5 February 2014

Companies Announcement Office
Via Electronic Lodgement

COMPANY PRESENTATION

Please find attached a copy of the presentation made by Peninsula Energy Limited's Executive Chairman, Mr John (Gus) Simpson at the 2014 Mining Indaba Conference in Cape Town, South Africa.

A copy of the presentation will also be available on our website at http://www.pel.net.au.

Yours sincerely

Jonathan Whyte
Company Secretary

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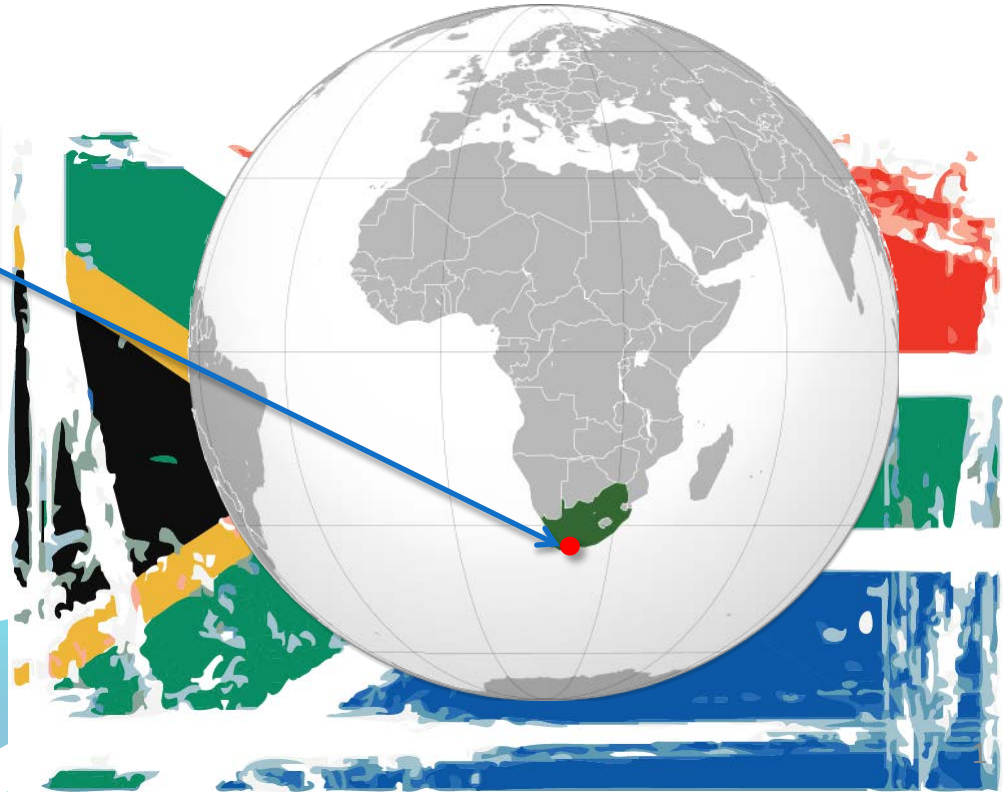
Indaba Presentation
February 2014

Karoo, South Africa

50.1Mlb U_3O_8

JORC Compliant Resource



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Presentation does not relate to any securities which will be registered under the United States Securities Act of 1933 nor any securities which may be offered or sold in the United States or to a US person unless registered under the United States Securities Act of 1933 or in a transaction exempt from registration.

Please note that in accordance with Clause 17 of the JORC (2012) Code, the potential quantity and grade of the "Exploration Target" in this announcement must be considered conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource

Competent Person Statement

The information in this presentation that relates to Exploration Targets, Exploration Results and Exploration Potential at Peninsula's Karoo projects is based on information compiled by Mr Alfred Gillman and Mr. George van der Walt. Mr. Gillman is a Fellow of the Australian Institute of Mining and Metallurgy. Mr. Gillman is Technical Director and is a Competent Person under the definition of the 2012 JORC Code. Mr. van der Walt is a member of a Recognised Overseas Professional Organisation included in a list promulgated by the ASX (The South African Council of Natural Scientific Professions, Geological Society of South Africa). Mr van der Walt is a Director of Geoconsult International. Both Mr Gillman and Mr van der Walt have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Both Mr. Gillman and Mr. van der Walt consent to the inclusion in the presentation of the matters based on their information in the form and context in which it appears.

The information in the presentation which relates to Mineral Resources at the Karoo Projects is based upon information compiled by Ian Glacken, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Ian Glacken is an employee of Optiro Pty Ltd and has sufficient experience which is 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 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ian Glacken consents to the inclusion in the presentation of a summary based upon his information in the form and context in which it appears.

REGIONAL OVERVIEW

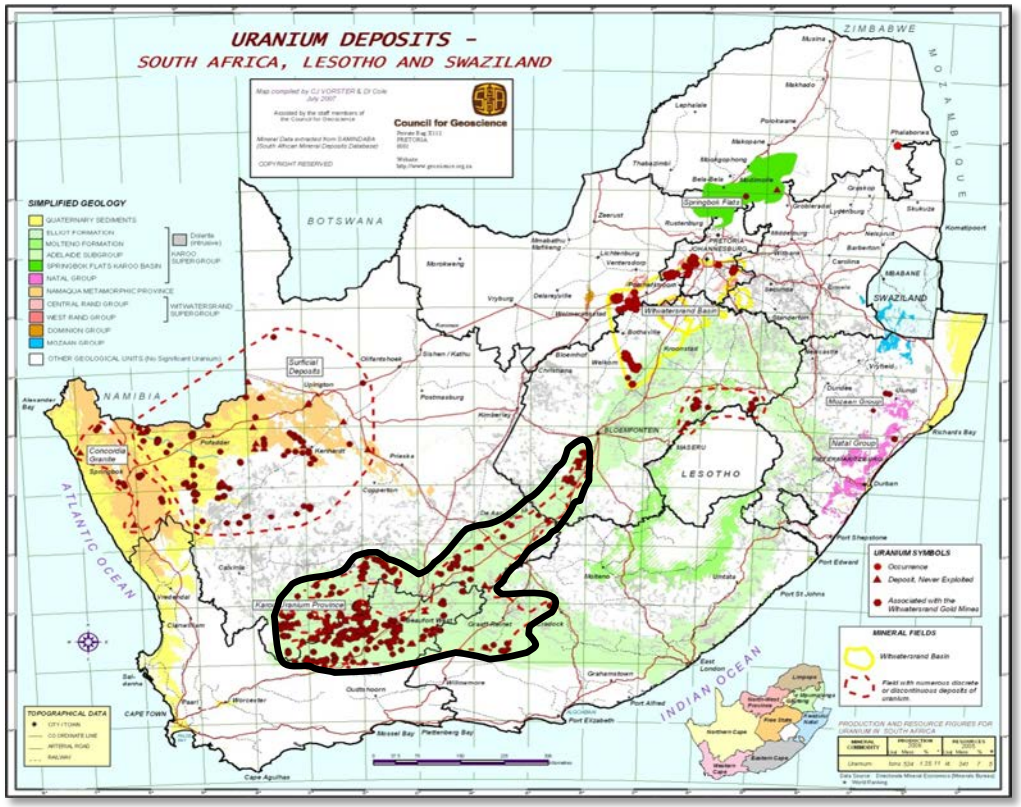
SW Karoo Basin covers ~100,000km^2

Uranium is present in the form of fluvially-deposited, sandstone-hosted formations within the main Karoo Basin of South Africa

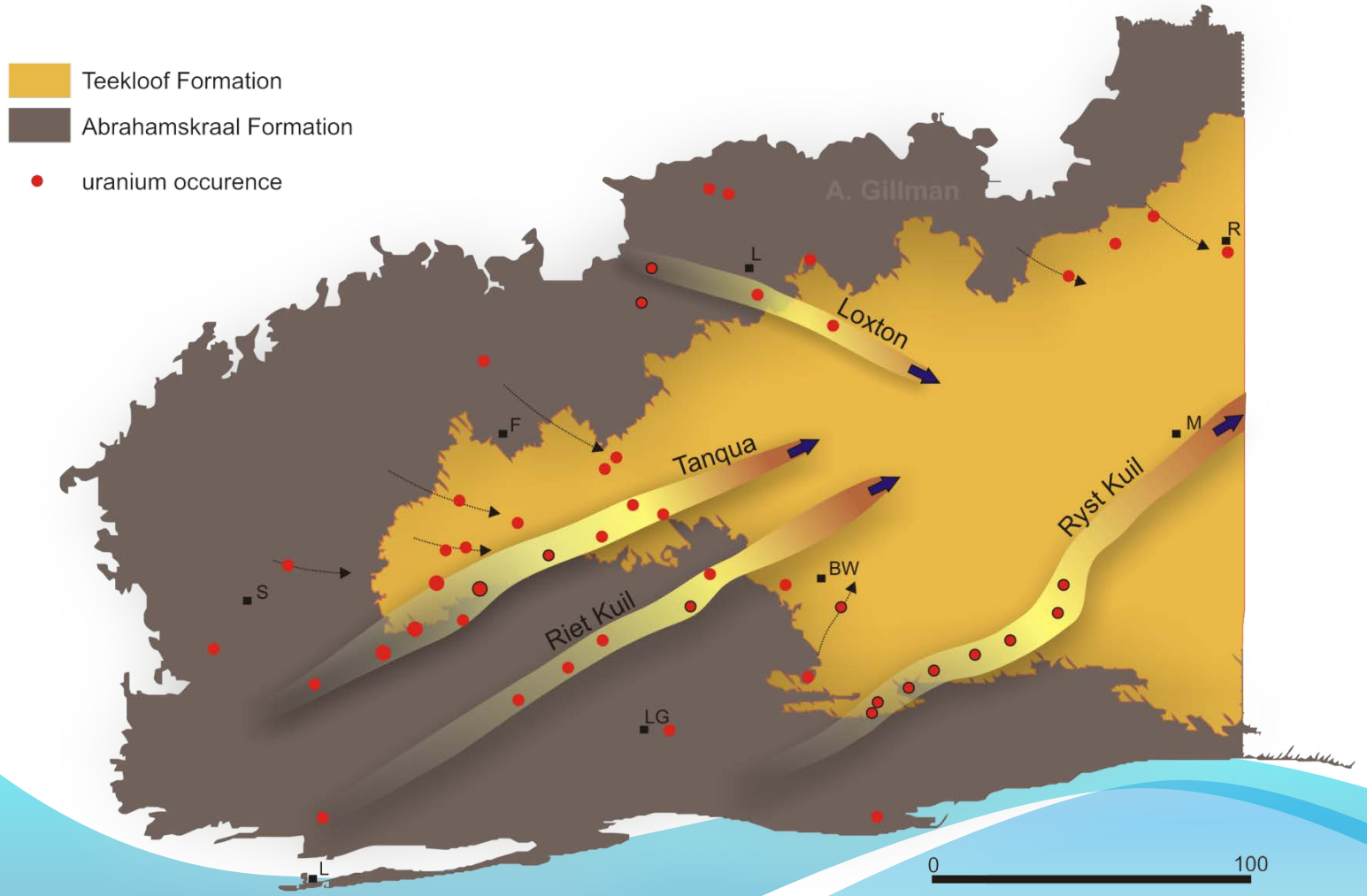
SW Karoo Basin explored extensively by numerous local and multi-national companies during the 1970's

