

# East Coast Minerals NL (ASX: ECM)

## Quarterly Report for 31 March 2009

29 April 2009



ABN 82 000 738 885

- SAM survey at Elizabeth Hill Preliminary results show areas of high channelling anomalies to the north of Elizabeth Hill not previously identified or drilled
- Company acquires an option to purchase 51% of an Underground Coal Gasification (UGC) company
- Program of work approved by for drill testing of the Mustang anomalies
- Further work at Gossan Dam pending the granting of the tenement application

### ELIZABETH HILL PROJECT

(East Coast 69.88% Legend Mining 30.12%)

After a review of the Elizabeth Hill Silver mine and surrounding area, sub-audio magnetics (SAM/TFMMR) has been chosen to assist in the mapping of structures, shear zones, zones of complexity, potential alteration and potentially mineralised zones. The aim of using this technique is to identify further anomalies which may be able to be drill tested. Elizabeth Hill sits in a jog within the Munni Munni Fault and the identification of these structures may be able to define further silver targets.

Elizabeth Hill Area (M47/342, M47/343)

The SAM survey at Elizabeth Hill has been completed. Preliminary results (see *Figure 2*) have been received in raw format and show areas of high channelling anomalies (magenta and red) to the north of Elizabeth Hill which have previously not been identified or targeted by drilling.

Final results have been announced to the ASX (see 28 April 2009 ASX announcement) and identified a number of new anomalies at Elizabeth Hill that are prospective for silver and base metals.

