

create. nurture. grow.

# The premier potash and multi agri-commodity opportunity

Proactive Investors Forum 12<sup>th</sup> - 13<sup>th</sup> April 2016

**Paul Donaldson, Managing Director** 



### Forward looking statements and disclaimer



The information in this presentation is published to inform you about Danakali Limited (the "Company" or "DNK") and its activities. DNK has endeavoured to ensure that the information enclosed is accurate at the time of release, and that it accurately reflects the Company's intentions. All statements in this presentation, other than statements of historical facts, that address future production, project development, reserve or resource potential, exploration drilling, exploitation activities, corporate transactions and events or developments that the Company expects to occur, are forward-looking statements. Although the Company believes the expectations expressed in such statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in forward-looking statements.

Factors that could cause actual results to differ materially from those in forward-looking statements include market prices of potash and, exploitation and exploration successes, capital and operating costs, changes in project parameters as plans continue to be evaluated, continued availability of capital and financing and general economic, market or business conditions, as well as those factors disclosed in the Company's filed documents.

There can be no assurance that the development of the Colluli Project will proceed as planned. Accordingly, readers should not place undue reliance on forward looking information. Mineral Resources and Ore Reserves have been reported according to the JORC Code, 2012 Edition. To the extent permitted by law, the Company accepts no responsibility or liability for any losses or damages of any kind arising out of the use of any information contained in this presentation. Recipients should make their own enquiries in relation to any investment decisions.

Mineral Resource, Ore Reserve and financial assumptions made in this presentation are consistent with assumptions detailed in the Company's ASX announcements dated 4 March 2015, 23 September 2015, 30 November 2015 and 29 January 2016 which continue to apply and have not materially changed. The Company is not aware of any new information or data that materially affects assumptions made.

### **Corporate snapshot**



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Enterprise Value	A\$41.0m
Debt (31-Dec-15)	Nil
Cash (31-Dec-15)	A\$2.8m <sup>1</sup>
Market capitalisation	A\$43.8m
Number of shares	199.0m
Share price (8-Apr-16)	A\$0.215

#### **Colluli Mining Share Company**

 Danakali's major asset is its 50% shareholding in the Colluli JV



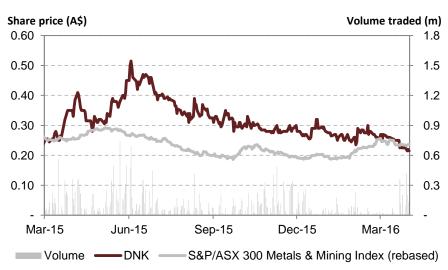
Eritrean National Mining Company

Source: IRESS, company filings

#### **Top shareholders**

Well Efficient Hong Kong private investor	15.1%
Kam Lung Investment Dev. Chinese strategic investor	5.2%
<b>Sprott Inc.</b> Leading North American-based investment firm	4.6%
Danakali Board and management	11.5%

#### Share price performance over last 12 months



<sup>1</sup> Danakali completed a share placement in March 2016 to raise approximately A\$5.5m

# Colluli is a stand out project with a compelling investment case



- Fertiliser demand growth will continue people need to eat
- **Premium potash fertiliser** Sulphate of Potash (SOP)
- Colluli is a positively unique, large, low cost, long life resource in close proximity to the coast
  - ✓ Best access to the largest unexploited potash basin in the world
  - √ 1.1 billion tonne ore reserve
  - ✓ Superior combination of potassium salts for low cost SOP production
  - ✓ > 200 year mine life

#### DFS complete

- ✓ Superior economics industry leading capital intensity, bottom quartile operating costs, low incremental growth capital
- ✓ Most fundable, scalable, long life potash project in the world
- ✓ Colluli salts generate product at the top of the quality spectrum

#### Strategically located

- ✓ Closest SOP project to a coastline anywhere in the world
- ✓ On the doorstep of key growth markets
- Unrivalled diversification and upside potential
  - Resource capable of producing three of the four potash types (SOP, MOP and SOP-M)
  - ✓ Resource sits beneath a large, high quality rock salt resource



