L&M Group New Zealand Phosphate Project

August 2023

Disclaimer

This information is provided to you by L&M Group Limited (L&M Group) to provide preliminary information about its phosphate exploration project.

- All reasonable efforts have been taken to ensure it is accurate, but neither L&M Group nor any other party makes any representation or warranty to that effect.
- This presentation does not constitute an invitation to purchase, participate in, or offer to sell, the phosphate project.
- L&M Group and its officers and related companies shall have no liability for any loss arising or decisions made from any review of this presentation.

Background - L&M Group

- Established 1935
- Operations and Exploration activities have included:
  - Industrial Minerals
  - Oil & Gas
  - Gold in NZ and PNG
  - Coal Seam Gas
  - Uranium
  - Coal

Why explore for phosphate?

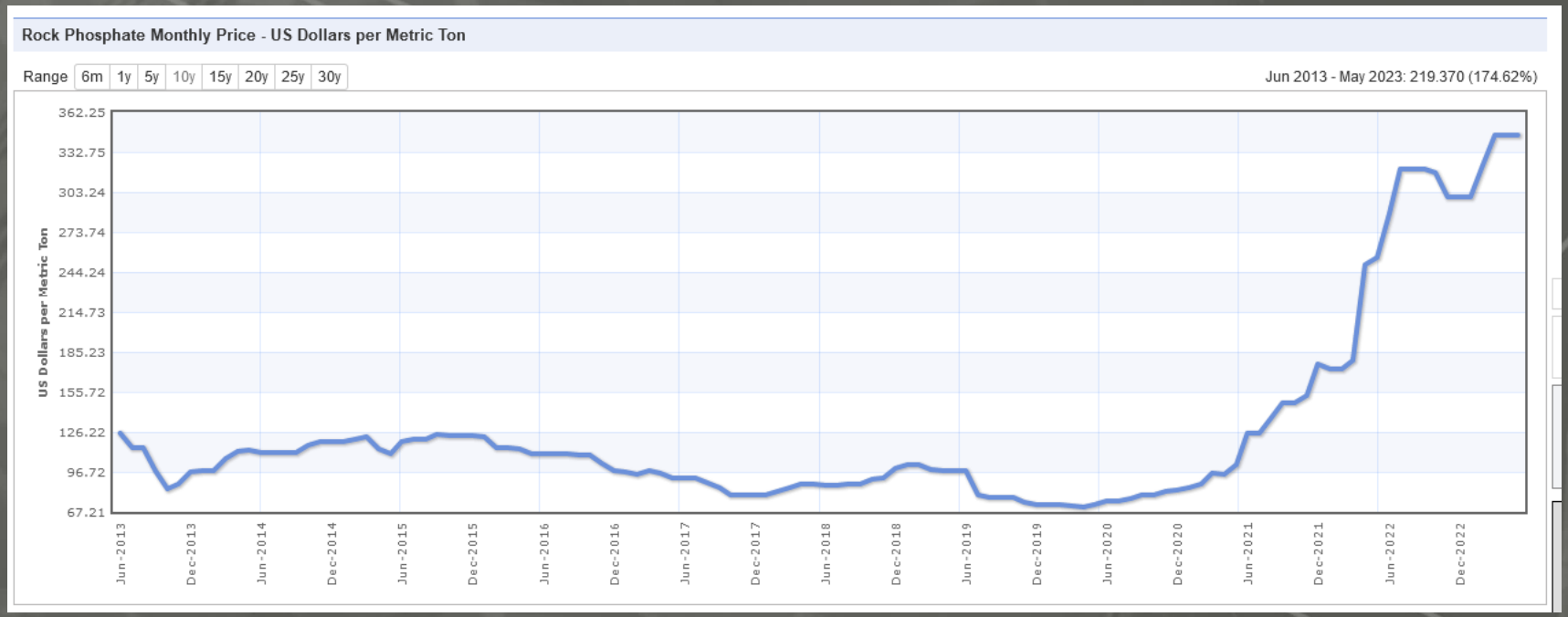
- *"We may be able to substitute nuclear power for coal, and plastics for wood, and yeast for meat, and friendliness for isolation but for phosphorus there is neither substitute nor replacement." (Asimov, 1974).*

Why explore for phosphate in NZ?

