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ASX RELEASE

For Immediate Release – 11 November 2019

Ovoot Early Development Plan (OEDP) Extended Case Update to Pre-Feasibility Study (PFS) Mine Plan and Costs

Highlights:

The updated OEDP PFS Extended Case delivers improved financial outcomes:

- **Recent mining contractor quoted rates have reduced mine gate costs per tonne by 19% from US$32.80\t down to US$26.40\t over the life of mine.**
- **Lower mining costs and deferred capitalised waste removal delivers a 34% reduction in the required up-front capital investment from US$47 million down to US$31 million.**
- **Logistics costs based on current contractor quotes essentially re-confirm cost estimates provided in the PFS.**
- **C1 cash costs fall from US$83\t to US$76\t for coal delivered to the China border.**
- **The combination of the above amendments increases the OEDP's pre-tax NPV_{10} to US$878 million, a rise of US$120 million with all other assumptions remaining constant. The pre-tax internal rate of return increases to 49.4%.[1]**
- **Aspire shareholders to vote on A$33.5 million share placement to the Company's largest shareholder, Mr Tserenpuntsag, in Perth on 29 November 2019. Independent expert BDO has concluded that the placement "not fair but reasonable" to shareholders and the Non-Aligned Directors[2] continue to unanimously recommend that shareholders support the Placement to Mr. Tserenpunstag in the absence of a superior proposal.**

[1] Unless otherwise stated, all financial numbers in this announcement are in US$ and are not subject to inflation or escalation factors. NPV and cashflow numbers quoted exclude contingencies. Mining and process engineering designs for the OEDP PFS were developed to support capital and operating estimates to an accuracy of +\- 25% and +\- 15% respectively. Key assumptions that the PFS is based are outlined in in the body of this announcement. Aspire has concluded it has a reasonable basis for providing the forward-looking statements in this announcement.

[2] Aspire Directors other than those nominated by Mr. Tserenpuntsag

Leading pure-play metallurgical coal project developer, Aspire Mining Limited (ASX: AKM, the **Company** or **Aspire**), is pleased to provide mine plan and cost updates for the Ovoot Early Development Plan (**OEDP**) Extended Case and an updated and re-stated OEDP Pre-Feasibility Study (**PFS**).

The OEDP PFS was undertaken by the Company and its lead PFS consultant, FMS LLC (**FMS**) and reported in the 28 February 2019 and 1 March 2019 announcements. The OEDP PFS included a Base Case and an Extended Case with a longer mine life.

The PFS Update to the PFS Extended Case has been undertaken by the Company and reflects recently received mining contractor cost quotes, a review of logistic cost estimates and a revised mine schedule. As announced on 28 February 2019 and 1 March 2019, the OEDP Extended Case involves mining a relatively low ash, low strip ratio and high yielding *"fat"* coking coal from a starter pit that sits within the existing 255Mt Ovoot JORC ore reserve (**Ovoot Project Reserves**[3]). The OEDP Extended Case open pit utilises a 53.8Mt JORC ore reserve (**OEDP Reserve**[4]) carve out from the Ovoot Project Reserves and supports a 12.5 year mine life.

Up to 4 million tonnes per annum (**Mtpa**) of coking coal is to be delivered via a 560km special purpose haul road to be constructed to connect to a rail head at Erdenet. The coal will then be delivered on the Mongolian rail network that has confirmed the 4Mtpa available capacity for the OEDP coal through to the Mongolian/China border crossing of Erlian to Chinese end customers.

As previously announced, advancement of the OEDP remains subject to receipt of the necessary approvals to complete the Definitive Feasibility Study (**DFS**) and proceed to construction and mining. The DFS continues to be delayed due to continuing delays in receiving these necessary approvals from the local community level to complete infill and other technical drilling required to complete the DFS. Notwithstanding these ongoing delays, the Company is progressing with other components of the DFS including updating mining costs, the mine schedule and logistics costs.

Summary of Key OEDP PFS Extended Case Updates, Revised Outcomes and Assumptions

1. Updated Mine Plan

As reported in the June 2019 Quarterly Report, Aspire has optimised a rescheduled start-up mine plan whereby initial waste removal is deferred until years 2 and 3 of mining operations. Total mined volumes of waste and coal remain the same.

Mining for the OEDP is assumed to be conducted by a contractor using traditional truck and shovel methods.

An initial starter open pit will be targeted for the first three years of coal production with successive cutbacks continuing to the west, expanding the pits. Benches of 16m have been assumed. It will take approximately 8 months and 14m Bcm of waste removal before secured access to coal is established. See Figure 1 for planned annual volumes.

The mine plan requires consistent annual waste stripping after the initial pre-strip to top of coal is established. The thick seams and their relatively flat nature give rise to modest and relatively stable annual strip ratios.

[3] See the Aspire December 2013 Quarterly Report released to ASX on 31 January 2014. Aspire confirms that it is not aware of any new information or data that materially affects the information included in that announcement and that, in the case of the ore reserve estimate, all material assumptions and technical parameters underpinning the estimates in the announcement of 31 January 2014 continue to apply and have not materially changed.

[4] The OEDP Reserves are the ore reserves shown in Table 6 of this announcement.

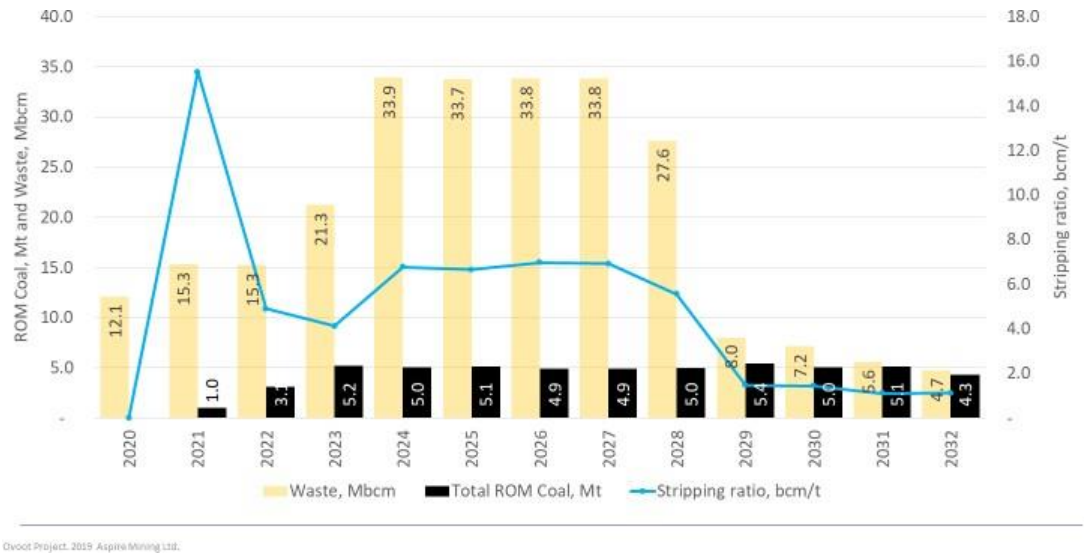

Figure 1: Annual Mine Schedule.

2. Updated Operating Costs

Mine operating cost estimates for the OEDP PFS were based on assumed contractor mining rates prepared by FMS. The Company has recently provided the updated mine schedule to local mining contractors and received firm mining cost quotes. The financial model has been updated with these quotes.

Other CHPP operating costs were provided by GT Global.

General administration costs are calculated by FMS.

All other mining cost assumptions used in the OEDP PFS have been maintained including yield assumptions and pricing. The Company is not aware of any new information that materially affects these other PFS inputs and assumptions.

The Company has used consultants to reassess current logistics cost estimates to a degree of accuracy of +\- 10%. These new estimates have essentially reconfirmed transport costs from the Ovoot mine to the Mongolia\China border at Erlian. The marketing assumption that 100% of the production will be sold into China through the Erlian border has been maintained.

	Average Annual	PFS Extended Case	Updated PFS Extended Case
Physicals			
Waste Mined (M Bcm)	19.7	253.6	253.6
Strip Ratio (Bcm/t coal) (incl. pre-strip)		4.7	4.7
Coal Mined (Mt)	4.6	53.8	53.8
Average Yield (10% moisture)		86%	85%
Coal sold (net of 2% loss) (Mt)	4.0	45.2	44.7
Life of Mine		12.5 years	12.5 years
Operating Costs (US$)			
Mining $/t		33	26
Trucking $/t		32	32
Rail + Border Charges- $/t		18	18
C1 Cash Costs $/t		83	76
Total Cash Costs $/t		102	97

Table 1: Physical and operating cost assumptions.

3. Updated Mine Pre-Strip Estimates

The updated mining schedule when combined with the current mining contractor cost quotes, results in a deferral of waste removal tonnes and a significant reduction in the capitalised waste removal cost before commercial sustainable production can commence. The capitalised waste removal has reduced from US$47 million to US$31 million, a reduction of US$16 million.

The mine capital expenditure is made up of:

Item (US$)	PFS Extended Case	Updated PFS Extended Case
CHPP Plant	37	37
Onsite infrastructure	10	10
Offsite terminals and blending facility	16	16
Mine Processing and Infrastructure	**63**	**63**
Waste Pre-stripping	47	31
Total Mine Capital	**110**	**94**

Table 2: Summary Mine Capital

4. Erdenet to Ovoot Haul Road

In order to deliver the planned coking coal volumes to the rail terminal at Erdenet, a special purpose road is to be built between Ovoot and Erdenet.

A scoping study was completed using Mongolian road consulting engineers, RCRS LLC, that reviewed a number of alternative routes including following the planned Northern Railways path. The favoured option is a special purpose 560km public road that links several soum centres in Khuvsgul with the town of Mörön, the Capital of Khuvsgul.

ICT Sain\MIL was appointed to complete a DFS for this chosen road path. They have progressed along with the Company's Community Engagement Department to engage with local communities along the path. Local community approval for an approved alignment for this road is necessary before this DFS for the road can be completed.

