Coronado Global Resources Inc. Statement of Coal Resources and Reserves for the Logan County Complex in Accordance with the JORC Code and United States SEC Regulation S-K 1300 as of December 31, 2023 Central Appalachian Coal Basin West Virginia, USA

February 2024

Prepared for: Coronado Global Resources Inc. 100 Bill Baker Way Beckley, West Virginia 25801 Prepared by: MARSHALL MILLER & ASSOCIATES, INC. 582 Industrial Park Road Bluefield, Virginia 24605 www.mma1.com

Statement of Use and Preparation

This Technical Report Summary (*TRS*) was prepared by **Marshall Miller & Associates, Inc.** (*MM&A*) for the sole use of **Coronado Global Resources Inc.** (*Coronado*) and its affiliated and subsidiary companies and advisors. Copies or references to information in this report may not be used without the written permission of Coronado.

This report provides a statement of coal resources and coal reserves for Coronado, as defined under the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code*) as well as under Subpart 1300 of Regulation S-K (Regulation S-K 1300) promulgated by the **United States Securities and Exchange Commission (SEC)**. Subject to the comments below, this report was also prepared in accordance with the *Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (VALMIN Code*).

The statement is based on information provided by Coronado and reviewed by *Qualified Persons* (*QPs*) who are full-time employees of MM&A.

As noted above, this report is a "Public Report" for the purposes of the VALMIN Code. However, in accordance with paragraph 12.1 of the VALMIN Code, it is noted that this report is not a "Valuation of Mineral Assets", and it also does not comply with the following requirements that apply to "Technical Assessments" (as defined in the VALMIN Code):

This report does not include a determination of the status of tenure (as required by paragraph 7.2 of the VALMIN Code) on the basis that tenure was separately reviewed by Coronado's legal advisors.

This report does not include separate commentary on the reasonableness and quality of the Resources and Reserves estimates and the basis on which they have been reported (as required by paragraph 7.3 of the VALMIN Code). MM&A did not consider that this was appropriate in circumstances where MM&A was engaged for the specific purpose of preparing those estimates. However, MM&A notes that, in accordance with its usual practice, a separate team of MM&A employees undertook a peer review of this report and confirmed that both the process followed by the authors of this report and the estimates prepared were reasonable and comply with the requirements of the JORC Code.

1

The information in this TRS related to coal resources and reserves is based on, and fairly represents, information compiled by the QPs. At the time of reporting, MM&A's QPs have sufficient experience relevant to the style of mineralization and type of deposit under consideration and to the activity they are undertaking to qualify as a QP as defined by Regulation S-K 1300 and the JORC Code. Each QP consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

Marshall Miller & Associates, Inc. (MM&A) hereby consents to the use of the information contained in this report dated December 31, 2023, relating to estimates of coal resources and coal reserves controlled by Coronado.

2

Qualified Person: Date:

/s/ Marshall Miller & Associates, Inc. February 16, 2024

Table of Contents

1	Executive	e Summa	ary					1	L
	1.1 Prop	perty De	scription					1	
	1.2 Owr	nership						2	
	1.3 Geo	logy						3	
	1.4 Expl	loration	Status					3	
	1.5 Ope	erations a	and Developmen	t				3	
	1.6 Min	eral Reso	ource					4	
	1.7 Min	eral Rese	erve					4	
	1.8 Cap	ital Sumi	mary					5	
	1.9 Ope	erating Co	osts					6	
	1.10	Econom	nic Evaluation					7	
		1.10.1	Discounted Cas	h Flow Analy	ysis			10	
		1.10.2	Sensitivity Anal	ysis				11	
	1.11	Permitt	ing					11	
	1.12	Conclus	ion and Recomn	nendations				11	
2	Introduc	tion						12	2
	2.1 Reg	istrant ai	nd Terms of Refe	erence				12	
	2.2 Info	rmation	Sources					13	
	2.3 Pers	onal Ins	pections					14	
3	Property	Descrip	tion						ł
	• •	•							
	3.2 Title	es, Claim	s or Leases					15	
	3.3 Min	eral Righ	nts					15	
	3.4 Enci	umbranc	ces					16	
	3.5 Oth	er Risks .						16	
4	Accessib	ility, Clin	nate, Local Reso	urces, Infras	structure a	nd Physiogra	ohy	16	5
		•	Elevation, and \				•		
			Fransport						
			Population Cent						
			Length of Opera						
	4.5 Infra	astructu	re					17	
5	History							17	,
			eration						
		•	oloration						
6			g, Mineralizatio						
Ū	•		cal and Property	•					
	0.1 1105	101101, 20	cal and rioperty	Scology				10	
MAR	SHALL MILLER & A	SSOCIATES, INC	с.						i