- NZ soils are naturally deficient in P. The use of phosphorus based fertilisers is vital for the success of New Zealand agriculture.
- Security of supply: NZ is the 9th largest global importer with most imports from Africa. There are potential risks to existing supply chains.
- Carbon: we estimate that NZ-sourced phosphate would approximately halve the carbon emmisions associated with phosphate fertiliser application

Why explore for phosphate?

Phosphate price has increased significantly during the past 2 years from in the order of USD80 - 100 per tonne to USD345 per tonne



New Zealand On-Shore Phosphate

- Numerous occurrences of phosphate minerals in New Zealand.
- Most common occurrences are associated with mid Tertiary sediments
- Deposits usually comprise a phosphatic zone in the sediments overlying an unconformity surface
- Historic studies targeted phosphate as a potential fertiliser source but only one deposit has ever been mined. This was at Clarendon near Milton.

L&M's Work to Date

- Identification of areas with potential
- 4 prospecting permits granted, one further application being processed. Total area 1,750 km^2
- Detailed literature research
- Field mapping and sampling is underway to identify potential drilling targets
- Sample analysis by XRF
- Preliminary market studies

Figure 1: Prospecting Permit Locations

Date: 1/07/2022	Author: David Manhire

Clarendon

- Long history of phosphate exploration and development between 1900 and 2013

Clarendon Exploration

- Initial mapping, pitting and mining during the early 1900's
- 1940's exploration included 287 drillholes and trenches plus other detailed studies
- Ravensdown carried out exploration between 2009 and 2013 included drilling, trenching and bulk sampling
- L&M's studies have led to the development of a new geological model
- This reinterpretation indicates that the deposit remains highly prospective

Clarendon Phosphate deposit

Phosphate bearing sediments in 3 zones:

- Basal zone: above Milburn Limestone & greensand. Averages about 2m thick. Grade 20% to 25% P_2O_5.
- Middle: Clarendon Sand. 0 to 3% P_2O_5,. Up to 30m thick, generally much less.
- Upper: Kapiti Sandstone. Discontinuous. Maximum thickness of 17.7m, ave 6.4m, Ave grade is about 12% P_2O_5.