The road will be sealed to suppress dust and will cater for truck and trailer combinations of 115t gross vehicle mass and net coal capacity of 85t.

The scoping level engineering study cost of road construction before contingencies is made up as follows:

	US$m
Road	130
Bridges and culverts	35
Total	**165**

Table 3: Haul Road Capital Costs

Note: The above capital costs are estimated to an accuracy of +/- 25%

While Ovoot will be the major user of the road, there will be other commercial users who will be charged a toll. No benefit has been assumed in the OEDP PFS financial model from the charging of future tolls to third party users of the Erdenet to Ovoot road.

Road capital expenditure estimates of US$165 million remains subject to the final alignment approval and the completion of a definitive engineering study.

5. Coal Handling and Preparation Plant

GT Global, China's largest builder of washplants, provided the review of washability data, washplant design, capital and operating cost forecasts.

GT Global's conclusions are that the raw coal produces a high clean coal yield with low yields to middlings and refuse. The washability characterisation of the raw coal is in the easy to wash or intermediate level given different separation densities.

The final design includes a heavy media cyclone that was chosen due to its lower water consumption and lower power consumption and processing complexity. Flotation process is required to maximise fines recovery. The Updated OEDP updated consumable cost estimates which have been incorporated in the overall lower mining cost per tonne of marketable coal.

6. Power Options Study: Solar and Grid

FMS has provided a Power Options Study which has recommended a cost-effective solution that includes a combination of solar, diesel and connection to a local power grid.

The maximum power draw for the OEDP has been modelled at 5MW. The power solution will encompass a solar photovoltaics power plant connected to the central grid and aid by diesel generator set. The power supply can be covered by a third-party over an 18-year contract for an average cost of US$0.19/kWhr to cover solar PV, diesel genset, grid operating costs and all capital and connection costs.

The combination of solar PV, diesel backup and grid power can supply a 24hr wash plant operation as well as administration and the camp operations. Operating costs, capital costs and the carbon footprint using this combination are substantially less against equivalent solutions using only diesel generators.

7. Mine Infrastructure

Mine infrastructure cost of US$9.8m has been estimated by FMS in the OEDP PFS. This amount covers internal mine site roads, fencing and security, administration building and maintenance workshops.

The camp will be provided under a BOOT (build, own, operate and transfer) agreement with a suitable contractor and will cater for the 420 employees, contractors and visitors without any capex costs for the company. The BOOT agreement is to include an ability to buy the balance of the contract out at any time.

8. Transport and Logistics

The coking coal will be washed at site to reduce ash levels down to an average of 10%. The coal will be trucked along a purpose-built sealed haul road of 560km to the rail head at Erdenet. The Company has an option to acquire land area adjacent to the existing line for conversion into a rail terminal. Construction of 4km of rail spurs will need to be completed for the loading area. From Erdenet, coal will be railed south to the Chinese border at Erlian and then be trucked to Jining in Inner Mongolia for distribution to end customers in Hebei and surrounding provinces.

Estimated operating costs per tonne per kilometre are based on current long haul contract cartage rates for coal in Mongolia. Given the design of the road and supporting culverts and bridges the gross vehicle mass of each truck unit can be 115t with 85t coal payloads which may allow for lower than forecast trucking transport costs.

Rail costs are based on UBTZ scheduled rates including wagon hire. At full capacity and depending on the wagon turnaround times at the Erlian border, there will be a requirement for 900 to 1,000 coal wagons. The Company will coordinate with UBTZ and other wagon leasing and manufacturing companies to ensure that the OEDP has access to sufficient wagons.

The Company will also establish a blending yard at Jining to blend with other Mongolian and Inner Mongolian coals to optimise product specifications and pricing.

UBTZ, the manager of the Mongolian railway network, has re-confirmed the availability of 4.0Mtpa of rail capacity from Erdenet.

The OEDP PFS Update has reconfirmed Transport and Logistics cost estimates used in the OEDP PFS.

9. Financial Impact of Updated Mine Plan and Costings

			PFS Extended Case	Updated PFS Extended Case
Financial Assumptions				
Coking Coal Price (net received price to Erlian border)			150	150
Exchange Rates:	MNT:USD Rmb:USD		2600 6.8	2600 6.8
Royalties:	Mongolian		6.5%	6.5%
Marketing and China Border Cost US$\t			8.6	10.0
EBITDA			$2.2bn	$2.4bn
Capital Investment				
Mine:	Establishment Maintenance		$110m $1mpa	$94m $1mpa
Road:	Establishment Maintenance		$165m $2mpa	$165m $2mpa
Pre-tax net present value (10%)			$758m	$878m
Internal Rate of Return (Pre-tax)			44.5%	49.4%
Payback (commencing first full year of production)			24 months	26 months

Table 4: OEDP Financial Outcomes

The above financials assume a fixed US$150\t coking coal sale price at the China\Mongolian border. Coking coal prices have reduced over the last three months with seaborne pricing for hard coking coal falling to US$ 141\t CFR Jintang Port China (Metal Bulletin 1 November 2019). Domestic coking coal spot pricing based on SX Coal data is approximately US$160 – US$170\t net of VAT on a delivered basis which equates to US$130 – US$140\t at the China\Mongolia border.

10. Sensitivity analysis

The net price received is the most sensitive assumption in the achievement of the assessed returns. The before tax NPV_{10} and IRR sensitivities based on a range of prices demonstrate the robustness of the OEDP Extended Case as set out in the table below:

Price	US$160\t	US$150\t Assumed for OEDP PFS	US$140\t	US$130\t
Pre Tax NPV10	US$1,066m	US$878m	US$672m	US$466m
Pre Tax IRR	56.8%	49.4%	41.0%	32.2%

Table 5: OEDP Financial Outcomes across a range of prices

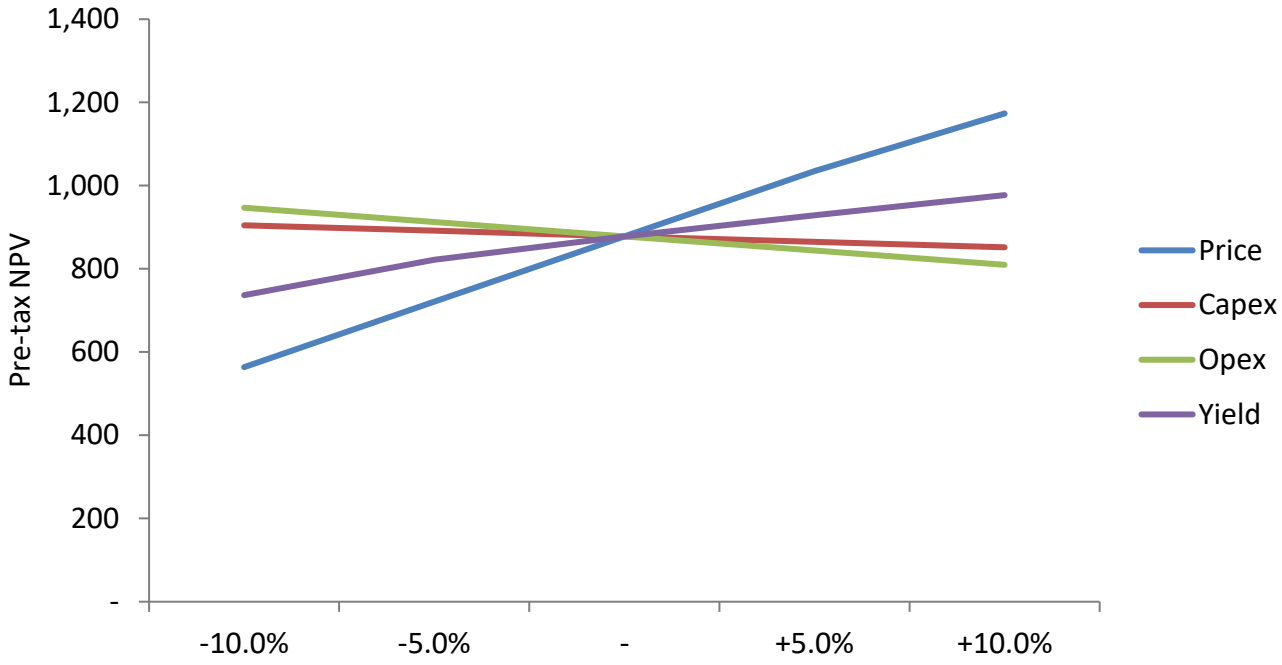

Figure 2: Key OEDP Updated Extended Case Pre-tax NPV Sensitivities

Sensitivity	-10.0%	-5.0%	-	+5.0%	+10.0%
Price	564	721	878	1,035	1,174
Capex	905	892	878	865	852
Opex	947	913	878	844	810
Yield	737	822	878	929	977

Table 6: Pre-tax OEDP Updated Extended Case NPV_{10} Sensitivities (US$m)

While it is encouraging to see higher financial returns given lower forecast mining costs, further mine development is still subject to gaining local community support and execution of a Community Development Agreement.

11. JORC Resources & Reserves

The Updated OEDP PFS is based on the OEDP PFS Reserve prepared by independent consultant FMS LLC ("FMS") and reported in the announcement of the OEDP PFS on 28 February 2019. FMS converted the existing Ovoot Resource Model to Surpac and assumed 5% dilution in the re-blocking exercise for Whittle re-optimisations. FMS then conducted an optimisation based on trucking product to the rail at Erdenet (as opposed to the assumption and economics of a rail connection from Ovoot to Erdenet) and restricting maximum production to 4Mtpa being the current available rail capacity from Erdenet to markets. The pit selection to produce a steady 4Mtpa of saleable coal provides an initial 9.2 year mine life for the OEDP and a 12.5 year mine life for an Extended Case. The Updated OEDP PFS has had not changed the OEDP Reserves.

