
GOLDPHYRE
RESOURCES LIMITED
THE LAKE WELLS
POTASH PROJECT
Australian potash for Australian farmers
"Currently 100% of Australia's potash
is imported. The development of a local source of potash
would be a significant win for Australian farmers"

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UNIQUE INVESTMENT PROPOSITION

GOLDPHYRE RESOURCES LIMITED

Australian Potash for Australian Farmers

- WA brine hosted Sulphate of Potash (SOP) project
- Aiming to feed the domestic demand for SOP which is currently 100% imported
- Superior mining jurisdiction in the eastern goldfields of WA
- Simple, tried and tested brine extraction method used all over Australia
- Excellent infrastructure already in place
- Emphasis on achieving strong economic returns rather than focusing on big resources and big production profiles
- Ground floor investment opportunity with GPH capitalised at only $14m
- Project primed for maiden JORC Resource Q2 2016

CORPORATE OVERVIEW

GOLDPHYRE RESOURCES LIMITED

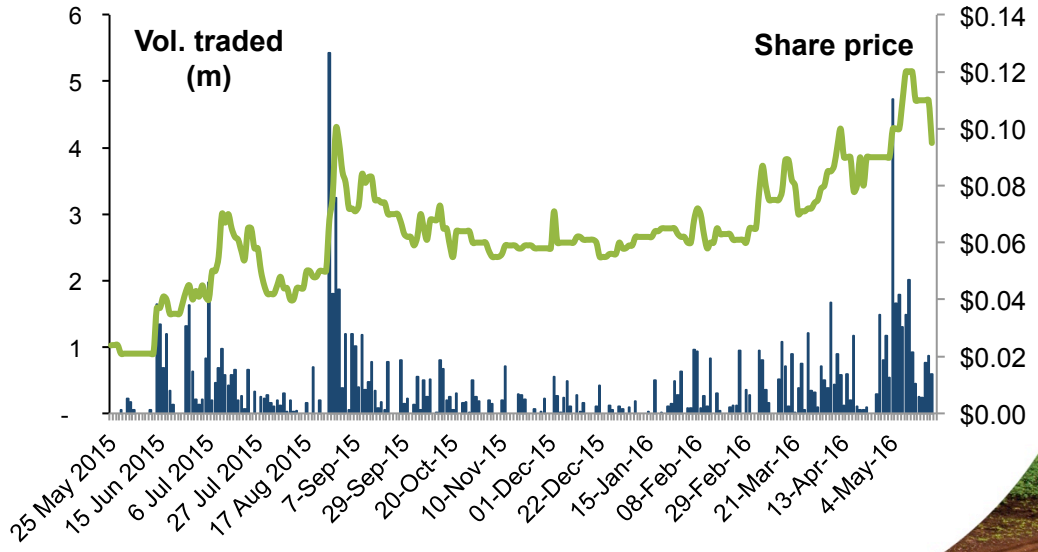
Financial information

Share price 23 May	$0.095
Number of shares	145.9m
Options	92.4m
Market Capitalisation	**$13.8m**
Cash 31 March	$1.1m
Enterprise value	$12.7m

