



LIBERTY RESOURCES

Cleaner • Greener • Safer

ASX Announcement

5 October 2009

## Liberty Inferred Coal Resource Report

**Price**  
\$0.185

### SHARE INFORMATION

ASX Share Price (LBV):	\$0.185
Issued Shares:	138.6 m
Market Cap:	25.6 m
Current Cash:	\$4.4 m
Debt	\$0 m

At the request of the ASX, Liberty Resources Limited is supplementing our announcement on 21 September 2009 and provides the background technical report prepared by independent geologists Al Maynard & Associates ('AM&A').

Liberty Resources has 6 Exploration Permit for Coal (EPC's) and 43 Exploration Permit for Coal Applications (EPCA's) granted and 1 Mineral Development License Application (MDLA) under the Queensland Mining Act. Liberty engaged AM&A to prepare a JORC coal resource estimation on these tenements. The information contained in this report relating to coal resources is based upon data reviewed by Mr Allen Maynard and Mr Phillip Jones, who have consented to their inclusion both in this report and the ASX Announcement by Liberty and have signed off as competent persons. AM&A have provided independent geological advice over several years to the Directors of Liberty, who have endorsed the qualifications and experience of Mr Maynard and Mr Jones.

The JORC code to which AM&A were reporting, defines a resource as an occurrence of material of intrinsic economic interest that has reasonable prospects for eventual economic extraction. In making their estimation, AM&A note that the coal measures modeled in their study are too deeply buried to be considered for conventional open cut or underground mining. Liberty aims to realize the eventual economic extraction of the value of the coal resource through its in-situ processing by Underground Coal Gasification ("UCG"). The Inferred resource estimate by AM&A was of the coal potentially available for the UCG process based on the parameters described in their report, not for coal to be extracted by conventional mining methods

The economic potential of extracting the energy from coal resources has been documented by several organizations including a Price Waterhouse Coopers report titled "Industry Review and an Assessment of the Potential of UCG and UCG Value Added Products. Price Waterhouse Coopers 2008".

### Directors

Andrew Haythorpe  
Managing Director

Alan Phillips  
Chairman

Michael Fry  
Non-executive Director

James Becke  
Non-executive Director

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Commercial trials providing proof of concept have been completed by ASX listed companies Linc Energy Limited, Cougar Energy Limited & Carbon Energy Limited. These trial plants are operating on coal resources granted under the Queensland Mining Act, in the same geological environment in Queensland as the Liberty tenements. The results from these trials and the in-situ energy value of the associated coal resources have been publically released by these companies. Although in the same geological environment, these trials have been conducted at shallower depths than the coal seams in the Liberty tenements covered by the Inferred Resource.

#### ABOUT UCG

UCG is a process for utilizing coal in the ground by its in-situ gasification through the introduction of heat and the injection of steam, air or oxygen and extracting/producing the resultant gas stream (syngas) through wells inserted into the coal seam. Syngas consists of carbon dioxide, carbon monoxide, methane and hydrogen in proportions which are dependent on the coal macerals and the nature of the injected catalyst. The resultant gas stream can then be used for power generation or as feedstock in the production of natural gas, hydrogen, diesel, fertilizers and other chemical products.

Yours Sincerely

Robert Hodby  
Company Secretary

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# AL MAYNARD & ASSOCIATES Pty Ltd

## Consulting Geologists

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**Australian & International Exploration & Evaluation of Mineral Properties**

The Directors,  
Liberty Resources Ltd  
Unit B2, 431 Roberts Road,  
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21<sup>st</sup> September, 2009

Dear Sirs,

### **RE: DESCRIPTION OF INFERRED RESOURCE ESTIMATION DETAILS**

The results of our coal resource estimates are summarised here in Table 1. The accompanying spreadsheet shows the details of the calculations for an Inferred Resource estimate of 2.8 billion tonnes utilising an area of influence of 1.0km radius from the relevant drill holes.

Project Area 1.0km Radius	Million tonnes
ANDREW	44
LAUREN	82
MERIVALE	276
WESTGROVE	2,426
<b>Total</b>	<b>2,828</b>

**Table 1 – Inferred Mineral Resource Statement.**

#### **Data:**

The Inferred Resource estimates are based on historical drill-hole records and data from seismic surveys obtained mainly from the Queensland Department of Mines and Energy for the Surat Basin and Denison Trough in Queensland, Australia.

