

ASX ANNOUNCEMENT

7 October 2013

MACKENZIE PCI COAL PROJECT | CONCEPTUAL MINING STUDY COMPLETE

HIGHLIGHTS

- Conceptual study complete
- Operating and capital costs for standalone project within expectations
- Coal quality assessment confirms potential for a prime PCI product.
- Mackenzie tenement well positioned for infrastructure and logistical support.

Cougar Energy Limited (ASX: CXY - “the Company”) is pleased to announce it has completed its initial assessment of coal quality and the conceptual mining study for its 100% owned Mackenzie PCI Coal Project (“MacKenzie” or “the Project”).

The Project is located within EPC 1445 (MDLa 503,504) approximately 25 km north-east of Blackwater in the Bowen Basin in Central Queensland and covers an area of 21 km². It is situated between the open cut operating mines of Jellinbah and Yarrabee, both long-term producers of PCI grade export coal.

The Project has been assessed for its potential as an underground operation.

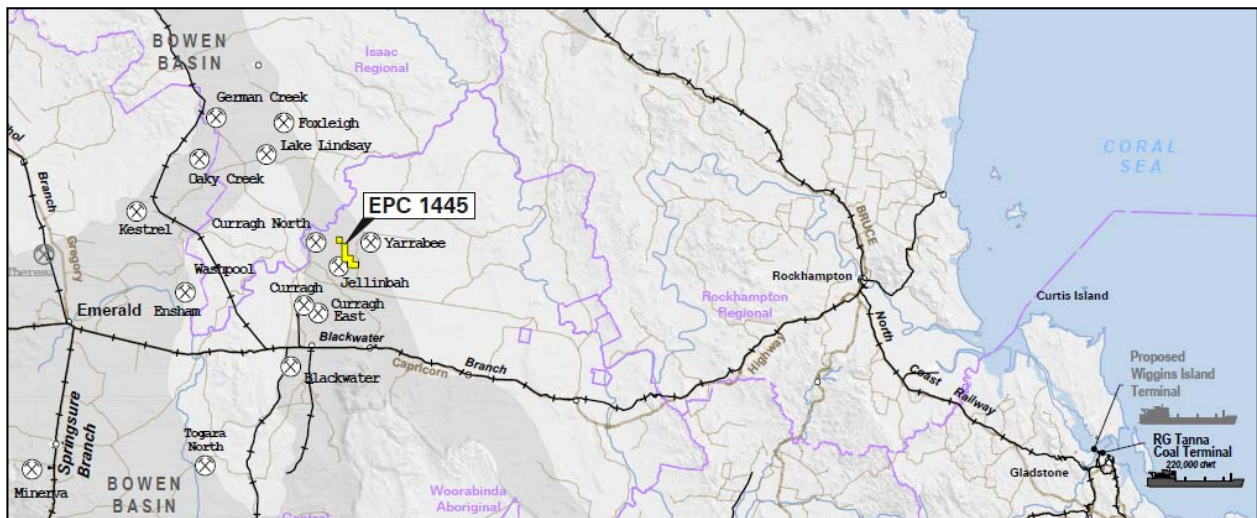


Figure 1: Location of Mackenzie and existing infrastructure

Exploration and resources

As previously reported the Company completed its first phase of exploration drilling at Mackenzie on 24 June 2013. This work consisted of 3 holes (with data available on a further 4 previously drilled holes along the western edge of the tenement) and concentrated on the southern section of the EPC which covers approximately 60% of the 2,100ha project area. A total of 2,197 metres was drilled including 262 metres of HQ size core.

All holes drilled intersected the targeted Rangal Coal Measures sequence – the **Aries, Castor, Pollux and Pisces seams**. The seams were intersected at moderate depth and range from a minimum of 283m in hole CED002 to a maximum depth at the base of the sequence of 451m in hole CED003. Figure 2 shows the site stratigraphy.