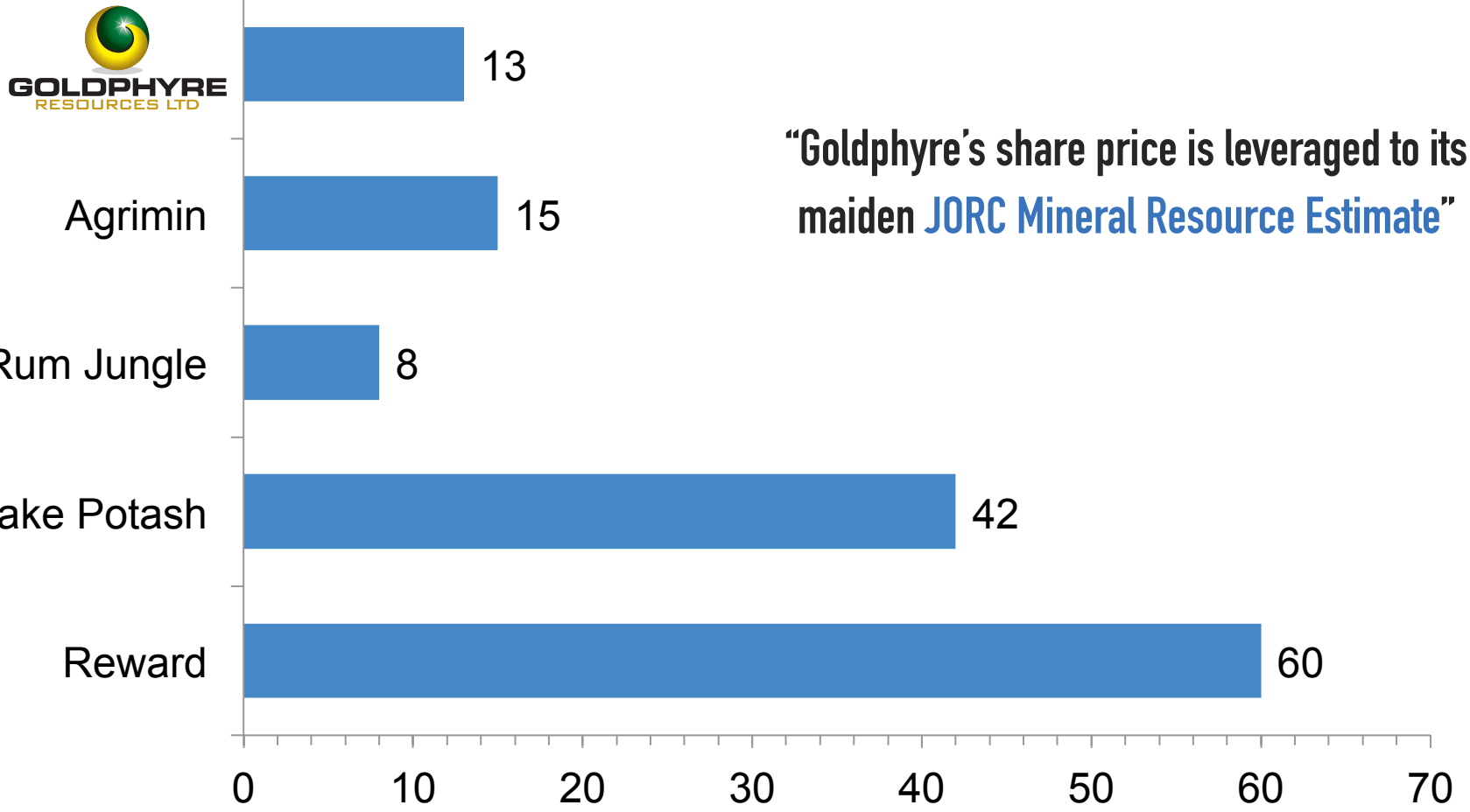
"Goldphyre's shareholder register is built around long-term investors who understand we are focussed on stakeholder return"

Shareholders

Yandal Investments Pty Ltd (Mark Creasy)	19.9%
Board & management	8.6%
Top 20	54.7%



EMERGING POTASH PLAYER



"Goldphyre's share price is leveraged to its maiden JORC Mineral Resource Estimate"

EXPLORATION TARGET*

"Goldphyre is on target to release its Maiden JORC compliant Mineral Resource Estimate in June 2016"

An estimate of how much SOP is contained within the Lake Wells Potash Project

79Mt – 123Mt
Of in-situ SOP, at a grade range of
11,400 mg/l – 13,900 mg/L

An estimate of how much SOP is **recoverable from** the Lake Wells Potash Project

6Mt – 37Mt
Of recoverable SOP, at a grade range of
8,900 mg/l – 13,900 mg/L

*The potential quantity and grade of the Exploration Target is conceptual in nature. There has not yet been sufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

WHAT IS POTASH?

- Potash is a fertiliser that provides plants with the essential, non-substitutable macro-nutrient, potassium which all plants need to grow
- Potassium is the 'quality element' in plant growth, improving appearance, feel, texture and yield*
- Potassium is mined from the soil through plant growth, and **POTASH** replaces that potassium

Sulphate of Potash ('SOP') is the Premium Potash type

- SOP provides chloride free potassium, many soils can't tolerate additional chlorine
- SOP is premium priced over other potash types
- SOP is produced in several ways, with the cheapest cost of production being brine evaporation

"A brine SOP project can capture the lowest cost of production of this essential premium priced fertiliser"

* International Potash Institute

HOW USEFUL IS POTASH?

