to be ground to 106 micron and processed downstream by froth flotation for the recovery of spodumene. The froth flotation test work has the potential to significantly increase the lithium recovery of the overall project whilst still achieving a high purity lithium concentrate product.

A high grade composite (HGC) and a low grade composite (LGC) were created from the four diamond drill holes at Altura's Pilgangoora project. The composites were homogenised before samples were split out and crushed to -10.0 mm, -6.0 mm and -3.35 mm, screened at 0.5 mm and subjected to heavy liquid separation (HLS). Summary results from the HLS tests show that high purity (90-97%) spodumene concentrates were obtained at these coarse sizes (see Table 1).

**Table 1 – Heavy Liquid Separation Concentrate Streams**

| <b>Heavy Liquid Separation</b> | <b>Li<sub>2</sub>O Grade (%)</b> | <b>Spodumene Content (%)</b> |
|--------------------------------|----------------------------------|------------------------------|
| HGC 3.35 mm concentrate        | 7.54                             | 93.9                         |
| HGC 6.0 mm concentrate         | 7.30                             | 90.9                         |
| HGC 10.0 mm concentrate        | 7.34                             | 91.4                         |
|                                |                                  |                              |
| LGC 3.35 mm concentrate        | 7.69                             | 95.8                         |
| <b>LGC 6.0 mm concentrate</b>  | <b>7.79</b>                      | <b>97.0</b>                  |
| LGC 10.0 mm concentrate        | 7.36                             | 91.7                         |

Following the encouraging HLS results, dynamic dense media separation (DMS) test work was performed on the Pilgangoora composites. The ore was crushed to -3.35 mm and screened at 0.5 mm to remove the fine fraction from the DMS feed. The ore was run through a dense media cyclone at specific gravities of 2.7 and 3.0. The concentrate stream was retreated by the dense media cyclone at a specific gravity of 3.0. The two stage DMS cyclone achieved a cleaner concentrate stream containing 6.89% lithium (86% spodumene).

**Table 2 – Dense Media Cyclone Products Summary**

| <b>2 Stage DMS Cyclone</b>           | <b>Mass (%)</b> | <b>Li<sub>2</sub>O Grade (%)</b> |
|--------------------------------------|-----------------|----------------------------------|
| <b>Clean Concentrate SG &gt; 3.0</b> | 8.59            | 6.89                             |
| <b>Cleaner Recycle SG &lt; 3.0</b>   | 2.85            | 6.12                             |
| <b>Middlings SG &gt; 2.7</b>         | 20.19           | 3.14                             |
| <b>Tailings SG &lt; 2.7</b>          | 68.36           | 0.24                             |

During operation, material reporting to the cleaner recycle stream is combined with the initial feed material which increases the grade of lithium in the DMS feed. Scoping Study test work performed in 2012 has shown that this only improves the DMS kinetics and allows for higher grades and greater recoveries to be obtained. This suggests that grades greater than 7.0% Li<sub>2</sub>O are achievable through DMS cyclone once equilibrium has been reached.

Additionally, garnet and mica removal test work has been scheduled which has the potential to upgrade the cleaner concentrate further, suggesting that concentrate grades of up to 7.5% Li<sub>2</sub>O are achievable at plant scale.

The material reporting to the DMS tailings stream contained minimal lithium indicating the potential for high lithium recovery over the plant. By not carrying out further processing of the tailings stream allows for the rejection of 68% of the mass with a lithium oxide grade of only 0.24% thereby vastly reducing the capital and operating costs of processing the finer ore sizes.

