



ASX Announcement

21<sup>st</sup> November 2017

# Presentations to the Annual General Meeting

Please find attached copies of the Chairman's address and Managing Director's presentation which will be made today at the Company's Annual General Meeting.

For further information, please contact:

**Gavin Bosch**

Chief Financial Officer & Company Secretary

Centrex Metals Limited

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# Chairman's address to the AGM

Now is a very exciting time for the Company as we focus on the fertiliser market and plan the transition from explorer to becoming an operator. The Ardmore Phosphate Rock Project acquisition has provided the opportunity for an early cash flow, highly profitable operation. The Company plans to release scoping studies to the market later this year and complete feasibility studies next year with first shipments expected in 2019. The project will require finance and we are at the early stages of looking at the debt and equity options available to us. Management has built a highly qualified team and is proposing conventional process solutions and logistics to get the product to market along with advancing off-take discussions with the likely customers.

While the Company's focus is now firmly on the Ardmore Phosphate Rock Project, work has continued making process improvements on the world class Oxley Potash Project. The Company's positive outlook for this project was confirmed with an independent review of the Scoping Study results which indicated the basis for a globally competitive operation with significant upside for large-scale expansion from the extensive deposit. In August 2016 the Company announced the approval of the Prefeasibility Study (PFS) which takes the project into the next phase of development. A significant stage of the Prefeasibility study will be a testwork program including small-scale continuous lab scale trials to confirm the physical behaviour of the plant feed through roasting, melting and cooling. On completion of the testwork and confirmation of the optimum viable process routes the company will seek partners to continue with feasibility studies, pilot plant and development options.

Coinciding with transfer of the Ardmore Phosphate Rock Project mining lease the Board appointed Mr Chris Indermaur as a non-executive director. Chris's experience in the fertiliser industry is considered a valuable add-on to the Board's existing capability. Prior to the appointment Chris had been consulting to Centrex as part of a Technical Review Committee for its fertiliser projects. He brings significant technical and commercial experience, particularly in downstream mining related industrial facilities including fertiliser plants. Shareholders will also note the recent appointment of Ben Hammond to the Board making his a joint role as both CEO and Managing Director.

From a funding perspective the Company held \$18.4 million in cash and equivalents and term deposits at the end of October. This funding will be sufficient to complete both the feasibility study for the Ardmore Phosphate Rock Project and the small-scale test work with the Oxley Potash Project. Nevertheless, the Company is already establishing relationships with potential funding providers to enable a smooth transition between completion of the feasibility study and the development funding for Ardmore. Any large-scale process work on Oxley and significant exploration at Goulburn will come from the Company's positive cash flow once Ardmore is in operation.

The Company and all its subsidiaries made a modest profit for the financial year ended 30th June 2017 of \$488,828. This was largely a function of winding up the Port Spencer Joint Venture where the Company received \$1.28 million in proceeds.

Finally, the Board thanks Ben and his small but experienced team for their continued hard work during the year. The year ahead will be challenging and exciting and the Board is confident that it has the right team in place to transition the Company.



From mine to farm, **integrated**  
fertiliser resource developments.



November 2017

[WWW.CENTREXMETALS.COM.AU](http://WWW.CENTREXMETALS.COM.AU)

## FORWARD LOOKING STATEMENTS

These materials include forward looking statements. Forward looking statements inherently involve subjective judgement and analysis and are subject to significant uncertainties, risks and contingencies, many of which are outside of the control of, and may be unknown to Centrex Metals Limited ('Centrex' or the 'Company').

Actual results and developments may vary materially from those expressed in these materials. The types of uncertainties which are relevant to the Company may include, but are not limited to, commodity prices, political uncertainty, changes to the regulatory framework which applies to the business of the Company and general

economic conditions. Given these uncertainties, readers are cautioned not to place undue reliance on such forward looking statements.

Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, the Company does not undertake any obligation to publicly update or revise any of the forward looking statements or any change in events, conditions or circumstances on which any such statement is based.

Forward looking statements include, but are not limited to, statements concerning Centrex's planned exploration program, targeted resources, commencement of product export and other statements that are not historical facts. When used in this document, the words such as "could", "target", "plan", "estimate", "intend", "may", "aim", "potential", "should", and similar expressions reflected in these forward-looking statements are reasonable, such as statements involving risks and uncertainties and no assurance can be given that actual results be consistent with these forward-looking statements.