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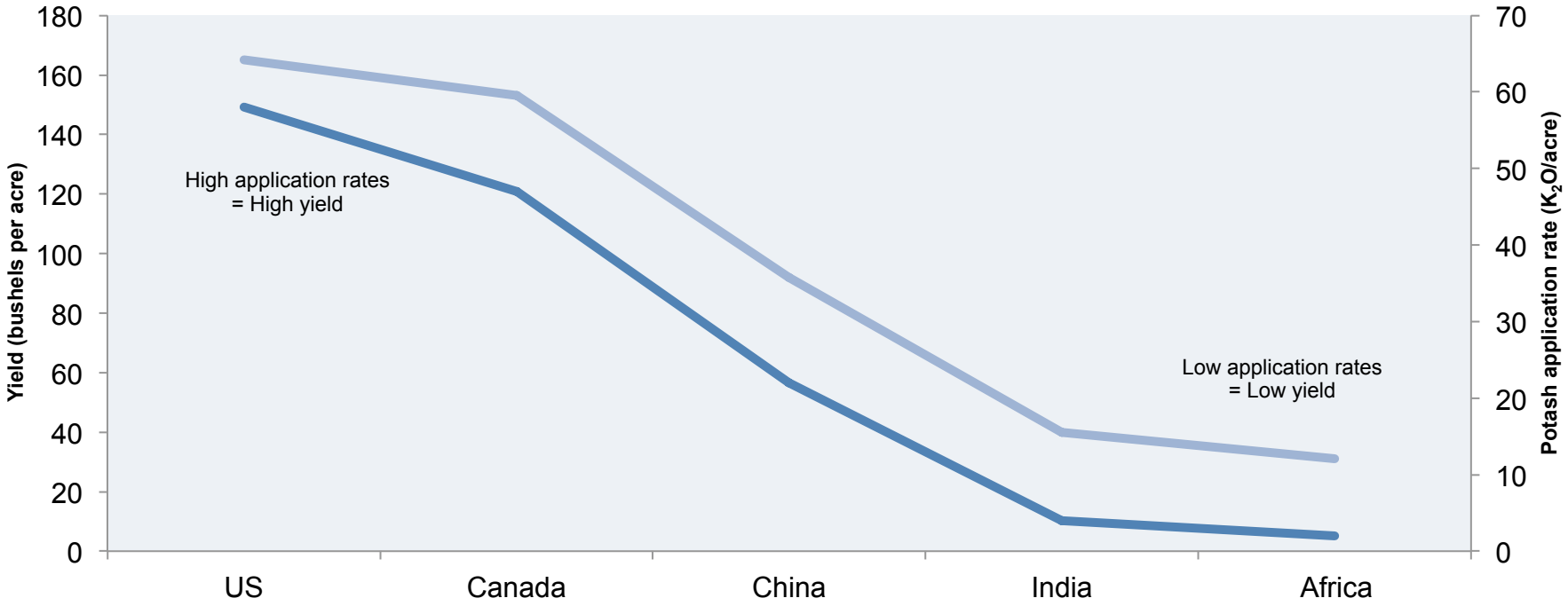
Corn Potash Application Rates & Yield