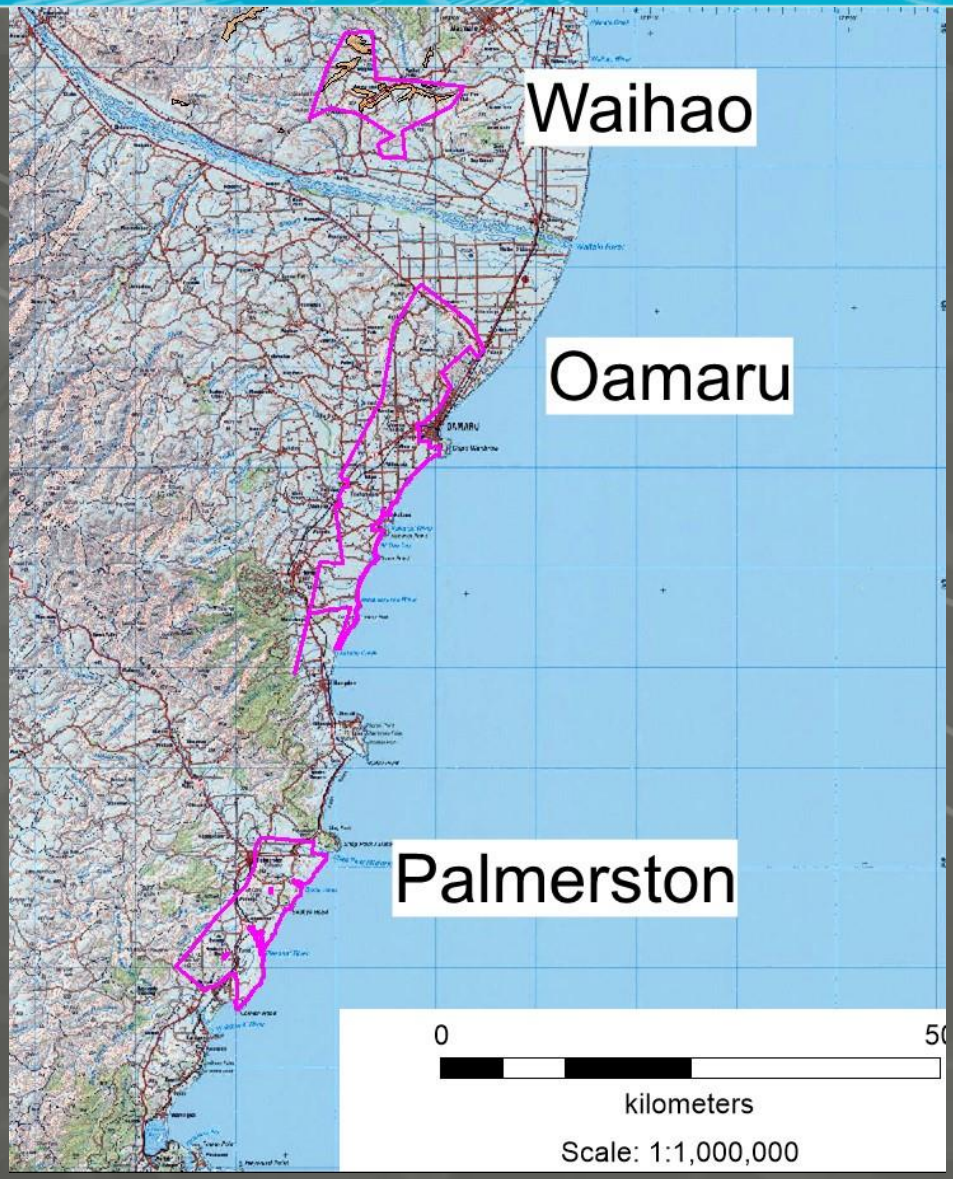
Cadmium and uranium contents are very low

Citric solubility is 30% +, therefore has potential for direct application

Phosphate: North Canterbury & Kaikoura

- Exploration carried out by Speight & Wild in 1918-19
- Main targets defined to date are in the Motunau Group
- Black points show locations of sediments where phosphate has been reported

Waitaki Permit



Main targets:

- Waihao Forks
- Oamaru area
- Palmerston-Waikouiti

Investigations by AMOIL in 1970's did not find an economic resource but showed some promising results at both Waihao and Palmerston-Waikouiti

