



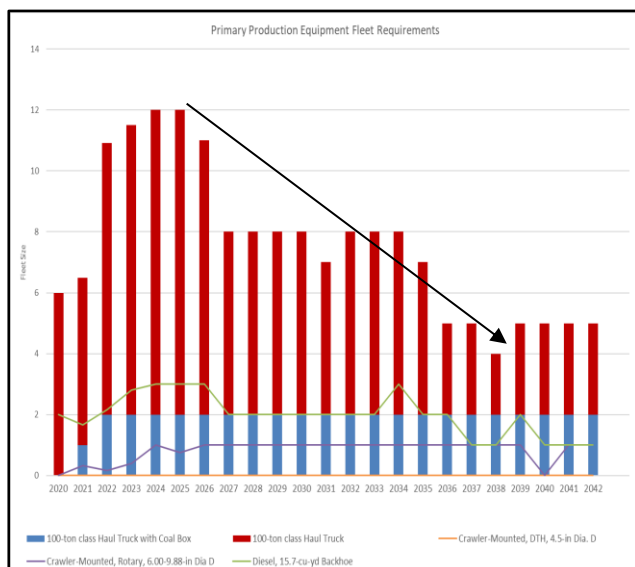
1 July 2019

REVISED MINE PLAN OPTION HAS THE POTENTIAL TO SIGNIFICANTLY ENHANCE TENAS PROJECT ECONOMICS

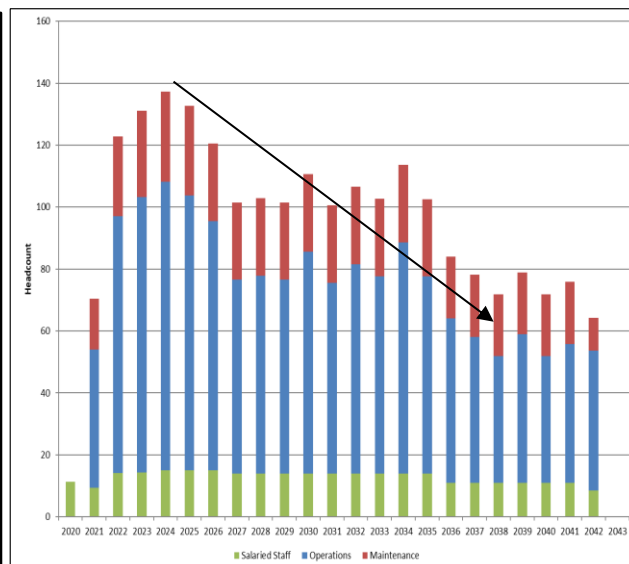
Better utilisation of equipment and labour over the mine-life of the Tenas Metallurgical Coal Project (**Tenas Project**) has the potential to significantly improve project economics. Key changes arising from a revised mine plan option (**Upside Case**) to the definitive feasibility study announced on 18 March 2018 (**DFS**), are highlighted in the table below.

HIGHLIGHTS	UPSIDE	DFS
Tenas saleable coal reserves	16.55Mt	16.55Mt
Saleable coal per annum production years 1 to 4	750kt	750kt
Saleable coal per annum production years 5 to 6	1.05Mt	750kt
Saleable coal per annum production years 7 to 15	1.35Mt	750kt
Mine-life (production years)	14.4 years	22 years
Potential to extend mine-life from additional resources	22 years	35 years
Strip ratio mine-life average (BCM/ROMt)	3.6:1	3.6:1
Yield mine-life average (all metallurgical coal product)	75%	75%
All-in FOB cash cost (ex-port) before interest & tax	US\$45.0/t	US\$49.7/t
Revenue mine-life annual average	A\$185M	A\$121M
EBITDA mine-life annual average	A\$105M	A\$64M
EBITDA ratio to revenue mine-life annual average	57%	53%
Start-up capital expenditure	US\$55.8	US\$54.3M
NPV8% pre-tax	A\$537M	A\$407M
IRR pre-tax	60.8%	56.9%
Capital payback after commencement of production	2.5 years	2.5 years

Allegiance Coal Limited (**Company**) is pleased to present the results of the Upside Case of the Tenas Project, undertaken to feasibility study standard, by SRK Consulting (Canada) Inc. (**SRK**). An opportunity was identified in the DFS review to improve equipment and labour utilisation in year six when a decline in usage emerged after completion of construction of water management infrastructure, highlighted in the two tables below.

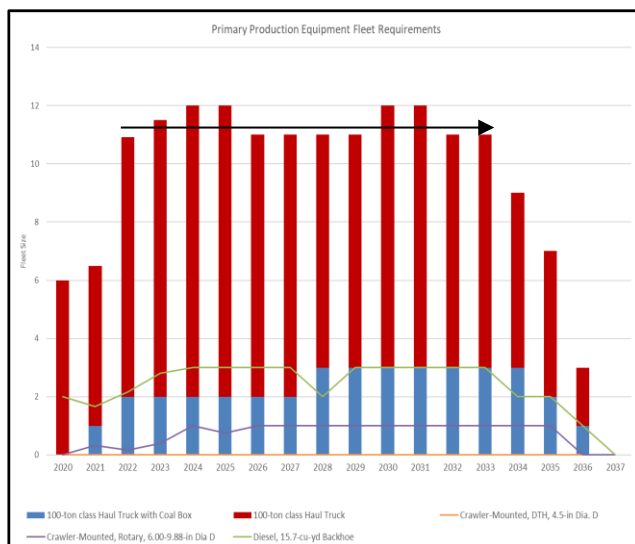


Primary equipment requirements under the DFS

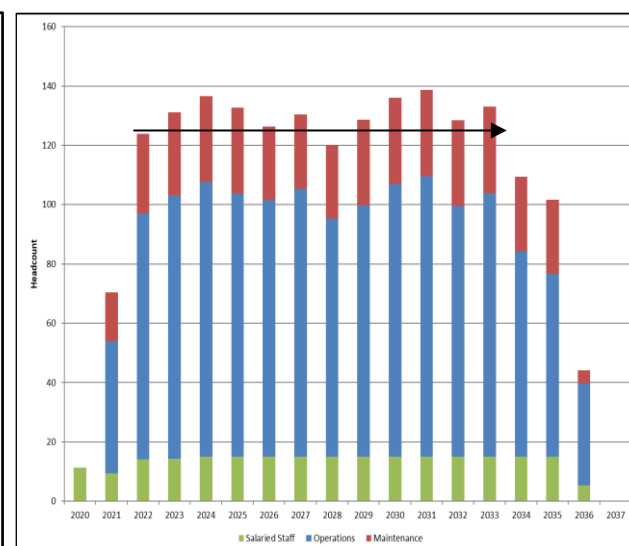


Labour requirements under the DFS

Rather than retiring equipment and a significant proportion of the workforce in year six, SRK was asked to revise the mine plan to maintain continuity of equipment and labour. The ramp-up is solely the result of re-deployment of equipment and labour from mine development work to pit operations. The ramp-up requires minimal capital expenditure limited to modifications to the wash plant infrastructure at start-up of US\$1.5M, and to the wash plant in year four, prior to ramp-up, of US\$5.3M. The tables below illustrate the improved utilisation of equipment and labour over the mine-life.



Primary equipment requirements under the Upside Case

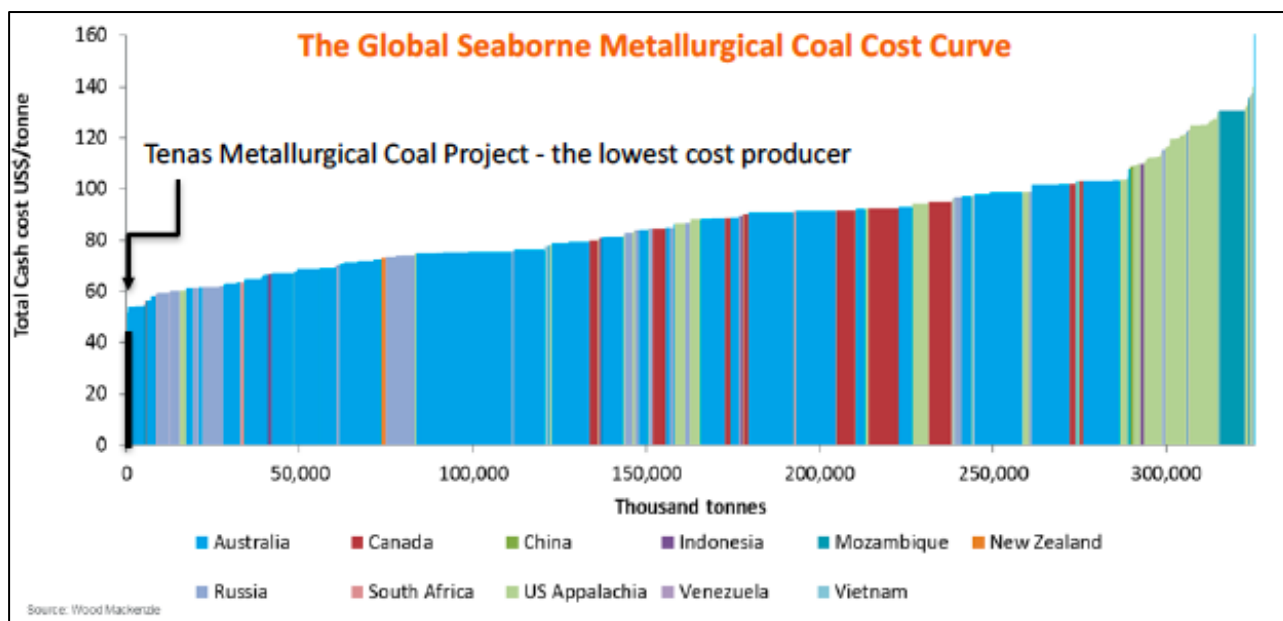


Labour requirements under the Upside Case

It is important to note, however, the Company will only be seeking to permit, initially, the Tenas Project at 750,000 saleable tonnes per annum. The new mine plan and production ramp-up will, after consultation with key stakeholders, be the subject of a new application once the mine is operating at a steady state.

In order to comply with the ASX Listing Rules, the entire body of the DFS announcement of 18 March 2019 is repeated in this announcement and where relevant, is updated. For the purposes of this announcement, the DFS as amended by the Upside Case, is referred to, simply as the Study.

Significantly, the Study concluded that the Tenas Project is likely to be one of, if not, the lowest cost producers of metallurgical coal on the global seaborne market. The seaborne market comprises around 325 million tonnes of metallurgical coal per annum, with semi-coking coals accounting for around 60 million tonnes of that trade. The vast majority of semi-coking coals on the seaborne market come from the Hunter Valley coal mines in New South Wales from companies such as Glencore, Yancoal, and Whitehaven.

