ASX Announcement

16 July 2019

COMPANY DETAILS

ABN: 62 147 346 334

PRINCIPAL AND REGISTERED OFFICE
Parkway Minerals NL
Level 1
675 Murray St
West Perth WA 6005

POSTAL ADDRESS
PO Box 1088
West Perth WA 6872

W
www.parkwayminerals.com.au

E info@parkwayminerals.com.au

P +61 8 9479 5386

F +61 8 9475 0847

ASX CODE
PWN

FRANKFURT CODE
A1JH27

CORPORATE INFORMATION
16 July 2019
608M Ordinary shares
123M Partly paid shares
65M Unlisted options

BOARD OF DIRECTORS
Adrian Griffin
(Non-Executive Chairman)
Patrick McManus
(Managing Director)
Natalia Streltsova
(Non-Executive Director)

PARKWAY MINERALS (ASX:PWN) ANNOUNCE GRANTING OF AUSTRALIAN K-MAX PATENT

HIGHLIGHTS:

- **Australian Patent confirmed for K-Max process.**
- **Significant step in commercializing the Dandaragan Trough and applying the technology to other deposits.**

Fertiliser feedstock explorer Parkway Minerals (ASX: PWN), (**PWN, Parkway** or **The Company**) is pleased to announce the receiving of Deed of Letters Patent No 2015349594 from IP Australia. The Patent recognizes the innovation of the K-Max process for extracting potassium from a range of minerals.

Parkways Managing Director, Patrick McManus, said "This is a strong endorsement of the K-Max process, developed by Parkway and our technical team. We look forward to commencing pilot plant testwork to validate the process on an industrial scale".

"In addition to unlocking value from glauconite deposits world-wide, K-Max could be applicable to other phyllosilicate-type minerals. The Australian Patent adds to other patents on the K-Max process held by the company in key countries world-wide".

For further information contact:

Parkway Minerals NL:
Patrick McManus
Managing Director
Mob:+61 408 956 798
Email:patrick.mcmanus@parkwayminerals.com.au

