

PERTH, AUSTRALIA--(Marketwired - April 12, 2017) - [Western Areas Ltd.](#) (ASX:WSA) ("Western Areas" or the "Company") is pleased to announce that its Mill Recovery Enhancement Project ("MREP" or "Project") has been updated and approved by the Board to commence construction in the September Quarter 2017 with an expected cost to complete of A\$17.5m.

The Project was first announced on 20 July 2015, but subsequently deferred later that year as part of a capital expenditure reduction initiative for CY2016. However, to ensure the Project could quickly recommence in the future, the Company invested A\$6.5m in long lead items at that time.

The Company having recently executed new improved offtake contracts, is seeing significant growth in nickel demand in the electric vehicle (EV) battery market, and is in advanced discussions with global commodity companies specialising in battery materials marketing and supply. Accordingly, the strategic and economic rationale is now compelling for the Company to complete this Project, which will deliver a new additional higher grade nickel product to market or, alternatively, blended into the existing nickel concentrate production offtake contracts.

## Highlights

- Increase in mill recoveries of 3% to 5% over the Life of Mine;
- Up to an additional 1,400 nickel tonnes recovered per annum;
- Estimated capital cost to complete of A\$17.5m;
- Unit cash operating cost of A\$2.44/lb of nickel in concentrate;
- IRR of 33% (pre-tax) and payback by June 2020<sup>(1)</sup>;
- Construction time of 6 months;
- First production of high grade nickel sulphide (45% - 50% nickel grade) in March Quarter 2018;
- GR Engineering Services continues under the original EPC Contract as part of a Guaranteed Maximum Price arrangement; and
- Process to produce refined nickel sulphate continues to evolve, additional work planned over the next 12 months.

During the last twelve months, the Company has refined and made process improvements to the Project resulting in an additional 200tpa of nickel being extracted compared to the original design. The Company has worked closely with GR Engineering Services to update the engineering design, which provides confidence in delivering the Project on schedule and within budget.

Western Areas Managing Director, Dan Lougher, said that re-commencement of the Project demonstrated the Company's track record of employing innovation as a core strength to create additional margin in the business.

"The Mill Recovery Enhancement Project is innovative and industry leading, particularly given we are extracting additional nickel from the tailings stream that was previously considered waste, and using our wholly-owned BioHeap® leaching process and converting it into a marketable product applicable in the EV battery market and/or the conventional nickel concentrate market.

"Whilst the base case economics include our recent new offtake terms, we believe there is still significant upside potential for this project. Over the last 18 months, we have been in discussions with major global companies active in the EV battery market. The demand for nickel products in this market has intensified substantially and we have an expectation, based on our discussions, to improve commercial terms for our new 45-50% high grade product generated by this Project. As such, any improvement in those commercial terms will enhance the base case economics presented today.

"Furthermore, we believe that our low risk Project only scratches the surface of available opportunities to apply our fully patented BioHeap® leaching process to other base metal projects, as mine grades decline and companies seek innovative processes to extract value from their resources," said Mr Lougher.

Western Areas, through its state of the art BioHeap® facilities at CSIRO, has been further enhancing the MREP potential by converting the nickel-pregnant leach solution delivered from the MREP into a nickel sulphate product directly applicable in the EV battery market. As outlined in the December 2016 quarterly report, the Company has already successfully created nickel sulphate grading around 20% nickel, using ion exchange. Future work on nickel sulphate will focus on producing a 22% nickel grade sulphate with little to no impurities, given the payables for this product can yield a 20% premium to the LME nickel price.

The Company plans to fund the MREP from existing cash reserves. The Company's FY17 guidance for capital expenditure will increase by A\$3m to A\$25-\$27m as a result of orders being placed and early works on the Project.

## Description of the Mill Recovery Enhancement Project

The process associated with the Project, was developed in-house by Western Areas for the specific purpose of treating Forrestania tailings. The Project will process one of the tailings streams from the flotation plant, which contain valuable amounts of nickel that cannot be recovered into a saleable concentrate by traditional flotation methods. This stream will be leached at

atmospheric pressure utilising the Company's patented BioHeap® process in fibreglass tanks to recover the additional contained nickel.

The BioHeap® process has been developed to operate at a pH of 3-3.5 which enables the removal of iron and other gangue elements during the leaching stage to form stable compounds for safe disposal in the Company's existing tailings storage facility.

A conventional thickener and filter are used for leach residue dewatering. The solids are discarded to tailings and the filtrate is passed to the sulphide precipitation circuit. Sodium sulphide is used to recover the nickel from solution to produce a nickel product grading between 45% to 50% nickel. With the addition of some minor equipment, this high grade product can be sold directly, or be combined with the current flotation nickel concentrate (14% to 16% nickel) to produce an overall higher grade, premium nickel concentrate (as per the base case presented above). The time period required to produce a nickel concentrate for blending into existing material is seven days.

The Project has been designed to add on to any existing flotation circuit to enable the recovery of valuable metals (e.g. nickel, copper, zinc) which cannot be recovered by conventional flotation. Consequently, the Company believes that this process can have significant positive results for a number of base metal projects around the world looking to improve metal recovery. An additional potential benefit may therefore arise from demonstrating the patented bioleach process in this niche application.

#### FORWARD LOOKING STATEMENTS:

This release contains certain forward-looking statements including nickel production targets. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production and expected costs. Indications of, and guidance on future earnings, cash flow, costs, financial position and performance are also forward looking statements.

These forward-looking statements are subject to a variety of risks and uncertainties beyond the Company's ability to control or predict which could cause actual events or results to differ materially from those anticipated in such forward-looking statements.

Examples of forward looking statements used in this report include: "Increase in mill recoveries of 3% to 5% over the Life of Mine", and, "First production of high grade nickel sulphide (45% - 50% nickel grade) in March Quarter 2018", and "Future work on nickel sulphate will focus on producing a 22% nickel grade sulphate with little to no impurities, given the payables for this product can yield a 20% premium to the LME nickel price."

This announcement does not include reference to all available information on the Company and should not be used in isolation as a basis to invest in Western Areas. Any potential investors should refer to Western Area's other public releases and statutory reports and consult their professional advisers before considering investing in the Company.

(1) Using the current offtake agreements and blending the new product into the existing concentrate produced. USD/AUD exchange rate 0.75. USD nickel prices used FY18 \$5.00/lb, FY19 \$6.00/lb, FY20 \$6.50/lb, Long term \$7.50/lb.

#### Contact

##### [Western Areas Ltd.](#)

Dan Lougher  
Managing Director  
+61 8 9334 7777  
dlougher@westernareas.com.au

##### [Western Areas Ltd.](#)

David Southam  
Executive Director  
+61 8 9334 7777  
dsoutham@westernareas.com.au  
www.westernareas.com.au

FTI Consulting  
Shane Murphy  
+61 8 9485 8888 / 0420 945 291  
shane.murphy@fticonsulting.com