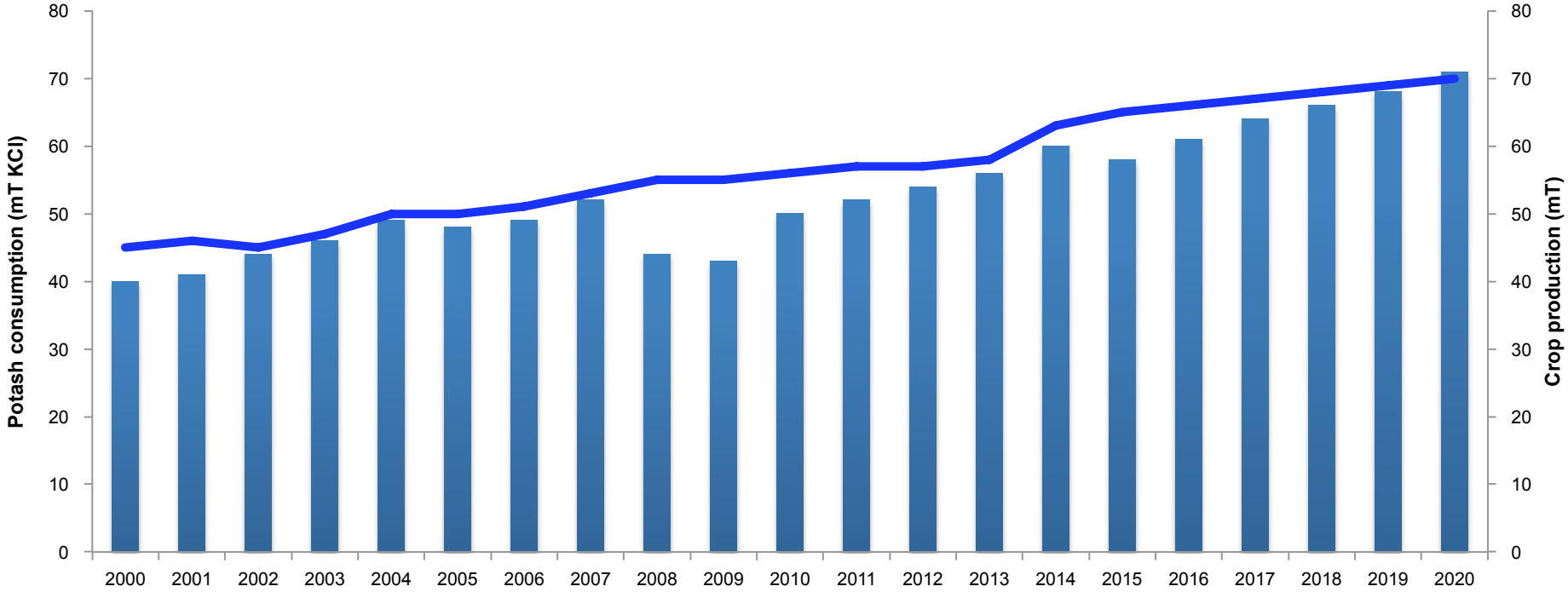


The effect of increasing potash application rates on crop yield is compelling

PotashCorp, Goldman Sachs Basic Materials Conference May 2016

POTASH DEMAND

Global crop production and potash consumption



More people means more food production means more potash consumption

PotashCorp, Goldman Sachs Basic Materials Conference May 2016

THE LAKE WELLS POTASH PROJECT

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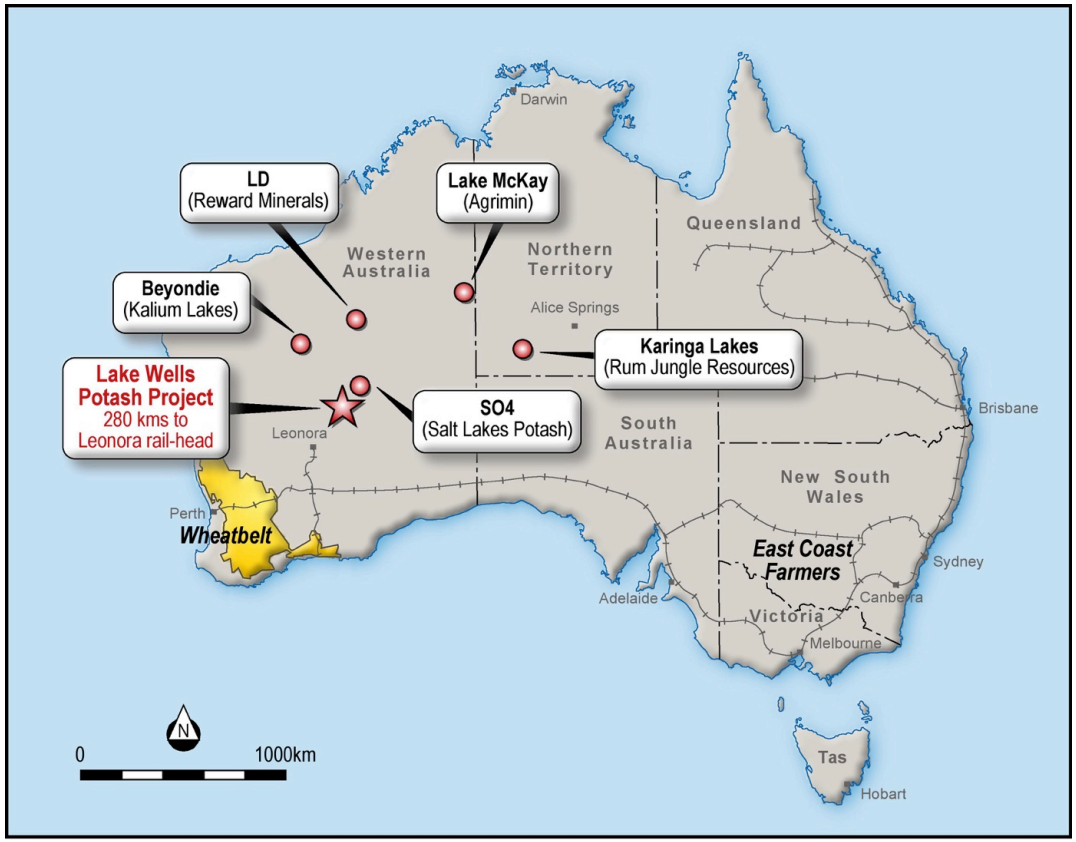
Location, location, location

