

Cairns and Mining Conference – 12th June 2013

FNQ Exploration & Mining Roundup 2013

FNQ = Cairns to Kidston to the Gulf and Cape York

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of Bremar Minerals Pty Ltd
Information is from public sources

An Outline of Activity at June 2013

DISCLAIMER

- The author is a Contract Geologist based in FNQ since 1979, and is not employed by or hold shares in any of the Companies mentioned in this presentation.
- The author does not promote any of these companies or projects but presents data that is available or has been made available in the public domain
- Anyone doing business with any of these companies cannot construe any of this presentation as endorsing the public statements or promotions of these companies, but must make their own business and financial assessments in the normal manner of business associations.
- The author is not qualified as a business or financial advisor so cannot be taken as such.

Aims of this presentation

- An overview of activities in FNO only - Only companies (private and public) and individuals with mining tenements in FNO are included
- None of this is a promotion of any of the Companies mentioned.
- There is no pretence that this includes all – some have been missed out
- It is aimed that none of the concurrent presentations are duplicated, or is there repetition of the well known operations
- It is to be noted that this presentation is based on Annual and Quarterly reports hence recent downturns may make some of the comment out of date

Exploration AND Mining

- It MUST be understood that there is a major difference between Exploration and Mining
- If there is no exploration then there can be no mining. Exploration is conducted by “small” companies – rarely by the majors!
- Exploration is based on Exploration Permit and mining is based on a Mining Lease.
- The fundamental unit of exploration is the “sub block which is 1 minute of latitude x 1 minute of longitude (approx 3.3sq km each). The commitment to the Government is to spend of the order of \$1,000 per year per sub block
- There are an estimated 30,000 of these in FNQ under application or granted. <http://mines.industry.qld.gov.au/geoscience/interactive-resource-tenure-maps.htm>

Targets and Companies

Targets

- Tin
- Gold
- Base metals
- Tungsten
- Bauxite
- Kaolin
- Marble
- Rare earths
- Diatomite
- Silica sand
- Silica for solar
- Beach Sands
- Tantalum
- Perlite
- Construction materials
- Coal
- Coal seam gas
- Uranium
- Geothermal Energy
- Petroleum

Included are local companies, national companies & international companies.

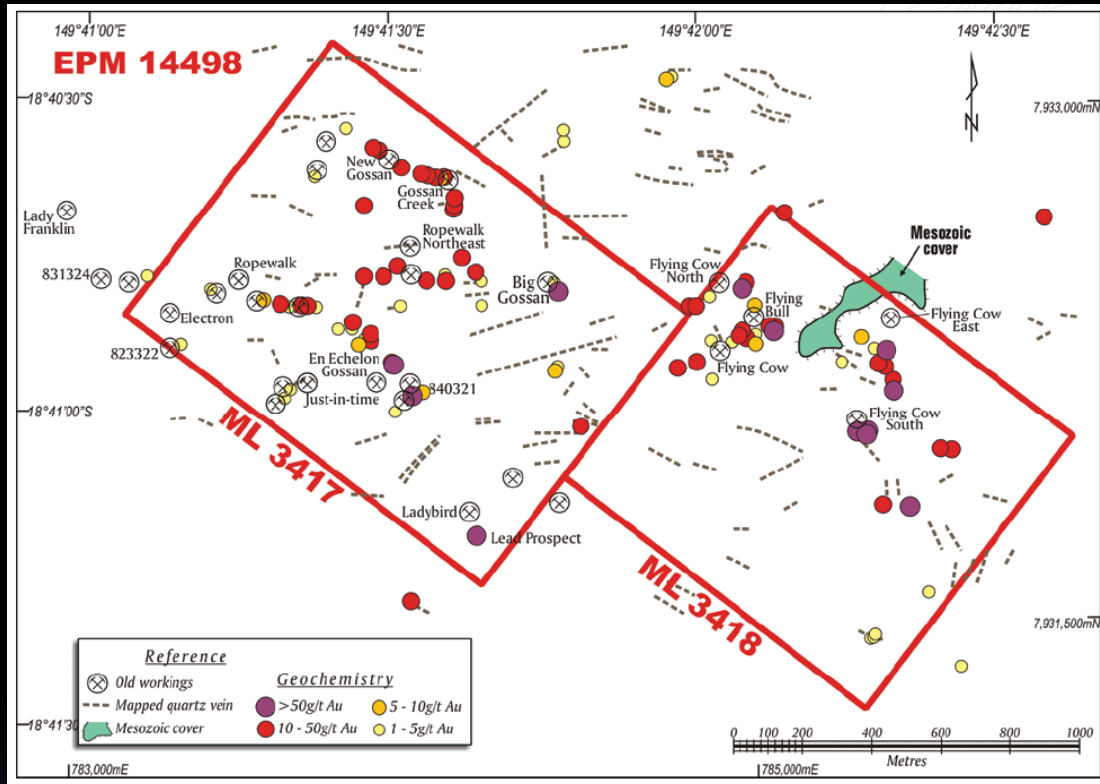
Majors are essentially not represented – mainly because of their lack of exploration interests

An Arbitrary Selection of Companies and their Activities

Georgetown – Forsayth Area

- Many private companies, as well as public companies including, but not limited to:
 - Australian Gold Mining PL, (recently drilling)
 - JKO Mining PL
 - Aussie NQ Resources PL
 - Centauras Metals Ltd (mainly in Brazil)
 - Endolithic Resources PL
 - Central Gold Mines PL
 - Atherton Minerals PL
 - Artemis Mining Corporation PL
 - Altius Mining Limited (mining)
 - Pepininni Minerals PL
 - Rennison Consolidated Mines NL

Altius Mining @ Forsyth: Gold

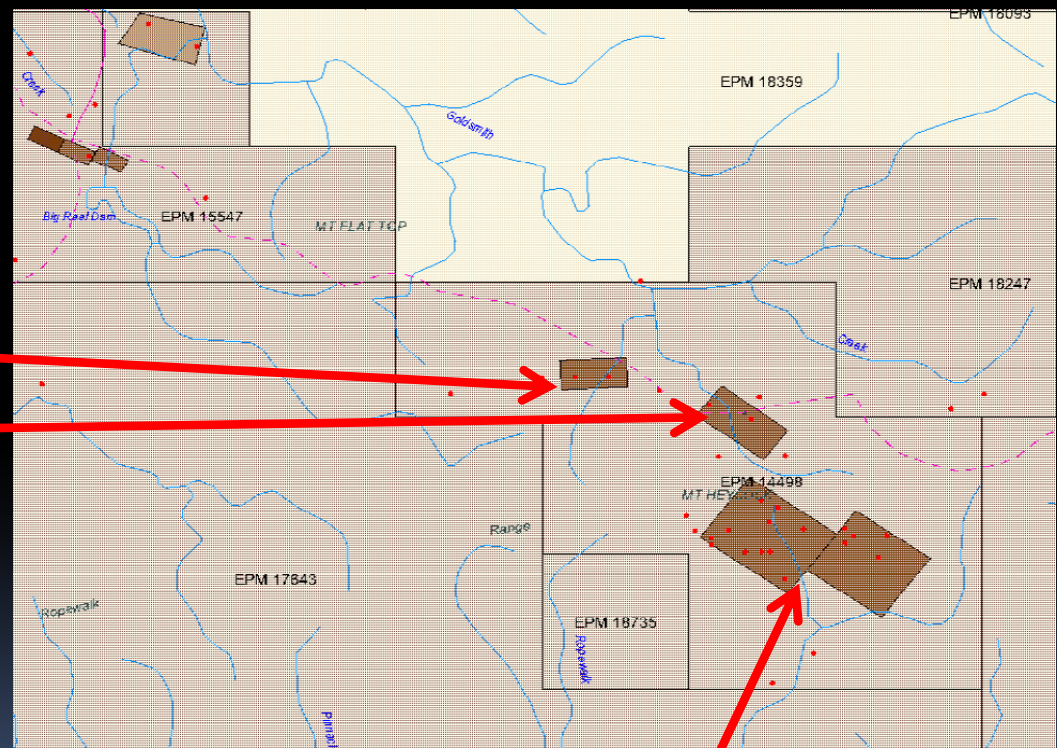


- Major changes to the Board
 - Professional Consultants employed
 - Mill and crushing circuit audited
 - EA being upgraded
 - Regional exploration expanded
- (AGM Nov 2012 Geological Presentation)