Uranium concentrated along major sedimentary channels "trends"

Extensive development of host Upper Permian Abrahamskraal and Teekloof Formations



URANIUM DEPOSITION



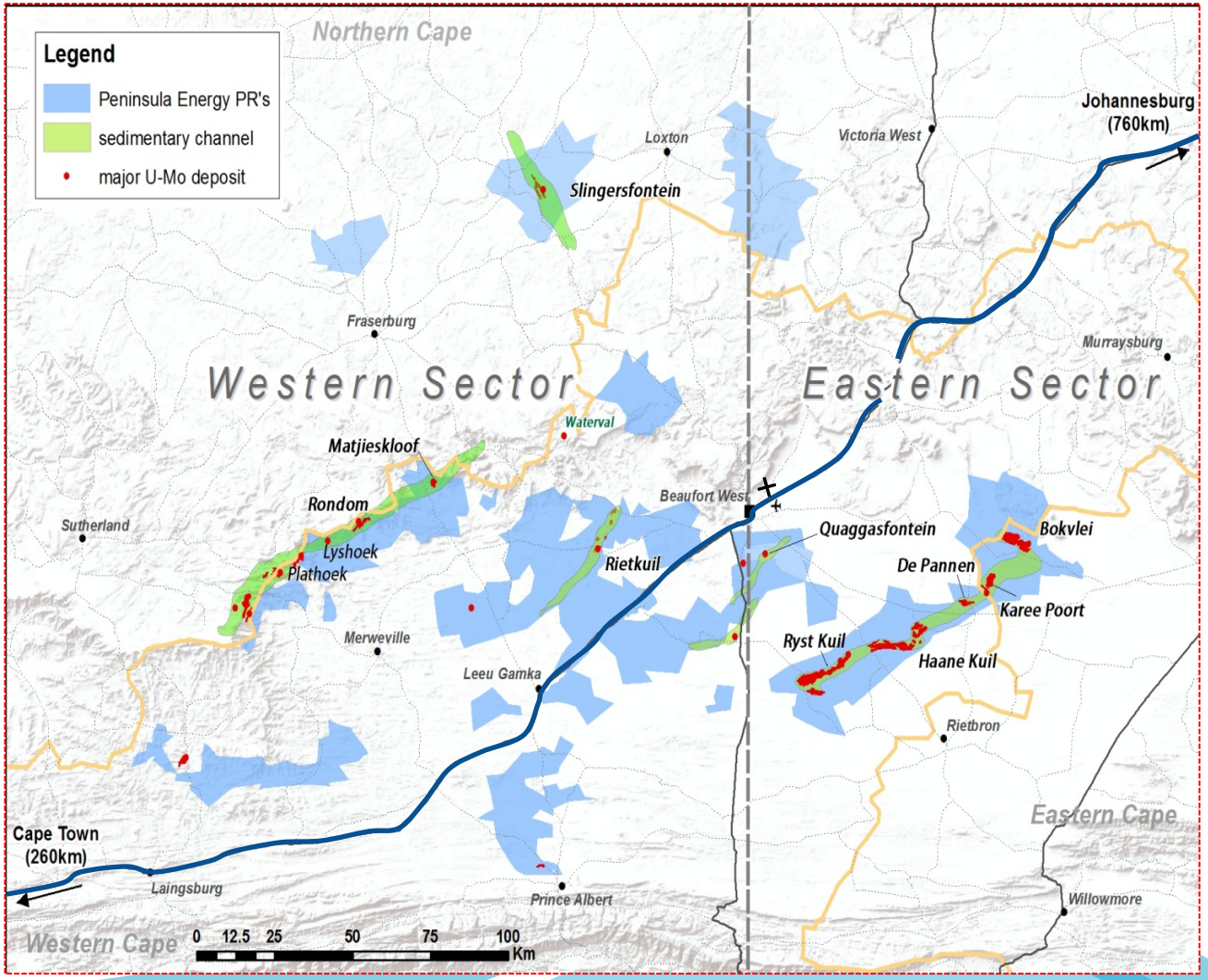
PENINSULA HOLDINGS

Dominant land position

7,800 km^2 Prospecting Rights
320 km^2 Freehold land
covering known mineralisation

Project covers most of the main recognised mineralised channels:

- Ryst Kuil
- Riet Kuil
- Tanqua
- Loxton



REGIONAL SUPPORT INFRASTUCTURE

- **The proposed location of the Central Processing Site is approximately 30 km's from:**
  - **The town of Beaufort West pop. 30,000 with established housing and supporting infrastructure**
  - **Eskom power line and main substation**
  - **The main N1 Highway from Johannesburg to Cape Town**
  - **Transnet railway line from Johannesburg to Cape Town**
  - **The Beaufort West regional airport**

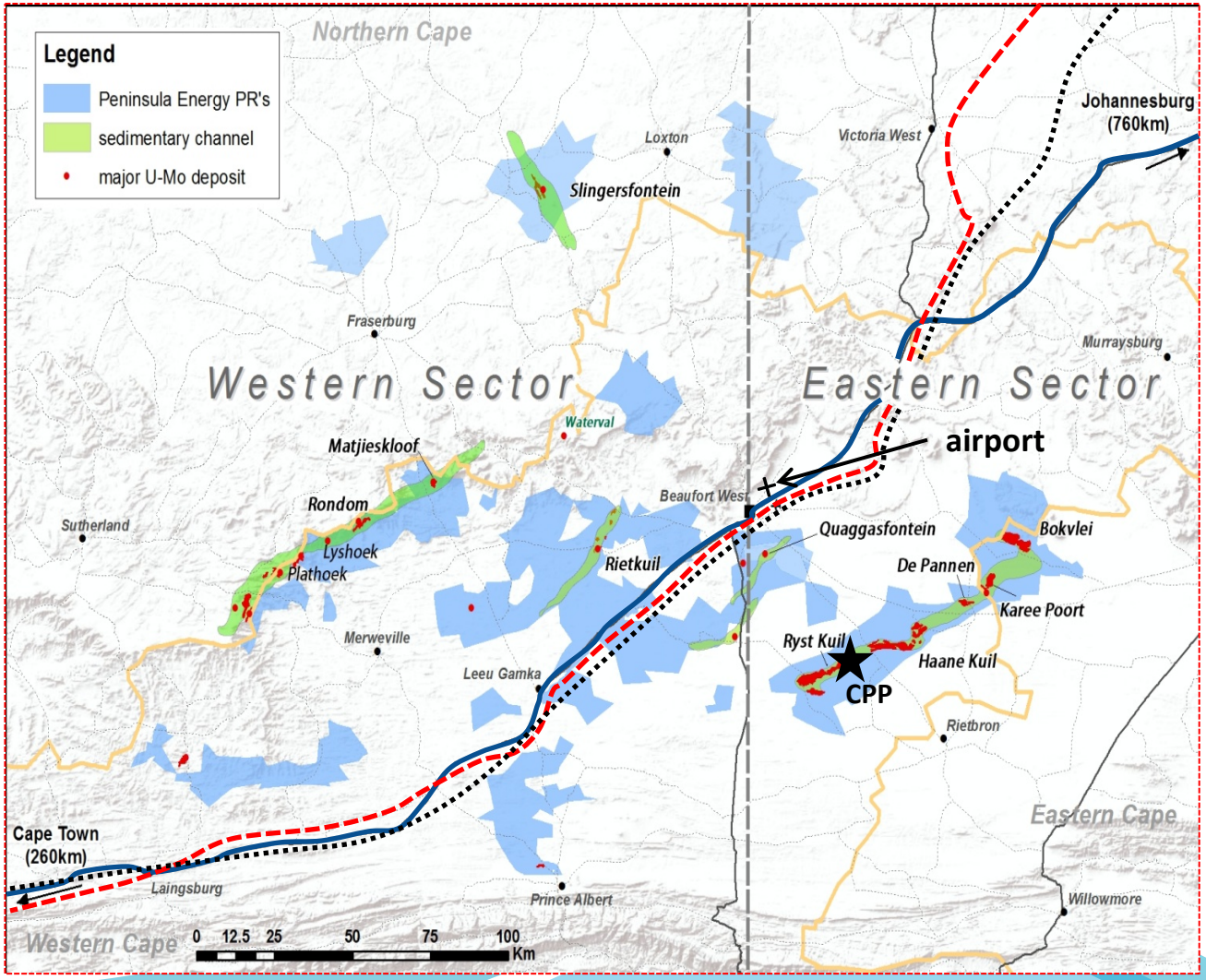
REGIONAL INFRASTRUCTURE

- **Transnet Railway Line**
- **N1 Highway**
- **Eskom Power Line**
- **Central Processing Plant (CPP)**

CPP proposed location is on Peninsula owned land

CPP is approximately 30km's from:

- Town of Beaufort West
- Pop: 30,000
- N1 Highway Cape Town to Johannesburg
- Transnet Railway
- Regional Airport



ESKOM POWER CLOSE TO PROJECT SITE

KAROO PROJECTS STATUS

- **Scoping Study completed September 2013**
- **Positive results trigger Pre-Feasibility Study (PFS)**
- **PFS initiated December 2013:**
  - **metallurgical test work underway on Ryst Kuil ore samples**
  - **PFS completion Q2/3 2014**
- **Mining Licence Application initiated:**
  - **Social and Labour Plan completed**
  - **Mine Works Plan (MWP) completed**
  - **Preliminary Economic Assessment (PEA) completed**
- **Targeting Development 2017/18**

KAROO JORC RESOURCE

Classification	eU_3O_8 (ppm) CUT-OFF	Tonnes	eU_3O_8 (ppm)	eU_3O_8 (lbs)	eU_3O_8 (t)
Indicated	600	6,992,741	1,019	15,705,995	7,124
Inferred	600	14,791,640	1,054	34,375,003	15,593
Total	**600**	**21,784,381**	**1,043**	**50,080,999**	**22,717**

Block model OK model
JORC 2012 compliant
Optiro Pty Ltd

JORC Table 1 included in announcement to the ASX released on 5th February 2013 :"50.1 MILLION POUND JORC CODE COMPLIANT RESOURCE AT KAROO PROJECTS".