The OEDP Reserves for the OEDP have been confirmed as:

Category	Coal Reserve (adb) ROM Mt	Coal Reserve Total Moisture 2.0% arb ROM Mt	ROM Coal adb Ash Content %	ROM Coal adb CSN%
Probable Ore Reserve Ore Open Pit OEDP	36.8	37.6	17.2	7.9
Probable Ore Reserve Open Pit OEDP Plus OEDP Extension	53.8	54.9	18.0	8.5

Category	Marketable Coal Reserve Total Moisture 10% arb Mt	Product Specification adb Ash Content %	Product Specification adb CSN%
Probable Product Reserve Ore Open Pit OEDP	32.2	10.5	8.5
Probable Product Reserve Open Pit OEDP Plus OEDP Extension	46.2	10.5	8.5

Table 7: OEDP Reserve

Competent Persons Statement – Ovoot Early Development Project

The OEDP Reserves in this release are stated in accordance to the JORC Code, 2012. They are based on information compiled and reviewed by Mr Julien Lawrence who is a Member of the Australasian Institute of Mining and Metallurgy (Member 209746) and is a full-time employee of FMS LLC. He has more than 20 years' experience in the evaluation of coal deposits and the estimation of coal resources. Mr Lawrence has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration to qualify him as a Competent Person as defined in the JORC Code, 2012. Mr Lawrence has no material interest or entitlement, direct or indirect, in the securities of Aspire Mining Limited or any companies associated with Aspire Mining Limited. Fees for work undertaken are on a time and materials basis. Mr Lawrence consents to the inclusion of the OEDP Reserves based on his information in the form and context in which it appears.

For further information on the OEDP Reserve, refer to JORC Code, 2012 – Table 1 Section 4 annexed to this announcement. The production targets and financial information included in the PFS and this announcement are underpinned by the OEDP Reserve.

12. Marketing

The OEDP produces a mid volatile, medium ash and sulphur fat coking coal with the following attributes.

Moisture	Ash (adb)	Volatiles (adb)	Sulphur %	G Index	Y Index	Ro Max
9%	10.5%	25%	1.2%	95	26	1.2

Table 8: OEDP Coking Coal Product Properties

On 16 January 2019, the Company reported on a study prepared by Fenwei Energy Information Services Ltd to support the price assumptions regarding the OEDP Product in the Chinese market.

Figure 3: Location Map of Ovoot and Nuurstei Coking Coal Projects & Chinese Steel Mills

Fenwei noted in its report that the market in China for *"fat"* coking coal is approximately 75Mt and that with forecast declining domestic production, a deficit of between 16Mt and 22Mt was observable over the medium term. Ovoot's OEDP coking coal will be feeding into this segment of the market.

Fenwei estimated delivered prices for OEDP coking coal into these markets would achieve prices of between US$191\t to US$180\t using an existing branded coal as a benchmark on a delivered to customer gate basis. By adding back Chinese trucking costs, an equivalent price at the Mongolian\Chinese border at Erlian can be established. This calculated net back forecast price at Erlian is between US$156/t down to US$145/t.

A sensitivity analysis in relation to the impact on the study of a range of prices follows below with actual price realisation being the most sensitive input.

The prices achieved by Aspire for its OEDP product is expected to reflect seaborne FOB coking coal prices for similar quality imported coals plus seaborne transport costs, port retrieval charges and costs to move the coal off the receival port to customers. These costs can add US$20–US$25\t to FOB pricing depending on the end customer location.

13. Community Benefits

The Company has completed detailed modelling of the community benefits of the OEDP based on the OEDP Extended Case and a fixed US$150\t price. While the OEDP workforce will grow to 450, adding additional indirect employment opportunities for the OEDP Project to generate over 1200 new jobs with a total investment of US$275 million. Taxes and fees payable by the project over its first 10 years of operations are expected to be over US$850 million with US$33 million going directly to the local community.

Aspire's Executive Chairman David Paull commented: "*The updates to the OEDP PFS demonstrate the value Aspire intends to deliver for all shareholders from Ovoot's first-stage development. Ovoot remains a world-class coking coal project and Aspire is committed to working with all levels of Mongolia's government and the community to achieve the necessary approvals for us to finalise the OEDP DFS. Having a Mongolian partner to help Aspire achieve our ambition of delivering substantial value for all shareholders is paramount and we are delighted with the ongoing support from our largest shareholder, Mr Tserenpuntsag. This is why Aspire's Non-Aligned Directors have unanimously recommended that Shareholders vote in favour of the $33.5 million Share Placement to Mr Tserenpuntsag at our AGM in Perth on 29 November".*

ENDS

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Forward-Looking Statements and Cautionary Statements

This announcement contains certain statements which may constitute “forward-looking statements”. Such statements are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance achievements to differ materially from those expressed, implied or projected in any forward-looking statements.

Aspire has concluded it has a reasonable basis for providing the forward-looking statements in this announcement.

Unless otherwise stated, all financial numbers in this announcement are in US$ and are not subject to inflation or escalation factors. NPV and cashflow numbers quoted exclude contingencies. Mining and process engineering designs for the OEDP PFS were developed to support capital and operating estimates to an accuracy of +\- 25% and +\- 15% respectively. Key assumptions that the PFS is based are outlined in the body of this announcement.

Ovoot Project Resource and Reserve Estimates

The Ovoot Project Reserve reported below is estimated by independent third parties and are reported in accordance with the JORC 2012 Code (see ASX announcement dated 31 January 2014 – December 2013 Quarterly Report).

Ovoot Project Coal Mineral Resources

Seam	Resource Category	Total (Mt)	Ash(adb) (%)	Raw **CSN**
Main Area				
UPPER	Measured	77.4	19.0	6.9
LOWER	Measured	102.1	26.5	6.2
OVB	Measured	17.5	35.1	6.4
		197.0		
UPPER	Indicated	9.8	19.0	7.4
LOWER	Indicated	28.1	30.7	6.0
OVB	Indicated	9.0	31.1	6.7
		46.9		
UPPER	Inferred	1.1	20.4	7.4
LOWER	Inferred	3.0	32.0	6.0
Coal Above BOW (Thermal)	Inferred	5.1	28.7	-
		9.2		
Total Main Area		**253.1**		
NE UG Area				
UPPER	Indicated	18.2	26.9	8.0
LOWER	Indicated	7.2	23.2	8.0
		25.4		
UPPER	Inferred	1.1	34.7	7.5
LOWER	Inferred	1.5	23.4	8.0
		2.6		
Total NE UG Area		**27.9**		
GRAND TOTAL		**281.0**		

Ovoot Project Coal Ore Reserves

	Reserve Category	Coal Reserve (arb, 2% moisture) ROM Mt	Marketable Coal Reserve (adb, 9.5% Moisture) Mt	Product Specification Abd Ash Content %	Product Specification Abd CSN%
Open Pit	Probable	247	182	10	7.5
Underground	Probable	8	6	10	8.0
Total		255	188	10	7.5

Competent Persons Statement – Ovoot Project

In accordance with the Australian Securities Exchange requirements, the technical information contained in this announcement in relation to the JORC Code (2012) Compliant Coal Reserves and JORC Compliant Coal Resource for the Ovoot Coking Coal Project in Mongolia has been reviewed by Mr Ian De Klerk and Mr Kevin John Irving of Xstract Mining Consultants Pty Ltd.

The Coal Resources at Ovoot Project documented in this release are stated in accordance to the JORC Code, 2012. They are based on information compiled and reviewed by Mr. Ian de Klerk who is a Member of the Australasian Institute of Mining and Metallurgy (Member #301019) and is a full time employee of Xstract Mining Consultants Pty Ltd. He has more than 20 years' experience in the evaluation of coal deposits and the estimation of coal resources. Mr. de Klerk has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration to qualify him as a Competent Person as defined in the JORC Code, 2012. Neither Mr. de Klerk nor Xstract have any material interest or entitlement, direct or indirect, in the securities of Aspire Mining Limited or any companies associated with Aspire Mining Limited. Fees for work undertaken are on a time and materials basis. Mr. de Klerk consents to the inclusion of the Coal Resources based on his information in the form and context in which it appears.

The Coal Reserves at Ovoot Project documented in this release are stated in accordance with the guidelines set out in the JORC Code, 2012. They are based on information compiled and reviewed by Mr. Kevin Irving who is a Fellow of the Australasian Institute of Mining and Metallurgy (Member #223116) and is a full time employee of Xstract Mining Consultants Pty Ltd. He has more than 35 years' experience in the mining of coal deposits and the estimation of Coal Reserves and the assessment of Modifying Factors. Mr. Irving has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration to qualify him as a Competent Person as defined in the JORC Code, 2012. Neither Mr. Irving nor Xstract have any material interest or entitlement, direct or indirect, in the securities of Aspire Mining Limited or any companies associated with Aspire Mining Limited. Fees for work undertaken are on a time and materials basis. Mr. Irving consents to the inclusion of the Coal Reserves based on his information in the form and context in which it appears.

The Company is not aware of any new information or data that materially affects the Ovoot Project Coal Reserves and Resources as announced on 31 January 2014 in the December 2013 Quarterly Report. All material assumptions and technical parameters underpinning the estimates in the 2013 Quarterly Report continue to apply and have not materially changed. In forming this view, the Company notes that:

- there has been no drilling conducted on site since 2013, such that is no new geological information or data that could impact upon the previously reported Ovoot Project Reserves.
- technical assumptions regarding dilution, yields and moisture have not changed.
- the Ovoot Project Reserves are based on an initial trucking operation which then utilises the Erdenet to Ovoot Railway to connect to the existing rail head at Erdenet.
- the OEDP is essentially starting in the same location as the Ovoot Project starter operation described in the "Development and Funding Plan For Ovoot" dated 13 August 2013. While the OEDP envisages

steady state production of 4Mtpa (rather than 5Mtpa) the average costs FOR China were estimated to be US$83\t to US$93\t versus the OEDP which is estimated to be US$89\t (both excluding royalties). Mine site capital costs are expected to be similar (excluding road construction and rail construction costs).

