



Company Announcements  
ASX Limited  
Exchange Plaza  
2 The Esplanade  
PERTH WA 6000

By Electronic Lodgement

14 February 2013

Dear Sir/Madam

### **KATINGAN RIA COAL RESOURCE UPGRADE**

- **Fivefold increase in Measured and Indicated Resources to 50Mt lays foundation for potential 10+ year coal operation**
- **Maiden JORC compliant Measured Resource of 6Mt in the proposed initial mining area**
- **Revised total resource of 89Mt (vs. 102Mt) due to a review of bore hole intersections of the Northern area D series seams**
- **Mining and logistics options studies well advanced, paving the way for the possible conversion of resources to a JORC compliant reserve**

**Realm Resources Ltd. (ASX: RRP) (“Realm” or the “Company”)** is pleased to announce that it has completed a resource upgrade following the phase three drilling program at its Katingan Ria Project (**“Katingan Ria”**).

Katingan Ria (RRP 51%), which is located in Kalimantan Indonesia, is shaping up as a simple, open-cut operation that will supply low ash and sulphur coal ideally suited for modern Indian and Chinese power generation.

The drilling program, designed in conjunction with the Company's consultants Xenith Consulting, aimed to improve the confidence in the coal resource and potentially allow for conversion of some of this resource to a JORC compliant reserve estimate. In addition, data collected will be incorporated within a feasibility study, alongside additional engineering studies (mining and logistics) and optimisation work that could enhance the project's economics.

Commenting on the results, Chairman Richard Rossiter said, “we are pleased that the final drilling programme has increased the confidence in the resource and significantly lifted measured and indicated resources from 10Mt to 50Mt.

“The resource upgrade paves the way for financing and development once the receipt of the final Pinjam Pakai (forestry) operations permit is granted, which is expected in H2 2013.”

### **Exploration Programmes**

Realm has undertaken three drilling programmes on the Katingan Ria Project between 15<sup>th</sup> May 2011 and 14<sup>th</sup> November 2012. A total of 60 holes have now been drilled, as follows:

#### **Phase 1**

Realm commenced its first stage of exploration activities in May 2011. This program included 28 boreholes of which 9 were cored holes. Drilling in the south identified three seams (Main, No. 2 and No. 3 seams), with an additional unnamed seam overlying the Main seam.

Drilling in the north, which commenced in August 2011, revealed multiple seams including the Main seam at a greater depth. Overlaying the Main seam were four to five thinner seams with a cumulative total coal thickness of all seams showing approximately 11m. Initial modelling in the north showed the seams dip gently to the west.

#### **Phase 2**

Realm commenced the second phase of exploration work in early 2012. The program included a total of 14 boreholes which were included in the April 2012 JORC Resource Estimate report. The Phase 2 program was aimed at improving data already obtained for the Main seam, No. 2 and No. 3 seams in the southern area of the lease, as well as improving coal quality data for the Main seam and upper seam sequence in the northern area of the lease.

The program also focussed on refining the understanding of structure within the lease area; in particular the location, vertical and lateral displacement of the fault which separates the northern and southern areas of the lease.

Finally, a Lidar Radar survey was undertaken to create a high resolution topographical model for the lease area for greater accuracy during resource definition and potential mining and civil design work.

#### **Phase 3**

Realm began the third and latest drilling program in September 2012. The program included a total of 18 drill holes, comprising 6 chipped holes and 12 cored holes. These holes, along with previously drilled holes, have contributed to the February 2013 JORC Resource Estimate.

The aim of this drilling program was to increase the estimate of the existing Coal Resource and/or upgrade the classification of the Coal Resource. Furthermore, coal quality testing was carried out on all cored holes where coal seams met the minimum testing criteria.

The southern area of the lease was the primary target for the Main seam, as the seam is thickest in this area and generally has lower reported ash values. Drilling in the north focussed on drilling intercepts of the upper seam sequence.

Basic bore core washability testing was carried out to determine the potential of processing these seams down to a lower ash product. Preliminary results are encouraging with some seams appearing to be easily beneficiated with simple processing methods, and further work will be undertaken in the future as part of the feasibility study.

