

# Research



# Aspire Mining SPECULATIVE BUY

Current Price: \$0.44 Valuation: \$0.96

 Ticker:
 AKM

 Sector:
 Materials

 Shares on Issue\* (m):
 787.7

 Market Cap (\$m):
 346.6

 Net Cash (\$m):
 25.0

 Enterprise Value (\$m):
 321.6

 \* Fully diluted, ex top-up rights

52 wk High/Low: \$1.14 \$0.07 12m Av Daily Vol (m): 2.07

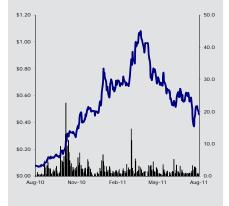
#### Directors

David McSweeney Chairman
David Paull Executive Director
Neil Lithgow Non-Executive Director
Andrew Edwards Non-Executive Director
Mark Read Non-Executive Director
Gan-Ochir Zunduisuren Non-Executive Director
Tony Pearson Non-Executive Director

#### Substantial Shareholders\*:

SouthGobi Resources	19.8%
Spectral Investments (Neil Lithgow)	10.8%
Badamdamdin Battuvshin	9.4%
Noble Group	8.6%
Khadbaasan Bat Erdene	7.5%
GZ Capital LLC (Gan-Ochir Zunduisuren)	7.1%
* Undiluted	

#### Share Price Graph



Analysts: Tim Serjeant Troy Irvin

### 19 August 2011

### Site visit

#### **Site Visit:**

Argonaut recently visited Aspire Mining's (AKM) Ovoot Coking Coal Project and Jilchigbulag coal projects in Mongolia's north west.

AKM has defined a JORC Resource of  $\sim 331 \text{Mt}$  at Ovoot, which is amenable to open pit mining and covers  $\sim 10\%$  of the  $509 \text{km}^2$  project. Coal quality test work (to date) has exceeded expectations. Washing analysis indicates a theoretical yield of 80%, to produce an 8% ash product and a CSN of 8 – 9, rating Ovoot as a mid-volatile coking coal.

Currently AKM is in the final stages of completing the 'Stage 1' Scoping Study, which envisages a small ( $\sim$ 5Mt) 'starter pit', trucking unwashed coal via road to the Erdenet rail facilities (560km) at a rate of 0.5-1.0Mtpa starting in December Q 2012.

A PFS for Stage 2 (~15Mtpa ROM) is underway and due for completion in December 2011. We envisage full scale production could commence from 2017 (contingent on future rail developments).

### Impact: Positive

We have put some 'high level' project assumptions around Stage 2, including capital and operating cost estimates, as well as comparing Ovoot to both Mongolian and Australian peers. The key takeaway is the near unrivalled leverage AKM offers to metallurgical coal prices.

View: Positive

The risks are significant; AKM is likely to require ~570km of rail (connecting Ovoot to Erdenet) to be built, as well as access to both the Trans Mongolian and Trans Siberian rail networks to reach seaborne markets (~>4,000km haul).

But as is the prize; a potential ~12Mtpa, quality hard coking coal deposit in proximity to Asian export markets, positioning AKM as a globally meaningful producer.

Despite its early stage status, it has already attracted corporate attention from more established Mongolian players (SouthGobi and Noble Group). Critically, AKM still retains 100% control of both the project and off-take, which we would expect to be a key bargaining chip in obtaining project funding.

### Recommendation:

Spec Buy

Argonaut rates AKM a Speculative Buy. Valuation - \$0.96.

#### Important Disclosures

Argonaut acts as corporate advisor to AKM and receives fees commensurate with these services. Argonaut acted as advisor to and arranger of the placement to SouthGobi Resources in December 2010 and received fees commensurate with the service provided. Argonaut owns/and or controls 1m AKM shares and 4,650,000 options exercisable at \$0.15 on or before 31 December 2012.



### Mongolian coal - From zero to hero

#### Backdrop

An emerging coal province...

Mongolia is an emerging coal province, with proven Reserves >10Bt, and Resources of ~162Bt. Historically, Mongolia's geographic location and investment climate has not been conducive to development. But this is evolving following significant changes to foreign investment and mining legislation over the last decade.