- the Ovoot Project assumes a 50\50 split between China and Russian Far East exports. At this stage there has been no change to this decision. However, the OEDP is assumed to be 100% into China.
- the average medium term price for coking coal used in the Ovoot Project PFS is within the range of recent coking coal prices CFR China.

OEDP Reserves

JORC Resources & Reserves

Refer to Table 7 within this announcement and JORC Code, 2012 – Table 1 Section 4 annexed to this announcement. The production targets and financial information included in the PFS and this announcement are underpinned by the OEDP Reserve.

About Aspire Mining Limited

Leading pure-play metallurgical coal project developer, Aspire Mining Limited (ASX: AKM), is the 100% owner of the world-class Ovoot Coking Coal Project.

Aspire is targeting early production of washed coking coal from a first-stage development of the Ovoot Project, known as the Ovoot Early Development Plan (OEDP). The OEDP is focused on a truck and rail operation to deliver up to 4Mtpa to end markets. Operational expansion can occur following the construction of the Erdenet-to-Ovoot Railway, which is being progressed by Aspire's subsidiary, Northern Railways LLC.

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

About Northern Railways LLC

Northern Railways LLC is a Mongolian-registered rail infrastructure company, mandated to pursue the development of the Erdenet-to-Ovoot Railway, and supported by a consortium comprising Aspire Mining, China Gezhouba Group (CGGC) 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 be a multi-user rail line and available for the transport of bulk materials, agricultural and general freight from the region to export markets including China, Russia and seaborne markets.

In August 2015, Northern Railways was granted an exclusive 30-year concession by the Mongolian Government to build and operate the Erdenet-to-Ovoot Railway. CGGC has completed a Bankable Feasibility Study for the Erdenet-to-Ovoot Railway. A capacity guarantee from the operators of the Mongolian railway network is required by CGGC to progress further funding.

JORC Code, 2012 Edition – Table 1

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	• All drillholes that intersected coal seams were geophysically logged (hole conditions permitting) and the resulting LAS files used for seam correlation and core loss evaluation purposes in the resource estimate. In some instances, it was necessary to run the sondes down the drill stem resulting in a somewhat attenuated, but still useful, response. • Coal sample interval details were validated by Xstract to ensure that no sampling gaps exist within seam/ply intervals selected for modelling. In a few cases where gaps of less than 0.1 m were identified, suitable default raw coal quality values were inserted into the raw coal quality database. These were based on the logged lithology of the sampling gap, by using raw coal quality results obtained for a similar lithology from the same seam/ply in nearby drillholes. • Xstract reviewed sampling practices and treatment of samples while onsite and found them to be satisfactory; however no formal written sampling standards and procedures were supplied.
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	• The geological model is based on 180 partially cored drillholes completed during the 2010, 2011 and 2012 drilling campaigns. Most of the coring used a HQ (63 mm core diameter) core barrel, however 43 drillholes were cored specifically for coal quality using a PQ (83 mm core diameter) core barrel. In addition, six angled geotechnical holes were drilled to investigate ground conditions for slope stability work in the proposed pit. • Australia Independent Diamond Drilling, Landrill and Major Drilling Group International carried out the drilling using a large range of drill rigs including the following: ○ Schramm

		○ UDR 650 ○ Coretech 1000, 1800 and 3000 ○ EDM • All exploration holes (excluding geotech holes) were drilled vertically, some being pre-collared using reverse circulation ("RC") methods to approximately the base of the weathered zone followed by conventional double tube diamond coring for the remainder of the hole.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• Core recovery statistics over the width of the modelled seam interval were evaluated in order to ensure that only those intersections with sufficient core recovery are used as coal quality points of observation. After a sample bias study, a minimum acceptable core recovery limit of 85% was adopted and considered by Xstract to be sufficient to ensure representivity of coal quality.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged.	• Logging data includes lithology, collar, survey, coal quality, and geotechnical properties. • Logging practices were reviewed by Xstract during the 2011 site visit and were generally found to be of a high standard and adequate level of detail. • Six geotechnical drillholes have been completed. • Limited additional geotechnical data is logged within cored general exploration holes including structure type and strength.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• All drillholes that intersected coal seams were geophysically logged (hole conditions permitting). • Depth corrections for lithological and sample intervals were completed by Aspire Mining Limited (AKM), guided by the downhole geophysics. • Sampled seam intersections that failed the QA/QC validation measures applied by Xstract were removed from the raw coal quality database so that only representative composites, suitable for use in resource estimation, were generated in the raw coal composite table. Other QA/QC measures included: ○ Confirmation of appropriateness of seam picks against geophysical logs and lithological logging. ○ Insertion of default raw coal quality values based on the logged lithology of sampling gap less than 0.1 m. ○ Exclusion of sample intervals where the interval exceeded the composited seam intervals by >20%.

		○ Exclusion of samples with <85% core recovery. ○ Graphical examination of raw coal quality values to observe any anomalous values. ○ Statistical examination of ply composited coal quality parameters. ○ Spatial examination of seam/ply coal quality values to validate spatial consistency.
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• AKM supplied statements of analytical standards applied and SGS Mongolia Minerals Laboratory certification. • Industry standard analysis techniques for coal quality analysis were used, however laboratory Quality Assurance and Quality Control ("QA/QC") standards and procedures have not been provided. Statistical and spatial examination of raw coal quality values was completed to identify and address any anomalous coal quality values.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• Xstract verified all coal seam intervals against geophysical logs and lithological logging. • Xstract verified a representative selection of drill locations, drill core, and sampling of coal seam intersections during the site visit in 2011. • Statistical examination of ply composited coal quality parameters was completed. • Spatial examination of seam/ply coal quality values to validate spatial consistency was completed.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• The collar positions of drillholes were surveyed by differential GPS and those used in the model were compared to the topographic DTM. Collars with RL's differing by more than 1.5 m from the DTM RL were adjusted to the DTM RL. Five drillholes had collar RL's adjusted to the DTM RL. • The grid system used is WGS84 47N • Xstract found the quality and accuracy of topographic control and sample location to be suitable for Coal Resource estimation.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	• The initial drilling grid was based on a 750 m triangular pattern which was subsequently infill drilled to a spacing of approximately 300 m in higher interest areas. In some areas the drill spacing was further reduced to less than 150 m. Drill spacing is considered sufficient to

	• Whether sample compositing has been applied.	establish coal seam structure continuity and generally within or at the limits of coal quality continuity.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• Drillholes have been vertically drilled and as such are generally orientated at a high angle to the coal seams resulting in seam intersections very close to true thickness.
Sample security	• The measures taken to ensure sample security.	• The sample security procedure is: o Attach a tag to each sample during initial sampling o Established an integrated sampling spreadsheet and attached it to each sample, as well as kept that spreadsheet updated in our data base o Send samples to the laboratory with instructions regarding the appropriate analytical procedure o Fill out the sample submission form at the laboratory and deliver the samples together with the documents o Receive from the laboratory the analysis report complete with sample reconciliation advice. o Update the sampling spreadsheet.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• Sampling technique reviews and data reviews occurred during Xstract's site visit in 2011. Xstract considered the techniques and procedures to be appropriate for the study. Xstract provided advice on aspects of AKM's 2010 to 2012 drilling programs.

JORC Code, 2012 Edition – Table 1

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• Through its wholly owned Mongolian subsidiary, Khurgatai Khairkhan LLC ("Khurgatai"), AKM has a granted Mining License – MV 017098, covering 5,758 ha. This license extends over both the proposed surface and underground mine areas. MV017098 expires in 2042.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• No information regarding historical exploration within the licence areas was made available for Xstract's review.
Geology	• Deposit type, geological setting and style of mineralisation.	• The coal-bearing sediments of the Ovoot Basin are Jurassic in age and have been gently folded into an ENE – WSW trending syncline. • Seams generally dip approximately 6° toward the fold axis. • Compressional and extensional tectonic regimes have affected the Ovoot Basin. Both reverse and normal faulting is present with some displacements interpreted to be in excess of 100m, but generally in the range 10 to 40 m.

Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:
	  ○ easting and northing of the drill hole collar
	  ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
	  ○ dip and azimuth of the hole
	  ○ down hole length and interception depth
	  ○ hole length.
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.
		• Summary drillhole seam/ply intersection information including average seam thickness intersected, minimum and maximum thicknesses and corresponding Hole ID, as well as the standard deviation of the thickness for each seam intersect is provided in Appendix A. Appendix B summarises composited raw coal quality by seam/ply (air dried basis). Appendix C shows the location of exploration drillholes (2010 to 2012) in plan view. All drillholes have been vertically drilled.

Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Length and density weighted compositing by ply is undertaken during data preparation for Coal Resource estimation.
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	• Coal seams generally dip at 6° towards the fold axis. Drill spacing is in 750 m, 300 m or 150 m triangular pattern depending on the location. • In general, the drilling orientation is at a high angle to the coal seam structures resulting in sample lengths being close to true thickness and minimal sampling bias.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• Drillhole collar locations are shown in Appendix C. Fault locations are shown in Appendix D. The extent of coal seams are shown in contour plots (Appendix E and Appendix F). Maximum depth (m) of modelled coal resources is shown in Appendix G. More details are provided in the PFS report, dated November 2012.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• As individual exploration results are not being reported this section is not relevant to Ovoot Coal Resource reporting.
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• Additional exploration work completed by AKM consists of geological mapping and a nine-line resistivity survey. In March 2011, Logantek Mongolia LLC reported on twelve 2D seismic survey lines located around the proposed Stage 1 pit. Xstract has used the interpreted seismic profiles to aid with the structural interpretation during construction of the geological model.
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Further infill drilling within the current proposed mining areas is recommended to increase confidence in classification, continuity and quality.