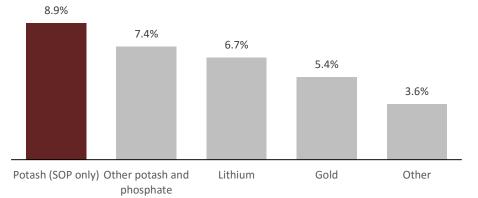
### SOP – a new age commodity



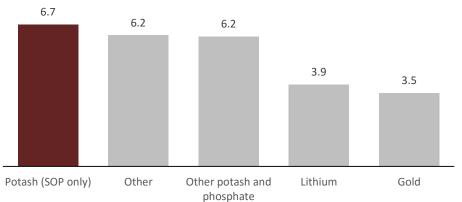
# POSITIVE SHIFT IN FUNDRAISING ACTIVITY IN RESOURCES IN RECENT TIMES; PARTICULARLY IN POTASH AND LITHIUM

- Recent ASX capital markets activity has seen several successful capital raisings completed by companies focused on "new-age" commodities, lithium and potash
- Specifically, several ASX-listed SOP companies have been able to raise an average of A\$6.7m over the last 6 months, more than other commodity buckets
- Positive fundraising momentum is an early sign that the new mining investment cycle is beginning to take shape
- Danakali successfully completed an A\$5.5m
   placement in March 2016 with strong support
   from major shareholders

#### Capital raised by ASX junior miners relative to market cap (last 6 months)<sup>1</sup>



#### Average ASX junior miner raising size (A\$m, last 6 months)<sup>1</sup>



Source: Company filings, IRESS

<sup>1</sup> Junior miners defined as GICS Metals & Mining companies with a market capitalisation between A\$10m-A\$100m as at 6 November 2015

# Fertiliser demand growth will continue People need to eat!



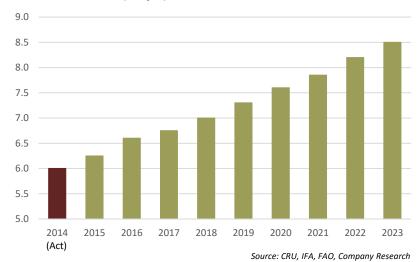
## Fertiliser demand growth underpinned by:

- Growing population
- Decreasing arable land
- Changing dietary preferences

A food production increase of 70% is required for an additional 2.3 billion people by 2050<sup>1</sup>

# SOP demand forecast to grow by at least 4% per annum

#### Global SOP demand (Mtpa)











More people

More food More fertiliser

More potash

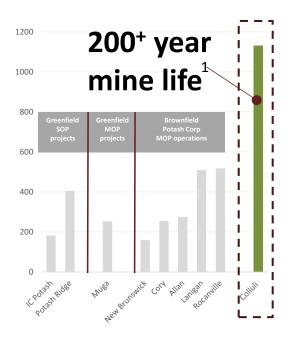
POTASSIUM IS AN ESSENTIAL, NON-SUBSTITUTABLE NUTRIENT, WHICH IS PROVIDED BY THE ADDITION OF POTASH FERTILISER

1. FAO

# Colluli is a positively unique, large, low cost, long life potash resource in close proximity to the coast



Ore Reserve estimates for selected potash (MOP and SOP) projects<sup>2</sup>
Million tonnes



### Sealed road running from Massawa towards Colluli



All weather coastal road from Massawa runs within 50km of Colluli



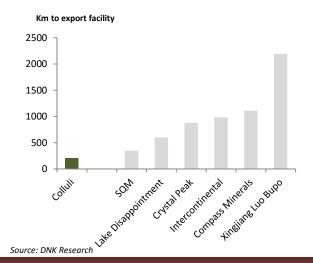
Well established shipping infrastructure at the Port of Massawa



## Colluli has the best and simplest logistics in the Danakil



Colluli is the closest sulphate of potash project to export infrastructure anywhere in the world