7	Explora	tion	2
-	•	ture and Extent of Exploration21	
		on-Drilling Procedures and Parameters24	
		illing Procedures	
		ine Data	
		drology	
		otechnical Data25	
8	Sample	Preparation, Analyses and Security	2
		ior to Sending to the Lab	
	8.2 La	b Procedures	
9	Data Ve	erification	2
	9.1 Pr	ocedures of Qualified Person27	
		nitations	
	9.3 Op	ninion of Qualified Person	
10	Minera	I Processing and Metallurgical Testing	2
	10.1	Testing Procedures	
	10.2	Relationship of Tests to the Whole	
	10.3	Lab Information	
	10.4	Relevant Results	
11	Minera	l Resource Estimates	3
	11.1	Assumptions, Parameters and Methodology	
		11.1.1 Geostatistical Analysis	
	11.2	Qualified Person's Estimates	
	11.3	Resources Exclusive of Reserves	
		11.3.1 Initial Economic Assessment	
	11.4	Resources Inclusive of Reserves	
	11.5	Qualified Person's Opinion	
12	Minera	I Reserve Estimates	3
	12.1	Assumptions, Parameters and Methodology	
	12.2	Mineral Reserves40	
		12.2.1 Surface Reserves41	
		12.2.2 Underground Reserves	
	12.3	Qualified Person's Estimates43	
	12.4	Qualified Person's Opinion44	
13	Mining	Methods	4
	13.1	Geotech and Hydrology44	

	13.2	Production Rates	HJ
	13.3	Mining Related Requirements	46
		13.3.1 Underground	46
		13.3.2 Surface Mine	46
		13.3.3 HWM	46
	13.4	Required Equipment and Personnel	46
		13.4.1 Underground Mines	46
		13.4.2 Surface Mines and Highwall Miners	52
14	Process	ing and Recovery Methods	5
	14.1	Description or Flowsheet	
	14.2	Requirements for Energy, Water, Material and Personnel	56
15	Infrastr	ucture	5
16	Market	Studies	
10	16.1	Market Description	
	16.2	Price Forecasts	
	16.3	Contract Requirements	
17		mental Studies, Permitting and Plans, Negotiations or Agreem ndividuals	
	17.1	Results of Studies	
	17.2	Requirements and Plans for Waste Disposal	
	17.3	Permit Requirements and Status	
	17.4	Local Plans, Negotiations or Agreements	
	17.4	Mine Closure Plans	
	175		
	17.5 17.6		
10	17.6	Qualified Person's Opinion	63
18	17.6 Capital	Qualified Person's Opinion	63 63
18	17.6 Capital 18.1	Qualified Person's Opinion and Operating Costs Capital Cost Estimate	63 63
-	17.6 Capital 18.1 18.2	Qualified Person's Opinion and Operating Costs Capital Cost Estimate Operating Cost Estimate	63 63
18 19	17.6 Capital 18.1 18.2 Econom	Qualified Person's Opinion and Operating Costs Capital Cost Estimate Operating Cost Estimate hic Analysis	63 63
-	17.6 Capital 18.1 18.2 Econom 19.1	Qualified Person's Opinion and Operating Costs Capital Cost Estimate Operating Cost Estimate nic Analysis Assumptions, Parameters and Methods	
-	17.6 Capital 18.1 18.2 Econom 19.1 19.2	Qualified Person's Opinion and Operating Costs Capital Cost Estimate Operating Cost Estimate hic Analysis Assumptions, Parameters and Methods Results	
-	17.6 Capital 18.1 18.2 Econom 19.1 19.2 19.3	Qualified Person's Opinion	
-	17.6 Capital 18.1 18.2 Econom 19.1 19.2 19.3	Qualified Person's Opinion and Operating Costs Capital Cost Estimate Operating Cost Estimate hic Analysis Assumptions, Parameters and Methods Results	
19	17.6 Capital 18.1 18.2 Econom 19.1 19.2 19.3	Qualified Person's Opinion	
19 20	17.6 Capital 18.1 18.2 Econom 19.1 19.2 19.3 Adjacen 20.1	Qualified Person's Opinion	
19 20	17.6 Capital 18.1 18.2 Econom 19.1 19.2 19.3 Adjacen 20.1 Other F	Qualified Person's Opinion	
19 20 21	17.6 Capital 18.1 18.2 Econom 19.1 19.2 19.3 Adjacen 20.1 Other F	Qualified Person's Opinion	
19 20 21	17.6 Capital 18.1 18.2 Econom 19.1 19.2 19.3 Adjacen 20.1 Other F Interpret	Qualified Person's Opinion	