"The Lake Wells Potash Project is **ideally located** to the potential end users of this essential macro-nutrient, **Australian Farmers**"



REGIONAL INFRASTRUCTURE

Lake Wells road 85km

Great Central Road 90km

Laverton-Leonora Road 125km

Bulk projects need quality infrastructure and good access

"Using existing infrastructure enables us to target faster development"

The Leonora rail head is 280km from the Lake Wells Potash Project

RESOURCE DRILLING

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THE LAKE WELLS POTASH PROJECT

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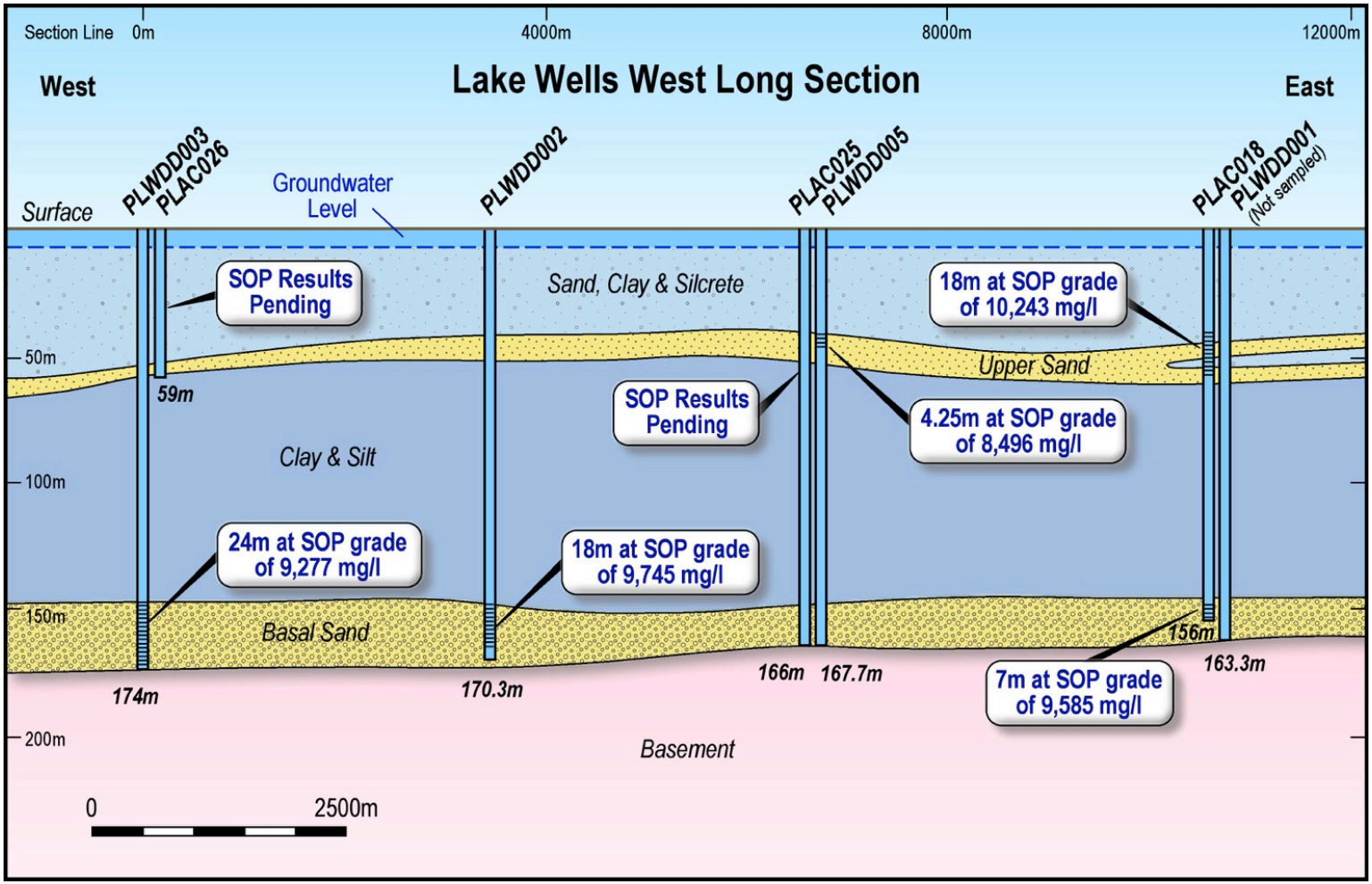

