

29 January 2016

Manager Companies Companies Announcements Office Australian Stock Exchange Limited

Quarterly report for the three months to December 31, 2015

MAJOR GAS RESOURCE CERTIFIED

Highlights

- Initial Inferred Coal Resource of 377 Million Tonnes reported in accordance with the JORC Code 2012 (refer to ASX release dated 8 December 2015).
- Heads of Agreement with APT Pipelines Limited, a subsidiary of APA Group which will allow the
 development of conceptual plans for the interconnection of the Leigh Creek Energy Project with
 the east coast gas markets (refer to ASX release dated 15 December 2015).
- Mandate signed with EAS Advisors LLC of New York, USA for strategic, capital raising (debt and equity) and investor relations advice (refer to ASX release dated 22 October 2015).

Subsequent to quarter end the following has occurred;

 Achievement of a 2C ISG Gas Resource of 2,963.9 PJ at the Leigh Creek Energy Project independently assessed and certified by MHA Petroleum Consultants LLC (USA) and reported in accordance with the Society of Petroleum Engineers – Petroleum Resources Management System (refer to ASX release dated 8 January 2016).

Leigh Creek Energy Project (LCEP)

LCK is developing the LCEP with the initial objective of producing sales gas, using in situ gasification (ISG) methods, for delivery into the supply constrained gas market. The first phase of the LCEP has always been to undertake geological and environmental assessments and to provide estimates of the coal and gas resources. Initially appraisal drilling was planned to carry out these assessments, however in the December quarter 2015, LCK discovered physical geological and drill hole data (refer to ASX announcement dated 28 October 2015) which significantly progressed the first phase of the LCEP. This allowed for independent coal and gas resource estimates to be conducted as detailed below.

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Initial PRMS ISG Gas Resources Certification

On 8 January 2016, Leigh Creek Energy (LCK) announced the achievement of the following ISG Gas Resources at the Leigh Creek Energy Project:

1C 2,747.7 PJ

2C 2,963.9 PJ

3C 3,303.1 PJ

This was independently assessed and certified by MHA Petroleum Consultants LLC (MHA) and reported in accordance with the Society of Petroleum Engineers – Petroleum Resources Management System (PRMS).

MHA was provided with the Geological and Modelling Report prepared in December 2015 by GeoConsult Pty Ltd (**GeoConsult**) which provided the estimate of the Inferred Coal Resource reported in accordance with the JORC Code 2012.

The GeoConsult model was based on 1,432 drillholes in the upper series coal seams and 3,385 drillholes in the main and lower series coal seams and re-interpretation of seismic data.

MHA conducted a detailed review of the GeoConsult coal resource estimate, and these coal volumes were used in the MHA gas resource estimate.

Importantly the gas resources recoverable underpin the next steps toward the commercial development of the LCEP. We intend to monetise some gas in the June half 2016 period. LCK intends to monetise gas in order to improve the internal rate of return (IRR) to LCK shareholders. Gas monetisation, if successful, may reduce significantly LCK's need for equity – assuming some items of infrastructure (such as gas pipeline and power generation) can be project financed.

Upcoming seismic survey and appraisal drilling

LCK plans to undertake 17 line kilometres of new 2D seismic data acquisition at the LCEP to underpin new drill locations and further understanding of the coal resource.

The drill hole locations have been reassessed following the acquisition of significant data in October and will be finalised following the seismic survey. The drill program, to be undertaken in Q1 2016, will infill areas of the LCEP geological model and provide key environmental and hydrogeological information.

Following completion of the revised drilling program, LCK aims to provide an updated coal resource estimate and gas resource certification.

We anticipate that few holes are required to in-fill areas of the coal field which have not already been drilled, and that these holes will likely add significantly to known coal resources and that will flow onto an expected increase in gas resource certification.

Some of the new holes drilled are planned to act as water monitoring wells, which are required in the lead up to South Australian government approval to produce and flare gas.

Gas Flaring Approvals

The operational effort required ahead of seeking approval to demonstrate gas production and gas flaring has been increased, with additional effort across;

- Base line environmental assessment and monitoring.
- Engineering planning, design concept scope of works and tender document drafting.
- Significant interaction with relevant government departments.

Path Forward

LCK is nearing completion of the first phase of the LCEP with the recent inferred coal resource, commencement of environmental baseline studies and now MHA's ISG Gas Resource certification.