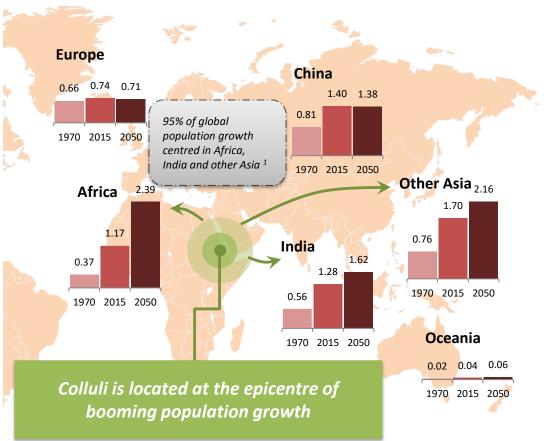
<sup>1</sup> The Colluli resource remains open to the North West and South East

<sup>2</sup> Company websites

## Eritrea is on the doorstep of key markets









United Nations world population prospects, 2015

# The initial focus of Colluli is on high margin, high quality, chloride free SOP



## ECONOMICALLY EXPLOITABLE RESOURCES FOR PRIMARY PRODUCTION OF SOP ARE GEOLOGICALLY SCARCE

- SOP is a premium, chloride free multi-nutrient potash type
- Used on high quality crops such as fruits, nuts and vegetables
- Only four projects in the world at DFS level (including Colluli)
- Colluli demonstrates the lowest development capital, bottom quartile operating costs, low incremental growth capital, unrivalled project upside and substantial mine life

#### Historic MOP and SOP prices (US\$/t)1



Source: Greenmarkets

<sup>1</sup> MOP prices based on FOB Vancouver prices, SOP prices based on FOB Utah prices

### **SOP is the PREMIUM POTASH TYPE**



# SOP IS A PREMIUM AGRICULTURAL COMMODITY

#### **Chloride Free Potassium**

- Potassium is an essential, consumed, non-substitutable macro-nutrient
- SOP critical for chloride intolerant crops such as fruits and vegetables
- Multi-nutrient also provides sulphur which is considered to be the fourth macro-nutrient

#### **High Value Crops**

- Application of SOP most suited to high value crops such as fruits, vegetables and nuts
- SOP suited to arid operating environments focussed on high water efficiency

#### **Limited supply**

- Limited economically exploitable primary resources
- Over 50% of world's supply from high cost secondary production
  - Secondary production facilities need to contend with acid sourcing and disposal issues

#### **Premium Price**

- Sustained price premium of over 50% relative to MOP<sup>1</sup>
- Secondary production provides high margins for primary producers

Source: Greenmarkets

<sup>1</sup> MOP prices based on FOB Vancouver prices, SOP prices based on FOB Utah prices

## **Commercially proven technology**

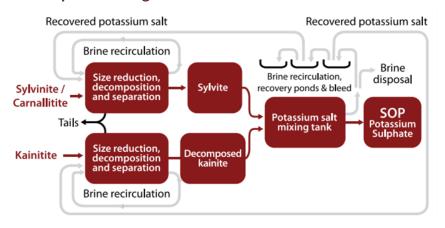


# DFS DEMONSTRATES THE COMMERCIALLY PROVEN PROCESSING METHOD YIELDS PREMIUM QUALITY SOP FROM COLLULI SALTS

#### Colluli has the right combination of salts for low cost production

Operation	Process feed	
Compass Minerals <sup>1</sup>	Kainite + KCl	
SQM <sup>2</sup>	Kainite + KCl	
Xingjiang Luobupo <sup>3</sup>	Kainite + KCl	
Colluli	Kainite + KCl	

#### Colluli process design



#### Colluli plant image



- Gustavson Associates
- 2. Company website
- 3. DNK research

# Colluli salts and process design yield the highest quality product



# DEMONSTRATED CAPACITY TO PRODUCE A HIGH QUALITY SOP PRODUCT

- Over 300kg of high grade SOP produced from Colluli salts in pilot tests
- Colluli SOP is at the top end of the quality spectrum