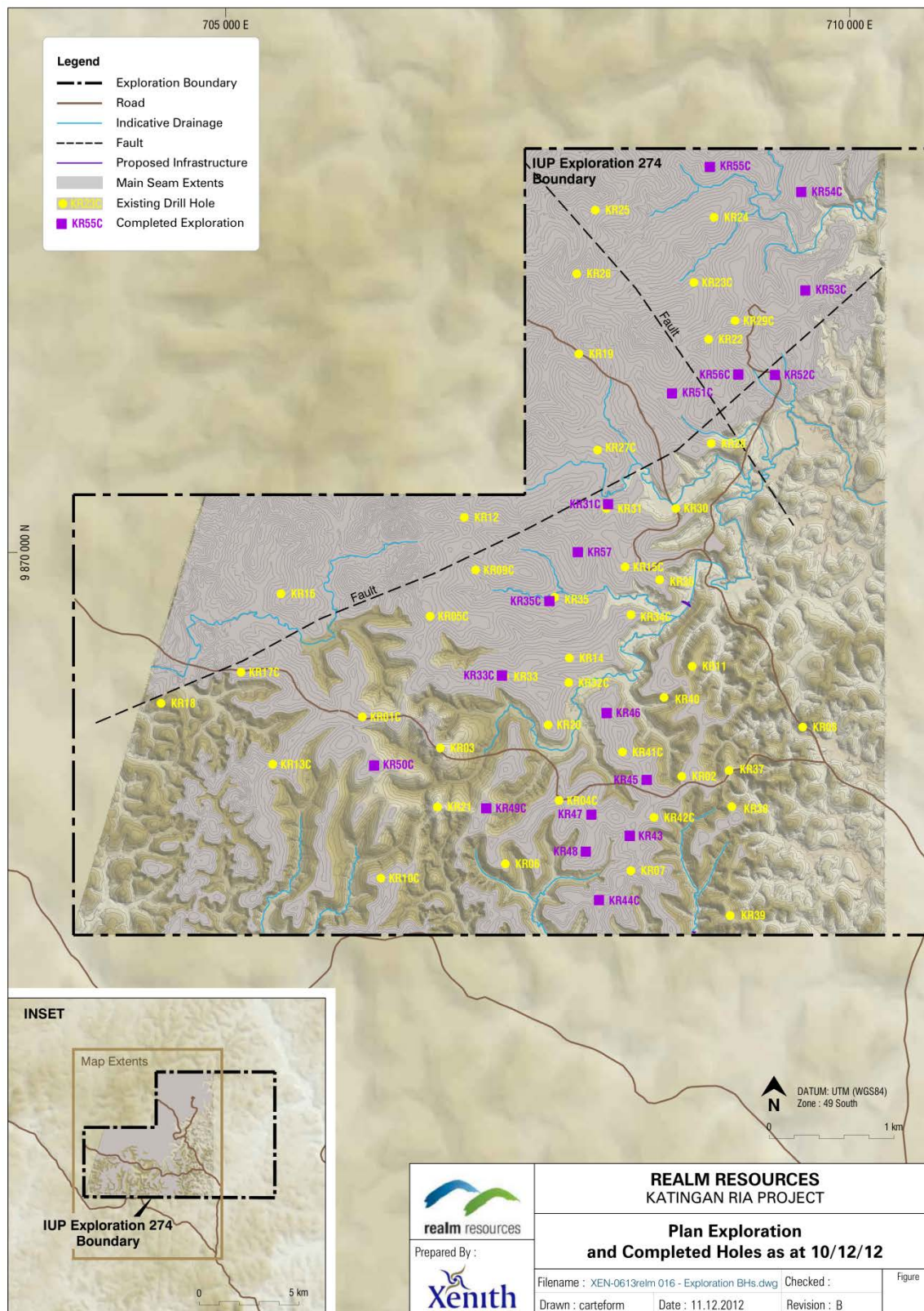
Borehole locations for the program are shown in Figure 1 below, as well as existing boreholes from the previous exploration programmes and interpreted faults included in the geological model.