LCK has commenced phase two of the LCEP which will work towards demonstration and flaring gas planned for the December quarter 2016.

Corporate

Gas Marketing

The PRMS certification is the foundation stone of the gas marketing efforts. Now that the initial PRMS resource is complete, we expect to rapidly progress negotiations with potential customers. The Company considers gas monetisation to be a significant and prudent method of raising early capital, and an alternative to equity capital.

Present gas marketing intends to;

- 1. Obtain information of the gas demand needs of large and small customers, so that the LCEP has an understanding of its production growth curve post commercial gas production start which is anticipated in early 2019.
- 2. Monetise some of the gas and thereby substantially reduce the need for equity capital.

The board of LCK, at this early stage of gas marketing, is considering all or any of the final forms of gas monetisation which might eventuate, such as;

- Gas option payments to secure as supply;
- Gas pre-payments;
- Purchase of gas resources in ground;
- Purchase of equity in the LCEP; or
- Some combination of these.

Heads of Agreement with APA

On 5 December 2015 LCK announced the signing of a non-binding Heads of Agreement (**HOA**) with APT Pipelines Limited, a subsidiary of APA Group (**APA**).

Under the HOA, LCK and APA will work together to:

- Develop conceptual plans for the interconnection of LCEP to the eastern Australian gas markets;
- Identify the most likely route for the interconnection pipeline;
- Review the transport charges to deliver gas to market;
- Review the gas storage potential at the LCEP; and

• Review other infrastructure opportunities including power generation.

The studies to be completed under this HOA constitute the first stage of the development of the pipeline required to bring LCEP gas to market.

Gas storage, also at the LCEP, is an exciting opportunity and has the potential to store and provide gas during periods of seasonal low gas demand and provide additional insurance over South Australia's energy security and to support variable demand loads such as gas fired peak power generation.

Monthly based meetings between APA and LCK have commenced.

Mandate with EAS Advisors

On 22 October 2015 LCK announced the signing of a mandate with EAS Advisors LLC (**EAS**). EAS is a boutique advisory firm based in New York (USA) well known for advising natural resources companies at relatively early stages through large-scale development.

EAS will be supporting LCK's efforts across a range of areas including capital raising (debt and equity), strategic advice and international investor relations. LCK, with EAS's support, is currently designing a capital structure that will optimise returns to shareholders whilst reducing overall risk.

Initial US and Australian non deal roadshows commenced in the December quarter and a larger US roadshow is planned for March 2016.

Stakeholder Engagement

LCK has actively increased stakeholder engagement efforts across a wide spectrum of parties, individuals and localities.

With the closure of mining activities at the Leigh Creek Coal Field (Dec quarter 2015) and the associated closure of power stations at Port Augusta (June half 2016) there is great community concern with regard to the future of the town of Leigh Creek and surrounding communities.

We strongly believe that Leigh Creek has a long term future and we look forward to helping the town and regional communities best manage the difficult ongoing process of transition. Unfortunately our own efforts cannot fully offset job losses, even though we anticipate that the size of construction activity planned for 2017/18 and then operational needs from 2018/19 will likely offset the number of jobs lost.

Finance

At the end of the quarter, LCK's cash balance was \$871K. A summary of the cash flows for the quarter are attached in the Appendix 5B.

LCK had 15.0 million Treasury shares at the start of the quarter. Of these, approximately 8.8 million had been sold at quarter end (at an average price of \$0:21 per share), the remaining 6.2 million are expected to be sold in the March quarter 2016.

Commenting on the quarterly progress, Managing Director David Shearwood said:

"I am extremely pleased about progress made during late 2015 across all fronts and I take this opportunity to thank all staff, our shareholders, our service providers and a widening group of stakeholders for their efforts and support in LCK. Post listing we have experienced rapid growth and I am very proud to work with the LCK team that we have assembled.

The Leigh Creek Energy Project is now, post gas resource certification, a significant new source of potential gas supply in the presently constrained Eastern Australian gas market.

We expect further rapid growth as we now seek to monetise gas, increase our gas resources by modest in-fill drilling and plan the detail of gas demonstration and gas flaring ahead of approvals to flare gas.

We are witnessing a rapid increase in interest in our gas from small and large gas customers and this is indicative of the gas shortage looming. It is our intention that these negotiations will lead to gas monetisation opportunities thus significantly reducing our need for equity capital.