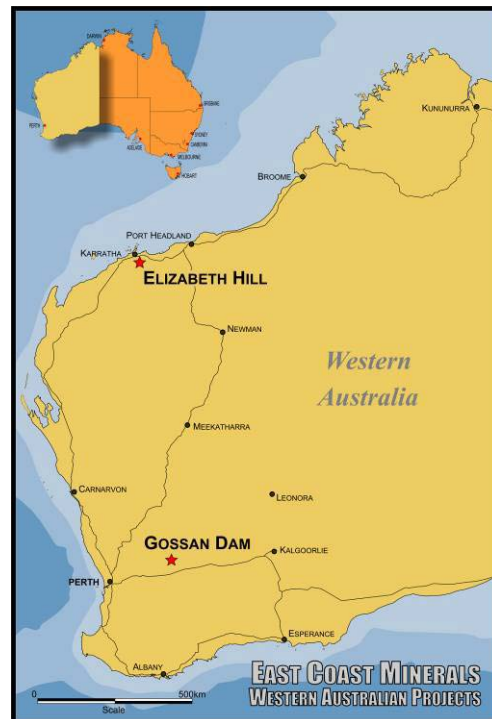


Figure 1: Location map for East Coast Tenements

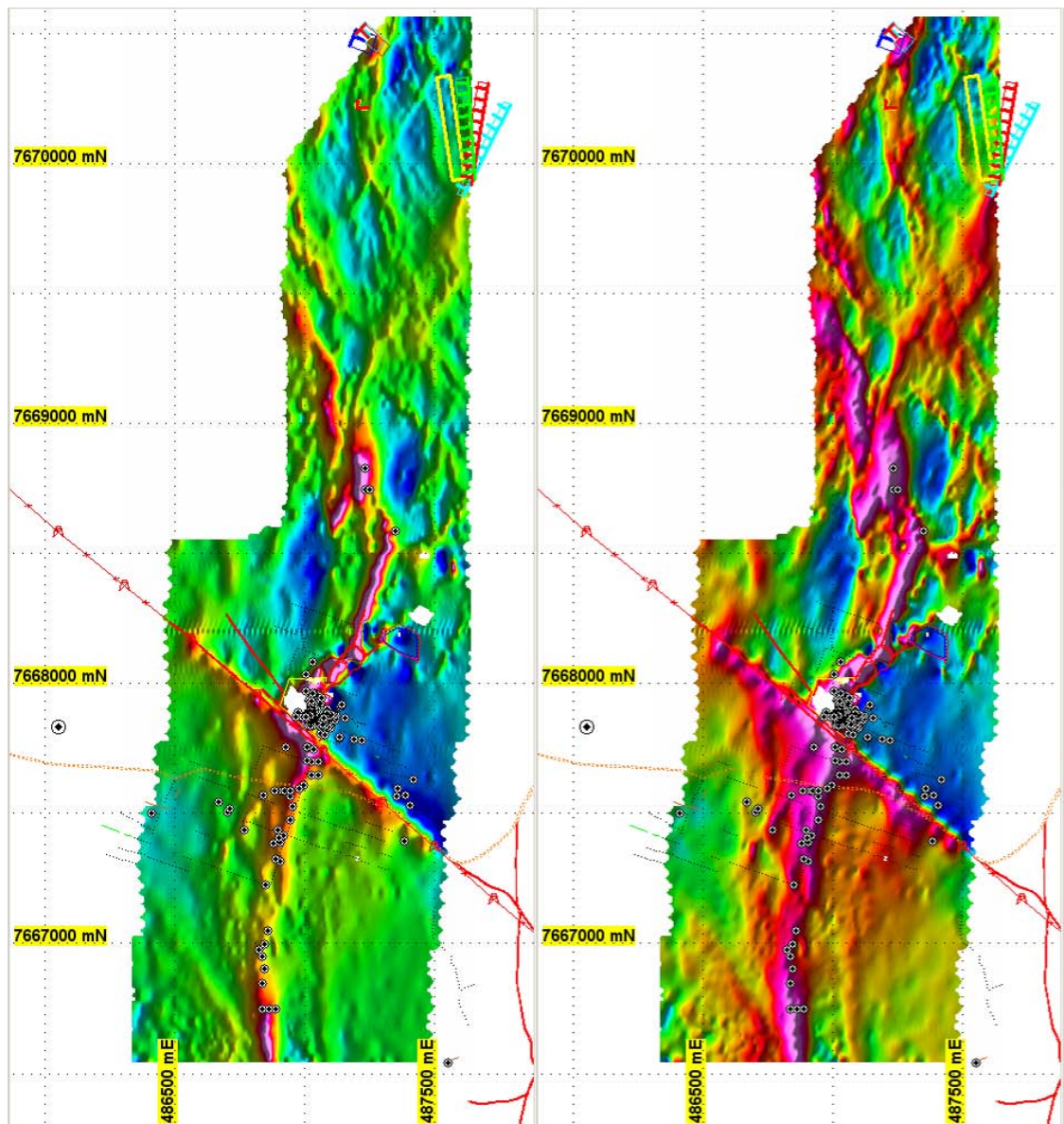


Figure 2: Preliminary raw data from the SAM survey at Elizabeth Hill

#### Cadgerina Dyke Project (M47/340)

The Cadgerina Dyke area is situated 6km west of Elizabeth Hill. A review of existing geophysical data (see *Figure 3*) was performed in order to define whether any additional geophysical techniques could progress exploration efforts.

The data review indicated that no modern Electromagnetic surveying had been completed within the M47/340 tenement area. A nickel sulphide occurrence is recorded within the DOIR mindex system, but this needs to be validated in the upcoming exploration field season.

An Electromagnetic survey is currently underway at Cadgerina. The survey is looking for massive nickel and copper sulphides. Results of the survey will be announced when they become available.



