

# MINERAL AND COAL INVESTMENTS PTY LTD (MCI)

Outline of Exploration Areas

# MINERAL AND COAL INVESTMENTS PTY LTD

## AREA SUMMARY

### Number and Total Area

12 Areas  
756 Sub-blocks  
2330 km<sup>2</sup>

### Distribution

Cooktown in the north to Texas in the south

### Geological Setting

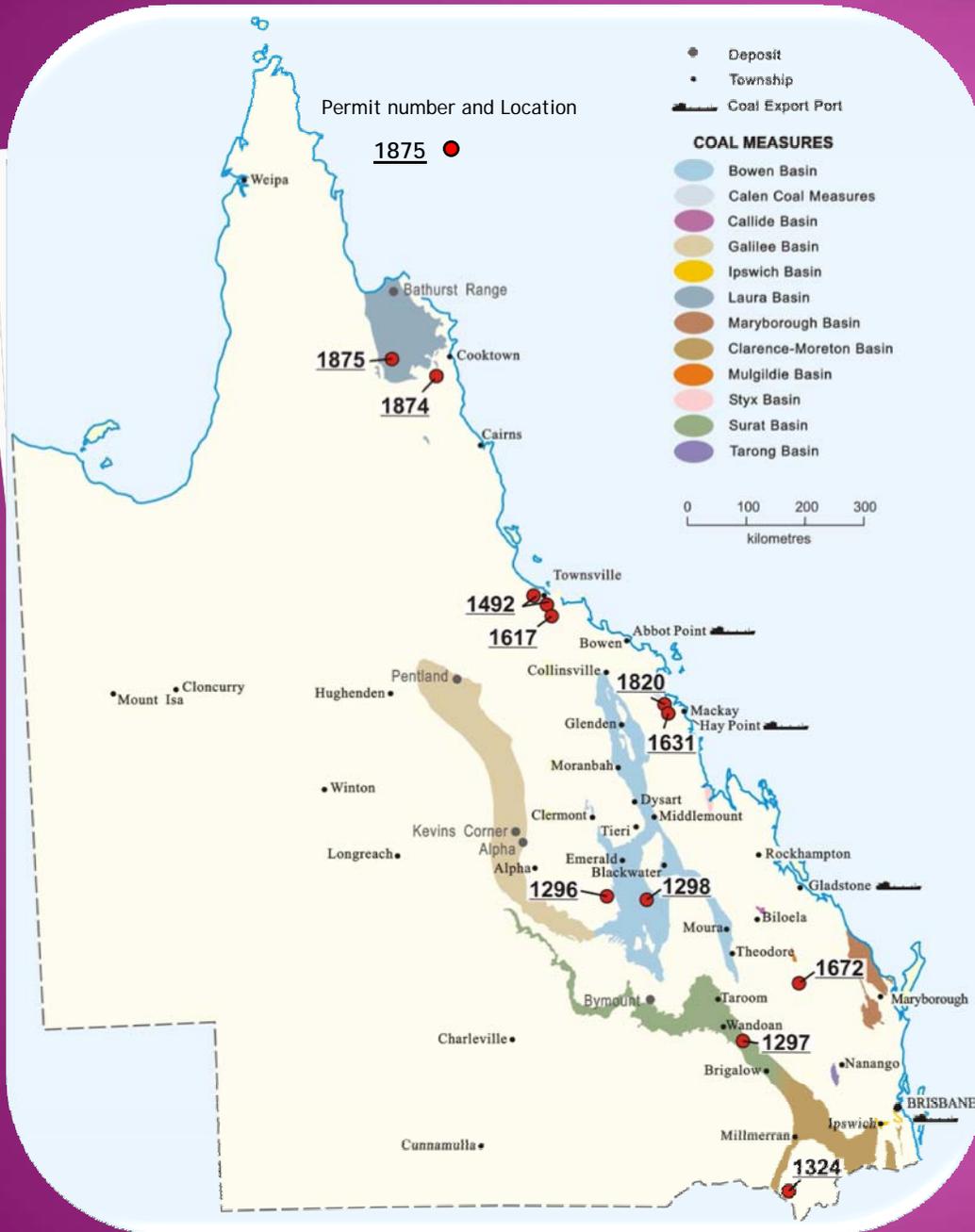
Laura Basin  
Townsville Basin  
Calen Basin  
Bowen Basin  
Mulgildie Basin  
Surat Basin

### Exploration Potential

Varies from areas with known coal to frontier exploration areas

### Targets

Underground and open cut  
Export thermal and coking coal



# EPC 1296 CONNEMARRA

## Location

65 km SSE of Emerald  
40 Sub-blocks (123 km<sup>2</sup>)