# Summary

- § Heading towards production on the Ardmore Phosphate Rock Project in Northwest Queensland
- § One of the very few undeveloped high-grade phosphate deposits in the world
- § Feasibility Study due for completion in mid-2018
- § First phosphate rock shipments from Townsville targeted for 2019
- § Larger scale Oxley Potassium Nitrate fertiliser development in Western Australia
- § Studies on potassium project to accelerate once phosphate rock project is into revenue generation
- § Continuing to explore quality zinc massive sulphide play in NSW close to recently funded Woodlawn Mine

Outcropping  
DSO Phosphate  
Deposit



Rare large-scale  
potassium  
deposit at surface



Advanced Zinc &  
Copper Prospect



# Corporate Overview

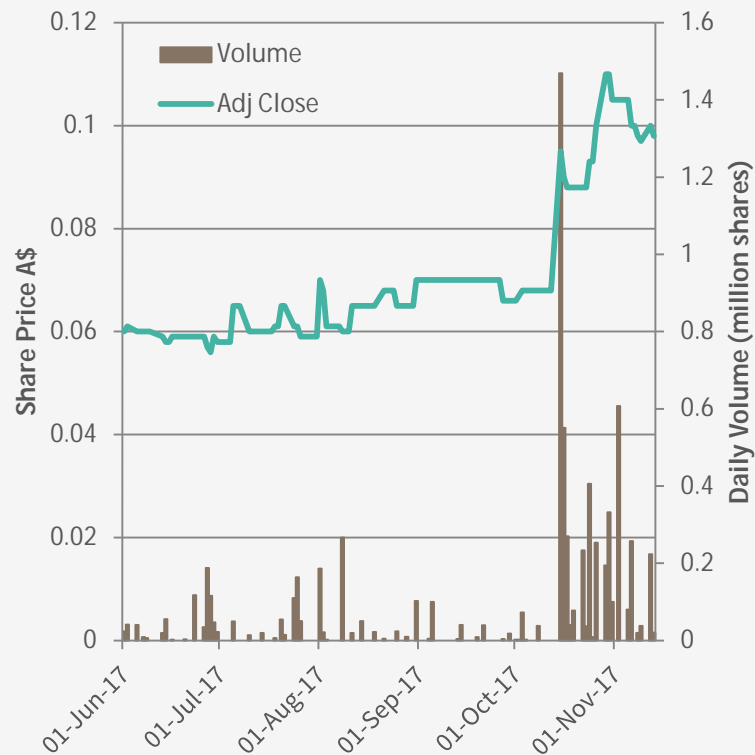


## Capital Structure 15 November 2017

Ordinary shares on issue	315.5 million
Share rights on issue	5.1 million
Share Price	\$0.09
Market Capitalisation	\$28.4 million
Cash (31 October 2017)	\$18.4 million

## Top 5 Shareholders

Daiang Pty Ltd (associated holding of Centrex Director Graham Crisp)	35.2%
WISCO International Resources Development & Investment	12.8%
Baotou Iron & Steel (Group) Company Limited	6.9%
HSBC Custody Nominees (Australia) Limited	4.7%
Mr Sik Ern Wong	2.6%