## **Exploration Results**

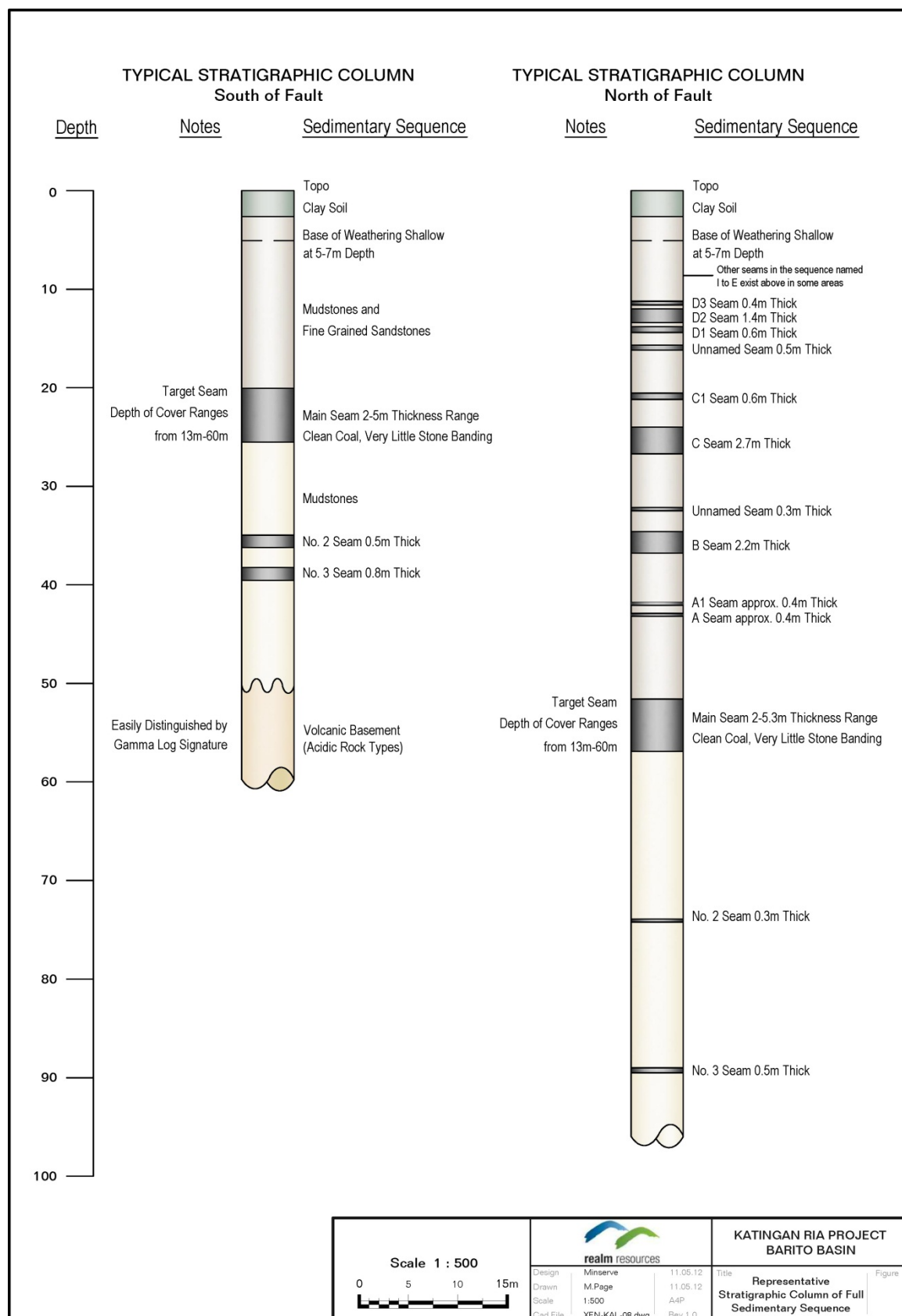
There are 20 identified coal seams within the lease area, though not all coal seams are present over the entire lease area due to the general seam dip, folding and/or faulting. The stratigraphy of the deposit shows that the Main seam is the most consistent and laterally extensive. The upper seams exist only where the Main seam is at depth, as they range from approximately 20m to 50m above the Main seam stratigraphically. The upper seams are generally higher in raw ash and slightly more banded in nature. The No.2 and No.3 seams appear relatively consistent, albeit relatively thin and are generally found 5m to 15m below the Main seam. These two seams show consistent geophysical signatures which allow them to be used as marker bands in the stratigraphic sequence.