## Status

Granted

## Surface

Freehold

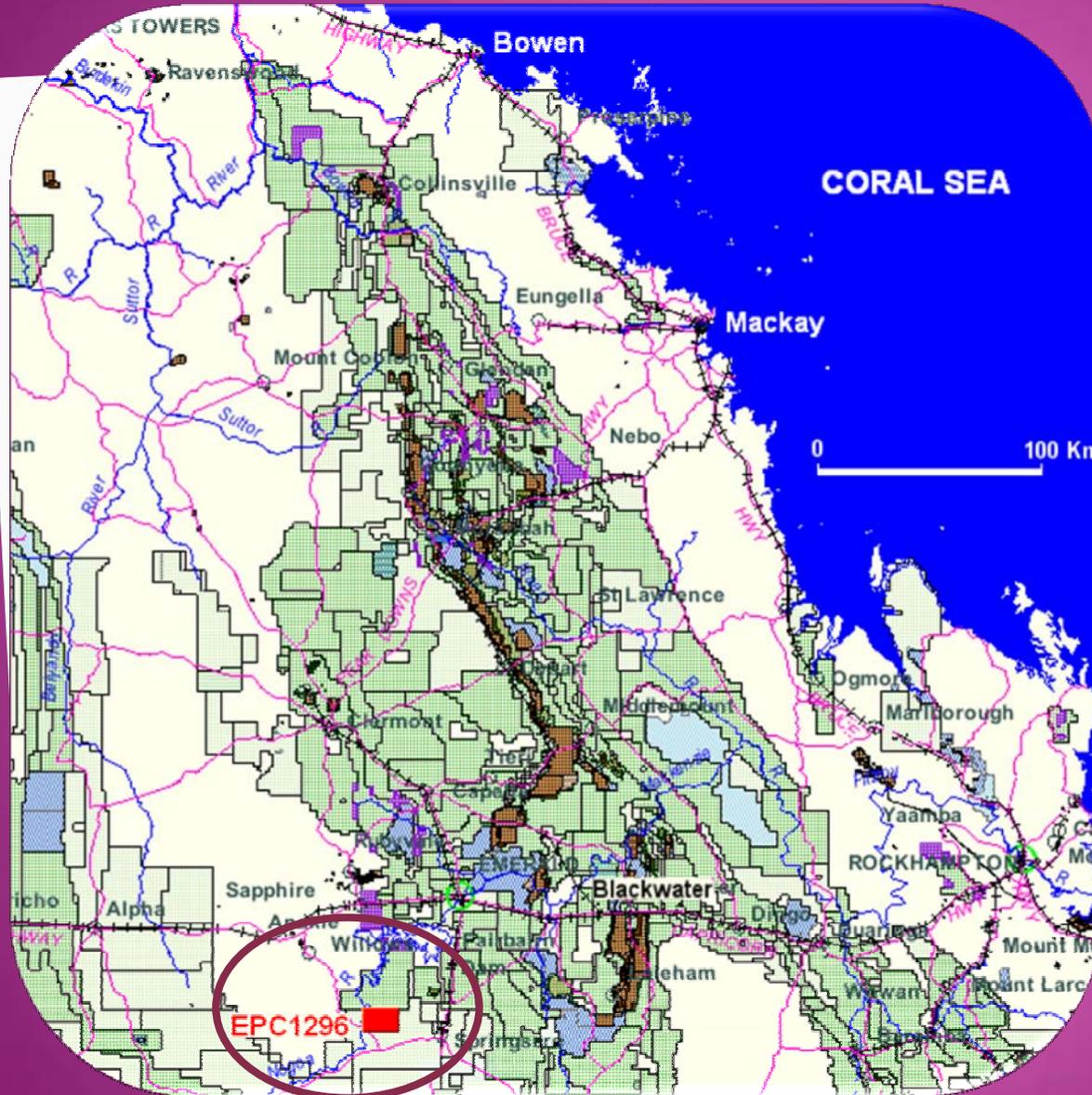
## Work programme

\$75K 2 years

## Geology and Exploration

SW Bowen Basin

Contains formations known to be  
coal bearing elsewhere  
No significant previous  
exploration



AGE	GEOLOGICAL UNIT	
	CONNEMARRA AREA Drummond Basin	
Tertiary	BASALT	
	Fluvial & Lacustrine Sediments	
	<i>Unconformity</i>	
PERMIAN	COLINLEA SANDSTONE	
	Coal Bearing Potential	
	<i>Unconformity</i>	
PERMIAN	JOE JOE FM.	Jochmus Fm.
		Jericho Fm.
	UNDIFF. CARBONIFEROUS	
	SPRINGSURE AREA Bowen Basin	
	BASALT	
	Fluvial & Lacustrine Sediments	
	<i>Unconformity</i>	
	Peawaddy Formation	
	Catherine Formation	
	Ingelara Formation	
	Freitag Formation	
	ALDEBARAN FORMATION	
	Colinlea Sandstone	
	Cattle Creek Formation	
	REIDS DOME BEDS	
	<i>Unconformity</i>	
	UNDIFF. BASEMENT	
	Coal Bearing	Coal Bearing Potential