#### SOP products (%K<sub>2</sub>O vs. product) 53.5 53.0 52.5 52.0 51.5 51.0 50.5 50.0 49.5 Qrop SOP Potassium sulphate std Yara SOP-G Ag Granular Soluble Fines KALISOP Crystalline Ultrasol SOP52 Standard/Industrial fines **KALISOP** gran GranuPotasse Mid Granular **KALISOP Fertigation** Ultrsol SOP Solupotasse Yara Krista SOP

#### **Granular SOP from Colluli salts**



Source: Company websites

## **Outstanding DFS economics**

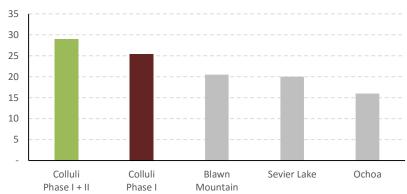


# COLLULI DOMINATES OTHER PROJECTS WITH RESPECT TO VALUATION OUTCOMES

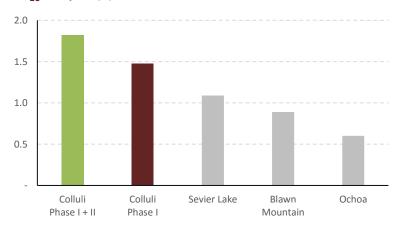
#### **Key DFS results**

Metric	Phase I	Phase I and II
Production	425kt	850kt
Strip ratio	1.91	1.93
Post tax NPV (10% real)	US\$439m	US\$860m
Post tax IRR	25.4%	29.0%
Capital	US\$298m	
Incremental Phase II capital		US\$175m

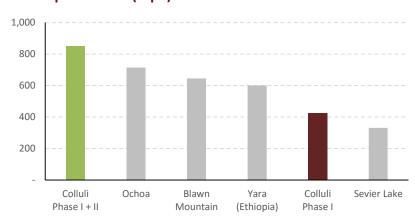
## Post-tax IRR (%)



#### $NPV_{10}$ / capex (x)



#### Annual production (ktpa)



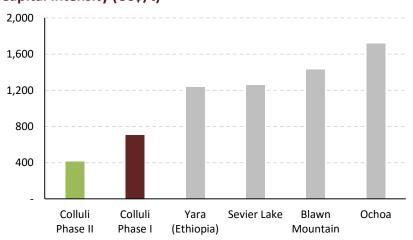
Source: DNK Company announcements, Company websites

### **Industry leading capital intensity**

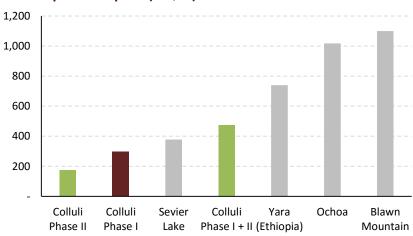


## INDUSTRY LEADING CAPITAL INTENSITY AND LOW DEVELOPMENT CAPITAL RENDERS COLLULI HIGHLY FUNDABLE

#### Capital intensity (US\$/t)



#### Development capital (US\$m)



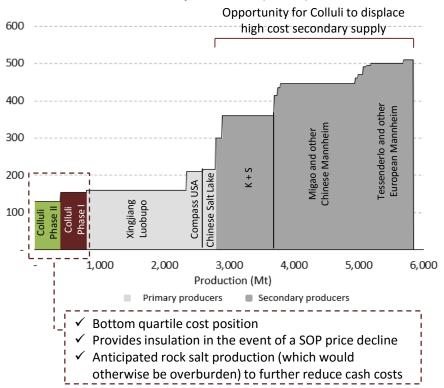
#### The Colluli resource is positively unique:

- Colluli has the right combination of potassium salts for low cost, high yield SOP production
- It is the shallowest evaporite deposit in the world making it amenable to open cut mining
- Extraction of salts in solid form negates the need for large evaporation ponds reducing capital intensity
- Mining and processing salts in solid form will result in **stable, consistent, and reliable production**

# Colluli will be in the bottom quartile of the SOP cash cost curve



#### Ex-works cash costs for SOP production (US\$/t)



Colluli is the only resource that has the right combination of potassium salts in the desirable physical form to achieve the most favourable operating and capital cost structure for SOP production

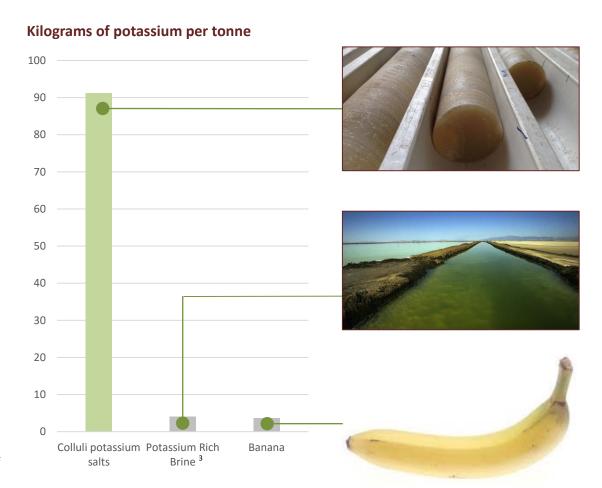
Source: CRU, Integer, Company Research

# Colluli is differentiated by its positively unique suite of potassium salts and depth of mineralisation



## INDUSTRY LEADING CAPITAL INTENSITY FACILITATED BY EXTRACTING AND PROCESSING SALTS IN SOLID FORM

- Colluli is the only resource in the world that has the ideal composition of salts for SOP production that can be extracted in solid form
- This is directly related to the shallow mineralisation and open cut mining method
- Potassium salts mined from Colluli have a potassium concentration approximately
  - **25X** that of potassium rich brines <sup>1</sup>
- A potassium rich brine on a weight basis has similar potassium concentration to a banana<sup>2</sup>



<sup>1.</sup> Calculated from Colluli resource data and published brine compositions

United States department of agriculture

Salt Lake Potash Website

# On top of excellent economics, Colluli has unrivalled multi agri-commodity potential



# THE COLLULI RESOURCE CONTAINS A DIVERSE RANGE OF FERTILISER PRODUCTS WITH ESTABLISHED MARKETS

#### **MOP**

- Improves yield for wide range of crops
- Most concentrated form of granular potassium
- Demand is elastic (easy to substitute)
- Market is well supplied by global potash majors
- Generally higher development costs

#### **SOP**

- Danakali's key focus
- Improves yield of high value crops
- Suitable for chloride intolerant crops
- Demand is inelastic (not as easy to substitute, premium product leads to sticky demand)
- Global supply shortage of primary resources
- Sulphur is a key nutrient
- Fewer natural sources
- Higher margin

#### SOP-M

- Demonstrated production from Colluli
- Limited supply and carries a price premium
- High grade, chloride free premium fertiliser
- Multi-nutrient fertiliser suitable for crops where three major nutrients are required
- SOP-M production ability confirms Colluli's multi agricommodity business potential

~3% of potash supply

#### Kieserite

- An effective source of both magnesium and sulphur (magnesium sulphate)
- Suitable for all types of crops and use in any soil type
- Identified in potassium salt seams
- Volumes currently being evlauated

#### Gypsum

- Source of calcium and sulphur
- Improves acid soils and treats aluminium toxicity
- Improves soil structure and water infiltration
- Reduces run off erosion
- Detected within the Colluli tenements