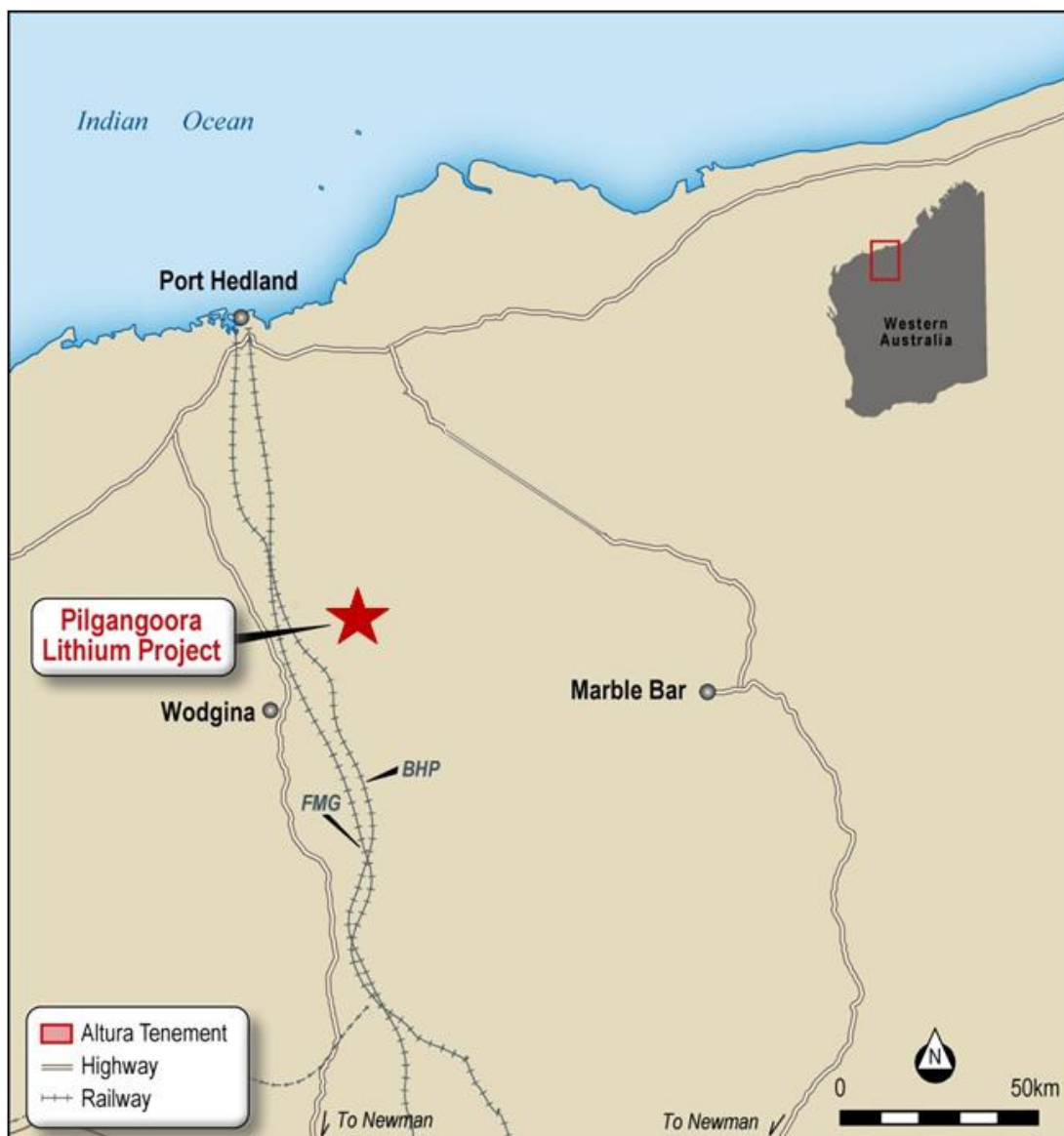
Altura is extremely pleased with these results and again confirms the significant potential of the project. The Company will continue to direct substantial resources to the project in line with its objective for fast tracking the development.

The Company believes the project delivers Altura's key objectives in:

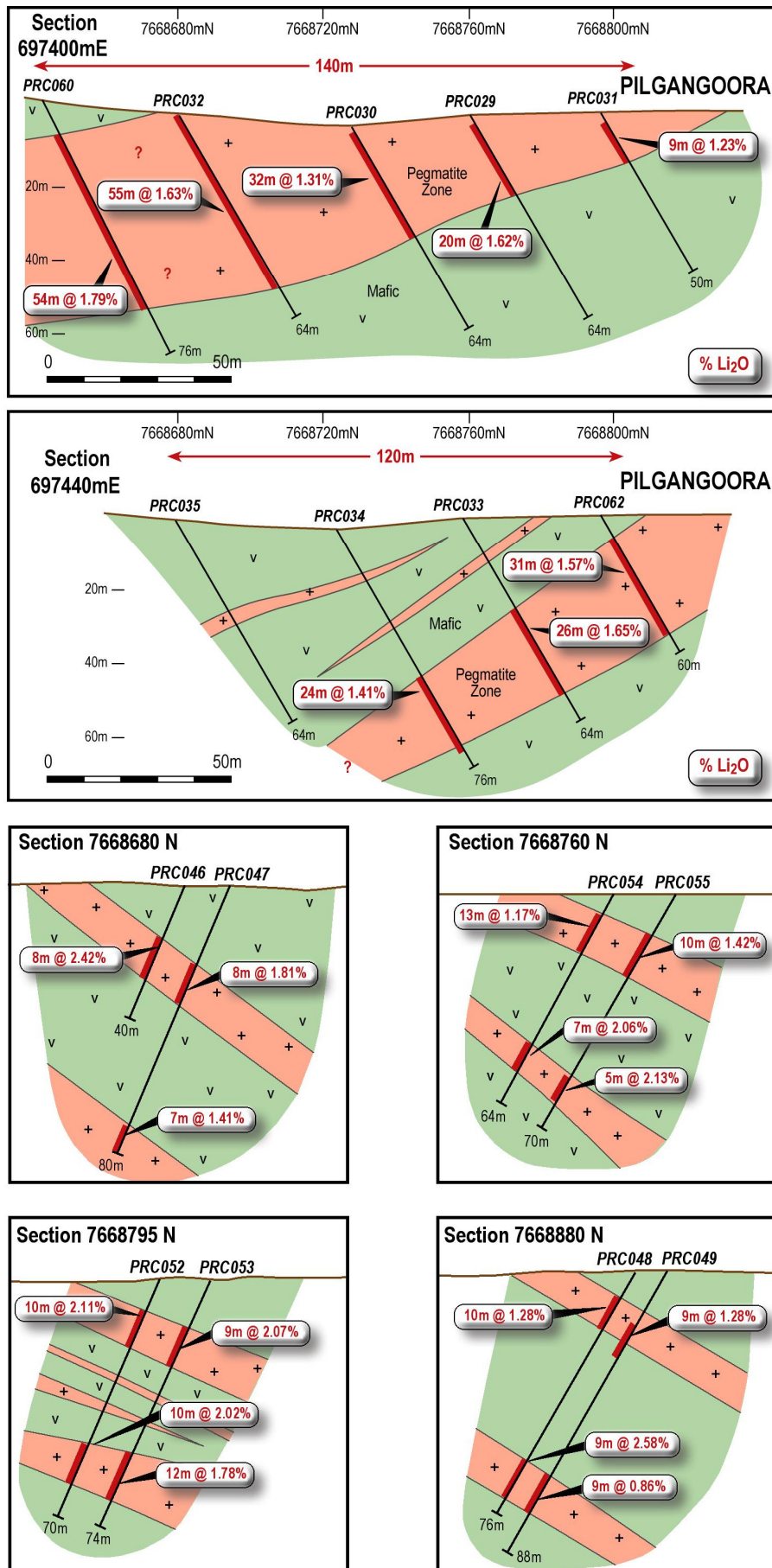
- High demand commodity with compounding growth projections
- Potential for low cash operating costs due to shallow and thick high grade zones
- Manageable capital input utilising proven technology
- Access to excellent infrastructure including roads and ports
- Ideal proximity to significant Asian end user markets
- Well known mining area with stable governing laws

Altura will continue to proceed with the project feasibility as planned with the detailed mining study nearing completion. Further updates on the feasibility study will be provided in future ASX announcements.

**Figure 1 – Altura Pilgangoora Lithium Project Location**



**Figure 2 – Altura Pilgangoora – Representative Cross Sections with Lithium Intercepts**



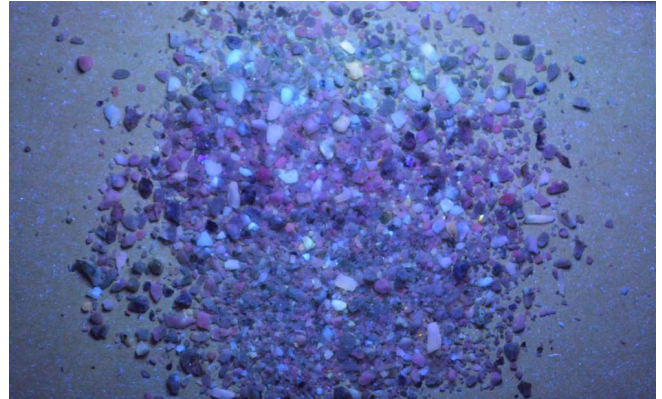


### Product Photographs

Photos under white light and under ultra-violet light have been taken of the products from the DMS cyclone test work. Note: spodumene fluoresces pink or purple under UV light.