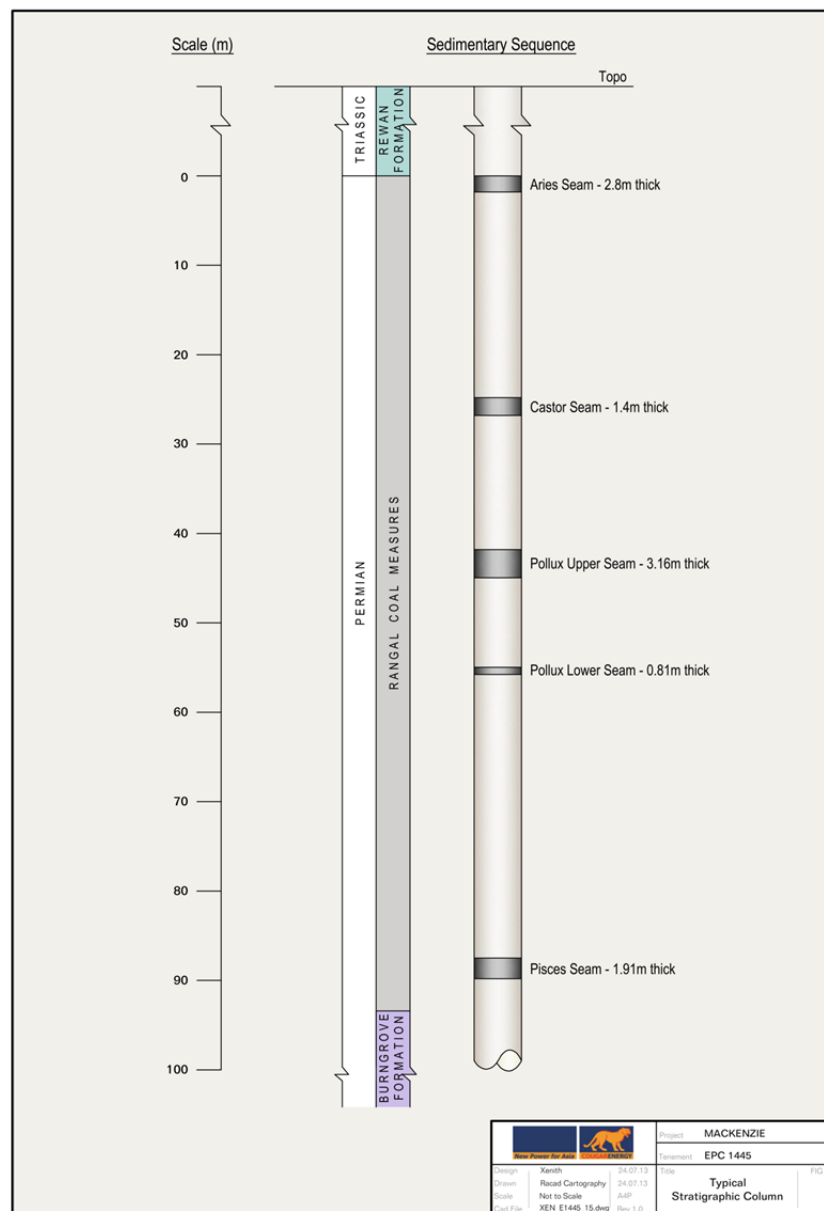


Figure 2: Site Stratigraphy
(Scale represents depth beneath the Aries seam)

Xenith Consulting completed the resource estimation work for the Project. The results were prepared under the requirements of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and reported by the Company on 17 July 2013.

Inferred Coal Resources within the Project area are estimated at 201Mt¹.

¹ Refer to the Company's announcement to the ASX on 17 July 2013. The Company is not aware of any new information which would materially affect the resources stated.



Tables 1, 2 and 3 summarise the distribution of resources by seam, raw quality and depth increment:

Table 1: Summary of Coal Resources

Inferred Coal Resources					
Seam	Average Thickness	Coal Area	Coal Volume	PRD	Mass
	[m]	[Ha]	[M bcm]	[g/cc]	[Mt]
Aries	2.80	1,650	46	1.51	70
Pollux Upper	3.16	1,650	52	1.58	82
Pisces	1.91	1,650	32	1.55	49
Total Tonnes					201

Table 2: Summary of Raw Coal Quality

Quality - Raw Air Dried Basis (adb)								
Seam	IM	ASH	VM	FC	RD	CSN	TS	SE
	[%]	[%]	[%]	[%]	[g/cc]		[%]	[Mj/Kg]
Aries	1.6	21.4	14.7	62.3	1.53	3.5	0.53	29.08
Pollux Upper	2.0	27.4	13.3	57.3	1.61	1.0	-	-
Pisces	1.7	25.9	14.5	57.9	1.58	1.0	0.38	25.65