## EPC 1296 CONNEMARRA EXPLORATION TARGET

### Target Sequence

Basal Colinlea Sandstone  
Jochmus Sandstone

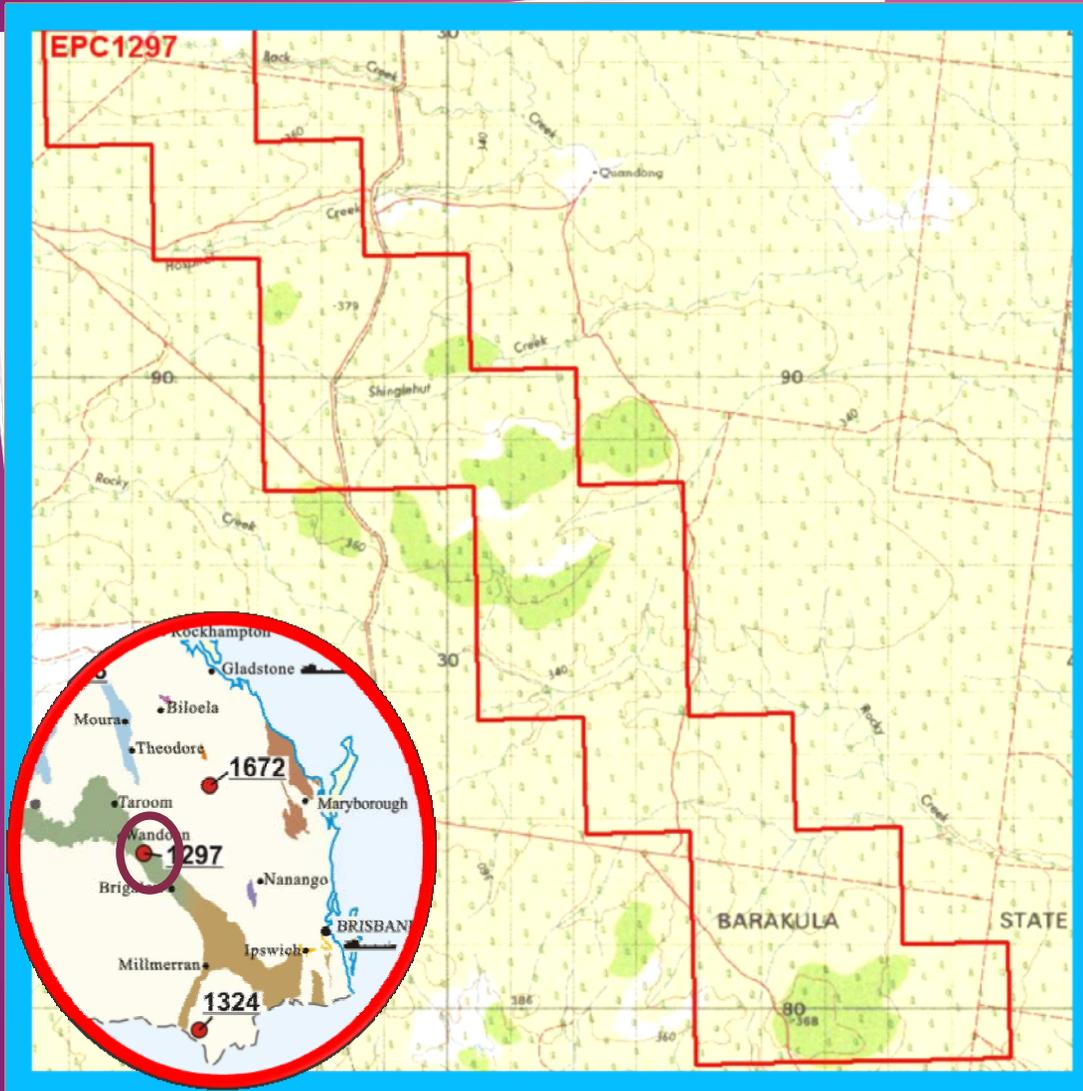
### Target Coal Type

Thermal Coal

### Mining Potential

Most likely underground but has open cut possibilities

# EPC 1297 BACK CREEK



## Location

45 km SE of Wandoan  
20 Sub-blocks (62km<sup>2</sup>)  
Near "missing link" to Gladstone

## Status

Application

## Surface

Primarily State Forest

## Work programme

\$75K 2 years

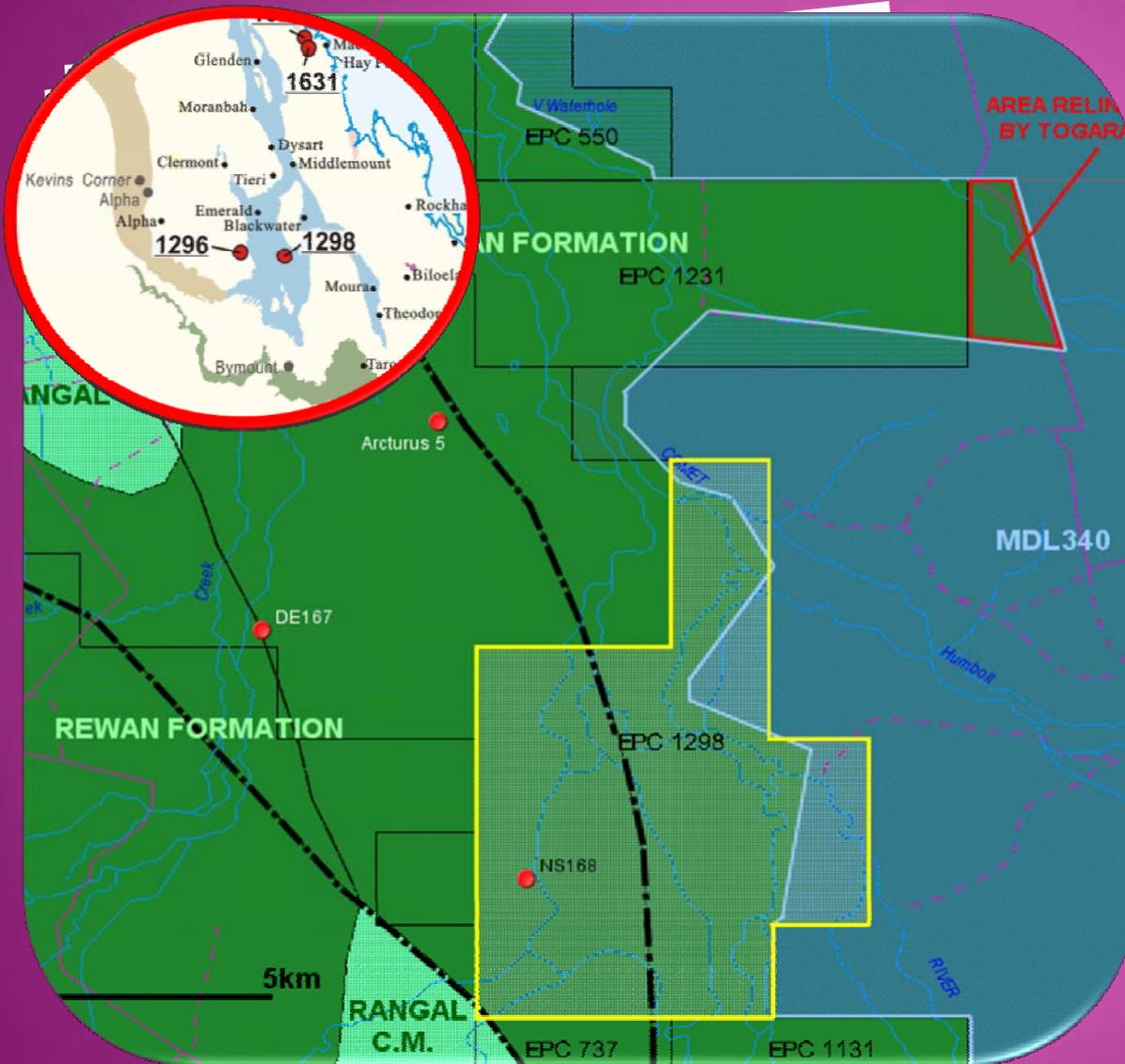
## Geology and Exploration

Eastern Surat Basin  
Taroom Coal Measures  
20 km of strike length  
Limited previous exploration  
At least one seam  $\pm 5$ m thick  
Domestic and export thermal coal