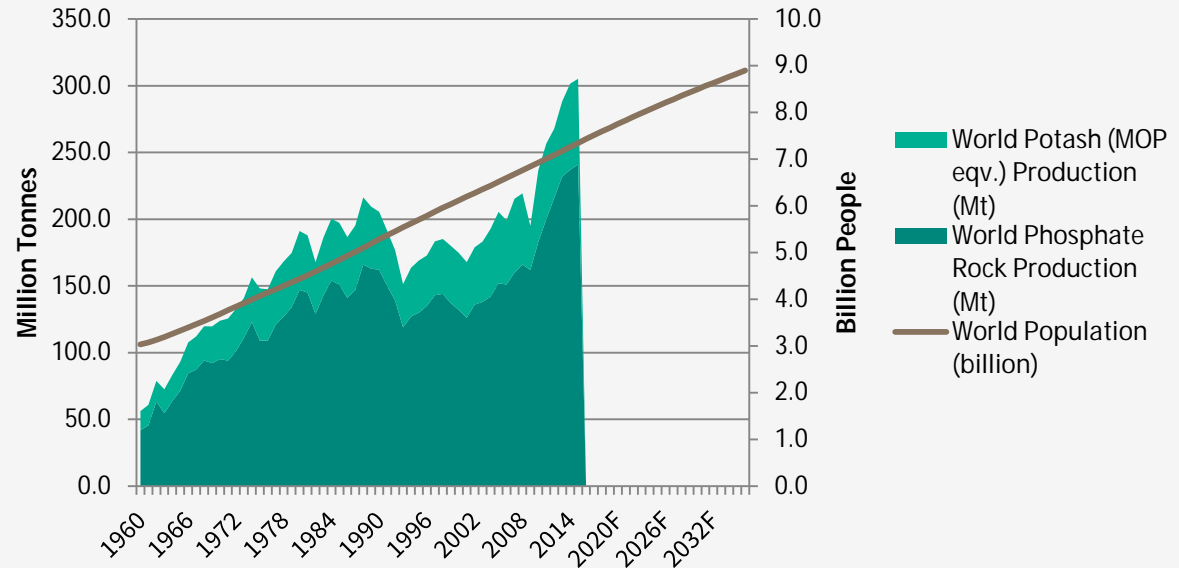
# Fertiliser Long-Term Fundamentals

## Simple demand side story

- § More mouths to feed
- § More food to feed them
- § Less land to produce it from
- § Higher crop yields needed
- § = More Fertiliser
- § Phosphate & potash 2 of the 3 required macronutrients
- § No substitutes!

## Long-Term Phosphate & Potash Growth Trends

Source: Derived from USGS (Production), World Bank (Population)



# Ardmore Phosphate Project

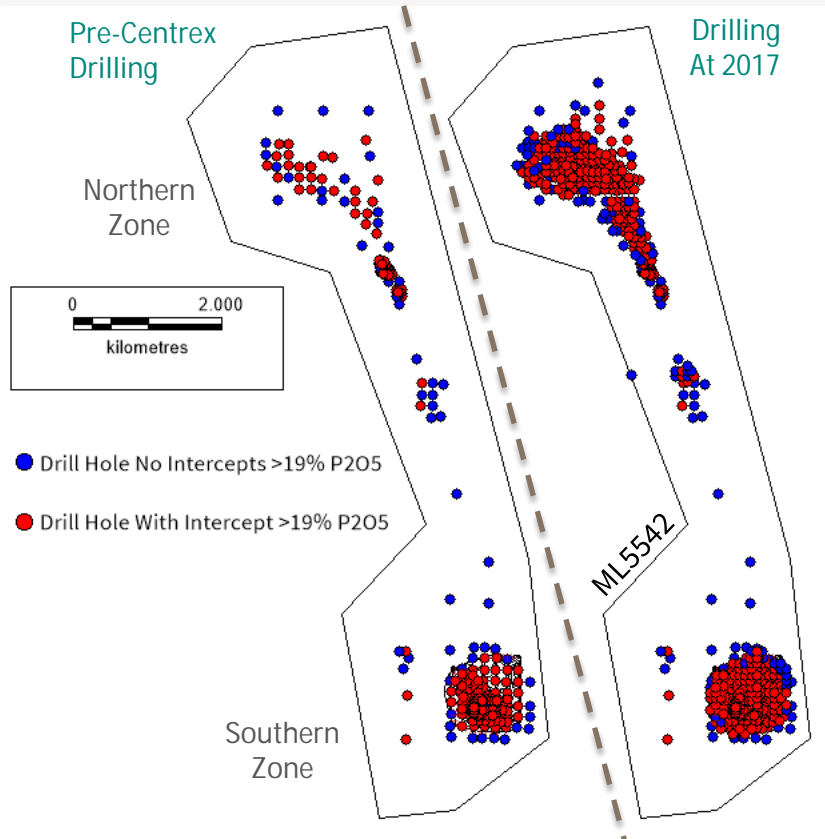


# Ardmore Phosphate Deposit

- § The Ardmore deposit is hosted in the same Cambrian sedimentary package as the nearby Duchess deposit
- § Phosphate mineralisation occurs in two units within the same formation; an upper high-grade ( $>25\% \text{P}_2\text{O}_5$ ) phosphorite member, and a basal lower grade ( $10\text{-}15\% \text{P}_2\text{O}_5$ ) phosphorite member with a series of cherts in between
- § The upper high-grade member has been the focus of exploration and outcrops within the Ardmore Mining Lease
- § Phosphate occurs as relatively coarse ( $\approx 200\mu\text{m}$ ) apatite pellets