...with substantial production growth...

Coal production is growing rapidly:

- 22.5Mt was produced in 2010 (74% exported), up from 13.2Mt in 2009
- China coking coal imports 2011 YTD 41% from Mongolia (up from 32% in 2010, 12% in 2009)

...and >\$1.5b raised on the HKSE in 2010

The market has become cognisant of this, with >\$1.5b raised via corporate offerings on the HKSE in 2010:

- SouthGobi Energy Resources (majority owned by Ivanhoe Mines) raised ~\$460m in January 2011 to aid production expansion at its Ovoot Tolgoi deposit
- Mongolian Mining Corp (MMC) is the nation's largest privately owned hard coking coal producer, sold ~20% of the Company for ~ \$650m
- Winsway Coking Coal, the largest off taker of Mongolian coal, completed a ~\$470m IPO

Further, a landmark Investment Agreement (IA) between Ivanhoe, Rio Tinto and the Mongolian Government for the Oyu Tolgoi Copper-Gold deposit (at the time, the largest undeveloped project of its type globally) as well the Erdenes Tavan Tolgoi development (~6.4Bt coal) has heightened market and corporate interest around Mongolia.

### A captive market

Although traditionally captive to regional Chinese markets in the South...

Mongolian coal has been captive to regional Chinese markets in the South given a lack of infrastructure, inefficiencies and quality:

- Product sold to date has been typically lower value-in-use (unwashed)
- Inefficient Border crossing open for ~10 hours per day, waiting times, different rail gauges (Chinese rail is narrow v Russian wider gauge)
- Discount prices Vary from US\$160/t for MMC's washed coking coal to ~\$40/t SouthGobi's high sulphur, high ash thermal product

...the Government aims to access Russian rail network and ports...

The Mongolian Government wants to reduce reliance/dependence on China and access Russian rail network and ports of Vostochny and Vanino (~3,800km away from the border).

A 3-stage plan to build  $\sim\!6,000$ km of rail over the next decade, although no timeframe has been provided (This equates to a \$12-18b build, assuming \$2-\$3m/km).

...following significant planned investment in infrastructure

Stage 1 will be co-ordinated around development of Erdenes Tavan Tolgoi, with 1,100km of rail linking the deposit to the Trans Mongolian Railway and ultimately to the Trans Siberian rail network and Russian ports of Vostochny and Vanino.



#### Where does AKM fit in?

#### Overview

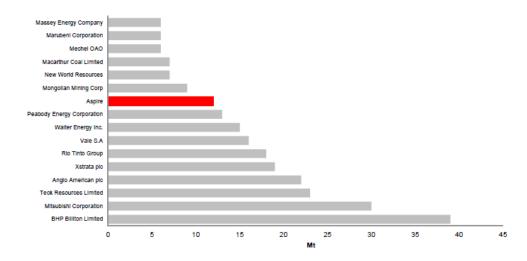
Although AKM's Ovoot lies in Mongolia's undeveloped northwest...

Aspire Mining (AKM) is largely distal to the hive of activity in the south of the country – its 100% owned Ovoot project lies in Mongolia's undeveloped north-west.

However, the prize on offer is significant - a potential  $\sim 12 Mtpa$ , quality hard coking coal deposit in proximity to Asian export markets, positioning AKM as a globally meaningful producer.

...the prize is significant...

Figure 1: Met Coal Producer Landscape in 2016



Source: AME, AKM

Maiden JORC Resource of ~331Mt covers ~10% of the 509km² tenement area...

A maiden JORC Resource of  $\sim 331 \text{Mt}$  was defined in October 2010, where drilling to date covers  $\sim 10\%$  of the  $509 \text{km}^2$  tenement area. Washing yield analysis indicates a theoretical yield of 80%, to produce a 8% ash product and a CSN of 8 – 9, which would rate Ovoot as a mid-volatile coking coal.