## Resource Potential

Up to 59Mt estimated  
Mined by open cut

# EPC 1298 KILMAIN



## Location

75 km SE of Emerald  
16 Sub-blocks (50 km<sup>2</sup>)

## Status

Granted

## Surface

Freehold

## Work programme

\$75K 2 years

## Geology and Exploration

SW Bowen Basin

Underground Rangel Coal

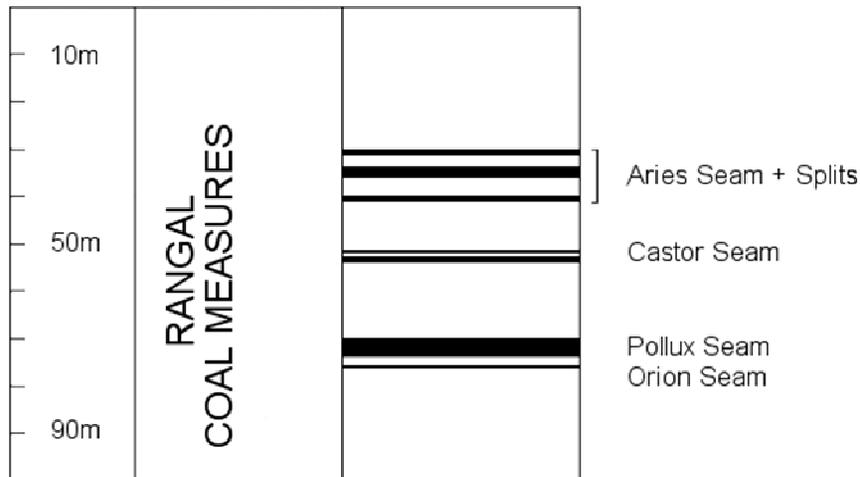
Measures

Limited previous exploration

## Principal Stratigraphic Units

AGE	GEOLOGICAL UNIT
Quaternary	Alluvial Silts and Sands
Tertiary	UNDIFFERENTIATED SEDIMENTS
<b>Unconformity</b>	
Triassic	REWAN FORMATION
Permian	RANGAL FORMATION

## Likely Coal Seam development



## EPC 1298 KILMAIN

### Previous Exploration

One hole NS168 - six seams  
0.3m to 1.89m thick  
At depths of 419 to 503m

### Exploration Potential

Substantial underground resource (Pollux Seam)  
Low ash soft coking or thermal coal  
Probably shallow dips, limited faulting

### TOGARA NORTH AREA COAL QUALITY

Air Dried Basis	%
<b>Moisture</b>	6 - 7
<b>Row Ash</b>	11 - 12
<b>Volatile Matter</b>	28 - 29
<b>Fixed Carbon</b>	50.5
<b>Tot. Sulphur</b>	0.4 - 0.5
<b>Energy (gad)</b>	<b>(MJ/kg)</b> 27.5



# EPC 1324 LINALLIE

## Location

230km SW Of Brisbane  
42 Sub-blocks (117 km<sup>2</sup>)