High grades and wide intersections from March – May 2016 **resource drilling**

THE LAKE WELLS POTASH PROJECT

Hole ID	Sample interval		Sample SOP grade	
	Basal sands	Upper sands	**Basal sands**	Upper sands
PLAC019	**18m**	12m	**9,046 mg/l**	5,921 mg/l
PLAC020	**12m**	18m	**8,363 mg/l**	6,571 mg/l
PLWDD002	**18m**	-	**9,745 mg/l**	-
PLWDD003	**24m**	-	**9,277 mg/l**	-
PLAC018	**7m**	18m	**9,585 mg/l**	10,243 mg/l
PLWDD005	**-**	4.25m	**-**	8,496 mg/l

Upper sands and basal sands intersected in March – May 2016 **resource drilling**

SOP ECONOMICS

SOP can be produced in several ways

Most expensive → Least expensive

- Manheim process
- Reacted salts
- Hard-rock mining
- Brine evaporation

Average cost of production	**A$275/tonne**
Farm-gate price of SOP in Western Australia	**A$1,100/tonne**

"A domestic SOP brine operation can provide Australian farmers with certainty of supply and reduced exchange rate risks"

- 100% of all potash used in Australia is imported
- There will be substitution to SOP if it is priced right

Source: Industry presentations, Company websites, public announcements

SOP PRODUCTION

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SOP held in brine is produced through evaporation

1. Pumping

The palaeochannel bore-field pumps brine into evaporation ponds

2. Evaporating

Brines pass through evaporation ponds, dropping out salts along the way

3. Harvesting

Salts are harvested and transported to plant for conversion

4. Conversion

Schoenite is converted, or crystallised, into SOP

5. Processing

SOP is washed, dried, screened and chipped ready for distribution to end user

"Using existing road infrastructure, Goldphyre will test the feasibility of distributing its SOP product through a centrally located, wheatbelt location"

BRIEF HISTORY RAPID PROGRESS

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Going forward ….