22.2.2 Limitations
22.2.3 Methodology
22.2.4 Development of the Risk Matrix75
22.2.5 Categorization of Risk Levels and Color Code Convention1
22.2.6 Description of the Coal Property1
22.2.7 Summary of Residual Risk Ratings2
22.2.8 Risk Factors
23 Recommendations
24 References
25 Reliance on Information Provided by the Registrant
Figures (in Report)
Figure 1-1: Coronado Logan Property Location Map
Figure 1-2: CAPEX
Figure 1-3: OPEX
Figure 1-4: Sensitivity of NPV11
Figure 3-1: Logan Property Location14
Figure 6-1: Coal Basins & Logan Property Location19
Figure 6-2: Logan Stratigraphic Column
Figure 7-1: Logan Cross-Section
Figure 11-3: Variogram of the Total Seam Thickness for the No. 2 Gas Seam Present in the Logan Complex
Figure 11-4: Result of DHSA for the No. 2 Gas Seam Present in the Logan Complex
Figure 11-5: Results of Initial Economic Assessment
Figure 15-1: Logan Surface Facilities 58
Figure 18-1: CAPEX 64
Figure 19-1: Cash Costs per Tonne67
Figure 19-2: Sensitivity of NPV71
Tables (in Report)
Table 1-1: Coal Resources Summary as of December 31, 2023 (Mt)
Table 1-3: Coal Reserves Summary (Marketable Sales Basis) as of December 31, 2023 (Mt)5
Table 1-4: Life-of-Mine Tonnage, P&L before Tax, and EBITDA (\$000)
Table 1-5: Project Cash Flow Summary (\$000)*
Table 2-1: Information Provided to MM&A by Coronado

MARSHALL MILLER & ASSOCIATES, INC.

iv

Table 11-1: General Reserve & Resource Criteria 32	
Table 11-2: DHSA Results Summary for Radius from a Central Point 36	
Table 11-3: Coal Resources Summary as of December 31, 2023 (Mt)	
Table 11-4: Results of Initial Economic Assessment (\$/tonne)	
Table 12-1: Coal Summary (ROM Basis (Moist)) as of December 31, 2023 (Mt)	
Table 12-2: Coal Reserves Summary (Marketable Sales Basis) as of December 31, 2023 (Mt) 44	
Table 13-1: Underground Summary of Production by Year (Tonnes x 1,000)	
Table 13-2: Surface Summary of Production by Year (Tonnes x 1,000)	
Table 13-3: Highwall Summary of Production by Year (Tonnes x 1,000)	
Table 16-1: Quality Specifications by Product	
Table 17-1: Logan Mining Permits	
Table 18-1: Estimated Coal Production Taxes and Sales Costs	
Table 18-2: Logan Operating Costs	
Table 19-1: Life-of-Mine Tonnage, P&L before Tax, and EBITDA (\$000)	
Table 19-2: Summary of Logan Key Financial Performance Metrics (2024-2031)	
Table 19-3: Project Cash Flow Summary (\$000)*	
Table 22-1: Probability Level Table 76	
Table 22-2: Consequence Level Table 77	
Table 22-3: Risk Matrix1	
Table 22-4: Risk Assessment Matrix 2	
Table 22-5: Geological and Coal Resource Risk Assessment (Risks 1 and 2)	
Table 22-6: Environmental (Risks 3 and 4)4	
Table 22-7: Regulatory Requirements (Risk 5)	
Table 22-8: Market and Transportation (Risk 6)	
Table 22-9: Market and Transportation (Risk 7)	
Table 22-10: Methane Management (Risk 8) 6	
Table 22-11: Mine Fires (Risk 9)7	
Table 22-12: Highwall Failure (Risk 10) 7	
Table 22-13: Availability of Supplies and Equipment (Risk 11)	
Table 22-14: Labor – Work Stoppage (Risk 12)8	
Table 22-15: Labor – Retirement (Risk 13)8	
Table 25-1: Information from Registrant Relied Upon by MM&A	

