

19 June 2014

Company Presentation

Australian resources company, Cauldron Energy Limited (**ASX: CXU**) ("Cauldron" or "the Company") is pleased to attach a copy of the presentation which will be presented by Beijing Joseph Investment Co. Ltd / Joseph Investment International ("Joseph Investment") on behalf of the Company in a roadshow in Guangzhou this week. Joseph Investment is an existing significant shareholder in the Company and is a Chinese investor participating in the Company's recently announced A\$11 million funding via share placements (refer to ASX Announcement dated 10 June 2014 for more details).

End.

For further information, visit www.cauldronenergy.com.au or contact:

Simon Youds

Cauldron Energy Limited

Ph: (08) 9380 9555

David Tasker

Professional Public Relations

Ph: (08) 9388 0944

ABN 22 102 912 783

32 Harrogate Street, West
Leederville WA 6007

PO Box 1385, West
Leederville WA 6901

ASX code: CXU

178,562,092 shares
11,800,000 unlisted options

Board of Directors

Tony Sage
Executive Chairman

Brett Smith
Executive Director

Qiu Derong
Non-executive Director

Amy Wang
Non-executive Director

Catherine Grant
Company Secretary



Guangzhou Joseph Roadshow

June, 2014



Disclosure Statements

Forward Looking Statements

This presentation may include forward-looking statements with respect to achieving corporate objectives, developing additional project opportunities, the Company's analysis of opportunities and the development of these and certain other matters. These statements involve risks and uncertainties which could cause actual results to differ from those contained herein. Given these uncertainties, reliance should not be placed on forward-looking statements.

Analytical Method

All holes were gamma logged by Borehole Wireline P/L with an Geovista 38mm total count gamma tool. The gamma tool was calibrated in Adelaide at the Department of Water, Land and Biodiversity Conservation in calibration pits constructed under the supervision of CSIRO. The gamma tool measures the total gamma ray flux in the drill hole. Readings are taken over 1 centimetre intervals and the reading and depth recorded on a portable computer. The gamma ray readings are converted to equivalent U_3O_8 readings by using the calibration factors derived in the Adelaide calibration pits. These factors also take into account differences in hole size and water content. The grade and calibration was calculated by Duncan Cogswell BSc(hon) MSc MAusIMM from Borehole Wireline based in South Australia. Deconvolved uranium grade values and grade thickness intervals were calculated by David Wilson BSc MSc MAusIMM from 3D Exploration Ltd based in Western Australia.

The gamma radiation used to calculate the equivalent U_3O_8 is predominately from the daughter products in the uranium decay chain. When a deposit is in equilibrium, the measurement of the gamma radiation from the daughter products is representative of the uranium present. It takes approximately 2.4M years for the uranium decay series to reach equilibrium. Thus, it is possible that these daughter products, such as radium, may have moved away from the uranium or not yet have achieved equilibrium if the deposit is younger than 2.4M years. In these cases the measured gamma radiation will over or under estimate the amount of uranium present. Sandstone hosted roll front mineralisation may not be in equilibrium due to one of the above factors.

Competent Person Statement

The information in this announcement to which this statement is attached that relates to Cauldron Energy Limited's exploration results is based on information compiled by Mr Mark Couzens who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Couzens is a full-time employee at Cauldron Energy Limited in the role of Exploration Manager and has sufficient experience relevant to the styles of mineralisation and types of deposits under consideration and to the activities 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 Couzens consents to the inclusion in the announcement of the matters based on their information in the form and context in which it appears.

The information in this resource memorandum that relates to mineral resources is based on information evaluated by Mr Craig Harvey who is a Member of the Geological Society of Southern Africa. Mr Harvey is full time employee of Ravensgate, an independent consultancy group specialising in mineral resource estimation, evaluation and exploration. Mr Harvey has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Report of Exploration Results, Mineral Resources and Ore Reserves'. Mr Harvey consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The calculation of the uranium grades used in the resource estimate are based on information compiled by Mr David Wilson BSc MSc MAusIMM from 3D Exploration Ltd based in Western Australia. These uranium grades form the basis of the resource estimate and have been calculated from the gamma results and from the disequilibrium testing. Mr Wilson is a consultant to Cauldron and has sufficient experience relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Wilson consents to the inclusion in the announcement of the matters based on their information in the form and context in which it appears.

Corporate Overview

UNDERVALUED COMPANY | PROJECTS POISED FOR GROWTH

Capital Structure*

➤ Ordinary shares	178.56M
➤ Unlisted options	11.8M
➤ Market cap. (AUD\$0.31)	A\$55.18M
➤ Cash @ 31/03/14**	A\$1.18M
➤ Convertible Note proceeds	\$1M

• Figures as at 31/03/2014

** Inclusive of A\$1M convertible loan facility

Board & Management

➤ Tony Sage	Chairman
➤ Brett Smith	Exec. Director
➤ Qiu Derong	Non-Exec. Director
➤ Amy Wang	Non-Exec Director
➤ Simon Youds	Head of Operations
➤ Mark Couzens	Head of Exploration
➤ Catherine Grant	CFO & Company Secretary

Major Shareholders*

➤ Cape Lambert Resources Ltd	23.11%
➤ Mr D.Qiu	16.20%
➤ Joseph Investments Int. Ltd	14.21%

* As at 18/06//2014

ASSET RICH COMPANY
MAJOR STOCK PRICE IMPROVEMENT POTENTIAL

CXU Key Uranium Assets

TOP-SHELF URANIUM AND BASE METAL ASSETS

Australia

- **Yanrey Project, WA (U)**
 - **Bennet Well:** Potential growing ISR opportunity
 - Leach Testing paves path to ISR (96%)
- **Marree Project, SA (Pb-Ag-Cu-Au)**
 - Large target area with high grade mineralisation
 - Geophysical surveys have generated multiple drill targets

Argentina

- **Rio Colorado (Cu, Ag)**
 - Potential world-class base metals project
 - **Uranium by-product in 16km strike can supply 100% of Argentina's domestic nuclear energy demands**



Core from Yanrey Project's Bennet Well South: trays show the sedimentary contrasts and are coincident with the gamma spikes

**Undervalued company with
Globally significant resource assets**

Recent CXU News

CXU Secures AU\$11 Million funding from China Jun 2014

Funding and new director secured from supportive shareholders and new Chinese investors

CXU congratulates RNI and FEL on discovery May 2014

Cauldron major shareholder in FEL, a 20% free carry on RNI's new discovery

Takeover Offer for Energia Minerals (EMX) Closes May 2014

Unsuccessful attempt to amalgamate the uranium resources in WA's Yanrey region

Bennet Well Surpasses Expectations Jan. 2014

Outstanding uranium extraction at Bennet Well indicates high recovery at low operating cost

Further testwork confirms Bennet Well's recovery potential Mar 2014

96% average extraction establishes Bennet Well's ISR credentials

Resource Improvement forecast at Bennet Well Mar 2014

Core analysis indicates improved grade across whole Bennet Well resource

Bennet Well Surpasses Expectations Jan. 2014

Outstanding uranium extraction at Bennet Well indicates high recovery at low operating cost

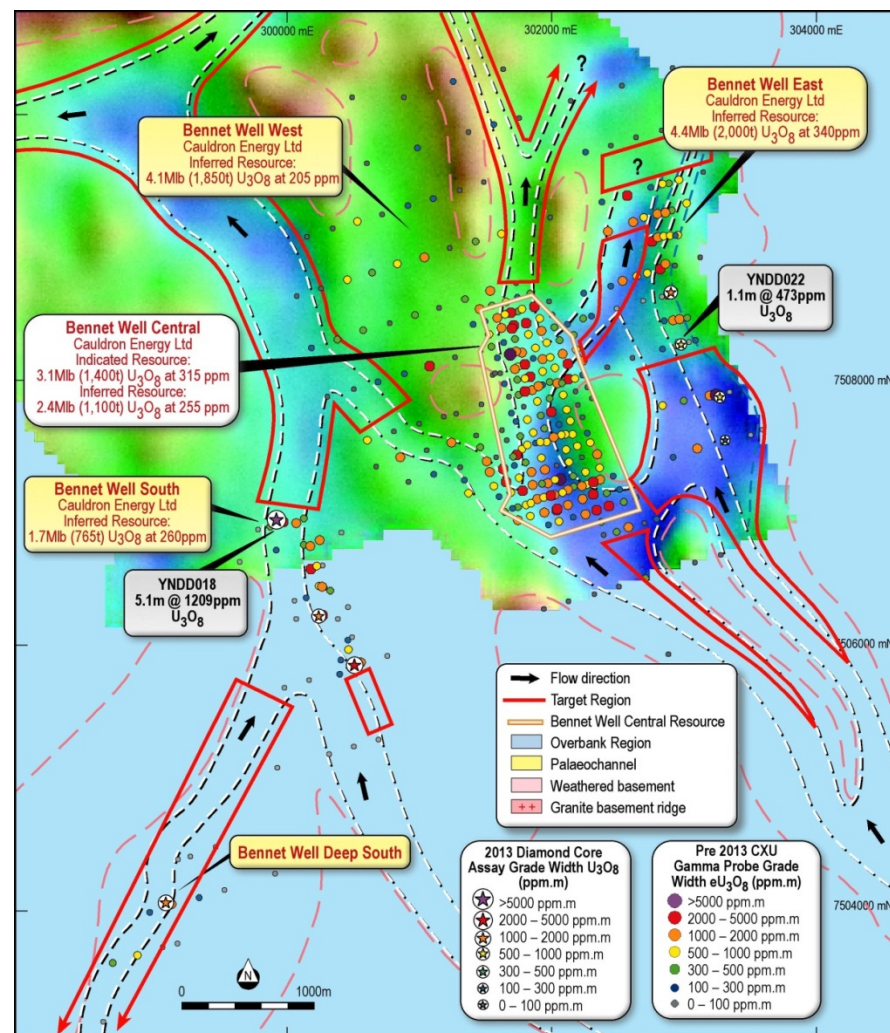
CXU funded and Bennet Well on ISR development path