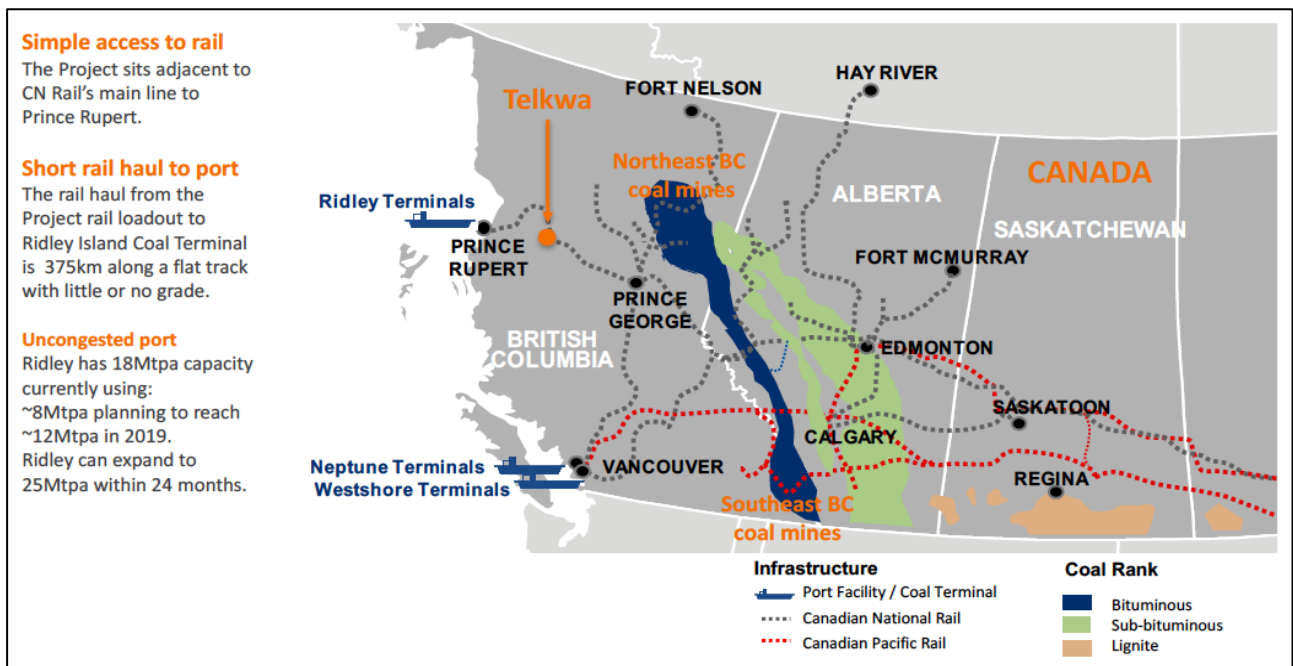


Source: Wood Mackenzie seaborne metallurgical coal cost curve as at November 2018

SRK Consulting (Canada) Inc. (**SRK**) and Sedgman Canada (**Sedgman**) were the lead Study consultants along with an extensive team of technical experts and Allegiance Management. The Study team is listed below.

Company	Area of responsibility
SRK	Geotechnical engineering
SRK	Geochemistry
SRK	Coal reserves and mining
SRK	Water management
SRK	Hydrogeology
Sedgman	Coal processing
Sedgman	Coal quality
Ron Parent, Independent geologist	Geology and resource
MCA Engineering Ltd and BV Electric	Power
Hooper Engineering and Morch Engineering Ltd	Rail loop
DWB Engineering	Mine access road and bridges
Kobie Koornhof & Associates Inc	Coal analysis and marketing
All the above	Capital and operating costs
Dan Farmer, Chief Operating Officer, Allegiance	Ancillary infrastructure
Angela Waterman, Director Environment & Govt. Relations, Allegiance	Environment, social and permitting
Jonathan Reynolds, Chief Financial Officer, Allegiance	Financial model & economic analysis
David Fawcett, Former Non-Executive Chairman, Allegiance	Technical review

Located in the northwest of British Columbia, Canada, the Tenas Project enjoys exceptional location to rail and port. Simple logistics is a key factor contributing to the Tenas Project as a low cost producer.



Added to this, it is a shorter shipping distance to target markets, in particular the Japanese and South Korean steel mills, than from its main competitor of semi-soft coking coals in Hunter Valley via the port of Newcastle. It is 3,800 nautical miles from Ridley Terminals to Tokyo, whereas it is 4,300 nautical miles from Newcastle.



Equally importantly, there is no congestion at Ridley Terminals with no delays in ships berthing; unlike Newcastle (and Queensland) where ships often wait two to four weeks before they can berth. Mine owners incur expensive demurrage and steel mills suffer a delay in the supply of raw materials for their coke ovens and blast furnaces which disrupts steel production.

First Nations

Allegiance acknowledges the unceded rights of the Wet'suwet'en nation to 22,000 square kms of traditional territory within which the Tenas Project sits. Allegiance has and continues to engage with the Office of the Wet'suwet'en (**OW**) in respect of all Tenas Project activities.

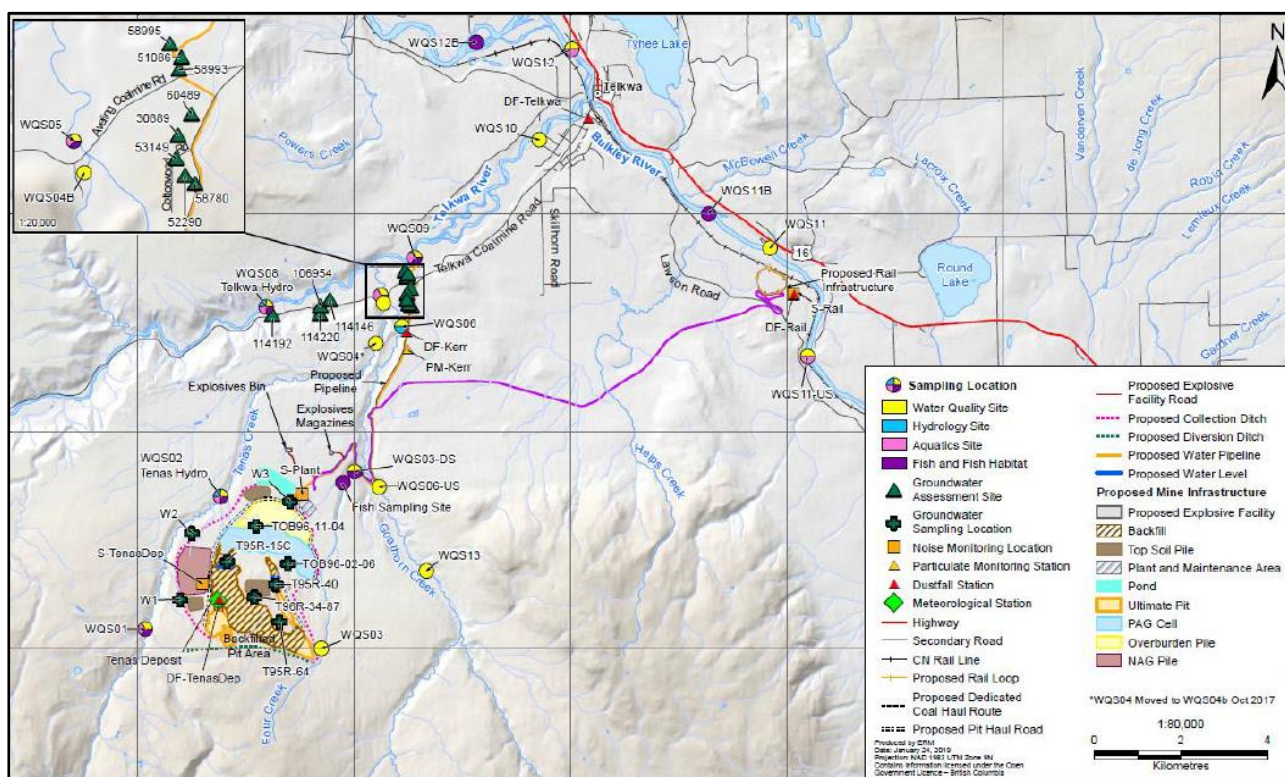
The OW is the central office for the Wet'suwet'en focusing on the management of their lands and resources, fisheries and wildlife, human and social services, and treaty negotiations. The OW is governed by the Wet'suwet'en Hereditary Chiefs residing throughout their traditional territories.

In April 2017, a Communication and Engagement Agreement was signed between Allegiance's subsidiary company Telkwa Coal Ltd and the OW. The Tenas Project minesite area is within the traditional territory of the Cas'Yex (Grizzly House) of the Gitdumden clan of the Wet'suwet'en and the rail loadout is located within Laksilyu territory of the Wet'suwet'en.

Permitting Schedule

The permitting process first involves the collection of environmental baseline data (over at least two years), and then an environmental impact assessment of the Project on the baseline data collected. The Tenas Project fortuitously has baseline data across most environmental disciplines dating back to the 1990s. This provides more substance to the modelling of environmental impact assessment.

The map below illustrates Allegiance’s baseline monitoring activities over the last 2 years.

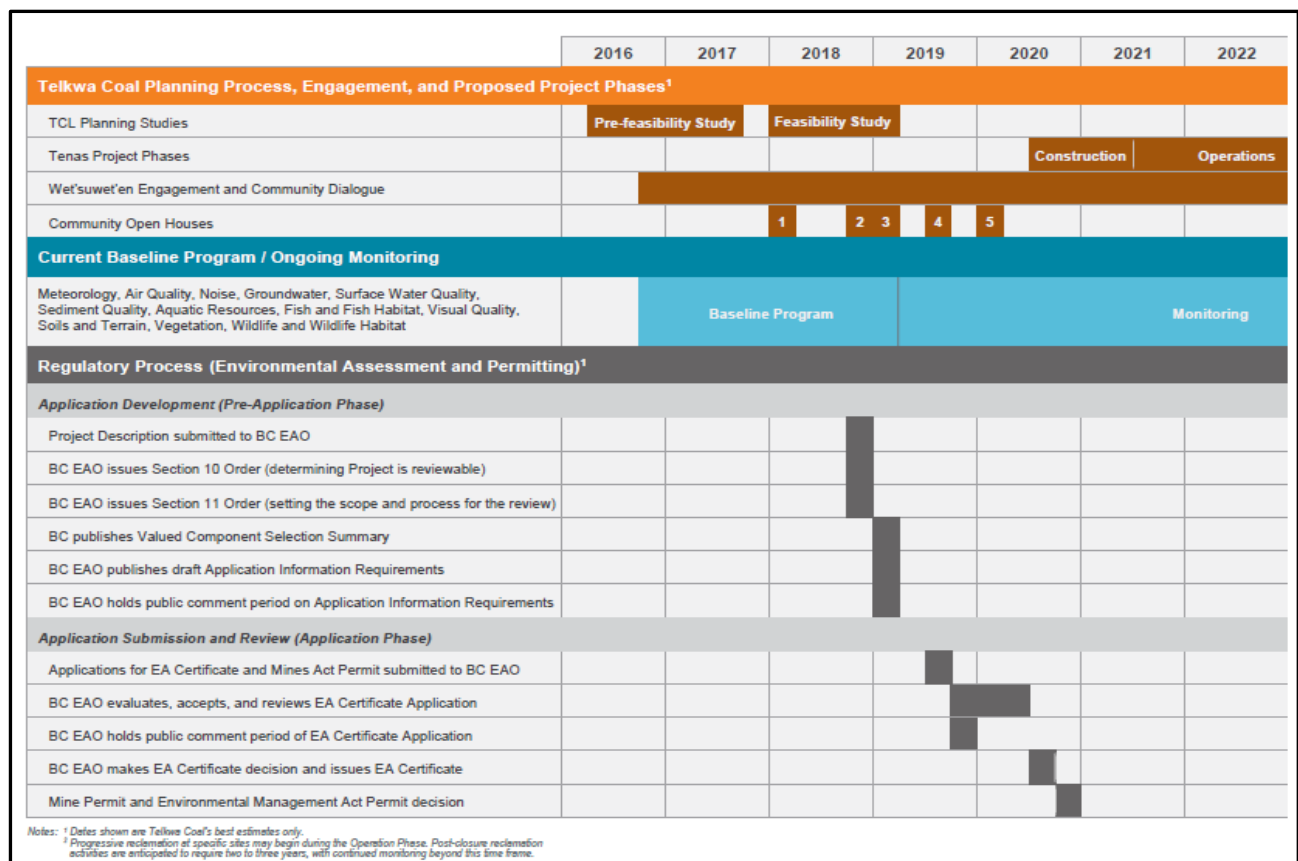


The main areas of focus (not limited to), are listed below:

- Geochemistry;
- Surface water quality and quantity;

- Groundwater quality;
- Soil and Terrain;
- Noise;
- Air quality;
- Vegetation;
- Fish and aquatic species; and
- Wildlife.

Allegiance is in the pre-application phase of permitting, and on schedule with the timeline below.



In addition to engagement and dialogue with the Wet'suwet'en, Allegiance has been very active in wider community consultation, meeting frequently with a range of stakeholder and special interest groups, and having organised and held to date, two of five planned community open houses. BC Government guidelines recommend two community open houses.

To reinforce Allegiance's commitment to the community, Company CEO, Mark Gray, relocated to Telkwa 15 months ago and is now resident there. This has proven to be very valuable, enabling informal, daily, ad hoc community consultation with the Company. Environmental baseline programmes are now complete. Less intensive environmental monitoring continues during the permitting phase and into production.

Allegiance has prepared and submitted the Valued Component Selection Summary document to the Environmental Assessment Office for review, and is now preparing the Application Information Requirements document. Target period for lodgement of applications for an EA Certificate and Mines Act Permits remains Q3 2019.

Summary of Upside Case Results

Tables 1 to 4 summarize the key results of the Upside Case, comparing the Upside Case with the DFS.

Table 1: Coal Resource and Production Parameters Life of Mine	Units	Upside	DFS
Total Telkwa coal complex coal resource across 3 deposits	Tonnes	126.0M	126.0M
Total Tenas deposit coal resource	Tonnes	36.5M	36.5M
Life-of-mine ROM coal production	Tonnes	22.0M	22.0M
Life-of-mine saleable coal production (at 10% moisture)	Tonnes	16.55M	16.55M
Average ROM coal production (at 5% moisture)	Tonnes pa	1.8M	1.0M
Average product coal yield	%	75	75
Average saleable coal production years 1 to 4	Tonnes pa	750k	750k
Average saleable coal production years 5 to 6	Tonnes pa	1.05M	750k
Average saleable coal production years 7 to 15	Tonnes pa	1.35M	750k
Average strip ratio	BCM/ROMt	3.6:1	3.6:1
Mine life (incl. pre-production)	Years	15	22

Table 2: Start-up Capital (US\$)	Upside		DFS	
	Lease finance	Owner equity	Lease finance	Owner equity
Pre-production activities		4.2		4.2
CHPP and associated plant infrastructure	3.3	15.5	3.3	14.0
Minesite infrastructure		12.5		12.5
Water management		17.3		17.3
Rail loop and loadout		5.4		5.4
Mobile equipment	32.9	0.9	32.9	0.9
Total Start-up Capital (excludes contingency)	36.2	55.8	36.2	54.3

The increase in 'CHPP and associated plant infrastructure' of US\$1.5 relates to expanding the shell of the CHPP to allow for the installation of additional components prior to ramp-up to increase throughput from 145t/h to 250t/h.

Table 3: Operating Costs Life of Mine per saleable tonne	US\$	Upside	DFS
Site Costs		Saleable/t	Saleable/t
Mining – waste removal and coal recovery		17.1	19.5
Coal processing		5.2	6.3
General and administration		3.0	4.2
Reclamation		0.9	0.9
Transportation and Marketing			
Marketing costs		1.9	1.9
Haulage (CHPP to Rail Siding)		3.8	3.8
Rail to port and loaded		13.1	13.1
Total all-in cash cost FOBT pre-interest and tax		45.0	49.7

Predictably, 'Site Costs' reduce with volume increase reducing FOBT cash costs pre-interest & tax, to US\$45/t.

Table 4: Key Performance Indicators		Upside	DFS
2021 and 2022 average coal price	US\$/t	120	120
2023 onwards average coal price	US\$/t	114	114
Pre-tax net present value @ 8%	A\$M	537.3	407.3
Pre-tax Internal rate of return	%	60.8	56.9
Payback from commercial production	Years	2.5	2.5

Again, predictably, with the acceleration of cashflow from ramping production, NPV increases significantly.

Production Targets and Forecast Financial Information

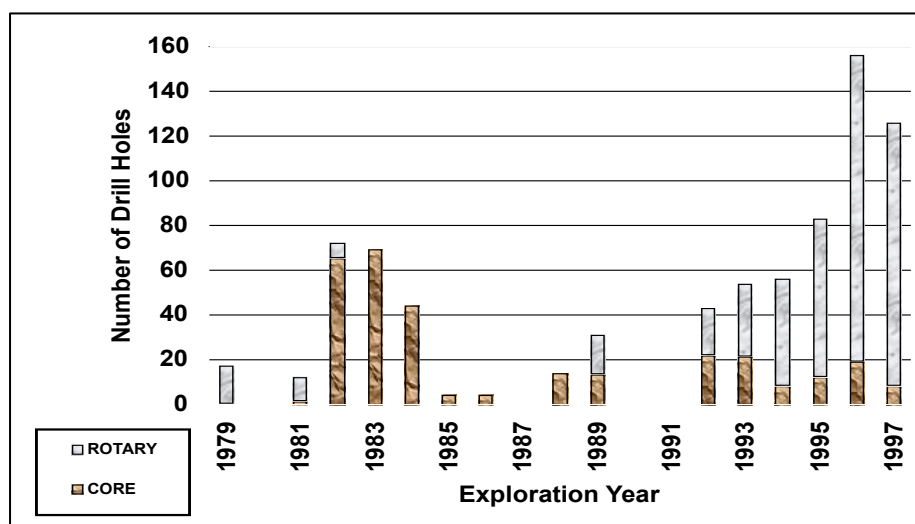
Allegiance notes the following in relation to the production targets disclosed in this announcement:

- 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.

Telkwa Coal Resources & Reserves

The Telkwa metallurgical coal complex has had several drilling and bulk sample programmes completed by previous owners between 1980 and 1997, and most recently by Allegiance in 2018.

Other than the 2018 Allegiance drill programme, all coal resource data and quality analysis was undertaken during the period illustrated in the table below, an estimated A\$40M worth of historical exploration data.



In total, 826 drill holes recovered core from 91,000m of drilling; plus, a 208t bulk sample in 1983, and a 80t bulk sample in 1996.

From this, coal was recovered to undertake coal washability and quality tests and petrographic analysis.

On 3 July 2017, Allegiance published the results of the first of two pre-feasibility studies (PFS) in relation to the Telkwa metallurgical coal complex (**3 July 2017 Announcement**).

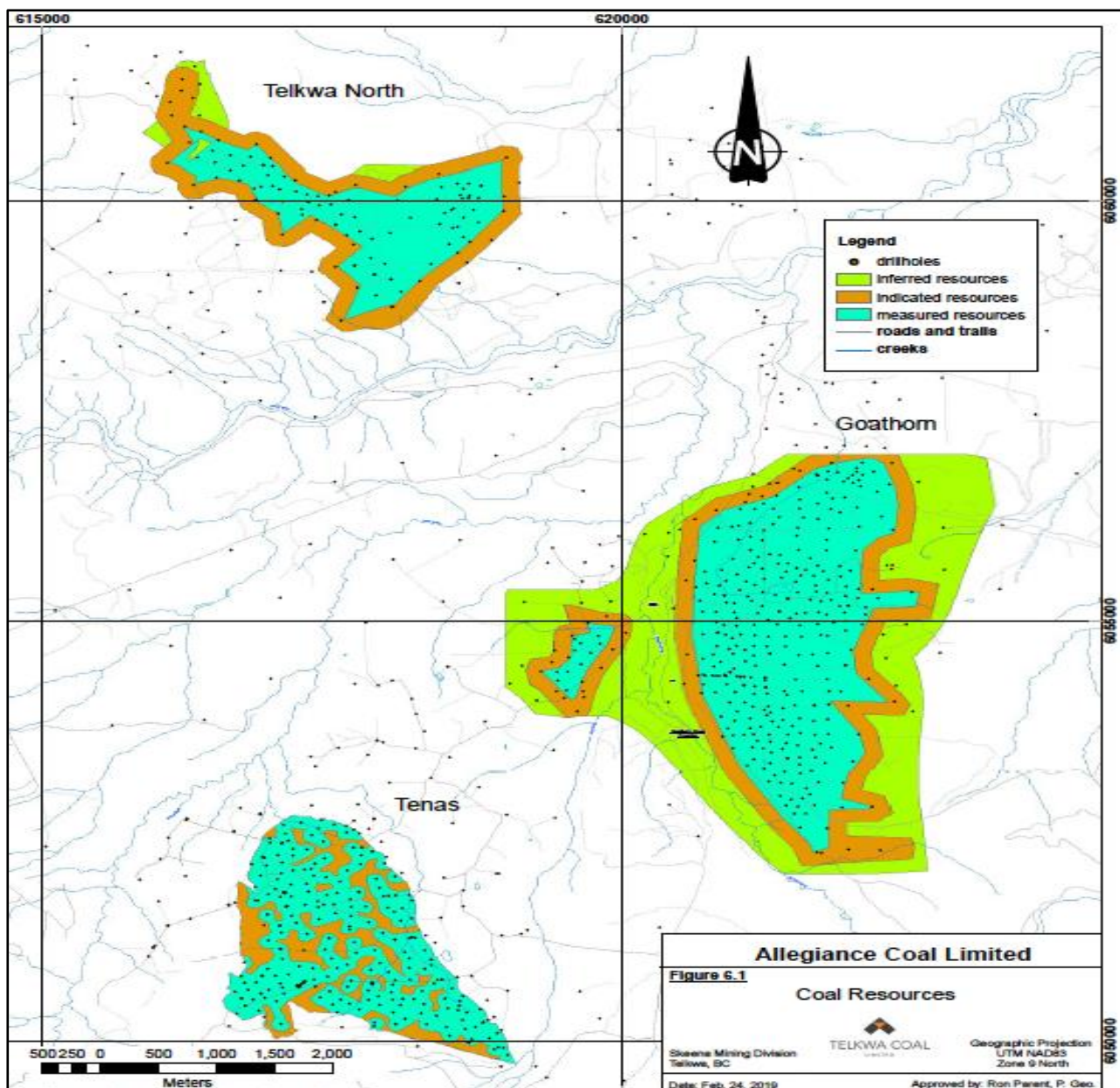
In that PFS, SRK prepared a statement of resources and reserves in accordance with JORC 2012 Edition (**JORC Code**) and National Instrument NI 43-101 'Standards of Disclosure for Mineral Projects' (**NI 43-101**), as is set out in the 3 July 2017 Announcement.