MARSHALL MILLER & ASSOCIATES, INC.

v

Appendices	
A	MM&A
Qualifications	
В	Μ
aps	
C	Glossary of
Terms	
D	Initial Economic Assessment for Resources Exclusive of
Reserves	
E	JORC
Table 1	

vi

1 Executive Summary

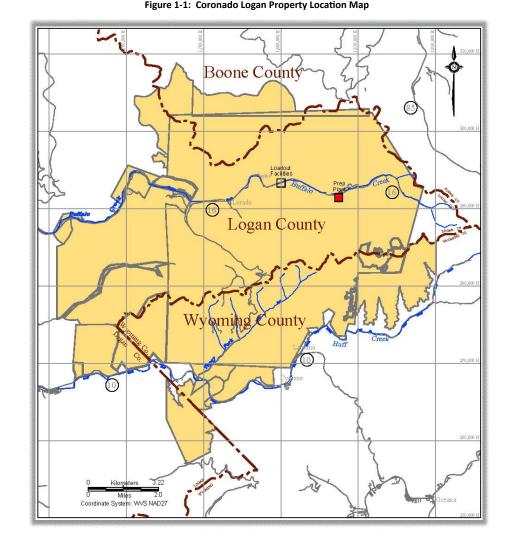
1.1 Property Description

Coronado Global Resources Inc. (Coronado) authorized Marshall Miller & Associates, Inc. (MM&A) to prepare this Technical Report Summary (TRS) of its controlled coal resources and reserves located at the Logan County Complex (Logan) in Boone, Logan and Wyoming Counties, West Virginia (the Property). This TRS updates the TRS titled, "Coronado Global Resources Inc. Statement of Coal Resources and Reserves for the Logan County Complex in Accordance with the JORC Code and United States SEC Regulation S-K 1300 as of December 31, 2022 Central Appalachian Coal Basin West Virginia, USA February 2023," dated February 15, 2023, due to material differences in the key financial modifying factors including coal sales price assumptions, operating costs and capital costs from December 31, 2022 to December 31, 2023. Coal sales price assumptions are discussed in Sections 12 and 16 of the TRS, while operating costs and capital costs are discussed in Sections 18 and 19 of the TRS. A portion of the resources defined in the February 2023 TRS were converted to reserves as discussed in Section 11 of the current TRS. The report provides a statement of coal resources and coal reserves for Coronado, as defined under the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) as well as under Subpart 1300 of Regulation S-K (Regulation S-K 1300) promulgated by the United States Securities and Exchange Commission (SEC). This report was also prepared in accordance with the Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (VALMIN Code).

Coal resources and coal reserves are herein reported in metric units of measurement and are rounded to millions of metric tonnes (*Mt*).

Surface facilities for the operations are located along Buffalo Creek and a **CSX Corporation (CSX)** rail line about 21 kilometers north-northeast of Man, West Virginia (see *Figure 1-1*). The Property is composed of 13,183 total hectares, 13,114 of which are leased from private landholders under approximately 15 individual leases, and 69 hectares are owned by Coronado. Subject to Coronado exercising its renewal rights thereunder, a majority of the leases, covering a majority of the Logan reserves, expire upon exhaustion of the relevant coal reserves, which is expected to occur in 2057. One lease expires in 2032; however, Coronado is projected to have previously exhausted the reserves covered thereby.