Bennet Well, Yanrey Region

ISR SUITABILITY VALIDATED BY LEACH TESTS

- **Resource¹ upgrade required**
 - Core testing indicates significant Bennet Well uranium grade increase 122%-147%
 - Change to JORC 2012
 - **Drilling from Sept 2013 to be included**
- Leach tests have put Bennet Well on path towards potential production
 - **Bottle Roll Test simulating ISR conditions give 94%-98% extraction**
- **Outstanding growth potential**
- Identification of uranium minerals provides Redox-front road map to aid locating additional uranium Resources locally and regionally

¹ Bennet Well JORC 2004 Resource (E08/1493) of 15.7 million lb U₃O₈ at 267ppm U₃O₈ inclusive Indicated Resource 3.1 Mlb (1,400t) at 315ppm U₃O₈ and Inferred resource: 12.7 Mlbs (5,700t) U₃O₈ @ 255ppm



The Target Prospects show the growth potential for the Resource at Bennet Well

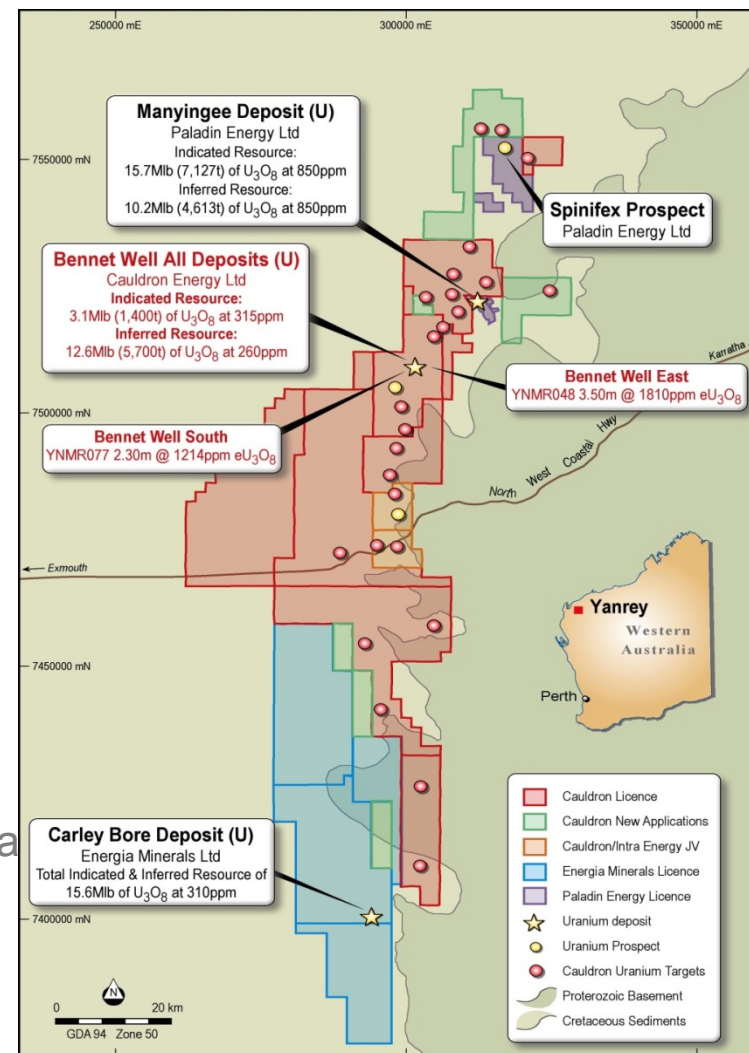
**BENNET WELL ON THE WAY TOWARDS
ISR PROJECT DEVELOPMENT**

Yanrey Regional Potential

WIDESPREAD URANIUM ALONG PALAEO COASTLINE SIMILAR TO BENNET WELL

- **Exploration Target⁽¹⁾ 30-115 Mlb @ 250-900 ppm eU₃O₈ to be reviewed following resource upgrade**
- Studies show grades above 250ppm eU₃O₈ (over 1m) are potentially economic for a ISR mining operation
- **11 major channel systems similar to Bennet Well identified by CXU**, most with evidence of uranium mineralisation
- **Regional uranium competition:** Paladin Energy Manyingee 25.9Mlb deposit; Energia Minerals Carley Bore 15.6 Mlb deposit
- Mineralogy from Bennet Well shows different uranium minerals from different deposition environments - gives a road map for the redox deposition

(1) Exploration Target: Under clause 18 of the JORC code, the exploration targets (excluding the portion already classified into JORC Inferred Resource outlined in this report are conceptual in nature as there has been insufficient exploration (namely drilling) to define a mineral resource and it is uncertain if further exploration will result in the determination of any additional mineral resource

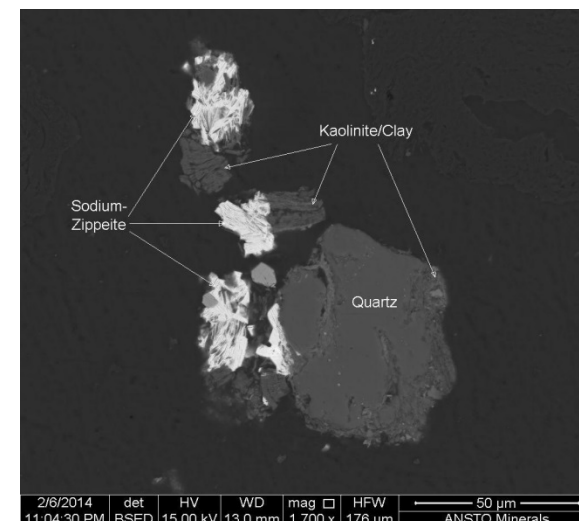


FUNDING IS SOLE IMPEDIMENT TO EXPANDING YANREY RESOURCE INTO EMERGING URANIUM CAMP

Uranium Extraction Results

BOTTLE ROLL TESTS CONFIRM HIGH URANIUM EXTRACTION

- **High levels of Uranium extraction achieved and Low Cost extraction anticipated**
 - Bottle roll tests in acidic media without oxidant
 - Low acid consumption demonstrated
 - Uranium appears to exist in soluble +6 oxidation state
- **Low levels of impurities unlikely to impact leach solution processing**
- Mineralogy showed variety of uranium minerals present including Sodium Zippeite

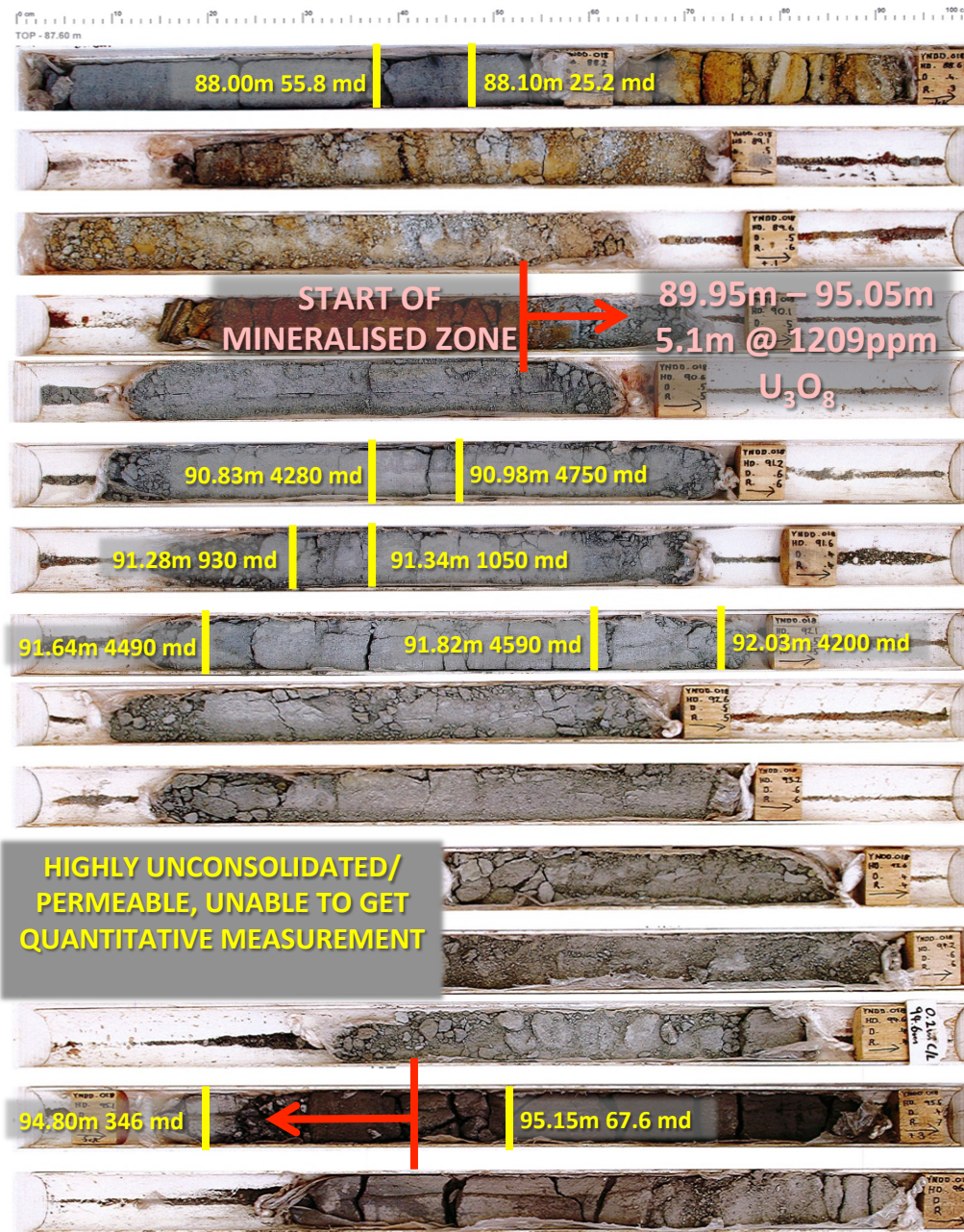


SEM image from Hole YNDD018 at Bennet Well showing lighter uranium mineral and depicting accessible location of Uranium

