POSEIDONNICKEL

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27th July 2016

POSEIDON & KIDMAN MOVE CLOSER TO LITHIUM PRODUCTION

Highlights

- **Poseidon enter into an MOU to explore opportunity to process Kidman Lithium ore**
- **Moving to establish Lake Johnston as a central processing hub for lithium**
- **Existing Lake Johnston process plant ensures speed to market**
- **Kidman recently announced significant lithium results at Mt Holland on Granted Mining Leases**
- **Kidman to define maiden lithium resource estimation**
- **Testwork on Kidman Mt Holland composite samples to be expedited**
- **Engineering for co-processing lithium hosted pegmatites and nickel sulphide on schedule**
- **Pre-production activities at Lake Johnston to be progressed**
- **Patent application for the co-processing of lithium & nickel ores**
- **On-going discussions with third parties for spodumene concentrate offtake**

Poseidon Nickel Limited (ASX:POS, Poseidon or the Company) is pleased to announce it has entered into a Memorandum of Understanding (MOU) with Kidman Resources Limited (Kidman) to process Mt Holland spodumene lithium hosted pegmatites at Lake Johnston. Poseidon Chairman Mr Chris Indermaur stated, "As previously advised to the market (21st July 2016) Poseidon plans to use its existing plant and infrastructure to become the first hard rock lithium producer in the Lake Johnston region. Processing lithium hosted spodumene pegmatites from Mt Holland would be a significant step towards establishing Lake Johnston as the central lithium processing hub."

Mt Holland is located approximately 120 kilometres trucking distance from the Lake Johnston process plant run of mine (ROM) stockpiled ore. Discussions with the relevant local Shires and Main Roads will be progressed to ensure appropriate approvals are secured well in advance of first ore deliveries to support trial mining at Kidman and trial processing at Lake Johnston. Figure 1 below highlights the location of Mt Holland relative to the Lake Johnston processing plant and facilities.

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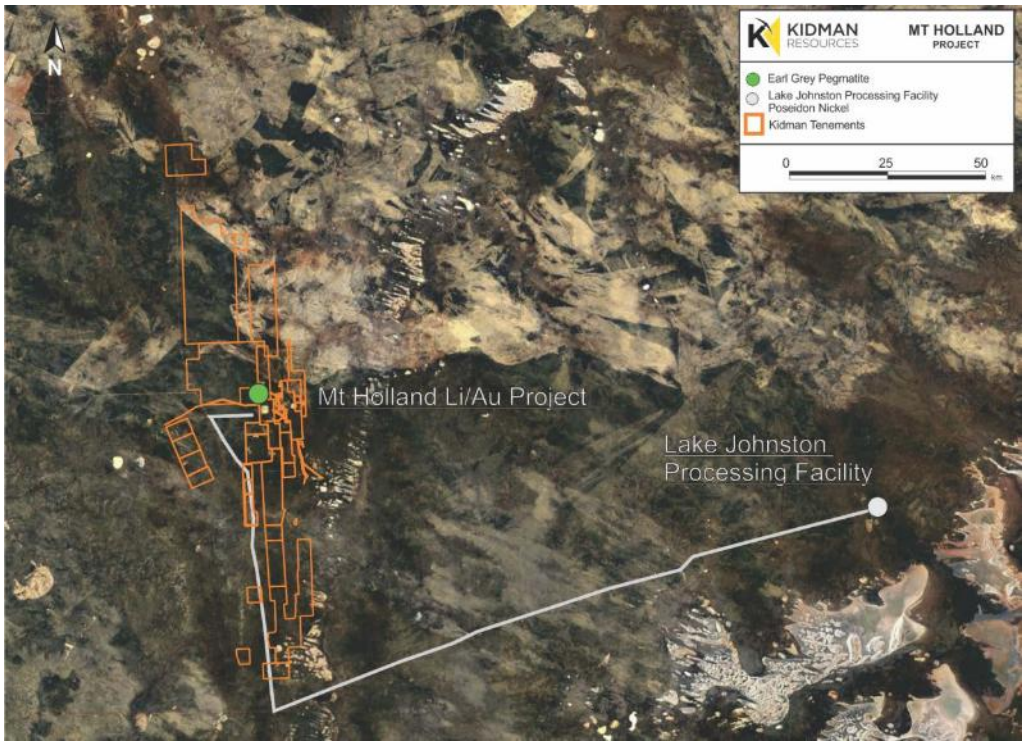


Figure 1: Mt Holland Tenements Relative to Lake Johnston

Kidman is mobilising a reverse circulation (RC) drill rig to Mt Holland and plans to complete a maiden resource estimate for the Mt Holland lithium hosted pegmatites. Kidman previously announced on 15th July 2016 significant lithium results as detailed below.