1



1.2 Ownership

The Logan properties started mining in 1945 by Lorado Mining Company. The properties were sold to **Buffalo Mining Company** in 1964 and then to **Pittston Coal Company** (*Pittston*) in 1971. Pittston operated the properties until the early 1990's when it idled the mine complex and then in 2004 sold them to **Addington Resources**. Production resumed in 2005. **Imagin Natural Resources** acquired the properties in 2007 and then sold them to **Cleveland-Cliffs Inc.** (*Cliffs*) in 2011, which in turn sold the properties to Coronado in 2014.

MARSHALL MILLER & ASSOCIATES, INC.

1.3 Geology

The coal-bearing formation of interest at Logan is primarily the Kanawha Formation of Lower Pennsylvanian System, which comprises a major portion of the exposed ridges. The Kanawha Formation is a coal bearing sequence of sandstones, siltstones, shales, and mudstones with minor occurrences of siderite, limestone and flint clay.

Coronado mines several coal horizons within the Kanawha formation. The horizons are as follows: Buffalo Creek, Upper Clarion Rider, Clarion, Lower Clarion, Upper Stockton, Lower Stockton, Upper Coalburg, Lower Coalburg, Lower Dorothy, Upper Winifrede, Lower Winifrede, Chilton-A, Chilton, Upper Cedar Grove, Middle Cedar Grove, Lower Cedar Grove, 2 Gas, Upper Powellton, Lower Powellton, Eagle, and Lower War Eagle. Operations at the Logan Mine Complex extract multiple coal seams by both underground and surface mining methods.

1.4 Exploration Status

The Property has been extensively explored, largely by drilling with continuous coring methods and rotary drilling, often supported by downhole geophysical methods. In addition to exploration means, coal measurements from mine exposures have supplemented the database. The majority of the data was acquired or generated by previous owners of the Property. These sources comprise the primary data used in the evaluation of the coal resources and coal reserves on the Property. MM&A examined the data available for the evaluation and incorporated all pertinent information into this TRS. Where data was anomalous or not representative, that data was not honored within the digital databases and for subsequent processing by MM&A.

Ongoing exploration has been carried out by Coronado since acquiring the Logan Complex. Exploration data acquired from Coronado has been consistent with past drilling activities.

1.5 Operations and Development

As of December 31, 2023, underground mine operations were active at Lower War Eagle, Eagle No. 1 and Muddy Bridge Mines with three, three and two active mining sections, respectively, using the room-and-pillar method. The North Fork Winifrede Mine was fully depleted in 2023. The Powellton No. 1 Mine was in process of being rehabilitated and had minimal production during the fourth quarter of 2023, with plans to initiate full production with one mining section in the first quarter of 2024. Annual deep mine production peaks at approximately 2.6 Mt in 2033. Two active surface mines, Toney Fork and Elklick (Buffalo Creek South), were also operating. Surface production is projected to peak at 0.7 Mt in 2028. Highwall miner production is also projected to resume in 2024 with a peak in 2047 at 0.54 Mt. Overall production will continue until 2057 with peak production occurring in 2033 at 3.5 Mt.

The Logan County Complex includes the Saunders Preparation Plant in addition to the mines. The plant site includes raw coal storage, clean coal storage, a railroad loadout, and refuse disposal area. The plant has a feed rate capacity of 1,088 raw tonnes per hour.

3

1.6 Mineral Resource

Mineral resources, representing in-situ coal from a portion of which reserves are derived, are presented below. A coal resource estimate, summarized in *Table 1-1*, was prepared as of December 31, 2023, for property controlled by Coronado.

Table 1-1: Coal Resources Summary as of December 31, 2023 (Mt)

	Coal Resource (Dry Tonnes, In Situ, MT)				Resource Quality (Dry)			
Area	Measured	Indicated	Inferred	Total	Ash%	Sulfur%	VIM%	
Inclusive of Reserves	133.9	35.8	0.0	169.7				
Exclusive of Reserves	39.2	35.9	3.4	78.5	17	1.0	31	
Total 12/31/2023	173.1	71.7	3.4	248.3				
Note: Resource tonnes are inclusive of reserve tonnessince they include the in-situ tonnes from which recoverable coal reserves are derived.								