- Tenements in Qld inc 2 granted MLs and 1 EPM
- Prospects include: Ropewalk, Flying Cow, North Arm, Queenslander, Nil Desperandum, Big Gossan
- Historically grades mined were in excess of 1 oz Au/t
- Orebodies are narrow vein
- In the 2012 Ann Rep there were no drill results and no stated resources or reserves

Australian Gold Mining PL

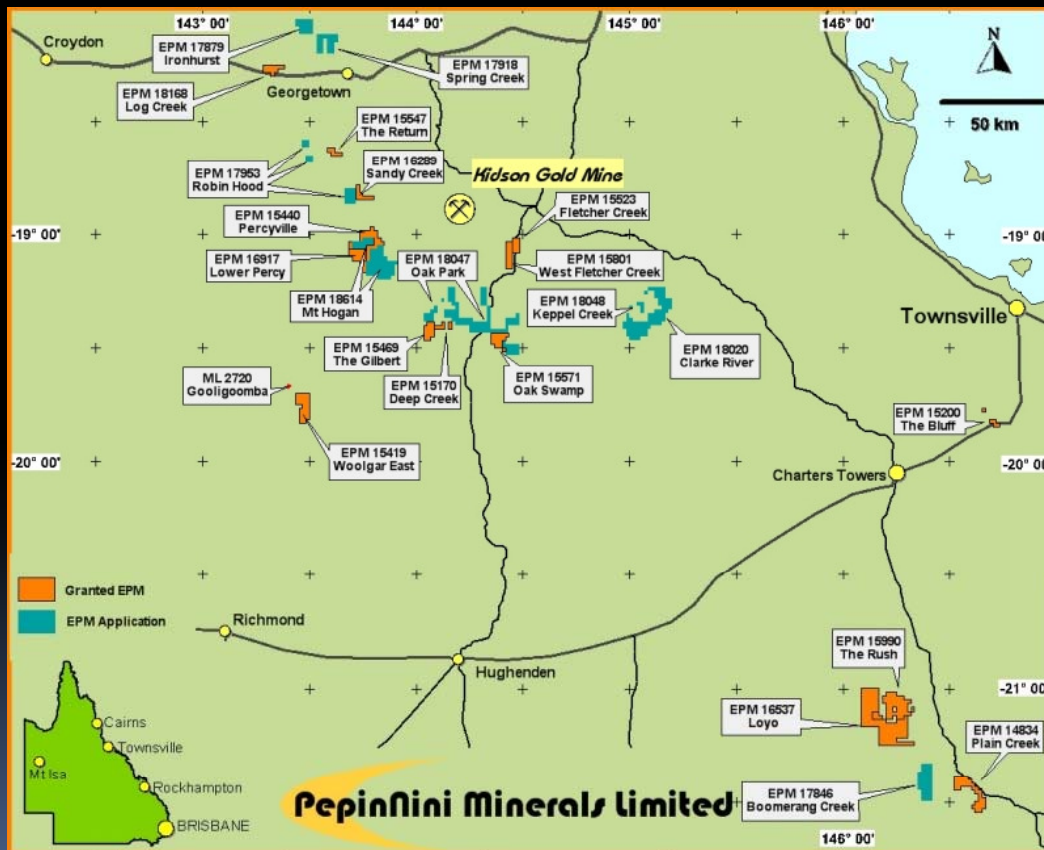
- Growing private company in the Forsayth area
- Extensive drilling programs
- Canadian
- Goldsmiths
- Cortez (new MLA)
- High grade narrow vein systems
- Expanding tenement holdings in FNO



Altius Group

Pepinnini Minerals: Gold + uranium + strontium

- Targets U, Au, Sr, base metals
- Originally a Percyville - Ind+Inf Resources Report: 12.8mt at 2.5 g/t Au No longer current
- Latest activity: heli mag + drilling late 2010,
- 25 holes for 3,256m, for 1-2m intersections of high grade – Forsayth & Percyville
- Divested of non core tenements to JKO



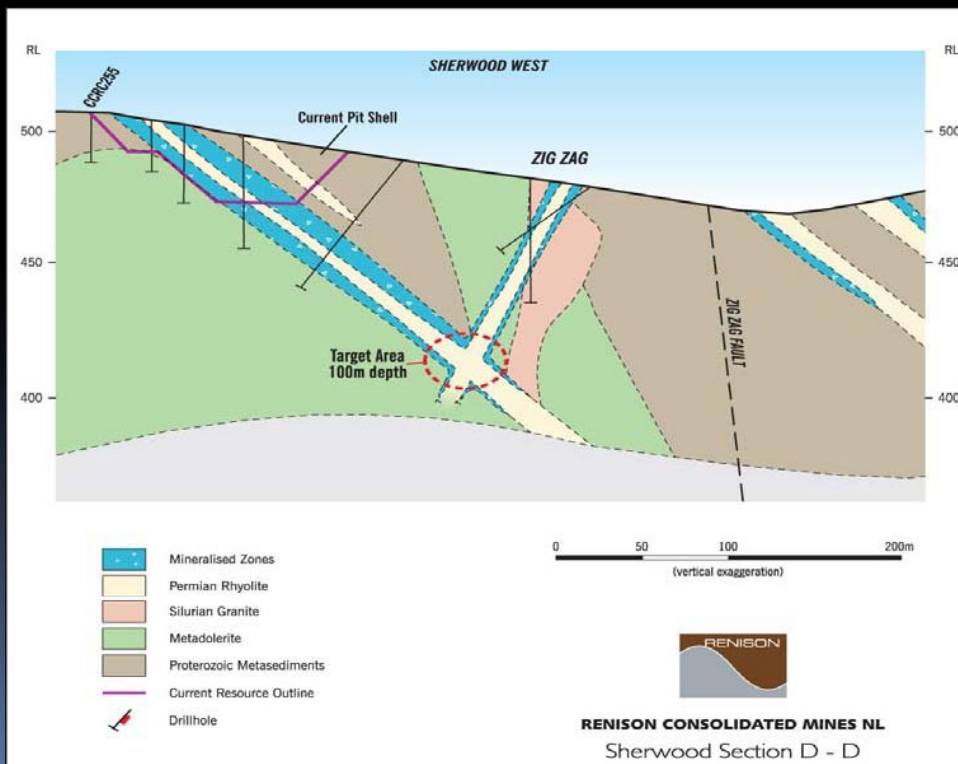
<http://www.pepinnini.com.au/>

Gold: Renison Consolidated - 2011

The current resource estimates are set out in the tables below at a 0.3 g/t gold cut-off grade.

0.3 G/T CUT-OFF	TOTAL			SHERWOOD			SHERWOOD SOUTH			SHERWOOD WEST		
Resource Classification	Mt	Gold g/t	Gold '000 oz	Mt	Gold g/t	Gold '000oz	Mt	Gold g/t	Gold '000oz	Mt	Gold g/t	Gold '000Oz
Indicated	10.65	0.98	336	5.42	1.04	181	0		0	5.23	0.92	155
Inferred	6.36	0.88	180	2.61	0.91	76	0.43	1.05	15	3.32	0.83	89
Total	17.01	0.94	514	8.03	1.00	258	0.43	1.05	15	8.55	0.89	245

Mar Qtr 11



- Agate Creek area – south of Forsayth
- Epithermal, qtz+Au, in narrow structures
- Prot meta seds, dolerite, Permian granites, rhyolites, agglomerates in subsidence cauldron
- Now 480 holes, latest in 2010
- Additional targets deeper and adjacent anomalies
- Barrick diluting out