For ease of reference, a summary of the PFS resources and reserves is repeated in Tables 5 and 6 below.

Table 5: Resources	Measured Mt	Indicated Mt	Inferred Mt	Total Mt (adb)
Tenas deposit	58.8	-	-	58.8
Goathorn deposit	59.5	9.2	0.2	68.9
Telkwa North deposit	15.7	3.7	1.0	20.4
Total	134.0	12.9	1.2	148.1

Table 6: Reserves		ROM Coal Mt	Clean Coal Mt	Saleable Coal Mt
Tenas Proven		29.1	20.6	21.0
Tenas Probable		-	-	-
Tenas Total		29.1	20.6	21.0
Goathorn Proven		22.1	12.6	18.8
Goathorn Probable		0.2	0.1	0.1
Goathorn Total		22.3	12.7	13.9
Telkwa North Proven		10.8	6.4	7.0
Telkwa North Probable		0.7	0.4	0.5
Telkwa North Total		11.5	6.8	7.5
Grand Total		62.9	40.1	42.5

The coal resources including drill hole locations of the Telkwa metallurgical coal complex, as listed in Tables 5 and 6 above, are illustrated in the map that follows.



Following a 34-hole drill programme in the Tenas deposit undertaken by Allegiance in 2018, the Tenas geology was re-interpreted and the coal resources updated based on the identification of a series of faults. In addition, non-continuous, thin and high ash coal seams were excluded from the resource statement reducing the number of coal seams from 13 to just three, one of which was split into a lower and upper ply. The updated resource statement for Tenas was published by Allegiance on 18 June 2018 (**18 June 2018 Announcement**). For ease of reference, the 18 June 2018 Announcement statement of resources is repeated in Table 7 below.

Table 7: Tenas Resources	Measured Mt	Indicated Mt	Inferred Mt	Total Mt (adb)
c Seam	4.5	1.4	-	5.9
1 lower seam	8.1	2.7	-	10.9
1 upper seam	4.5	1.6	-	6.2
1 Seam	9.9	3.5	-	13.5
Total	27.1	9.4	-	36.5

Estimation Methodology

Coal quality and seam thickness parameters were estimated using inverse distance squared within the seam wireframes which control the distribution of interpolated values in 3D. The model is of the coal seams only and the interburden has been modelled by default but to sufficient detail to assist with waste rock characterisation and waste rock management. The model block size ranges from 5 to 25 m along strike, 5 to 10 m down dip and 5 m in height. Average drillhole spacing for Tenas is 110 m and the average core hole spacing (with quality data) is 237 m.

A key assumption utilized in the resource estimate was the relationship between ash content on an air dried basis and bulk density used for conversion of volume to tonnes. The geological interpretation is based on the “stacking” of seam bottoms along 25 m spaced cross sections from the lowermost seam upward. The main validation method used was a comparison between wireframe solids volume and volume generated from the 3D block model after coding. The model accurately represents the drilled seam true thicknesses to +/- 0.1 m at a given XY location. The elevations may vary up to 3 m at any drillhole intercept. This is due to the sectional nature of the modelling process, projecting all seam intersections a maximum of 12.5 m to the nearest cross section.

Updated Tenas Reserve Statement

In the DFS, and hence the Upside Case, SRK updated the Tenas reserves in accordance with the JORC Code and NI 43-101, which is summarised in Table 8 below. The Upside Case accounts for just 15% of the entire coal resource of the Telkwa metallurgical coal complex.

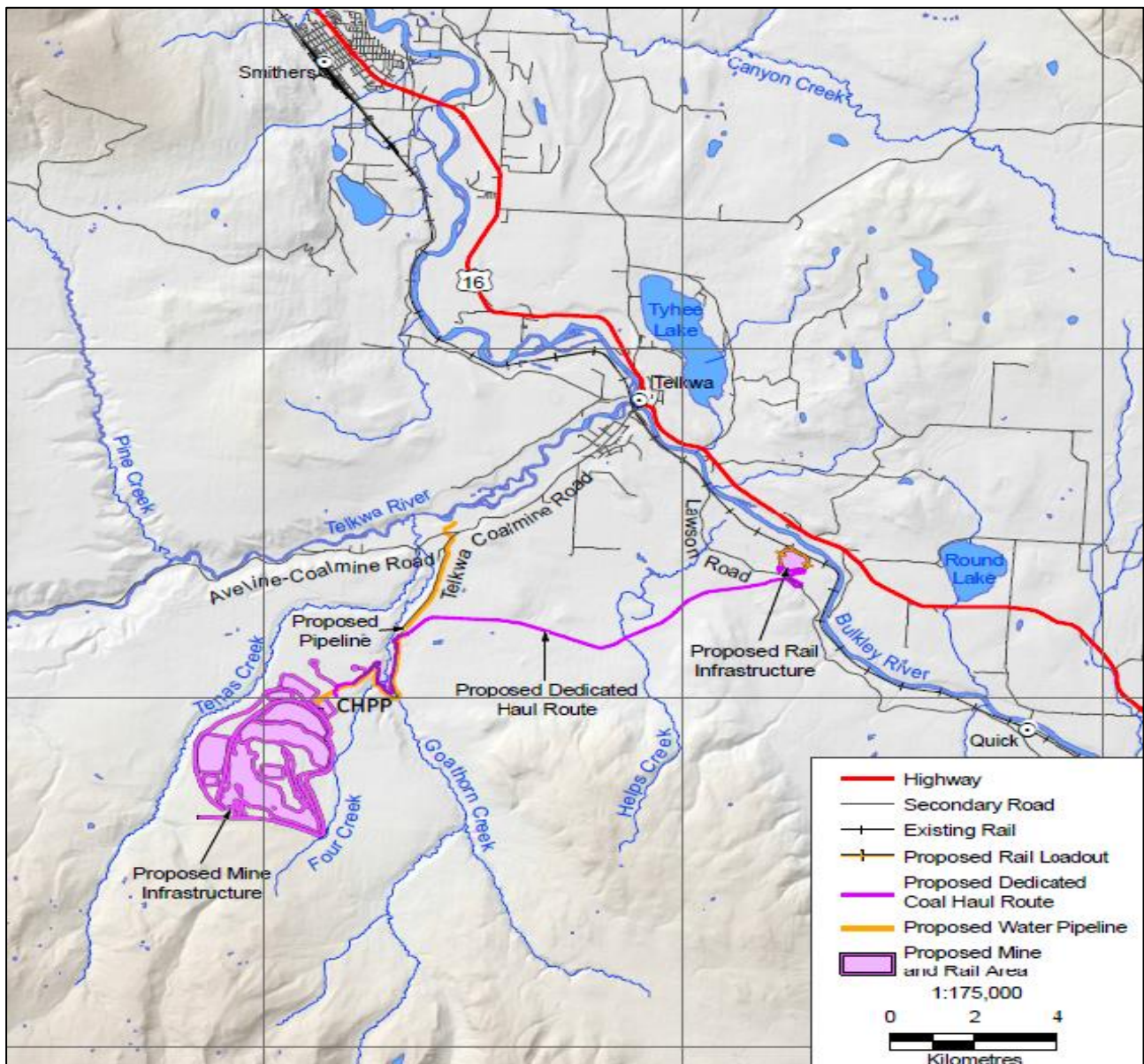
Table 8: Tenas Reserves			ROM Coal Mt	Saleable Coal Mt
Tenas Proven			17.1	12.9
Tenas Probable			4.9	3.7
Tenas Total			22.0	16.5

The production targets and forecast financial information outlined in this announcement in relation to the new Tenas Reserves, are based solely on the Proven and Probable Reserves in Table 8. Modifying factors such as mining dilution, mining recovery, raw ash and density, and coal yield have been estimated using accepted techniques considered by Allegiance and SRK. The accuracy of the Tenas Reserve estimate is subject to geological data and modelling procedures to estimate the coal resource and to modifying factor assumptions for dilution and loss. While the Tenas Project is not in production and such reconciliation is not

possible, the assumptions are based on sound principles and experience from mines with similar conditions. All Telkwa Reserve estimates are based on: minimum seam thickness of 0.8 m; maximum ash content of 50%; dilution of 0.15 m (unless blasting through seams, where it is 0.25 m) and coal loss of 0.10 m (0.20 m where blasting through seams) per coal seam; raw coal (**ROM**) and saleable product bases, with a moisture contents of 5% and 10% respectively; and coal yields are based on washabilities at a float-sink specific gravity of 1.6.

Tenas Project Components

The Tenas Project is located 7km southwest of the small town of Telkwa (population ~2,000), and 25km south of the larger town of Smithers (population ~6,000) which has an airport with daily direct flights to Vancouver. The town of Telkwa has a long history of coal mining dating back to the late 1800s with coal production ceasing as recently as 1985. The Tenas Project has access to excellent road infrastructure developed by the forestry industry, is just 3km from power, and 16km from the proposed CHPP to the proposed rail loadout along a gentle declining private designated haul road (to be constructed). The excellent existing infrastructure has kept the cost of infrastructure construction low helping to minimize start-up capital expenditure.