Much work is planned for the existing quarter, March 2016, and I look forward to updating you with progress regularly."

For further information contact:

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Media

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Mineral Resource Statement

Estimates of Mineral Resources reported in this announcement were initially reported and released to the ASX on 8 December 2015. Leigh Creek Energy Limited is not aware of any new information or data that materially affects the information included in the 8 December 2015 announcement and all the material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

Gas Resource Statement

Gas Resources reported in this announcement were initially reported and released to the ASX on 8 January 2016. Leigh Creek Energy Limited is not aware of any new information or data that materially affects the information included in the 8 January 2016 announcement and that all the material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed. All Estimates are based on the deterministic method for estimation of petroleum resources.

About Leigh Creek Energy

Leigh Creek Energy Limited (LCK) is an emerging gas company focused on developing its Leigh Creek Energy Project (LCEP), located in South Australia. The LCEP will produce high value products such as methane and fertiliser from the remnant coal resources at Leigh Creek utilising In Situ Gasification technologies, and will provide long term growth and opportunities to the communities of the northern Flinders Ranges and South Australia.

The Company is committed to developing the LCEP using a best practice approach to mitigate the technical, environmental and financial project risks to as low as can be reasonably achieved.

Rule 5.5

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/2013

| Name of entity | | | | | | |
|----------------------------|-----------------------------------|--|--|--|--|--|
| Leigh Creek Energy Limited | | | | | | |
| ABN | Quarter ended ("current quarter") | | | | | |
| 31 107 531 822 | 31 December 2015 | | | | | |

Consolidated statement of cash flows

| | | Current quarter | Year to date |
|--|--|-----------------|--------------|
| Cash flows related to operating activities | | \$A'000 | (6 months) |
| | | | \$A'000 |
| 1.1 | Receipts from product sales and related debtors | | |
| 1.2 | Payments for (a) exploration & evaluation (b) development (c) production | (246) | (542) |
| | (d) administration | (848) | (1771) |
| 1.3 | Dividends received | | |
| 1.4 | Interest and other items of a similar nature received | | 3 |
| 1.5 | Interest and other costs of finance paid | | |
| 1.6 | Income taxes paid | | |
| 1.7 | Other (provide details if material) | | |
| | | (1094) | (2310) |
| | Net Operating Cash Flows | | |
| | | | |
| 0 | Cash flows related to investing activities | | |
| 1.8 | Payment for purchases of: (a) prospects | | |
| | (b) equity investments | | |
| | (c) other fixed assets | | |
| 1.9 | Proceeds from sale of: (a) prospects (b) equity investments | | |
| | (c) other fixed assets | | |
| 1.10 | Loans to other entities | | |
| 1.11 | Loans repaid by other entities | | |
| 1.12 | Other (provide details if material) | | |
| | (F-3.14c details in material) | | |
| | Net investing cash flows | | |
| 1.13 | Total operating and investing cash flows | | |
| | (carried forward) | | |

⁺ See chapter 19 for defined terms.

Appendix 5B Mining exploration entity and oil and gas exploration entity quarterly report

| 1.13 | Total operating and investing cash flows (brought forward) | (1094) | (2310) |
|------|--|--------|--------|
| | Cash flows related to financing activities | | |
| 1.14 | Proceeds from issues of shares, options, etc. | 1707 | 1707 |
| 1.15 | Proceeds from sale of forfeited shares | | |
| 1.16 | Proceeds from borrowings | | |
| 1.17 | Repayment of borrowings | | |
| 1.18 | Dividends paid | | |
| 1.19 | Other (provide details if material) | | |
| | Net financing cash flows | 1707 | 1707 |
| | Net increase (decrease) in cash held | 613 | (603) |
| 1.20 | Cash at beginning of quarter/year to date | 258 | 1,474 |
| 1.21 | Exchange rate adjustments to item 1.20 | | |
| 1.22 | Cash at end of quarter | 871 | 871 |

Payments to directors of the entity, associates of the directors, related entities of the entity and associates of the related entities

| | | Current quarter |
|------|--|-----------------|
| | | \$A'000 |
| 1.23 | Aggregate amount of payments to the parties included in item 1.2 | 274 |
| 1.24 | Aggregate amount of loans to the parties included in item 1.10 | - |
| 1.25 | Explanation necessary for an understanding of the transactions | |
| | 1.23 includes salaries and directors fees | |
| | | |