Leach Results

Leach No.	Composite	pH	ORP (mV, Ag/ AgCl)	Temp (C)	Estimated Acid Consumption (kg/t)	Feed U ₃ O ₈ (ppm)	Residue U ₃ O ₈ (ppm)	U Extraction (%)
CAULD 7	YNDD018	2.0	450	30	TBA	1,186	17	98.6
CAULD 8		1.8	450	21	0.4		47	96.0
CAULD 9	YNDD022	1.8	450	21	1.2	500	23	95.4

**HIGH LEVEL OF URANIUM EXTRACTION ACHIEVED
LOW COST ANTICIPATED**

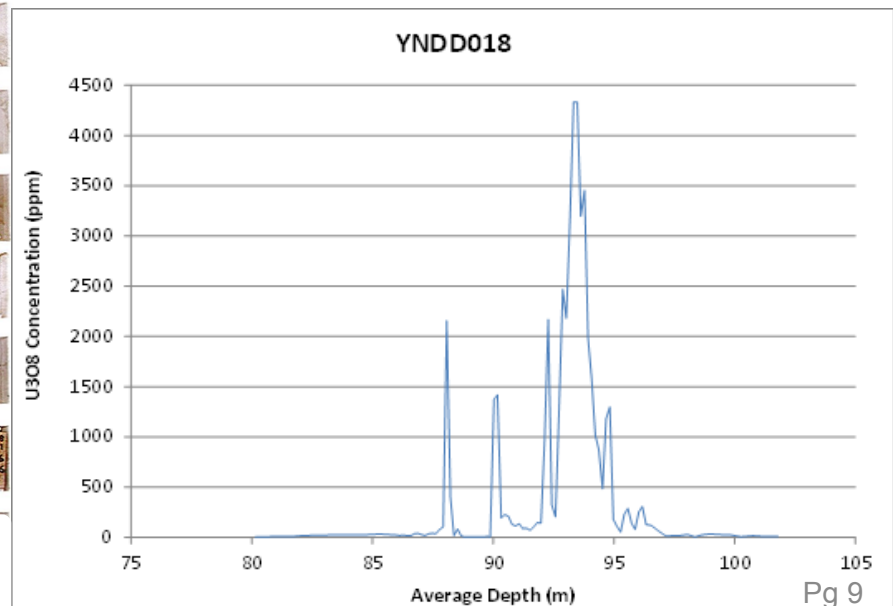


Core from YNDD018 from 87.6m to 96.7m: uranium grade of 5.1m @ 1209 ppm U_3O_8

Permeability vs Assays vs Leach Results – YNDD018

URANIUM DISTRIBUTION WITH DEPTH HOLE YNDD018

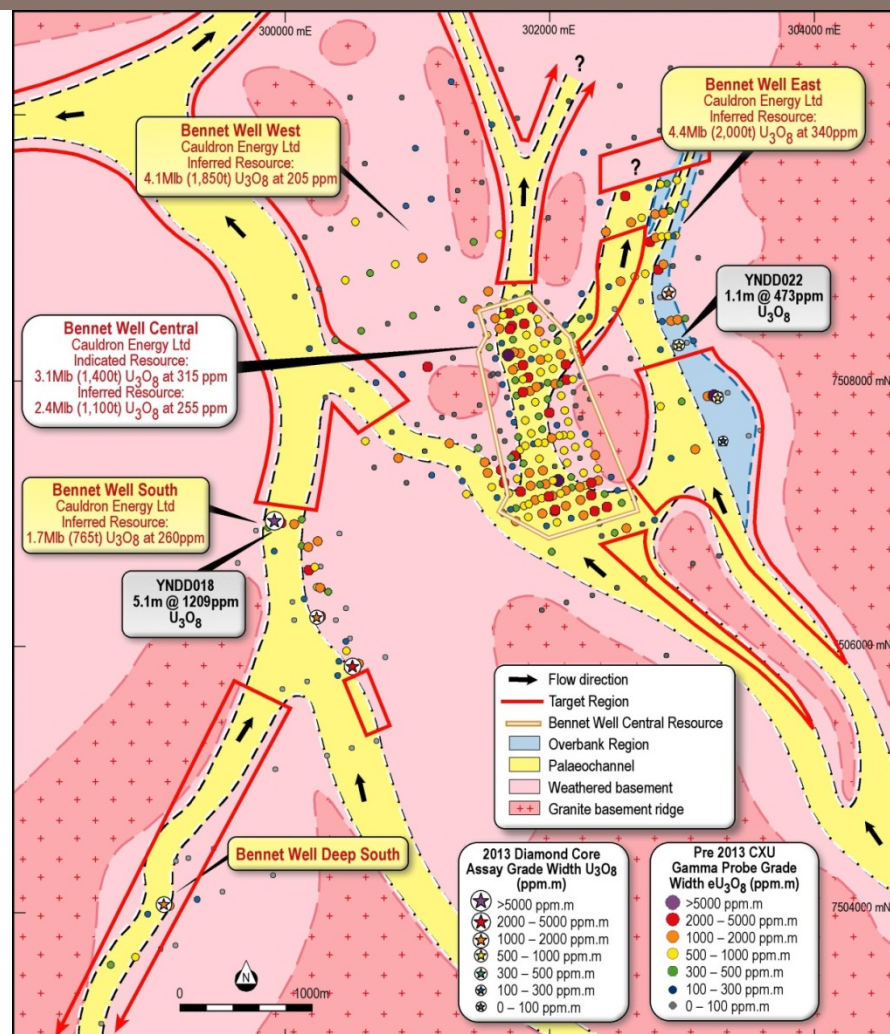
- Image: mineralised zone in hole YNDD018 (red) and permeability data (yellow)
 - Highly permeable nature evident in the sands hosting uranium at Bennet Well South Prospect
- **Data supports leach testwork results:**
 - 98.6% U extraction acid leach
 - 95.3% U extraction alkaline leach