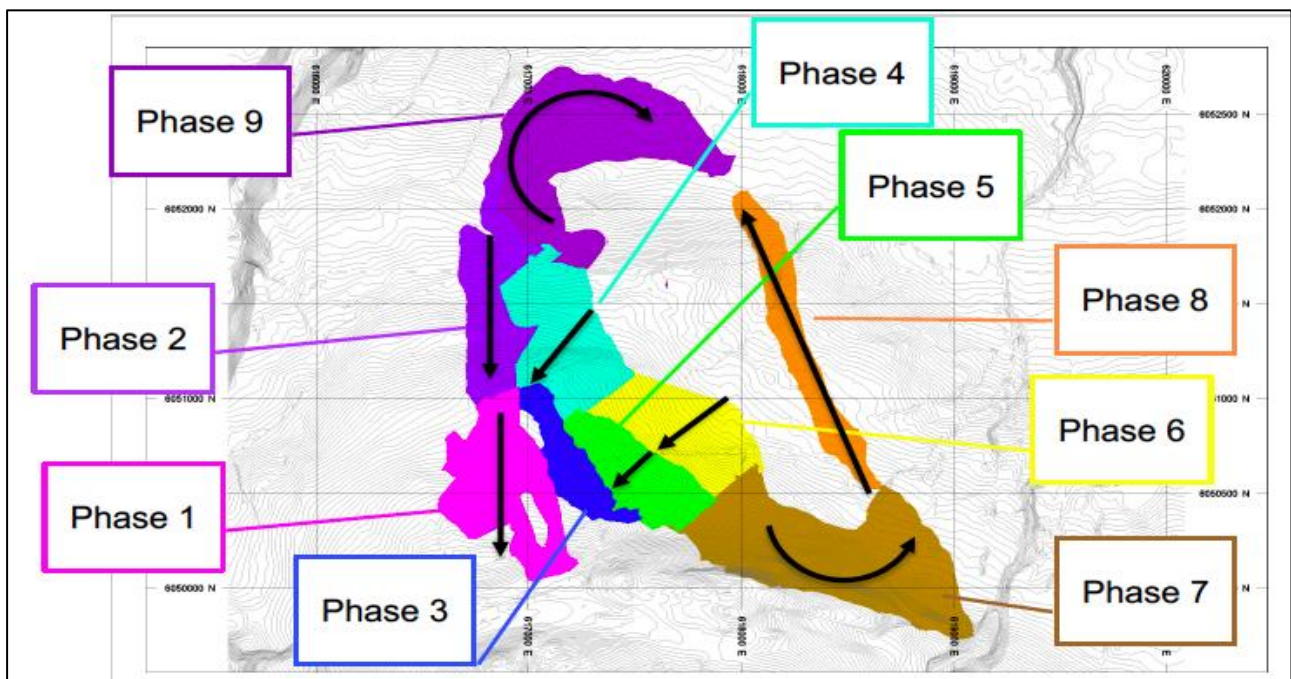


The Tenas Project components, highlighted on the map above, will include, amongst other things:

- One single open pit mine;
- Typical open pit mine operations equipment including 91t dump trucks, excavators and dozers;
- Waste rock dumps outside the pit as well as back-fill dumps during mining within the pit;
- Diversion ditches to divert 'contact' water into the water management ponds;
- Water management ponds to submerge under water potentially acid leaching waste rock during mining;
- Sedimentation pond;
- Dedicated pipeline from the sedimentation pond to a watercourse for discharge;
- ROM coal haul roads from pit operations to the coal handling and preparation plant (**CHPP**);
- The CHPP itself and associated infrastructure;
- Mine infrastructure including amongst other things equipment maintenance shop;
- 3km power line connecting the mine to a local 25kV powerline;
- A dedicated 16km private clean coal haul road from the CHPP to the rail loadout;
- Several small bridges along the clean coal haul road;
- A rail loop and loadout facility adjacent to Canadian National Rail's (**CN Rail**) main line to Ridley Terminals.

Mining Method and Schedule

The Tenas deposit is a syncline basin with the coal seams gently dipping from the west meeting the syncline on the east. The deposit is to be mined by open pit mining methods involving nine phases. Mining commences at the production rate of 1.05Mt of ROM production with phase 1 in the shallowest area to the southwest, then progressively mining towards the syncline to the east, north and south, as illustrated below.



Under the Upside Case, in year six, due to the completion in construction of water management infrastructure, equipment and labour employed in that development work is proposed to be re-deployed to the pit in mining operations including waste rock removal and coal recovery. To do otherwise would mean the surplus equipment would be retired and more crucially, up to 30 percent of the workforce would be made redundant. In the interests of keeping the workforce employed, re-deployment to pit operations is

advantageous to both the workers and the mine. This results in an increase in production over years five and six to, on average, 1.4M ROM tonnes of coal equating to 1.05M tonnes of saleable coal; and a further increase in production in years seven to fifteen to, on average, 1.8M ROM tonnes of coal equating to 1.35M tonnes of saleable coal. It should also be noted that the Tenas resource has an additional 14M tonnes of in-situ coal allowing for another seven to eight years of additional mining for a potential mine life of 22 years. Tables 9 and 10 below illustrate the mining schedule under the DFS and the Upside Case. The black line highlights ROM coal production while the multi-coloured bars highlight waste removal based on waste type.

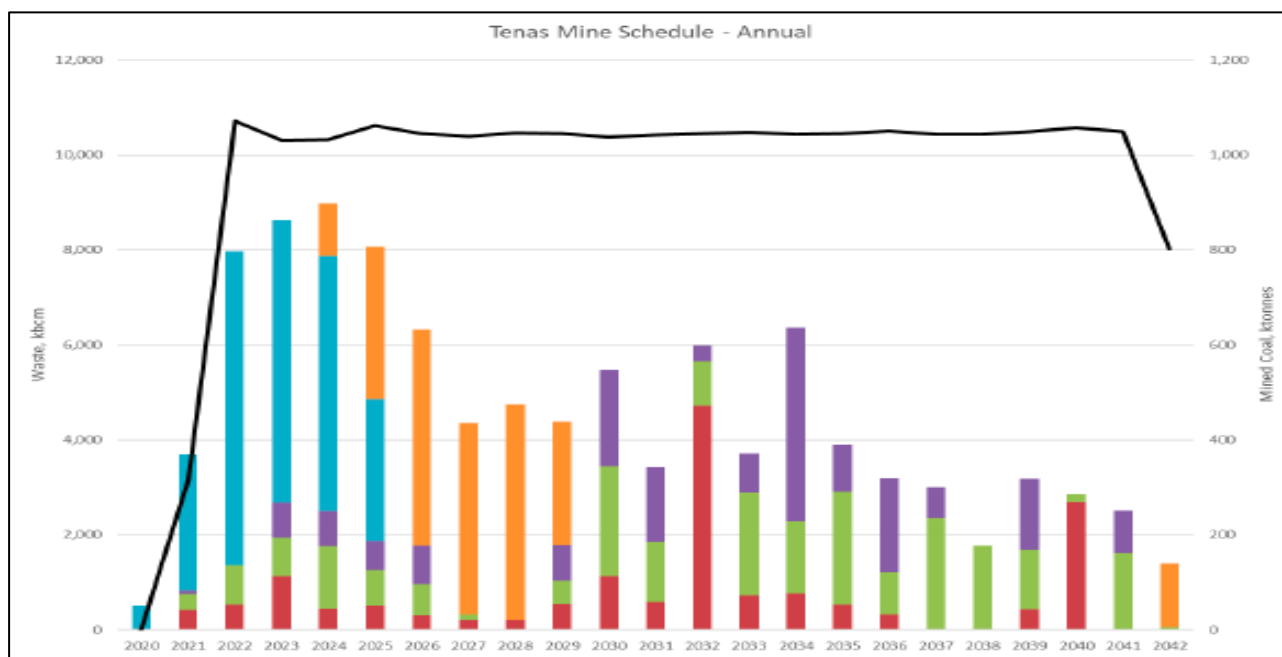


Table 9: Mining schedule under the DFS

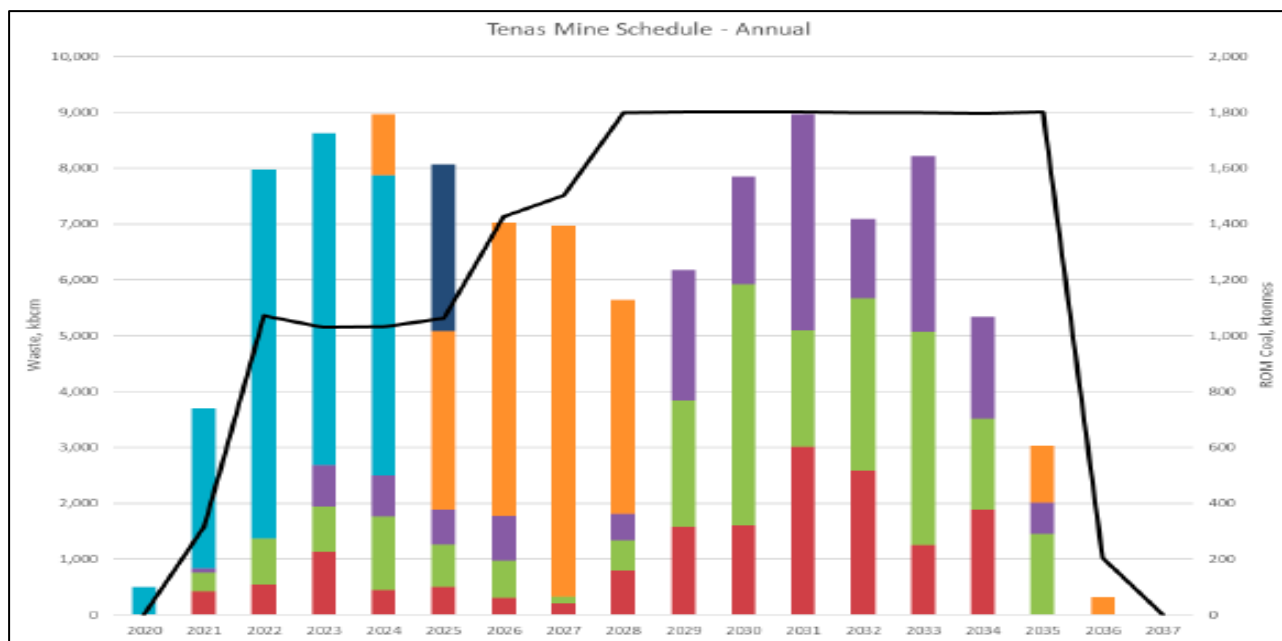
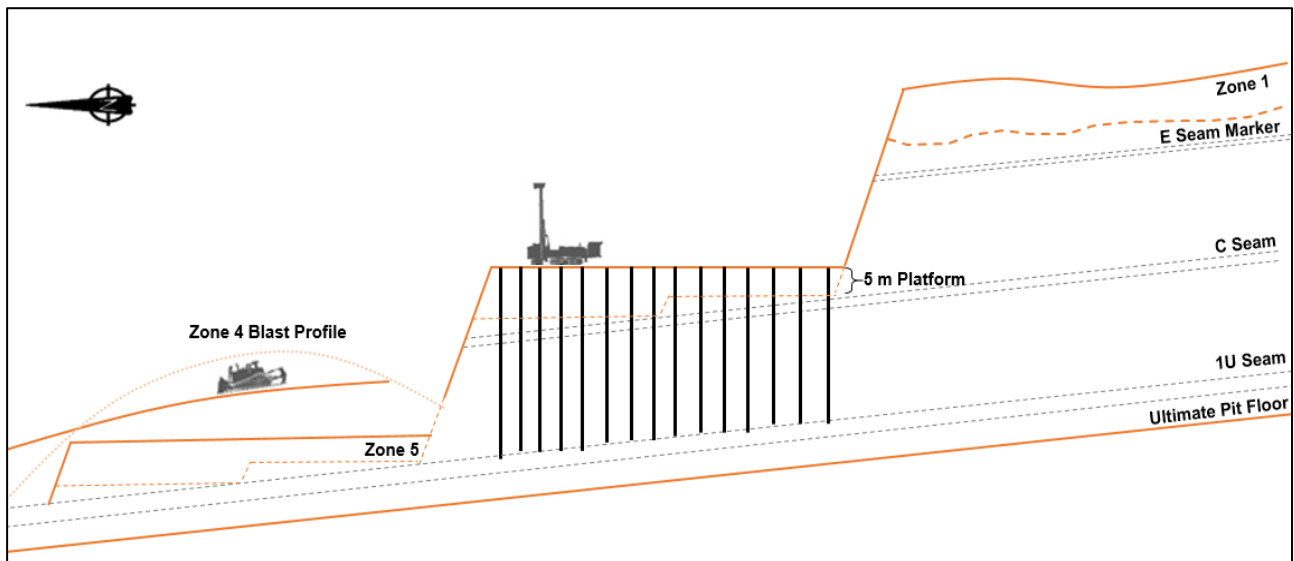


