



28 November 2019

NEW ELK COKING COAL PROJECT FEASIBILITY STUDY DELIVERS OUTSTANDING RESULTS

The New Elk coking coal project feasibility study positions the project uniquely for a US coal producer, in the lowest cost quartile of the seaborne metallurgical coal cost curve and sits amongst the lowest cost producers of hard coking coal in the US. With such convincing feasibility study results, Allegiance Coal Limited intends to expedite completion of the acquisition of the New Elk coking coal project with a view to returning it to production in mid 2020.

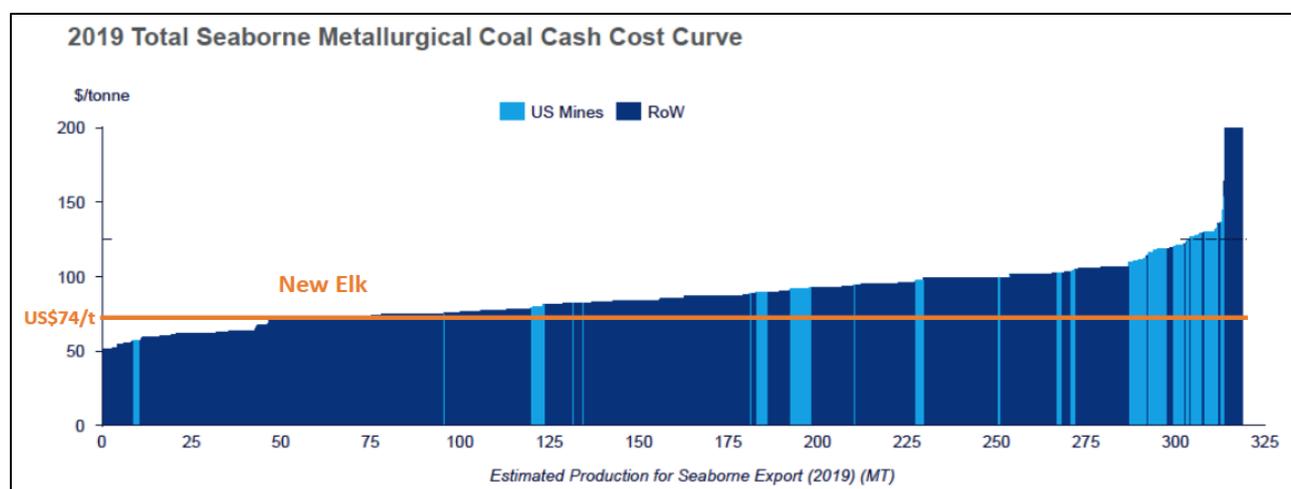
DFS HIGHLIGHTS

- High productivity room and pillar ‘walk through super-section’ underground mining operation.
 - 268Mt of coal resources at 3.0 foot seam height cut-off from just 3 of 8 coal seams. All tonnes stated in this announcement are metric tonnes.
 - 62Mt of ROM coal reserves converting to 45Mt of saleable coal reserves at a yield of 72% and at a minimum coal seam mining height of 4.0 foot from mostly 2 of the 8 coal seams.
 - 2.7Mt per annum average ROM production delivering 2.0Mt per annum average saleable coal.
 - 23 year mine life from 2 of the 8 seams with a small amount of production for access purposes from a 3rd seam.
 - US\$74 per tonne average all-in FOB cash cost (ex-port) before royalties, interest and tax.
 - Landowner royalties are linked to the FOB sales price, commencing at US\$1/t on FOB sales price up to US\$100/t, and for every US\$10/t of additional FOB price, the royalty steps up US\$1/t.
 - US\$132/t average sales price for US high vol hard coking coal.
 - A\$370M annual average revenue delivering A\$153M of annual average EBITDA.
 - US\$28.4M start-up capital expenditure (excluding working capital).
 - A\$1.2B NPV8% pre interest and tax.
 - 130% IRR pre interest and tax.
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Chairman and Managing Director, Mark Gray, commented:

“The feasibility study results in relation to a high productivity room and pillar underground mining operation are truly outstanding. What appealed to the Board at the outset with this asset was its scale. Scale enabled Stantec to develop a mine plan minimising out-of-seam dilution by setting a high (compared to the majority of US coking coal mines) minimum coal seam height of 4.0 foot, yet still enjoying a large resource base to design an efficient mine plan. Avoiding significant out-of-seam dilution resulted in an average yield of 72% which is very high compared to most US coking coal mines and sets this mine apart. The Board now intends to expedite acquisition of the Project, with a target of returning the mine to production mid-2020”.

Allegiance Coal Limited (**Allegiance** or the **Company**) is pleased to present the results of the New Elk Feasibility Study (**Study**) undertaken by Stantec in the US (**Stantec**), on behalf of the Company along with several other technical consultants. Significantly, the Study concluded that the New Elk coking coal project (**Project**) is likely in the lowest cost quartile of the seaborne metallurgical coal market, and more importantly, amongst the lowest cost US export coking coal producers by a significant margin.



Source: Wood Mackenzie seaborne metallurgical coal cost curve as at November 2019

The Company refers to its prior announcement on 15 July 2019 (**15 July Announcement**), relating to the one year option to acquire all the shares in New Elk Coal Company LLC (**NECC**), which company owns the permitted, and built, New Elk coking coal mine located in southeast Colorado, US (**Mine**). During the one year option period the Company would undertake legal and financial due diligence, now complete, and more critically, update the geological model and undertake a feasibility study of the Project to determine whether the Project was economically viable, and a prudent acquisition for the Company.

The results of the Study are outstanding, exceeding the Company’s expectations based on its initial internal review. The Company will proceed immediately to enter into the formal conditional agreement to acquire NECC. A draft purchase agreement has been completed with the vendor and the Company is hopeful the purchase agreement will be signed in December 2019 with completion targeted for calendar Q1 2020.

The major outstanding condition to completion will be that the Company must secure the funding necessary to meet the start-up capital requirement of US\$28M, plus working capital. To that end, the Company is well advanced in discussions with several investment funds who have signed non-disclosure agreements, have had access to the underlying Project technical data, and are now awaiting the results of this Study. The Company has until 14 July 2020 to raise the funding, but is confident following the results of this Study, of doing that in the coming months to tie in with the target completion date of calendar Q1 2020. The other

significant condition to completion is shareholder approval which is being sought at the Company's annual general meeting being held on 28 November 2019.

Summary of Study Results

A summary of the key results of the Study which relate to just to 3 of the 8 coal seams within the Mine, the Green, Blue and Allen, are set out in Tables 1 to 4 below.

Table 1: Coal Resource and Production Parameters Life of Mine	Units	
Total coal resources	MTonnes	267.6
Total ROM coal production	MTonnes	62.3
Total saleable coal production (from Blue and Allen seams only)	MTonnes	45.1
Minimum underground mining coal seam height	Foot	4.0
Annual average ROM coal production	MTonnes per annum	2.7
Annual average saleable coal production	MTonnes per annum	2.0
Average product coal yield	%	72
Mine life	Years	23

Table 2: Start-up Capital		US\$M
Mine access and ventilation		2.6
Mine infrastructure		7.4
Mining equipment for 3 super-section production units		13.4
CHPP upgrade inserting a fine coal circuit		5.0
Total Start-up Capital (excludes contingency)		28.4

Table 3: Operating Costs Life of Mine		US\$/Saleable t
Site Costs		
Mining		30.2
Coal processing		4.5
General and administration		1.2
Transportation and Marketing		
Marketing costs		0.2
Haulage		0.2
Rail to port and loaded		37.4
Total all-in cash cost FOB pre-interest and tax		73.7

Table 4: Key Performance Indicators Life of Mine	Units	Value
LOM average coal price	US\$/t	132.3
Net present value @ 8% pre interest and tax	A\$M	1,171
Net present value @ 8% post tax	A\$M	799
Internal rate of return pre tax	%	130
Internal rate of return post tax	%	77

Production Targets and Forecast Financial Information

Allegiance notes the following in relation to the production targets disclosed in this announcement:

- All material assumptions on which the production targets and forecast financial information are based are disclosed in the announcement;
- The coal resources and reserves on which the production targets are based have been prepared by competent persons in accordance with the requirements of the 2012 edition of the JORC Code; and

- The production targets and forecast financial information in this announcement are underpinned solely by a combination of coal reserves and measured and indicated coal resources. The relevant proportions of probable coal reserves and proven coal reserves is 12:78.

New Elk Coal Resources & Reserves

In the 15 July announcement, the Company listed the New Elk coal resources previously prepared in July 2012 in accordance with National Instrument NI 43-101 'Standards of Disclosure for Mineral Projects' (NI 43-101) by Agapito Associates, Inc., a US nationally recognised engineering firm (**Report**).

The Report declared a mineral resource estimate of 656Mt of coal resources at a minimum seam height of three foot. The mineral resource estimate is shared across 8 coal seams summarised in Table 5 below.

Table 5: Coal seams	Seam height	Measured Mt	Indicated Mt	Inferred Mt	Total Mt
Green	3 to 7 foot	29.94	24.95	0.09	53.98
Loco	3 to 4 foot	13.06	27.22	24.13	64.41
Blue	3 to 5 foot	47.36	34.56	0.82	82.74
BCU	3 to 6 foot	11.61	33.38	27.22	72.21
Red	3 to 4 foot	21.14	9.34	0.00	30.48
Maxwell	3 to 9 foot	65.41	65.05	15.79	146.24
Apache	3 to 5 foot	45.63	51.53	13.97	111.13
Allen	3 to 5 foot	38.83	43.45	12.79	95.07
Total		271.97	289.48	94.80	656.26

Cautionary statement: Investors should note that the Agapito mineral resource estimates for the Project are foreign estimates under ASX Listing Rule 5.12 and are not reported in accordance with JORC Code (2012 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves") (JORC Code).

Except as is stated in this announcement in relation to the Green, Blue and Allen seams, a competent person has not done sufficient work to classify the foreign estimates as a mineral resource under the JORC Code in relation to the other coal seams, and it is uncertain that following further exploration or evaluation work that this foreign estimate in relation to those other seams, will be able to be reported as a mineral resource in accordance with the JORC Code.

Pursuant to the Study, however, Stantec has prepared a statement of resources and reserves in accordance with the JORC Code and NI 43-101 in relation to the Green, Blue and Allen seams only, as is set out in Tables 6 and 7 below.