Yanrey Uranium Suited to ISR

MINERALOGY PROVIDES REDOX ROADMAP

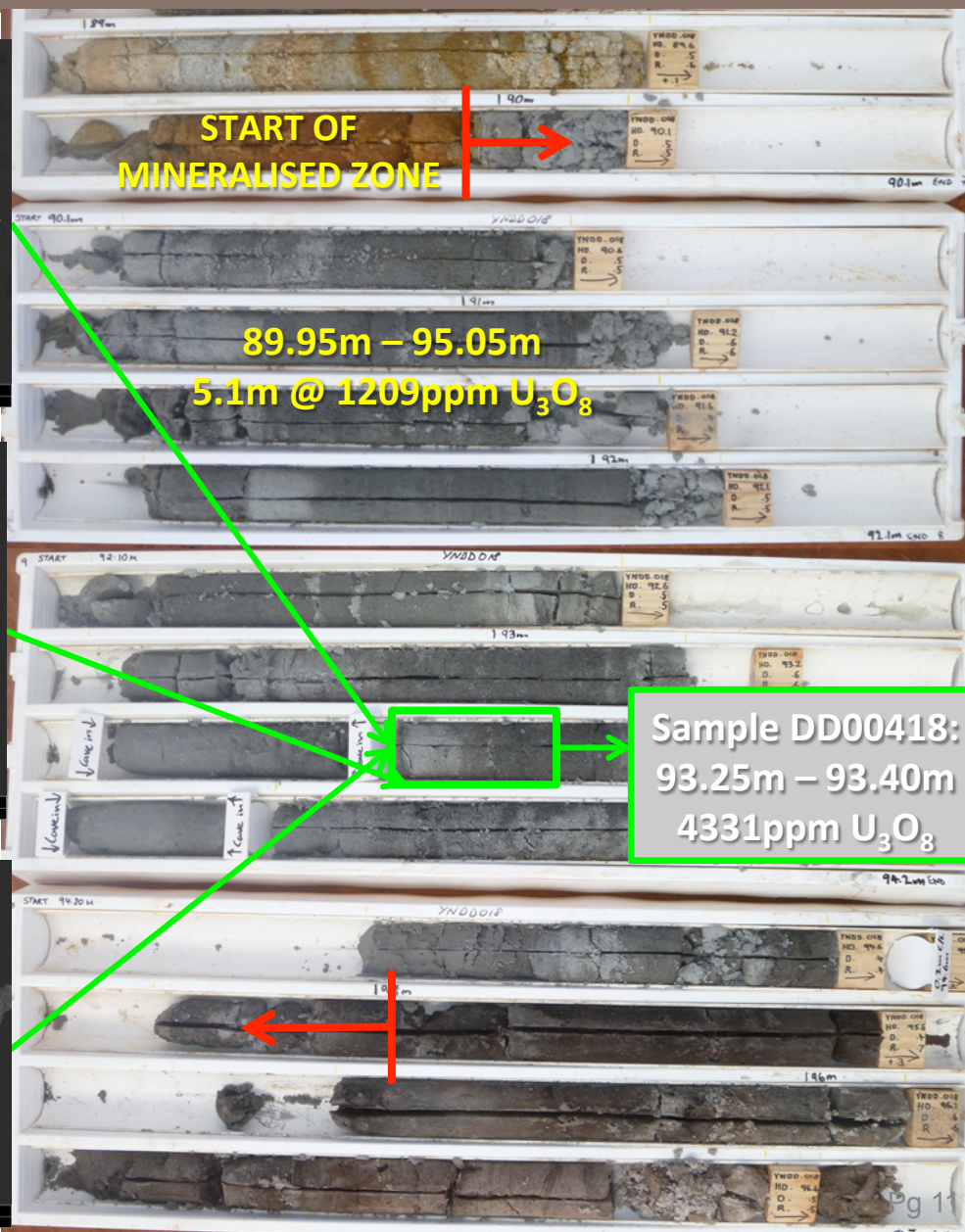
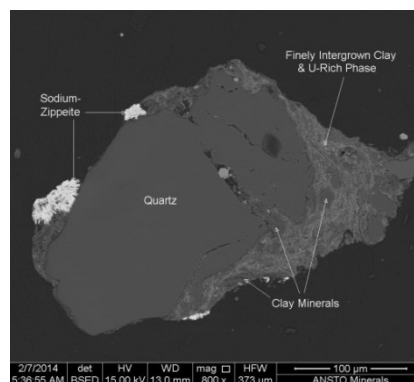
- QEMSCAN and manual SEM testing strongly indicate several provenance areas for uranium mineralisation, **all soluble = amenable to ISR**
- Uranium mineralisation forms in reducing environments
 - Reducing agents (zones of fossilised wood, abundant pyrites) found at Bennet Well
 - **COFFINITE** - primary uranium silicate mineral not yet exposed to oxidising agents or environments.
 - **URANIFEROUS ZIRCONS** - typically detrital in origin, having shed off a granitic source proximal to source
 - **SODIUM-ZIPPEITE** - secondary uranium-bearing mineral – ie re-deposited in paleo river sands



Current geological interpretation of Bennet Well Resource Area

**MINERALS IDENTIFIED PROVIDE TOOLS FOR
REGIONAL EXPLORATION**

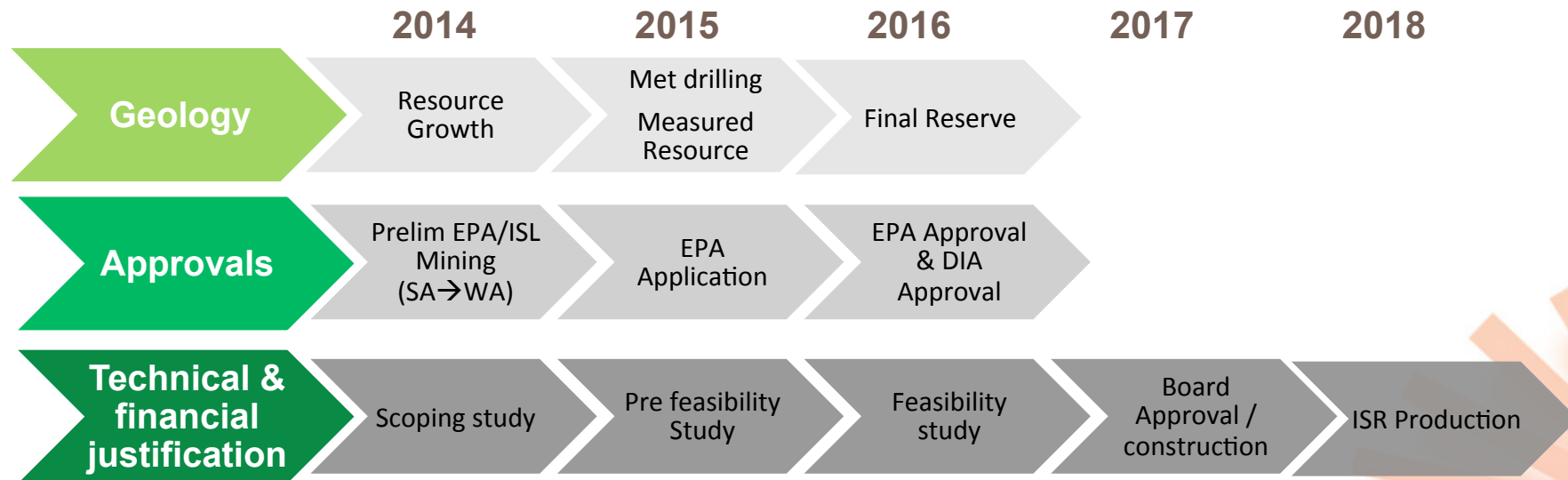
- **Dominant uranium-containing phase**
with a chemical composition corresponding to the mineral **SODIUM-ZIPPEITE**
- **High recovery rates** suggest this uranium species is easily soluble and hence highly recoverable



Yanrey 5yr Production Plan

LOW CAPEX ISR PROJECTS PROVIDE GROWTH PLATFORM

- Sandstone roll-front ISR operations production price : \$8/lb - \$16/lb globally
- **Revenue at \$50/lb is 4-5 times C1 cash cost**
- **Realistic production timeframe** following first WA uranium mine to receive final approvals
- Core data shows majority of uranium located in permeable sand zones amenable to ISR
- **ISR style mining: quick to establish, cheap to run**
 - **Fast track production to fill market demand shortfall**



**ISR: HIGH MARGIN PRODUCTION
AT LOW COMMODITY PRICE**

Potential World Class Deposits

MARREE, SOUTH AUSTRALIA

- Large poly-metallic alteration area, numerous historical mining sites
- Geophysical anomalies undercover and adjacent to old mine
- **Potential for large poly-metallic system (multiple deposits)**
- Currently 2 main deep drill targets

2014 ACTIONS

- **Structural geophysical survey** required over whole area to achieve improved definition
- Resolve Traditional Owners dispute (currently being resolved)
- **Drill priority targets** subject to funding

RIO COLORADO, ARGENTINA

- **16km outcrop, 11m wide, open at depth**
 - multiple samples taken average grades >150g/t Ag, 2-3% Cu and 300ppm Uranium
 - Access restrictions starting to ease
- Early metallurgical work completed
- **Nuclear power identified by government as key for Argentina's energy mix**

2014 ACTIONS

- **Map region** to establish local presence & engage with local community
- Subject to access, **conduct reconnaissance drill program to establish consistency at depth potential for inferred resource**

Marree: Exciting potential for large deep mineralisation
Rio Colorado: potential for high value subject to access

World Uranium News

GLOBAL PROBLEM: GROWING DEMAND AND INSUFFICIENT SUPPLY

China on Track to Beat 2020 Nuclear Power Targets **Mar. 2014**

China on track to meet nuclear power targets with new plant construction expected to resume shortly

Japan to Restart 48 Nuclear Reactors **Feb. 2014**

After 2yrs offline, Japanese govt. has announced its intention to restart the country's 48 nuclear reactors

Pakistan to Build 32 Nuclear Plants to Generate 40,000 MW Electricity **Feb. 2014**

Pakistan in process of selecting 8 sites for 32 nuclear plants to combat domestic energy crisis

US Uranium Concentration Production Rises, Russian Warhead Fuel Runs Out **Feb. 2014**

US 2013 uranium concentrate production up 21% following end of Megatons to Megawatts program

India, Japan Seek Early Deal on Nuclear Cooperation **Jan. 2014**

India and Japan agree to fast-track negotiations for possible deal on nuclear energy

Pakistan , China Discuss 3-Plant Nuclear Energy Deal **Jan. 2014**

Pakistan and China in talks over a deal where China sells Pakistan 3 large nuclear plants for ~\$13B

Argentina Competitive Bidding Process for 4 Nuclear Power Plants **Jun. 2013**

Govt. will tender before end of 2013 to build four new nuclear plants, worth US\$16M