Table 10: Mining schedule under the Upside Case

Multiple mining approaches can be deployed to take advantage of the unique geological and topographic setting of the Tenas deposit. Shallow dipping coal strata, and reasonably near surface coal strata allow for a

bottom-up mining approach. For this, a box-cut is established at the lower end of a phase and successive cuts advance up-dip, progressively expanding available backfill space down-dip from the active cuts. Hydraulic excavators mine the bulk of the waste, with track dozers pushing some of the waste above 1U-seam on to final pit bottom. Coal is also mined by hydraulic excavator. Blasting is in benches above C-seam, and then through C-seam standing off from 1U/1-seam.

Not all phases are amenable to this method due to steeper seam dips nearer the syncline, relying instead on more conventional top-down bench mining. The up-dip mining is illustrated below.



Equipment Requirements

The primary fleet at full production will include:

- Two production drills (one 250mm and one 140mm bit diameter);
- Three hydraulic backhoes (12m³);
- One backhoe excavator (6m³);
- 12 rigid frame haul trucks (91t);
- Four track dozers (3.9m blade);
- Three graders (4.26m blade); and
- Two water trucks (91t).

The production fleet will be supported with ancillary equipment similar to other open pit operations in western Canada.

Labour Requirements

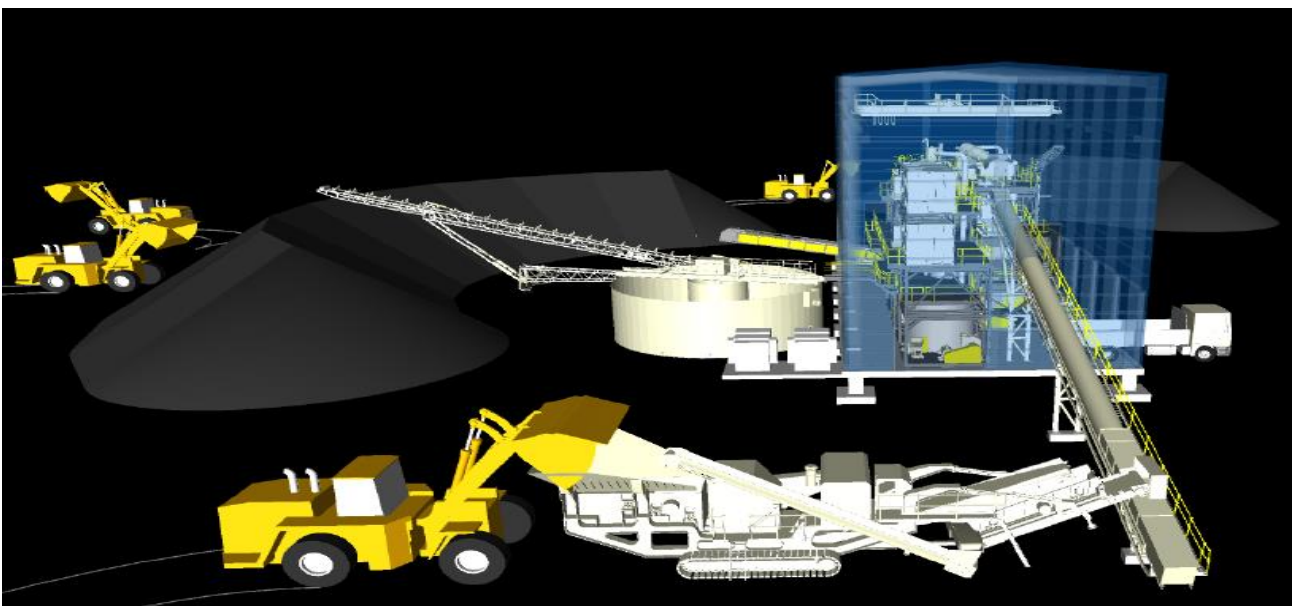
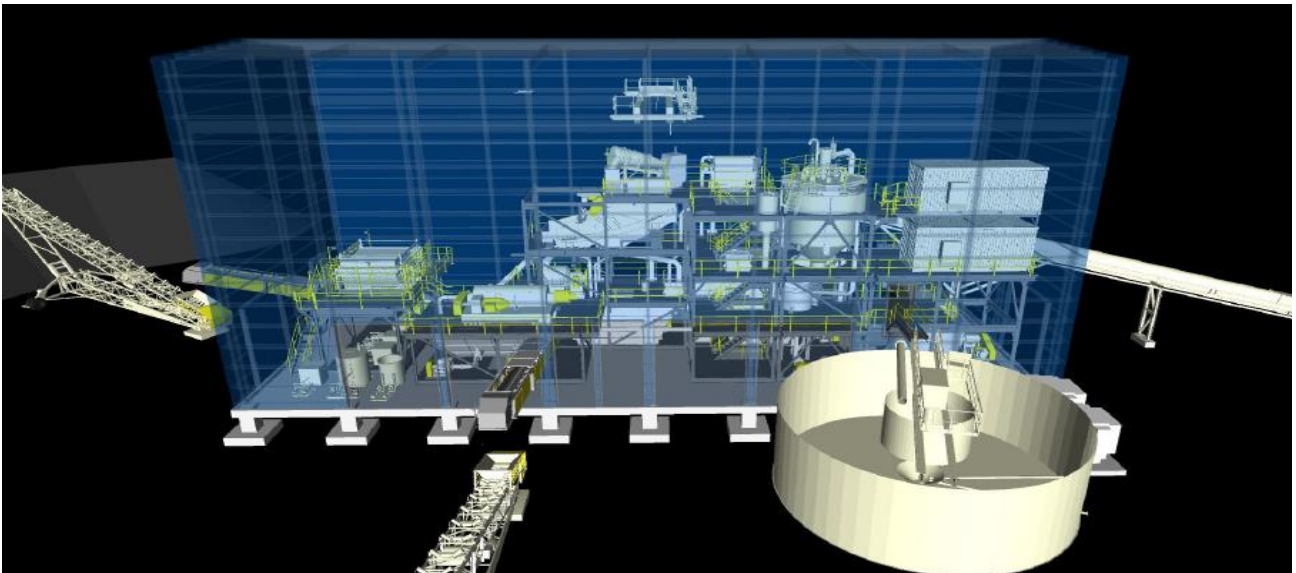
The mine will operate 24/7 with four crews on a seven shift on, seven shift off rotation, alternating days and nights, while the maintenance workforce is assumed to largely work a dayshift four-on / four-off schedule with two tradespeople working night shift to support mine operations. At full production, the mine averages 95 mine workers, 29 mine maintenance workers along with technical support and supervisory staff. The neighbouring towns of Telkwa, Smithers, and 50km south of Telkwa, Houston, all house skilled mine workers who support the hardrock mining industry in the region. In addition, the primary industry in the region is forestry, where skilled equipment operators provide a readily available labour pool.

Coal Handling and Preparation Plant

The CHPP configuration will be a DMC/flotation plant designed and constructed to process 145t/h of raw coal (ROM) over the first 4 years of mine life. A key factor to this processing rate was a desire by Allegiance to use a Sedgman modular plant with minimal upfront capital expenditure. In year five however the CHPP will be expanded to 250t/h (equivalent to 1.8Mt annual ROM production) by adding:

- A second float cell;
- A second reject drain with rinse screen;
- A second belt filter press; and
- A reflux classifier circuit.

The additional capital expenditure for the expansion is US\$6.8M, comprised of modifications to the wash plant infrastructure at start up of US\$1.5M and to the wash plant prior to ramp-up of US\$5.3M. The images that follow illustrate the Sedgman designed modular CHPP and related infrastructure.



The CHPP is located approximately 2km to the northeast of the Tenas pit. This location was selected as it has a relatively flat profile which minimises bulk earthwork costs required to construct the pad required for both the CHPP and ancillary infrastructure. The plant location also allows for any future expansion of the pit as there are known coal resources residing in the 2km between the selected plant location and Tenas pit.

The CHPP flowsheet on commencement of production incorporates the following process stages:

- Raw coal reclaiming and size reduction;
- Coarse coal (DMC) circuit for coal between 50.0 by 0.50 mm with horizontal basket centrifuge for dewatering;
- Magnetite recovery circuit;
- Fine coal flotation for coal <0.50 mm with screen bowl centrifuge for dewatering;
- Fine rock thickening and dewatering using a belt press filter;
- Washed coal loadout at the plant via an 8,400-tonne open air stockpile;
- Plant Rock loadout via a 6,600-tonne open air stockpile;
- 16 km on-highway truck haul to the Rail Loadout;
- Washed coal loadout via a 30,000-tonne open air stockpile;
- 375 km rail transport using 116 car unit trains to Ridley Terminals.

Infrastructure

The construction of the infrastructure required to support the mining operation will occur in stages to minimize the upfront capital but also allow for expansion:

- 2020/21 – Infrastructure constructed to support the immediate operational needs are constructed;
- 2022 – Maintenance infrastructure upgraded; and
- 2023 – Stacker/reclaimer upgrade to be more efficient at the rail loadout.

The Infrastructure facilities outlined below will be constructed in years 2020 and 2021 of the operation:

- One 50,000L diesel fuel tank and dispensing station for mine and light vehicles;
- Electrical substation and site distribution;
- Improvements to 6.0km of existing forestry access road through the Goathorn Creek Valley;
- A fit for purpose 110 tonne single lane bridge over Goathorn Creek;
- A newly constructed 10.0 km access road to the train load out;
- A train load out pad with sprayer apparatus;
- 2.5 km rail loop which includes 500 metres for the lead tie in track to support a 116-car unit train;
- 3.6 km of 25 kV transmission line to site;
- A new 25 kV to 600 V substation and electrical rooms on site;
- A pole mounted 25 kV to 600 V transformer at Goathorn Creek;
- A second pole mounted transformer located at the Explosive storage facility;
- Communication system;
- Explosive Facilities and magazines;
- Flocculant sheds at the rail loadout and the main sedimentation pond at site; and
- Administration and mine dry building.