# Resource Definition



- § >300 historical drill holes (1970s) used for initial Inferred Mineral Resource estimate released by Centrex in June 2017
- § Centrex completed a 319 reverse circulation ("RC") drilling program in November 2017, with a resource estimate update being finalised at present
- § Updated resource estimate expected to underpin mine designs for feasibility study due for completion in mid-2018
- § Updated resource should allow publication of scoping level cost estimates and financial analysis in 2017

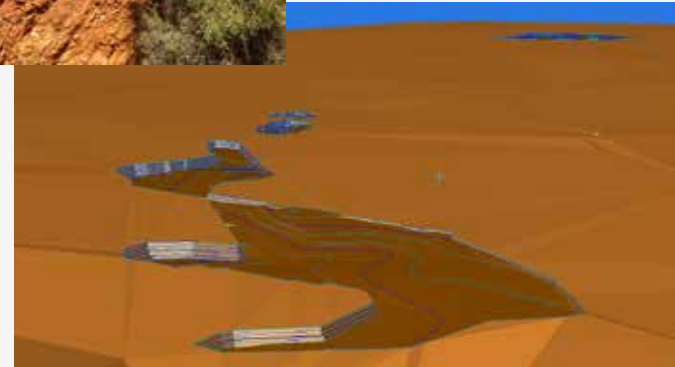
# Mining

- § Deposit outcrops in several areas
- § Average depth to the hanging wall at 8.3m, and average depth to footwall 12.0m for the average 4.3m thick high-grade member = relatively low strip ratio
- § Current mine plan for a dozer to strip the overburden, then truck and shovel within the ore zone for selective mining
- § 6 historic excavations completed with a D9 dozer down to 10m below surface showing it to be “free-dig” (no drill and blast required), similar to mining at the Duchess deposit
- § Current geotechnical testwork on diamond drilling confirms rock to be weak and suitable for free digging



DSO Phosphate ore  
at surface in historic  
trench AE6

Looking South from  
Northern to Southern  
Pit Designs



# Process Testwork



Sample	P <sub>2</sub> O <sub>5</sub> (%)	CaO (%)	Al <sub>2</sub> O <sub>3</sub> (%)	Fe <sub>2</sub> O <sub>3</sub> (%)	MgO (%)	SiO <sub>2</sub> (%)	F (%)	Cd (ppm)	MER Ratio
Head Grade	31.7	44.1	2.7	2.5	0.4	12.0	3.4	1.4	0.18
Concentrate Grade	35.3	49.4	0.8	1.8	0.2	6.6	3.7	1.1	0.08
Recoveries (%)	81.3	81.4	21.8	53.2	39.7	39.9	80.3	79.1	

- § Scoping study composite showed ability to produce a premium 35% P<sub>2</sub>O<sub>5</sub> concentrate with ultra-low cadmium
- § Almost 1 tonne bulk composite created from 24 hole PQ diamond drilling program
- § Feasibility level testwork currently underway on bulk composite
- § Physical characterisation results to date for bulk composite show very weak and extremely low abrasion ore

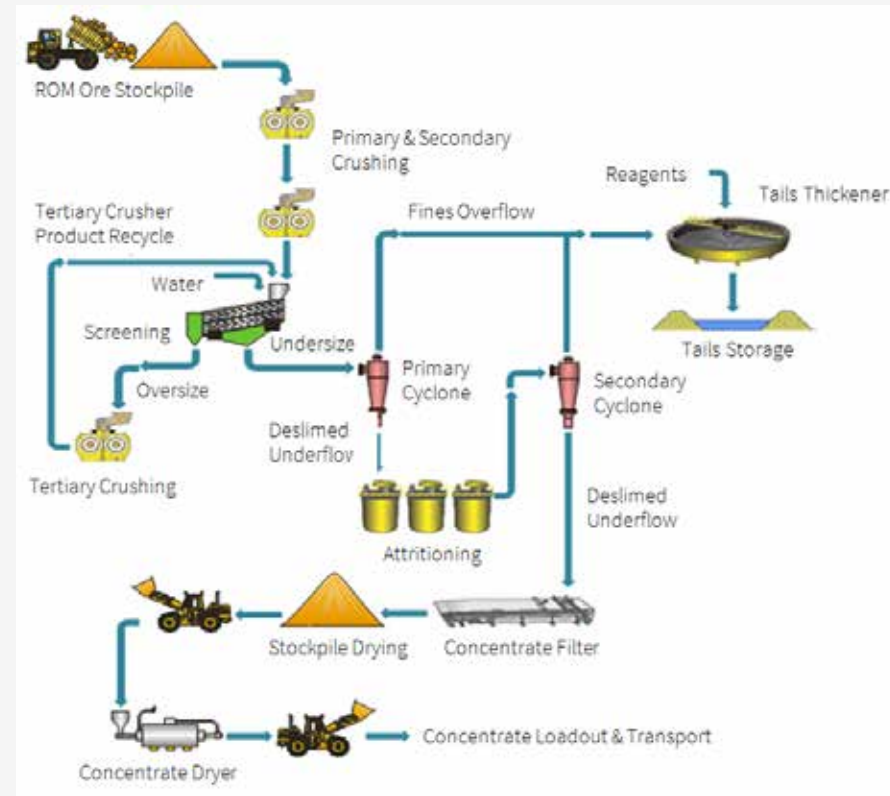
For full details of the recent testwork results refer announcement 21<sup>st</sup> September 2017;