Peninsula confirms that it is not aware of any new information or data that materially affects the information included in this presentation and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

SCOPING STUDY COST RESULTS

(Unescalated; 2013$)	USD / lb	@ 3.0 m lbs per annum (USD'm)
Production Rate (m'lbs per annum)		3.0
Open Cut Mining	$10.08	$30
Underground Mining	$6.39	$19
Mine Technical & Support	$1.50	$4
Processing	$15.92	$48
Indirect Costs	$0.22	$1
Production Operating Cash Costs	**$34.11**	**$102**
Sustaining Capital	$0.68	$2
Average All-in Production Cash Costs	**$34.79**	**$104**

1) Scoping Study level of accuracy at + / - 25%
2) All amounts in USD unescalated 2013$
3) South African Rand amounts converted to USD at 1USD = 11.0 ZAR
4) Production rate of 3.0 million pounds per annum is steady state average production rate after initial commissioning and ramp-up
5) Initial capital expenditure costs, contingency, sales & marketing and ongoing royalties are excluded

The Scoping Study referred to in this presentation is based on low-level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised.

Note: Reagent costs based on "spot" prices - high volume long term contracts would be likely to reduce the processing costs significantly

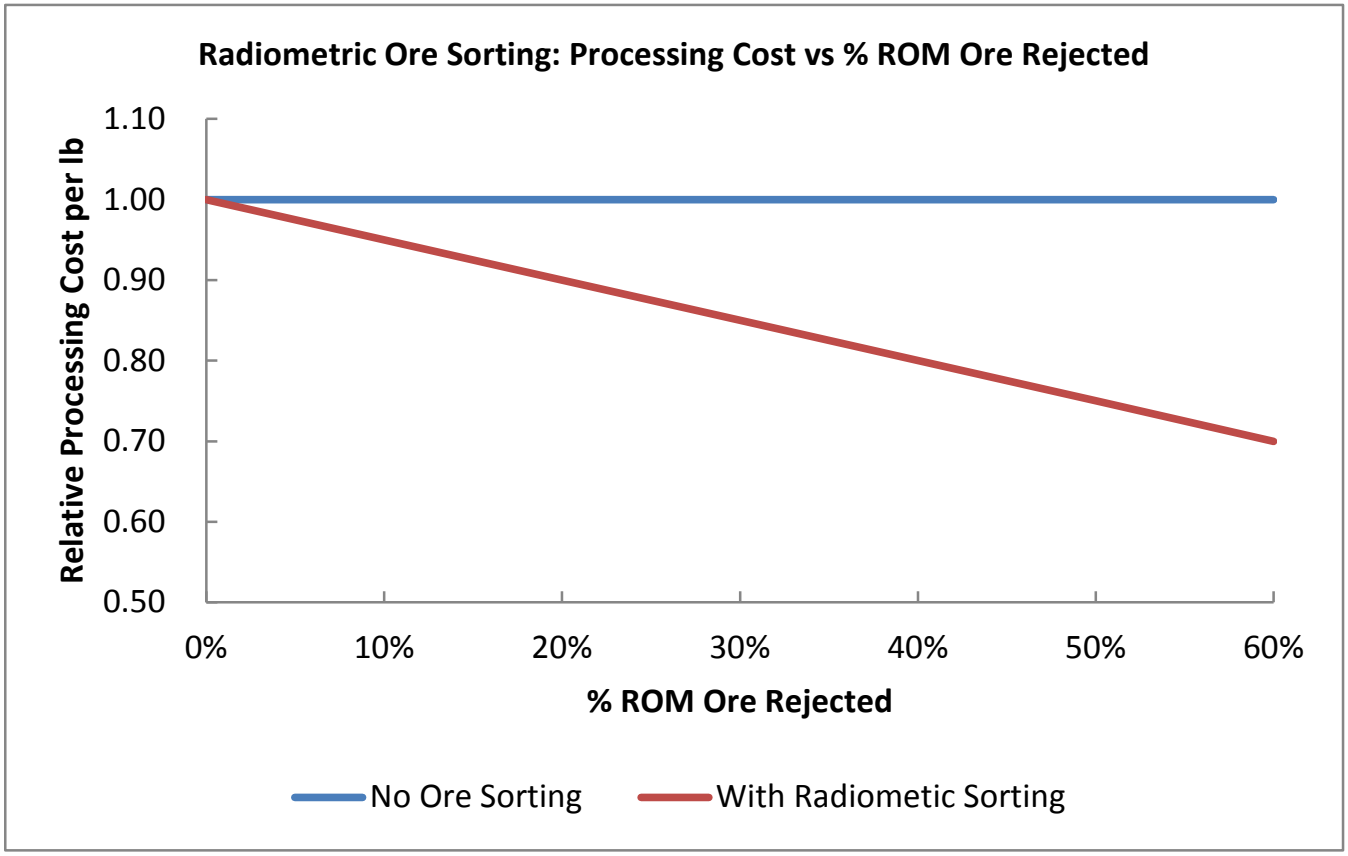
BASIS OF SCOPING STUDY

Inputs to the Scoping Study and outputs from it have been applied to a preliminary financial model. Ore Reserves are yet to be determined and accordingly Peninsula makes no claim as to economic viability or project value in this presentation and release. Key parameters applied to the Scoping Study:

- **Mining Methodology**: The mining methodology adopted for the Scoping Study comprises both open cut and underground mining. Open cut mining was modelled to occur from the Ryst Kuil, De Pannen, Quaggasfontein and Hanne Kuil deposits. Undergound mining was modelled to occur in the Ryst Kuil and De Pannen deposits only. For open cut deposits, a mining dilution factor of 10% was used and a mining recovery rate of 95% was used. For underground deposits, a mining dilution factor of 20% was used and mining recovery rate of 95% was used.
- **Mine Plan**: Optimal Whittle shells were generated for each open cut deposit. Once each open cut deposit was optimised, potential profitable underground mining areas were then identified. The Whittle shell optimisation process used a sales price for U3O8 of US$67.25 / lb. This price represented an average forecast price in 2017 sourced from uranium industry participants and market commentators. This price is also consistent with general industry commentary of a price of US$65-70 per pound being required to encourage and incentivise new uranium mining developments. Total production over the life of mine from the mine plan is 28.5 million pounds of U3O8, with 56% of production sourced from Indicated Resources (16.0 million pounds) and 44% sourced from Inferred Resources (12.5 million pounds).
- **Operating Costs**: Open cut deposits have been modelled on a contractor mining approach, whereas underground mining has been modelled on an owner-operator approach. Contractor rates for open cut mining were sourced from a database maintained by DRA Minerals (Pty) Ltd (the third party engineering firm engaged by the company to undertake the Scoping Study). Costs and mining productivity rates for underground mining operations were also sourced from databases maintained by DRA Minerals (Pty) Ltd. Mining costs allow for all overburden stripping and mine site rehabilitation.
- **Processing and Administrative Costs**: The Scoping Study considered two baseline comparisons for the processing circuit, namely an Acid Leach Circuit based on the testwork done by AREVA / Uramin and the Alkaline Leach Circuit was based on the testwork done by ESSO Minerals. Both baseline circuits were considered with molybdenum recovery and without molybdenum recovery. Metallurgical testwork undertaken by AREVA / Uramin was conducted by ANSTO and the metallurgical testwork undertaken by ESSO Minerals was conducted by Hazen Research Inc.

  As a result of this comparison, the preferred processing circuit recommended from the Scoping Study is an Alkaline Leach Circuit without molybdenum recovery. Reagents and power comprise the majority of the processing and administration costs. Usage of reagents per pound of production was applied to the current cost to purchase each reagent on a spot purchase basis. Electricity cost has been based on sourcing electricity from the main power grid.
- **Initial Capital Cost**: Initial capital costs are estimated at US$165 million, excluding contingency. This cost includes the cost of owner-operator underground mining equipment, processing plant and site infrastructure. A preliminary design of the processing plant has been completed by DRA Minerals (Pty) Ltd designed to process up to 2.2 million tonnes per annum of ROM ore and produce up to 3.0 million pounds per annum of U3O8. Capital and Operating cost optimisation will be a focus of value engineering during the PFS for the project.