## Status

Application

## Surface

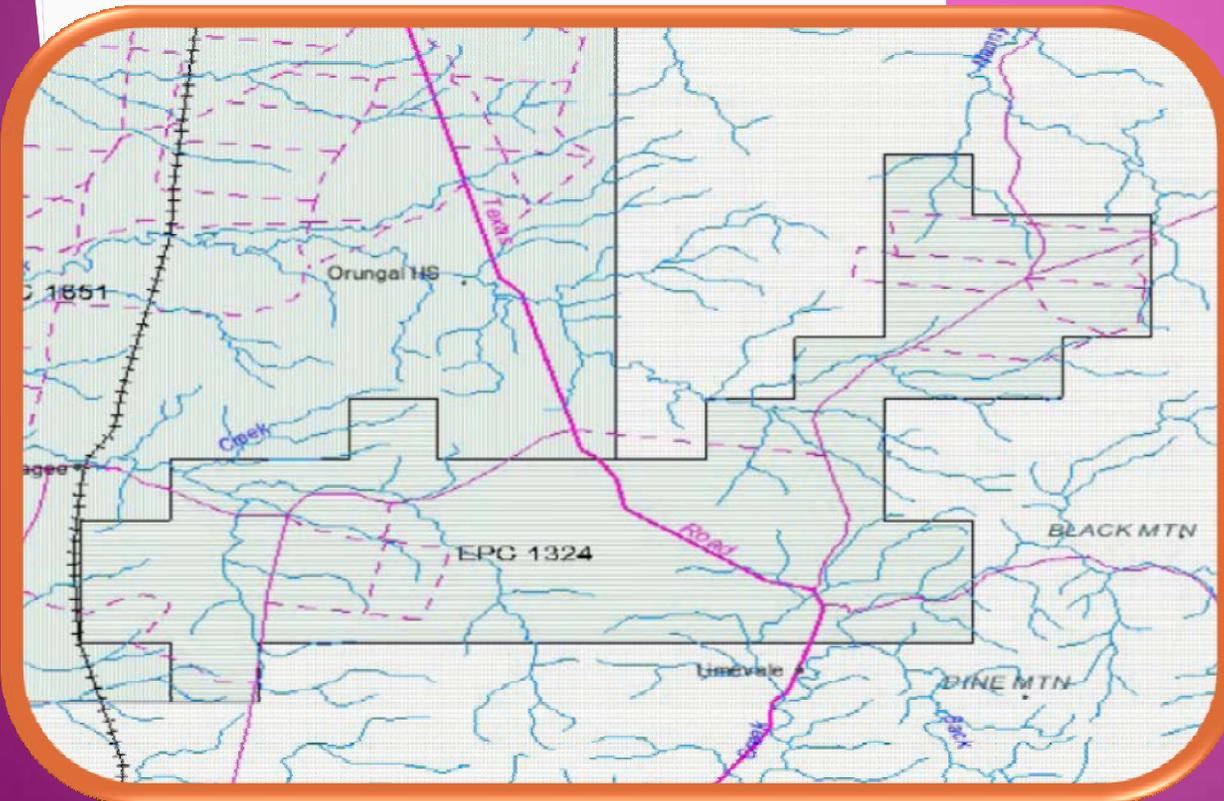
State Forest and Freehold

## Work programme

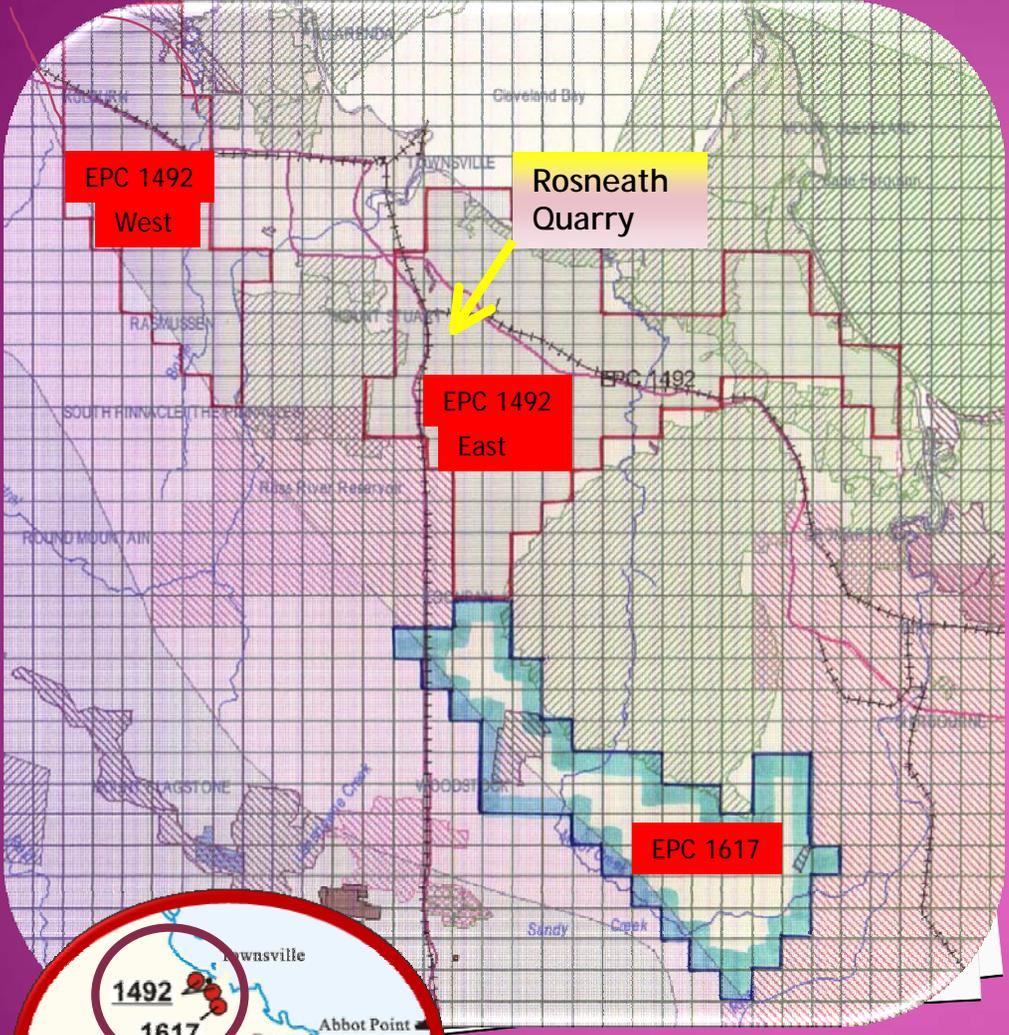
\$282K 2 years

## Geology and Exploration

Southern Surat Basin  
Walloon Coal Measures  
Possible Permian Ashford Coal Measures Equivalent?  
Thermal and coking coal  
Limited previous exploration