Additional agri-product potential

~85% of potash supply

Major potassium products 1

~10% of potash supply

## Working in partnership with ENAMCO



# DNK AND ENAMCO ARE ADVANCING A WORLD CLASS POTASH PROJECT

- The Colluli project is 100% owned by the Colluli Mining Share Company ("CMSC")
- The share company has equal ownership between Danakali and the Eritrean National Mining Company ("ENAMCO")
- The relationship is a key enabler to project success
- All projects in Eritrea to date that have completed positive DFS studies have advanced to construction and production
- Danakali and ENAMCO are working collaboratively on the development of the Colluli potash project
- CMSC board has agreed to progress the project following a positive DFS



### Eritrea is a developing economy



# DANAKALI HAS BEEN OPERATING IN ERITREA SINCE 2009 AND HAS FOUND IT TO BE SAFE, STABLE AND DEVELOPMENT FOCUSSED

- The Danakali experience:
  - No evidence of corruption
  - Safe and friendly
  - High degree of focus on health and education
  - Development focussed on agriculture, industrial and mining
  - Stable government
  - Building up a track record of success in a maturing mining industry

2016 marks 25 years of Eritrean Independence.

**Congratulations Eritrea!!** 





### **Maturing mining jurisdiction**



## ERITREA HAS A GROWING MINING INDUSTRY WITH A HISTORY OF INVESTMENT BY GLOBAL INVESTORS AND CORPORATES

- Over US\$600m invested in Eritrea mining industry to date<sup>1</sup>
- In addition to mining, over 250kt of table salt is currently produced in Eritrea each year across two projects<sup>2</sup>
- Supportive laws for mining investment in Eritrea<sup>3</sup>
  - Accelerated depreciation (straight line, 4 years)
  - 10 year carrying forward of losses
  - Generous reinvestment deduction (5% gross income)
  - Stable corporate tax
- Increasing support base within Eritrea for the mining industry
- Danakali's JV partner, ENAMCO, retains an interest in the other major Eritrean mining developments

**Prominent international companies operating in Eritrea** 

















#### Major Eritrean mining developments<sup>1</sup>

#### Bisha

Au, Ag, Cu, Zn
Nevsun /
ENAMCO

Undergoing third expansion



#### Zara

Au SFECO / ENAMCO

Commissioned and producing



#### Asmara

Cu, Zn, Au Sichuan Road & Bridge Mining Corp. / ENAMCO

60% share recently purchased from Sunridge



<sup>1</sup> Company announcements

United States Geological Survey 2013 Minerals Yearbook – Eritrea

<sup>3</sup> Eritrean Mining Proclamation

## **Overwhelming community support**



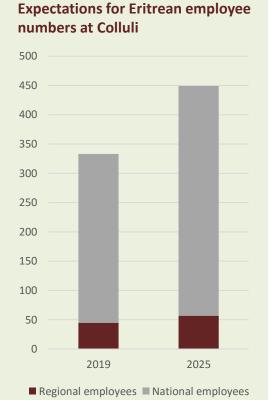
## ENGAGEMENT WITH COMMUNITY AND KEY STAKEHOLDERS HAS GENERATED STRONG SUPPORT FOR COLLULI DEVELOPMENT











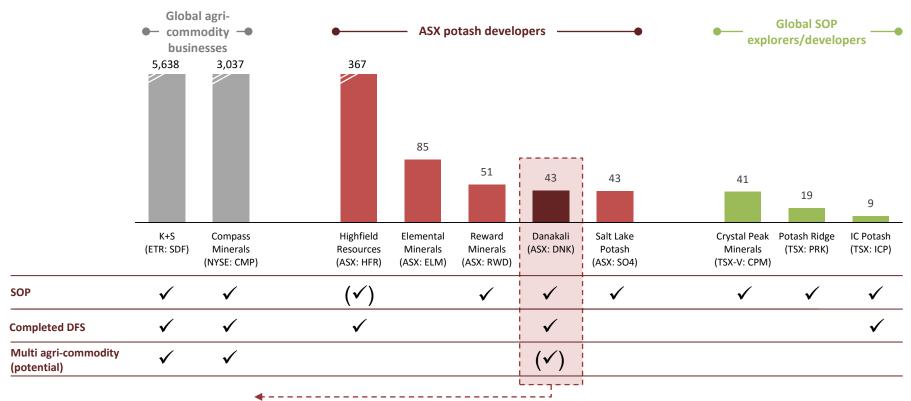
Colluli will create over 300 permanent jobs for locals and Eritrean nationals by 2019, and over 450 by 2025