...test work suggests a midvolatile coking coal

Table 1: Coal Quality - Benchmarking Ovoot

Coal quality					
Measure	Unit	AKM	Bowen Basin	Benga (Riversdale)	Premium HCC
Ash	%	0.8	7-10.5	10.5	<8.5
CSN (Swell Index)	-	8-9	6-9	9.0	6-9
Inherent Moisture	%	0.6	1.0	-	-
Volatile Matter	%	26.7	20-25	23.1	< 25
Rank	Ro max	1.2	1.15-1.35	1.4	-
Sulphur	%	1.0	.3555	0.8	0.5

Source: Argonaut, Company Reports

Already attracted corporate attention...

Despite its early stage status, AKM has already attracted corporate attention from more established Mongolian players:

- SouthGobi (19.8%) SouthGobi acquired a strategic holding in AKM through the issue
  of 105.7m shares at \$0.19 per share and the right to maintain its proportionate
  shareholding (for a period of two years) if it is diluted under a future placement or new
  issue (Top-up rights)
- Noble Group (8.6%) Noble purchased its stake on-market, commencing in October 2010 immediately following SouthGobi's investment in AKM. Noble are already active in Mongolia's north, through their Strategic Alliance with Xanadu Mines (XAM)

...from more established Mongolian players

Critically, AKM retains 100% control of both the project and potential off-take.



#### Status

Currently completing a 0.5-1.0Mtpa 'Stage 1' Scoping Study... AKM is in the final stages of completing the 'Stage 1' Scoping Study.

Stage 1 envisages a small ( $\sim$ 5Mt) 'starter pit', which will see unwashed coal trucked via road to the Erdenet rail facilities (560km) at a rate of 0.5-1.0Mtpa.

Initial export will rely on the completion of a sealed road linking Moron to Erdenet (under construction) as well as an upgrade to the existing unsealed road linking Moron to Ovoot (~180km) which AKM will need to upgrade.

...with first production from December Q 2012

Mining is slated to commence in March 2012 with first production from the December Q 2012. Total capex for Stage 1 is  $\sim$  \$55m.

Stage 1 is in essence a 'Proof of Concept' exercise, whereby AKM can;

- Establish greater product knowledge both internally and in the market place (potential customers) and;
- Identify optimal route(s) to seaborne markets, demonstrating commerical quantites can be shipped to Asian markets and manage cross-border logistics

Stage 2 production (potential ~12Mtpa) is contingent on future rail developments

Stage 2 production (potential  $\sim$ 12Mtpa) is contingent on future rail developments (we expand on this later in the report).

A PFS for Stage 2 is underway and is due for completion in December 2011, before commencement of a BFS in early 2012.

Table 2: Conceptual timeline

	20	11		20	12			201	3			20	14			20	15			201	6
Stage 2 Project Development Timeline	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3 (	24	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2 (	Q3 Q4
Scoping Study																					
Pre-Feasibility Study																					
Feasibility Study																					
Rail Development																					
Wash plant train development																					

Source: AKM (unless stated otherwise)



### Risks/Challenges

#### Solving the Logistics Puzzle

AKM requires ~570km of rail to connect Ovoot to Erdenet...

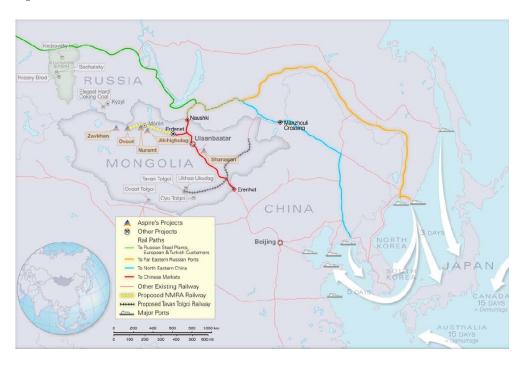
As with any emerging, undeveloped bulk mineral province, the establishment of infrastructure presents a key challenge.

AKM requires ~570km of rail infrastructure to be built, connecting Ovoot to Erdenet, from which four potential rail corridor routes have been identified:

- 1. East along the Trans Siberian Railway to Far East Russian Ports.
- 2. West along Trans Siberian Railway to Russian steel plants and European and Turkish customers (MMC have completed a trial shipment from UHG to Thyseen Krupp in Eastern Europe)
- 3. East along the Trans Siberian Railway and then south into North Eastern China via Manzhouli.
- 4. South along the Trans Mongolian Railway to Erenhot and Chinese markets.