JORC Code, 2012 Edition – Table 1

Section 3: Estimation and Reporting of Coal Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• Xstract examined all lithological logging data supplied in conjunction with the seam pick information and geophysical logs in order to confirm that seam picks were appropriate. • The geological modelling software (Minescape Stratmodel version 4.119) checks that sampled intervals correspond to seam intervals during compositing of model intervals and reports on any mismatches. Samples that extend outside of modelled intervals by more than 20% were excluded from the raw coal quality database, as they were not considered representative of the interval being sampled. • Prior to importing the raw coal samples into the sample quality database in Minescape, scatter plots, were examined in order to assess key quality relationships, and to identify any anomalies. • Postings and contours of seam/ply coal quality values were examined to ensure that the values were spatially consistent.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• A site visit was carried out by a representative, C. Williams, of the Xstract Competent Person, I de Klerk, in June 2011 to review and advise on aspects of the coal exploration including suitability of logging and sampling for estimating and reporting a Coal Resources in accordance with the Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition (JORC Code, 2012). Xstract was satisfied that the acquired exploration and coal quality data was suitable for resource estimation.
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	• Twelve 2D seismic lines were completed in March 2011. The seismic lines show numerous faults in the basement volcanics. Xstract has used the interpreted seismic profiles to aid with the structural interpretation during construction of the geological model. • Four reverse faults, which trend in a northwest-southeast direction and one major normal fault orientated in an east-west to east-north-east direction, were interpreted based on the drillhole data and the seismic profiles. • Validation and adjustment of coal seam/ply nomenclature and correlations, as well as fault interpretations, through iterative

		modelling runs and examination of resulting contour plans and cross sections was completed.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• A generalised stratigraphic column is presented in Appendix H of the PFS report dated November 2012. The upper sequence of coal seams (U01 to FP2) show the thickest development of good quality coking coal. The thickness of the upper sequence varies between 1.5m and 50m. • The top of the upper sequence ranges in depth from 40m to 340m below surface. • The depth of weathering affects the coal in the range 40m to 130m below the topographic surface, averaging 70 m. • A second lower sequence of seams, LOA, LOB, LOC, and LOD is present along the southern margin of the coal bearing sediments, stratigraphically below the upper sequence of seams. The extent of these lower seams is controlled by the basement palaeo-valley, which runs in an approximate east-northeast direction. Seismic geophysical surveys indicate that this basement valley is often fault bounded and with steep sides, against which these lower seams are truncated. The basement trough does not truncate the upper seams, which usually sub-crop against the weathering surface along the Southern and Northern margins of the local basin. In the North, the upper seam also thins appreciably and may pinch out before sub-cropping. • A third, and lowest coal sequence, known as OVB Seam, is locally developed in a restricted basement low. This thick sequence averages 47 m in thickness and has been intersected in four drillholes ranging in depth from 250 to 290 m. • Coal Resources available within the main OCCP area have been classified and summarised in Appendix I and Appendix J. Coal Resources within the proposed pit and underground areas have been tabled separately.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	• The following modelling parameters/schema settings were applied within MineScape Stratmodel software: Interpolators used: ○ Thickness: Planar (search radius 1,500 m) ○ Surface: FEM (search radius 1,500 m) ○ Trend: Planar (search radius 1,500 m) ○ Quality: Inverse Distance Squared (search radius 1,100 m) Minimum interval thickness modelled 0.1 m

	• The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation	Grid modelling smooth thickness "ON", smooth surface "OFF", Number of passes "= 1" Surfaces defined in the schema: ○ TUJU_Top of Jurassic (non-conformable, continuous) ○ BHWE_Base of Weathering (transgressive, continuous) ○ U07_FL U07 floor for trending of Upper Seam plies (contiguous, continuous) ○ TUBA Top of Basement (transgressive, pinch) • The structural model was validated by visual inspection of the floor and thickness contours, sub-crop limits and pinch outs of each seam in relation to the drillhole logged intervals, as well as numerous cross sections. The "verify model" function was also run in Minescape which compares values in the grid model with drillholes for a given expression. • The quality model was validated by visual inspection of contour plans of the gridded qualities, as well as comparing the mean and range of the gridded values against the original input composite qualities for each seam interval.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• No adjustment has been made to the analysed air-dried Relative Density ("RD") values to account for the in-situ moisture basis, as this effect is considered to be insignificant.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• No cut-off quality parameters were applied. • Minimum interval thickness modelled was 0.1 m
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• Mining of the Ovoot deposit is proposed to be primarily through open cut mining methods involving mechanised truck and shovel equipment. The geometry of the deposit makes it amenable to open cut mining methods employed in many similar coal mining operations around the world. • A minimum interval thickness of 0.1 m was applied
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• In some areas, mainly along the northwestern sub-crop of the upper coal sequence, seams occurring above the base of weathering have coal qualities suitable for use as either a domestic thermal coal product or as a blend with higher quality coking coal. "Coal Above BHWE" Inferred Resources have been reported for coal intersected above the base of weathering. This coal was not considered as part of the coking coal resource but could be considered as a suitable thermal coal raw product.

Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	• No environmental factors are considered to have a material impact on the reported Coal Resource estimate. The removal and placement of topsoil has been included in the PFS economic ranking (Section 4).
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• Relative Density (RD) was laboratory analysed on an air-dried basis for each coal quality sample. Seam composited RD was interpolated using the inverse distance squared method into a 50 x 50 m quality grid for Resource estimation purposes.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit.	The following resource classification criteria were adopted: o Points of observation for resource classification purposes were defined as cored drillhole intersections of seams with 85% or better core recovery and coal quality composites (at least raw coal proximate analysis, specific energy and total sulphur) that pass all QA/QC checks. Interval elevations and thicknesses must also be supported by down-hole geophysics. o The resource was classified as Measured if the distance between valid points of observation is less than 500m (effective maximum 250m radius around points of observation). o The resource was classified as Indicated if the distance between valid points of observation is greater than 500m and less than 1,000m (effective maximum 500m radius around points of observation). o The resource was classified as Inferred if the distance between valid points of observation is greater than 1,000m and less than 2,000m (effective maximum 1,000m radius around points of observation). o An additional "Reconnaissance" class has been defined (greater than 2,000m and less than 4,000m). This is not used for Coal

		Resource reporting in accordance with the JORC Code but is useful when planning infill drilling. ○ At least two intersecting points of observation radii were required for classification (i.e. no isolated circles of influence).
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• Xstract completed an internal peer review of this estimate and report.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• The resource classification appropriately reflects the varying levels of confidence of the resource model to predict coal quality and tonnages for the resource if it were to be mined. It does not take into account any modifying factors for mining and processing. As such, it is useful for long term and life_of_mine planning but does not have the degree of accuracy for short term mine planning and detailed mine scheduling. • No production data is available for comparison as the project has not been developed to a mining stage.

JORC Code, 2012 Edition – Table 1

Section 4: Estimation and Reporting of Coal Reserves

(Criteria listed in section 1, and where relevant in section 2 and 3, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	• The Mineral Resource Estimate was compiled by Ian De Klerk who is a full time employ of Xstract Mining Consultants Pty Ltd. Mr de Klerk BSc (Geol), MAusIMM who is the Competent Person for Mineral Resources and has over 20 years' experience as a geologist in resource estimation of coal resources. The details of the development of the Ovoot Coking Coal Resources for 2013 can be found above in the explanatory notes which accompany the Mineral Resource estimate. The Mineral Resource is inclusive of the Ore Reserves. • The statement of ore reserves contained in the Ovoot Early Development Plan (OEDP) were prepared by Mr. Julien Lawrence BEng (Mining Hons I), who is a Competent Person for Mineral Reserves and has over 20 years experience as a mining engineer, including more than 10 years in reserve estimation of coal reserves.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• A site visit was not conducted by the Competent Persons taking responsibility for the Coal Reserve as sufficient site information was collected by the Competent Person for the Coal Resource estimate. This information proved satisfactory for the level of the study and confidence of the Coal Reserve Estimate.
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. • The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	• The Coal Reserve is based on a Pre-feasibility Study conducted in 2012 • The re-stated OEDP reserves are based on a Mine Plan and Cost Estimate prepared in 2019 by FMS LLC under the direct supervision of Mr. Julien Lawrence, and relies upon the Resources and Reserves stated by Xstract as part of their 2012 Pre-Feasibility Study. FMS LLC has focused on the OEDP production requirements and re-estimated the Mine Plan and capital and operating costs for development of a 4 Million Tonne per annum operation delivering clean coal to market specification at the Mine gate.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	• Only Measured and Indicated material is classified as reserves. • There is no restriction on insitu ash content applied to the reserves.
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore	• The Coal Reserve estimate was based on conventional open pit mining operation using drilling and blasting and large hydraulic excavators loading off-highway trucks. The open cut mining will be accessed via

	Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). • The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. • The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. • The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). • The mining dilution factors used. • The mining recovery factors used. • Any minimum mining widths used. • The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. • The infrastructure requirements of the selected mining methods.	ramps. The method was deemed appropriate based on low strip ratios and relatively low dip angles. • The Underground portion of the initial Coal Reserve was based on access to the coal seams via two declines and the conventional room and pillar mining method using continuous miners. This method was deemed to be appropriate with the seam thickness, shallow dips and requirement for low capital expenditure. • During the OEDP there is no consideration for Underground mining. • The OEDP and OEDP Extension pit design were based on a Whittle optimisation output, subsequently mine designs and production schedules were produced to determine the economic viability extracting the Coal Resource and meeting typical market specifications required at the mine gate. • Overall pit slopes were designed by the geotechnical consultant and are 28 and 35 degrees in weathered and fresh rock respectively. • Economic Ranking assumptions used to calculate Run_of_Mine ("ROM") tonnes are: • minimimum mining width of 60m; • a minimum mining thickness of 0.3 m; • a dilution factor applied to a coal seam resulting in average coal loss of 2% and dilution of 5%. Dilution qualities of 80% ash and 2.3t/m^3 density • Profitable mining blocks are included in the pit design, of which the inventory is reported for the mine schedule. • No inferred resources are included in the mineable quantities in the OEDP. • The site will require infrastructure consisting of water bores, camp, offices, mobile equipment workshop, fuel and lubrication storage, explosives magazine, ROM stockpile, product stockpile, Coal Handling and Preparation Plant ("CHPP").
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. • Whether the metallurgical process is well-tested technology or novel in nature. • The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. • Any assumptions or allowances made for deleterious elements.	• The Coal Reserve is based on a dense medium processing plant typically employed in the beneficiation of coking coals. The design was based on data provided by Aspire Mining that was previously used in the 2012 PFS and work carried out by Beijing Guohua Technology Group LTD (GT) who conducted simulations of coal washing in the OEDP. Some of the coal with low inherent ash (> 10%) will bypass the processing.