## Strong potential for re-rating



## MUTLI AGRI-COMMODITY POTENTIAL COULD PLACE DANAKALI IN THE LEAGUE OF LARGE GLOBAL PRODUCERS

#### Market value of listed potash peers (A\$m)<sup>1</sup>



Strong potential for Danakali to re-rate

Source: Bloomberg, company disclosure

1 Based on AUD:USD = 0.752 and CAD:USD = 0.76

# Colluli is the best SOP project in the world and Danakali has a compelling investment case



- SOP is a high quality, chloride free potash with limited economically exploitable primary resources
- Colluli is an advanced stage project and is the most fundable, scalable, long life, low operating cost SOP project with access to global markets and is in close proximity to established infrastructure
- Colluli has standout economics relative to peers
- Colluli has unrivalled product diversification potential
- Colluli has significant upside on top of superior economic returns
- Colluli is the best SOP project in the world





create. nurture. grow.

**Colluli - Positively Unique** 



### **Competent persons statement**



#### Resource statement

The 2015 Colluli Potash Mineral Resource is reported according to the JORC Code and estimated at 1,289Mt @11% K2O Equiv. The Mineral Resource is classed as 303Mt @ 11% K2O Equiv Measured, 951Mt @ 11% K2O Equiv Indicated and 35Mt @ 10% K2O Equiv Inferred. The Competent Person for this estimate is Mr. Stephen Halabura, M. Sc., P. Geo., Fellow of Engineers Canada (Hon), Fellow of Geoscientists Canada, and a geologist with over 25 years' experience in the potash mining industry. Mr. Halabura is a member of the Association of Professional Engineers and Geoscientists of Saskatchewan, a Recognised Professional Organisation (RPO) under the JORC Code and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code.

The 2015 Colluli Rock Salt Mineral Resource is reported according to the JORC Code and estimated at 347Mt @96.9% NaCl. The Mineral Resource is classed as 28Mt @ 97.2% NaCl Measured, 180Mt @ 96.6% NaCl Indicated and 139Mt @ 97.2% NaCl Inferred. The Competent Person for this estimate is Mr. John Tyrrell, a geologist with more than 25 years' experience in the field of Mineral Resource estimation. Mr Tyrrell is a member of the AusIMM, is a full time employee of AMC Consultants Pty Ltd and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code.

Mr. Tyrell & Mr. Halabura consent to the inclusion of information relating to the Mineral Resource Statements in the form and context in which they appear.

#### **Ore Reserve statement**

The November 2015 Colluli Ore Reserve is reported according to the JORC Code and estimated at 1,113Mt @10% K2O Equiv. The Ore Reserve is classed as 286Mt @ 11% K2O Equiv Proved and 827Mt @ 10% K2O Equiv Probable. The Competent Person for the estimate is Mr Mark Chesher, a mining engineer with more than 30 years' experience in the mining industry. Mr. Chesher is a Fellow of the AusIMM, a Chartered Professional, a full-time employee of AMC Consultants Pty Ltd, and has sufficient open pit mining activity experience relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code. Mr Chesher consents to the inclusion of information relating to the Ore Reserve in the form and context in which it appears.

In reporting the Mineral Resources and Ore Reserves referred to in this public release, AMC Consultants Pty Ltd acted as an independent party, has no interest in the outcome of the Colluli Project and has no business relationship with Danakali Ltd other than undertaking those individual technical consulting assignments as engaged, and being paid according to standard per diem rates with reimbursement for out-of-pocket expenses. Therefore, AMC Consultants Pty Ltd and the Competent Persons believe that there is no conflict of interest in undertaking the assignments which are the subject of the statements.