1st Uranium Project to be Approved in WA **Apr. 2013**

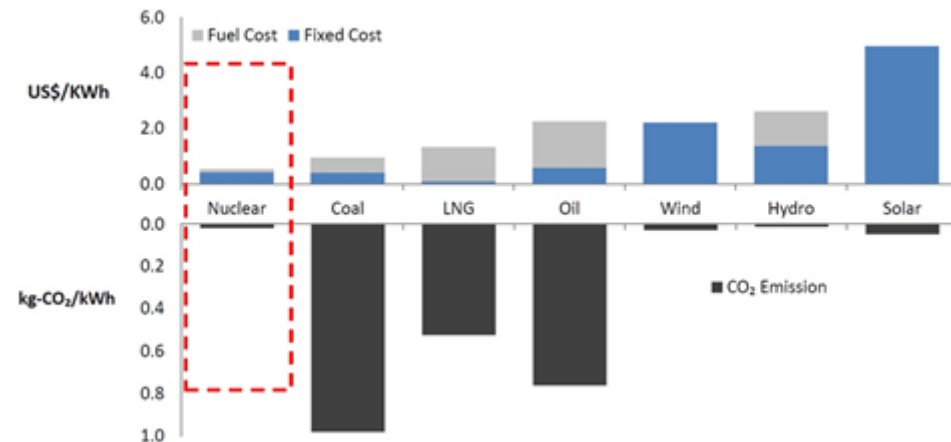
Wiluna Uranium Project (Toro Energy), capable of production from 2015, receives final Federal approval

World Nuclear Energy Market

EMERGING ECONOMIES BANKING ON NUCLEAR POWER TO MEET ELECTRICITY DEMANDS

- IAEA forecasts that if policies remain unchanged, world energy demand is projected to increase by over 50% by 2030*
- Nuclear power is the lowest social and economic cost power option for developing nations
- China's electricity demands are growing at an average annual rate of 10%
 - Will surpass US as largest global uranium consumer within the next 10-15 years

Generation Costs & CO₂ Emission Volumes



**GLOBAL DEMAND FOR URANIUM & NUCLEAR ENERGY
HIGHER NOW THAN PRE-FUKUSHIMA 2011**

Graph source: METI, WNA
*www.naturaledgeproject.net,
The Great Sustainability Debate
Pg 15

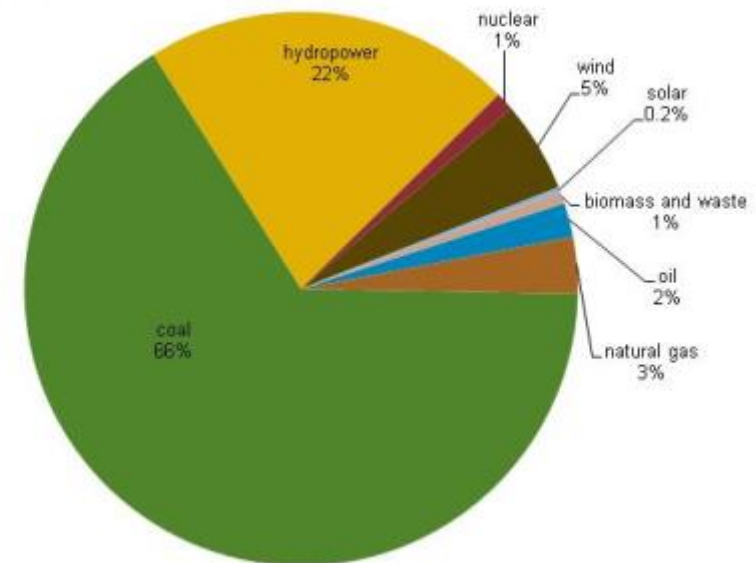
China's Energy Market

REFORMING ENERGY OUTPUT AND CONSUMPTION PATTERS

Electricity demands growing at average annual rate of 10%

- In 2013, installed power capacity rose by 94M kw, including 2.21M kw from nuclear
- 6 new nuclear power facilities approved since end of 2012
 - Construction may commence on new facilities during 2014
 - Astonishing progress in nuclear technology in recent years
- Electricity demands growing at average annual rate of 10%

China's installed electricity capacity by fuel, end 2012
installed capacity: 1,145 GW



China National Nuclear Corp. raising \$3B for expansion plans*

- Back on track with projects halted following 2011 Fukushima disaster
- China could build 20 nuclear plants in the next 6 years

Sources: FACTS Global Energy, IHS Cera, Chinese Renewable Energy Industries Association.

CHINA TO BEAT 2020 NUCLEAR TARGETS

Graph source: oilprice.com
China Moves Forward with Nuclear Reactors.

*Reuters: China to beat 2020 Nuclear targets (Mar 2014)

Uranium Market Analysis

UNDERSUPPLY TO FUEL URANIUM RESTART

+50% price growth by 2018*

- 2018 spot price to reach US\$72/lb U_3O_8

Higher uranium prices essential

- Non ISR incentive price +\$70/lb U_3O_8
- Stagnated demand and low prices unsustainable for uranium industry
 - **Paladin & Cameco announce significant output scale-backs**

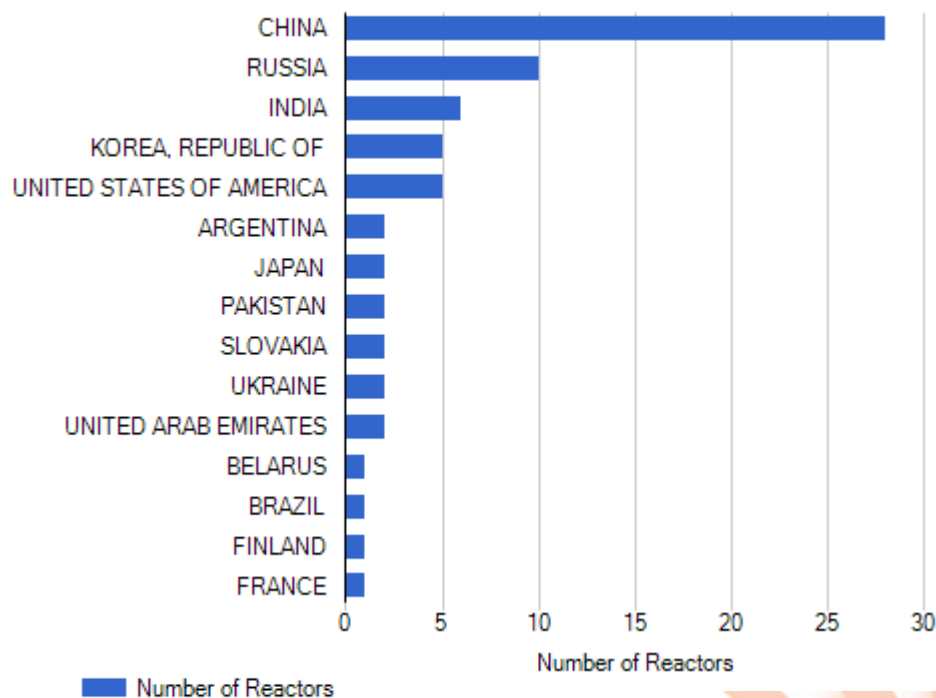
2030 uranium demand estimated to be 100kt

- ~48% increase on current demand*
- ~80kt to come from new mines and mine extensions (60% current global supply)

Reactor growth is main price trigger

- **Japan:** govt. has announced intention to restart 48 nuclear reactors
- **Pakistan:** location scouting for 32 new nuclear power plants to produce 40,000 MW energy

Total Reactors Under Construction Globally: 72 (~20% existing)



**CHRONIC URANIUM SHORTAGE WITHOUT NEW FLOW
IN NEXT 2-3YRS**

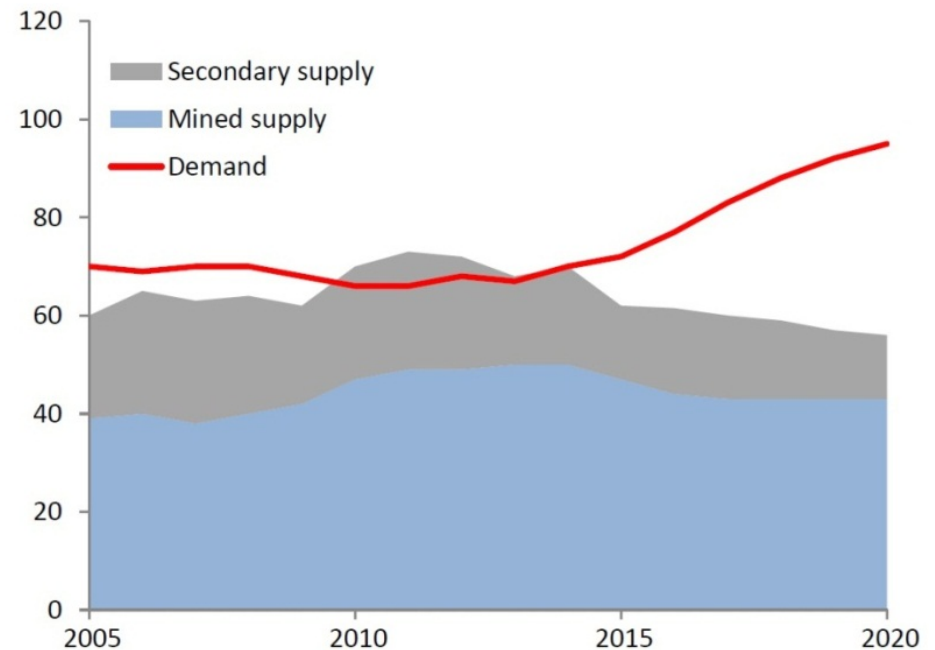
*Morgan Stanley: Metal Sparks, Feb 2014 **Bell Potter: Uranium Powering Up, Feb 2013
Graph source: iaea.org "Under construction reactors" Pg 17