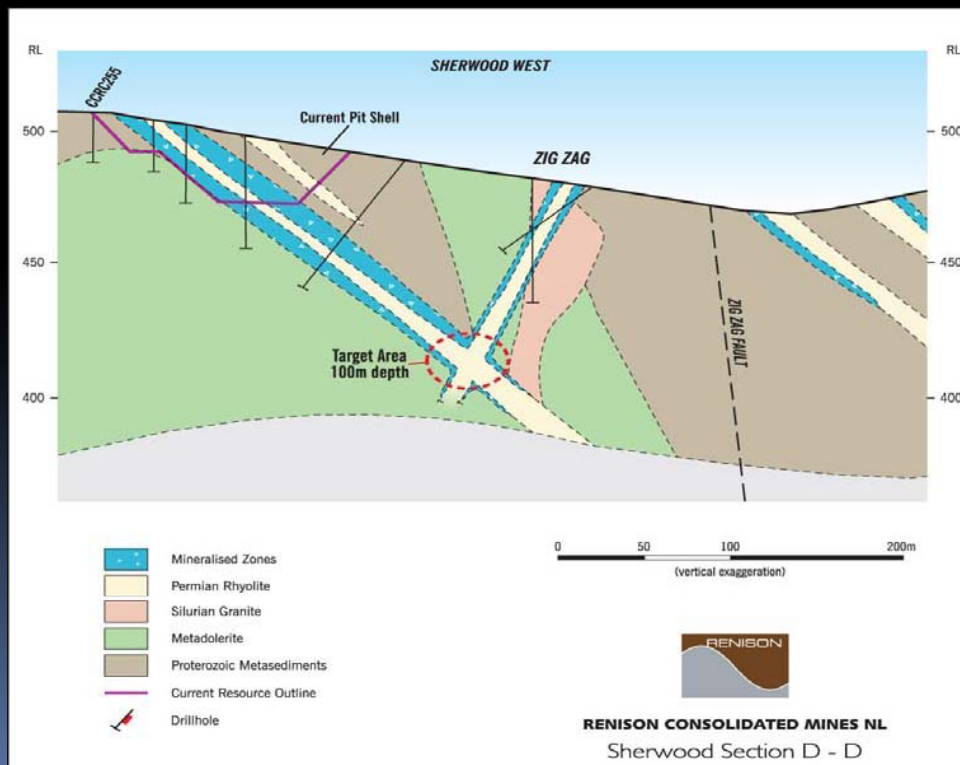
Sectional View of Sherwood West Zig-Zag Intersection Target Area

<http://www.rcm.com.au>

Gold: Renison Consolidated

□ Revised Resources

Mar Qtr 11



- Agate Creek area – south of Forsayth
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Sectional View of Sherwood West Zig-Zag Intersection Target Area

<http://www.rcm.com.au>

Uranium Companies

- Under the new Government in Queensland exploration for U is increasing
- A number of Companies exploring for uranium including:
 - Callabonna
 - AREVA
 - China West
 - Mega Uranium
 - Pepinnini
 - Regalpoint
- Known resources include:
 - Maureen (Georgetown)
 - Ben Lomond (Townsville)
 - Westmoreland (Qld-NT border)

Areva – U Objectives 2011-15

Areva's objectives 2011-2015

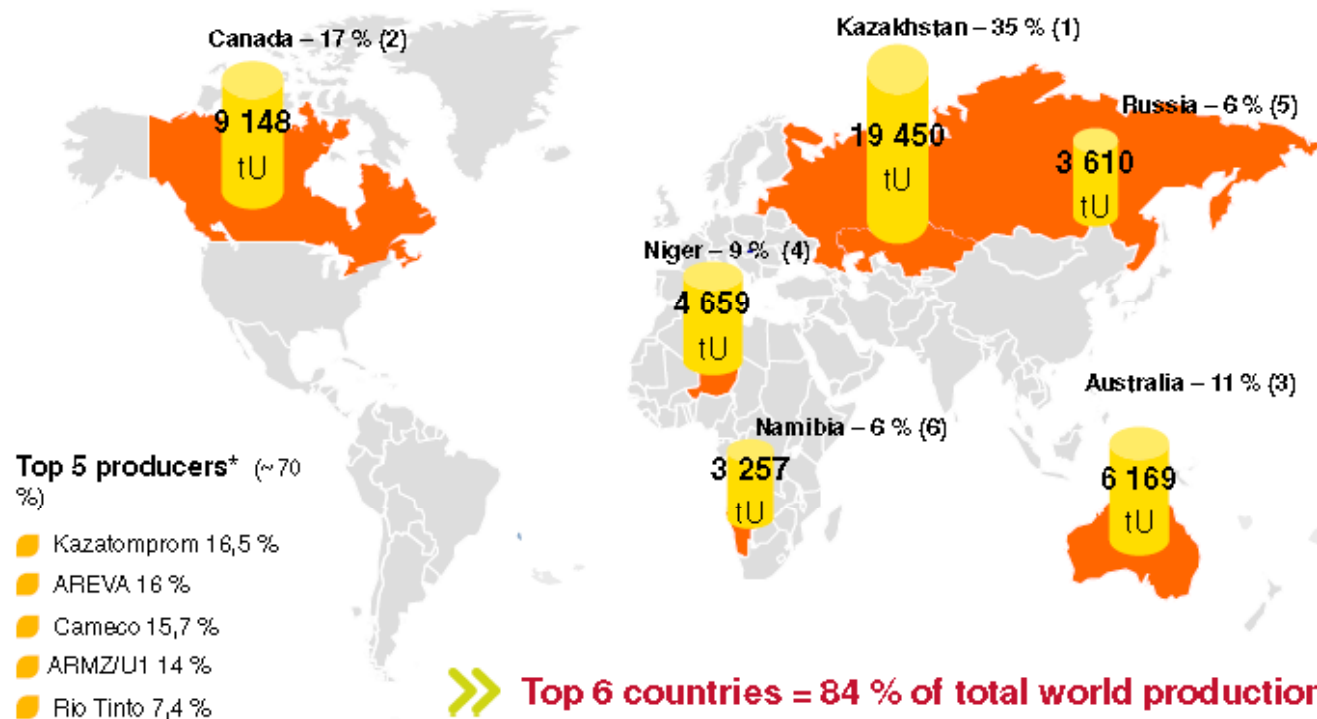
- Discovery of low production-cost uranium deposits (ISR focus)
- Target size: 15 - 50,000+ tonnes U
- Grade range: 0.03 – 0.5% U



Feasibility and development from 2015

Uranium - World Production

World uranium production in 2011



Source: 2011 AREVA Reference Document

Mining BG - Areva Resources Australia - February 2013 - p.5



Herberton – Mt Garnet Mineralfield

- Auzex Exploration - exploring
- Consolidated Tin – exploring, developing
- Monto Minerals - exploring
- MGT Resources – exploring, developing