# EPC 1492 & 1617 TOWNSVILLE & TOWNSVILLE EXTENDED



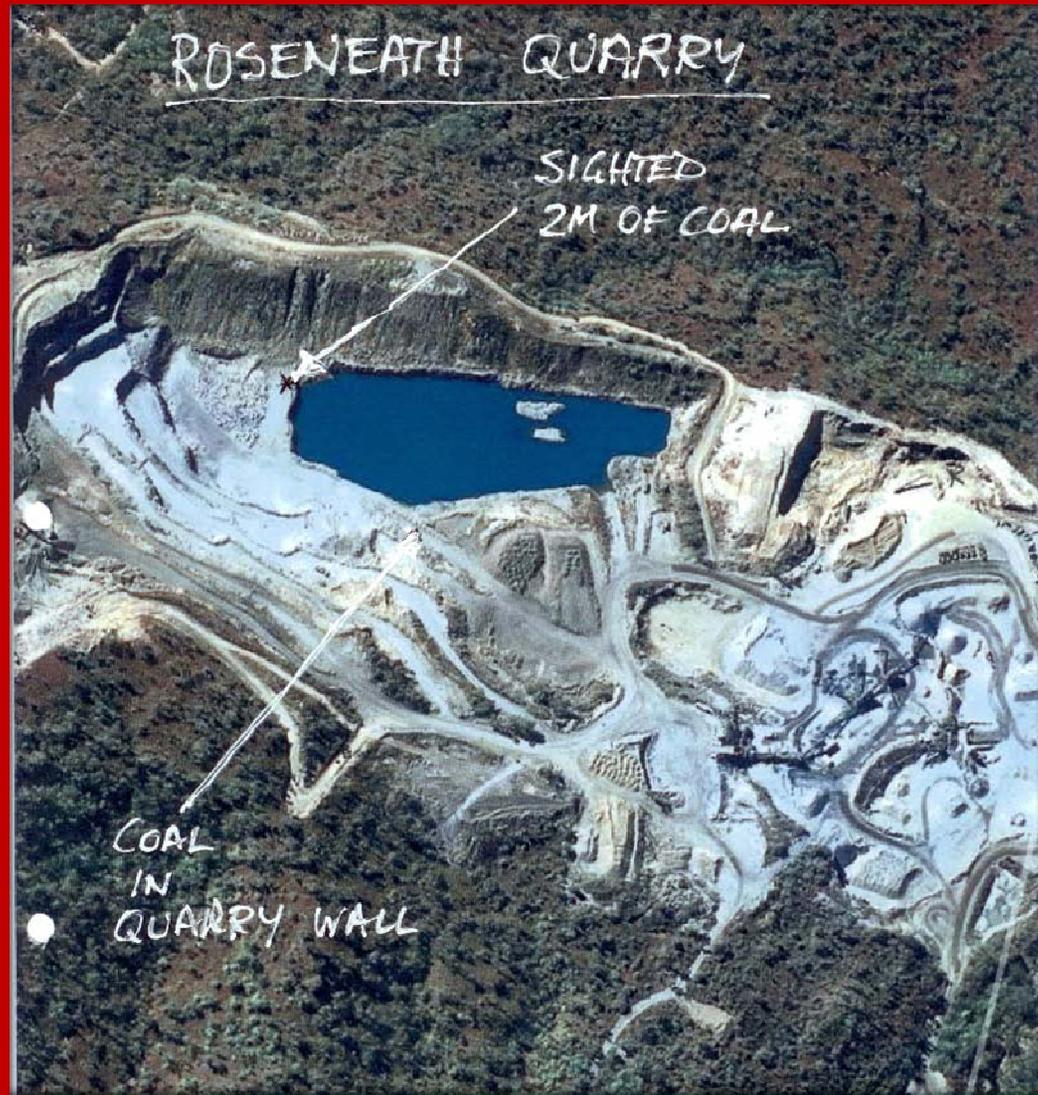
Location  
West and South of Townsville  
T 154 Sub-blocks (477 km<sup>2</sup>)  
TE 65 Sub-blocks (202 Km<sup>2</sup>)

Status  
T Application  
TE Granted

Surface  
Primarily Freehold

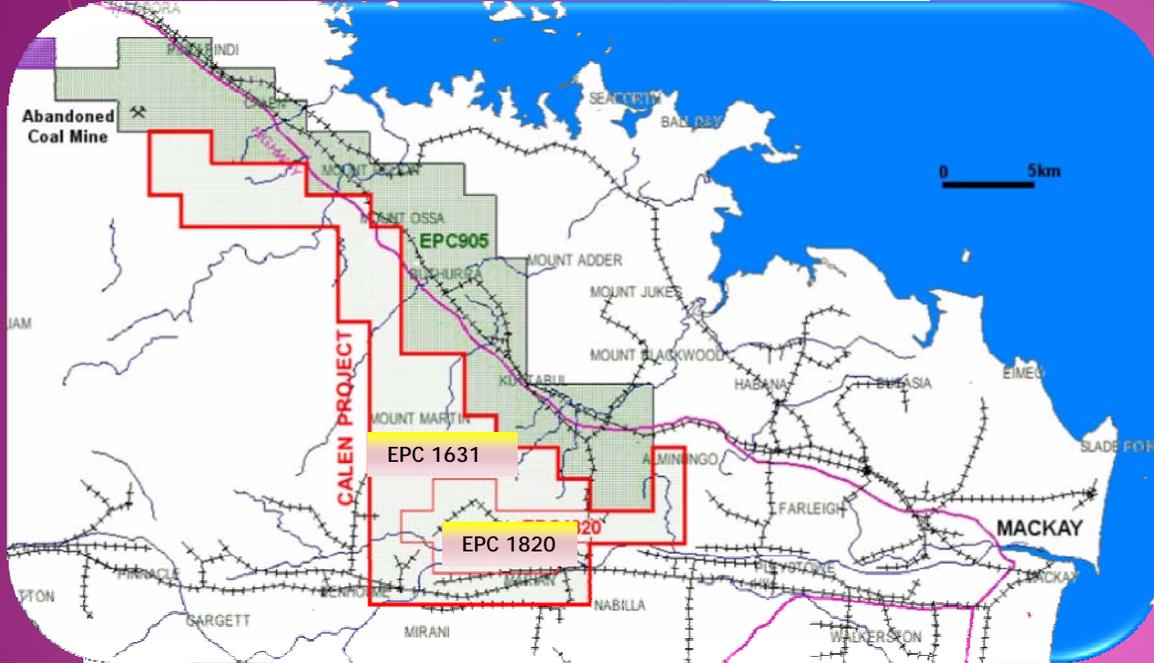
Work programme  
T \$475K 5 years  
TE \$475K 5 years