As previously advised by Kidman Mt Holland project comprises numerous granted Mining Leases (ML) and the Earl Grey, Prince of Wales and Bounty pegmatites are all located within these ML's. Recently Kidman announced that 5 RC drill holes into the Earl Grey pegmatite returned outstanding results as follows;

- 52m @ 1.53% Li02 from 206m to end of hole
- 45m @1.81% Li02 from 231m to end of hole, including 7m @2.23% Li02 from 255m and 5m @ 2.5% Li02 from 268m downhole
- 39m @1.93% Li02 from 189m to end of hole including 12m @2.46% from 215m downhole
- 11m @ 1.04% Li02 from 126m downhole and 27m @ 1.73% Li02 from 153m to end of hole including 9m @ 2.45% Li02 from 168m downhole
- 34m @1.35% Li02 from 176m downhole and 29m @ 1.31% Li02 including 6m @ 2.09% Li02 from 218m downhole

Significantly all these drill holes were terminated in lithium mineralisation as they were originally drilled targeting gold. As a result the actual thickness of the Earl Grey pegmatite is still unknown however the existing drill holes confirm a minimum true width of 50m. The interpreted dip of the mineralised zone appears to be between 20-25 degrees which is ideal for open cut mining at a low strip ratio.

Earl Grey pegmatite is located along strike within the same ultramafic unit as the Prince of Wales and Texas pegmatites which are yet to be tested for lithium but are confirmed by drilling to be 2.2km long and 6.3km long respectively (Refer Figures 2).

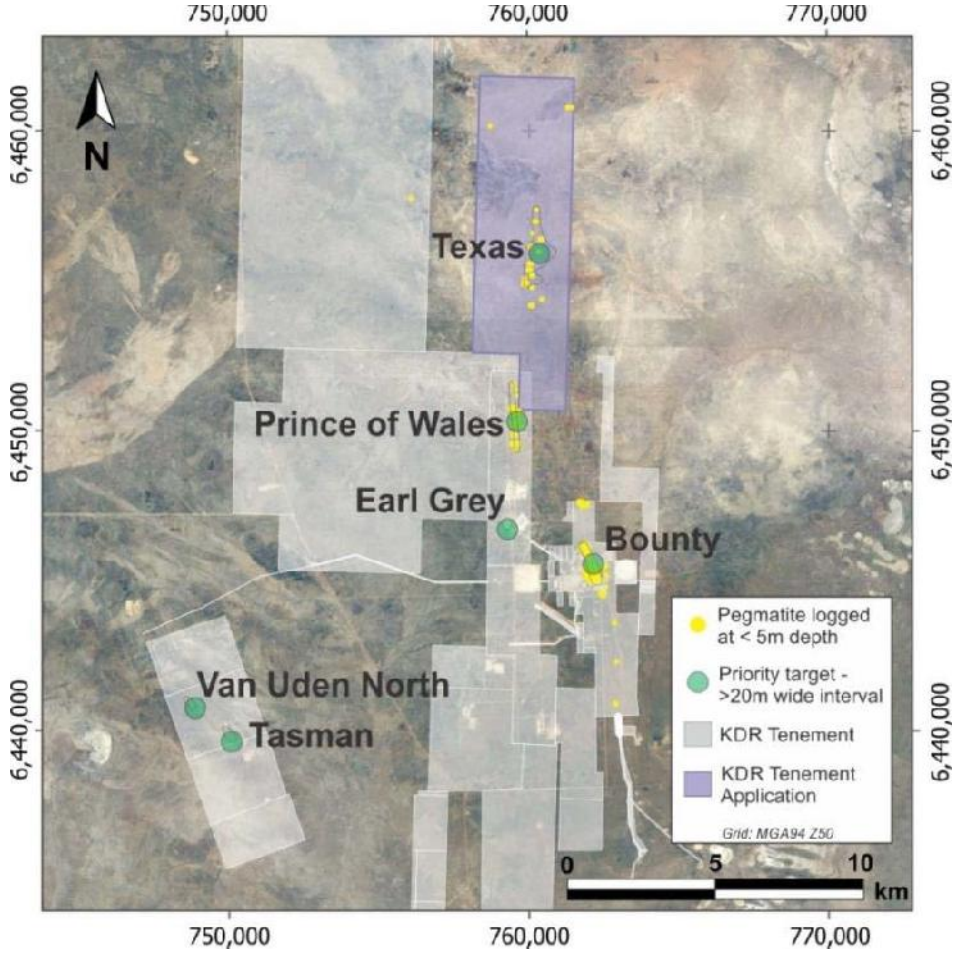


Figure 2: Pegmatite targets identified during district wide review for lithium potential

Composite samples will be collected by Kidman to complete metallurgical testwork at commercial laboratories in Western Australia. The results will be applied to finalise the design criteria for the existing processing facility at Lake Johnston. The testwork will be expedited to support the proposed mining and processing trials under a research and development programme.