- Final resource drilling assays
- Q2 Maiden JORC Resource estimate
- Q2/Q3 Test bore pumping trials
- Q2/Q3 Bench scale evaporation trials
- Q3/Q4 JORC Resource upgrade
- Q4 Test field evaporation ponds
- Q1 2017 JORC Measured Resource

MARCH 2016

Exploration Target* of 6Mt – 37Mt (specific yield)

FEBRUARY 2016

Seismic surveys double the length of the palaeochannel

DECEMBER 2015

Project area tripled in deal with Mark Creasy controlled entity

AUGUST 2015

High grade potash drill assays from surface to + 135m

APRIL 2015

High-grade potash brine sample assays reported to market

EXPERIENCED INCENTIVISED

The Board

Matt Shackleton, Executive Chairman
BComm., MBA, FCA
Over 20 years experience in corporate & resource company management

Brenton Siggs, Non-executive Director
BAppSc., MAIG
Over 25 years experience in mineral exploration and development

Dean Goodwin, Non-executive Director
BAppSc., MAIG
Over 25 years experience in mineral exploration, development, and management

John Ribbons, Company Secretary

Management

Matt Shackleton, Executive Chairman

Brenton Siggs, Exploration Manager

Carsten Kraut, Principal Hydrogeologist

Lisa Chandler, Environmental Advisor

Consultants

AQ2, Hydrogeological consultants

Peritas Group, Engineering consultants

"We are continually building on our competencies through working with the best people we can find"

COMPELLING OPPORTUNITY

Ideally positioned for Rapid Project Growth and Development

- Strong grades and scale in a highly conducive environment for evaporation
- Moving quickly towards de-risked JORC Resource Estimates
- Drilling recently finished with results pending
- Well funded for next program of works: test pumping Q3 2016
- Strong and supportive shareholder base
- Tried and tested abstraction process: not reinventing the wheel
- Significant infrastructure already in place
- Emphasis on achieving strong economic returns rather than focusing on big resources and big production profiles

DERISKING LAKE WELLS

	Q1 2016	Q2 2016	Q4 2016	Q1 2017
Exploration target	• Incorporate LWE data into exploration target data area • COMPLETE	• n/a	• n/a	• n/a
Inferred resource	• Collect core for porosity and specific yield analysis	• Brine sampling across horizons, geophysics • PUBLISH Resource	• n/a	• n/a
Indicated resource	• Porosity/Specific yield • More brine chemistry • Installation of piezometers	• Test bore drilling • Downhole geophysics • Numerical modelling	• Water abstraction environmental analysis • PUBLISH Resource	• n/a
Measured resource	• n/a	• Numerical modelling • Inter-bore continuity test-work	• Final aquifer test-work including permeability, specific yield, water chemistry variability	• PUBLISH Resource

DERISKING LAKE WELLS

	Exploration target	Inferred resource	Indicated resource	Measured resource
Desktop studies	✔	n/a	n/a	n/a
Auger sampling	✔	✔	✔	n/a
Core drilling	n/a	✔	✔	✔
Exploration drilling	✔	✔	✔	✔
Geophysics	✔	✔	✔	✔
Test bores	n/a	n/a	✔	✔
Modelling	✔	n/a	✔	✔
Environmental	n/a	n/a	✔	✔
Reporting	✔	✔	✔	✔

Not started ● ● ● ● Complete

Thankyou

Please come and visit Goldphyre Resources
at booth # 17

www.goldphyre.com.au

COMPETENT PERSONS STATEMENTS

The information in the announcement that relates to Exploration Targets is based on information that was compiled by Mr Jeffery Lennox Jolly. Mr Jolly is a principal hydrogeologist with AQ2 and has over 30 years of international experience. He is a member of the AusIMM and the International Association of Hydrogeologists. My Jolly has experience in the assessment and development of palaeochannel groundwater resources, including the development of water supplies in hypersaline palaeochannels in Western Australia. His experience and expertise is such that he qualifies as a Competent Person as defined in the 2012 edition of the “Australian Code for Reporting of Exploration Results, Mineral Resources and Ore reserves”. Mr Jolly consents to the inclusion in this report on the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration results, Mineral Resources or Ore Reserves is based on information compiled by Brenton Siggs who is a member of the Australasian Institute of Geoscientists. Brenton Siggs is contracted to the Company through Reefus Geology Services and is a Non-Executive Director (Exploration Manager) of Goldphyre Resources Limited. Brenton Siggs has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity currently being undertaken to qualify as a Competent Person as defined in the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Siggs is a shareholder and director of Goldphyre WA Pty Ltd, a company that holds ordinary shares and options in the capital of Goldphyre Resources Limited (Goldphyre Resources Limited, Annual Report 2015).
Brenton Siggs consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.