Geology and Exploration  
Northern extension of Bowen Basin  
Very limited previous exploration  
Known Permian coal occurrences up to 2m  
Possibly coking coal



**EPC 1492**  
**COAL OUTCROP**  
**IN ROSENEATH**  
**QUARRY**

# EPC 1631 & 1820 CALEN SOUTH & BOLDEN



## Location

West of Mackay to 55km NW of Mackay

CS 52 Sub-blocks (161 km<sup>2</sup>)

B 17 Sub-blocks (53 km<sup>2</sup>)

## Status

CS Granted

B Application

## Surface

Primarily Freehold

## Work programme

CS \$75K 2 years

B \$300K 5 years

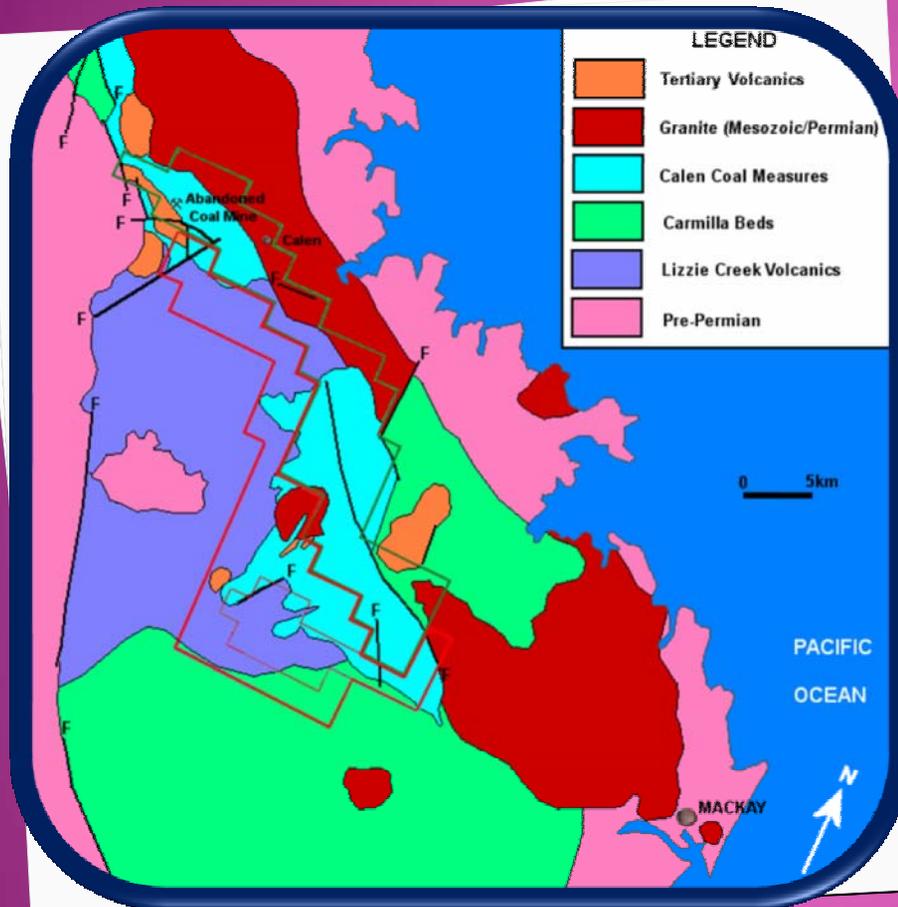
## Geology and Exploration

Lower Permian Calen Coal Measures

Very limited previous exploration

Known Permian coal occurrences

# EPC 1631 & 1820 GEOLOGICAL MAP



Sequence affected by folding and faulting

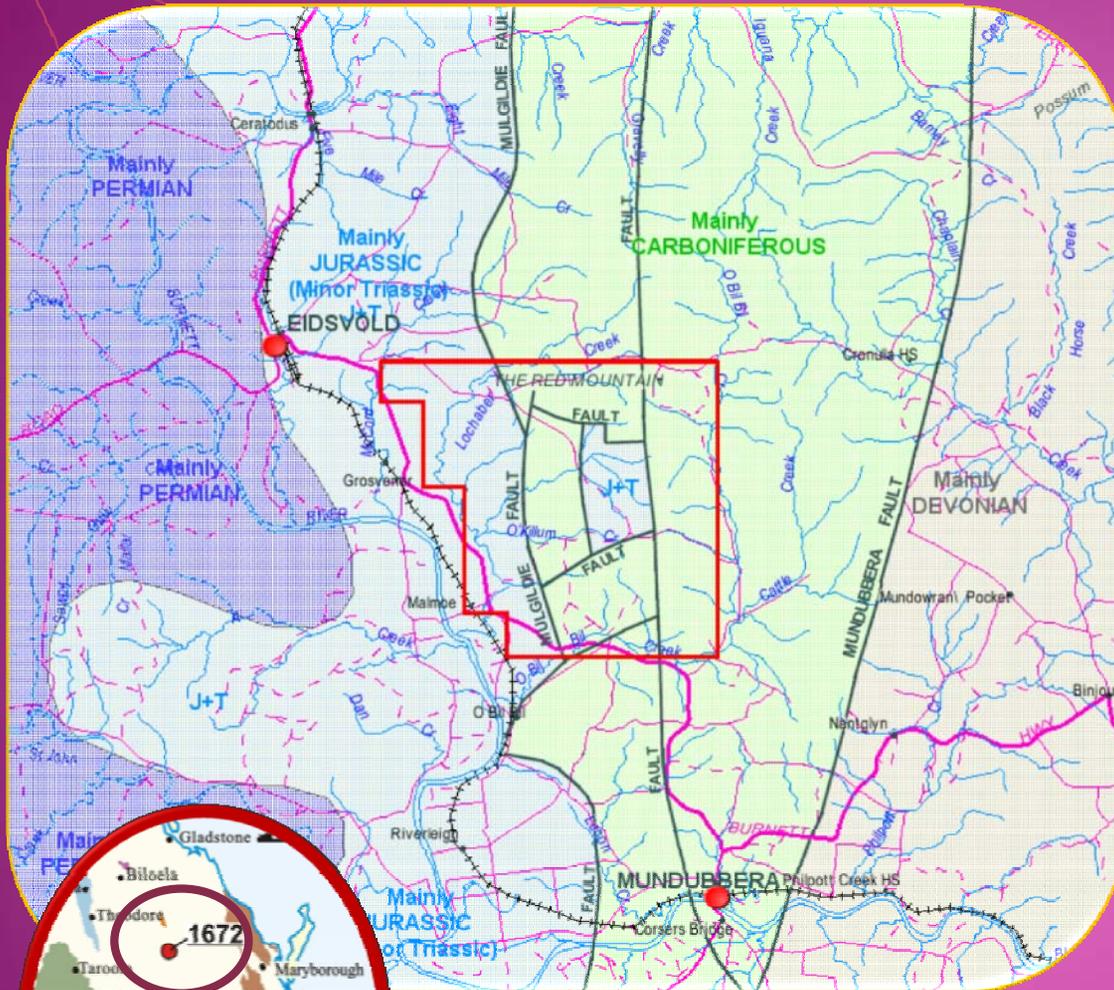
Seams up to 2.6 m thick mined previously