## ...with the most attractive route...

Figure 2: Routes to Seaborne Markets



...requiring ~4,800km of rail haulage

Route 1 is the most attractive to AKM at this point in time, however it requires  $\sim$ 4,800km rail haulage:

- ~570km of rail capacity (to be funded/built) linking Ovoot to the rail siding at Erdenet (yellow line)
- Access to the Trans Mongolian Railway ('Mongolian Rail'), a ~420km journey east and north to the border-crossing at Naushki (in red)
- A further ~3,800km haul along the Trans Siberian Railway ('Russian Rail') to Russian ports of Vostochny and Vanino (orange)

AKM has established a Mongolian SPV to house its rail interests

With regards to rail construction, AKM has established a Mongolian Special Purpose Vehicle (SPV) to house its rail interests and formed the Northern Mongolian Rail Alliance (NMRA) investigating the social and economic benefits that a rail link between Moron and Erdenet could provide. The development of regional assets such as Burenhaan Phosphate and Huren Chuluut Iron Ore will further justify the infrastructure investment.



As far as rail haulage goes, prima facie, a ~4,800km trip would appear uneconomic.

#### Modest Russian rail tariffs...

However, Russian rail tariffs are believed to range from as little as 0.7c/tkm to 1.25c/tkm, which would equate to \$27–48/t haulage (we breakdown our cost assumptions in more detail later) – which is economic assuming you are exporting a high value-in-use product (like Ovoot).

#### ...coupled with high value-inuse product assists the economics

The other issue then is capacity - AKM has commenced discussions with Russian Rail (RZD) regarding allocations for both Stage 1 and 2.

It was confirmed that there is capacity for Ovoot heading north along the Trans Mongolian Railway and that, subject to adequate port capacity being secured, rail capacity would also be available on the Trans Siberian Railway (Reportedly, RZD will spend RUB50b (~\$1.5b) on the Trans Siberian Railway by 2015).

# Port capacity is largely an unknown quantity

Port capacity (and accessibility to third parties) is largely an unknown quantity at this point. Far East Russian ports handled  $\sim 32 Mt$  of coal in 2010. Supposedly, current capacity at Vostochny is  $\sim 15 Mtpa$  and Vanino  $\sim 12 Mtpa$ .

#### Other risks/challenges

Aside from generic risks (e.g coal prices, funding), we document some of the stock-specific risks for AKM and Mongolia generally, including;

# Risks for AKM and Mongolia generally, include people...

### <u>People</u>

- With Mongolia already undergoing a dramatic growth phase and given the scale of projects such as Oyu Tolgoi (~\$4b) and Erdenes Tavan Tolgoi, access and availibility to people is a key risk
- Mongolia is the most sparsely populated independent country in the world, with a population of ~2.9m
- Historical cultural tensions with its Chinese and Russian neighbours could also play a factor with regards to importing labour.
- Underemployment in Mongolia's north potentially lessens that burden for AKM

# ...and an evolving licensing / approvals process

#### **Evolving licensing/approvals process**

- The most recent Fraser Institute Survey of Mining Companies scores Mongolia 54th (up from 67th) in the Policy Potential Index, ahead of China (62nd), Argentina (60th) and South Africa (67th), but behind the likes of Brazil (49th) and Mali (29th)
- In 2006, the Minerals Law was amended to provide for State participation in the exploitation of any mineral deposit of 'Strategic Importance'
- 'Strategic Importance' (loosely defined as potential to generate >5% GDP in a given year) allows State ownership of ~34% (51% for uranium projects historically) under a deferred payment structure/no upfront equity commitment. There are currently 15 deposits on this list
- Ovoot is not on this list however, if AKM was to reach ~12Mtpa saleable coking coal, it would be amongst the largest producers in Mongolia. Given potential infrastructure spend in the country's undeveloped north, Ovoot could arguably be perceived as being 'strategic'
- The IA reached between Ivanhoe/Rio Tinto and the Mongolian Government provides a recent framework (2010) dealing with these issues (Oyu Tolgoi receives tax concessions, carry-forward loss provisions and greater depreciation allowances)



#### What could AKM be worth?

### Key project assumptions

# Based on 'high level' assumptions...

We have attempted to put some 'high level' assumptions around what Ovoot could be worth (based on current parameters) and drawing largely on MMC's UHG deposit as an analog. Given the preliminary nature of the project, we have been deliberately conservative.