Web: www.parkwayminerals.com.au

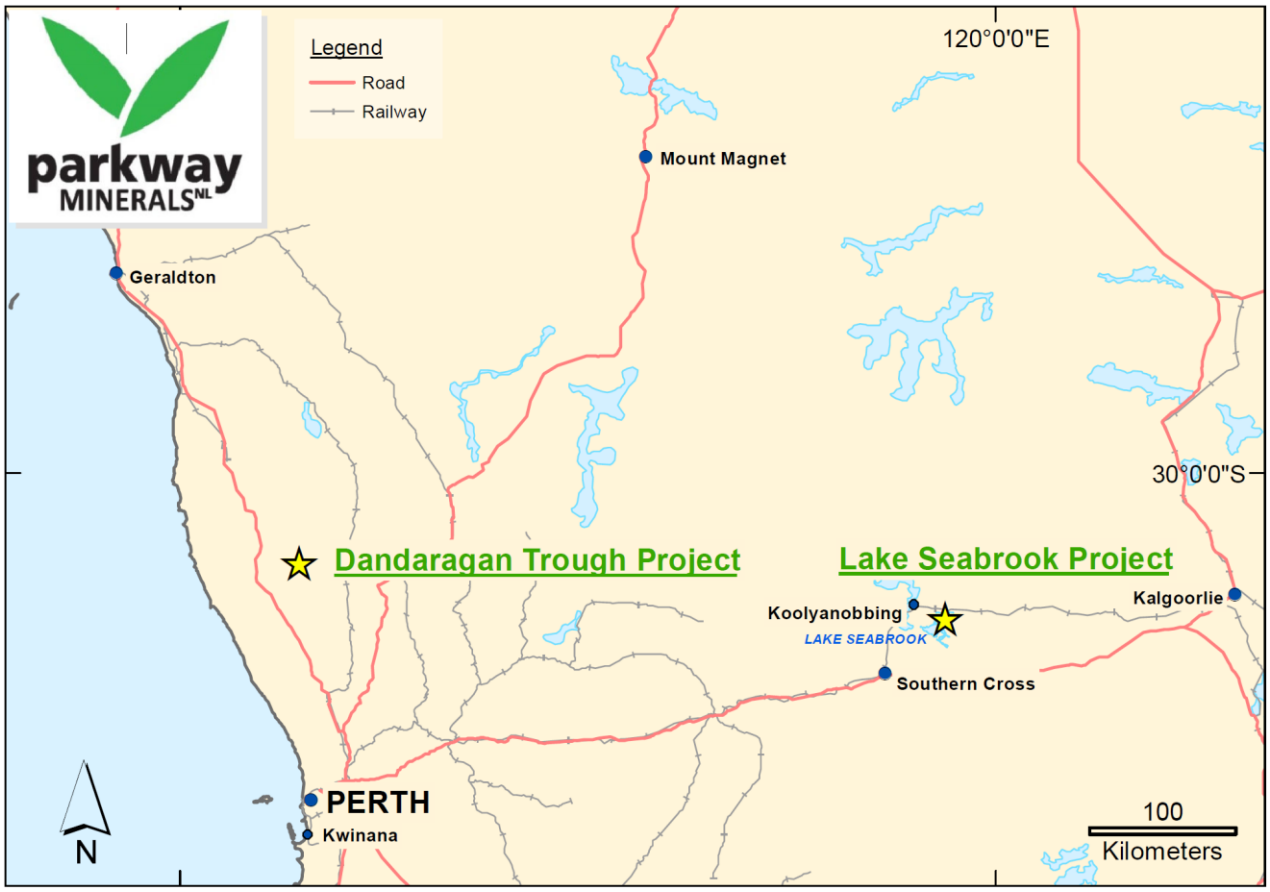

FIgure 1: Dandaragan Trough Location

BACKGROUND

The Dandaragan Trough is a large sedimentary basin, approximately 150 km north of Perth in Western Australia. It is located in an area with very good infastructure, close to road, rail, power and gas (Figures 1 and 2). The company has identified significant JORC 2012 resources of potash and phosphate at the Dinner Hill Deposit as well as a substantial exploration target at the Dambadgee Prospect in the southern part of the project (ASX release:21 August 2018), both of which are suitable deposits to apply the K –Max process.

Compared to conventional underground potash deposits, the greensand formations within the trough are close to surface and poorly consolidated, and requiring only conventional sand-mining techniques to mine the ore.

Glauconite is a phyllosilicate mineral making up approximately 60% of the greensand. Phyllosilicates are noted for their weak chemical bonding, which allows the minerals to break down readily. This in turn allows the potassium and magnesium to be extracted with much lower energy consumption, compared to other potassium-rich minerals, such as feldspars. The K-Max process takes advantage of this.

The basin also contains phosphate mineralization, associated with the glauconite. The glauconite and phosphate minerals can be concentrated using conventional mineral beneficiation equipment to provide upgraded feed prior to more costly chemical processing.

Testwork was completed, leading to a Scoping Study on the Dinner Hill deposit (refer ASX announcements Jan 10 2013 and Jan 13 2015). The K-Max process flowsheet is the product of extensive testwork by Parkway, and our technical consultants, Strategic Metallurgy. Mass and energy balances were taken and modelled by an independent Engineering Group, Tenova Minerals. The Scoping Study indicated that a viable project could be developed based on the Dinner Hill deposit.

The K-MAX PROCESS

The Greensands ore will be treated by slurrying, screening to recover phosphate nodules, desliming to remove clays and wet magnetic separation to recover glauconite. Residual quartz and clays will be returned to the mining void to allow rehabilitation and post-mining land use.

The phosphate nodules will be upgraded by conventional flotation and then treated with sulphuric acid to produce phosphate fertilisers, either single superphosphate, or phosphoric acid.

The K-Max process utilizes atmospheric leaching with sulphuric acid to break down the glauconite and extract approximately 95% of the contained potassium, magnesium, aluminium, iron and any residual phosphorous.

Several selective crystallization stages and a calcination stage will then produce Sulphate of Potash (SOP), a high magnesium SOP, aluminium sulphate and iron oxide.

The process is described in greater detail in the ASX release of Jan 13 2015.