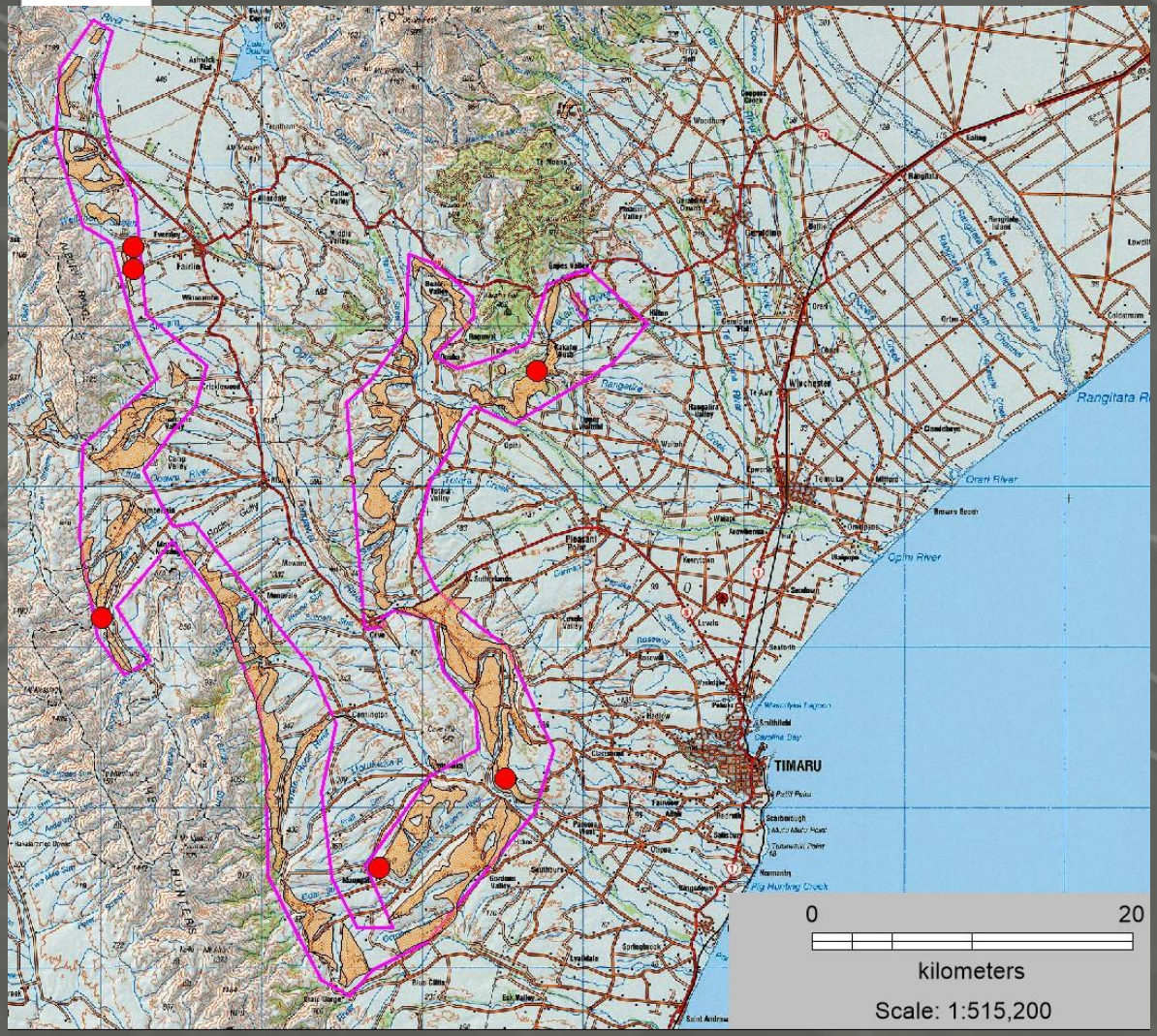
Gage (1957) made numerous references to phosphate deposits in the Oamaru area

Waitaki Prospectivity

Gees Beach: The backpack is sitting on Ototara Limestone, Gee Greensand above

- Gee Greensand near Oamaru, and Concord Greensand in the Waikouiti and Palmerston area are very prospective

South Canterbury



- Large permit area (498 km^2)
- Contains a similar sedimentary sequence to Waitaki and North Canterbury
- Red points show locations of sediments where phosphate has been reported

Use and market

- Potential use as feed for conventional superphosphate (requires beneficiation to at least 30% P_2O_5)
- Potential use as direct application fertiliser (Reactive rock phosphate – RPR)
- Very low cadmium and uranium levels in all samples tested to date

Ongoing Work Programme

- More detailed geological exploration
- Beneficiation and marketing studies