Note 2: Coal resources are reported on a dry basis. Surface moisture and inherent moisture are excluded. Note 3: The Property has 75.1 Mt of dry, in-place measured and indicated resource tonnes exclusive of reserves as of December 31, 2023.

1.7 Mineral Reserve

Reserve tonnage estimates provided herein report coal reserves derived from the in-situ resource tons presented in *Table 1-1*, and not in addition to coal resources. Proven and probable coal reserves were derived from the defined coal resource considering relevant mining, processing, infrastructure, economic (including estimates of capital, revenue, and cost), marketing, legal, environmental, socio-economic and regulatory factors. The Resource estimate has been used as the basis for this Reserve calculation, which utilizes a reasonable Preliminary Feasibility Study, a Life-of Mine (*LOM*) Mine Plan and practical recovery factors. Production modeling was completed with an effective start date of October 1, 2023. Additions and depletion have been used to bring the Reserve estimate forward to December 31, 2023.

Factors that would typically preclude conversion of a coal resource to coal reserve, which include the following: inferred resource classification; absence of coal quality; poor mine recovery; lack of access; geological encumbrances associated with overlying and underlying strata; seam thinning; structural complication; and insufficient exploration, have all been considered. Reserve consideration excludes those portions of the resource area which exhibit the aforementioned geological and operational encumbrances. Coal reserves are presented on a run-of-mine (*ROM*) basis in *Table 1-2*.

4

Table 1-2: Coa	Summary	(ROM B	asis (Mois	st)) as of De	cember	31, 2023	(Mt)			
Area / Mine		Der iability Catego Probable		oal Reserves (Mt, By Mining T Surface		/l) By Contro Owned	ol Type Leased		ality (Dry) Sulfur	Vol
Logan Mine Complex	104.1	30.5	134.6	37.0	97.6	0.0	134.6	49	0.9	19
Proven and probable coal reserve were derived from the defined in-situ coal resource considering relevant processing, economic (including technical estimates of capital, revenue and cost), marketing, legal, environmental, socio-economic, and regulatory factors. The proven and probable coal reserves on the Property are summarized below in <i>Table 1-3</i> . Table 1-3: Coal Reserves Summary (Marketable Sales Basis) as of December 31, 2023 (Mt) Demonstrated Coal Reserves (Wet Ton nes, Washed or Direct Shipped, MT)										
By Reliability Category By Mining Type By Control Type Quality (Dry Basis)										
Property	Proven	Probable	Total	Surface	UG	Owned	Leased	Ash% Su	ulfur% V	M%
Logan County Complex	54.9			32.2	38.4	0.0	70.6	8	0.9	35
Note: Marketable res				s, including a cor d6-percent, depe						

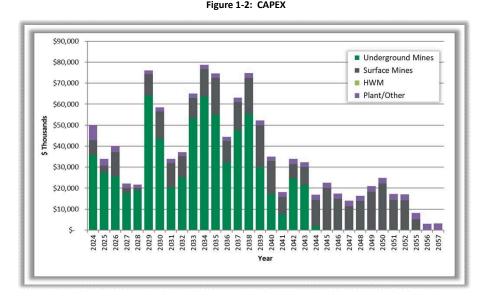
surface and inherent moisture is modeled between 4.5 and 6-percent, depending upon mining method. Actual product moisture is dependent upon multiple geological factors, operational factors, and product contract specifications and can exceed 8-percent. As such, the modeled moisture values provide a level of conservatism for reserve reporting.

In summary, Coronado controls a total of 70.6 Mt (moist basis) of marketable coal reserves at Logan as of December 31, 2023. Of that total, 78 percent are proven, and 22 percent are probable. All 70.6 Mt are leased coal reserves and are assigned. Approximately 62.2 Mt of reserves are considered suitable for the metallurgical coal market and 8.4 Mt are projected to be sold into the thermal coal market.