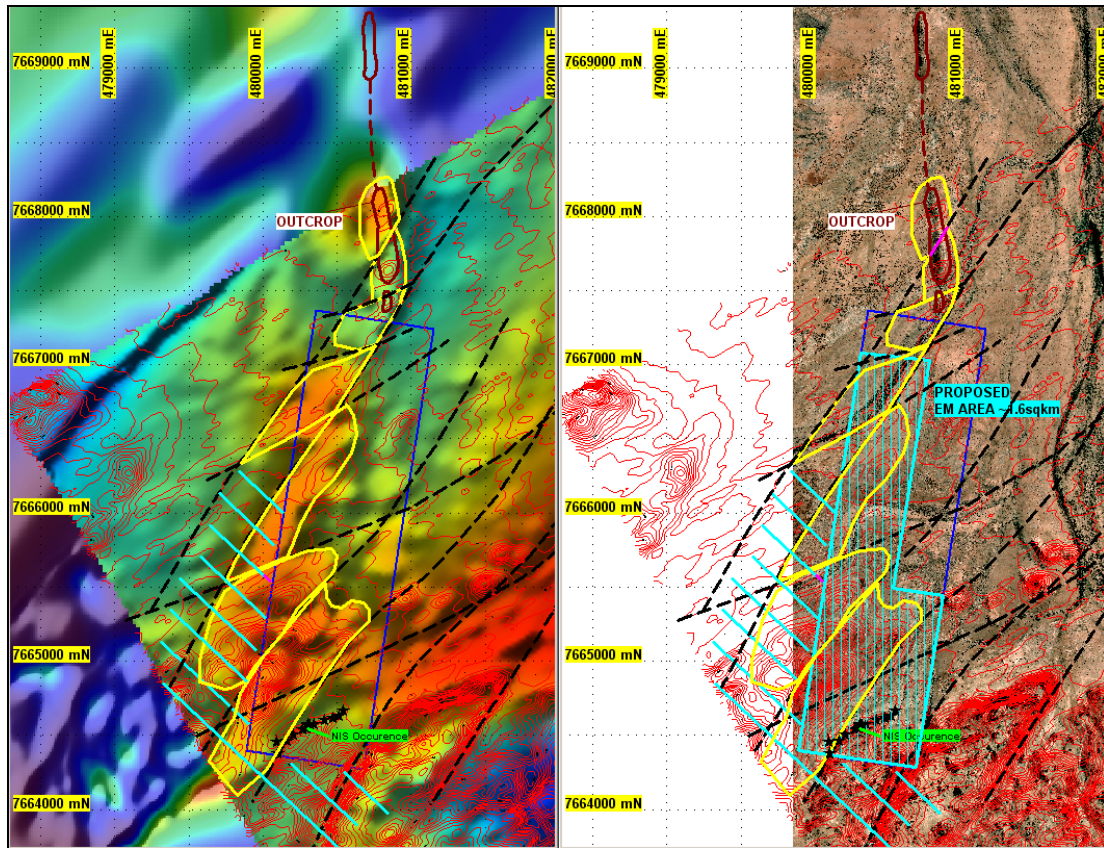


Figure 3: Cadgerina dyke area geophysical status plan with structural interpretation

### Mustang Prospect (M47/342)

A Program of work (POW) was approved by the Department of Mines and Petroleum (DMP) for drill testing of the Mustang Anomalies at the Elizabeth Hill Base metal and Silver Project (Figure 1 and 2) and drill testing of the SAM anomalies is scheduled.

Eight (8) proposed drill holes have initially been designed to test in and around the Fixed Loop Electromagnetic (FLTEM) conductor anomalies identified at the Mustang Prospect earlier this year. The anomalies sit on the northern portion of mining tenement M47/342 at the company's Elizabeth Hill project.

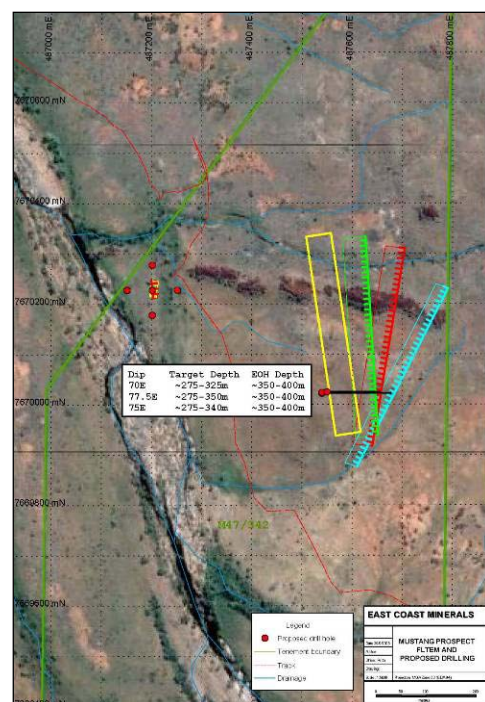


Figure 4: proposed drilling sites on the Mustang Anomaly

The Mustang Prospect sits between two base metal (Zinc, Silver, Lead, Copper) prospects discovered by Fox Resources in 2007. Fox subsequently did limited drill testing of Sunchaser and Conquest and identified copper and zinc mineralisation. Best intercepts at Sunchaser were 6.1m @ 3.1% Zinc from 28.4m and at Conquest 25m @ 0.52% Copper from 144m. ECM is therefore encouraged by these drill results as the Mustang anomalies are within the same mineralising system.

### **BONNIE ROCK/GOSSAN DAM BASE METAL AND SILVER PROSPECT (East Coast 100%)**

ECM have applied for an Exploration License over the Gossan Dam base metal and silver Prospect near Mukinbudin, which is 300Km east of Perth in Western Australia. No resource has been defined in the area, but significant mineralisation has been identified by rock chip sampling and limited drilling. The Company is awaiting the issue of the exploration licence before commencing work there.

### **UNDERGROUND COAL GASIFICATION (East Coast 51%)**

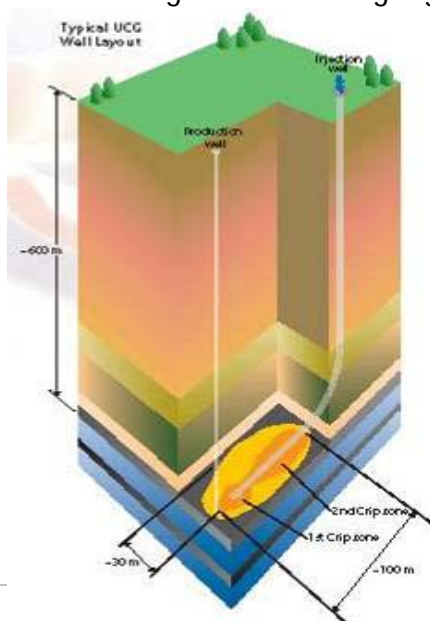
East Coast has announced that it has an option to acquire 51% of Energy Future Pty Limited a company that is focused on underground coal gasification (UCG). The option expires on 18 May 2009.