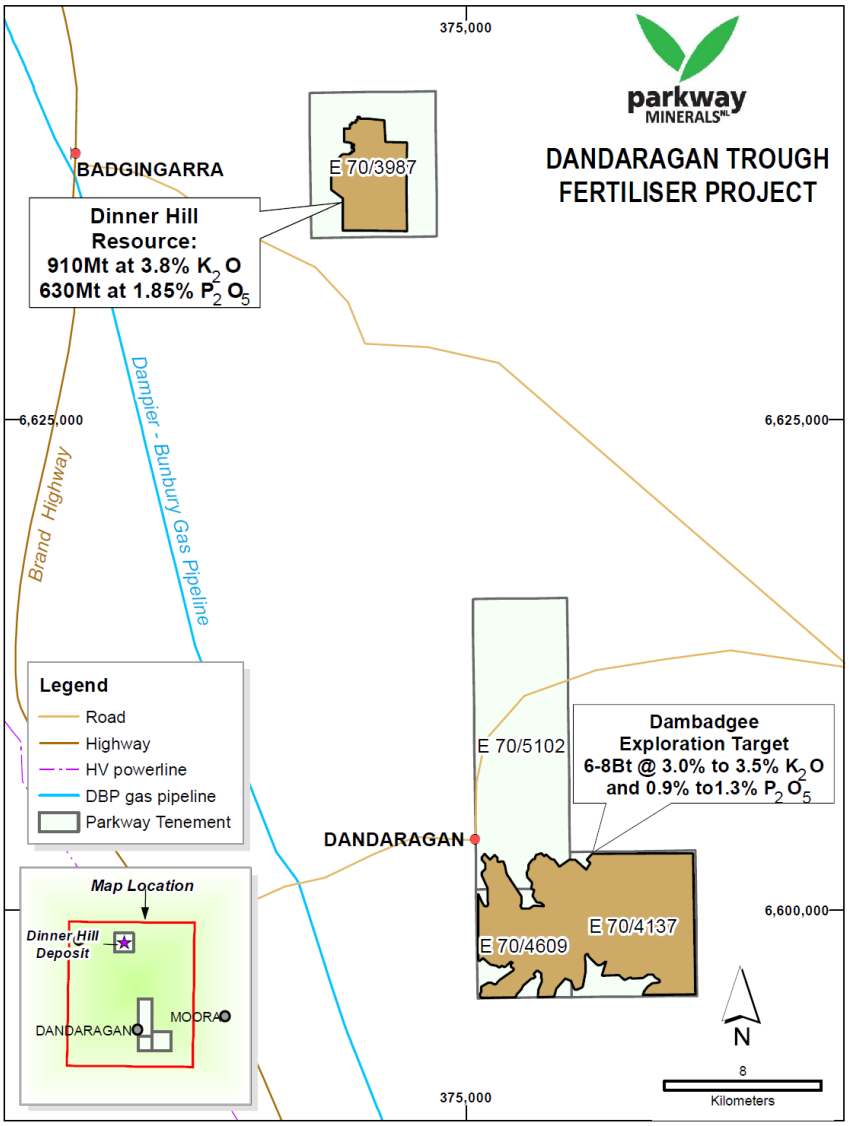

FIgure 2: Dandaragan Trough current licence holding.

NEXT STEPS

Parkway is looking forward to advancing the Dandaragan Trough project, by completing a pilot plant run using glauconite from both Dinner Hill and Dambadgee. Process data from that will feed into a prefeasibility study, which will confirm the financial metrics of a project using K-Max to produce both potash and phosphate fertilisers.

Confirmation of an Australian Patent has been a milestone that some potential investors wanted to see to confirm that the technology is indeed owned by Parkway Minerals, and does effectively extract potash from glauconite.

Parkway Minerals NL:
Patrick McManus
Managing Director
Mob:+61 408 956 798
Email:patrick.mcmanus@parkwayminerals.com.au
Web: www.parkwayminerals.com.au

About Parkway Minerals

Parkway Minerals (ASX:PWN) is an exploration company focused on developing large greensand deposits in West Australia's Perth Basin. The Company aims to define a substantial resource base and investigate how best to recover phosphate, potash and other minerals from the Dandaragan Trough. The project is well situated in relation to infrastructure, with close access to rail, power and gas. A successful commercial outcome will allow the Company to become a major contributor to the potash and phosphate markets at a time of heightened regional demand.

The Company has a major land holding over the Dandaragan Trough, one of the world's largest known glauconite deposits. Previous exploration indicates glauconite sediments are widespread for more than 150km along strike and 30km in width. Current JORC compliant Indicated Mineral Resources stand at 630Mt at 1.9% P_2O_5 of phosphate mineralisation and 210Mt at 3.8% K_2O, amenable to processing by the K-Max process (ASX release:26 September 2017).

The Company owns 44.2 M shares in Davenport Resources (ASX :DAV), focused on potash exploration in the South Harz region of central Germany, and 6.5M shares in Lithium Australia NL(ASX:LIT), focused on lithium technology.