Auzex Exploration Ltd

Khartoum Tin-Tungsten Project



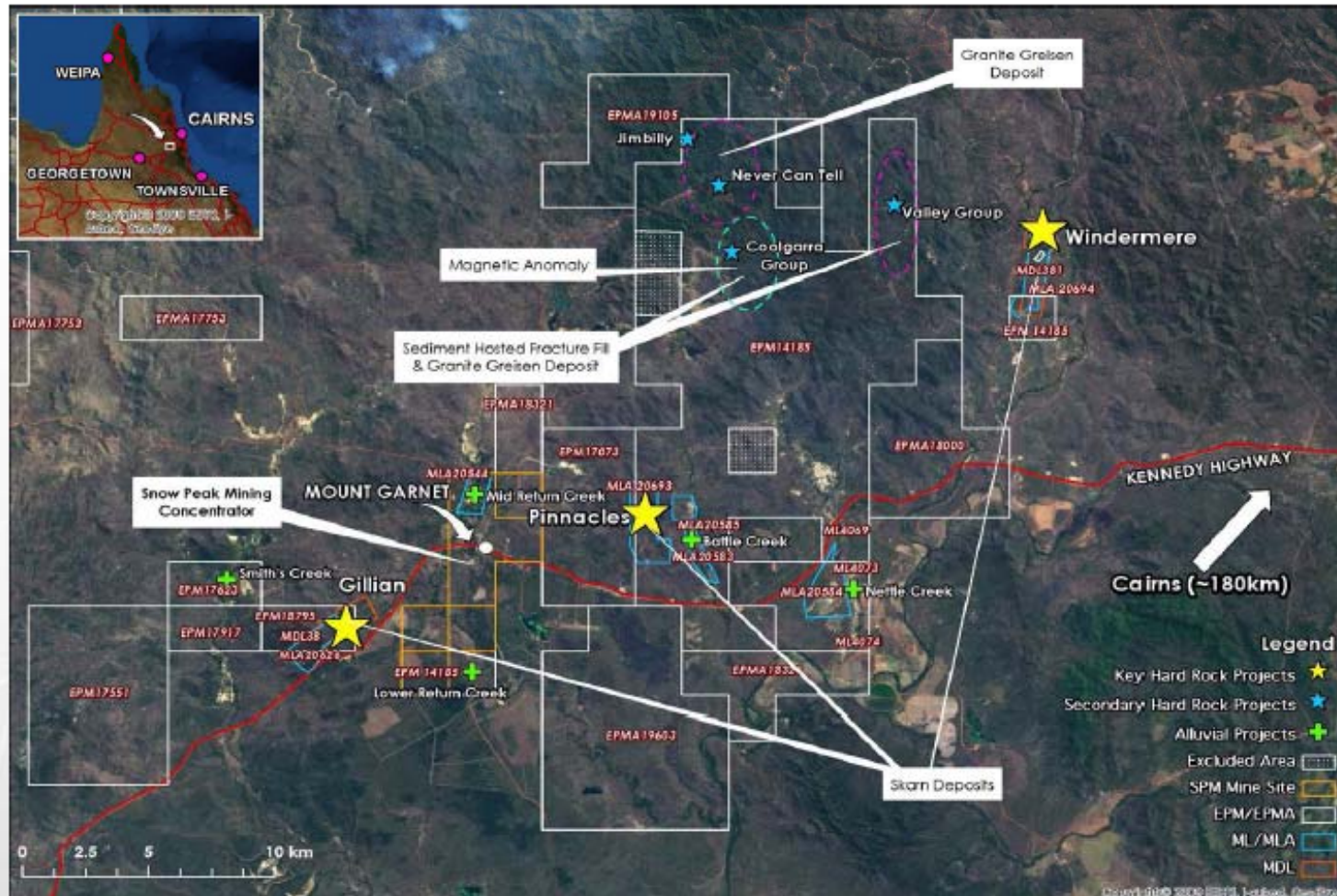
<http://www.auzex.com>

- Potential 80-120mt ore, averaging 0.2-0.3% tin + associated tungsten, silver, zinc, bismuth, copper, indium & molybdenum in potential recoverable quantities.
- Potential for world class deposit, extensive outcropping of mineralised formations across 50km².
- Best results to date include 15.25% tungsten, 3.78% tin, 0.13% bismuth, 438 g/t silver & 3.39 g/t gold.
- Initial 6 hole scout drilling intersected mineralisation in all holes along 2,500m strike extent.
- Recently acquired additional tenements with historical high grade (+1% tin) mineralisation.
- ~100km SW of Cairns
- Targeting IPO in Q1 2013
- Other projects in WA, NSW and NZ

Consolidated Tin Mines Ltd

Project Location

CONSOLIDATED
TIN MINES LIMITED
ABN: 57 121 534 001 ASX: CSD



Cons Tin/Snow Peak/Kagara

CSD/SPM Background

CONSOLIDATED
TIN MINES LIMITED
ASX: SP 129 634 606 ASX: CSD

SNOW PEAK INVESTMENTS (SPI)

- ❑ Major shareholder of CSD - 19.5%
- ❑ Major shareholder of SPM - 72 %

SNOW PEAK MINING (SPM)

- ❑ Purchased the Kagara Central Region assets including the tenements and Mt Garnet concentrator
- ❑ Restart Mt Garnet concentrator by September 2013 on copper from mining at Baul Gammion and Surveyor - Balcooma
- ❑ Responsible for all costs for development of ex Kagara assets and all non tin processing costs up to completion

CONSOLIDATED TIN MINES (CSD)

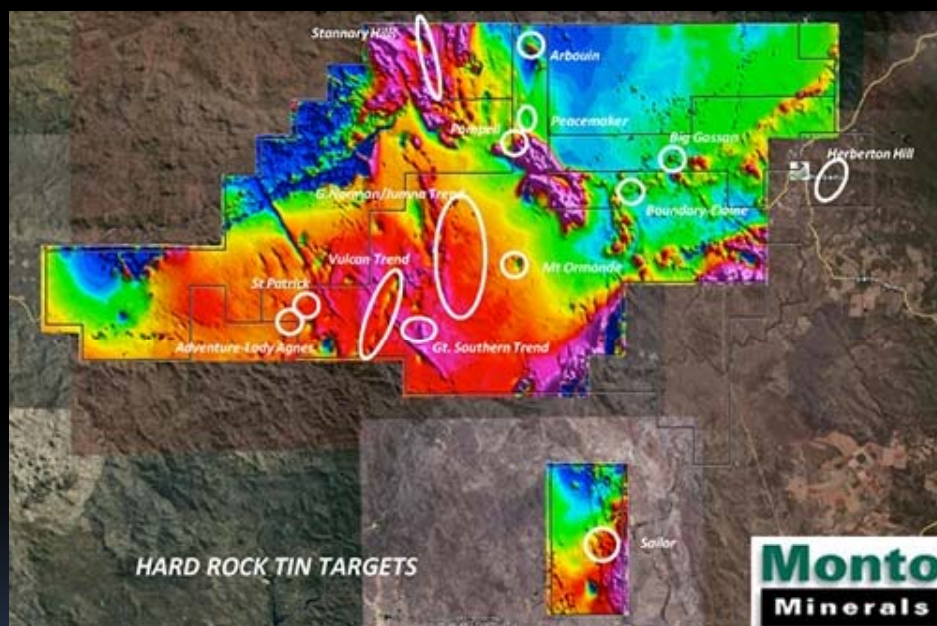
- ❑ Has 10% free carried interest in SPM - i.e. no costs payable and receives 10% of SPM base metals profits
- ❑ Manage SPM on a fully reimbursable basis
- ❑ Complete JORC resource review at Mt Garnet Tin Project by June 2013
- ❑ Complete Pre-Feasibility Study on skarn tin project by September 2013 based on an additional processing line at the Mt Garnet concentrator
- ❑ Evaluate smaller tonnage vein greisen tin opportunities to utilise spare mill capacity
- ❑ Responsible for all costs of developing the skarn tin assets to completion

1. The first step is to identify the problem or question that needs to be addressed. This involves understanding the context and the specific requirements of the task.



- ML20547 Summer Hill granted 23 Jan 2013
- JORC Resource 600,000t @0.47% Sn
- Drilling continuing
- Plant upgrade, capacity 70,000tpa, to be expanded to 500,000tpa by 2016-17
- Other exploration targets in the Mt Garnet Mineral Field plus gold targets near Townsville

Monto Minerals: Tin + Base Metals + Gold



Airmags over EPMs, 14 “compelling targets”

- Herberton historic Tinfield – underexplored
- 4 EPMs, 11 ML's, 9 MLA's
- Targets include
 - Arbouin drilled: 26.4m @2.78%Sn (unmined)
 - Sailor, Herberton Hill, Elaine-Boundary

<http://www.montominerals.com/HerbertonTinProject.html>

Monto Soils Anomalies

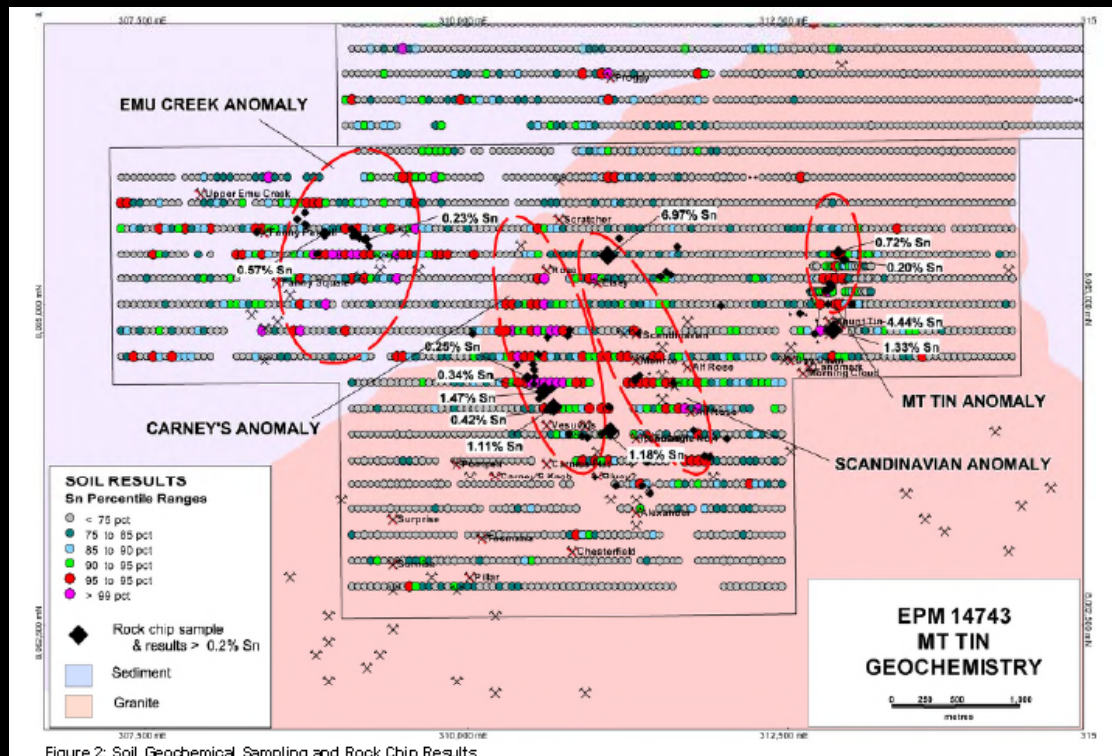


Figure 2: Soil Geochemical Sampling and Rock Chip Results

- Aim is 19,000 samples over 188 sq km

Annual + Dec qtlly Rep 2012

- Q4 2012 4,275 FPXRF soil samples
- Covering 45 sq km
- In greisenised granites
- Some high grades encountered
- 2 other anomalies in granite and metaseds