<http://www.asx.com.au/asxpdf/20170921/pdf/43mj13lptzjty9.pdf>

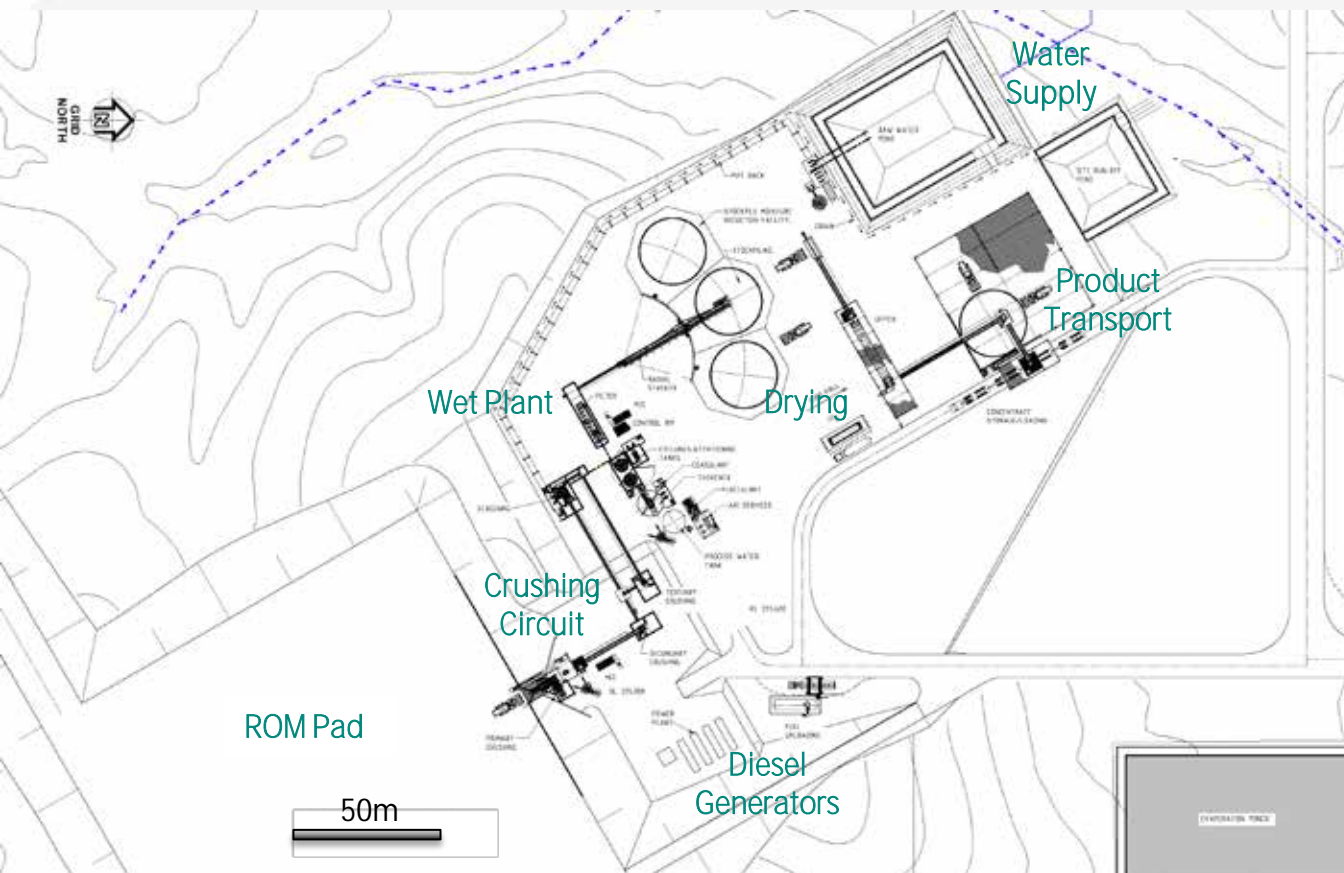
The results were reported under JORC 2012 and Centrex is not aware of any new information or data that materially affects the information contained within the release. All material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed.