Demand Increase/Supply Decrease

COMMODITY PRICE IS BIGGEST IMPEDIMENT TO SUPPLY GROWTH

- Current uranium spot price \$34.85/lb
 - production trigger price \$85/lb
- Secondary supply reducing
 - Less high enriched warheads
 - Tails retreatment not cost effective at current prices
- End users unconcerned on supply
 - Large inventories at low prices
 - Supply small cost component
 - New supply time lag not understood
 - New demand growth recovery since 2011

Demand & Supply Dynamics (Kt U)



LONG-TERM SUPPLY & DEMAND APPEARING TO INDICATE EXTENDED PERIOD OF UNDER SUPPLY

Graph source: Japanese Ministry of Economy, Trade & Industry; WNA; Bloomberg: Market Update
Pg 18

Socially Responsible Power

NUCLEAR ENERGY ESSENTIAL MAJOR POWER GENERATION SOURCE

By 2020, China & India will need additional >40Mlb uranium:
equivalent to ~40% of 2011 global mine supply

- **Low emission power: nuclear is the only carbon-free baseload source of electricity**
 - Modern plants will combat smog issues experienced by major cities inc. Beijing and Hong Kong
 - Renewable energies (wind, solar) as a baseload option are realistically 50-100 years away

ISR: Most Cost Effective + Safe Uranium Mining Method

- Land reverts easily to its previous use after decommissioning
- Water quality quickly reverts to original condition once leaching is discontinued
- **Only ISR uranium extraction method is economic at current prices**

ISR: LOW COST, LOW ENVIRONMENTAL IMPACT



Power growth potential in Asia evident
from Japan China India comparison



Image source:
www.sciencephoto.com

Pg 19

NUCLEAR POWER ESSENTIAL TO THE GLOBAL RESPONSE

- Climate change requires +60% reduction in greenhouse gas emissions
 - China, Japan, India, Pakistan, Argentina embrace nuclear power as essential to new domestic and global energy mix

Conservative estimates of the positive impacts of existing nuclear plants*

- ~64 gigatons of CO₂ saved: 1.8 million premature deaths prevented by reducing toxic pollution from coal fired power plants

Negative Impacts of the Anti-Nuclear Movement

- Had the nuclear rollout continued in 1970s, 18 million premature fossil fuel related deaths and ~640 gigatons of CO₂ would have been saved*
- Consequence of ~640 gigatons CO₂ is elevated risk of atmospheric temperature increase
- Responsibility for rise in gas-fracking and exploitation of tar sands and other oil technologies



WITHOUT NUCLEAR ENERGY - INCREASED HEALTH RISKS FROM SMOG, RISING GLOBAL TEMPERATURE

* www.businessspectator.com
"Jim Green's distractions and
James Hansen's analysis"
Image Source:
www.serc.carleton.edu

Investment Highlights

PREDICTED UPSURGE IN URANIUM PRICE **POTENTIAL FOR SIGNIFICANT RETURNS ON INVESTMENT**

- Outstanding cash margin at low commodity prices
- Commodity prices expected to more than double to meet world demand
- **Undervaluation of quality uranium miners creates credible buying opportunity**
- New generation of nuclear energy essential to energy mix over next 30 years
- ISR C1 cost multiplies at low market price
- ISR low cost production and low environmental impact
- **Yanrey – the new uranium camp?**
 - Exploration target size now indicates world class uranium region
 - High grades & shallow horizon indicate lowest ISR production cost
- **Argentina – huge potential not reflected in share price**
- Supportive shareholders and revitalised Board & Management Team

**CXU: ASSET RICH
WITH PROJECTS POISED FOR GROWTH**



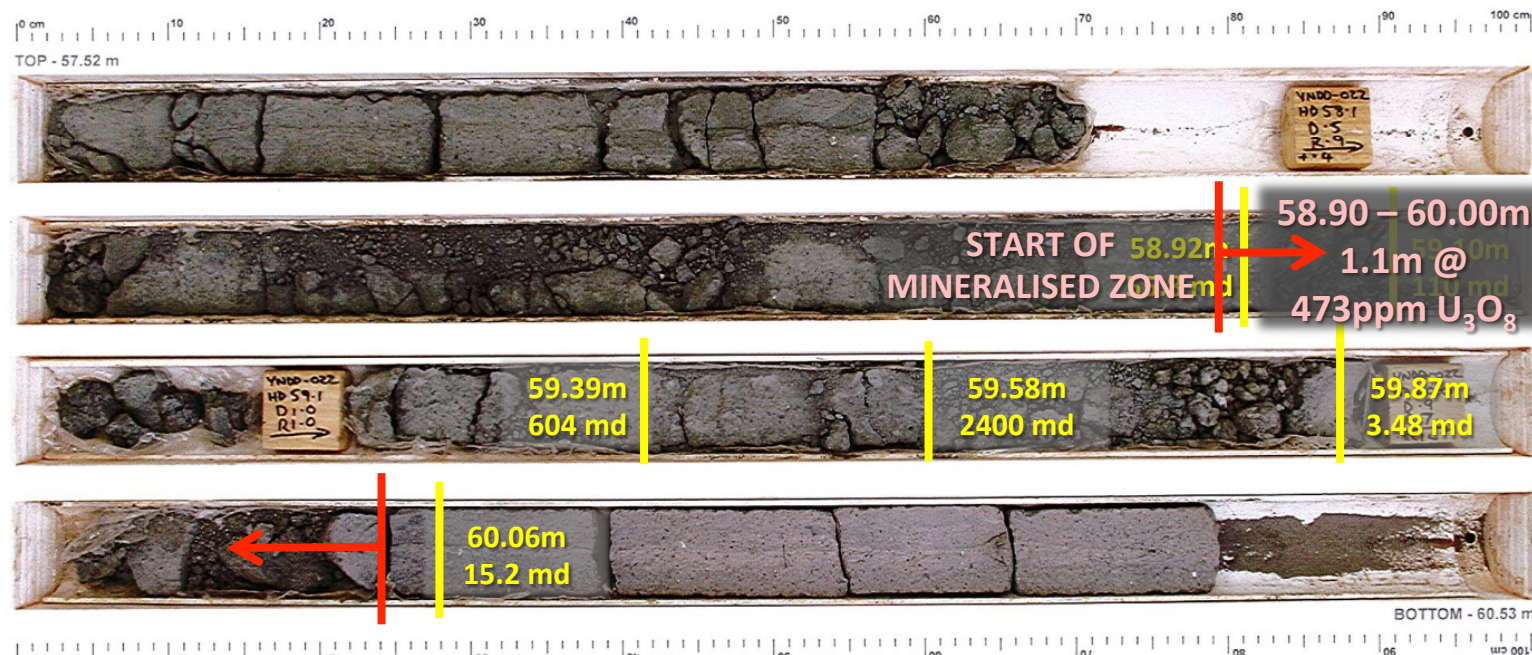
CONTACT US

Simon Youds
Cauldron Energy Limited
32 Harrogate Street
West Leederville WA 6007
Tel: +61 (8) 6181 9796
E: info@cauldronenergy.com.au
www.cauldronenergy.com.au

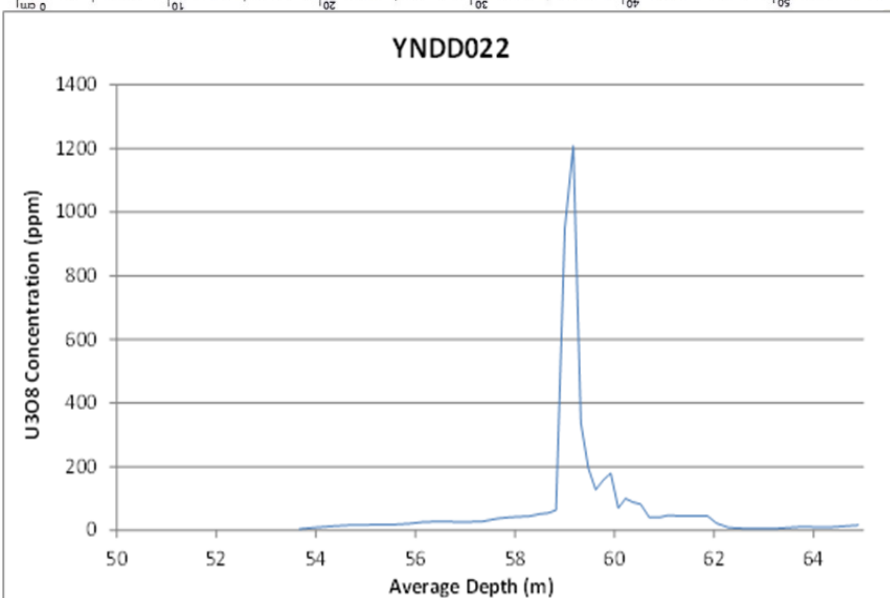
David Tasker/ Colin Jacoby
Professional Public Relations
Tel: +61 (8) 9388 0944
M: +61 (0) 433 112 936
E: david.tasker@ppr.com.au

APPENDIX

PERMEABILITY VS ASSAYS VS LEACH RESULTS – YNDD022



The image shown on the left illustrates the mineralised zone in hole YNDD022 (red) and permeability data (yellow).



Permeability data returned from the mineralised intervals in YNDD022 correspond to the zones of increased clay concentration, HOWEVER this has clearly had NEGLIGIBLE impact on the extraction rates of the uranium, as shown by the results of the leach testwork by ANSTO: 98.4% U extraction by acid reagent and 93.5% U extraction by alkaline leach liquor.