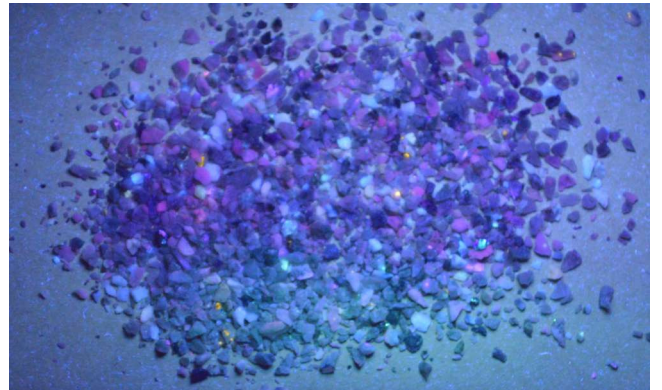
**Photo 1 – LGC Rougher Tailings Stream**



**Photo 2 – LGC Rougher Tailings (Under UV)**



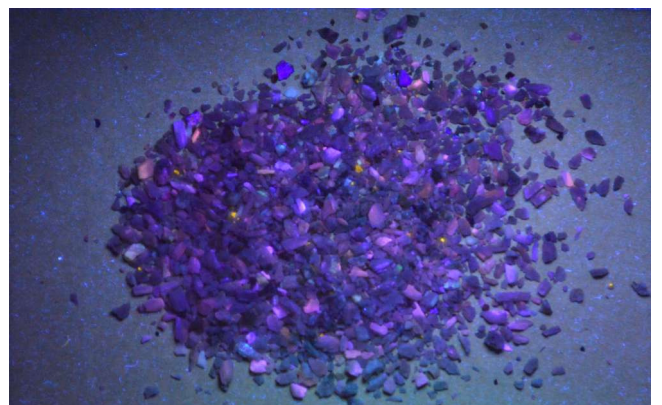
**Photo 3 – LGC Rougher Middlings Stream**



**Photo 4 – LGC Rougher Middlings (Under UV)**



**Photo 5: – LGC Rougher Concentrate Stream**



**Figure 6 – LGC Rougher Concentrate (Under UV)**

### **About Altura Mining Limited (ASX: AJM)**

*“Aggressively building independently sustainable businesses that deliver profitability, liquidity and growth in coal and non-ferrous mining and exploration” - **The Altura Vision***

*Altura is a multi-faceted miner with significant lithium and coal projects in Australia and Indonesia and a diverse minerals exploration portfolio. With experienced leadership and a strong and supportive shareholder base, Altura’s success is further underpinned by its solid suite of exploration and development projects. The Company’s main focus is the development of its 100% owned Pilgangoora Lithium project in Australia. Altura also has interests in the producing Delta Coal project in Indonesia, and the Tabalong Coal project which is in the final stages of approvals before mining commences.*

#### **Key Projects and Prospects:**

- **Lithium:** Progressing to Feasibility stage at Pilgangoora WA, one of the world’s largest high grade deposits.
- **Coal:** a 33⅓ % interest in the Delta coal mine currently targeting production at the 1.5 million tonnes per annum rate in East Kalimantan, Indonesia.
- **Coal:** Mine construction planned at Tabalong upon receipt of final regulatory approvals.
- **Coal:** Exploration tenements at Catanduanes, Rapu-Rapu and Surigao del Sur located on the eastern seaboard of the Philippines.
- **Uranium:** Exploration stage of key targets in Hayes Creek region, Mt Shoobridge NT.
- **Base/Precious Metals:** Exploration stage for lead, copper, zinc, gold and silver prospects - Shoobridge NT, Pilbara WA, Tanami NT.

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| <p>For further information, please visit <a href="http://www.alturamining.com">www.alturamining.com</a> or phone:<br/>James Brown, Managing Director on + 61 8 9488 5100.<br/>Chris Evans, General Manager Operations on +61 (0)419 853 904</p> |
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