# Ardmore Phosphate Beneficiation Circuit

- § Simple crush and deslime processing circuit to remove clays, and meet customer sizing specifications
- § Common circuit globally for phosphate rock operations
- § Low-risk design
- § Very weak nature of the ore means low crushing energy required, and open primary and secondary crusher circuits
- § Potential to reduce number of crushing stages with confirmatory bulk vendor testwork



# Process Plant Layout



- § Compact plant layout
- § Current design for fixed plant but potential to change components such as crushing to mobile or semi-mobile
- § Potential to consider used equipment closer to execution
- § Smaller footprint and less complex than an equivalent throughput gold plant
- § Quarry sized equipment





# Logistics



- § Product from Ardmore is planned to be trucked 90km by existing roads in triple or quad road trains to a siding at Duchess
- § The road routes are already gazetted for road trains and are state roads
- § After loading at Duchess, the product will be railed in either containers or bulk wagons to the Port of Townsville
- § Product will be stored in either bulk or containers at the port, and loaded by either existing rotainer or bulk shiploading facilities
- § Centrex has received indicative proposals for road, rail and port options from a number of 3<sup>rd</sup> parties
- § A new Centrex owned bulk storage facility at the port has also been designed and costed as an alternate to using 3<sup>rd</sup> party options



# Rail Siding

- § Centrex and QR Rail have been investigating an approximately 1km extension of an existing maintenance turnout at Duchess to form a new siding
- § The extension would utilise the existing corridor for the decommissioned Dajarra spur line
- § Utilising the existing turnout and decommissioned line would provide a very cost effective siding option
- § Environmental baseline monitoring at the proposed siding location has commenced by Centrex
- § 3<sup>rd</sup> party siding options raised to Centrex and still in consideration



# Water

- § Groundwater pump testing completed within Northern Zone of the Ardmore deposit
- § 4 day pump test at 3.5 litres per second
- § Negligible drawdown within water bore ore surrounding monitoring bores demonstrating large potential volume
- § Moderately saline water to be treated with reverse osmosis plant ("RO") for process plant
- § Surface water harvesting being assessed along with other potential fresh groundwater sources off the Mining Lease



# Current Activities

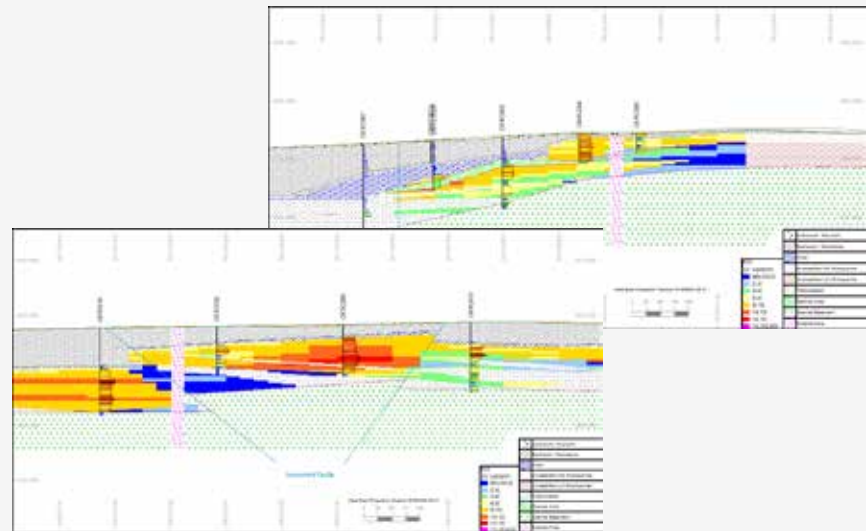
- § Bulk feasibility testwork underway to provide feasibility study inputs plus product samples to meet customer requests
- § Resource model update imminent
- § Mine design to be rescheduled base on new resource model
- § Scoping study cost estimates completed outside of updated mine designs
- § Scoping study to be finalised and released once mine design updates are completed
- § Feasibility study due for completion in mid-2018
- § Environmental baseline studies continuing
- § First shipments targeted for 2019