We would expect before any significant capital expenditure, AKM would need an Investment Agreement in place (as with Oyu Tolgoi), specifying potential concessions with regards to taxes, royalties etc. We have not made any assumptions in this regards, again for conservatism.

Table 3: Key project assumptions

Key assumptions		
Ovoot - Stage 2		
Mining Inventory	Mt	265
Strip Ratio	:	7
Material Movement	Mtpa	120
ROM production	Mtpa	15
Yield	%	80%
Production	Mtpa	12
Cash Costs*	\$/t	125
Capex	\$m	1,501
Mine Life	yrs	18
Starting	yr	2017
IRR	%	25%
Pricing		
Coking Coal Price Received	\$/t	200
Fiscal		
Tax Rate	%	25%
Royalty **	%	7.5%
Discount Rate	%	15%

<sup>\*</sup> Uninflated, pre royalties

Source: Argonaut

### DCF Valuation

...Argonaut values AKM at \$0.96 per share

We derive a valuation for AKM of 0.96 per share (undilted) on this basis, presented in Table 4 below.

Table 4: Summary Valuation

Summary Valuation		
Aspire Mining	\$m	\$ps
Ovoot	744	0.94
Exploration	17	0.02
Investments	0	0.00
Unpaid Capital	13	0.02
Corporate	-27	-0.03
Cash (June 30)	12	0.02
Debt	0	0.00
Total @ 15% Discount Rate	759	0.96

Source: Argonaut

<sup>\*\*</sup> Based on current Mongolian pricing benchmark for washed coal



# AKM provides near unrivalled leverage to coking coal prices

AKM provides near unrivalled leverage to coking coal prices. For instance:

- A 10% increase in our price received assumptions (ie US\$220/t v US\$200/t), would lift our valuation by \$2.69 per share (180% uplift)
- Similarly, a 10% cost reduction (i.e relating specifically to rail tariff charges) increases the valuation to \$2.02 per share (104% uplift)

The valuation is not overly sensitive to capex - a 10% increase in capital estimates (assumptions detailed below) below reduces our valuation by only 12%

#### Capex

# Argonaut estimates project capital costs of ~\$1.5b...

We estimate project capital costs of  $\sim$ \$1.5b, split roughly  $1/3^{rd}$  mine development and the rest for rail infrastructure and includes Stage 1 capex of  $\sim$ \$55m.

We have used compared MMC's UHG deposit as an analog for Ovoot given their comparable size (both 15Mtpa ROM).

Power (assumed 18MW) and Water costs mimic those of UHG. We have assumed washing plant capacity of 7.5Mt at a capital cost of 25/t - f or comparison, MMC is building 15Mtpa wash capacity (3 modules) at a cost of 22.50/t.

For rail capex estimates, we have assumed;

- 180km link from site to Moron is built for exclusive use by AKM at a cost of \$3m/km
- AKM pays its proportionate share (Ovoot would contribute ~50% of volume) for the 390km link from Moron to Erdenet rail line (at a cost of \$3m/km)

We would envisage a Build-Own-Operate-Transfer (BOOT) style model, which would presumably be privately funded.

Note, no capital estimate has been ascribed to port infrastructure at this stage.

Table 5: Capital Cost estimates

# ...split roughly 1/3rd mine development and the rest for rail infrastructure

Capex		
Mine:		
Site infrastructure	\$m	150
Wash Plant	\$m	170
Coal fired power plant	\$m	50
Water	\$m	60
Logistics:		
Ovoot - Moron Rail	\$m	486
Moron - Erdenet Rail (assume 50% of volume)	\$m	585
TOTAL	\$m	1,501

Source: Argonaut

#### Opex

# The bulk of Argonaut's ~\$94/t operating cost estimate...

The bulk of our operating cost estimate ( $\sim$ \$94/t) relates to rail and port transport charges. We have assumed:

- Tariff charge of 3c/tkm on volumes transported from Moron to the Naushki (~820km) on 'Mongolian Rail' infrastructure
- Tariff charge of 1.5c/tkm on volumes transported from Naushki to Russian port of Vostochny (~3,800km) along 'Russian Rail' infrastructure (Trans Siberian Railway)

# ...relates to rail and port transport charges

Port loading/handling charges of \$12/t



# Argonaut estimates total operating costs of \$125/t...

Table 6: Operating Cost estimates

Opex		
Breakdown		
Mining	\$/t	24
Processing/Washing	\$/t	5
Rail Haulage - Mongolia Rail	\$/t	25
Rail Haulage - Trans Mongolian to Volschny (Russian Rail)	\$/t	57
Admin	\$/t	2
Port	\$/t	12
SUM - pre royalties		125

Source: Argonaut

...plus an assumed royalty rate of 7.5% based on a LT price assumption of US\$200/t

Royalty rates start at 5%. There is an additional loading of up to 3% on processed coal (washed), above \$210/t. Based on our LT price assumption of US\$200/t; we assume a royalty rate of 7.5%.

#### Peer Comparison

We have benchmarked AKM against its most applicable Mongolian peer – Mongolian Mining Corp (MMC), as well as comparing Ovoot to MMC's recent acquisition of private company QGX Holdings and its Baruun Naran Coking Coal deposit. We also provide a 'pro forma' snapshot of the combined groups ('MMC + QGX').

# AKM compares favourably with its Mongolian counterparts...

Table 7: Mongolian Peer Comps

Company		Aspire	Mongolian Mining Corp	QGX Coal	MMC + QGX
Code		AKM	975	-	-
Ownership		100%	100%	100%	100%
Deposit		Ovoot	UHG	Baruun Naran	UHG & BN
% Coking Coal		100%	60%	60%	60%
EV	\$m	318	3,479	464	3,943
Status		Exploration	Producing	Feasibility	Producing
roduction target (ROM)	Mtpa	15.0	15.0	10.0	25.0
ield	%	80%	67%	62%	65%
Saleable - attrib	Mtpa	12.0	10.0	6.2	16.2
Capex*	\$m	1,501	1,227	744	1,971
Reserve	Mt	n/a	286	n/a	286
Resource	Mt	331	581	264	845
Saleable Coking Coal t *	Mt	200	152	118	270
V / Reserve t	\$/t	-	1.1	-	1.1
V / Resource t	\$/t	1.0	6.0	1.8	4.7
EV / Saleable t	\$/t	1.6	22.9	3.9	14.6
FF EV^ / Saleable t	\$/t	9.1	31.0	10.2	21.9

...across a range of metrics

AKM compares favourably with its Mongolian counterparts across the range of metrics.

Ovoot offers a number of advantages including...

Whilst both UHG (in production) and Baruun Naran (feasibility) are relatively more advanced and operational and infrastructure synergies between the two exist (30km apart), Ovoot does have a number of advantages:

- Yield 80% v 67% for UHG and 62% for Baruun Naran
- Proportion of Coking Coal AKM testwork has indicated no thermal fraction to the coal while ~40% of coal from UHG and Baruun Naran is thermal

...elevated yield, a high proportion of coking coal and scalable output

 Scale – As a product of the previous two points, Ovoot (12Mtpa) will potentially supply double the Coking Coal volumes of UHG (6Mtpa)

<sup>\*</sup> Company Reports, Argonaut estimates

<sup>\*\*</sup>AKM estimates

 $<sup>^{\</sup>wedge}$  FF EV = EV + Capex to be spent



AKM is inexpensive on EV/Saleable t basis...

On an EV/Saleable t basis, which takes into account mining parameters (e.g. At Ovoot, ~75% of the Resource is contained above 250m vertical depth, coal is shallow dipping), AKM is trading on less than half of the implied value (1.6x) of Baruun Naran (3.9x). Even after accounting for forecast capital expenditure (FF EV), AKM is still comparatively cheaper.

It is worth noting, that MMC are paying a minimum \$464m (up to max of \$950m, based on Reserve adjustments) for QGX. If we were to use the higher end of the valuation range it would only inflate the multiples further.