Table 6: Resources	Seam height	Measured Mt	Indicated Mt	Inferred Mt	Total Mt
Green seam	3.0 foot	19.1	17.7	5.6	42.4
Blue seam	3.0 foot	89.6	31.4	9.1	130.2
Allen seam	3.0 foot	68.9	25.4	0.7	95.1
Total	3.0 foot	177.6	74.4	15.6	267.6

Table 7: Reserves			Proven Mt	Probable Mt	Saleable Mt
Green seam	4.0 foot		0.8	-	0.8
Blue seam	4.0 foot		17.7	4.5	22.2
Allen seam	4.0 foot		16.7	5.5	22.1
Total	4.0 foot		35.2	9.9	45.1

Estimation Methodology

Coal seams were correlated by constructing lithological cross-sections and comparing coal seams and other lithologic units for geometry and continuity. Modelling was conducted using Carlson™ software, a widely used gridded seam modelling program.

Moisture content of the coal seams is considered uniform, given that as-received coal moisture content typically falls within a narrow range. For the Blue seam, this can range from 3.5 to 6.0 percent, but more consistently ranges between 3.8 to 4.8 percent. For the Allen seam, the range is typically between 4.0 to 5.0 percent.

A minimum coal thickness of 3.0 foot was used for calculating in-place coal resources. A minimum coal thickness of 4.0 foot was used in the mine planning process for determination of coal reserves, with exceptions for accessing adjacent coal resource blocks and developing to ventilation shaft locations where required. A minimum barrier of 300 foot was maintained between existing mine workings and projected mining in the Allen seam.

Coal resource estimates have not been constrained by metallurgical factors. In-situ coal densities were not available, therefore a conservative density of 82.5 pounds per cubic foot was used. The USGS Circular 891 criteria of 1,320ft from data points for Measured and 3,960ft for Indicated assurance categories was used for classifying resources. A competent person deemed this system to be appropriate in accordance with the 2014 Guidelines for compliance with the JORC Code. Relative accuracy of the resource estimates is dependent on the number of data points and the density and reliability of those data points. The New Elk property has a relatively high level of confidence in that 70% of the total resources are classified as Measured, and 78% of the total reserves are classified as Proven. In addition, this region of Colorado has been extensively mined in the past.

New Elk Project Summary

The Mine is located in Las Animas County in southeast Colorado bordering northeast New Mexico, and sits within the Raton Basin which according to U.S Geological Survey Paper 1625-A, has an estimated 15 billion metric tonnes of coal.

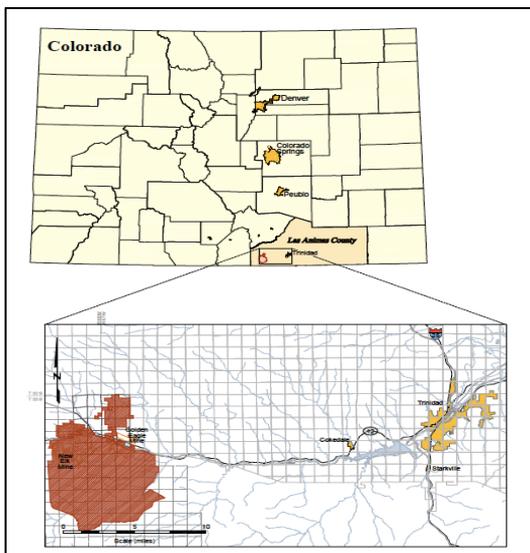


Image: Mine location, southern Colorado

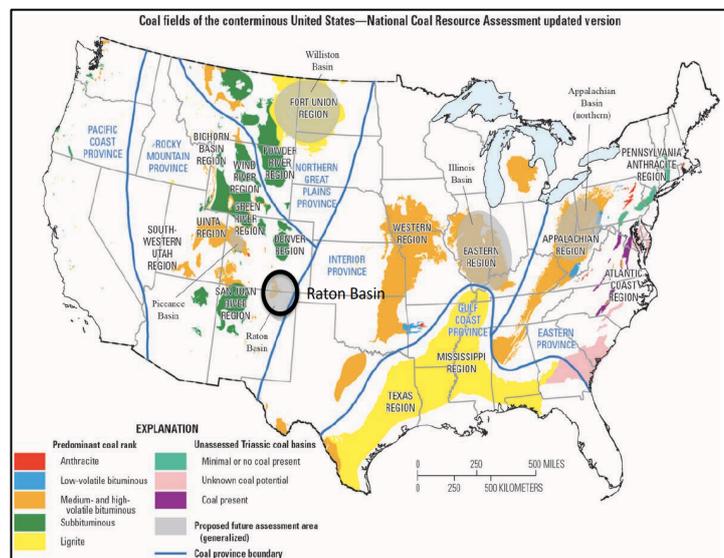
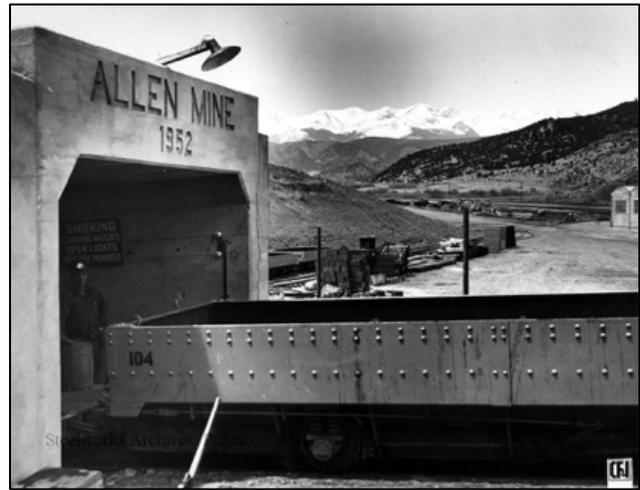


Image: Raton sedimentary basin where the Mine is located

The Raton Basin has had active coal mines for nearly 150 years producing good quality hard coking coals for domestic steel production. The Raton Basin hosts low sulphur, mid to high volatile hard coking coals, typically with excellent plasticity which is an important element in the blending of coking coals in blast furnace steel production.

The Mine was first named the 'Allen Mine', and commenced production in 1951 supplying coking coal to the Pueblo Steel Mill located approximately 100 miles north of the Mine. In the late 1970s, the Pueblo Steel Mill transitioned from blast furnace steel production to electric arc furnace no longer requiring hard coking coal. Notwithstanding this, the Allen Mine continued production through to 1989 supplying coal to local power utilities, and the wash-plant continued operating until 1996 servicing neighbouring mines.

While existing rail near the Mine could transport coal 850 miles to the Gulf of Mexico, a lack of nearby coal handling facilities at ports meant the coking coal could not access the export seaborne market. That has now changed with three coal and petcoke terminals nearby in the Bay of Houston along with ports accessible to the Mine in Longbeach, California and Guaymas inside the Baja California Peninsula of Mexico.



Images: historical portal entry into the Allen Mine

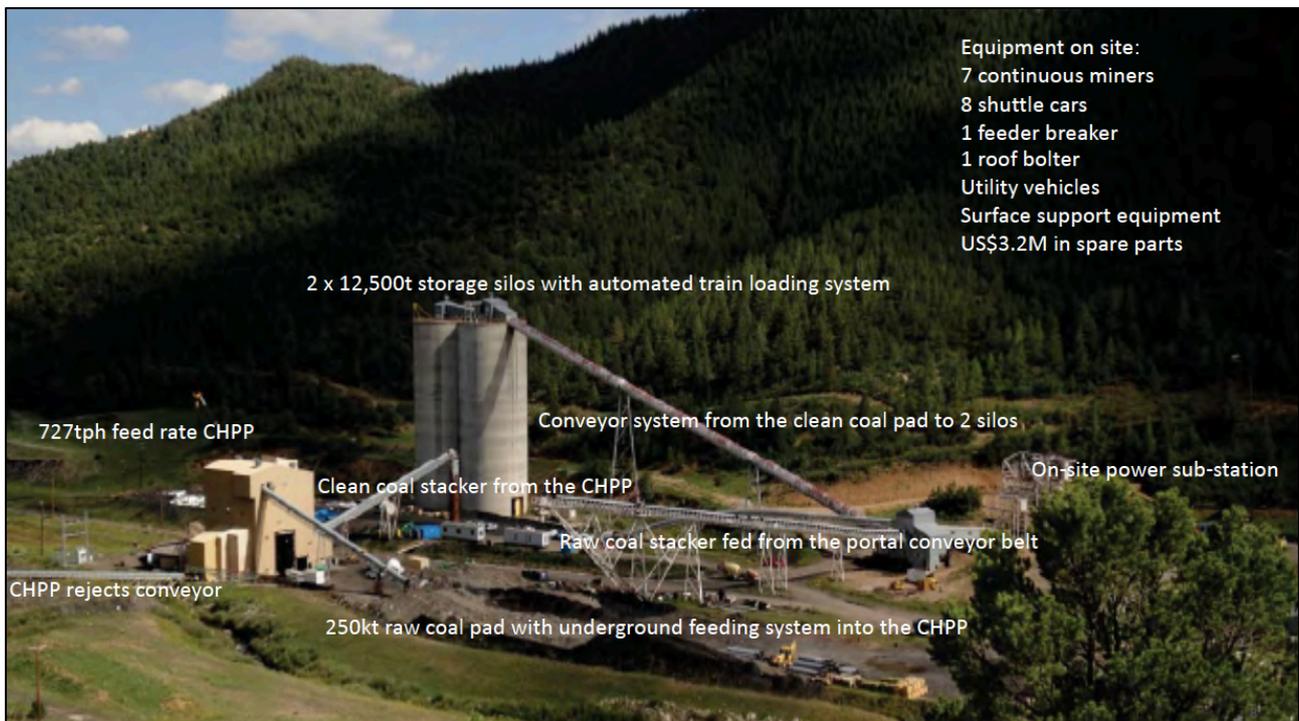
The Mine was acquired by Cline Mining Corporation (**Cline**) in 2008 for C\$17 million. In 2010, the Mine was re-opened under the name 'New Elk Mine'. Cline upgraded the Mine infrastructure, including the wash-plant and supporting infrastructure, developed a second underground portal entry, and recommenced production at an estimated capital cost of some C\$150 million. Production recommenced in 2011 with coal intended for sale on the global seaborne market via the Port of Corpus Christi in the Gulf of Mexico. The Mine operated for several months but was forced to close in July 2012 when world hard coking coal prices plummeted. Following this, Cline filed for bankruptcy protection, which resulted in all liabilities being extinguished, and the senior secured creditor ultimately taking ownership of Cline and its subsidiary NECC. It has remained on care and maintenance since.