Low volatile thermal coal or PCI

Principal target moderate to small  
underground resource

Given location resource of this type and  
rank potentially economic

# EPC 1672 LOCHABER



## Location

290 km NW of Brisbane  
47 Sub-blocks (146 km<sup>2</sup>)

## Status

Application

## Surface

Primarily Freehold

## Work programme

\$300K 5 years

## Geology and Exploration

Mulgildie Basin

Walloon equivalent Monto CM

## Exploration Target

Extension of known coal occurrences to the north

Follow-up on reported coal occurrences from 1930's

# EPC 1874 NORMANBY

## Location

40 km SW of Cooktown  
86 Sub-blocks (267 km<sup>2</sup>)

## Status

Application

## Surface

Primarily Freehold

## Work programme

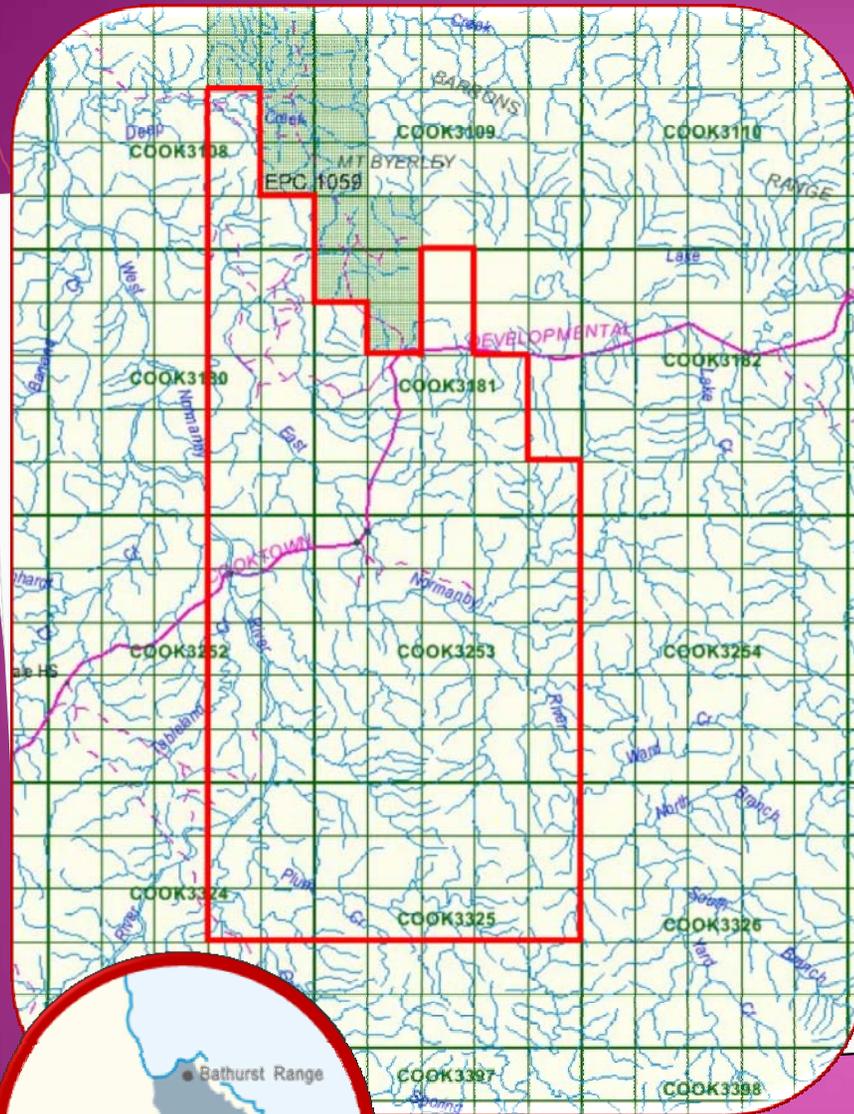
\$500K 5 years

## Geology and Exploration

Late Permian Normanby Formation  
Very limited previous exploration

## Exploration Target

High rank thermal coal or PCI



# EPC 1875 PINE TREE

## Location

100 km W of Cooktown  
217 Sub-blocks (670 km<sup>2</sup>) (Large Area)

## Status

Application

## Surface

Primarily Leasehold ?

## Work programme

\$915K 5 years

## Geology and Exploration

Late Permian Normanby Formation  
Very limited previous exploration

## Exploration Target

High rank thermal coal or PCI