The other feature to consider is coal quality. Table 8 (below) compares Ovoot (based on results the washing results from the 2010 drilling program) against typical 'specs' from UHG and Baruun Naran.

Table 8: Coal Quality Comparison

Coal quality				
Measure	Unit	Ovoot	UHG	Baruun Naran
Ash	%	8.0	<10	11
CSN (Swell Index)	-	8-9	8	7.5
Inherent Moisture	%	0.6	-	-
Volatile Matter	%	26.7	22.0	31.0
Rank	Ro max	1.2	-	-
Sulphur	%	1.0	0.6	0.6

Source: Argonaut, Company Reports

#### Australian Coal Transaction Multiples

priced ...and is favourably selected compared to Australian coal transactions

We have also looked at previous Australian coal transaction transaction metrics to provide a futher valuation 'yardstick'. Bulk commodities (iron ore, coal etc) are strategic in nature and therefore, we are of the view that the price corporates/end users are willing to pay is more reflective of underlying value.

Table 9: Australian coal transaction comps

Selected Cont	trolled Transaction Multiples						
Date	Target	Acquirer	% Acq	Stage	Coal Type	EV/Resoure	
Aug-11	Macarthur Coal	Peabody Energy	100	Producing	SS LV PCI T	1.85	
Feb-11	Northern Energy	New Hope	100	Development	HC TC	0.46	
Dec-10	Griffin Coal	Lanco	100	Producing	TC	0.68	
Dec-10	Riversdale	RIO	100	Development	HC TC	0.32	
Nov-10	Caledon Resources	Guangdong Rising Assets Mgmt	100	Producing	CC TC	0.58	
Aug-10	Aston R	esources IPO	n/a	Development	SS LV PCI T	2.21	
Aug-10	MDL 162	Macarthur Coal	90	Pre-Development	C T PCI	1.68	
Jul-10	Centennial Coal	Banpu	100	Producing	TC	1.14	
Apr-10	Macarthur Coal	Peabody Energy	100	Producing	SS LV PCI T	2.35	
Apr-10	Macarthur Coal	New Hope	100	Producing	SS LV PCI T	2.28	
Apr-10	Gloucester Coal	Noble	100	Producing	PCI TC	4.90	
Jan-10	Gloucester Coal	Macarthur Coal	100	Producing	PCI TC	3.20	
Nov-09	Maules Creek Project	Aston Resources	100	Pre-Development	SSCC TC	1.21	
Aug-09	Felix Resources	Yanzhou	100	Producing	PCI SS TC	2.53	
Nov-08	Peabody's Baralaba Project	Cockatoo Coal	100	Pre-Development	PCI TC	5.37	
Aug-08	Linc Energy Teresa Licences	Xinwen Mining	100	Exploration	PCI TC	3.00	
Jul-08	NHC's New Saraji Project	BMA	100	Pre-Development	CC	3.55	
May-08	Macarthur	Arcelor Mittal	19.9	Producing	SS LV PCI T	3.80	
Dec-07	Custom Mining	Macarthur Coal	100	Development	CC PCI	3.93	
Dec-07	Foxleigh	Anglo	70	Producing	PCI	3.55	
Dec-07	Resource Pacific	Xstrata	100	Producing	TC	4.48	
Oct-07	Austral Coal	Xstrata	100	Producing	HC	2.41	
Jul-07	Pike	River IPO	n/a	Development	HC	3.57	
Average						2.57	
Average (ex High - Low)							
Median						2.41	

The typical EV/Resource t multiple for selected Australian coal transactions over recent

years (at project and corporate level) has been in the range of \$2.00 - \$3.00/t. The average is \$2.57/t. AKM is trading on an EV/Resource multiple of 1.0x currently.

Source: Argonaut, Bloomberg, IRESS, RIV, NHC-NEC Independent Expert Report



### **Appendix A: Site Visit**

### Getting there

Argonaut visited AKM's Ovoot project...

Argonaut visited Aspire Mining's (AKM) Ovoot Coking Coal Project (100%) and Jilchigbulag coal projects in July 2011.