As a result of the prior investment by the original Mine owners and more recently Cline, the Mine is fully built with upgraded infrastructure and generally in a very good state of repair. Key mine components include:

- A full spread of production equipment including;
 - 7 Joy rebuilt 14cm15 continuous miners; one new with no hours; two with less than 2,000 hours; and three with less than 3,000 hours;
 - 7 Joy SC10 shuttle cars;
 - 1 feeder breaker;

- 1 roof bolter;
 - 3 scoops (underground utility vehicles);
 - Several underground power units;
 - Conveyor drives, structure and belt; and
 - An estimated US\$3.2M in inventory and spare parts.
- Two separate portals and declines (including access road, belt road and ventilation road) into the Blue seam 20 metres below surface and the Allen seam 200 metres below surface;
 - Rock crusher bin receiving ROM coal by conveyor belts from both portals and feeding the ROM coal pad by a stacker conveyor;
 - ROM coal pad and dual underground feeding systems conveying ROM coal into the coal handling and preparation plant (**CHPP**) and then conveying washed coal to the product pad;
 - CHPP with a nameplate of 727tph feed rate;
 - Product coal pad underground fed conveyor feeding system to two silos with holding capacity of 25,000 tonnes;
 - CHPP rejects dump with direct conveyor;
 - Power sub-station;
 - Office buildings, wash-house, warehouse and workshop with 10 tonne overhead crane;
 - Surface support equipment including 40t dump truck, grader, front-end loader and back-hoe.

The image below provides a visual appreciation of the mine infrastructure in place.



Mining

Mining Method and Equipment

Coal will be mined with continuous miners adopting the place change room and pillar method. Key items of machinery on each section are illustrated below.

Examples of underground mining equipment deployed at New Elk

Joy 14cm15 Continuous Miner



Joy 10SC Shuttle Car



Fletcher Roof Bolter



Joy Feeder Breaker



Room and pillar mining is the predominant underground coal mining method in the US, unlike Australian underground coal mines where longwall mining is more prevalent.

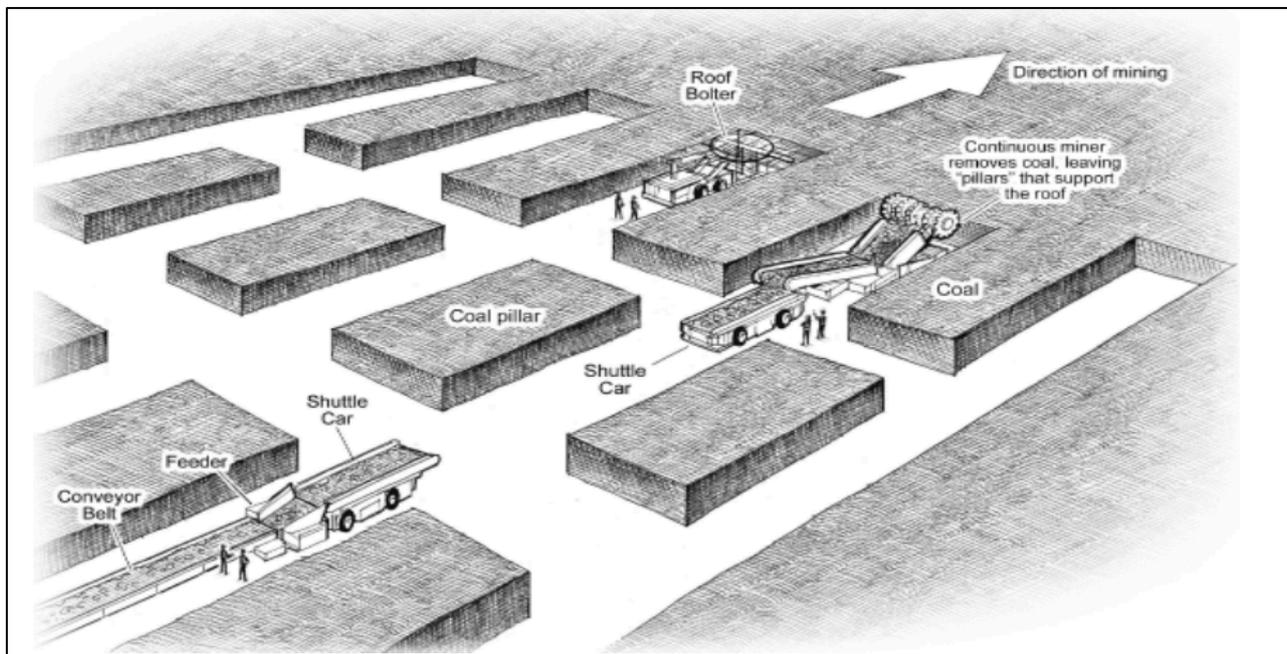
Longwalls are expensive and capital intensive and generally the privilege of the major coal mining companies whose balance sheets can absorb the initial capital investment and the holding costs while a Longwall is either being transferred to a new panel or is not operating because of geological interruptions to production. Theoretically, they deliver lower operating costs and recover more of the coal resource but are inflexible and prone to major downtime through relocations and unpredictable geology.

Room and pillar mining is less capital intensive and while perceived by many to be higher in operating cost, can be extremely efficient and low cost if operated as 'super sections'. Room and pillar mining is also flexible to unpredictable geology and can easily manoeuvre around geological intrusions when encountered, without disrupting production. For these reasons, the Company has adopted room and pillar mining.

A super section involves two continuous miners operating on each section. This can be either with two continuous miners operating concurrently on a section or sequentially, that is, as one machine has completed a cut, the operator will 'walk through' to the other side of the section and commence a new cut with the second machine. While the operator is making the new cut with the second machine, a crew-hand will reposition the first machine for its next cut. When the operator has completed the cut with the second machine, he or she will return to the first machine and execute another cut, and so the sequence continues without any, or limited, downtime in production during a shift.

Typically, two to three shuttle cars (coal haulers), convey coal from a continuous miner to a feeder breaker while the continuous miner is being operated. The feeder breaker sizes the coal and then feeds it on to a conveyor belt which then transfers the coal outside the mine to a stockpile before being fed into the CHPP. Once a continuous miner completes a cut, and is withdrawn, a roof-bolter enters the cavity and drills bolts into the roof to support the roof, or any part of it, from falling.

The picture below illustrates a room and pillar sequence in operation with a single continuous miner section. As discussed, New Elk will operate with two continuous miners in a 'walk through super section' with seven to nine headings (the picture below only has five headings typical of a single continuous miner section).



The capital cost for the three production units on commencement of production which forms part of the start-up capital is summarised in Table 8 below. Pricing listed in orange is equipment already owned subject only to on-site refurbishment while all other items of equipment are required to be purchased prior to the start of production.

Table 8: Production Equipment	New Cost US\$	Rebuild US\$	Unit 1 US\$	Unit 2 US\$	Unit 3 US\$
Joy 14CM15 continuous miner	5,000,000	1,675,000	290,000	290,000	290,000
Joy 14CM15 continuous miner	5,000,000	1,675,000	290,000	290,000	290,000
Joy 10SC Shuttle car	1,200,000	550,000	75,000	75,000	75,000
Joy 10SC Shuttle car	1,200,000	550,000	75,000	75,000	550,000
Joy 10SC Shuttle car	1,200,000	550,000	75,000	75,000	550,000
Fletcher RR11 roof bolter	1,300,000	445,000	98,000	445,000	445,000
Fletcher RR11 roof bolter	1,300,000	445,000	445,000	445,000	445,000
Stamler BF 17 feeder breaker	1,250,000	480,000	480,000	480,000	480,000
S&S 488 battery scoop	1,200,000	255,000	55,000	55,000	255,000
Power centre	450,000		900,000	900,000	900,000
Proximity detection	212,550		425,100	425,100	425,100
Parts car	14,000		14,000	14,000	14,000
Duster	20,000		20,000	20,000	20,000
Total	19,221,550	6,640,000	3,242,100	3,589,100	4,739,100

The cost savings evident from the table above derived from the existing equipment on-site is substantial. To acquire 3 production units new, costs almost US\$60M while to compile 3 production units from rebuilt equipment, assuming items can be acquired, is around US\$20M. This compares to the estimated capital cost of refurbishing existing equipment and buying additional items of equipment as required for 3 production units of just US\$11.6M.

Mine Plan

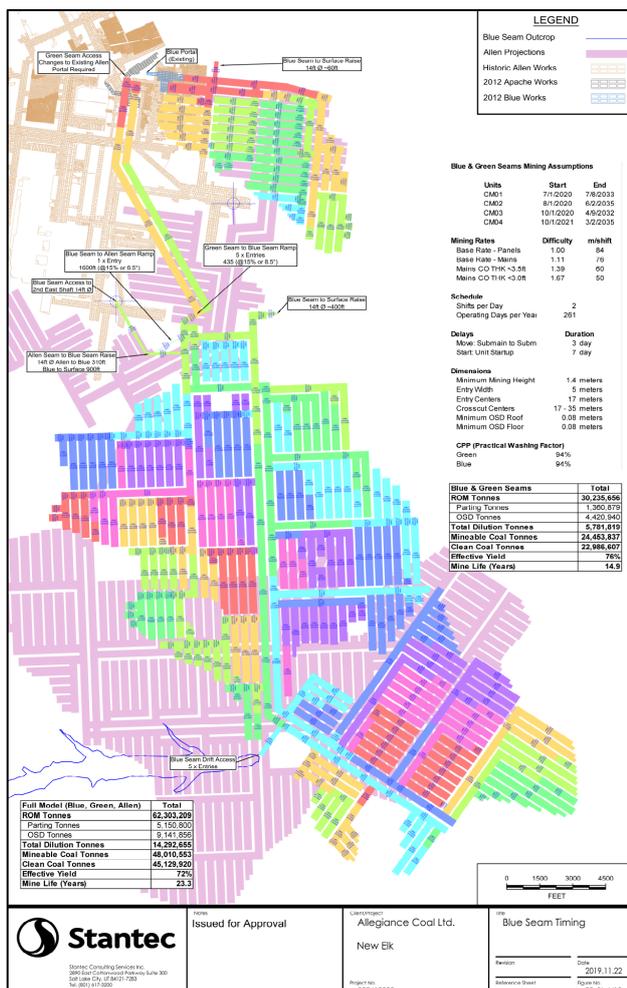
The entire New Elk coal resource is around 656Mt (refer to the Cautionary Statement on page 4) of which 268Mt has been declared in accordance with the JORC Code from just 3 of the 8 coal seams.