Non-cash financing and investing activities

| 2.1 | Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows |
|-----|--|
| | N/A |

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⁺ See chapter 19 for defined terms.

| 2.2 | Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest | | | | |
|------|---|-----------------------|---------|-----------------------------|--|
| | N/A | | | | |
| | | | | | |
| | nancing facilities available I notes as necessary for an understanding of the position | on. | | | |
| | | Amount ava | ilable | Amount used \$A'000 | |
| 3.1 | Loan facilities | Nil | | - | |
| 3.2 | Credit standby arrangements | Nil | | - | |
| Es | timated cash outflows for next qua | arter | | | |
| | | | \$A'000 | | |
| 4.1 | Exploration and evaluation | | 1040 | | |
| 4.2 | Development | | - | | |
| 4.3 | Production | | - | | |
| 4.4 | Administration | | 1019 | | |
| | Total | | 2059 | | |
| Re | econciliation of cash | | | | |
| show | nciliation of cash at the end of the quarter (as in in the consolidated statement of cash flows) e related items in the accounts is as follows. | Current qu \$A'ooo | arter | Previous quarter \$A'000 | |
| 5.1 | Cash on hand and at bank | 802 | | 104 | |
| 5.2 | Deposits at call | 69 | | 154 | |
| 5.3 | Bank overdraft | - | | | |
| 5.4 | Other (provide details) | - | | | |
| | Total: cash at end of quarter (item 1.22) | 871 | | 258 | |

⁺ See chapter 19 for defined terms.

Changes in interests in mining tenements and petroleum tenements

| | | Tenement reference and location | Nature of interest (note (2)) | Interest at beginning of quarter | Interest at end of quarter |
|-----|---|---------------------------------|----------------------------------|--|----------------------------------|
| 6.1 | Interests in mining tenements and petroleum tenements relinquished, reduced or lapsed | N/A | | | |
| 6.2 | Interests in mining tenements and petroleum tenements acquired or increased | N/A | | | |

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

| | | Total number | Number quoted | Issue price per security (see | Amount paid up per security (see |
|-----|---|--------------|---|-------------------------------|----------------------------------|
| | | | | note 3) (cents) | note 3) (cents) |
| 7.1 | Preference +securities (description) | N/A | | <i>y</i> , , , | |
| 7.2 | Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buybacks, redemptions | | | | |
| 7.3 | ⁺ Ordinary securities | 230,519,472 | 230,519,472 (Of which 104,767,190 Escrowed for 2 years from 03.07.2015 and 35,544,493 Escrowed for 1 year from 29.06.2015) | | |

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⁺ See chapter 19 for defined terms.

| 7.4 | Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buybacks +Convertible | N/A | | |
|------|--|------------|------------------------|---------------------------|
| 7.5 | debt | IN/A | | |
| | securities | | | |
| 7.6 | (description) Changes during | | | |
| 7.0 | quarter | | | |
| | (a) Increases | | | |
| | through issues (b) Decreases | | | |
| | through | | | |
| | securities | | | |
| | matured, | | | |
| | converted Options | | | |
| 7.7 | (description and conversion factor) | | | |
| 7.8 | Issued during quarter | 1,000,000 | Exercise price 0.212 | Expiry date 19.10.2019 |
| | | 1,000,000 | Exercise price | Expiry date |
| | | 2,000,000 | 0.25 Exercise price | 19.10.2020 Expiry date |
| | | 2,000,000 | 1.50 | 31.07.2020 |
| | | 10,250,000 | Exercise price | Expiry date |
| | | | 0.30 | 30.11.2020 |
| 7.9 | Exercised | | | |
| 1.9 | during quarter | | | |
| 7.10 | Expired during | 750,000 | 1.727 | 01.11.2015 |
| | quarter | | | |
| 7.11 | Debentures (totals only) | | | |
| 7.12 | Unsecured | | | |
| - | notes (totals | | | |
| | only) | | | |
| | | | 1 | |

Compliance statement

This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 5).

⁺ See chapter 19 for defined terms.

This statement does give a true and fair view of the matters disclosed.

Sign here:

Date: 29 January 2016

Company secretary

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Print name: Jordan Mehrtens

Notes

- The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements and petroleum tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement or petroleum tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- Issued and quoted securities The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- The definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report.
- Accounting Standards ASX will accept, for example, the use of International Financial Reporting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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⁺ See chapter 19 for defined terms.