

**Aspire Mining Limited**

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Web: [www.aspiremininglimited.com](http://www.aspiremininglimited.com)Email: [info@aspiremininglimited.com](mailto:info@aspiremininglimited.com)**ASX RELEASE****For Immediate Release – 18 June, 2018****Coke Tests Return High Quality Results**

- **Coke Oven Testwork completed on a bulk indicative sample of Nuurstei Coking Coal has returned outstanding results from pilot coke oven testing at ALS Laboratories at their Wacol Queensland facilities.**
- **A CSR (hot coke strength) result of 78 clearly puts it in the category of prime hard coking coals. CRI was 14.6.**
- **The coke tests confirm the presence of premium hard coking coal at Nuurstei which once washed will be very competitive on a quality basis with the best available coking coals on the market.**

Mongolian metallurgical coal explorer and infrastructure company, Aspire Mining Limited (ASX: AKM, the **Company** or **Aspire**), is pleased to announce that on 15 June 2018 it received the results of pilot scale carbonisation testwork on a washed bulk sample of 300 kgs of coal indicative of the coal expected to be produced from the Nuurstei Coking Coal Project. The sample was taken from a shallow open pit adjacent to the Nuurstei Mining License, the coal being the up dip surface expression of the Nuurstei deposit.

The bulk sample specification used and based on a 1.50 float sink cut off provided the following specification. This was compared to a compilation of Nuurstei washed coking coal quality results released on 13 April 2016.

	Indicative Washed Bulk Sample	Indicative Washed Coal 2015 Drilling Core Composites
Ash (air dried)	8.3%	9.2%
Volatile Matter (air dried)	22.6%	26%
Total Sulphur (air dried)	0.55%	0.7%
Phosphorus (air dried)	0.05%	0.09%
Free Swelling Index	9.0	8.5
Caking Index ("G")	87	98
Gieseler Fluidity (ddm)	325	3755
Max Dilatation	110%	190%
Sapozhnikov Index – X mm	8	16
Sapozhnikov Index – Y mm	20	29
Vitrinite	89%	90%
Ro Max %	1.33	1.35

## Fluidity

The coal sample had an initial softening temperature of 435 deg C with a plastic range of 75 deg C. Max fluidity was 325 ddpm. The sample may have lost some fluidity due to the long transit time between Mongolia and Australia.

## Petrography

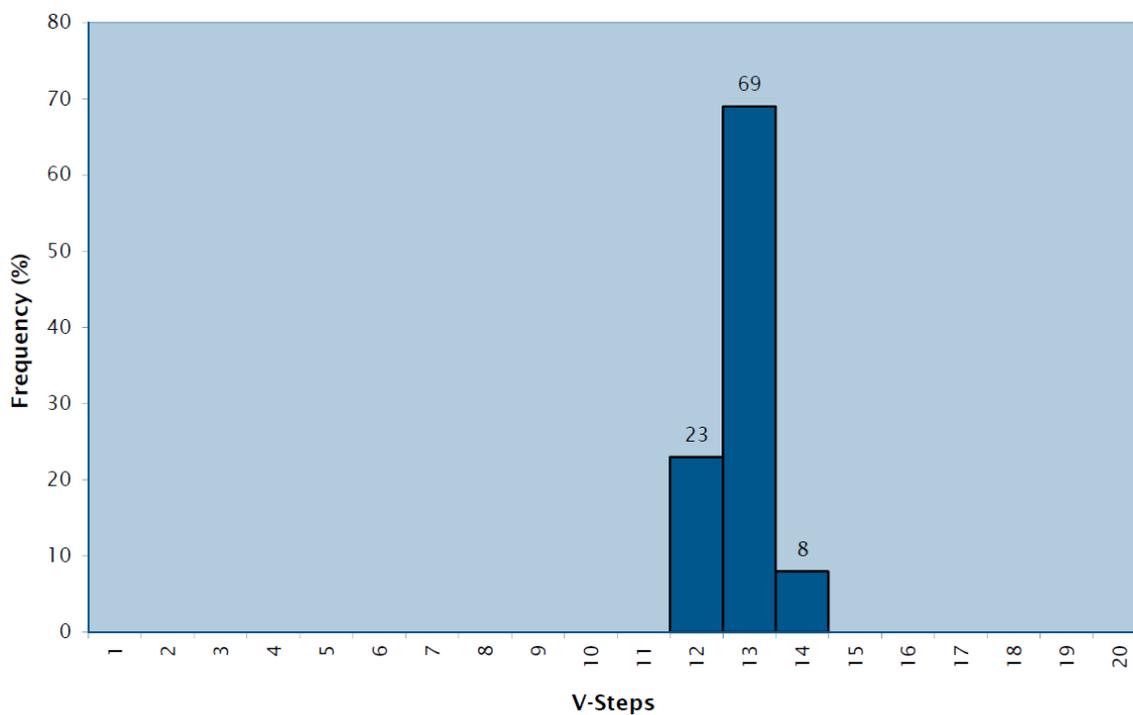
The vitrinite distribution was tightly spread between V12 and V14. The RoMax reading was 1.33.