The Mine Plan was driven by coal seam height, and coal quality that would meet the requirements of steel mills and to that end focussed on the 3 following seams:

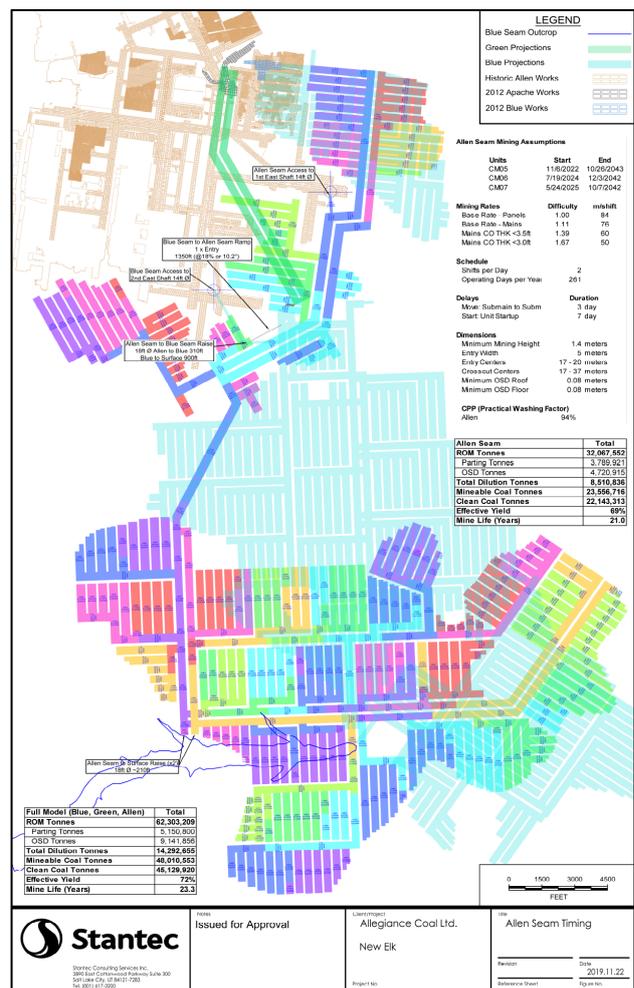
- The shallow Blue seam (which is already established with portal entries and main headings);
- The bottom or deepest Allen seam; and
- The very shallow Green seam used as an access road to the point at which new declines can be established into the southern area of the Blue seam, and then into the Allen seam.

The Mine Plan was designed with a minimum coal seam height of 4.0 foot allowing for 6 inches of unavoidable out-of-seam dilution. Therefore, a mining height of 4.5 foot provides ample room for conventional lower profile underground mining equipment to operate remaining in the coal seam, and for the Mine to be adequately ventilated.

Limiting coal recovery to 4.0 foot does reduce the recovery of some coal, but the gains in retaining a high yield far outweigh loss of coal resource. This is the primary benefit of a large resource base - a mine plan can be designed around high yielding coal but still with a large recoverable resource.



Blue seam mine plan with Green access to the south



Allen seam mine plan accessed from the Green seam

Mining commences in the Blue seam where the portal entries (belt road, ventilation, and men and materials) are already established and the main headings already advanced 150m underground. Two super sections are set-up in the Blue seam on commencement with the second starting one month after the first. At the same time, the Green seam is accessed via the original Allen seam portals, and a single super section will commence mining approximately 3 months later.

The primary purpose of mining the Green seam is to drive headings in coal southwards to reach a point where a decline can be established into the southern portion of the Blue seam, and from the same drift, a decline into the lower Allen seam. A consequence of the 4.0 foot coal seam height cut-off, is that the Blue and Allen coal seam areas are not contiguous, separated by areas of coal less than 4.0 foot.

There is a significant area of 4.0 foot plus coal to the north of the current Blue seam mine plan which is not incorporated into the Mine Plan (or the images above) pending securing additional mineral and surface rights. The Company is working to secure these additional coal resources which, if successful, will have the effect of enabling the mine plan for the Blue seam to be considerably extended.

The mine plan is staged, commencing at 0.4Mctpa in the first six months, 1.2Mctpa in the second year, and gradually increasing to peak production in year 8 of 3.1Mctpa, and then averaging 2.7Mctpa for 11 years before gradually decreasing to conclude production early in year 24.

The staged production is limited in the first 24 months by a restriction to haul coal from the CHPP to the rail loadout on a sealed road for 21 miles. During the first 24 months however, the Mine Plan contemplates relaying railway track along a railway spur that was in place until the 1970s, prior to the railroad owner uplifting the track and relocating it following the original closure of the Mine. Once the track is re-laid, production can ramp, limited only by the front-end feed capacity of the CHPP.

Production Schedule

Table 9 below highlights the Mine Plan production schedule over the life of mine including ROM coal production and clean coal (coal sales).

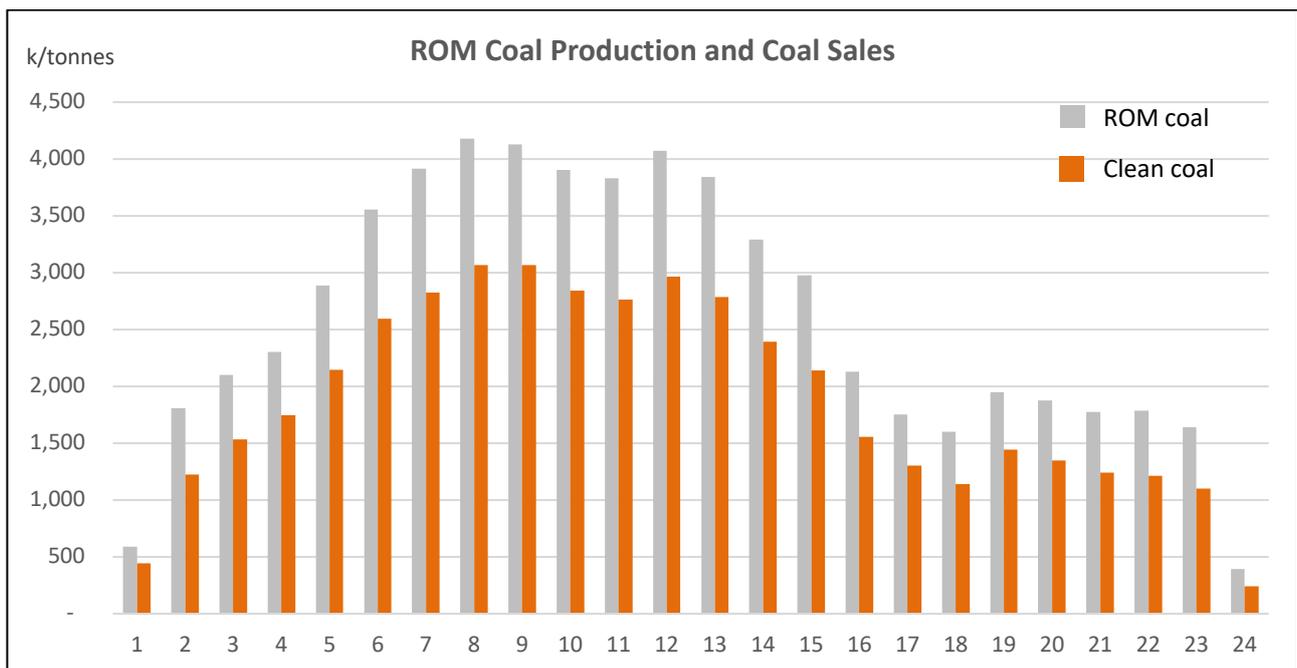


Table 9: production schedule (note 1 above commences 1 July 2020 and is therefore just 6 months of production)

In year one, production commences in July 2020 and is therefore just 6 months of production with 2 production units in the Blue seam and the third commencing in month 4 of that 6 month period in the Green seam. By year 5, the mine will have 7 production units operating (highlighted in the mine plans) at peak production.

The Company intends to review the Mine Plan again prior to the commencement of mining by adding new production to maintain steady state production of 3Mctpa, until mine closure. Mention has already been made in this announcement of coal in the Blue seam to the north of the current Mine Plan, and there are substantial areas of coal in the Green seam which at this stage have been ignored other than for the purpose of driving headings to access the southern area of the Blue seam and to access the Allen seam.

Labour Requirements

The mine will operate two, 9 hour production shifts per day and one overlapping maintenance shift per day for equipment maintenance, advancement of conveyor belts and section power, and general mine repairs and other idle work. The production schedule is based on a total of 261 production days per year.

Each production unit will have 11 crew members totalling a production workforce of 210 once the mine reaches peak production with 7 production units. An additional 86 underground support employees and 43 general employees will be engaged at full production, resulting in a total of 339 employees. The Company intends to recruit Appalachia coal miners to form the nucleus of each production unit, supplementing the crew numbers with local, less experienced mine workers.

Coal Handling and Preparation Plant

Coal Preparation

The CHPP circuitry consists of;

- Heavy media vessel;
- Heavy media cyclones; and
- Spirals.

The CHPP has a nameplate feed rate of 727tph. The CHPP was reviewed by Performance Industries, Inc, a specialist coal processing consultancy from West Virginia, USA, whose principals undertook a review of the CHPP when the mine was acquired by Cline.

The current circuit provides:

- Raw coal is separated by screens into various size fractions;
- The coarse material is sent to the Heavy Media Vessel;
- The next size fraction down is sent to the Heavy Media Cyclone;
- The remaining raw product is sent to the Classifying Cyclones;
- The plus 100 mesh is sent to the Spiral Circuit; and
- The minus 100 mesh material that is separated from the raw coal feed via the classifying cyclones is discarded and sent to the thickener for refuse disposal.

The minus 100 mesh size fraction is 8 percent of the plant feed. Currently there is no equipment in the CHPP to process this ultra-fine portion of the plant feed and therefore, the Study sees the installation of a fine coal

circuit in the plant using eight 500 cubic foot conventional flotation cells. In addition, a screen-bowl dryer will be added to dewater the ultra-fine coal recovered and at least a portion of the spiral clean coal as well.

Further modifications will be made to the meter belt presses in the CHPP which are not adequate to process the amount of material being removed from the thickener underflow at the rated capacity on the flowsheet. Replacing with 3-meter belt presses along with the recovery of the fine coal in the flotation circuit will increase the feed rate to the flowsheet rating and allow for a refuse product to be produced that is capable of being handled. The capital cost of upgrading the CHPP is summarised in Table 10 below.

Table 10: CHPP capital items		US\$
Raw coal handling		878,355
Plant refurbishment		758,838
Belt press		691,336
Radial clean coal stacker		450,184
Flotation circuit		3,484,268
Water only cyclone circuit		736,680
Total		6,999,661

It is anticipated that some items of the CHPP upgrade can be purchased second-hand and that the likely upgrade cost will be nearer US\$5M.

Coal Handling

The raw coal feed to the CHPP is by way of a feed tunnel with four vibratory feeders. Currently, both the Allen seam slope belt and the Blue seam product belt are deposited onto the ROM pile via the same stacking conveyor. In order to process the Allen and Blue/Green seams through the plant independently, the coal will be produced at different times with mobile equipment used to manually separate the piles.

The clean coal product goes out of the CHPP on a single conveyor deposited onto the clean coal pile. This conveyor extends across the road to a single stacking tube. In order for the Allen and Blue/Green seams to be processed and shipped separately, the coal will be loaded separately into the two, 12,500t silos.

Coal Quality & Pricing

Quality

New Elk coal will be washed at an SG of 1.50 to produce a target 9% ash, high volatile hard coking coal, at an average life-of-mine saleable coal yield of 72%.