This drilling was carried out by other companies and government agencies in the search for oil, gas, water and in some cases coal. Since most of these holes were not primarily designed to be drilled for coals suitable for in-situ processing as proposed by Liberty, most of the relevant downhole data pertaining to the coals is incomplete and has not been used.

This data has not been independently verified by AM&A but another independent consulting group based in Qld (“Geoconsult”) has compiled the information and verified as much of it as possible during the process of retrieving it directly from within the Qld Mines Dep’t offices. AM&A has accepted the data as received.

Most of the holes were useful for confirmation of the stratigraphy of the basin sediments ‘down-the-holes’ plus general coal information. The few holes with

more complete information such as suitable lithology logs, down-hole geophysical logs including density and gamma logs were used to estimate coal thickness. Only where the coal seams exceeded 2.0m thickness they were considered suitable for processing and are included in the Inferred Resource estimates.

**Coal Quality:**

The coal measures modelled in this study are too deeply buried to be considered for conventional open cut or underground mining but the high pressures and temperatures at these depths, it is believed, makes some of these coals ideal for in-situ processing to produce gas and liquid fuels suitable for power generation.

The quality of the coal seams modelled as Inferred Resources was not rigorously considered due to the available information. However, the coal measures in the basins covered by the Liberty tenements, as indicated by work done by others, generally have fairly uniform physical and chemical properties with high proportions (70-100%) of vitrinite and liptonite producing high volatile matter (>50% daf) with a perhydrous composition (>6% hydrogen, daf) that is believed ideal for in-situ conversion to gas and/or liquid fuels and power generation.

These Inferred Resource estimates in no way imply the coals modelled will result in economic recoveries of any coal products but simply outline exploration Inferred Resource quantities of coal that may or not be suitable for in-situ processing.

**Estimation Method:**

The tenements were compared against regional geology maps and seismic profiles and all the tenements modelled were found to entirely cover basin sediments that potentially contain coal suitable for processing by Liberty.

The average coal thicknesses of the seams modelled per hole that met the criteria described above (>2m thickness) were calculated by dividing the total metres of coal intersected by the number of holes with modelled coal seams.

This overall average coal thickness was then multiplied by a resource block using a 1.0km radius surrounding all the drill holes used in the calculations to get a volume of the coal. This volume was then multiplied by 1.4, the assumed bulk density of the coal, to calculate the tonnage of coal.

Due to the lack of holes and geological information on the basin characteristics, no attempt was made to de-cluster the holes or use geological extrapolation techniques on the coal parameters modelled.

**Inferred Resource Estimates:**

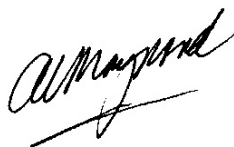
The Inferred Resource estimates listed in Table 1 are JORC Code compliant resources as they are based on drill-hole samples and other geological controls, especially seismic profiles. Due to their wide spacing the geological and coal quality continuity cannot be verified over the whole of the modelled area.

Since the technology to exploit the coal resources included in these estimates has not been tested on these coal seams it cannot be implied that all the modelled seams are potentially economic and suitable for in-situ processing until appropriate tests have been successfully carried out on these coal seams.

The viability of the proposed process relies on a number of variables such as seam thickness, quality of the coal, depth, ground pressures and temperatures and none of these variables were considered in these estimates. These resource estimates simply indicate the inferred tonnage of coal that could be considered for future study.

If the modelled coal seams prove to be suitable for the proposed process, these current estimates may well prove to be conservative as many of the holes used in the calculations did not fully penetrate the stratigraphic column containing the coal seams. Thus many potential seams were not included in the estimates. An arbitrary minimum seam thickness of 2.0m was used and it may eventually be proven that narrower coal seams may be suitable for processing.

Yours faithfully,



Allen J. Maynard

*Competent Persons Statements.*

*The information in this report which relates to Exploration Results or Mineral Resources is based on information compiled by geologists Mr Allen Maynard and Mr Philip A. Jones, who are both Members of the Australian Institute of Geosciences (“AIG”), Corporate Members of the Australasian Institute of Mining and Metallurgy (“AusIMM”) and independent consultants to the Company. Mr Maynard is the principal of AI Maynard & Associates Pty Ltd and he and Mr Jones each have over 30 years of exploration and mining experience in a variety of mineral deposit styles including mineral resource estimates.*

*Mr Maynard & Mr Jones 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 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”. Both consent to inclusion in the report of the matters based on this information in the form and context in which it appears.*