1.8 Capital Summary

Coronado provided MM&A with an inventory of operating equipment available at Logan. MM&A's capital schedules assume that major equipment rebuilds occur over the course of each machine's remaining assumed operating life. Replacement equipment was scheduled based on MM&A's experience and knowledge of mining equipment and industry standards with respect to the useful life of such equipment. A summary of the estimated capital for the Property is provided in *Figure 1-2* below.

5



1.9 Operating Costs

Coronado provided historical and preliminary 5-year projections of operating costs for its active mines for MM&A's review. MM&A used the historical and/or budget cost information as a reference and developed personnel schedules for each mine. Hourly labor rates and salaries were based upon information contained in Coronado's financial summaries. Fringe benefit costs were developed for vacation and holidays, federal and state unemployment insurance, retirement, workers' compensation and pneumoconiosis, casualty and life insurance, healthcare and bonuses.

For the underground operations, a cost factor for mine supplies was developed that relates expenditures to mine advance rates for roof control costs and other mine supply costs at underground mines. Other factors were developed for maintenance and repair costs, rentals, mine power, outside services and other direct mining costs.

Surface mine direct operating costs were developed as a function of overburden ratio for repair and maintenance supplies, diesel fuel, explosives and blasting, and miscellaneous supplies and services.

Operating costs for highwall mines are based on costs per ROM tonne estimates.

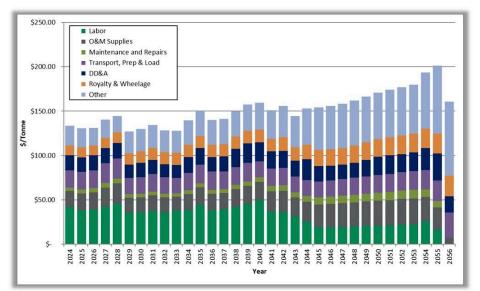
Operating costs factors were also developed for the coal preparation plant processing, refuse handling, coal loading, property taxes, and insurance and bonding.

6

Appropriate royalty rates were assigned for production from leased coal lands and sales taxes were calculated for state severance taxes, the federal black lung excise tax, and federal and state reclamation fees.

A summary of the projected operating costs for the Property is provided in Figure 1-3.





1.10 Economic Evaluation

The pre-feasibility financial model prepared for this TRS was developed to test the economic viability of the coal resource area. The results of this financial model are not intended to represent a bankable feasibility study, required for financing of any current or future mining operations contemplated for the Coronado properties, but are intended to establish the economic viability of the estimated coal reserves. Cash flows are simulated on an annual basis in year-end 2023 nominal dollars assuming a 2% inflation rate based on projected production from the coal reserves. The discounted cash flow analysis presented herein is based on an effective date of January 1, 2024.

On an un-levered basis, the net present value (*NPV*) of the project cash flow after taxes represents the Enterprise Value of the project. The project cash flow, excluding debt service, is calculated by subtracting direct and indirect operating expenses and capital expenditures from revenue. Direct costs include labor, operating supplies, maintenance and repairs, facilities cost for materials handling, coal preparation, refuse disposal, coal loading, reclamation and general and administrative costs. Indirect costs include statutory and legally agreed upon fees related to direct extraction of the mineral. The indirect costs are the Federal black lung tax,

MARSHALL MILLER & ASSOCIATES, INC.

Federal and State reclamation taxes, property taxes, coal production royalties, and income taxes.

Table 1-4 shows LOM tonnage, profit & loss (P&L), and earnings before income tax, depreciation & amortization (EBITDA) for Logan.

Table 1-4: Life-of-Mine Tonnage, P&L before Tax, and EBITDA (\$000)