Table 11: New Elk Coal Quality		Units	Typical HVB Specs	Blue Seam	Allen Seam
Proximate	Ash	%	<9	9.0	9.0
	Volatile matter	%	34 – 37	35.4	36.4
	Sulphur	%	0.75 - 1.3	0.60	0.60
Rheology	Free swell index		7 - 9	6 - 7	7 – 9
	Maximum fluidity	ddpm	20k - 30k	25k	30k+
	Dilatation	%	70 - 220	140	220
Ash chemistry	Phosphorus	%	0.004 - 0.009	0.09	0.06
	Base acid ratio	%	0.14 - 0.17	0.28	0.24
	CSR (calculated)		45 - 54	44	49
Petrography	RoMax		0.90 - 1.0	0.87	0.87
	Strength index		3 - 3.5	3.06	3.19

Kobie Koornhof & Associates Inc (**Koornhof**), a respected coal market specialist with particular expertise in North American coals, provided the Company with an analysis of New Elk hard coking coal by reference to US high volatile B hard coking coals (**HVB HCC**), summarised in Table 11 above and discussed in this section. According to Koornhof, the target Blue and Allen seams compare favourably with representative quality ranges for HVB HCC, in particular as it relates to volatile matter, reflectance and rheology. The Allen seam displays very good rheology, which is superior to that of most HVB HCC.

Koornhof noted that with a large number of HVB HCC in the market (although likely diminishing in a lower coal price environment), it is important to focus on a coal's distinguishing features. In the case of the New Elk coals, the key quality parameter relates to the low sulphur content.

While 9% ash is regarded as a typical ash by reference to the majority of hard coking coals on the seaborne market, because US hard coking coals (sold from the east coast of the US), typically deliver a lower ash compared to Australia, a small penalty is expected if New Elk coal is also sold via the east coast of the US. That said, the Mine can deliver a lower ash product for a lower yield if it is economically incentivised to do so, otherwise the Company is inclined to suffer a small penalty but gain volume and value from a better yield to more than off-set the penalty. In addition, as is discussed in the 'Logistics' section of this announcement, if New Elk coal is sold via the west coast of the US direct into the Asian market, it is unlikely a ash penalty would be applied.

The ash chemistry for both seams is inferior to HVB HCC and phosphorus content is much higher than that of most US coking coals, which in the European markets will incur penalties but again, if sold via the west coast of the US direct into the Asian markets, it is likely no penalties will apply. Despite a higher than normal base acid ratio, the CSR falls within the required range for HVB HCC. While reflectance is low in the range 0.85 - 0.90, the higher FSI and dilatation in the Allen seam will off-set the lower rank but will not in the Blue seam which might expect a small penalty.

In summary, Koornhof concluded that both the Blue and Allen seams will be accepted as HVB HCC and the Allen seam in particular will gain a net pricing premium.

Pricing

In addition to coal analysis, Koornhof provided the Company with a price guide for New Elk coal. The pricing model for the Blue and Allen seams took into consideration the quality assessment provided earlier, factoring in the price relationships between the various HCC brands.

In determining price competitiveness, a number of penalties and premia were applied by Koornhof to the quality of the two seams in relation to average qualities for HVB HCC and in particular:

- Sulphur: a premium of 0.75% of price for every 0.1% of sulphur below the average sulphur of 0.95%;
- Ash: a penalty of 1.75% of price for every 1% of ash above the average ash content of 8%;
- CSR: a penalty of 0.5% of price for every 1% of CSR below the average CSR of 49.

Table 12 below summarises Koornhof's price outlook for the Blue and Allen seams as derived from prices for premium low vol HCC (**PLV HCC**) and US HVB HCC, incorporating the various penalties and premia.

Table 12: Benchmarking medium and long term pricing for the Blue and Allen coal seams				
	Medium term pricing 2020 (US\$/t)		Long term pricing 2021 onwards (US\$/t)	
	Blue seam	Allen seam	Blue seam	Allen seam
PLV HCC	160.00	160.00	165.00	165.00
US HVB discount 17%	27.20	27.20	28.05	28.05
US HVB price	132.50	132.50	136.95	136.95
Sulphur premium	3.49	3.49	3.59	3.59
CSR penalty	-3.32	0.00	-3.42	0.00
ASH penalty	-2.32	-2.32	-2.40	-2.40
Total penalties/premia	-2.16	1.16	-2.23	1.20
New Elk price	130.64	133.96	134.72	138.15

For 2020, assuming an average price of US\$160/t for PLV HCC, and based on the price relationships in Table 12 (with HVB HCC priced at 83% of PLV HCC), an average price of US\$133/t can be expected for HVB HCC. After allowing for quality adjustments, according to Koornhof, Blue and Allen seam pricing is estimated at US\$130.64/t and US\$133.96/t respectively.

In the longer term, Koornhof predicts prices of US\$150/t - US\$180/t with short term swings from US\$130/t - US\$200/t. Taking an average price of US\$165/t, this translates to a price of US\$137/t for HVB HCC. On that basis, according to Koornhof, Blue and Allen seam pricing is estimated at US\$134.72/t and US\$138.15/t, respectively. For the purposes of the Study however, the Company has used Koornhof's short-term pricing of US\$130.64/t and US\$133.96/t respectively throughout the forecast period.

Logistics

For the first 24 months of production, coal will be conveyed from the CHPP to a rail loadout and siding adjacent to railway track owned by BNSF Rail, in 30t road trucks on a sealed road for 21 miles. During this period, track will be re-laid from BNSF's line to the CHPP after which train sets will be loaded from the two 12,500t silos located at the Mine.

Coal will then be railed on BNSF's line 850 miles to Pasadena Deepwater Terminal located in the Bay of Houston (Gulf of Mexico). The likely market for New Elk coal from this port will be Europe and South America, with occasional vessels from Asia that either come through the Panama canal or around the Cape Horn.



Pasadena Deepwater Coal Terminal

Two railroad companies operate on BNSF's line to the Bay of Houston: BNSF and Union Pacific. This has allowed for competitive rail rates in hauling the coal from the CHPP to the coal terminal.

The Company is also considering moving coal to the west coast of North America, in particular Longbeach Coal Terminal in California and/or the Port of Guaymas inside the Baja California Peninsula of Mexico. While the rail is further and the rail costs are likely to be more expensive than to the Bay of Houston, it is likely the Asian steel mills will pay a premium on east coast US coal prices for New Elk coking coal offsetting the higher rail costs. Having more direct access to the Asian steel markets, which accounts for 67% of steel supply and demand, would give New Elk coking coal a competitive advantage over east coast US hard coking coals.

Capital

The start-up capital expenditure is summarized in Table 13 below. Start-up capital expenditure is modest due to the Mine being fully built. Pre-production activities therefore are focussed on refurbishing the equipment, rehabilitating the Mine and upgrading the CHPP.

Table 13: Start-up Capital		US\$M
Mine access and ventilation		2.6
Mine infrastructure		7.4
Mining equipment for 3 super-section production units		13.4
CHPP upgrade inserting a fine coal circuit		5.0
Total Start-up Capital (excludes contingency)		28.4

The sustaining capital expenditure over the life of mine is summarized in Table 14 below. The rail spur will be installed in the first 24 months of production providing the ability for the Mine to ramp-up production. The balance of the sustaining capital expenditure is predictable relating to more infrastructure and mining equipment to expand the Mine and maintain the production rate.

Table 14: Sustaining Capital		US\$M
Mine access and ventilation		23.4
Mine infrastructure		160.5
Rail spur		20.0
Mining equipment		155.1
Total Sustaining Capital (excludes contingency)		359.0

Operating Costs

The Mine operating costs are summarized in Table 15 below.

Table 15: Operating Costs Life of Mine		US\$/Saleable t
Site Costs		
Mining		30.2
Coal processing		4.5
General and administration		1.2
Transportation and Marketing		
Marketing costs		0.2
Haulage		0.2
Rail to port and loaded		37.4
Total all-in cash cost FOB pre-interest and tax		73.7

Underground mine operating costs are influenced most by:

- Coal seam height (the extent of out-of-seam dilution);
- Geology (the extent of igneous intrusions); and
- Roof and floor conditions.

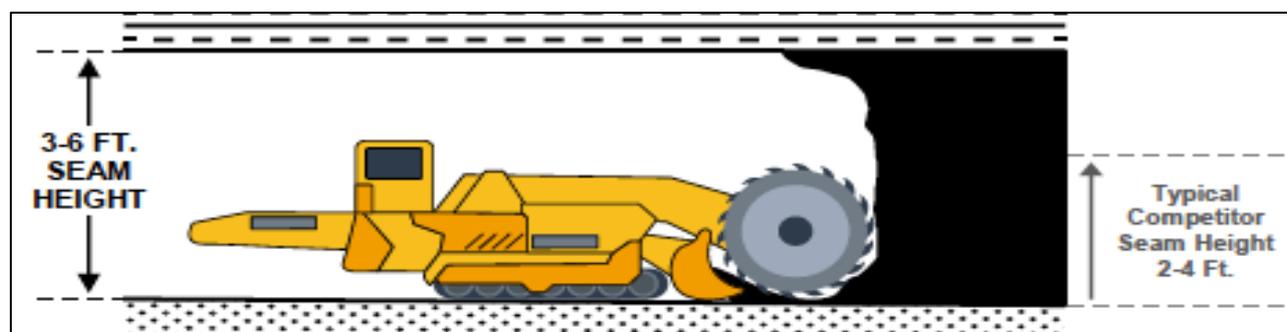
The sum of these inputs dictates what is a reasonable advance rate, what is involved in securing the roof and the likely yield of clean coal from ROM coal.

The Mine has competent roof, ranging from sandstone to siltstone to mudstone, and limited structure. Consequently, average advance rates per shift of 250 feet (in main entries) and 275 feet (in panels) for a 'walk through super section' was assumed in the Mine Plan.

The Mine Plan was designed at a 4.0 foot coal thickness cut-off allowing for 6 inches of unavoidable out-of-seam dilution, which will deliver an excellent CHPP average LOM yield estimated to be around 72%. The key objective in doing this is to mine 'in the coal seam' and avoid out-of-seam dilution.

Most US metallurgical coal mines do not have this luxury and mine in 2.0 to 4.0 foot of coal, but still have to mine to a 4.5 foot horizon to enable conventional equipment to efficiently operate in the mine, and to allow the mine to be appropriately ventilated. This means most US underground metallurgical coal mines must mine an equal amount, if not more, rock to coal, driving the ROM to clean coal yield to below 50% and the impact that this has on cost, is significant.

New Elk is fortunate in that the scale of its resource has enabled Stantec to design a mine plan in 4.0-foot plus coal with a large resource base to allow for a long mine life. The image below illustrates a continuous miner operating in 4.0-foot plus coal compared to the normal US coal mines of 4.0-foot and less.