OPTIMISATION POTENTIAL



1) % ROM ore rejected based on testwork undertaken by ANSTO in 2008 at the request of Uramin
2) ANSTO 2008 testwork results show that it is possible to reject approximately 40-55% of the material fed at an average reject fraction of 100ppm, resulting in only a 2-8% uranium loss
3) Relative processing cost per pound to be further assessed during PFS and BFS stages of the development of the project

HISTORICAL OVERVIEW

High grade open pit opportunities

High grade underground opportunities

DATABASE

Extensive drilling database

Numerous drilling and engineering studies conducted by:

Esso
Union Carbide
JCI
Uramin
Areva
Anglo American
Tasman Pacific

Currently 9,329 drill holes (>642,000m of drilling and probing information)

Tracking down a further 2,000+ historic drill holes

PENINSULA CONFIRMATION ACTIVITY

- 892 (21,852m) exploration RC, RC twin, DH twin completed
- >600 (14,986m) historic holes re-probed for QAQC and JORC resource estimate
- Completed airborne radiometric survey
- Project mapping
- Database compilation and validation
- JORC resource estimate completed (Jan 2013)
- Further detailed metallurgical test work initiated

EXPLORATION TEAM

SENIOR EXPLORATION TEAM

Glenn Black: COO, CEO South Africa	Senior management engineer; 30 years experience with De Beers in mine construction and operations in Africa
Alf Gillman, Technical Director PEN	UNatal (Pmb), UWA, member of original Esso Exploration team at Ryst Kuil/Tanqua
George Van Der Walt, Project Geologist	UStellenbosch, five years continuous experience on the Karoo projects, based in Beaufort West

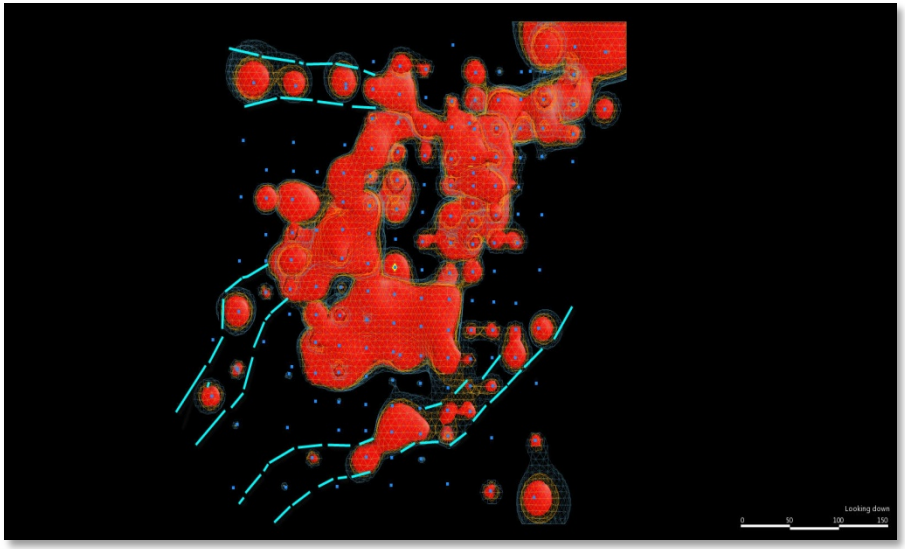
DATABASE

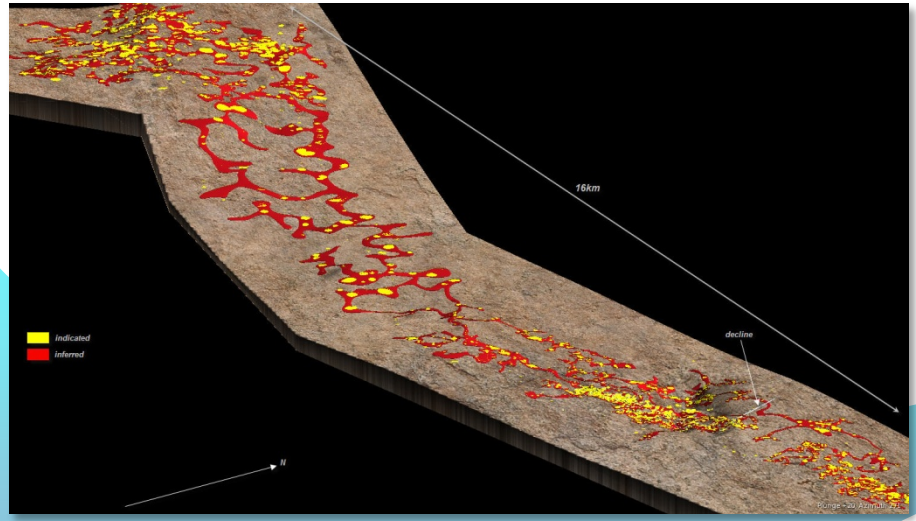
Advanced geological modeling

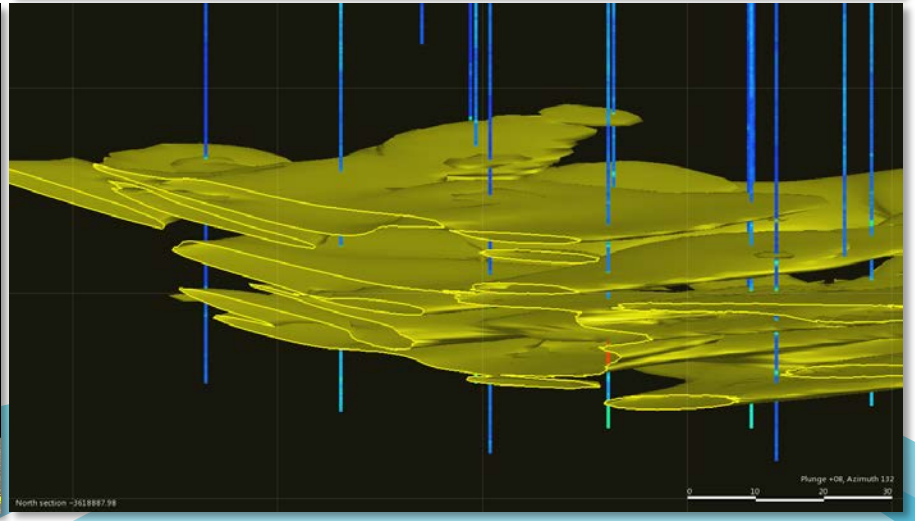
Enhanced continuity apparent from 3D modelling

Identification of mineralised trends

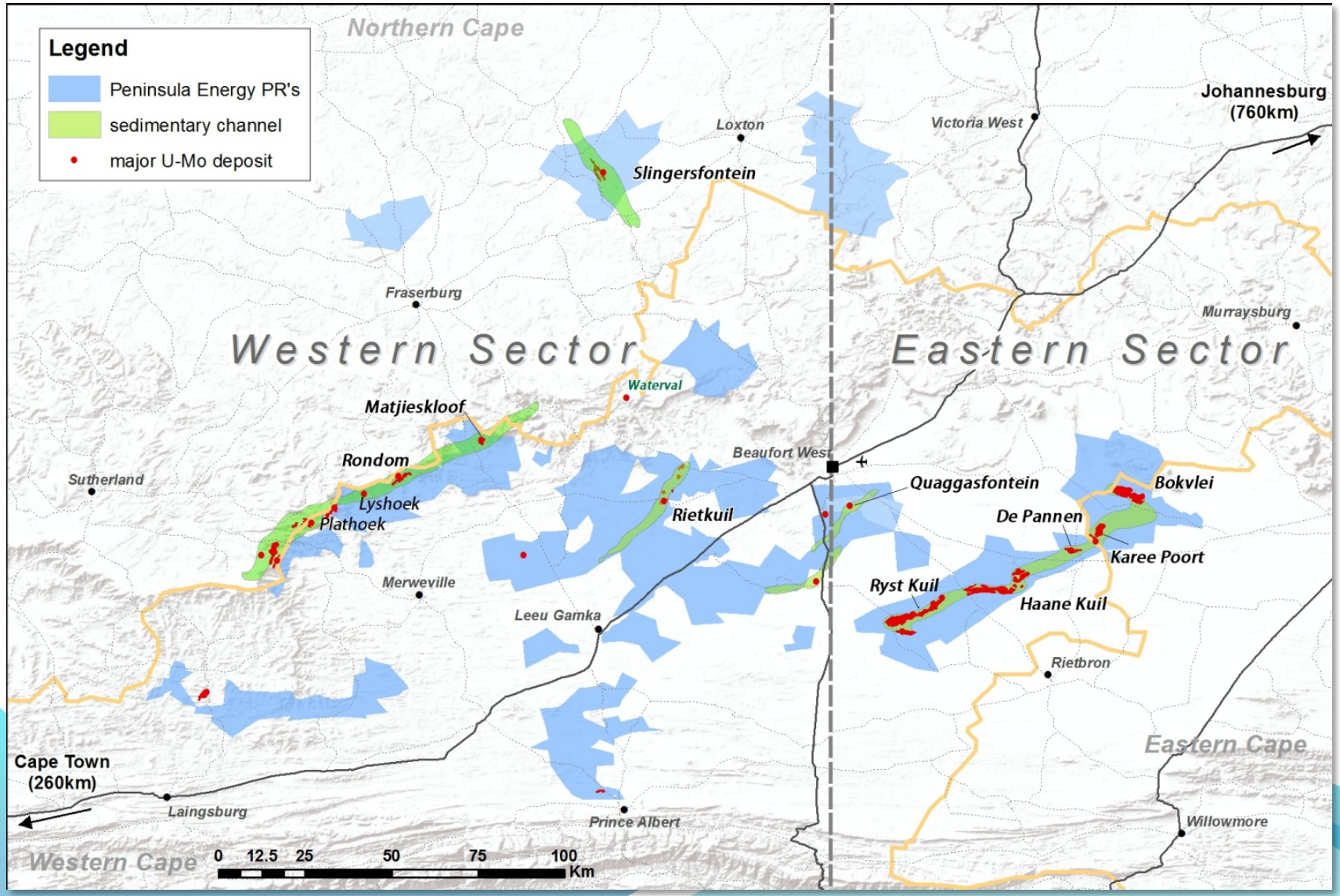
Geology no longer constrained by farm boundaries







KAROO PALEOCHANNELS



EXPLORATION TARGET

Exploration Target

Exploration Areas	Tonnes (M)		Grade (ppmU3O8)		U3O8 (Mlbs)	
Range	From	To	From	To	From	To
Total	**126**	**133**	**900**	**1200**	**250**	**350**

Please note that in accordance with Clause 17 of the JORC (2012) Code, the potential quantity and grade of the "Exploration Target" in this announcement must be considered conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

EXPLORATION TARGET

Basis of the Exploration Target

The Exploration Target is based on a combination of Exploration Results and on proposed exploration programs.

Exploration Results

Approximately 10,000 historic holes, of which 7,163 have been relogged, together with 1,245 newly drilled and logged holes. The data from these holes has been used to determine a JORC 2012 compliant resource and to extrapolate between areas of limited drilling but still within the mineralised trends. For a comprehensive description of drilling information readers are referred to JORC Table 1 (shown below) included in announcement to the ASX on 5th February 2013: 50.1 MILLION POUND MAIDEN JORC CODE-COMPLIANT RESOURCE AT KAROO PROJECTS .