The Lake Johnston 1.5 million tonne per annum (Mtpa) process plant includes a conventional 3 stage crushing circuit, 3 ball mills, 2 flotation circuits, multiple thickeners and 2 Larox filtration circuits, a large concentrate storage shed separated into two distinct zones. The process is controlled remotely via a central control centre.

The process plant is capable of co-processing ores or operating parallel circuits independently. Infrastructure at Lake Johnston include an existing power plant, 300 person camp with modern amenities (wet & dry mess, large gym, swimming pool and outdoor sports area), an aerodrome, two existing tailings disposal cells, a borefield and water treatment plant, large mine workshop and maintenance facilities, administration buildings, functional laboratory and metallurgical laboratory, plant stores and workshop areas, medical centre and emergency response control centre.

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Figure 3: Aerial View of 300 person camp at Lake Johnston

Pre-production activities at Lake Johnston are progressing. In 2015 the Company spent an estimated $5M in recommissioning the process plant to treat concentrate recovered from the plant infrastructure and subsequently sold to Tsingshan.

Poseidon has mobilised engineering subcontractors to begin a design review of the facilities at Lake Johnston. The Primero Group Engineering subcontractors have been commissioned to progress engineering design for the co-processing of lithium hosted pegmatites and nickel ores at Lake Johnston. An initial review of the concentrator will be focussed on a plant trial to process lithium ores to produce a 6% spodumene concentrate.

Fieldwork at Lake Johnston to define the lithium hosted pegmatites resource is on-going. Poseidon have mobilised geochemistry technicians and geologists to define a maiden resource on its 100% owned Lake Johnston tenements. Entering into an MOU to process lithium ores from Mt Holland is consistent with the Company's strategy of establishing Lake Johnston with all of its existing plant and infrastructure as the first hard rock lithium processing hub in the Lake Johnston region.

The Company is progressing patent applications for the co-processing of lithium hosted pegmatites and nickel ores. Downstream processing options are under investigation to conclude an optimum design. Testwork will be progressed to support preliminary engineering. Producing a lithium carbonate product acceptable to the battery market may offer further upside.

As previously advised to the market, the Company is in discussions with third party offtake providers. Initial discussions with offtake providers are important to understand key product requirements and impurities. Defining a lithium resource will require kriging deleterious elements to ensure they are managed in the life of mine (LOM) schedules. The forecast quality and deleterious elements will be investigated from composite samples recovered from Mt Holland.

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Figure 4: Lake Johnston 1.5MTPA Process Plant



Figure 5: Tailings Disposal Cells at Lake Johnston

Memorandum of Understanding (MOU)

The proposed transaction between Poseidon and Kidman (the Parties) is to evaluate the possibility of processing lithium (that may be mined by Kidman) at Poseidon's Lake Johnston processing facility providing an expeditious path to market for a spodumene lithium concentrate.

The purpose of the MOU between the parties is to provide a framework between the parties to evaluate the proposed transaction and for the consideration and finalisation of a structure. This will facilitate the exchange of confidential information by both parties to allow discussions and negotiations to conclude a formal agreement.

The parties have agreed to work together in good faith during the term of the MOU to finalise a business model for the proposed transaction that may include one of the following:

Ore Tolling Agreement. Kidman would mine the lithium hosted pegmatites ore and Poseidon would toll treat the ore to produce a lithium concentrate for Kidman at an pricing arrangement with sales and marketing to be managed entirely by Kidman; and/or

Off-Take Agreement. Under an off- take agreement Poseidon would purchase the ore from Kidman at an agreed market pricing arrangement.

The parties envisage the following steps to evaluate the proposed transaction:

i) Resource and reserve definition
ii) Process plant engineering review
iii) Trial mining
iv) Trial processing
v) Regulatory approval

Under the MOU each party grants the other party legally binding pre-emptive rights for a period of 3 months from the signing of the MOU. If prior to the parties entering into a formal agreement, a third party wishes to enter into an agreement outside the MOU, the parties each have the exclusive right to match the third party offer for a period of 45 days after receipt of that offer.

With the exception of the period of pre-emptive rights described above, the Parties may terminate the MOU with 30 days written notice.

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CORPORATE DIRECTORY

Director / Senior Management

Chris Indermaur	Non-Executive Chairman
David Singleton	Non-Executive Director
Geoff Brayshaw	Non-Executive Director
Robert Dennis	Non-Executive Director
Gareth Jones	Company Secretary

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Home Exchange

The Company's shares are listed on the Australian Securities Exchange and the home exchange is Perth
ASX code: POS

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