The sample contained:

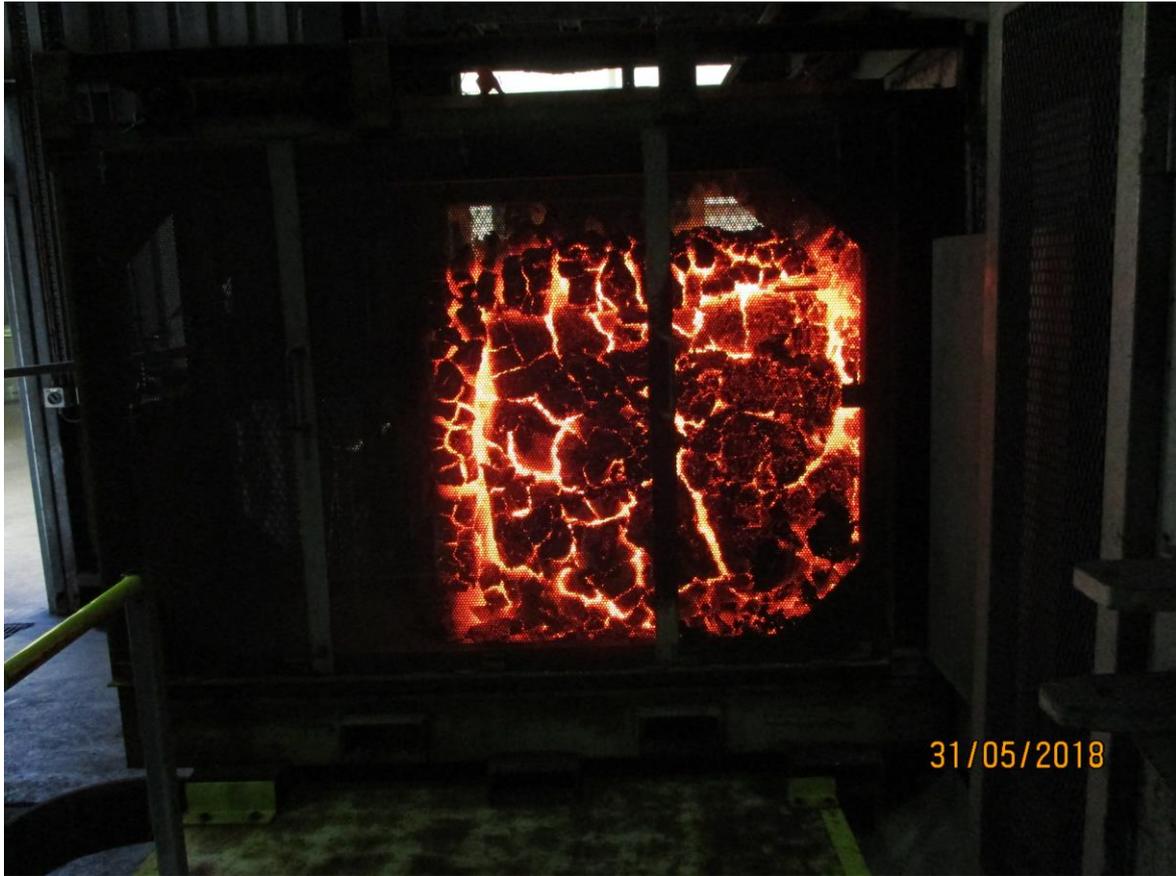
89% Vitrinite

8% Inerts

3% Mineral matter



This bulk sample produced large blocky coke from the pilot oven.