Classification	eU_3O_8 (ppm) cut-off	Tonnes (millions)	eU_3O_8 (ppm)	eU_3O_8 (million lbs)
Indicated	600	6.9	1,020	15.7
Inferred	600	14.8	1,050	34.4
Total	**600**	**21.7**	**1,040**	**50.1**

Proposed Exploration Programs

The Company has prospecting rights to 7,800 square kilometres of ground. This package covers the most prospective mineralised trends that have a cumulative strike length of 23km. The Company intends to continue exploration over this ground using airborne radiometric data, geological mapping and prospecting together with follow up drilling with the intention of locating additional material for future mining and processing.

Basis of Grade and Tonnage Range Determination

With a database of approximately 10,000 drillholes, together with several decades of geological research and surface exploration, the level of exploration activity on which the Exploration Target is based is considered to be high.

The current Karoo resources are located on two well-defined sedimentary channels that each extend for up 100kms along strike. These channels have been tested both recently and historically with approximately 10,000 exploration drillholes. Along these channels JORC-compliant resources have been estimated in localised areas in which reliable drilling data is available. The zones between the JORC-compliant resources areas form the Exploration Target because of the following:

- Continuity of the prospective sandstone established by geological mapping and regional drilling
- Historic estimates of mineralisation based on drilling which have not yet been validated by Peninsula

The JORC-compliant resource of the Ryst Kuil channel alone, which represents the most completely drilled portion of the resources, comprises 17.2Mt at 1,048ppm eU3O8.

EXPLORATION TARGET

This resource tonnage is distributed over a cumulative strike length of 23km representing approximately 0.75Mtonnes/km. The Exploration Target is based on a combination of:

- the total cumulative prospective strike length of the undrilled sections of the channel multiplied by the demonstrated tonnage/km, combined with,
- the areas of known mineralisation for which historic estimates exists but are not included in the JORC-compliant resource
- the grade range which represents the lowest resource area grades and highest resource area grades.

Summary of the Relevant Exploration Data Available and the Nature of the Results

For a comprehensive description of drilling information readers are referred to JORC Table 1 included in announcement to the ASX on 5th February 2013: 50.1 MILLION POUND MAIDEN JORC CODE-COMPLIANT RESOURCE AT KAROO PROJECTS. Peninsula confirms that it is not aware of any new information or data that materially affects the information included in this presentation and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

Proposed Exploration Activities Designed To Test Validity of the Exploration Target

Over the next 3-5 years ongoing exploration drilling is proposed to expand the JORC-compliant resource within the Exploration Target areas. This initial 3-5 years program will be focussed on the Eastern Sector Ryst Kuil channel. Exploration activities will mostly comprise geophysical logging and geochemical sampling of additional drillholes, ground-based prospecting and geological mapping.

Testing of the Western Sector Exploration Target, utilising the same exploration techniques, areas will commence during following 5-10 year time frame.

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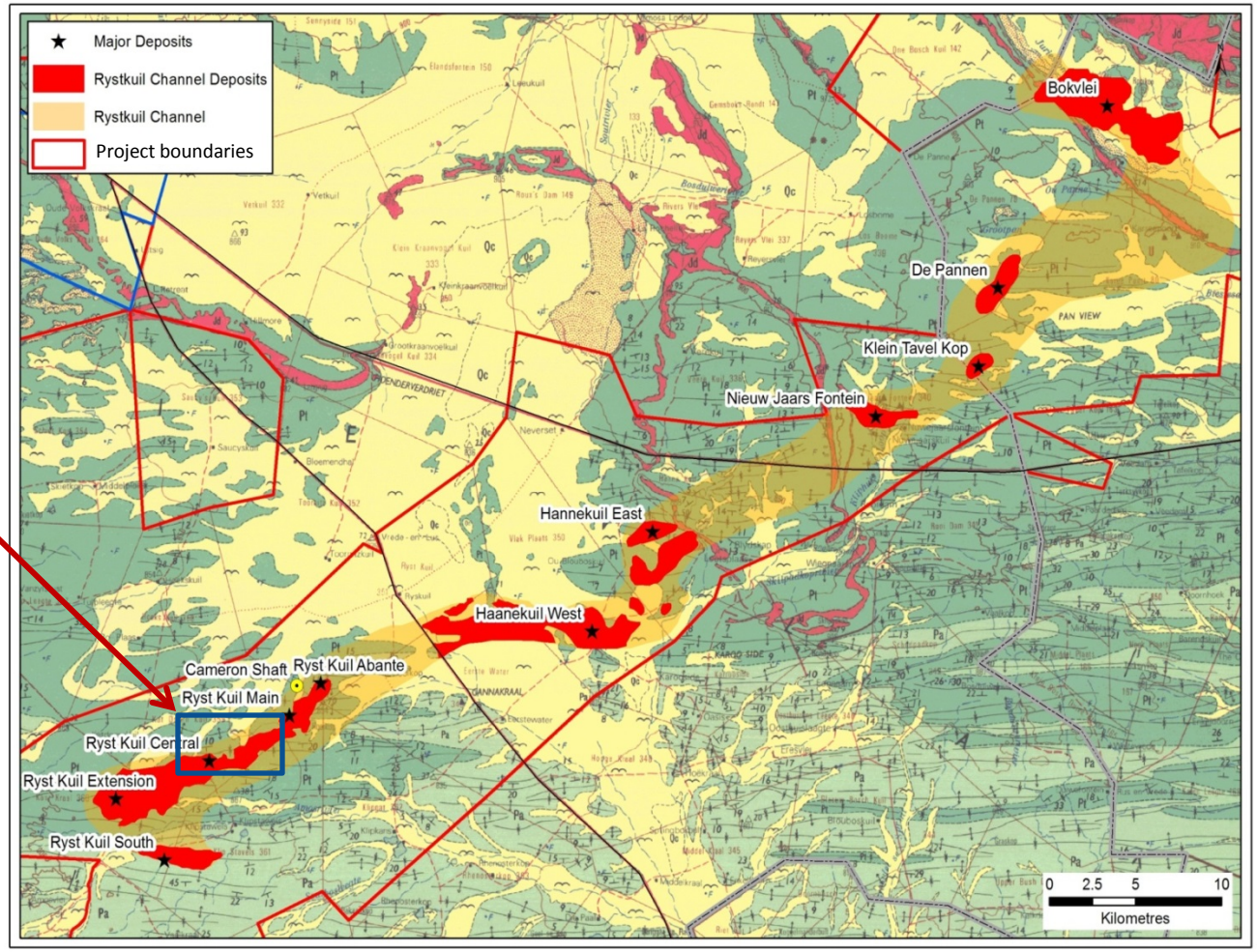
RYST KUIL PROJECT AREA