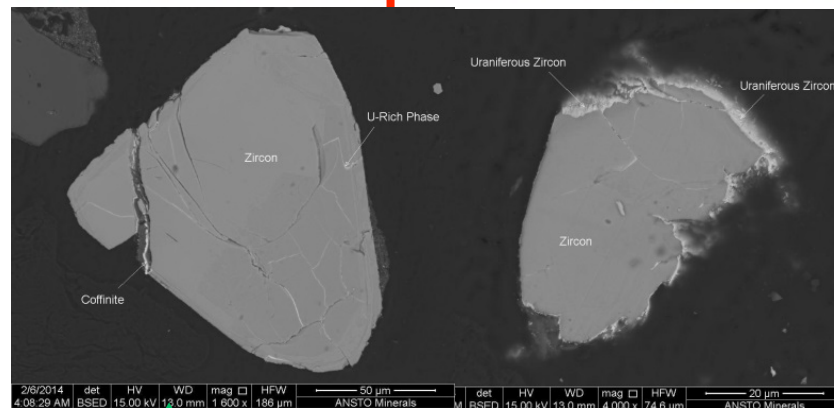
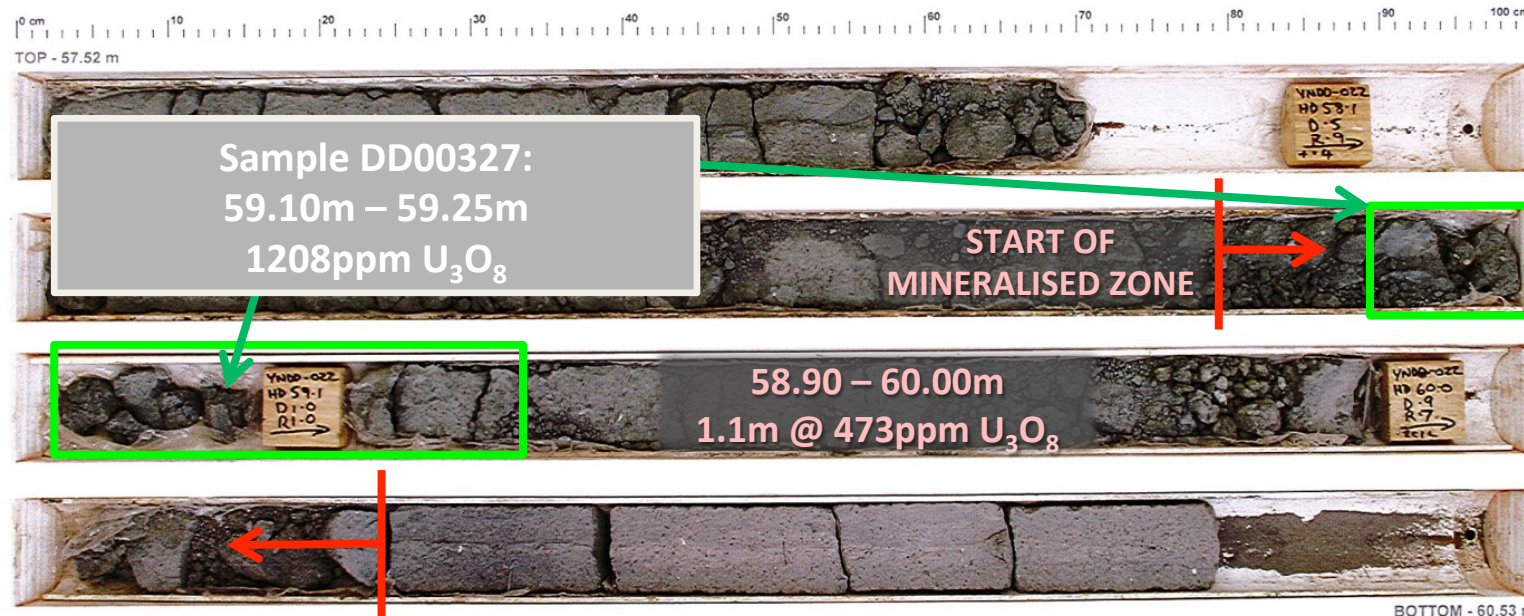
Uranium Distribution with Depth, Hole YNDD022

QEMSCAN/SEM RESULTS: YNDD022 (BENNET WELL EAST)

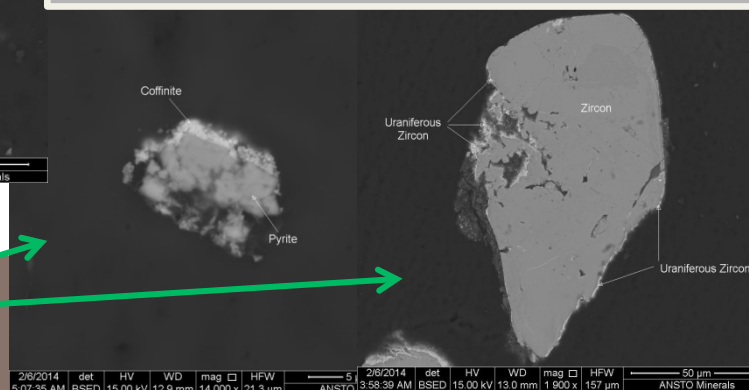
QEMSCAN
analysis
identified
**URANIFEROUS
ZIRCONS** and
COFFINITE within
the YNDD022
mineralised zone.

Manual SEM
examination
clearly revealed
coffinite as the
most prolific
uranium species.

The high recovery
rates returned
from YNDD022
also suggest that
these 2 uranium
species are easily
soluble and
therefore
extractable by
leaching



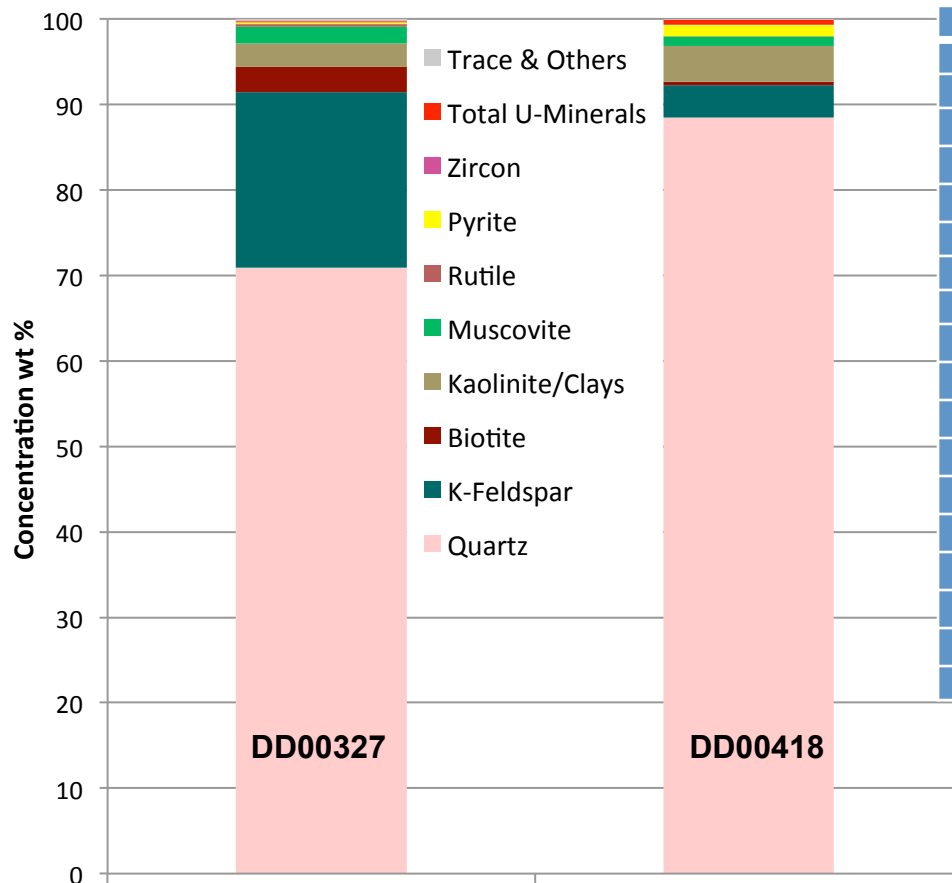
The coffinite is typically present as
tiny grains, finely intergrown with
biotite, muscovite, kaolinite/clay,
quartz and pyrite



All images from sample
DD00327

MODAL MINERALOGY FOR SAMPLES DD00327 (YNDD022) AND DD00418 (YNDD018)

MODAL ABUNDANCES IDENTIFIED BY QEMSCAN



Uranium Bearing Minerals in Higher Grade Intervals			
Mineral	Chemical Formula	YNDD022	YNDD018
Uranium Phase	U, S, Si, Zr, O, Na	0.020	0.36
U-Zircon	(Zr,U)SiO ₄	0.010	0.022
Coffinite	U(SiO ₄) _{1-x} (OH) _{4x}	0.0002	0.013
Sodium-Zippeite	Na ₄ (UO ₂) ₆ (SO ₄) ₃ (OH) ₁₀ • 4H ₂ O	<0.001	0.038
Gangue Minerals in Higher Grade Intervals			
Mineral	Chemical Formula	YNDD022	YNDD018
Quartz	SiO ₂	70.9	88.5
K-Feldspar	KAlSi ₃ O ₈	20.6	3.80
Biotite	K(Mg,Fe) ₃ [AlSi ₃ O ₁₀ (OH,F) ₂]	2.95	0.35
Kaolinite/Clays	Al ₂ Si ₂ O ₅ (OH) ₄	2.82	4.16
Muscovite	KAl ₂ (Si ₃ Al)O ₁₀ (OH,F) ₂	1.87	1.14
Rutile	TiO ₂	0.37	0.06
Pyrite	FeS ₂	0.20	1.27
Zircon	ZrSiO ₄	0.12	0.14
Carbonates	(Ca,Mg,Fe)CO ₃	0.001	0.005
Trace & Others		0.20	0.11