The Infrastructure facilities outlined below will then be added in 2022 to support the operation:

- Mine truck shop facility including a warehouse with a loading dock;
- Cold storage facility;

- Light vehicle shop and emergency rescue fabric structure;
- Second 50,000L diesel storage tank;
- Bulk lube facility at the truck shop; and
- Dust suppression system at the rail loadout and plant site.

The Infrastructure facilities outlined below will then be added in 2023 to support the operation:

- Stacking and Reclaiming system at the rail loadout;
- Additional conveyor antifreeze system; and
- Automated signals at Telkwa Crossing.

It is estimated that the facilities constructed in 2020/2021 will take up to eight months to deliver with the rail loop and access road being the longest lead items.

Coal Quality

Telkwa coal will be washed at an SG of 1.6 to produce a target 9% ash, mid-volatile semi-soft coking coal, at a saleable coal yield of 75%.

Table 11: Telkwa Coal Quality	Units	Tenas	NSW HV SSCC	QLD MV SSCC
Inherent moisture	%	1.1	2.5-4.5	2-2.5
Volatile matter	%	25.8	33-38	25-27
Ash	%	9.0	5-9.5	9.5-10
Sulphur	%	0.98	0.35-0.85	0.35-0.55
Fixed carbon	%	65.3	50-60	55
Free swell index		3-4	3-6	3-3.5
HGI		63	40-52	70-80
Reflectance	%	0.96	0.65-0.85	0.99-1.06
Maximum fluidity	Ddpm	6	10-500	15-50
Base acid ratio		0.15	0.10-0.20	0.12-0.21

The quality parameters for Telkwa coal are summarized in Table 11 above, and are compared to similar products exported from New South Wales and Queensland.

Coal Pricing

Kobie Koornhof & Associates Inc (**Koornhof**), a respected coal market specialist with particular expertise in North American coals, provided Allegiance with a market outlook for metallurgical coal along with a price guide for Telkwa coal as a mid-volatile semi-soft coking coal, and a mid-volatile PCI. The DFS, and hence the Upside Case, has relied on Koornhof's pricing guidance for a Telkwa mid-volatile semi-soft coking coal.

According to Koornhof, demand for hard coking coal is continuing at robust levels as steel industry fundamentals remain a strong driver for seaborne coking coal imports. The current constraints to supply availability for high quality coking coals is likely to remain for the foreseeable future, since global coking coal supply is not coming on line at a pace that will upset the current supply/demand balance. In the medium term, the biggest risk to metallurgical coal pricing lies in a possible global economic slowdown, fuelled by the fear of burgeoning trade wars.

In determining a suitable price point for Telkwa semi-soft coking coal, Koornhof notes Telkwa SSCC is a closer match with the Queensland medium volatile SSCC (**MV SSCC**), than New South Wales high volatile SSCC (**HV**

SSCC). The net effective carbon content of the MV SSCC, which is considerably higher than that of the HV SSCC, results in a premium of US\$2-3/tonne for the MV SSCC.

Koornhof noted that Australian SSCC for Q4 2018 was settled on January 29, 2019 at US\$135 per tonne. The net result for Telkwa SSCC, considering a sulphur penalty/ash premium, and factoring in the US\$2.50/tonne premium for MV SSCC over HV SSCC, is a US\$2.05/tonne discount to HV SSCC pricing. Based on the settlements for Q4 2018, that would indicate a price of US\$132.95 per tonne for Telkwa SSCC today.

Koornhof assumed a price range for premium benchmark coking coal for the medium term (2020 to 2022) and long term (2023 onwards), against which it then applied the current trend discount for HV SSCC to benchmark hard coking coal. The benchmark parameters used for pricing are summarized in Table 12 below.

Table 12: Benchmarking	Price as % of HCC	Medium term price US\$/t	Long term price US\$/t
		Years 2020 - 2022	Years 2023 onwards
Premium low vol coking coal	100%	185 - 210	175 - 210
Semi-soft coking coal	66%	122 - 139	116 - 139

Using a value in use methodology, Koornhof provided a price range forecast for Telkwa coal summarised in Table 13 below.

For the purposes of the Upside Case, Allegiance assumed the lowest price of US\$120/t for coal sold in 2021 and 2022, and the lowest price of US\$114/t for coal sold from 2023 onwards.

Table 13: Price forecast		Medium term price US\$/t	Long term price US\$/t
		Years 2020 - 2022	Years 2023 onwards
Telkwa MV SSCC price range		120 - 137	114 - 137

Coal Markets

All steel mills use a blend of coking coals ranging from hard coking coals to semi-coking coals to feed their coke ovens. Generally, the steel mills blend at a ratio of 70:30 hard coking coal to semi-coking coal. In some instances, semi-coking coal is the primary feed for a coke oven.

Tenas Project's target customers are the north Asian steel mills. Using coal derived from the 2018 drill programme, Allegiance provided bulk sample coal to the three Japanese steel mills and one South Korean steel mill, all of whom undertook coal quality tests. Following the test results, expressions of interest were lodged for the purchase of Telkwa coal once the Tenas Project is in production.

Feedback from the steel mills emphasised the scarcity of mid-volatile semi-soft coking coals on the seaborne market. They advised that the semi-soft market is dominated by the supply of high volatile semi-soft coking coals from the Hunter Valley and that there only a few mines, producing low volumes, of mid-volatile semi-coking coal from central Queensland. They also advised there was no non-Australian supplier of mid-volatile semi-soft coking coal to the seaborne market, placing Telkwa coal in a unique position.

Koornhof also noted in his report, that "Telkwa SSCC is expected to be well received due to limited availability of midvol SSCC on the seaborne market, in contrast to the more readily available high volatile SSCC coals from NSW. The market should react favourably to the introduction of a new midvol SSCC, not only as diversification from Australia, but also due to the fact that Canadian SSCC supplies have largely been eliminated with the closure of the Coal Mountain operation."

Capital

The start-up capital expenditure is summarized in Table 14 below.

Table 14: Start-up Capital	Upside		DFS	
	Lease finance	Owner equity	Lease finance	Owner equity
Pre-production activities		4.2		4.2
CHPP and associated plant infrastructure	3.3	15.5	3.3	14.0
Minesite infrastructure		12.5		12.5
Water management		17.3		17.3
Rail loop and loadout		5.4		5.4
Mobile equipment	32.9	0.9	32.9	0.9
Total Start-up Capital (excludes contingency)	36.2	55.8	36.2	54.3

Pre-production activities includes land clearing, logging, topsoil salvage and pre-strip.

Minesite infrastructure primarily includes:

- Earthworks;
- Connecting to power including sub-station;
- Upgrading existing forestry roads;
- ROM and clean coal haul road construction including several small bridges;
- Raw water system;
- Fuel tanks; and
- Fencing.

As discussed previously, the CHPP is a Sedgman designed modular wash plant which will have a feed capacity on start-up of 145t/h expanded in year five to feed 250t/h.

The wash plant configuration was driven by a desire to minimise start-up capital expenditure without materially compromising yield and performance, as well as allowing an increase in production in year six funded by cashflow.

Effective and reliable water management is critical for any mine operation in British Columbia. Managing surface water from rain and snow melt that contacts mine operations is very important. Contact water is diverted via ditches to ponds where the water is held allowing sediment to settle prior to the water being discharged into the catchment area.

The DFS, and hence the Upside Case, assumes the water will be discharged into the Telkwa River (a large watercourse) via a pipe. Water is discharged in spring and summer once the ponds have thawed after the spring melt and during high water flows.

In addition, some of the waste rock mined has the potential to leach acid when exposed to air and water, which the Study assumes will be submerged under water in management ponds constructed during the first 10 years of production eliminating the opportunity for the rock to acidise.

The Study assumes that start-up production equipment will involve new equipment. Attractive equipment financing terms were offered by several well known equipment brands for fleets of new equipment.

The sustaining capital expenditure is summarized in Table 15 below.

Table 15: Sustaining Capital	Upside		DFS	
	Lease finance	Owner equity	Lease finance	Owner equity
Milestone payments for project acquisition		5.3		5.6
Mining		8.1		8.1
CHPP and associated plant infrastructure		20.3		11.4
Minesite infrastructure		4.3		4.4
Water management		52.4		52.4
Rail loop and loadout		1.9		2.8
Mobile equipment	10.8	22.0	10.8	21.6
Administration infrastructure		0.7		0.7
Total Sustaining Capital (excludes contingency)	10.8	115.0	10.8	107.0

The major change in sustaining capital from the DFS is the cost of the wash plant as discussed.

The milestone payments are to Altius Minerals Corporation in the first two years after the commencement of production and represent the majority of the purchase price paid by Allegiance for the acquisition of the Telkwa coal exploration tenements.

The Study assumes US\$10.8M of mobile equipment will be lease financed and the balance funded from cashflow. As discussed above, on going water management, and mitigating the risk of environmental impact is important and requires significant ongoing capital investment during the life of mine. This is not uncommon in British Columbia, and Canada generally, and reflects the high standards that Canada sets for the protection of the environment from industry, not just mining.

Operating Costs

Operating costs are summarized in Table 16 below.

Table 16: Operating Costs Life of Mine		Upside	DFS
Saleable coal / tonne		US\$	US\$
Site Costs			
Mining – waste removal and coal recovery		17.1	19.5
Coal processing		5.2	6.3
General and administration		3.0	4.2
Reclamation		0.9	0.9
Transportation and Marketing			
Marketing costs		1.9	1.9
Haulage (CHPP to Rail Siding)		3.8	3.8
Rail to port and loaded		13.1	13.1
Total all-in cash cost FOB pre-interest and tax		45.0	49.7

With the increase in production volumes year-on-year, under the Upside Case, unit costs per saleable tonne reduce to US\$45/t, FOB port at Ridley Coal Terminal. Significantly all of the reduction occurs in Site Costs where the fixed cost component has reduced with the shorter mine life from 22 to 14.4 years.

The Tenas Project enjoys relatively easy mining conditions with flat gentle dipping coal seams, and a low average life-of-mine strip ratio of 3.6:1 BCM/ROMt, or 4.8:1 BCM/PRODt. This along with dozer pushing and back filling a significant amount of waste rock material during mine operations, has contributed to very low mining costs.

Itochu Corporation are the appointed sales agent for Telkwa coal, and receive a sales commission of 3 percent of the FOB price, of which 1.5% is paid on sale, and 1.5% is paid as a profit share after EBITDA, assuming

EBITDA is positive. The EBITDA marketing fee is not included in the all in cash cost/t above because it is subject to profitability, not revenue.

A royalty is also payable to Altius Minerals Corporation for the life of mine as part of the project acquisition purchase price, equal to 3% of the FOB price, and paid quarterly after sales, which royalty is not included in the all in cash cost/t above.