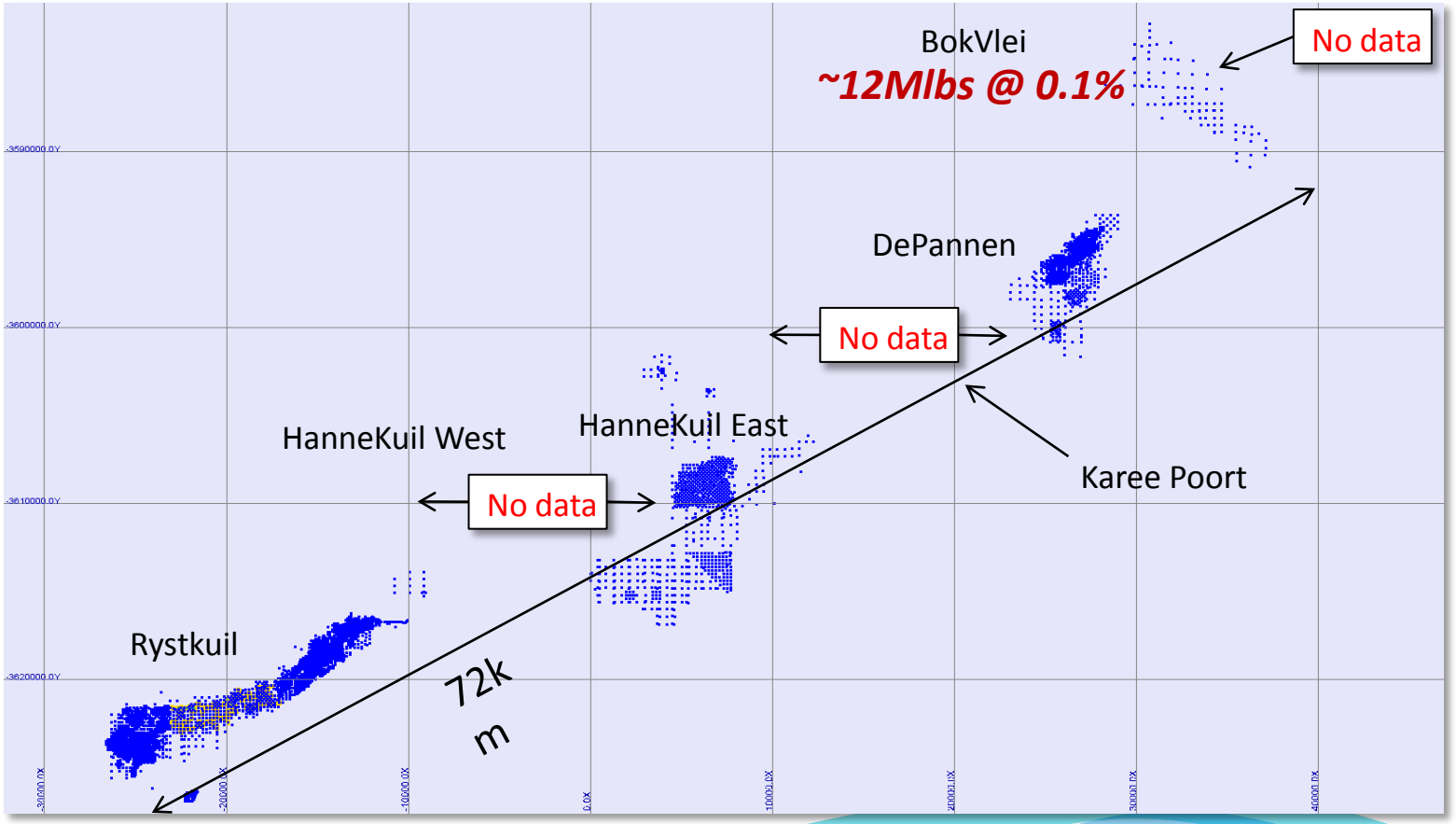
Ryst Kuil Central

Example of interrogation and modeling of dataset



Ryst Kuil Full Channel Extent

RYST KUIL DATABASE



RYST KUIL TRIAL MINING 1979

RYST KUIL TRIAL MINING AREA

1979

2012

RYST KUIL TRIAL MINING AREA

1979

2012

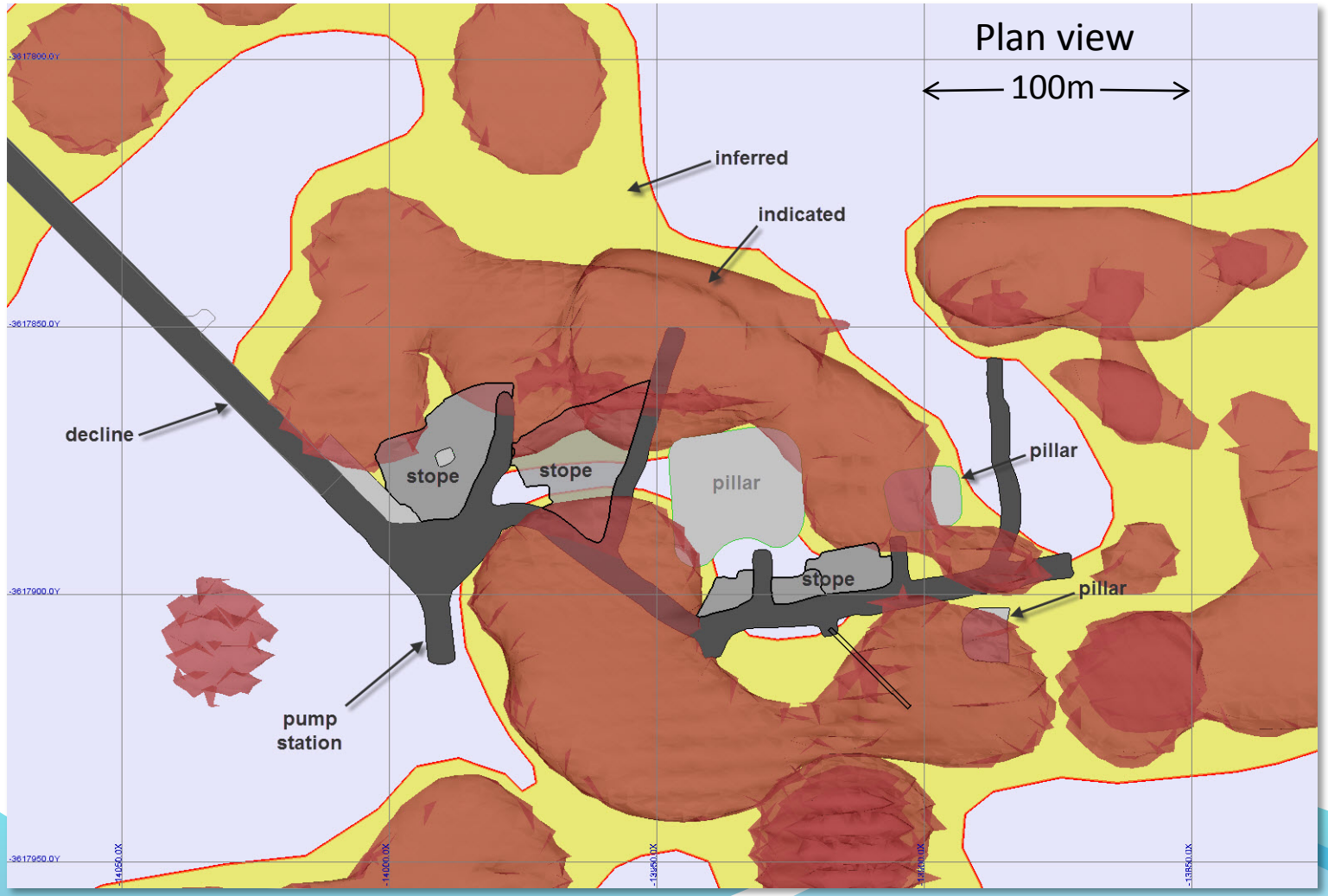
RYST KUIL TRIAL MINING AREA

1979

Chris Cameron (facing camera)
the geologist who discovered Ryst Kuil

2012

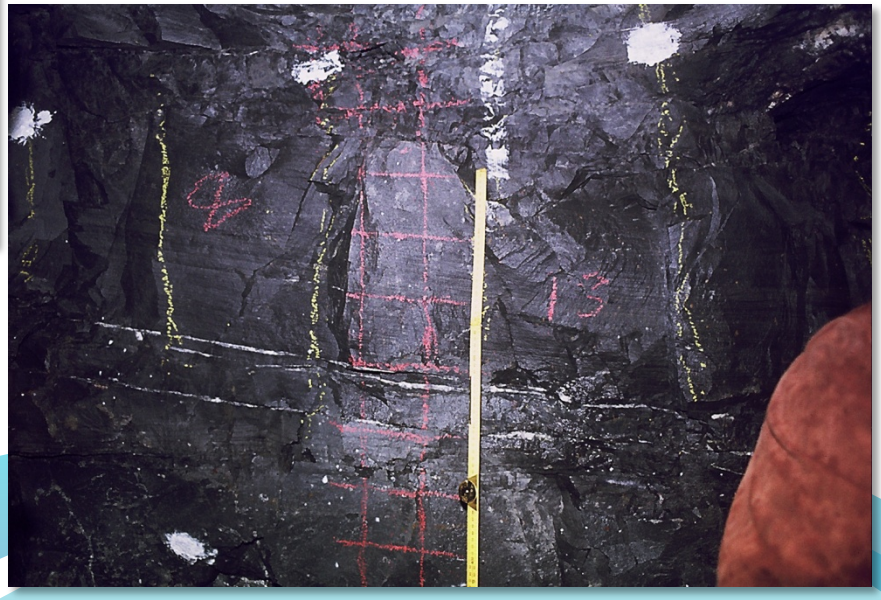
RYST KUIL TRIAL MINING



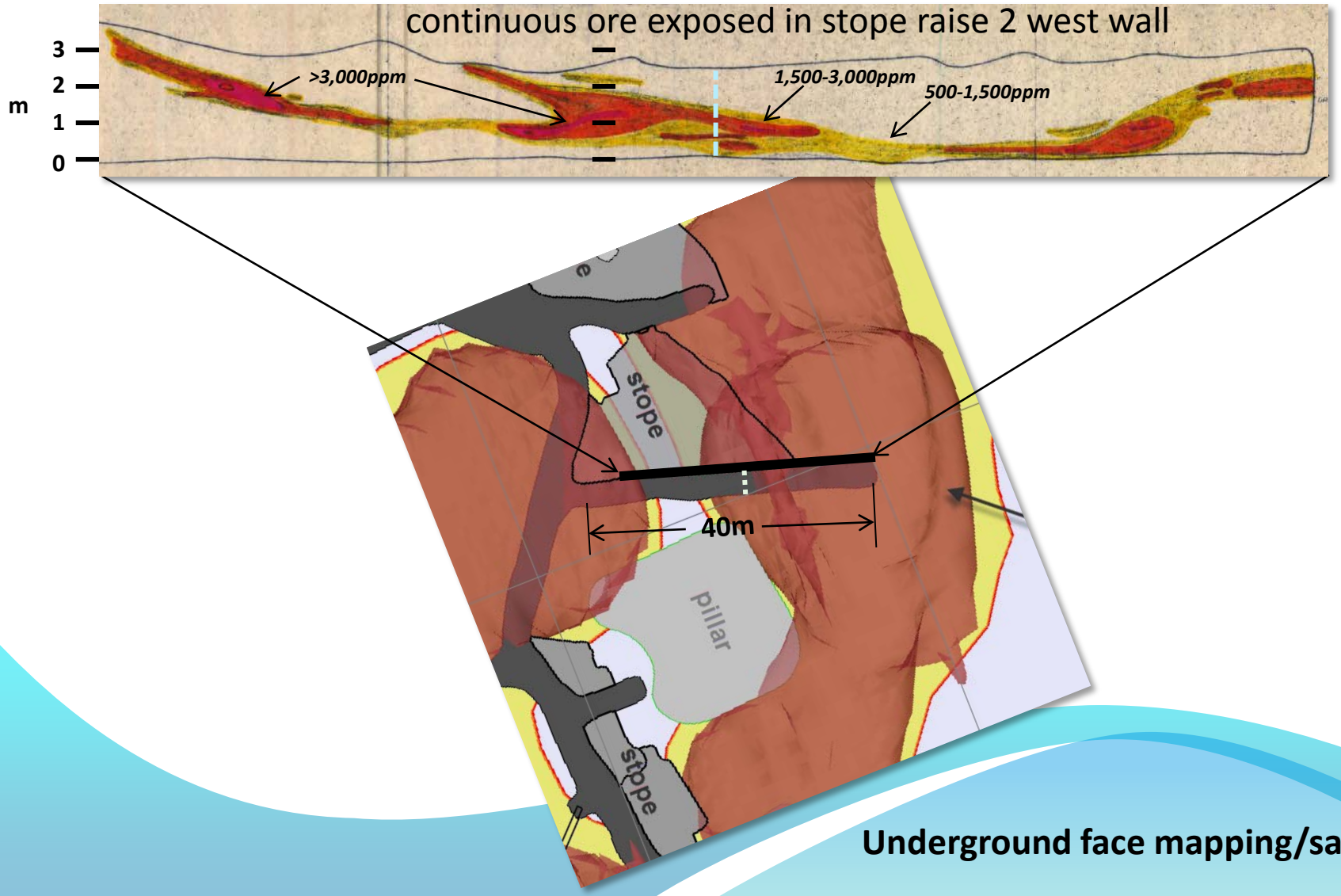
162 bulk samples at 25t each (4,050t)