Table 3: Summary of Coal Resources – By Depth

	Average Thickness (m)	Area (Ha)	Volume (Mbcm)	PRD (g/cc)	Mass (Mt)
Aries 200 – 300m	2.99	789	23.6	1.52	36
Aries 300 – 400m	2.63	860	22.6	1.44	33
Pollux Upper 200 – 300m	2.89	20	0.6	1.58	1
Pollux Upper 300 – 400m	3.21	1,233	39.6	1.60	63
Pollux Upper 400 – 500m	3.04	396	12.1	1.53	18
Pisces 300 – 400m	1.72	783	10.8	1.59	22
Pisces 400 – 500m	2.07	866	17.7	1.56	28
Total					201

Mining ²

Xenith were retained to undertake the conceptual mining study. The conceptual layout was based on exploiting the EPC limits and maximising potential long wall extraction. Considering the northern block, separate access would be required under the current EPC configuration, bord and pillar was assumed for this area. Drift access was assumed to the Aries seam.

² Cautionary Statement: The conceptual mining study referred to in this announcement is based on low-level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the conceptual mining study will be realised. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result on the conversion of Inferred Mineral Resources to Indicated and/or Measured Mineral Resources or that the potential production range itself will be realised. The Company advises that the conceptual mining study results and potential production range reflected in this announcement are preliminary in nature as conclusions are partly drawn from Inferred Resources.

For the purposes of the conceptual study, all surface infrastructure was assumed to be located off site near the existing rail way. Further land access and acquisition will form the basis of future investigations. Figure 3 shows the conceptual panel layout.

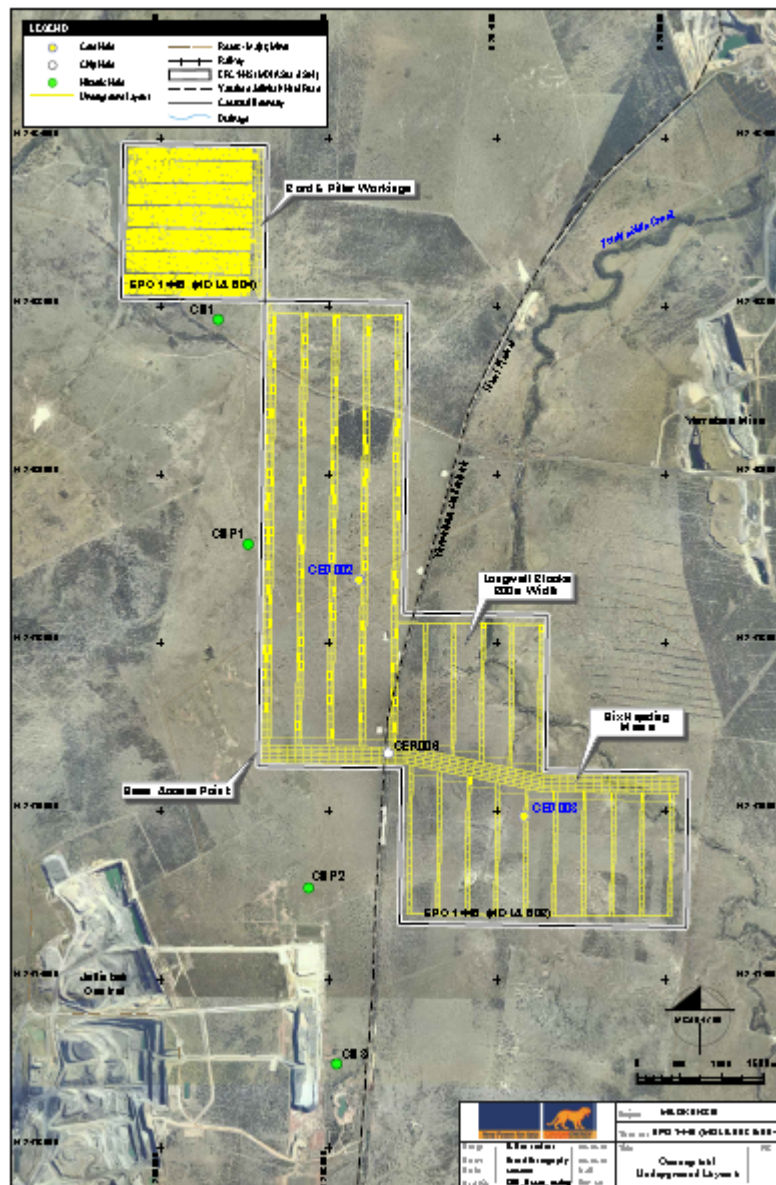


Figure 3: Conceptual mine layout

The mining depth at Mackenzie for the Aries seam is considered within the middle of the range for Australian long wall operations. The initial mining target is the Aries seam. Following mining of the Aries seam, production would continue at depth to the Pollux and Pisces seams.