	• The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. • For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	• The combination of the CHPP washed coal and bypassed ROM coal meets the product ash requirement of less than 10.5%. • Varying percentages of the ROM Coal is required to be washed based on the coal ash distribution within the pit limit estimated in the Coal Resource contained in the OEDP. The remainder of upper seam will be bypassed straight to the product stockpile, and there is no Lower seam and OVB Seam present in the OEDP pit limit.
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	• Environmental baseline studies to be completed. • Management and mitigation strategies regarding air quality, water resources, biodiversity and soil are being considered. • Testwork to determine the possibility of Acid Rock Drainage has not been undertaken. The proposed geotechnical test program on waste rock includes pre-mining testing and ongoing weekly sampling.
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.	• Site layouts and planning have demonstrated appropriate space is available for the required infrastructure. • Water bores have been established and ongoing monitoring will establish the water reserve in the immediate project area and the dewatering requirement of the open cut. Insufficient bores are currently established, however Aspire will develop water reserves and permit them for use as part of the BFS study. • A potable water processing plant will be constructed. • A camp site will be constructed 5 km north of the processing plant. • A trafficable road is required between the project and Murun, approximately 191 km in length. This has not been considered as part of the OEDP undertaken by FMS. A separate coal haulage road is under planning by Aspire, which will pass through Murun. • The saleable product will be transported to international markets via a haulroad between the site and Erdenet railway station, and then rail transport to Zamyn Uud and onto Erlian in China. Approximately 580km of road is required between the project and Erdenet rail station. • A feasibility study for the rail project between site and Erdenet (547 km long) has been completed.
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study. • The methodology used to estimate operating costs. • Allowances made for the content of deleterious elements. • The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.	• Capital and operating costs have been derived from known costs already encountered onsite, and supplier quotes and consultant estimates for other site infrastructure and mobile equipment. Local knowledge and experience was drawn upon from GT for the processing fixed and variable costs, FMS Mining Consultants for the site layout and equipment costs.

	• The source of exchange rates used in the study. • Derivation of transportation charges. • The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. • The allowances made for royalties payable, both Government and private.	• The project assumes an exchange rate of 6.8:1.00 (CNY:USD) and 2600:1 (MNT:USD) for the life of the OEDP. • Transport and logistics costs for site to Erdenet rail, then rail to port and road to China and Russia have been sourced from quotes and information provided by Eurokhan LLC and Monsped LLC. • The state mineral royalties in Mongolia are based on reference prices published monthly by the MMRE, not on the actual sales price. The base royalty for exported coal is 5%. In addition, there is a sliding scale royalty from 0-5%, depending on price and classification. • The reference prices upon which royalty calculations are based were provided by Fenwei Energy China (Fenwei) in a comprehensive market and logistics study report. In the OEDP royalty calculations are: ○ For washed product there will be a 5% base royalty plus 2% (from the sliding scale), or a total royalty of 7%. At the reference price of $147/tonne this produces a royalty of $10.32/tonne. • There are no private royalties
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. • The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	• FMS has modelled all product selling to Chinese markets within OEDP period for economic modelling purpose. • The selling price is based on a forecast by Fenwei. Fenwei forecast a strong market for good quality (<10.5% Ash) coking coal, valued at the average reference price US$147/tonne DAP Eronhot. • Transport cost has been calculated based on truck and rail transport to Erenhot China.

Market assessment	• The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.
	• A customer and competitor analysis along with the identification of likely market windows for the product.
	• Price and volume forecasts and the basis for these forecasts.
	• For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.
		• Coal sales are based on 100% of the coal exported out of Mongolia via the Chinese city of Erenhot at the Mongolian border.
		• The revenue is based on a forecast by Fenwei Energy China 2019. Fenwei forecast an average market for comparative quality fat coal based on the following:
		  ○ Designated future regional market of China, Kailun and Wuhai cantered market to be specific, and as well as potential market of Shaanxi, Inner Mongolia and Hebei provinces of China.
		  ○ China is still under structural adjustment on economic growth methodology, and slightly dipping down on demand is foreseeable.
		  ○ Metallurgical coal is steady on demand with gradual increases in consumption forecast.

		○ Aspire coal product with medium-moisture, medium-volatile, low-ash, medium-sulfur and high caking properties is expected to see a slight shortage of supply in the China market. • Blending ratio of fat coal in the coke production is estimated to rise steadily to 14-15% to ensure coke quality
Economic	• The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. • NPV ranges and sensitivity to variations in the significant assumptions and inputs.	• The PFS estimate inputs provided by Aspire and reviewed by FMS (capital and operating costs) are at +/- 25% for mining and +/-15% for the CHPP as is the standard for this study phase. • A project discount rate of 10% was used. • Inflation has not been included in the model and all costs are presented in real 2019 terms. • Mongolian taxes are 15% on all profits up to MNT3B per year and 25% on all profits greater than MNT2B per year. • Sensitivities are performed on transportation costs, coal price, and wash plant yield and pit wall slope. • The NPV is most sensitive to the coal sale price and the transportation costs. A 10% reduction in the coal price will reduce the IRR from 32% 22%. A 10% increase in the transportation costs will reduce the IRR to 28%. • Sensitivities also demonstrated that the internal rate of return (IRR) is not sensitive to exchange rates and that for both a very strong and a very weak USD:CNY rate the IRR will be sustained at approximately 31%.
Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	• The Company is engaging with the local community to complete a Community Development Agreement and runs a comprehensive community relations programme. The project is adjacent on the east of the Mogoin Gol Coal Mine which has been mined over a 40 year period.
Other	• To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: • Any identified material naturally occurring risks. • The status of material legal agreements and marketing arrangements. • The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or	• There are no known naturally occurring risks. • The legal agreements and marketing arrangements required to carry out mining activities are in progress. • Whilst there is no guarantee of the project receiving all permits for commencement of operations and sales, there is no reason to expect approvals will not be gained before the project is advanced to mine status according to the schedule set out in the OEDP.

	Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories. • Whether the result appropriately reflects the Competent Person's view of the deposit. • The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• The Coal Reserve estimate is based on the Coal Resource contained within the final open pit design classified as Measured and Indicated after consideration of all mining, metallurgical, social environmental and financial aspects of the project. The Reserve estimate has been classed as Probable based on the understanding that the approval for the road development from site to Erdenet is still in an approval process. • This classification reflects the Competent Person's view of the deposit. • 93% of the Probable Coal Reserves have been derived from Measured Coal Resources. • The Coal Reserve is shown in Appendix K
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	• Xstract has internally reviewed the OEDP Coal Reserve estimate.
	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. • It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• Factors that may affect the accuracy and confidence of this estimate relate to: o The relative accuracy of the yield variability across the deposit o The variability of the "Limit of Oxidation" along the sub-crop line is yet to be fully defined o The confidence of the Coal Reserve is dependent on the rail approvals for building initially a road and eventually a rail line between Ovoot and Erdenet, which remain to be granted. o The magnitude of the estimate of the coal tonnages within the Coal Reserve is dependent on the variation of the assumptions in the coal price and foreign exchange rates • This statement of Coal Resource and Coal Reserve relates to global estimates of tonnes and quality. • No production data is available.

Appendix A:

Summary drillhole seam/ply intersection information (main pit resource area)

Seam Ply	Intersections	Average Thickness (m)	Minimum Hole Thickness (m)		Maximum Hole Thickness (m)		Std. Dev.
U01	62	3.26	DH216	0.01	DH323	13.60	2.93
U02	16	1.00	DH361	0.25	DH220	3.07	0.68
U03	11	1.52	DH313	0.20	DH271	5.80	1.77
U04	11	3.36	DH240	0.40	DH311	8.70	2.74
U05	42	4.43	DH353	0.28	DH253	10.25	2.23
U06	49	4.70	DH361	0.85	DH218	9.66	2.02
U07	72	5.15	DH244	0.07	DH246	17.98	3.74
U08	33	2.25	DH299A	0.01	DH308	7.10	1.76
UHA	1	2.55	GT08	2.55	GT08	2.55	-
ULS	30	3.47	DH249	0.01	DH201	12.50	3.42
FP1	21	1.29	DH302A	0.01	DH309	4.00	1.12
FP2	8	0.86	GT08	0.09	DH340	2.00	0.64
LOA	51	4.17	DH208	0.01	DH243	25.00	4.97
LOB	43	5.12	DH234	0.10	DH235	27.82	6.34
LOC	45	4.35	DH308	0.20	DH203	26.90	4.09
LOD	28	1.75	DH244	0.10	GT05	5.46	1.52
OVB	5	49.81	DH340	32.10	DH234	60.87	11.10

Appendix B:

Drillhole composited raw coal quality summary by seam/ply (air-dried basis)