Financing

The Board of Allegiance considers that there is a reasonable basis to assume the necessary funding for commencement of production will be able to be obtained when required, because of (but not limited to) the reasons outlined below.

The Company is engaged with several mining investment houses who are evaluating investing in NECC by:

- Acquiring an equity interest in NECC, and this includes potential off-take partners; and
- Providing debt facilities to NECC.

As advised in the 15 July Announcement, the agreement with Cline will incorporate a purchase price of US\$1 for all the shares in NECC, an upfront debt repayment of US\$8 million in cash and US\$3 million in Allegiance

shares, with the balance of some US\$30 million of (subordinated) debt repaid from operating cash flow. These projected cash flows have been factored into the Study.

The Company is also engaged with its shareholders, and several institutions who have expressed an interest in providing part of the start-up capital by way of a private placement in the Company.

Project Economics

In addition to the coal production inputs discussed throughout this announcement, additional inputs into the key performance indicators of the Project economics are set out in Table 16 below.

Table 16: Additional inputs to Key Performance Indicators	Units	Value
Colorado State severance tax (first 300,000 per quarter exempt)	US\$/t	0.85
US Federal and State Corporate tax rate	%	25.63
AUD:USD exchange rate	US\$	0.70

The Project key performance indicators are summarized in Table 17 below.

Table 17: Key Performance Indicators	Units	Value
Pre-interest and -tax NPV _{8%}	A\$M	1,170
Pre-interest and -tax IRR	%	130
Post-tax NPV _{8%}	A\$M	799
Post-tax IRR	%	77

Sensitivity analysis was undertaken to determine the effect on the post-tax NPV_{8%} and the IRR. The results of the sensitivity analysis are set out in Tables 18 and 19 below.

Table 18:		Operating and Capital Costs (US\$M)							
NPV (US\$M)	559	2,610	2,983	3,356	3,729	4,102	4,474	4,847	
Price US\$/Product tonne	93.77	91.45	72	52	30	9	-12	-34	-55
	107.17	104.51	269	250	230	210	189	169	149
	120.56	117.58	449	430	410	390	370	350	330
	133.96	130.64	618	599	579	559	539	519	499
	147.36	143.70	801	781	761	741	721	702	682
	160.75	156.77	984	963	943	923	902	883	863
	174.15	169.83	1,157	1,137	1,116	1,096	1,076	1,055	1,035

Table 19:		Operating and Capital Costs (US\$M)							
IRR (%)	77%	2,610	2,983	3,356	3,729	4,102	4,474	4,847	
Price US\$/Product tonne	93.77	91.45	17%	14%	12%	9%	8%	6%	5%
	107.17	104.51	46%	39%	33%	29%	25%	22%	20%
	120.56	117.58	84%	70%	59%	51%	45%	40%	35%
	133.96	130.64	127%	105%	91%	77%	67%	59%	52%
	147.36	143.70	184%	148%	127%	109%	95%	85%	74%
	160.75	156.77	276%	215%	175%	147%	125%	111%	99%
	174.15	169.83	414%	309%	244%	201%	170%	146%	126%

Tables 18 and 19 show that the New Elk Project performance indicators are sensitive to changes in commodity price and operating and capital costs. The Project can sustain a 30% decrease in product selling price resulting in a post tax NPV_{8%} of US\$9M and 9% post tax IRR. The Project can sustain a 30% increase in capital and operating costs resulting in a post tax NPV_{8%} of US\$499M and 52% post tax IRR.

Risks

The key risks in relation to the New Elk Project are summarised below.

The risks and uncertainties described below are not intended to be exhaustive. There may be additional risks and uncertainties that the Company is unaware of or that the Company currently considers to be immaterial, which may affect the Company.

Specific risks relating to the Company

Additional requirements for capital:

- The Company will require additional capital to fund further exploration or development of its existing or new projects, including the New Elk Coal Project and its Telkwa Project;
- The Company may seek to raise further funds through equity or debt financing, joint ventures, production sharing arrangements or other means. Failure to obtain sufficient financing for the Company's activities and future projects may result in the delay and indefinite postponement of exploration, development or production on the New Elk Coal Project and/or the Telkwa Project or even loss of a property interest;
- There can be no assurance that additional finance will be available when needed or, if available, the terms of the financing might not be favourable to the Company and might involve substantial dilution to Shareholders.

Mine development risk:

- Possible future development of a mining operation at the Company's existing or new projects, including the New Elk Coal Project, is dependent on a number of factors including, but not limited to, the acquisition and/or delineation of economically recoverable mineralisation, favourable geological conditions, receiving the necessary approvals from all relevant authorities and parties, seasonal weather patterns, unanticipated technical and operational difficulties encountered in extraction and production activities, mechanical failure of operating plant and equipment, shortages or increases in the price of consumables, spare parts and plant and equipment, cost overruns, access to the required level of funding and contracting risk from third parties providing essential services;
- If the Company commences production, its operations may be disrupted by a variety of risks and hazards which are beyond its control, including environmental hazards, industrial accidents, technical failures, labour disputes, unusual or unexpected rock formations, flooding and extended interruptions due to inclement or hazardous weather conditions and fires, explosions or accidents. No assurance can be given that the Company will achieve commercial viability through the development or mining of any of its projects, including the New Elk Coal Project.

Estimation of resources and reserves:

- There is a degree of uncertainty to the estimation of mineral resources and ore reserves and corresponding grades being mined or dedicated to future production. Until mineral resources or ore reserves are actually mined and processed, the quantity of mineral resources and ore reserves must be considered as estimates only. In addition, the grade of mineral resources and ore reserves may vary depending on, among other things, ground conditions. Any material change in quantity and grades of mineral resources, ore reserves, may affect the economic viability of the properties. In addition, there can be no assurance that coal properties demonstrated in small-scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production;

- Fluctuation in the price of coal, results of drilling, metallurgical testing and the evaluation of mine plans subsequent to the date of any mineral resource estimate may require revision of such estimate. Any material reductions in estimates of mineral resources and/or ore reserves, could have a material adverse effect on the Company's financial condition.

Title:

- The claims comprising the New Elk Coal Project are governed by contracts relating to renewal and forfeiture. There is no guarantee that current or future lease contracts will be renewed;
- The contracts may be subject to a number of specific conditions including payment of rent and meeting minimum annual extraction commitments. The inability to meet these conditions in relation to the coal licenses could affect the standing of these coal licenses or restrict their ability to be renewed, adversely affecting the operations, financial position and performance of the Company.

Permits to Mine:

- Mining operations in North America are strictly controlled by permits to operate, governed by legislation. There can be no guarantee that current or future licences and applications, conversions or renewals to operate will be approved;
- The permits will be subject to a number of specific legislative conditions including payment of fees and meeting minimum performance conditions. The inability to meet these conditions could affect the standing of the permits or restrict their ability to be renewed, adversely affecting the operations, financial position and performance of the Company.

Sovereign and political risk:

- The activities related to the New Elk Coal Project will be governed by United States federal and state law. The Directors consider that the US government supports the development of natural resources by foreign investors. However, there is no assurance that future political and economic conditions in the USA will not result in the US government adopting different policies regarding foreign development and ownership of mineral resources. Any changes in policy may result in legislative changes affecting ownership of assets, taxation, rates of exchange, environmental protection, labour relations, repatriation of income and return on capital, all of which may adversely affect the operations, financial position and performance of the Company;
- Any potential future US operations of the Company are subject to a number of risks, including: potential difficulties in enforcing agreements and collecting receivables through foreign systems, potential difficulties in protecting rights and interests in assets, increases in costs for transportation and shipping, and restrictive governmental actions, such as imposition of trade quotas, tariffs and other taxes.
- Any of these factors could materially and adversely affect the Company's business, results of operations and financial condition.

Environment:

- The New Elk Coal Project is subject to laws and regulations regarding environmental matters and the Company will require approvals from and compliance with all relevant authorities;
- The Company is unable to predict the effect of additional environmental laws and regulations that may be adopted in the future, including whether any such laws or regulations would materially increase the Company's cost of doing business or affect its operations in any area.

No market sector diversification:

- As the Company will be entirely exposed to the mining, and in particular the coal mining, sector, its business performance may be affected should this sector perform poorly.

General risks relating to the Company

Economic risks:

- General economic conditions, introduction of tax reform, new legislation, movements in interest and inflation rates and currency exchange rates may have an adverse effect on the Company's business activities and potential exploration and development programs, as well as on its ability to fund those activities.

Force majeure:

- The Company's projects now or in the future may be adversely affected by risks outside the control of the Company, including labour unrest, civil disorder, war, subversive activities or sabotage, fires, floods, explosions or other catastrophes, epidemics or quarantine restrictions.

Market conditions:

- Share market conditions may affect the value of the Company's Shares regardless of the Company's operating performance. Share market conditions are affected by many factors such as:
 - general economic outlook;
 - introduction of tax reform or other new legislation;
 - interest rates and inflation rates;
 - changes in investor sentiment toward particular market sectors;
 - the demand for, and supply of, capital; and
 - terrorism or other hostilities.
- The market price of securities can fall as well as rise and may be subject to varied and unpredictable influences on the market for equities in general and resources stocks in particular. Neither the Company nor the Directors warrant the future performance of the Company or any return to Shareholders arising from the transactions the subject of this Notice or otherwise.

No guarantee in respect of investment

- The above list of risk factors ought not to be taken as exhaustive of the risks faced by the Company or by investors in the Company. The above factors, and others not specifically referred to above may, in the future, materially affect the financial performance of the Company and the value of the Company's securities.

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About Allegiance Coal

Allegiance Coal is a publicly listed (ASX:AHQ) Australian company based in Vancouver, BC Canada, and is focused on developing and mining metallurgical coal projects in North America and Western Canada. The Company is developing the Tenas metallurgical coal project, located in northwest British Columbia, in partnership with Itochu Corporation. The Tenas Project has a completed definitive feasibility study and is now in the permitting process targeting H2 2022 for the commencement of production. On 15 July 2019, the Company announced the planned acquisition of the New Elk hard coking coal mine, a fully permitted and constructed mine located in southeast Colorado, US. The Company intends to complete the acquisition of the New Elk Project in calendar Q1 2020 and return the mine to production mid-2020.

Competent Persons Statement

The estimate of coal resources or reserves in this announcement in respect of the New Elk Project is based on and fairly represents, information and supporting documentation prepared by Mr Andrew Robinson and Mr R Kevin Whipkey. Mr Robinson is a certified Professional Geologist in the American Institute of Geologists and is a registered Professional Geologist in Kentucky. Mr Whipkey is a registered Professional Engineer in the US States of Colorado, Kentucky, Ohio, Utah and West Virginia. Mr Robinson and Mr Whipkey are independent consultants to the Company, and have sufficient experience which is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which they undertook to qualify as Competent Persons as defined in the JORC Code (2012 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves"). Mr Robinson and Mr Whipkey as competent persons for this announcement have consented to the inclusion of the information in the form and context in which it appears herein.