RYST KUIL TRIAL MINE AREA

Underground face mapping/sampling



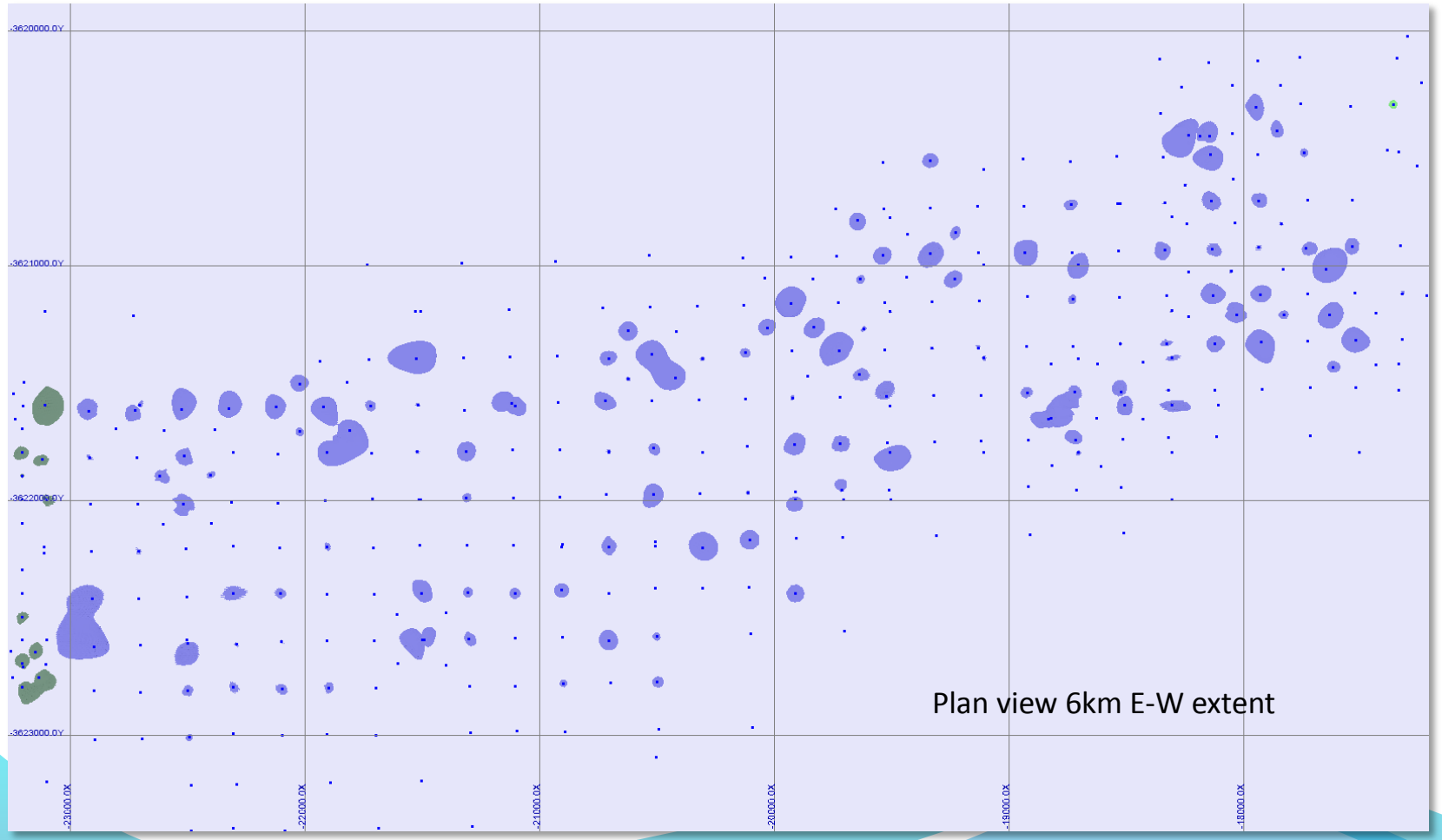
RYST KUIL TRIAL MINING AREA



Underground face mapping/sampling

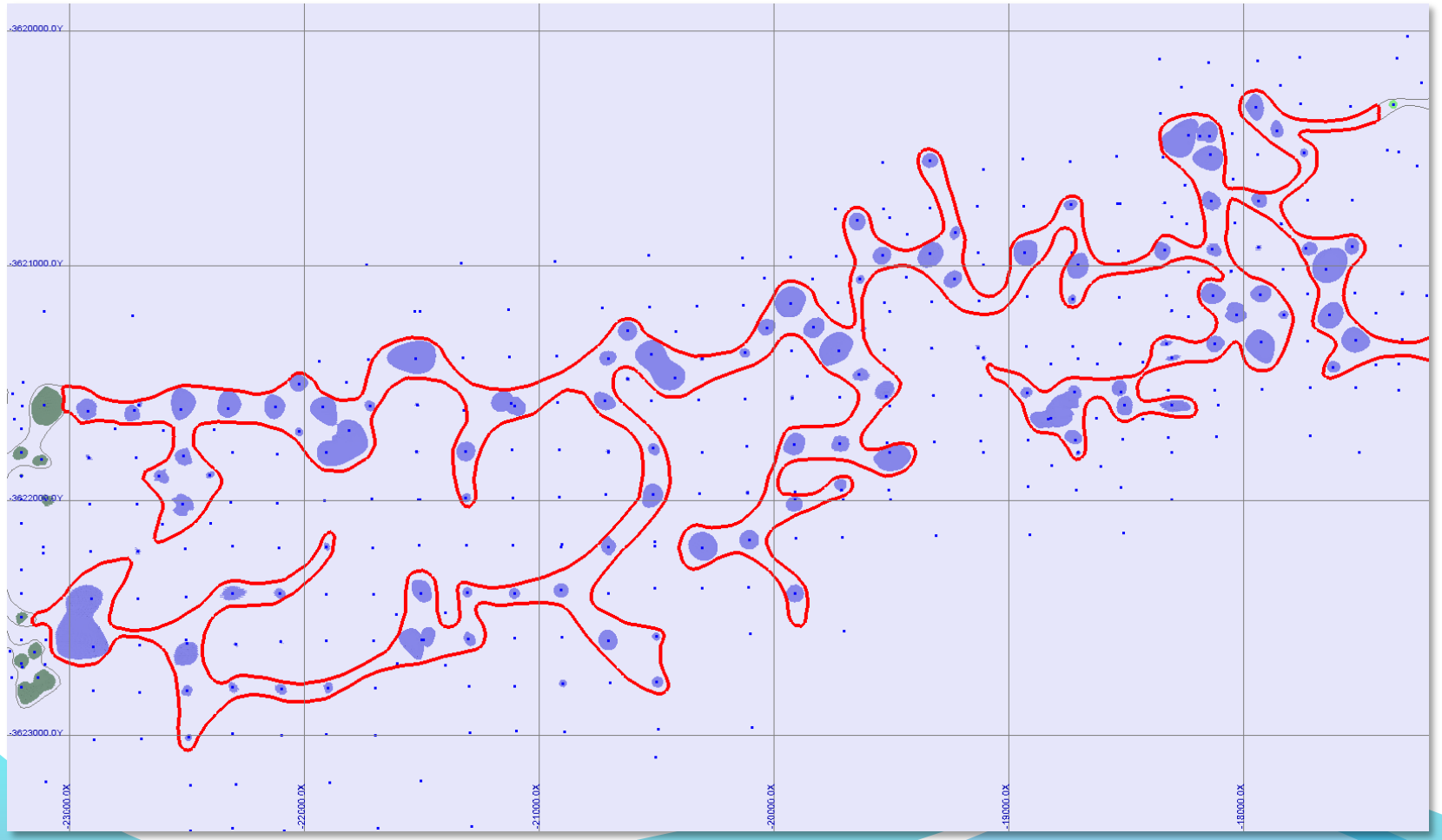
RYIT KUIL EXPLORATION MODEL

Ryst Kuil Central



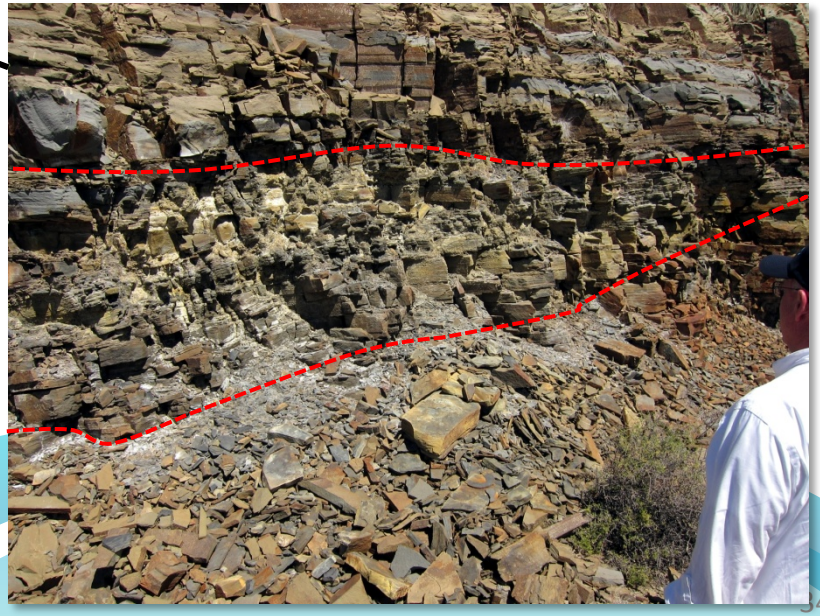
EXPLORATION SUCCESS

Ryst Kuil Central



REIT KUIL PROJECT AREA

1979

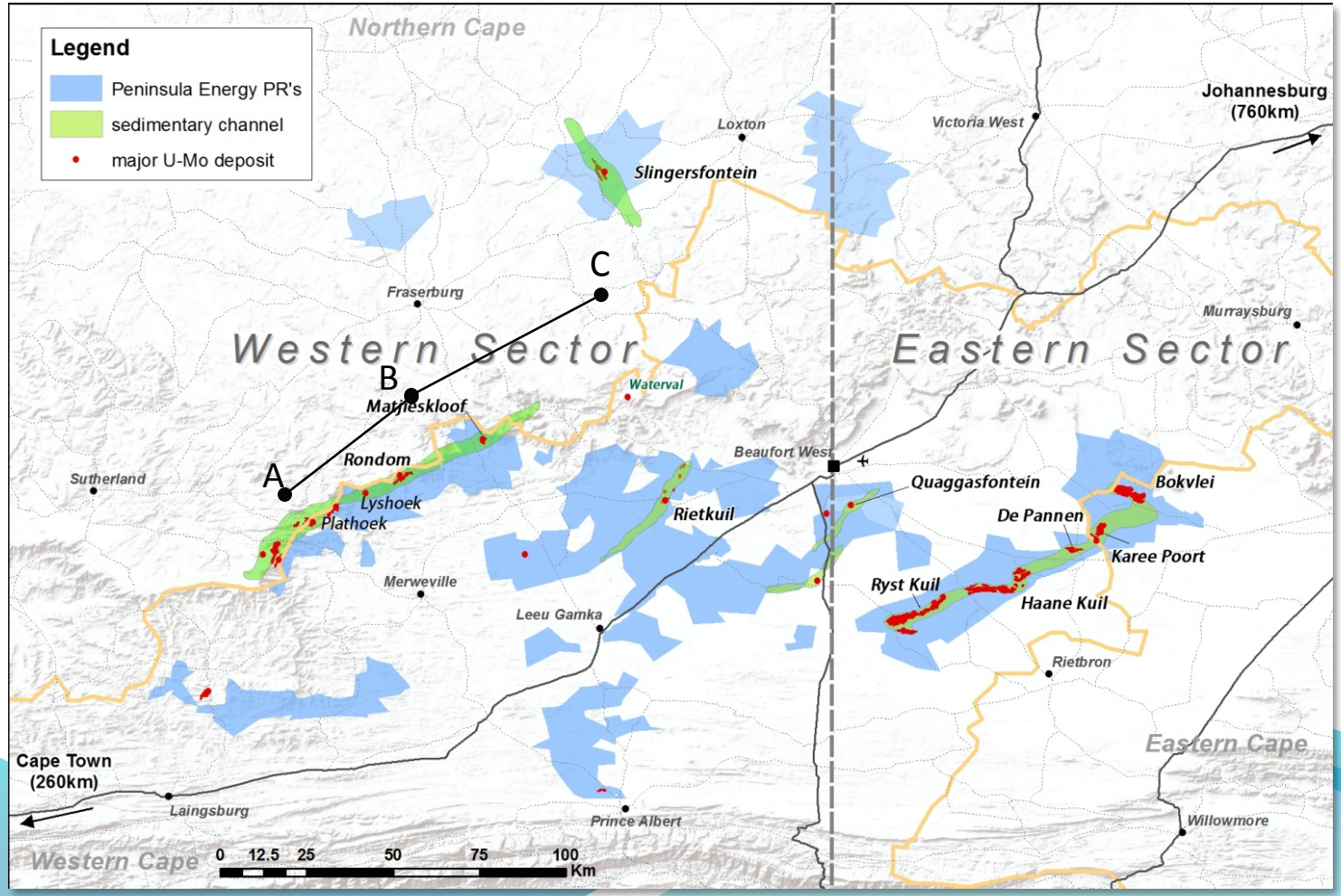


2012

WESTERN SECTOR PROJECT AREA

Western Sector - Tanqua

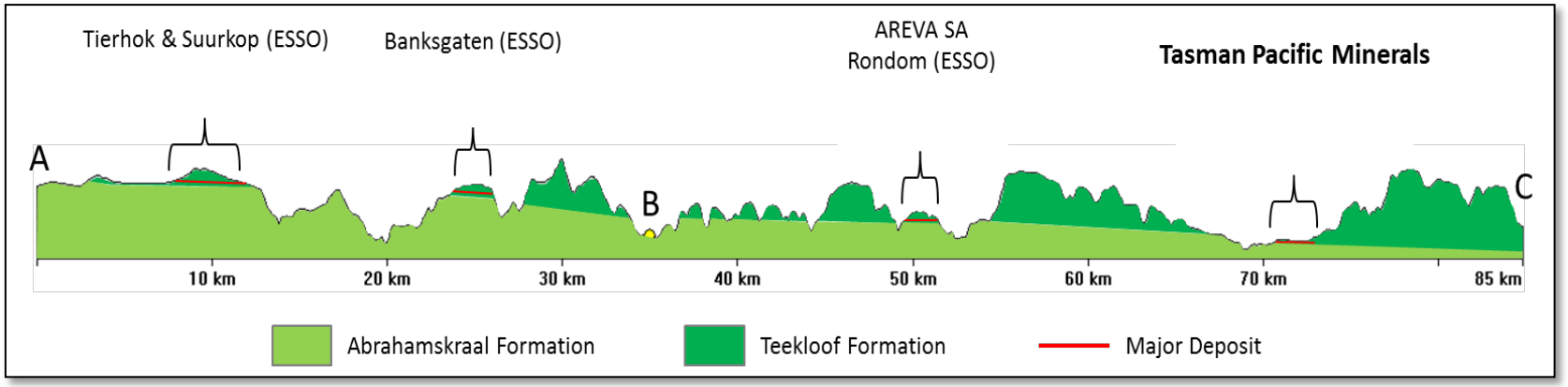
Modelling and targeting of entire strike length



EXPLORATION SUCCESS

Western Sector - Tanqua

Modelling and targeting of entire strike length