Monto Minerals

- Drilling at Confederation incl 6m @ 4.33% Cu, 1.25% Sn, 106g/t Ag
- A lease called Confederation has been pegged and applied for contiguous with Baal Gammon

28 hole drilling program by Kagara in 2011, then reviewed resources at that time

Baal Gammon Resource – 0.2% Cu cut-off

Resource Category	Volume m ³	Tonnes	Copper %	Silver g/t	Tin %	Indium g/t
Inferred	10,492	30,636	0.6	18	0.1	63
Indicated	918,324	2,769,385	1.0	40	0.2	38
Total	928,816	2,800,021	1.0	40	0.2	39

Note: Material mined has not been subtracted from the figures above

Monto – Kagara – Baal Gammon

Category	Tonnes (000t)	Cu (%)	Sn (%)	Ag (g/t)	In (g/t)
Ore	2,676,282	1.07	0.23	38.1	33.5
Low Grade Ore	430,725	0.26	0.13	9.6	5.3
Total Ore Reserve	3,107,007	0.96	0.22	34.2	29.6
Table: Summary of Probable Ore Reserves					

Based on the resource model generated by AMC and the Whittle modeling completed by Snowden, NQM generated the following Probable Ore Reserves in 2007:

Table: Total Indicated +Inferred Resource :

Ore Type	Category	Tonnes (000t)	Cu (%)	Sn (%)	Ag (g/t)	In (g/t)	CuEQ (%)*	Cu Metal (000t)+
Total Oxide + Sulphide	Ind + Inf	5,482	0.8	0.2	29	29	1.8	41.6

- Cu - Sn - Ag - In
- Production to commence October 2011
- Sediment roof pendant intruded by UNA porphyry sill
- Cu is chalcopyrite + stannite
- 70% of Sn is cassiterite, rest is stannite
- It is anticipated that mine development will commence immediately with ore production scheduled for October 2011

<http://www.kagara.com.au/>

Silica Deposits

- Cape Flattery – producing sands
- Solar Silicon Resources Group (SSRG) – developing and mining

Cape Flattery: Silica Sands

- The Company describes itself as the Worlds biggest silica sand manufacturer
- It reports an average grade of 99.9% SiO₂
- It employs over 90 people, many of whom are locals from Hopevale
- Ships direct from its own loading facility, offices in Cairns
- <http://www.cfsm.com.au/contact.htm>

SSRG – Lighthouse & Mourilyan

- Solar Silicon Resources Group (SSRG) is a wholly owned subsidiary of Singapore unlisted public company Auzminerals Resource Group (AMRG)
- Lighthouse Quartz is a high purity industrial silica with an average purity of 99.8% prior to refining. After refining, the silica reaches purity levels of 99.999%
- SSRG quote: only 3 other producers of high purity quartz sand in the world
- Lighthouse Quartz is suitable for use as feedstock for silicon smelters, epoxy moulding compounds, industrial fillers, fused quartz glass and LCD glass substrates.
- Over 1.4m t at Lighthouse, and some 6m t of silica sands at Mourilyan

SSRG – Lighthouse & Mourilyan



Lighthouse Quartz Deposit



- ◆ The Lighthouse Silica mine is geographically located inland from Cairns, in Far North Queensland.
- ◆ There are three shipping ports in close proximity:
 - Cairns Port (302 km)
 - Townsville Port (458 km)
 - Mourilyan Harbour (320 km)

SSRG – Lighthouse Quartz



Lighthouse Quartz – Product Development

- ◆ World Class Research Team – GE Advanced Materials, Norwegian Crystallites, Momenite
- ◆ Test and development equipment installed at SSRG's Melbourne facility includes:
 - Crushing / milling equipment
 - Magnetic separator
 - Froth flotation
 - Chemical reactors
 - Screening equipment
 - High temperature vacuum melt furnaces
 - Mass Spectrometers (FTIR, ICP-MS, XRF)
 - Laser Diffraction Particle Size Analyser
 - Gas Analyser
 - Electron and optical microscopes
 - High temperature vapour management and diffusion equipment
- ◆ NATA accredited independent laboratory validates test results.

SSRG – Lighthouse Silica

High power needs



Acid washed
(99.989% purity)

Tumbled
(99.943% purity)

Rinsed
(99.463% purity)

Raw
(97.463% purity)



Copper

- Solomons Mines – producing
- Baal Gammon – on care and maintenance
- Einasliegh and Kaiser Bill – awaiting development

Tungsten Deposits

- Wolfram Camp Mining PL - producing
- Carbine Tungsten - producing
- Vital Metals - developing

Wolfram Camp Mining

Executive Summary

- Wolfram Camp – Long history of tungsten mining
- Deutsche Rohstoff AG (DRAG) is a German Mining Group (metals, oils & gas)
- DRAG acquired Wolfram Camp in 2011
- Processing plant was refurbished and open pit commenced within 6 months
- First test wolfram concentrate was produced in December 2011, first delivery made in March 2012
- Production ramp up to 350,000tpa completed January 2013
- Currently producing 2 tonnes of WO₃ concentrate per day

Wolfram Camp Mining (Feb 2013)

Operation

- Mine production constantly increasing
 - Currently ~4,000 t/day
 - ~50 people working onsite
 - Majority are tablelands locals and all are QLD residents
- Screening ~2,500t/day
- Mill processing constantly increasing
 - Currently ~35t/hr with the aim to achieve 45t/hr
- Forecast of 4-6 tonnes of concentrate production per day



Carbine Tungsten

Carbine Tungsten Limited



CARBINE TUNGSTEN

Tungsten production from Mount Carbine

3 - stage development plan:

1. Tailings re-treatment
2. Process low grade stockpiles
3. Hard rock mining
4. Total project life ~20 years



Deposit open at depth and along strike

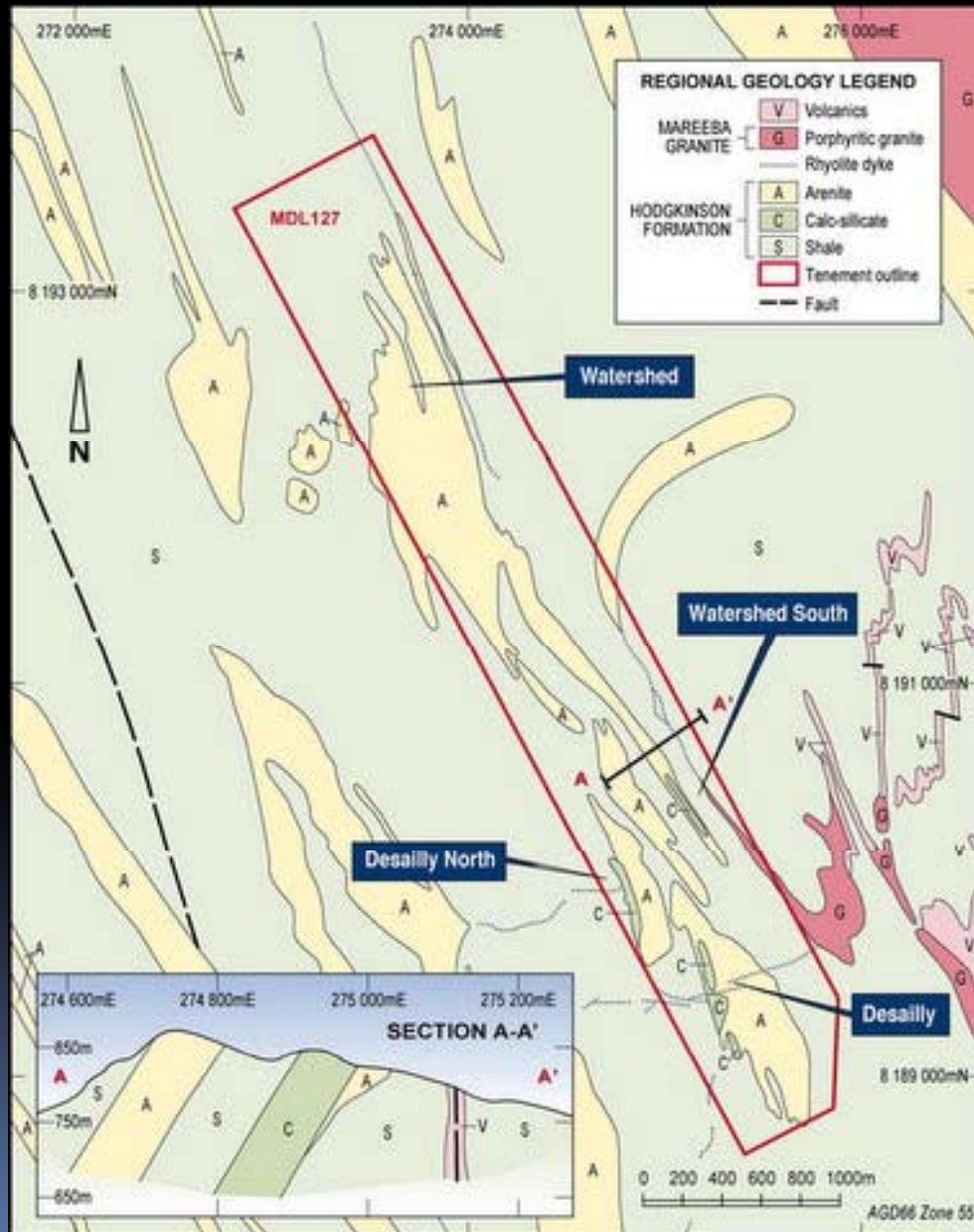
Off-take agreement with Mitsubishi
Anticipate permitting for dumps processing soon