Figure 2 below shows a typical stratigraphic column across the coal seams in the north and south, with the upper seam sequence generally developed in the north only. Vertical displacement of approximately 50m was interpreted across the fault with a potential eastern lateral displacement to the north of the fault, exposing the Main seam to the east.

**Figure 1 - Location of Boreholes**



**Figure 2 - Typical Stratigraphic Column**





## Coal Resources

The coal resources in the project have been classified as Measured, Indicated or Inferred. It can be observed that the Main seam outcrops in a number of locations in the lease which gives further confidence in seam thickness and continuity in addition to the modelled drill holes.

Overall, the Katingan Ria Project is estimated to contain a JORC compliant Resource of 89Mt. Resources total 63.3Mt in the Main seam, 20.8Mt in the upper seams and the remaining 4.7Mt in the lower seams.

The Resource has a total of 5.7Mt in the Measured category, 44.1Mt in the Indicated category and the remaining 39.0Mt in the Inferred category.

Table 1 below details the coal resources for the project as at February 2013.

The primary difference in total tonnes reported in the April 2012 (102Mt) and January 2013 (89Mt) Resource estimates are attributed to the D seam no longer qualifying for inclusion into the Resource Estimate. Only one intercept was drilled in the most recent drill program, however the seam was highly weathered and no associated coal quality work was undertaken. Re-correlations due to reviewed drill data in the north has resulted in the D seam no longer meeting criteria for inclusion into the Inferred category. Further drilling will need to be completed to potentially reinstate these seams to Inferred status. In the April 2012 Resource Estimate, the D seams were reported as 11.2 Mt of Inferred category Resources.

Figure 3 below shows the JORC Resource area and cored holes that were included as points of observation for the Main seam Resource Estimate.

The average air dried (“**adb**”) moisture of the coal seams included in the JORC Resource Estimate (Xenith, 2013) is approximately 17%. Consequently, a standardised moisture of 17% has been used to adjust the ash, volatile matter, fixed carbon and calorific value percentages (adb) results. The total “insitu” or “bed” moisture has been standardised for all seams at 32% for the Resource Estimate purpose. The insitu density of the coal seams has been adjusted using the Preston Sanders calculation (PRD).

The following raw coal qualities have been modelled:

- RD - Raw Coal Relative Density (g/cc).
- TM - Raw Coal Total Moisture (% , as received).
- IM - Raw Coal Moisture (17% standard moisture).
- ASH - Raw Coal Ash (17% standard moisture).
- VM - Raw Coal Volatile Matter (17% standard moisture).
- FC - Raw Coal Fixed Carbon (17% standard moisture).

- TS - Raw Coal Total Sulphur (17% standard moisture).
- CV - Raw Coal Gross Calorific Value (kcal/kg, 17% standard moisture).

The Main seam remains the dominant target seam for the project with an average total thickness of 3.80m across the JORC Resource area, and low raw ash averaging 10.6% adb. Core samples have also been taken from the upper and lower seams in the sequence. The upper seams range in thickness from 0.30m to 2.70m but do have higher raw ash content, averaging 18.0% adb. The lower seams are thinner but have a reasonable raw ash content averaging 12.1% adb.

All other coal quality parameters are within expectations with the Main seam exhibiting highly accepted ash fusion properties and trace element characteristics.

**For further information please contact:**

Richard Rossiter (Chairman) or Theo Renard (FD) on +61 2 8249 4542 or visit the Company's website at <http://www.realmresources.com.au/>

**About Realm**

Realm's strategy is to create shareholder value through exploration and development of bulk commodity projects, primarily in coal. In addition, the Company has platinum group metals, advanced exploration projects and an aluminium dross treatment plant in South Africa.

*Competent Persons Statement – Katingan Ria Project*

*The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves at the "Katingan Ria" Project is based on information compiled by Mr Troy Turner, who is a Member of the Australian 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 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Turner consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.*



### Table 1 - Coal Resources Summary

[illegible]



Figure 3 - JORC Resource Polygon – Main Seam