Cautionary Statement

Investors should note that other than exclusivity to the planned acquisition to 14 July 2020, the material provisions in relation to the potential acquisition of New Elk are and remain non-binding and that an investment decision should not be made on the basis of this information. There can be no certainty that any binding agreements will be reached, or that any concluding transaction will eventuate.

APPENDIX - JORC TABLE 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (e.g., 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 representativeness 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 30g 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. 	<ul style="list-style-type: none"> Coal samples derived from solid rock core using detailed physical observation by drillers and/or geologists, engineers of rock core. Geophysical logging employed on various drill holes across the property to aid in proper coal seam identification and coal sampling collection.
Drilling techniques	<ul style="list-style-type: none"> Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g., 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.). 	<ul style="list-style-type: none"> Drill holes used in geologic models were vertical continuous wireline core holes drilled from surface to various targeted coal seams, with a total of eleven (11) major coal horizons intercepts. Number of drill holes used to calculate resources for the individual seams range from approximately 210 to 480. Drill hole depths typically range between 300 feet (ft) and 1,300ft with a core diameter of approximately 48 mm (2"-NQ-size).
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drill sample recovery of the coal seam is often documented on the core logs. If there is a core loss the driller and/or geologist typically noted how much was lost and at what interval the loss likely occurred. A relatively high percentage recovery (>80 percent) of the samples has been noted during the geologic investigation of this project. In many instances, the drill holes were geophysically logged and that data was used to verify loss and recovery.
Logging	<ul style="list-style-type: none"> 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 photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Rock and coal cores were described in detail by the drilling contractors across the property, which is typical practice in the coal industry. Geophysical logging has been performed on various drill holes across the property during numerous drilling programs over the years. Where lithological descriptions were inadequate for seam correlations, the available geophysical logs were used to verify the correct coal seam horizons, coal seam thicknesses (coal/parting intervals) and rock intervals between the coal horizons.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> General practice is for the coal cores to be placed in a wooden core box and transported either to a laboratory or a company access-controlled storage facility. The coal sample intervals are typically separated by a geologist or competent person based on predetermined project goals and/or mining scenarios. When available,

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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 representativeness 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. 	<p>geophysical logs are used to spilt separate coal samples from other carbonaceous containing strata.</p> <ul style="list-style-type: none"> Once the coal samples are separated, they are then bagged, labelled and accompanied to the laboratory with a detailed laboratory instruction sheet. This instruction sheet outlines the desired analytical suite to be performed on each individual sample.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Coal quality values were obtained utilizing ASTM laboratory standards and practices.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sampling procedures were not able to be verified. Copies of original laboratory analysis sheets were made available for the analyses provided. A representative selection of laboratory results was verified in the data sets.
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The drill holes have typically been surveyed by a local surveying company, but the percentage of holes surveyed was not able to be verified. Location information, such as elevations carried out to two decimal places indicate actual surveying results.
Data spacing and distribution	<ul style="list-style-type: none"> 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. Whether sample compositing has been applied 	<ul style="list-style-type: none"> Points of observation are predominantly within the 3,960ft area of influence requirement for Indicated coal resources per the criteria presented in USGS Circular 891, the system of assurance classification used in the U.S.A. which is deemed appropriate by the Competent Person, in accordance with the 2014 Guidelines for compliance with the JORC Code (2012). To further clarify, drill hole spacing is deemed adequate for resource evaluation of the property and most of the resource falls within the categories of Indicated or Measured signifying a high degree of confidence.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All drill hole attitudes were advanced the same as vertical (drilling steel tends to wander off true vertical as the holes increases in depth) and the reported lithological thicknesses are, for all practical purposes, equivalent to true thicknesses due to the relatively flat-lying geologic structure of the region (approximately 3° dip to the northeast).
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Typically, coal cores are transported via pick-up truck from the drill site to the laboratory or a company access-controlled storage facility. Additional security methods are deemed unnecessary and not commonly employed.

Criteria	JORC Code explanation	Commentary
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Extensive internal checks and comparisons between data has been undertaken to verify and validate data for this resource estimate.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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 license to operate in the area. 	<ul style="list-style-type: none"> Mineral ownership is held in the form of a combination of coal ownership tracts and leased areas. Mineral ownership in this area is often separate from the surface ownership but can be combined in fee tracts, as evidenced by the fee parcels controlled by New Elk. The largest leasehold is through the Colorado Division of Wildlife and Wildlife Commission (DOW), which totals nearly 30,000 acres. Mining and reclamation permits for the most recent mining operations within the property are current.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Various coal companies/landowners have conducted exploration projects on the property over the years. This included the geophysical logging of the drill holes. Geologic information was also obtained from CBM holes advanced within the property.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> "Geologic Type" can be categorized as "low" geologic complexity. Minor faulting, seam "rolls" and igneous dike/sill intrusions have been noted in the area of the property but are not considered significant. The property is located within the Raton Basin which runs from Colorado to New Mexico and contains approximately 20,000 to 25,000 feet of sedimentary rock sequence. The geologic age of the lithologies associated with the minable coal bearing strata underlying the New Elk Mine Property is of Late Cretaceous to Paleocene. Structurally, the lithologies underlying the property dip to the northeast at approximately 3°.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drill hole information included driller's lithologic logs, geologist logs, and geophysical logs (an estimated 75% of the holes have geophysical logs).
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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. 	<ul style="list-style-type: none"> No cutoff grades are applied to the exploration data. Weighting of sample intervals is by sample length only.
Relationship between mineralisation widths and	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. 	<ul style="list-style-type: none"> All exploration drilling and sampling is vertically orientated and, given the 3° seam gradient or less, these intercepts effectively represent true thickness of the target coal seams.

Criteria	JORC Code explanation	Commentary
intercept lengths	<ul style="list-style-type: none"> 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 (e.g. 'down hole length, true width not known'). 	<ul style="list-style-type: none"> Sampling is obtained directly from the rock core taken from each drill hole and there is a clear contact point between the coal sampled and the sedimentary rock interface. Geophysical logs, when available, were used to further define coal sample collection points.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Diagrams of the mineralized zones have been developed and are provided in a separate technical report.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Exploration data allows for the reporting of coal resources on the New Elk Mine Property as investigated by Stantec.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported, including (but not limited to): <ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Past and current mine maps (underground workings) were provided to Stantec. Limited outcrop measurements were also available at the time of this investigation.
Future work	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions, or large-scale step-out drilling). 	<ul style="list-style-type: none"> Resource confidence is such that further exploration activity is used primarily to investigate locations that fall "outside" the Measured/Indicated resource areas.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The data employed in the resource estimates has been checked for inaccuracies and transcription errors and corrected where necessary.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. 	<ul style="list-style-type: none"> Andrew Robinson is the Competent Person for the geology and estimation of mineral resources; he relied upon a qualified professional, Kevin Whipkey, who is the Competent Person for the mining and determination of coal reserves, to make a site visit to the property on August 6-7, 2019.
Geological interpretation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Coal seams were correlated by constructing lithological cross-sections and comparing coal seams and other lithologic units for geometry and continuity.
Dimensions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Coal resources were calculated on the currently controlled property, which totals between 34,000 and 35,000 acres.
Estimation and modelling techniques	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Modeling was conducted using Carlson™ software, a widely used gridded seam modeling program.

Criteria	JORC Code explanation	Commentary
	<p>points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</p> <ul style="list-style-type: none"> • 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 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 data if available. 	
Moisture	<ul style="list-style-type: none"> • Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> • Moisture content of the coal seams is considered uniform, given that as-received coal moisture content typically falls within a narrow range. • For the Blue Seam, this can range from 3.5 to 6.0 percent, but more consistently ranges between 3.8 to 4.8 percent. • For the Allen Seam, the range is typically between 4.0 to 5.0 percent.
Cut-off parameters	<ul style="list-style-type: none"> • The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> • A minimum coal thickness of 3.0 feet was used for calculating in-place coal resources.
Mining factors or assumptions	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • A minimum coal thickness of 4.0 feet was used in the mine planning process for determination of coal reserves, with exceptions for accessing adjacent coal resource blocks and developing to ventilation shaft locations where required. • A minimum barrier of 300 feet was maintained between existing mine workings and projected mining in the Allen Seam.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Coal resource estimates have not been constrained by metallurgical factors. • Reduced depth of cover resulting in the possible oxidation of coal only occurs in two small instances: during initial development in the Green Seam and when the south portal area is established for the Blue Seam where it outcrops.
Environmental factors or assumptions	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Coal resource estimates have not been constrained by environmental factors. • Stantec considered the current permits in place and those required in the future based on the mine plans and does not anticipate issues and/or problems to be experienced in the issuance of future permits. • Another consideration is the low probability for subsidence from underground mining due to the depth of cover and no secondary mining being planned.

Criteria	JORC Code explanation	Commentary
	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.	
Bulk density	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> In-situ coal densities were not available, therefore a conservative density of 82.5 pounds per cubic foot was used.
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie 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. 	<ul style="list-style-type: none"> The USGS Circular 891 criteria of 1,320ft from data points for Measured and 3,960ft for Indicated assurance categories was used for classifying resources. The Competent Person deemed this system to be appropriate in accordance with the 2014 Guidelines for compliance with the JORC Code (2012).
Audits or reviews.	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> Peer review by Stantec personnel was carried out on the geological interpretation. No external audit or review of the resource estimate for this model was carried out. The resource estimates are similar to those from previous studies performed with the same data; differences are resulting primarily from seam correlation discrepancies.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Relative accuracy of the resource estimates is dependent on the number of data points and the density and reliability of those data points. The New Elk property has a relatively high level of confidence in that 70% of the total resources are classified as Measured, and 78% of the total reserves are classified as Proven. In addition, this region of Colorado has been extensively mined in the past and the New Elk property has had mining in three coal seams.

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The New Elk resource estimates were carried out following the guidelines of the JORC Code (2012) by Stantec.