#### **What Will the Option Give East Coast?**

- A partnership with InSitu Energy (ISE) which has as one of its owners the world leader in UCG technology with established project implementation expertise;
- A partnership with Energy Technology Partners (ETP) the world leader in gas liquids technology;
- Potential; to acquire a 50,000 barrel per day resource; and
- Applications for exploration licences over 6000 m<sup>2</sup> of coal areas off shore the east coast of Australia stretching from Wollongong to New Castle.

#### **How Does UCG work?**

- Two wells are drilled into the coal seam;
- Oxygen and Steam are injected into the well;
- The coal is ignited; and
- The product gas (syngas) is extracted via the production well.



## Why this Project should Succeed?

Our partners ETP and ISE are the leaders in successful UCG projects. Their projects are the benchmark in the industry and they have completed more successful UCG trials than anyone else in the world.

Below is a table of the successful trials completed by this team:

UCG PROJECTS	TYPE	PROJECT	DURATION
Rawlins 1 Wyoming	Steeply Dipping Bed	Feasibility	1 month duration, up to 70 T/D
Rawlins 2 Wyoming	Steeply Dipping Bed	Demonstration	3 month duration with gas utilization, up to 200 T/D
Rocky Mountains 1	Flat Seam	Demonstration	3 month defining work on CRIP up to 200 T/D
New Zealand Huntley	Flat Seam	Commercial Trial	A series of projects over a 10 year period ending in small test burn

## Sydney Basin - A World Class Opportunity

Energie Future has lease application for 6000 sq kms of offshore eastern seaboard of Australia. The exploration zone is from Wollongong to New Castle. In 1981 the ADMR gave a speculative estimate of the area saying that based on conventional mining methods and down to a depth of 600 metres a conservative estimate of the coal in this area was 28 Billion Tonnes.

## How does this Compare to the Listed Companies in the Sector?

	Energie Future	Linc Energy (ticker LNC)	Carbon Energy (ticker CNX)	Cougar Energy (ticker CXY)
Market Capitalisation	Not applicable	\$921m	\$206m	\$42m
Resources Potential	30 billion tonnes+	19 billion tonnes+	668 million tonnes+	73 million tonnes
Own UCG Technology?	Yes	Yes	Yes (Based on EF Technology)	Limited Licence
Own Fischer Tropsch Gas to Liquids Technology?	Yes	No - licensed from Syntroleum	No - Exploring Methanol option	N/A - power generation.
Technology run successfully at full scale	Yes - three pilots at Rawlins and Rocky Mountains	Yes - 1 at Chinchilla	Initial Trial underway	Initial Trial Underway
Resources Located adjacent to major energy market	Yes	No	No	No
Time to First Production	4 years +	5 Years +	5 Years +	5 Years +

From the above table it may be seen that Energy Future is in many ways leading the other players in the sector in particular, in the area of completing trials of the technology and owning the technology.

#### Why is East Coast interested in UGC

- ✓ Energy continuity concerns will increase the value of these types of resources making the Sydney Basin Licences extremely valuable;
- ✓ Increasing market acceptance of UGC technology means that the technology will gain support from the Authorities;
- ✓ Demand for “clean green” coal alternatives make UGC attractive;
- ✓ Energy Future has the ability to be the first Company into UGC commercial production;
- ✓ UGC will be a major energy source for the future.

The Option provides East Coast with a very cheap entry into the UGC sector and potentially significant upside providing the opportunity to extract considerable value for shareholders.

#### CALL ON PARTLY PAID SHARES

The directors made a fully underwritten call on the partly paid Bonus shares in February 2009 of 1 cent each in order to provide further working capital for the Company. The call closing date has been extended to 5 May 2009.

Richard Sealy

Managing Director

29 April 2009

Phone +61 413 757 182

[richardsealy@eastcoastminerals.com](mailto:richardsealy@eastcoastminerals.com)

[www.eastcoastminerals.com](http://www.eastcoastminerals.com)

*The information in this Report that relates to Exploration Results is based on information compiled by Ed Mead who is a member of the Australian Institute of Mining and Metallurgy. Ed Mead 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 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Ed Mead consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.*