Ovoot comprises  $509 \, \text{km}^2$  tenure, located in Khuvsgul Province in North-West Mongolia. Access to site is currently a 4-5 hour drive along ~160km unsealed gravel road from the town of Moron (which is a ~90 minute flight from the capital, Ulaanbataar).

...located in Khuvsgul Province in North-West Mongolia

Figure 3: Project Location

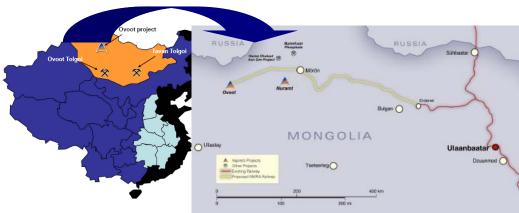


Figure 4: Ovoot Camp Site



Source: Argonaut

### Current 331Mt Resource

Ovoot has a Maiden JORC Resource of ~331Mt...

AKM acquired the project in February 2010 (consideration of \$8.6m plus options). By October 2010, >8,300m of drilling defined a maiden JORC Resource of  $\sim$ 331Mt (confirmed by independent consultant CSA Global).

...with ~80% in the Measured and Indicated categories

Approximately 80% of the Resource is in the Measured and Indicated Category, with  $\sim\!75\%$  of the Resource contained above 250m vertical depth with 93% located in two seams.



Table 10: Ovoot – Maiden JORC Resource, October 2010

JORC Resource			
Catergory	Above 250m	Below 250m	Mt
Measured	70.4	22.9	93.3
Indicated	135	47.4	182.4
Inferred	41.9	13.1	55.0
TOTAL	247.3	83.4	330.7

Source: Argonaut

Coal mineralisation typically sits below 40-50m of allivium/sand/clay cover Ovoot lies on the western edge of a larger Lower Jurassic aged sedimentary basin. Coal mineralisation typically sits below 40-50m of allivium/sand/clay cover, hosted within a syncline structure dipping  $\sim\!6^\circ$  to the East.

The mineralised envelope is  $4.5 \, \text{km} \times 2.8 \, \text{km}$ , with a central 'thick' part of the orebody  $\sim 1 \, \text{km} \times 4 \, \text{km}$ . Seam thickness average  $\sim 13 \, \text{m}$ , and exceed  $45 \, \text{m}$  in some parts (Upper Seam).

Figure 5: Core



Source: Argonaut

### Coal Quality

Raw coal quality data indicates that Ovoot is high fluidity, midhigh volatile coking coal

Raw coal quality data has confirmed the consistency of the coal across the deposit and indicates that Ovoot is high fluidity, mid-high volatile coking coal.

Washing yield analysis on  $\sim$ 350 samples has reconfirmed the theoretical yield of 80% to produce a 8% ash product and a CSN of 8 - 9. The low ash results suggest not all of the raw coal will require washing to produce a quality, blended product.



#### Local infrastructure

### Power

# Power currently sourced from Russia

 Power is currently sourced from Russia (a 110kva power line runs adjacent to camp and workshop area)

# Local 60MW coal fired power station under construction

- A 60MW coal fired power station is under construction, ~70km from Ovoot. AKM has entered into a non-binding MoU with the owners to supply coal to the facility
- For Stage 2, we have assumed AKM would look to build its own coal-fired power station

#### Water

# Aquaterra developing a water acquisition strategy

- A challenge in Mongolia generally
- AKM has appointed Aquaterra to develop a water acquisition strategy for Ovoot. Water monitoring bores have established and flow rates are being meaured
- Plans are in place to establish a permanent water bore to support the camp and exploration activities

#### Road

# Sealed road construction / upgrades underway

- A sealed road is under contruction linking Erdenet to Moron (390km), to be completed in 2013.
- AKM will need to upgrade the existing unsealed road from Moron to Ovoot for the Stage 1 development, which forms the majority of the proposed ~\$55m capex



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#### Important Disclosure

Argonaut acts as corporate advisor to AKM and receives fees commensurate with these services. Argonaut acted as advisor to and arranger of the placement to SouthGobi Resources in December 2010 and received fees commensurate with the service provided. Argonaut owns/and or controls 1m AKM shares and 4,650,000 options exercisable at \$0.15 on or before 31 December 2012.

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