Mean stabilized coke size was 54.7mm and coke yield was 80%.

Subsequent coke testing gave outstanding results.

CSR (Coke Strength Reactivity) is a standard test of coke value in use. The higher the number the harder the coke and the greater the iron ore charge that it can support in a blast furnace. The results of this test returned a CSR of 78. (This test was repeated to confirm this very high result). Prime Hard Coking Coals are normally specified at 68 – 72 CSR.

The CRI (Coke Reactivity Index) is a test of the coke reactivity (indicates potential to break down in a reducing atmosphere). The lower the number the better. The CRI in this test was just 14.6. This is a very low index and is consistent with the very high CSR result.

Aspire's Executive Chairman Mr David Paull said that "these coke results demonstrate that coal from Nuurstei will be potentially sought after by Japanese and Korean steel producers as well as from Chinese steel mills where higher quality inputs into the steel industry are being sought. It also demonstrates that Mongolia can supply premium coking coals to the world's steel industry."

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### **About Aspire Mining Limited**

Aspire Mining Limited is listed on the ASX (ASX: AKM) and is the largest coal tenement holder in Mongolia's Northern provinces and is focused on identifying, exploring and developing quality coking coal assets.

Aspire is the 100% owner of the world class Ovoot Coking Coal Project (Ovoot Project) which is the second largest coking coal project by reserves in Mongolia. The Ovoot Project development is dependent on the construction of the Erdenet to Ovoot Railway being progressed by Aspire's subsidiary, Northern Railways LLC (Northern Railways). Production from the Ovoot Project can coincide with the commissioning of the Erdenet to Ovoot Railway.

Aspire has a 90% interest in Nuurstei Coking Coal Project (Nuurstei Project) located in northern Mongolia.

The proximity of the Nuurstei Project to existing infrastructure (town, road, rail and services) provides an excellent opportunity to assess the economics of a road-based operation prior to the construction of the Erdenet to Ovoot Railway.

Depending on the further analysis of the results of an intended 2018 drilling program, future positive economic studies, funding and the grant of necessary approvals and licenses, the Nuurstei Project could commence a road based production operation and then later have access to the new Erdenet to Ovoot Railway two years from commencement of the rail construction.

### **About Northern Railways LLC**

Northern Railways LLC (Northern Railways) is a Mongolian registered rail infrastructure Company, and mandated to pursue the development of the Erdenet to Ovoot Railway, is supported by a consortium consisting of Aspire Mining, and subsidiaries of Fortune 500 listed China Railway Construction Corporation Limited – China Railway 20 Bureau Group Corporation and China Railway First Survey & Design Institute Group Co Ltd.

The Erdenet to Ovoot Railway extends 547km between the town of Erdenet to Aspire's Ovoot Project, which connects northern Mongolia to China and international markets. In accordance with Mongolian

National Rail Policy, the Erdenet to Ovoot Railway is a multi-user rail line and will be available for the transport of bulk materials, agricultural and general freight from the region to export markets including China, Russia and seaborne markets.

The Erdenet to Ovoot Railway will play an important part in the establishment of the Northern Rail Corridor through Mongolia, the subject of a trilateral program agreed by the Presidents of China, Russia and Mongolia. The Northern Rail Corridor through Mongolia is primarily aimed at improving trade by reducing regulation, improving capacity at borders and improving road and rail infrastructure to meet this increased demand for transport services. The Northern Rail Corridor through Mongolia links closely with Chinese policies to establish a New Silk Road to improve Euro-Asian trade, and Russia's policy of establishing a Euro-Asian economic zone.

In August 2015, Northern Railways was granted an exclusive 30 years concession by the Mongolian Government to build and operate the Erdenet to Ovoot Railway. Northern Railways is now progressing funding negotiations for the completion of the concession conditions precedent, other studies to support applications for licenses, permits and approvals, the EPC contract and railway construction.

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