Financing

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

Funding from completed DFS to completion of permitting

As previously announced by Allegiance on 5 November 2018, Itochu Corporation of Japan (**Itochu**) has agreed to invest C\$6.6M (A\$6.9M) into Telkwa Coal Ltd (**TCL**), subscribing for shares in TCL representing 20 percent of the issued share capital of TCL, as follows:

- C\$1.5M for a 5.3% interest in TCL, completed in January 2019, following the issue of a section 10 order under the Environmental Assessment Act of British Columbia (which formally acknowledges the Tenas Project has been accepted for environmental review and permitting and was received by TCL early November 2018);
- C\$1.5M for a further 4.8% interest in TCL, following completion of the Tenas Project DFS to the satisfaction of Itochu and which was confirmed by Itochu on 26 June 2019;
- C\$3.6M for a further 9.9% interest in TCL, following lodgement of an application for an Environmental Assessment Certificate, targeted for Q3 2019; and
- In addition to the shares that Itochu receives in TCL, Itochu has been granted the exclusive right to market and sell all coal mined at Telkwa, including from the Tenas Project.

It is anticipated that the Itochu investment will substantially fund TCL through to the completion of permitting. To the extent that it does not, Allegiance may have to raise additional capital for that purpose. If required, it is presently anticipated that such capital would most likely be raised through:

- Equity capital markets; and/or
- Further farm-out of participating interests in the Tenas Project to Itochu, or other potential investors.

Mine development funding post permitting

Itochu has the right, after permits to mine the Tenas Project are granted, to subscribe for additional shares in TCL on the basis of a valuation where all permits to mine are granted. That valuation is to be determined between the parties, or failing that by an independent expert. It is Allegiance's view that a valuation of the Tenas Project where all permits to mine are granted, will properly reflect value and that Itochu is likely to be prepared to invest further equity towards Tenas Project construction in order to monetise the value of their coal marketing rights. The Board considers this view reasonable. Without this further investment, and in the absence of alternative funding, the coal marketing rights will not be of value.

Two major equipment suppliers have offered favourable financing terms for the supply of new mining equipment during the mine start-up phase. The Study has assumed that the major equipment supplied from the preferred supplier will be lease financed from that supplier at the offered interest rate of 5.6% pa, and

repaid in full over five years from the commencement of production. In addition, the Study assumed that ancillary mobile equipment will also be lease financed and assumed the same finance lease rate offered by the same preferred supplier.

Table 15 below lists the major mine equipment, for the start-up phase, with indicative price and finance terms from the preferred supplier, and summarises the ancillary mobile mine equipment assuming the same finance rate.

Table 15: Equipment lease financed on start-up	Number of units	C\$'000
Crawler-mounted Rotary Drill 6.00-9.88 inch diameter	1	2,662
Crawler-mounted Rotary Drill 4.5 inch diameter	1	778
Diesel 15.7 cubic yard Backhoe	2	7,366
Diesel 7 cubic yard Backhoe	1	1,228
100-ton class Haul Truck	10	20,354
D8 class 12.9 inch blade Dozer	3	2,988
14H class 14 inch blade Grader	3	1,608
100-ton class 75,000 L Water Truck	1	2,335
Articulated Haul Truck 43 st 30 yd	2	1,902
988 class Front End Loader	4	4,335
Ancillary mobile equipment		3,664

In addition to the above, mine development funding options will be explored during the permitting phase of the Tenas Project and include:

- Project finance;
- Vendor finance;
- Customer finance; and/or
- Equity capital markets.

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: Key Performance Indicators Life of Mine	Units	Value
2021 and 2022 average coal price	US\$/t	120
2023 onwards average coal price	US\$/t	114
Exchange rate Canadian dollars to US dollars	CAD:USD	1.33
Exchange rate Australian dollars to US dollars	AUD:USD	1.41
Exchange rate Canadian dollars to Australian dollars	AUD:CAD	1.06
BC Minerals tax rate (deductible from corporate taxes)*	%	2 or 13
BC Corporate tax rate	%	11
Federal Corporate tax rate	%	15

*BC Minerals tax rate comprises a net current proceeds tax rate of 2% or a net revenue tax rate of 13% depending on taxable income.

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

The increase in production volume under the Upside Case from 750k saleable tonnes to 1.35M saleable tonnes stepping-up over years five and six, brings forward cashflow which in turn has a profound effect on the net present value of the Tenas Project.

The pre-tax NPV of the Upside Case shows an increase of A\$130M compared to the DFS, and post tax NPV A\$82.5M, an increase of 32% with a corresponding increase in the internal rate of return.

Table 17: Key Performance Indicators	Units	Upside	DFS
Pre-tax NPV _{8%}	A\$M	537.3	407.3
Pre-tax IRR	%	60.8	56.9
Post-tax NPV _{8%}	A\$M	343.0	260.5
Post-tax IRR	%	51.0	47.0
Payback from commencement of production	Years	2.5	2.5

Since publication of the DFS, Allegiance's equity ownership in TCL has reduced from 95% to 90% following the second investment by Itochu into TCL. The remaining 10% of TCL is owned by Itochu. On that basis, Allegiance's current 90% share of Upside Case Project NPV is summarized in Table 18 below in the Upside column.

Table 18: Allegiance's share of NPV	Units	Upside	DFS
Pre-tax NPV _{8%}	A\$M	483.5	386.9
Post-tax NPV _{8%}	A\$M	308.7	247.5

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 19 and 20 below.

Table 19:		Operating and Capital Costs (US\$M)						
NPV (US\$M)	243	880	1,006	1,132	1,258	1,384	1,509	1,635
Price US\$/Product tonne	84.0 & 79.8	163	128	93	57	21	-17	-57
	96.0 & 91.2	223	189	155	121	85	49	12
	108.0 & 102.6	283	250	216	182	148	112	77
	120.0 & 114.0	343	310	277	243	209	175	141
	132.0 & 125.4	402	370	337	304	270	236	202
	144.0 & 136.8	462	429	397	364	331	297	264
	156.0 & 148.2	522	489	456	424	391	357	324

Table 20:		Operating and Capital Costs (US\$M)						
IRR (%)	51	880	1,006	1,132	1,258	1,384	1,509	1,635
Price US\$/Product tonne	84.0 & 79.8	48%	34%	25%	17%	11%	6%	2%
	96.0 & 91.2	67%	49%	37%	27%	20%	15%	10%
	108.0 & 102.6	88%	66%	50%	39%	30%	23%	17%
	120.0 & 114.0	111%	84%	65%	51	40%	32%	25%
	132.0 & 125.4	136%	104%	81%	64%	52%	42%	34%
	144.0 & 136.8	164%	125%	98%	79%	64%	52%	43%
	156.0 & 148.2	196%	149%	117%	94%	77%	63%	53%

Tables 19 and 20 show that the Tenas Project performance indicators are sensitive to changes in commodity price and operating and capital costs. The Upside Case indicates the Project can sustain a 30% decrease in product selling price resulting in a post tax NPV_{8%} of US\$57M and 17% post tax IRR. The Project can sustain a 30% increase in capital and operating costs resulting in a post tax NPV_{8%} of US\$141M and 25% post tax IRR.

Risks

The key risks in relation to the Tenas Project are summarised below:

- **Environment:** The impact of mining on the environment is always an issue irrespective of the type of mine and its location. Once the Company has completed its environmental effects assessment of the Project, the Company will have a solid understanding of what the impacts might be.
- **Water Management:** Related to the first point of environmental impact, one area of particular concern to the Company is water management. The Project has several streams within its vicinity which all feed into a major river system. Ensuring that the Project discharges clean surface water back into the river system is a matter of high priority to the Company.
- **Acid Rock Management:** The Project has some waste rock that has potential to generate acid leaching of metals when mined and exposed to air and water. The Study assumes this rock will be permanently stored under water cover in management ponds constructed in the first five years of mining. This plan will prevent oxidation of the rock which in turn will eliminate the requirement for treatment of acidic water. There is a risk that the water balance will not be positive requiring water to be pumped from a watercourse to maintain the water cover, or active ongoing water treatment.
- **Water Discharge Quality:** The Government provides thresholds for water quality discharge. Until an effects assessment of the Project on water quality being discharged into the catchment is completed, and which is part of the environmental assessment process, it will not be known for certain whether the treatment of water prior to discharge is required.
- **Permitting:** There is no guarantee that the Project will be granted all permits required to operate a mine at whatever stage of planned production. Whilst British Columbia is in a first world country, with a very prescriptive mine permitting regime, there is always uncertainty and doubt as to whether Government ministries will support a particular mining activity.
- **Finance:** Notwithstanding the Company's confidence in this regard, there is no guarantee that if and when the Project is permitted and ready for development, there will be funding available to do so. Whilst the Project is very low down the cost curve and can withstand a material drop in the price of coal, the volatility of commodity prices in a downward trend often dampens the interest of investors in a particular commodity, such that funding may be difficult to secure.
- **Coal performance:** unless and until a particular coal has been tested for its performance in a blast furnace, there remains an uncertainty as to how it will actually perform, and this may have an impact on coal pricing.

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About Allegiance Coal

Allegiance Coal is a publicly listed (ASX:AHQ) Australian company advancing a metallurgical coal mine into production in British Columbia, Canada. The Telkwa metallurgical coal complex (Project) includes three pit areas comprising 125.8Mt of JORC compliant coal resource of which 102.3Mt is in the Measured Category; 22.3Mt is in the Indicated Category; and 1.2Mt is in the Inferred Category. The Tenas Project the subject of the DFS and this Upside Case represents the first development of the complex and comprises 36.5Mt of the Project resource and 16.5Mt of the Project reserves.

Coal Resources & Reserves

Tenas Project: The estimate of coal resources or reserves in this announcement in respect of the Tenas Project was first reported in the Company's announcement of 18 June 2018, updated on 18 March 2019. The Company confirms it is not aware of any new information or data that materially affects the information included in those announcements insofar as it relates to the coal resource or reserves for the Tenas Project and that all material assumptions and technical parameters underpinning the estimates in those announcements continue to apply and have not materially changed.

Goathorn Deposit & Telkwa North Deposit: The estimates of coal resources or reserves in this announcement in respect of the Goathorn Deposit & the Telkwa North Deposit, were first reported in the Company's announcement of 3 July 2017. The Company confirms that it is not aware of any new information or data that materially affects the information included in that announcement insofar as it relates to the coal resources or reserves for the Goathorn Deposit & the Telkwa North Deposit and that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

Competent Persons Statement

The estimate of coal reserves in this announcement in respect of the Tenas Project is based on and fairly represents, information and supporting documentation prepared by by Mr Ron Parent and Mr Robert McCarthy. Mr Parent is a Professional Geologist registered with the Association of Professional Engineers and Geoscientists of British Columbia. Mr McCarthy is a Professional Engineer registered with the Association of Professional Engineers and Geoscientists of British Columbia. Mr Parent and Mr McCarthy 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 Parent and Mr McCarthy as competent persons for this announcement have consented to the inclusion of the information in the form and context in which it appears herein.