<http://www.carbinetungsten.com.au>

Vital Metals: Tungsten, Watershed

- JORC Resource of 49.2mt at 0.14% WO₃ at 0.05% WO₃ cutoff
- Recoveries improved with "whole of ore" flotation
- Definitive Feasibility Study continuing
- Exploration continuing
- JOGMEC to earn 30% by funding \$5.4m over 2 yrs
- Permitting anticipated 2013
- Start constructing dams and plant
- Production anticipated mid 2014

Vital Metals - Geology

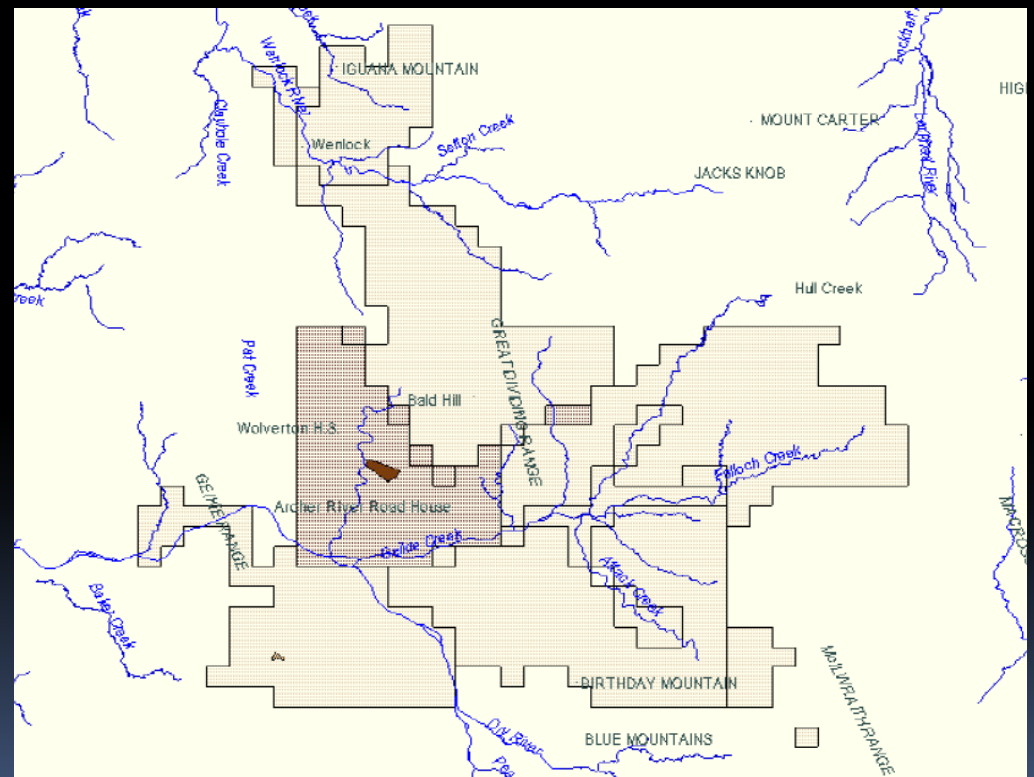


- In scheelite bearing quartz – felspar veins and as disseminated scheelite in the calc – silicate and albite muscovite altered metamorphics
- Structural trend is regional NNW over some 3,000m

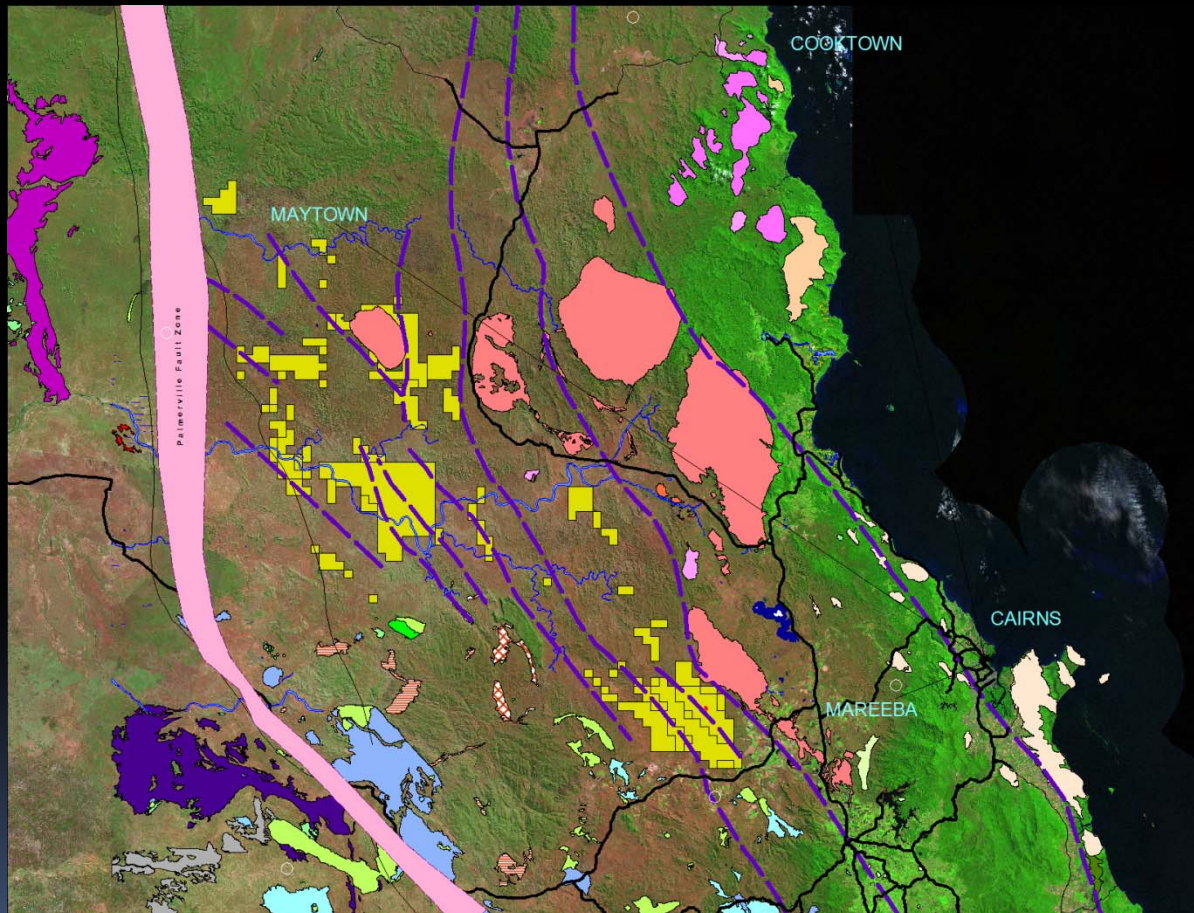
Paterson Mining Pty Ltd

- Private company
- Specialising in alluvials and targeting:
 - Tin,
 - REE,
 - Gold
- 21 tenements in FNQ and NT, includes:
 - Wolverton Tinfield granted ML,
 - Coen area,
 - Wenlock & Blue Mountains fields