Criteria	JORC Code explanation	Commentary
Site visits	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The Competent Person for the Ore Reserves estimation is R. Kevin Whipkey. Mr. Whipkey visited the site on August 6 and 7, 2019 along with Allegiance Coal personnel.
Study status	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The study was completed to a feasibility study level. • Modifying factors considered material to the development and economic extraction of the coal resource have been taken into account.
Mining factors or assumptions	<ul style="list-style-type: none"> • The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore 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 (e.g. 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. 	<ul style="list-style-type: none"> • The New Elk project uses underground room and pillar mining to convert the Mineral Resource to an Ore Reserve. A total of seven production units utilizing the walk-between continuous miner super-section concept are employed in the mine plan. • Room and pillar mining is the most appropriate method for the New Elk operation due to the characteristics of the coal resource and the flexibility required in mining it. In addition, room and pillar mining is less capital intensive than longwall mining. • Pillar design for this mining method was performed based on the Analysis of Retreat Mining Pillar Stability (ARMPS) method developed by the National Institute for Occupational Safety and Health (NIOSH) for use in the design of pillars for room and pillar retreat mining. Factors considered include depth of overburden, seam thickness and strength, and geometry of the mine projections. A minimum safety factor of 2.0 was maintained for conservatism, compared to the normally required safety factor of 1.5. Coal seam structure on the property typically dips 2 to 3 degrees to the north/northeast and does not impact pillar sizing. • A minimum coal thickness of 4.0 feet was used in the mine planning process for determination of coal reserves, with exceptions for accessing adjacent coal resource blocks and developing to ventilation shaft locations where required. A minimum of six inches of out-of-seam dilution was applied throughout the mine plan. A minimum mining height of 4.5 feet was used in the mine plan. • A preparation plant efficiency of 94% was applied to only the coal mined (not including rock partings and out-of-seam dilution) to arrive at clean recoverable coal. • An entry width of 18 feet was employed throughout the mine plan. • No inferred Mineral Resources are projected to be mined in the mine plan. Coal resources with limited geological certainty are classified as inferred and cannot be converted to coal reserves. • Much of the infrastructure requirements to begin the New Elk mine plan are already in place. Initial capital expenditures, identified in the DFS, are projected to support mining of the Allen Seam with access through the Green Seam and ventilation improvements at the Blue Seam portal. These include revisions to the materials handling system, ventilation, and power distribution. Infrastructure is further capitalised through the life of mine including ventilation, materials handling, power distribution, water supply and dewatering. Materials handling system revisions are planned, along with additions to the preparation plant to improve plant performance.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	<ul style="list-style-type: none"> 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 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? 	<ul style="list-style-type: none"> The existing plant process flowsheet is a typical coal processing facility consisting of a heavy media vessel, heavy media cyclone, and spirals. The addition of a fine coal flotation circuit to process the ultra-fine portion of the plant feed is included in the feasibility study, along with associated drying equipment and modifications to the fine refuse handling. These additions and modifications will improve recovery of coal and allow for optimization of plant throughput for the specific coal to be mined. All metallurgical processes and technology have been used extensively within the coal industry worldwide. Testwork to date was completed under Australian Standard methods at the time of the testwork and is suitable for this level of study It has been assumed that the organic liquids used for float-sink has had no effect on the coal properties 2 Bulk samples have been completed in the past with one pilot scale testwork being completed. Pilot testwork was completed on a 19mm x 0mm size fraction using a DSM heavy media cone for 19mm x 0.6mm and 2 stage spiral/water only cyclone for below 0.6mm fraction. Due to the testwork practices this pilot wash was not suitable for use as a framework for this study and the results were not used in the analysis. A further coal quality and washability program was completed in 2018 using current lab techniques and a bulk sample wash was performed by SGS at their Lakefield lab located in Ontario, Canada. 1998, 1996 Bulk samples and 2018 test work were used in the process simulations and it is believed from these results that the coal is fairly homogeneous within seams. The current proposed plant will produce a clean coal which is of marketable specification
Environmental	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The major environmental permits (<i>i.e.</i>, those that typically require the most lead time and may be the most controversial) required to re-open the Mine include: (i) an approved Operation Plan and Reclamation Plan under the Mining Permit (defined below), (ii) a CDPEs Water Discharge Permit, and (iii) an Air Pollution Control Permit. All are in good standing.
Infrastructure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The mine is served by the following infrastructure. Main line power and substation located on the property. A high capacity main rail line owned and operated by BNSF rail which is already in use for the transport of coal unit trains is approximately 21 miles east of the property. Guidance pricing has been provided to Allegiance by BNSF Rail as well as Union Pacific Rail who have use rights on the track. The Pasadena Deep Water Terminal located in the Bay of Houston is 850 miles from the property and has sufficient capacity to export New Elk coal. The project is located 25 miles from the town of Trinidad for the supply and accommodation of labour The site is currently serviced by a State of Colorado sealed road.
Costs	<ul style="list-style-type: none"> 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. The source of exchange rates used in the study. Derivation of transportation charges. 	<ul style="list-style-type: none"> The costing of the New Elk feasibility study has assumed an owner-operated mine. Costs are developed from first principles wherever possible, utilizing inputs from engineering firms and vendors. The designs upon which these costs are based are to feasibility / class 3 level. Engineering work has been undertaken to establish the capital cost requirement for the project, including the mine, processing plant, rail, as well as other supporting infrastructure. Capital costs for the project are supported by work by: <ul style="list-style-type: none"> Stantec – mining

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Performance Industries Inc – process plant Combs Equipment – mining equipment Operating costs are based on work by: <ul style="list-style-type: none"> Stantec – all mining costs inclusive of mobile equipment, support services and labour Performance Industries Inc – processing and coal handling
Revenue factors	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The Mine will produce a high-volatile hard coking coal at a nominal rate of 1.2Mctpa increasing to 3.1Mctpa by year 8, then for 11 years at 2.7Mctpa before declining until the end of mining in early year 24. Commodity pricing for the project was based on the study conducted by Kobie Koornhof & Associates. An average price of US\$132/t coal product was assumed for the life of mine. Private royalty to the DOW was applied at a rate of US\$1/t on FOB sales price up to US\$100/t, and for every US\$10/t of additional FOB price, the royalty steps up US\$1/t.
Market assessment	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Kobie Koornhof & Associates Inc (Koornhof) provided the Company with an analysis of New Elk hard coking coal by reference to US high volatile B hard coking coals (HVB HCC). According to Koornhof, the target Blue and Allen seams compare favourably with representative quality ranges for HVB HCC, in particular as it relates to volatile matter, reflectance and rheology. The Allen seam displays very good rheology, which is superior to that of most HVB HCC. Koornhof noted that with a large number of HVB HCC in the market (although likely diminishing in a lower coal price environment), it is important to focus on a coal's distinguishing features. In the case of the New Elk coals, the key quality parameter relates to the low sulphur content.
Economic	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> An after-tax economic model was prepared by the Company, substantially at monthly rests, to test the economic viability of the Coal Reserve. The economic model took into account project revenue, freight and selling costs, royalty to DOW, capital costs, operating costs and administrative costs.
Social	<ul style="list-style-type: none"> The status of agreements with key stakeholders and matters leading to social licence to operate. 	<ul style="list-style-type: none"> An agreement to use water for the washplant with the owner of the neighbouring property is in place. A right of way and lease agreement relating to the railway bed stretching from the washplant to BNSF's main line is in place with landowners to enable a railway spur to be constructed after mining commences allowing coal to be shipped from the Mine on rail.
Other	<ul style="list-style-type: none"> To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: <ul style="list-style-type: none"> 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 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. 	<ul style="list-style-type: none"> An existing Mining Permit from the Division of Reclamation, Mining and Safety ("DRMS") of the Colorado Department of Natural Resources was due to expire by its own terms (permits are valid for five years) on February 28, 2019. New Elk timely filed a permit renewal application dated August 29, 2018, which application was acknowledged and deemed complete by the Colorado Division of Reclamation, Mining and Safety (DRMS) by letter of September 7, 2018. New expects confirmation from DRMS on the permit renewal imminently. Specific risks relating to Project follow. The Company will require additional capital to fund further exploration or development of its existing or new projects, including the New Elk Coal Project and its Telkwa Project. There can be no assurance that additional finance will be available when needed or, if available, the terms of

Criteria	JORC Code explanation	Commentary
		<p>the financing might not be favourable to the Company and might involve substantial dilution to Shareholders.</p> <ul style="list-style-type: none"> • Possible future development of a mining operation at the Company's existing or new projects, including the New Elk Coal Project, is dependent on a number of factors including, but not limited to, the acquisition and/or delineation of economically recoverable mineralisation, favourable geological conditions, receiving the necessary approvals from all relevant authorities and parties, seasonal weather patterns, unanticipated technical and operational difficulties encountered in extraction and production activities, mechanical failure of operating plant and equipment, shortages or increases in the price of consumables, spare parts and plant and equipment, cost overruns, access to the required level of funding and contracting risk from third parties providing essential services. • If the Company commences production, its operations may be disrupted by a variety of risks and hazards which are beyond its control, including environmental hazards, industrial accidents, technical failures, labour disputes, unusual or unexpected rock formations, flooding and extended interruptions due to inclement or hazardous weather conditions and fires, explosions or accidents. No assurance can be given that the Company will achieve commercial viability through the development or mining of any of its projects, including the New Elk Coal Project. • The activities related to the New Elk Coal Project will be governed by United States federal and state law. The Directors consider that the US government supports the development of natural resources by foreign investors. However, there is no assurance that future political and economic conditions in the USA will not result in the US government adopting different policies regarding foreign development and ownership of mineral resources. Any changes in policy may result in legislative changes affecting ownership of assets, taxation, rates of exchange, environmental protection, labour relations, repatriation of income and return on capital, all of which may adversely affect the operations, financial position and performance of the Company. • Any potential future US operations of the Company are subject to a number of risks, including: potential difficulties in enforcing agreements and collecting receivables through foreign systems, potential difficulties in protecting rights and interests in assets, increases in costs for transportation and shipping, and restrictive governmental actions, such as imposition of trade quotas, tariffs and other taxes. • Any of these factors could materially and adversely affect the Company's business, results of operations and financial condition.
Classification	<ul style="list-style-type: none"> • 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). 	<ul style="list-style-type: none"> • Proved and probable ore reserves are declared based on the measured and indicated mineral resources contained within the pit design and scheduled in the LOM plan. • The financial analysis showed that the economics of the Tenas project are positive. • No probable ore reserves have been derived from measured mineral resources.
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of Ore Reserve estimates. 	<ul style="list-style-type: none"> • No external review or audits have been completed on this coal reserve estimate as of the issue date of this table 1.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • The relative accuracy and confidence level of the ore reserve estimate is inherent in the reserve classification. • The accuracy of the reserve estimate is subject to geological data and modelling procedures to estimate the

Criteria	JORC Code explanation	Commentary
	<p>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.</p> <ul style="list-style-type: none"> • 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. 	<p>coal resource and to modifying factor assumptions for dilution and loss. The accuracy can only truly be confirmed when reconciled against actual production. While Telkwa is not in production and such reconciliation is not possible, the assumptions are based on sound principles and experience from mines with similar conditions.</p> <ul style="list-style-type: none"> • Modifying factors such as mining dilution, mining recovery, ROM ash and density, and coal yield have been estimated using accepted techniques.