Productivities for a potential operation have been considered with comparison to a range of Australian long wall operations. This work identified a range of 2 to 5Mtpa ROM for operations at similar depth. Considering the potential size, depth and level of definition of the Mackenzie resource, a nominal production rate of 4Mtpa ROM is assumed.

Coal quality

Coal quality assessment was carried out on samples taken from the phase 1 exploration programme. Clean coal composites were simulated with tests including Proximate analysis, CV, CSN and TS. Additional vitrinite reflectance testing was carried out to assess coal rank.

Sample raw ash ranged from 15 to 40% with average seam ash in the range of 20 to 25% (Table 2). Coal preparation will be required to achieve a metallurgical coal product.

Indicative coal specification for the Aries seam product is summarised in Table 4.

Table 4: Indicative Product Specification Mackenzie

Description		Value
		(Air Dried Basis)
Moisture (%)	Total	8.0(arb)
Proximate analysis (%)	Inherent moisture	1.5
	Ash	9.5
	Volatile matter	14.2
	Fixed carbon	74.8
Total Sulphur (%)		0.65
Calorific value	Gross (kcal/kg)	7570
HGI		85-90

The results of this work remain encouraging with all seams at Mackenzie having potential to produce a low volatile PCI product. In addition to this, CSN values of up to 7 were identified within the Aries seam. Further investigations will be conducted in future studies to determine the potential for a semi soft product from this seam.

Infrastructure

The Mackenzie tenement is well located close to existing logistics infrastructure.

A haul road owned by Yarrabee coal mine runs North to South directly through the tenement. Mackenzie is located approximately 26 kilometres to the North of Boonal coal load-out facility and the Blackwater rail line which transports coal to the Port of Gladstone.

Surface infrastructure requirements will include offices, mine industrial areas, coal processing, surface water and tailings storage, stockpile and rail loading infrastructure. Options are currently being assessed for placement of these facilities.

Capital and Operating Costs

Capital and operating cost estimates at a conceptual level were developed by Larpro consulting in conjunction with Xenith and the Company.

Capital costs

Table 5 presents the capital cost estimate. Capital costs include on site infrastructure, production equipment, initial development work and owners costs.

Table 5: Capital cost estimate

Description	AUD(M)
Mine surface works and coal processing	155
Underground	478
Transport and rail	104
Offsite	25
EPCM and Owners costs	98
TOTAL	860

Operating costs

FOB operating costs were estimated within the range of AUD90-130/t based on comparisons to a range of Australian long wall producers and a work up considering a base case of 4mtpa ROM production. Table 6 presents the operating cost breakdown.

Table 6: Operating cost breakdown

Item	AUD/t
Mining and coal processing	64
Coal handling and logistics	28
Overheads	6
Royalties and levies	15
TOTAL	113

The results of the concept study are encouraging with respect to the potential for establishing the Company as a long term producer of prime ultra low volatile PCI.

Chairman Andrew Matheson comments: “Our assessment to date has reviewed a number of options for the development of the Mackenzie Project. The results to date are encouraging both from coal quality and project cost perspectives and with this improved definition of the Project we will continue to pursue our options with respect to investment into Mackenzie at the project level.”

Andrew Matheson
Chairman

COMPETENT PERSON’S STATEMENT

The information in this Announcement that relates to the JORC Compliant Inferred Coal Resource estimated at the Mackenzie Project EPC 1445 (MDLa 503,504) is based on information compiled by Mr Troy Turner, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Turner is a full-time employee of Xenith Consulting Pty Ltd. Mr Turner is a qualified geologist and 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 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (JORC Code). The estimates of the Coal Resource in this Announcement are considered to be a true reflection of the Coal Resource as at 14 July 2013 and have been carried out in accordance with the principles and guidelines of the JORC Code. Mr Turner consents to the inclusion of the matters based on his information in the form and context in which they appear in this Announcement.