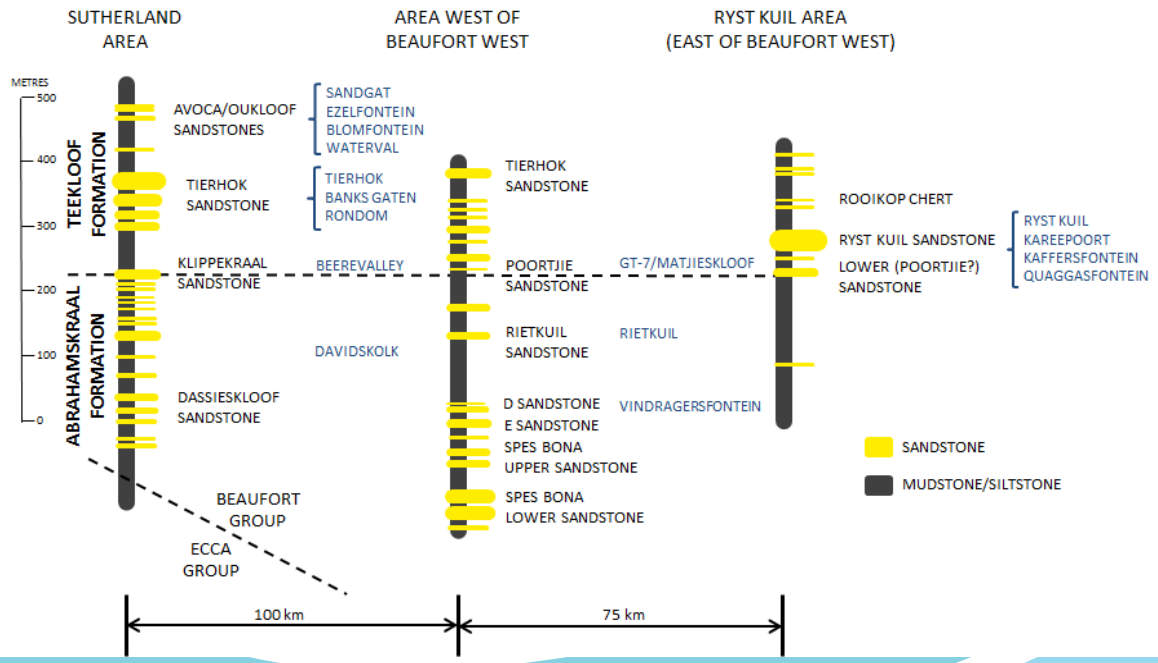
Tanqua Channel Extent Longitudinal Section

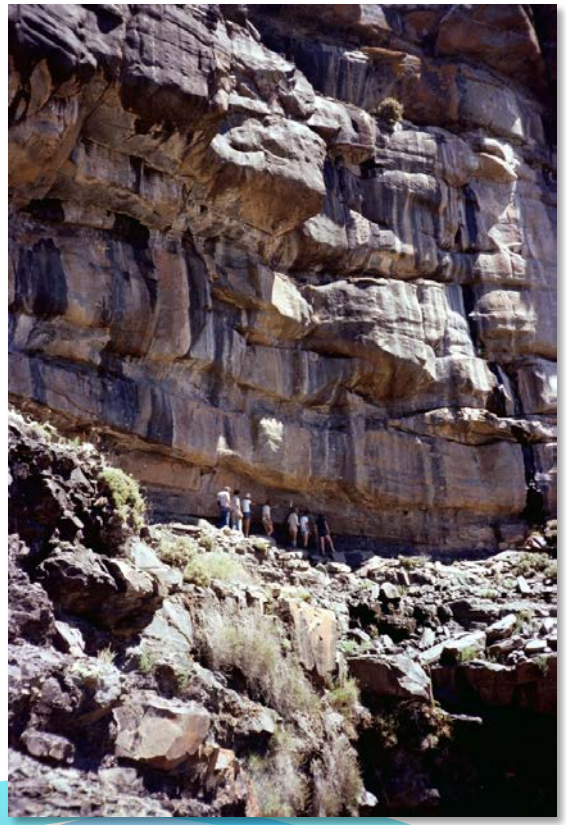
WESTERN PROJECT AREA PROSPECTIVITY

Regional continuity of host sandstones

Major thicknesses of sandstones preserved along Tanqua trend

Tanqua generally higher average grade (>1,400ppm)





Teekloof sandstones on Tanqua Trend

KAROO SUMMARY

- **50mlbs U_3O_8 @ 1040 ppm**
- **Significant potential for further exploration success**
- **Positive Scoping Study completed September 2013**
- **PFS initiated December 2013:**
  - DFS completion targeting Q3 2015
- **Mining Licence Application initiated**
- **Targeting Development 2017/18**