# Oxley Potassium Nitrate Project

# Oxley Potassium Deposit

- § 32km striking globally rare ultrapotassic lava flow
- § Dominantly composed of potassium feldspar
- § Outcropping and shallow dipping meaning simple open cut mining
- § Current 155 million tonne Inferred Resource at 8.3% K<sub>2</sub>O (6% K<sub>2</sub>O cut-off) over just 3km section of deposit
- § Inferred Resource includes 38 million tonne at 10% K<sub>2</sub>O (9% K<sub>2</sub>O cut-off)
- § Rock chips over entire 32km length shows consistent high potassium grades up to 14% K<sub>2</sub>O

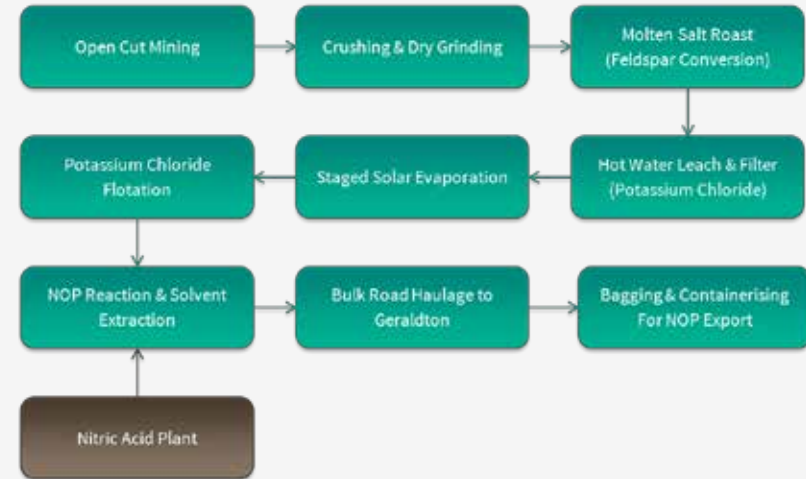


For full details of the Inferred Mineral Resource please see announcement 8<sup>th</sup> March 2016:  
<http://www.asx.com.au/asxpdf/20160308/pdf/435nrchjm48mjm.pdf>

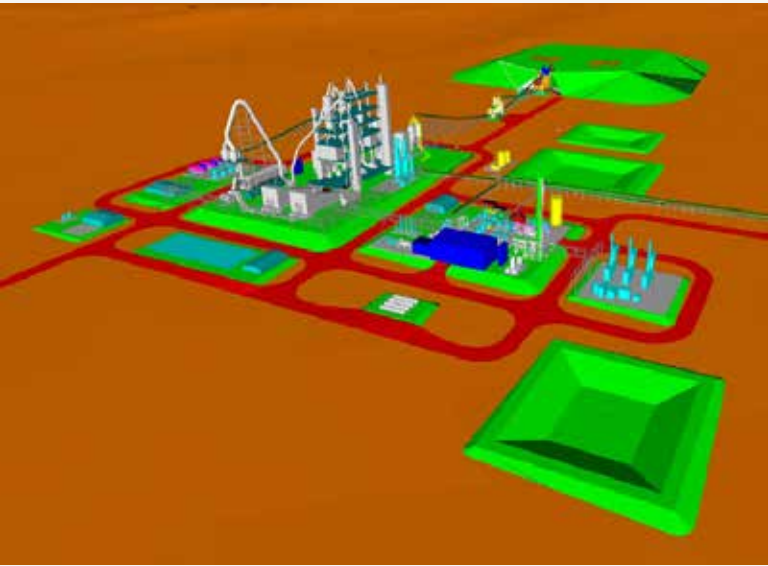
The results were reported under JORC 2012 and Centrex is not aware of any new information or data that materially affects the information contained within the release. All material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed.