Archer R – Wolverton Tin Field



Territory Minerals (Sb/Au)



- Exploration on Tregoora and Northcote Au-Sb in 2013
- Extensive targets for U, REE and beach sands in the Northern Territory
- Planned listing in the near future

Bauxite Companies – Cape York

- Rio /ComalcoAlcan, Weipa+South of Embly (mining and developing)

- Cape Alumina – Pisolite Hills (feasibility)

Explorers

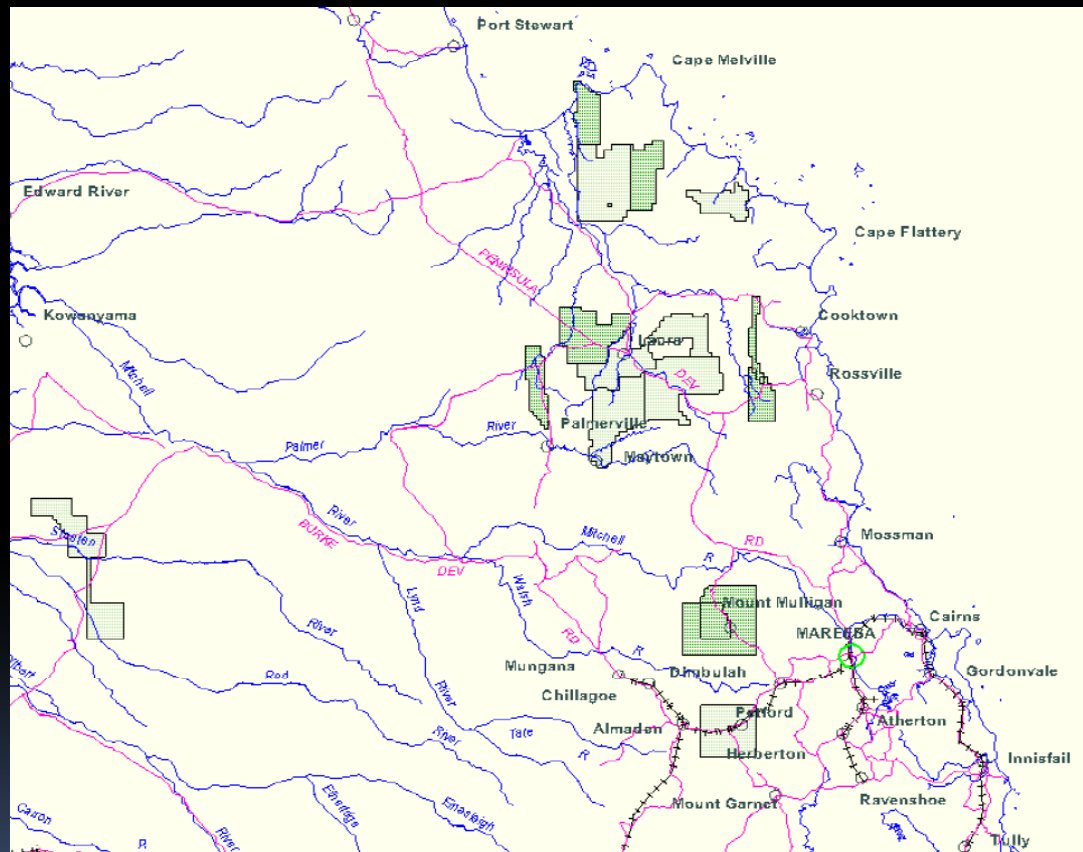
- Sunrise Minerals
- Charlotte Australia
- Gulf Alumina
- McKay Brook Resources
- Kendall Resources
- South West Pacific Bauxite

Bidders List – Aurukun Deposit

(winner to be announced late 2013)

- Aluminium Corporation of China Limited (CHALCO),
- Glencore International AG,
- Cape Alumina Consortium
- Rio Tinto Aluminium Ltd
- Australian Indigenous Resources

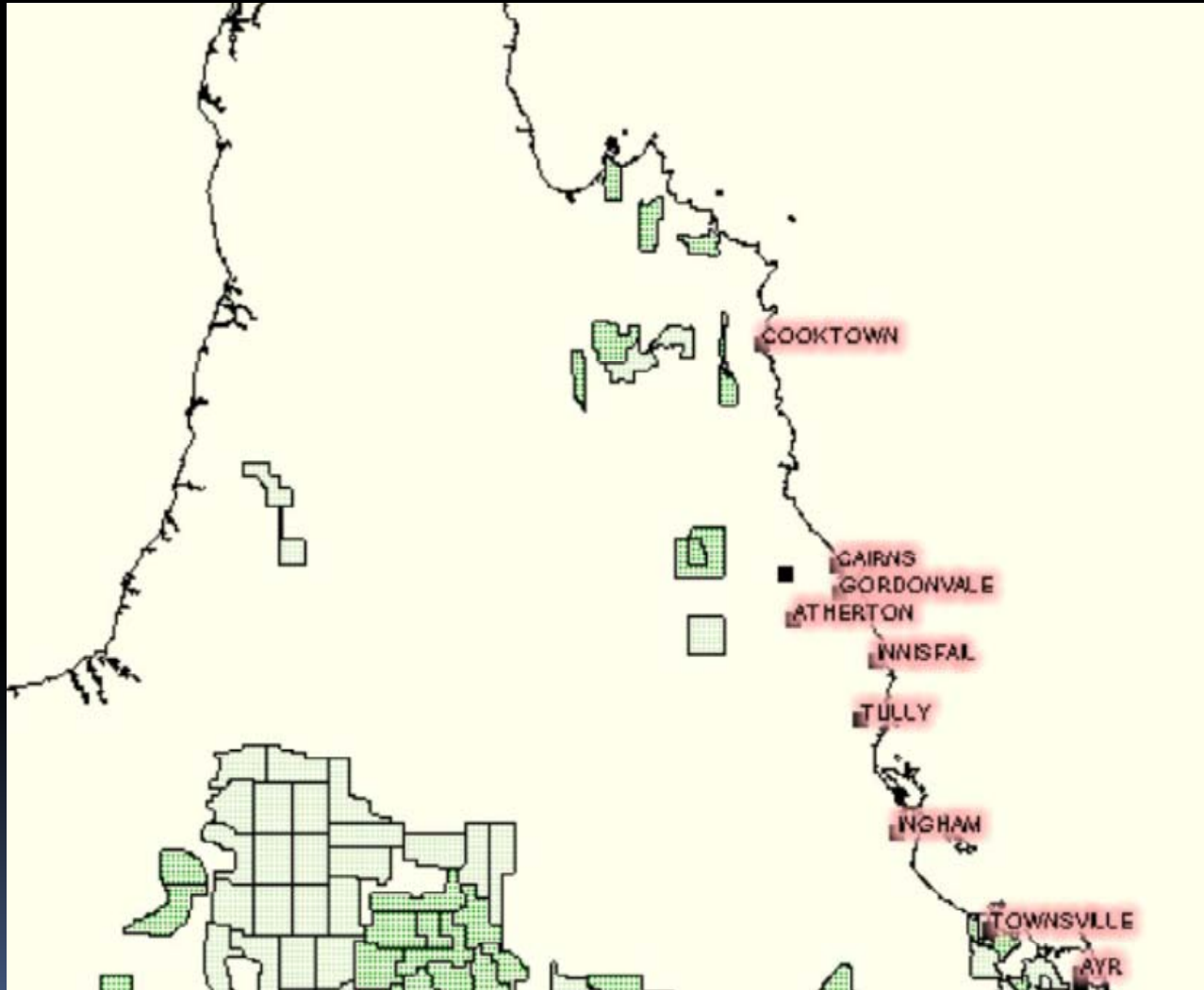
Coal EPCs – Feb 2013



Companies Include:

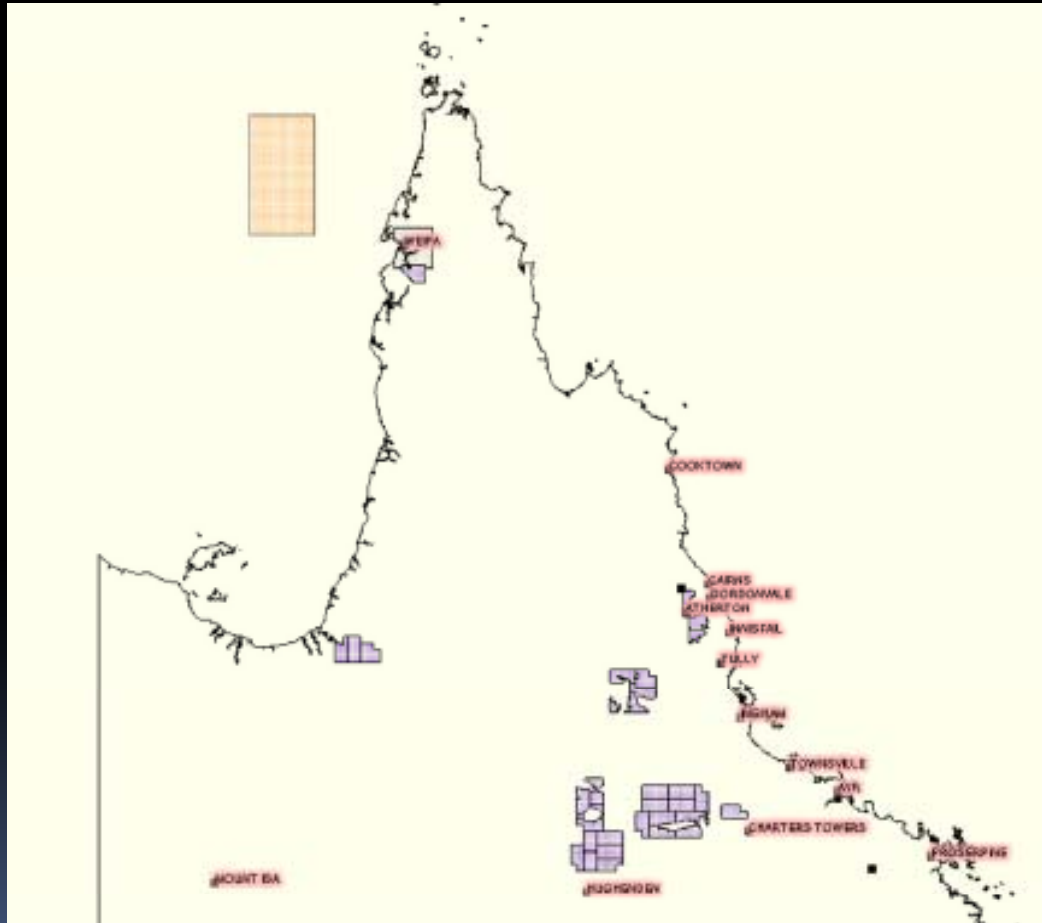
- Aust-Pac Capital
- Jems Exploration
- Mineral & Coal Investments
- Fairway Coal
- KS Mining
- Calcifer Minerals
- Air Resources

Coal Exploration – June 2013



- Aust-Pac Capital
- JEMS Exploration
- Mineral & Coal Investments
- Coal Face Resources
- Fairway Coal
- Air Resources
- Calcifer Industrial Minerals
- KS Mining
- All Pty Ltd companies

Geothermal & Offshore Petroleum - June 2013



- 7 EPGs in FNO are GeoGen Vic
 - Budgets being allocated 2013 – future to be decided
- Kuth has 2 EPG applications at Weipa
- Terra Estus Resources PL have 3 EPG in the Normanton area
- Hot Rocks has pulled out of exploration in FNO
- Gulf Energy have an Offshore Exploration Permit for petroleum (OEP) in the Gulf

Cairns



Comparison of Activity

2008

- Public Companies
 1. Bauxite – Weipa
 2. Cape Flattery – Silica Sand
 3. Mt Garnet – base metals
 4. Metals X - tin
 5. Minerals Corporation - kaolin
- Private Companies
 1. Solomons Mines – copper sulphate
 2. Perlco – Perlite
 3. Alluvial gold mines (5?)
- Wolfram Camp, Kangaroo Ck under construction
- Under feasibility – Watershed, Copperstrike, Baal Gammon, Chalco

2011

- Public Companies
 1. Bauxite – Weipa
 2. Cape Flattery – Silica Sand
 3. Mt Garnet – base metals
 4. Mungana – base metals, Au
 5. Baal Gammon – Cu-Ag-Sn-In
 6. Mt Carbine – W
- Private Companies
 1. Deutsch Rohstoff - Au
 2. Solomons Mines – copper sulphate
 3. Phoenix Lime
 4. Alluvial gold mines (?)
- Ropewalk, Mt Carbine, Baal Gammon Wolfram Camp under construction
- Oresome – beach sands – Feasibility
- Cape Alumina, Chalco rejected by State

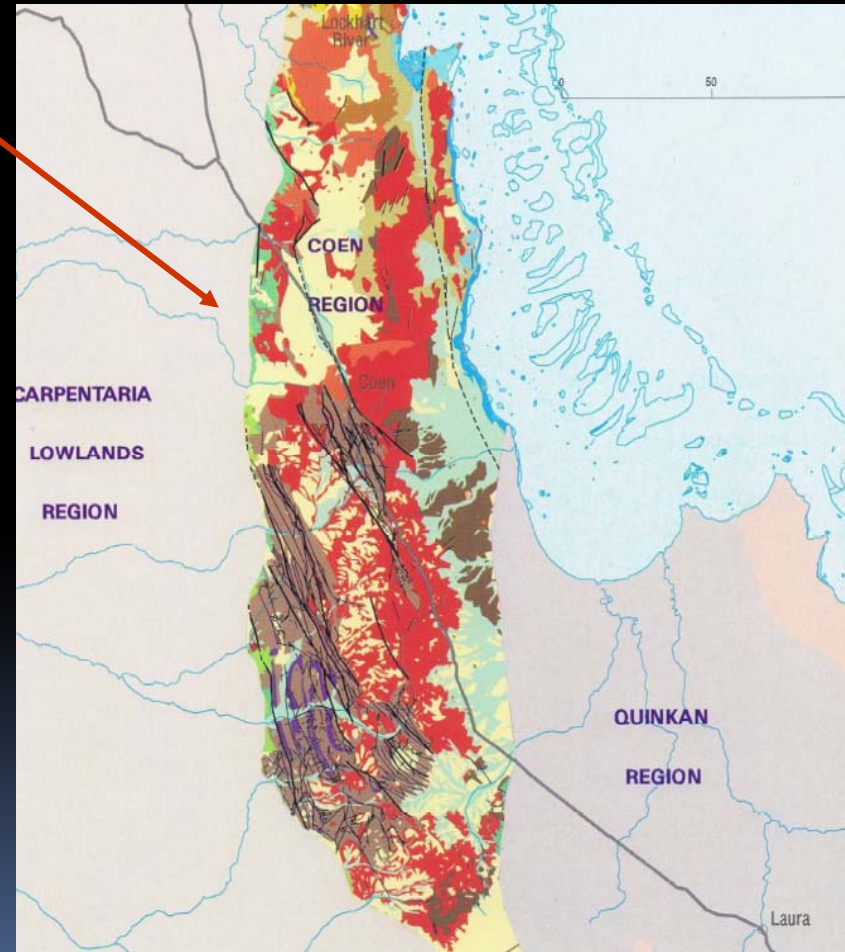
2013

- Public Companies
 1. Comalco -Bauxite – Weipa+ South of Embley
 2. MGT– tin
 3. Monto – tin
 4. Cons Tin – Tin
 5. Carbine Tungsten – W
 6. Vital Metals – W
 7. Altuis – Au
 8. Oresome – Beach sands
 9. Cape Alumina
 10. Auzex – Tin-W
- Private Companies
 1. Cape Flattery – Silica Sand
 2. Snowpeak
 3. Wolfram Camp- W
 4. Solomons Mines – copper sulphate
 5. SSRG Lighthouse
 6. Australian Gold Mining
 7. Phoenix Lime
 8. JOK Mining - Au
 9. Paterson Mining – tin, Au
 10. Territory Minerals – Au, Sb
 11. Alluvial gold mines (?)
- Under Construction/Maintenance: Ropewalk, Baal Gammon
- Awaiting Grant: Oresome, Vital Metals
- Cape Alumina - feasibility
- Chalco rejected by State – awaiting re-allocation
- Kagara gone replaced by Snowpeak

Where to FNQ?

Cape York: Structures & Coen Inlier

- **NNW Trending Structures:**
 - Total combined length 740km
 - Dilational zones
 - Many are known to carry gold
 - Significant breccia pipes have been recognised
 - Compare these with other Bx pipes (Mt Leyshon 3m oz Au, Mt Wright >1m oz Au)
 - Where are the other pipes in Cape York?
 - How many jobs and how much State income could be generated?



There is a Future in mining

- There are good targets and there are interested Companies
- There are experienced personnel
- Funding can be found if the Sovereign Risk and costs can be contained