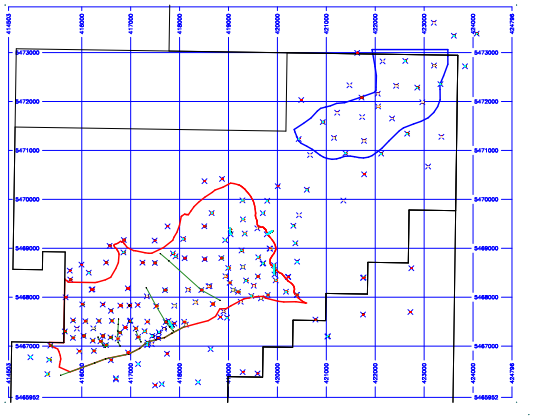
Seam Ply		RD	IM %	ASH %	VM %	FC %	TS %	CV kcal/kg	CSN	P %	CL %	HGI	MHC % (ar)
	Composites	28	28	28	28	28	28	25	19	9	12	11	7
	Min.	1.27	0.27	7.10	18.57	20.30	0.93	3231	3.5	0.019	0.000	60	1.02
	Max.	1.98	1.33	57.44	31.05	74.61	2.49	7974	9.0	0.231	0.038	119	1.65
U01	Mean	1.41	0.61	19.18	27.78	52.43	1.37	6756	7.5	0.089	0.011	92	1.37
	Composites	9	9	9	9	9	9	9	8	4	7	7	4
	Min.	1.31	0.27	8.27	24.64	42.79	0.86	5751	1.5	0.010	0.000	62	0.82
	Max.	1.57	0.80	32.19	31.50	60.24	2.61	7750	9.0	0.055	0.030	102	1.27
U02	Mean	1.41	0.50	16.31	29.67	53.51	1.61	7042	6.5	0.026	0.007	88	1.04
	Composites	7	7	7	7	7	7	6	5	2	4	4	2
	Min.	1.29	0.28	10.01	24.64	42.79	0.80	5751	6.0	0.035	0.000	62	0.93
	Max.	1.59	0.80	32.19	29.79	59.67	2.02	7526	8.5	0.075	0.010	98	1.56
U03	Mean	1.44	0.50	20.96	27.37	51.17	1.55	6706	7.0	0.055	0.005	77	1.25
	Composites	8	8	8	8	8	8	7	6	2	4	4	2
	Min.	1.27	0.24	10.01	24.38	43.85	0.88	5658	6.0	0.041	0.000	71	1.35
	Max.	1.54	1.50	31.28	30.86	59.67	1.85	7526	9.0	0.060	0.040	95	2.79
U04	Mean	1.39	0.60	17.14	28.26	54.00	1.31	6866	7.0	0.051	0.011	85	2.07
	Composites	26	26	26	26	26	26	23	18	6	9	7	5
	Min.	1.26	0.19	7.94	23.31	40.46	0.67	5380	5.5	0.073	0.000	69	0.93
	Max.	1.65	0.96	35.65	31.67	63.16	2.57	7858	9.0	0.167	0.042	124	1.86
U05	Mean	1.37	0.51	14.47	28.48	56.54	1.26	7138	8.0	0.112	0.010	99	1.27
	Composites	30	30	30	30	30	30	27	21	8	11	9	7
	Min.	1.26	0.12	8.40	23.03	50.31	0.84	6030	5.5	0.020	0.000	86	0.87
	Max.	1.52	0.82	26.01	30.88	63.17	1.99	7689	9.0	0.373	0.036	123	1.50
U06	Mean	1.37	0.48	14.11	28.45	56.97	1.21	7157	8.0	0.105	0.014	107	1.17
	Composites	44	44	44	44	44	44	41	36	16	21	18	12
	Min.	1.26	0.17	9.03	18.54	40.88	0.71	5157	1.5	0.010	0.000	60	0.86
	Max.	1.61	3.97	37.33	31.20	65.88	3.36	7776	9.0	0.153	0.049	133	4.99
U07	Mean	1.40	0.57	16.89	27.58	54.97	1.44	6916	7.0	0.066	0.014	100	1.54
	Composites	19	19	19	19	19	19	18	17	13	14	11	11
	Min.	1.33	0.26	13.31	19.34	34.22	0.27	4387	2.0	0.030	0.000	69	0.86
	Max.	1.76	2.41	43.23	33.64	64.51	3.07	7295	8.5	0.650	0.053	114	3.27
U08	Mean	1.55	0.63	28.32	25.89	45.16	1.58	5765	6.5	0.133	0.015	92	1.28

Seam Ply		RD	IM %	ASH %	VM %	FC %	TS %	CV kcal/kg	CSN	P %	CL %	HGI	MHC % (ar)
	Composites	1	1	1	1	14	1	1	1	0	0	0	0
	Min.	1.50	0.43	23.37	26.84	49.36	1.03	6370	8.5	-	-	-	-
	Max.	1.50	0.43	23.37	26.84	49.36	1.03	6370	8.5	-	-	-	-
UHA	Mean	1.50	0.43	23.37	26.84	49.36	1.03	6370	8.5	-	-	-	-
	Composites	14	14	14	14	14	14	14	12	6	7	5	4
	Min.	1.33	0.10	11.17	19.89	30.20	0.84	4228	4.5	0.030	0.000	60	1.09
	Max.	1.83	0.80	41.67	31.41	60.97	2.17	7517	8.5	0.110	0.040	112	1.39
ULS	Mean	1.49	0.48	23.65	26.63	49.24	1.46	6317	7.0	0.077	0.017	89	1.22
	Composites	8	8	8	8	8	8	7	7	2	4	2	0
	Min.	1.36	0.30	20.02	19.00	36.90	1.07	4488	2.5	0.120	0.000	71	-
	Max.	1.72	0.80	43.30	28.08	51.43	2.18	6673	8.0	0.330	0.018	84	-
FP1	Mean	1.51	0.44	29.00	24.82	45.75	1.61	5872	6.5	0.225	0.007	78	-
	Composites	4	4	4	4	4	4	3	4	0	0	0	0
	Min.	1.44	0.35	25.28	15.63	33.84	1.35	3998	4.0	-	-	-	-
	Max.	1.56	3.91	50.10	29.07	45.20	1.95	5990	7.5	-	-	-	-
FP2	Mean	1.51	1.29	34.50	23.37	40.84	1.55	5170	6.0	-	-	-	-
	Composites	29	29	29	29	29	29	27	28	7	10	6	3
	Min.	1.27	0.24	9.28	11.40	16.32	0.31	1377	1.0	0.050	0.000	61	1.17
	Max.	1.89	0.77	71.69	30.58	60.21	4.92	7634	9.0	0.304	0.020	92	1.71
LOA	Mean	1.51	0.46	29.45	24.74	45.28	1.39	5640	6.5	0.152	0.007	74	1.36
	Composites	25	25	25	25	25	25	23	25	6	9	6	2
	Min.	1.30	0.24	11.04	13.70	23.49	0.56	2622	1.5	0.023	0.000	60	1.09
	Max.	1.88	1.27	62.24	27.98	62.41	4.92	7810	9.0	0.080	0.025	86	1.24
LOB	Mean	1.52	0.49	30.66	23.29	45.52	1.22	5622	6.5	0.055	0.009	74	1.17
	Composites	29	29	29	29	29	29	29	28	8	11	6	3
	Min.	1.33	0.29	10.25	18.13	33.24	0.57	4025	4.0	0.010	0.000	78	1.04
	Max.	1.71	0.79	48.23	29.17	63.51	1.93	7687	9.0	0.296	0.050	104	1.20
LOC	Mean	1.45	0.46	24.11	25.09	50.30	1.03	6288	7.0	0.085	0.014	93	1.13
	Composites	15	15	15	15	15	15	15	14	5	7	5	3
	Min.	1.38	0.31	14.81	15.26	21.75	0.50	3090	1.0	0.020	0.000	62	0.96
	Max.	1.89	1.11	57.51	34.61	59.01	1.18	7267	8.5	0.270	0.060	101	1.16
LOD	Mean	1.61	0.49	35.61	23.25	40.59	0.87	4	5.5	0.129	0.014	85	1.04

Seam Ply		RD	IM %	ASH %	VM %	FC %	TS %	CV kcal/kg	CSN	P %	CL %	HGI	MHC % (ar)
	Composites	4	4	4	4	4	4	3	3	1	1	0	0
	Min.	1.45	0.49	26.23	19.65	34.22	0.56	4240	5.5	0.110	0.016	-	-
	Max.	1.71	0.73	45.59	24.09	49.06	0.92	6170	8.5	0.110	0.016	-	-
OVB	Mean	1.58	0.59	36.70	21.69	41.02	0.75	5130	6.5	0.110	0.016	-	-

Appendix C:

Location of exploration drillholes (2010 to 2012)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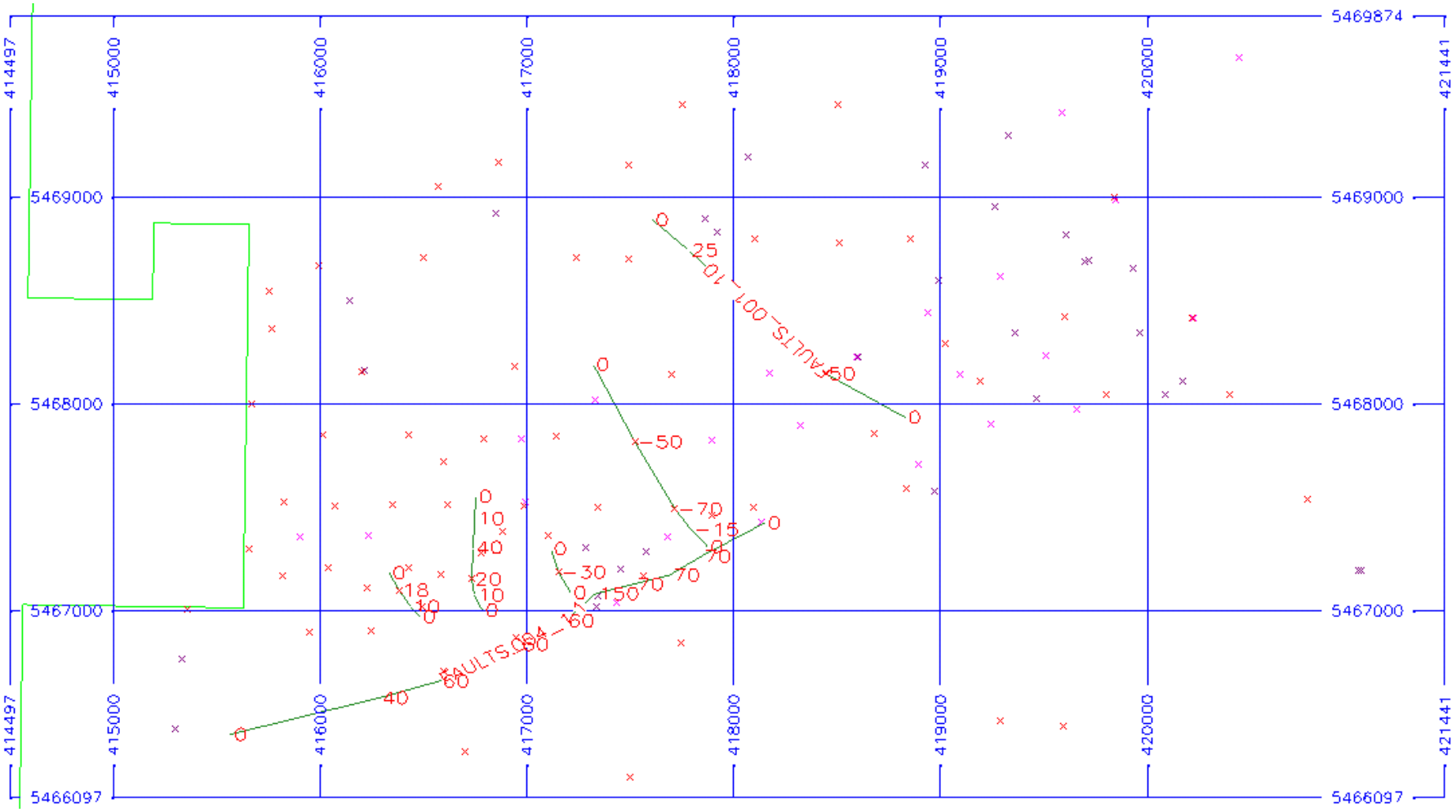
Appendix D:

Faults applied during modelling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FAULTS_004
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10
50
-50
-70
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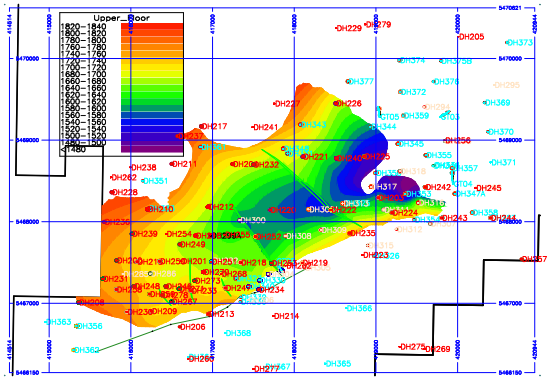
-30
150
-160
60
40
18
20

Appendix E:

Extent of upper sequence and floor RL of basal ply (U01-U08)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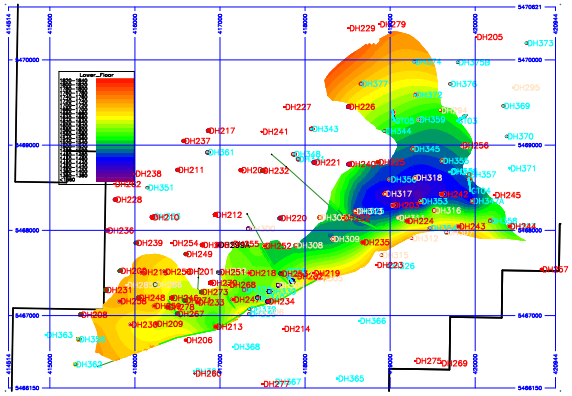
1800 - 1820
1780 - 1800
1760 - 1780
1740 - 1760
1720 - 1740
1700 - 1720
1680 - 1700
1660 - 1680
1640 - 1660
1620 - 1640
1600 - 1620
1580 - 1600
1560 - 1580
1540 - 1560
1520 - 1540
1500 - 1520
1480 - 1500
< 1480

Appendix F:

Extent of lower sequence and floor RL of basal ply (LOA-LOD)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DH237
DH345
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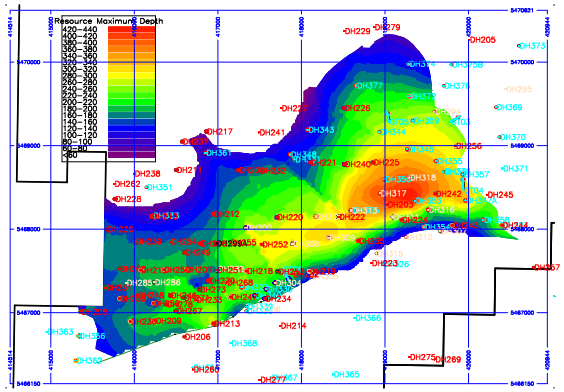
DH316
DH243
DH236
DH239
DH254
DH309
DH235
DH249
DH308
DH223
DH357
DH201
DH219
DH234
DH366
DH363
DH213
DH214
DH206
DH368
DH275
DH269
DH365
DH277

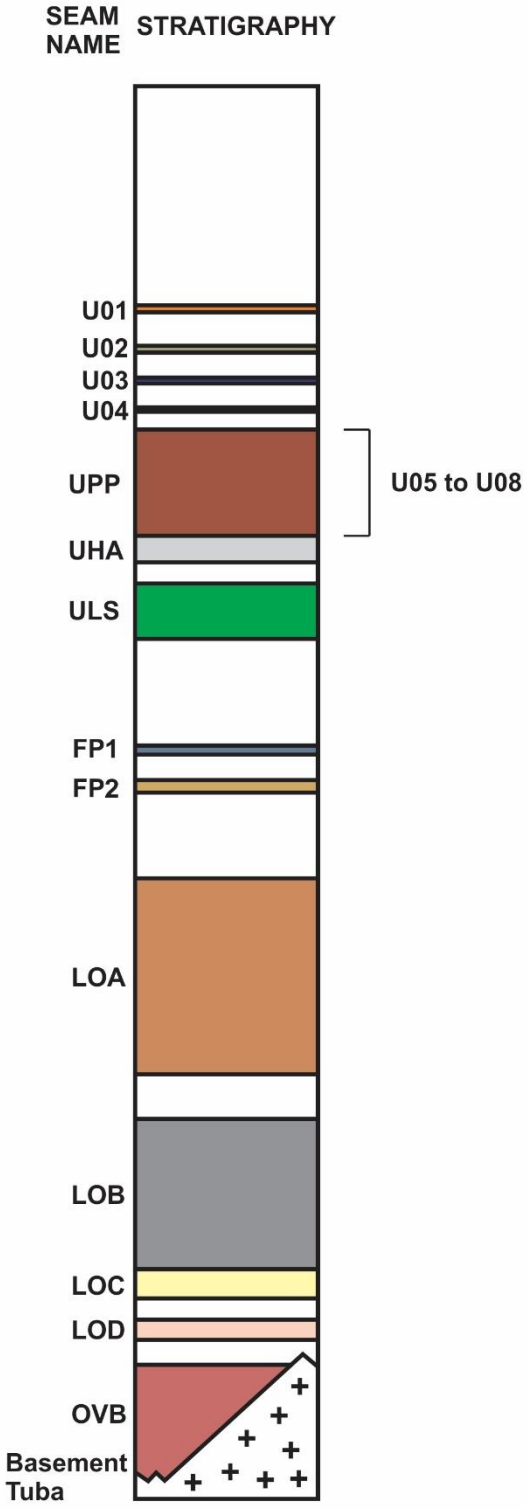
Appendix G:

Maximum depth (m) of modelled coal resources


Resource Maximum Depth
420–440
400–420
380–400
360–380
340–360
320–340
300–320
280–300
260–280
240–260
220–240
200–220
180–200
160–180
140–160
120–140
100–120
80–100
60–80
<60

Appendix H:

Ovoot generalised seam/ply stratigraphy


SEAM NAME
STRATIGRAPHY
U01
U02
U03
U04
UPP
U05 to U08
UHA
ULS
FP1
FP2
LOA
LOB
LOC
LOD
OVB
Basement
Tuba

Appendix I:

Ovoot Coking Coal Project updated JORC Code Coal Resource (July 2013)

Seam	Class	Total	Ash (adb)	CSN
		(Mt)	(%)	
UPPER	Measured	79.6	20.7	8.2
LOWER	Measured	108.1	27.5	7.5
OVB	Measured	22.6	36.2	10.7
		210.2		
UPPER	Indicated	9.0	21.1	7.9
LOWER	Indicated	26.2	28.6	7.2
OVB	Indicated	6.2	35.3	8.5
		41.4		
UPPER	Inferred	1.6	25.5	8.4
LOWER	Inferred	4.9	30.5	7.1
OVB	Inferred	0.2	37.5	16.1
		6.8		
Coal Above BHWE		2.3	23.1	7.1
Total Main Area		**260.7**		

Only M+I+I, Unclassified coal is not included

Appendix J:

Northeastern Underground area updated JORC Code Resource (July 2013)

		< 300 m Depth	> 300 m Depth	Total	Ash (adb)	CSN
Seam	**Class**	**(Mt)**	**(Mt)**	**(Mt)**	(%)	
UPPER	Indicated	-	18.2	18.2	26.9	8.0
LOWER	Indicated	-	7.2	7.2	23.2	8.0
		-	**25.4**	**25.4**		
UPPER	Inferred	-	1.1	1.1	34.7	7.5
LOWER	Inferred	-	1.5	1.5	23.4	8.0
		-	**2.6**	**2.6**		
Total NE UG Area				**27.9**		

Appendix K:

OEDP Coal Reserve Estimate as of Feb 2019

Open Pit Coal Reserve

Category	Coal Reserve (adb) ROM Mt	Coal Reserve, moisture added to give 2.0% arb ROM Mt	Marketable Coal Reserve, Total Moisture 10% arb Mt
Probable OEDP Open Pit	36,844,815	37,581,711	32,255,569
Probable OEDP Extension Open Pit	17,000,911	17,340,930	13,915,656
Total	53,845,726	54,922,641	46,171,225