Uranium mineral occurrence at the grain boundaries supports ISL extraction method

Elemental Analysis (wt%)

	Al	As	Ba	Fe	K	Mg	Mn	Na
DD00327	3.5	<0.001	0.062	1.24	2.59	0.17	<0.001	0.093
DD00418	3.0	0.002	0.019	1.85	1.25	0.057	0.019	0.064
	P	Si	Th	Ti	U	V	Zn	Zr
DD00327	0.016	38.1	0.002	0.19	0.10	0.004	0.003	0.038
DD00418	0.011	38.2	0.002	0.26	0.37	0.003	0.008	0.032

ICP-MS AND DNA ASSAYS VS DOWNHOLE GAMMA RESULTS

Hole ID	Easting	Northing	TD (m)	RL (m)	Resource Name	Assay Depth From (m)	Assay Depth To (m)	Assay Width (m)	ME-MS61 U308 (ppm)	DNA U308 (ppm)	Max Grade U308 (ppm)	Assay Grade Width (ppm.m)	Probe Grade Width (ppm.m)	Grade Width Change (%)
YNDD015	302878	7508657	52.5	47	Bennet Well East	41.45	43.60	2.15	612	NA	2641	1316	979	+35%
YNDD016	303305	7507544	68	47	Bennet Well East	62.90	63.5	0.6	443	NA	778	266	294	-9.5%
YNDD017	303240	7507886	64.1	48	Bennet Well East	58.35	59.25	0.9	538	NA	1533	484	948	-49%
						60.6	61.2	0.6	496		613	298	182	+64%
YNDD018	299975	7506937	102.1	45	Bennet Well South	87.85	88.30	0.45	NA	887	2157	399	349	+14.3%
						89.95	95.05	5.1		1209	4331	6166	3901	+58%
						95.35	96.25	0.9		219	309	197	155	+27%
YNDD019	300271	7506221	99.6	46	Bennet Well South	83.70	85.8	2.1	635	NA	1674	1335	1781	-25.1%
						92.25	93	0.75	797		2016	598	NA	NA
YNDD020	300538	7505854	90.6	46	Bennet Well South	73.35	73.95	0.6	1066	NA	2511	639	608	+5.1%
						82.20	83.70	1.5	1237		5506	1855	1541	+20.4%
YNDD021	299124	7504044	68.7	45	Bennet Well Deep South	53.90	55.40	Core Loss					602	NA
						61.15	61.75	0.6	1453	NA	3278	872	689	+26.5%
YNDD022	302970	7508268	67.6	49	Bennet Well East	58.9	60	1.1	NA	473	1208	520	1349	-61%

Note: All U308 grades are calculated by multiplying the uranium assay grade by 1.179

Note: The U308 cut off used for reporting is 100ppm U308 over a depth of 0.5m

Note: YNDD015 includes 0.5m core loss in the mineralised zone from 42.5m

Note: YNDD021 has complete core loss of the 1.5m upper mineralised zone from 53.90m

Note: The lower uranium zone in YNDD019 was not gamma probed due to hole blockage

Note: ME-MS61 assay testing was completed by ALS in WA. NA indicates not applicable

Note: DNA assay testing was completed by ANSTO in NSW. NA indicates not applicable

Note: Ore grade Ag assay was completed on 2 samples in YNDD017. 57.5 to 57.6m had 121 g/t silver and 58.12 to 58.20m had 135 g/t silver.

Note: The datum for all drillholes is GDA94_Zone50

Note: All holes were drilled vertical with a dip of -90 and an Azimuth of 0.

Diamond core assays returned an overall 12.3% increase in the total amount of uranium when compared to down-hole gamma probe data for the equivalent intervals. Highlighted are holes YNDD018 (Bennet Well South) and YNDD022 (Bennet Well East) chosen for analysis at ANSTO, NSW.

XRF ASSAYS VS ICP AND DOWNHOLE GAMMA RESULTS

Hole ID	Easting	Northing	TD (m)	RL (m)	Resource Name	Assay Depth From (m)	Assay Depth To (m)	Assay Width (m)	ICP U308 (ppm)	XRF U308 (ppm)	ICP Assay Grade Width (ppm.m)	XRF Assay Grade Width (ppm.m)	Gamma Probe Grade Width (ppm.m)	ICP to XRF Change (%)	XRF to Gamma Probe Change (%)
YNDD015	302878	7508657	52.5	47	Bennet Well East	41.45	43.60	2.15	612	658	1316	1415	917	+7.5%	+54.3%
YNDD016	303305	7507544	68	47	Bennet Well East	62.90	63.5	0.6	443	442	266	265	275	-0.4%	-3.6%
YNDD017	303240	7507886	64.1	48	Bennet Well East	58.35	59.25	0.9	538	538	484	485	887	+0.2%	-45.3%
						60.6	61.2	0.6	496	507	298	304	169	+2%	+80%
YNDD019	300271	7506221	99.6	46	Bennet Well South	83.70	85.8	2.1	635	667	1335	1401	1654	+4.9%	-15.3%
						92.25	93	0.75	797	837	598	628	NA	+5%	NA
YNDD020	300538	7505854	90.6	46	Bennet Well South	73.35	73.95	0.6	1066	1144	639	686	569	+7.4%	+20.6%
						82.20	83.70	1.5	1237	NA	1855	NA	1444	NA	NA
YNDD021	299124	7504044	68.7	45	Bennet Well Deep South	53.90	55.40	Core Loss					559	NA	NA
						61.15	61.75	0.6	1453	1562	872	937	646	+7.5%	+45%

Note: All U308 grades are calculated by multiplying the uranium assay grade by 1.179

Note: The U308 cut off used for reporting is 100ppm U308 over a depth of 0.5m

Note: YNDD015 includes 0.5m core loss in the mineralised zone from 42.5m

Note: YNDD021 has complete core loss of the 1.5m upper mineralised zone from 53.90m

Note: The lower uranium zone in YNDD019 was not gamma probed due to hole blockage

Note: ICP is ME-MS61 assay testing that was completed by ALS in WA. NA indicates not applicable

Note: XRF is ME-XRF15b assay testing that was completed by ALS in WA.

Note: In YNDD020 the lower zone has XRF values shown as NA since 4 of the 10 assay samples had non sufficient sample to complete testing. NA indicates not applicable

Note: No XRF analysis was completed on YNDD018 and YNDD022. The XRF was used to check whether there has been a complete uranium digest in the ICP assays

Note: The datum for all drillholes is GDA94_Zone50

Note: All holes were drilled vertical with a dip of -90 and an Azimuth of 0.

XRF results show an increase in core assay grade of approximately 6% from the original ICP assay results.

Deconvolved gamma probe grade and assay grade differences have increased from 20% to approximately 25% with the latest XRF results suggesting an increase in the gamma results used to calculate the existing JORC resource.

URANIUM EXTRACTION TESTWORK

FINAL LEACH TESTS UNDERTAKEN AT ANSTO, NSW

Leach Results

Leach tests undertaken in Sydney tap water in small agitated vessels to minimise matrix effects

Leach No.	Composite	Test Type	pH	ORP (mV, Ag/AgCl)	Temp (C)	Estimated Acid Consumption (kg/t)	Oxidant Addition Fe(III), g/L	Feed U ₃ O ₈ (ppm)	Residue U ₃ O ₈ (ppm)	Uranium Extraction (%)
CAULD 3	YNDD018	Agitated	1.2	600	50	13.6	2.0	1,186	17	98.6
CAULD 7		Agitated	1.8	~450	30	tba	0.0	1,186	32	97.3
CAULD 1		Agitated	2.0	500	30	7.9	0.5	1,186	34	97.1
CAULD 8		Bottle roll	1.8	~450	21	0.4	0.0	1,186	47	96.0
CAULD 5		Agitated	Alkaline Leach		30	N/A	N/A	1,186	71	94.0
CAULD 4	YNDD022	Agitated	1.2	600	50	16.3	2.0	500	9	98.2
CAULD 2		Agitated	2.0	500	30	10.1	0.5	500	19	96.2
CAULD 9		Bottle roll	1.8	~450	21	1.4	0.0	500	23	95.4
CAULD 6		Agitated	Alkaline Leach		30	N/A	N/A	500	35	93.0

Low acid consumption at < 16 kg/t

Site Water Analysis (ppm)

Sample	Al	As	Ba	Ca	Cl	Fe	K	Mg	Na	P	S	Si	Sr
Average	1.4	1.3	14.6	134.2	2,144	6.8	63.1	175.9	1,524	1.7	330	25.6	2.6
Maximum	6	2	77	333	13,500	35	208	518	8,960	6	1,490	34	9
Minimum	1	1	1	48	209	3	15	26	148	1	20	8	1

Low levels of impurities are unlikely to impact leach solution processing

HIGH LEVEL OF URANIUM EXTRACTION ACHIEVED USING ACID OR ALKALINE LEACH SOLUTIONS