# Scoping Study Basis

- § Start-up primary producer potassium nitrate ("NOP") operation
- § Ultrapotassic lava mined open cut in a series of shallow to selectively mine higher grade with small fleet 90 tonne trucks
- § Crush & dry grind ore to P80 150µm
- § Blend ore with salt and roast to convert to soluble potassium chloride ("MOP")
- § Hot water leach (order of magnitude higher potassium than natural brines) and filter
- § Solar evaporation to crystallise and float potassium chloride
- § Reacted with nitric acid produced on site to make NOP



# Oxley Engineering Design



- § Two alternate designs have been completed for the Oxley roasting circuit to date
- § The roasting circuit is the core of the Oxley project and a significant number of process flow and equipment options exist
- § The selection of process and equipment options is continuing to be updated as further process testwork results are returned, which provide more understanding of the circuit parameters
- § The next phase of the project is to undertake continuous lab scale trials to confirm the physical behaviour of the plant feed through melting, roasting, and cooling
- § Quotations to undertake this testwork are currently being sought



# Oxley Regional Infrastructure



- § A sealed main road runs straight past the project site connecting through to the Port of Geraldton
- § Start-up operation to haul bulk in road trains to 3<sup>rd</sup> party storage facilities where product will be bagged and containerised for export
- § Gas to be piped to site from connection into Western Australia gas network in the Perth Basin
- § Gas to be used for onsite power generation as well as furnace operations, and potentially ammonia production
- § Centrex holds adjacent tenement to Oxley covering a brine deposit for salt make-up and potentially process water (bonus KCl in brine)



# Current Activities

- § Quotations for continuous roast testwork currently being sought
- § Results of the testwork will finalise process flow and equipment selection options
- § UniSA continuing with testwork in parallel to assess ability to eliminate hydrometallurgical circuit and complete separation and purification steps while molten, given the water like nature of molten salt
- § Prefeasibility study schedule slowed while the focus of the Company is to get the smaller scale Ardmore Phosphate Rock Project into production
- § Oxley studies to accelerate again once Ardmore is revenue producing



# Goulburn Zinc Project

# Goulburn Zinc Project

- § Located in the East Lachlan Fold Belt with existing skarn and VHMS mineralisation intersected 10km north of the Woodlawn mine in the same host geology
- § Drill ready DHEM targets from 250m depth proximal to existing massive sulphides at Collector
- § 3 existing projects with significant zinc and copper drilling intercepts including the discovery hole DDH C2;

25.2m at 4.1% Zn, 0.8% Cu, 0.1% Pb from 86m depth (Inc. 6.3m @ 9.9% Zn, 0.7% Cu)

25.2m at 3.3% Zn, 0.2% Cu from 113m depth (Inc. 3.8m @ 6.7% Zn, 0.3% Cu, 0.1% Pb)

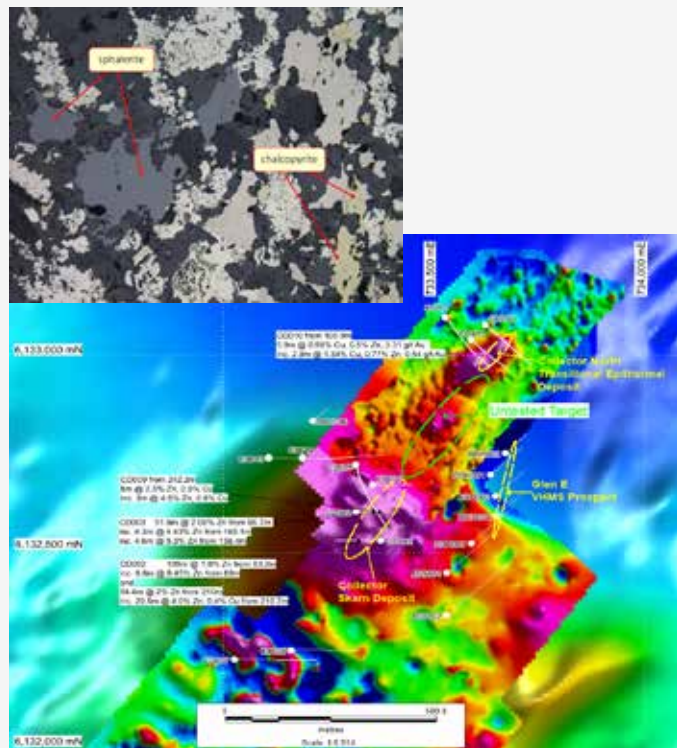
35.2m at 2.3% Zn, 0.3% Cu from 141m depth (Inc. 7.6m @ 4.6% Zn, 0.2% Cu, 0.1% Pb)

20.4m at 3.9% Zn, 0.4% Cu, 0.5% Pb from 211m depth

For full details of the DDH C2 drilling results see announcement 17<sup>th</sup> June 2014;

<http://www.asx.com.au/asxpdf/20140617/pdf/42q7znkpj7hkbv.pdf>

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