		-			
	LOM	LOM	P&L	LOM	EBITDA
	Tonnes*	Pre-Tax P&L	Per Tonne	EBITDA	Per Tonne
Deep Mines					
Camp Br Chilton	1,607	\$61,067	\$38.00	\$92,000	\$57.24
Ramaco N2G	1,519	\$38,659	\$25.45	\$84,549	\$55.66
Eagle No. 1 (Toney Fork)	10,962	\$177,450	\$16.19	\$344,402	\$31.42
Elk Lick Chilton	3,809	\$184,040	\$48.32	\$250,250	\$65.70
Lower Powellton	5,095	\$216,991	\$42.59	\$328,684	\$64.51
Lower War Eagle	5,731	\$230,836	\$40.28	\$336,103	\$58.65
Powellton No. 1	3,474	\$37,743	\$10.86	\$142,820	\$41.11
Muddy Br No.2 Gas	2,713	\$43,531	\$16.05	\$83,882	\$30.92
Upper Winifrede	1,438	\$89,318	\$62.11	\$113,233	\$78.74
Lower Winifrede	2,091	\$83,351	\$39.86	\$118,042	\$56.45
Winifrede (Chilton Rider)**	-	\$(1,302)	\$-	\$(1,302)	\$-
Consolidated Deep Mines	38,439	\$1,161,684	\$30.22	\$1,892,665	\$49.24
Surface Mines					
Toney Fork Surf	6,313	\$184,154	\$29.17	\$367,638	\$58.23
Buffalo Cr South Area	7,673	\$125,604	\$16.37	\$279,578	\$36.44
Sugar Camp Area 1	4,912	\$(11,563)	\$(2.35)	\$149,696	\$30.47
Surface Mines Consolidated	18,899	\$298,195	\$15.78	\$796,912	\$42.17
HWM Operations					
Toney Fork HWM	4,919	\$468,937	\$95.33	\$488,239	\$99.25
Buffalo Cr South HWM	7,004	\$624,409	\$89.15	\$648,796	\$92.63
Sugar Camp HWM	1,328	\$117,241	\$88.27	\$128,692	\$96.90
HWM Consolidated	13,251	\$1,210,588	\$91.36	\$1,265,728	\$95.52
Grand Total	70,589	\$2,670,467	\$37.83	\$3,955,305	\$56.03

* The Financial model includes 0.001 million tonnes of inferred coal production. Inferred coal represents 0.000001% of the total production, and none of this coal was included in the estimate of reserves.

** The Winifrede (Chilton Rider) was depleted in the 4th quarter of 2023.

As shown in Table 1-4, the Logan operations show positive EBITDA over the LOM. Overall, the Coronado consolidated operations show positive LOM P&L and LOM EBITDA of \$2.7 billion and \$4.0 billion, respectively.

Coronado's consolidated Logan cash flow summary in nominal dollars assuming a 2% inflation rate, excluding debt service, is shown in Table 1-5 below.

8

2025 43 2,66 5396,7: 51 \$87,7: 94 \$36,8: 51 \$77,8: 97 \$43,9: 1 YE12/31 2031 38 3,00 57 \$513,3: 1 YE12/31 2031 38 3,00 57 \$513,3: 15 \$513,5: 15 \$135,2: 15 \$135,2: 15 \$135,2: 18) \$(33,90 77 \$101,3: 14 YE12/31 2037 23 3,44 15 \$638,2: 94 \$205,1: 15 \$638,2: 94 \$205,1: 16 \$205,1: 17 \$101,1: 17 \$101,1: 17 \$101,1: 17 \$101,1: 18 \$105,1: 18	34 \$393 338 \$84 361 \$331 361 \$331 361 \$331 372 \$100 3938 \$37 1 YE12/ 203 200 \$(40, 3064 31 \$153 315 \$188 772 \$111 3131 \$153 304) \$(37, 328 1 YE12/ 203 1 YE12/ 313 203 \$116 1 YE12/ 203 213 \$153 328 \$116 1 YE12/ 203 212 \$618	2,702 3,101 \$ 4,0030 5,587 7,752 7,752 7,752 7,714 7,714 7,714 7,21 7,243 7,202 5,698 5,698 5,668 5,668 5,668 5,668 5,668 5,748 5,668 5,748 5,668 5,748 5,668 5,748 5,668 5,748 5,7	2027 2,526 3373,074 562,338 514,764 562,427 5(22,171) \$40,256 E12/31 2033 3,562 5619,064 5215,324 5112,379 5112,979 E12/31 2039 2,953 5562,910	2028 2,390 5362,422 558,011 512,933 553,133 553,133 5121,683 531,450 YE12/31 2034 25522,811 5522,811 5522,811 5522,811 5522,811 5522,811 5522,811 5522,811 5522,811 5522,811 570,951
06 \$396,7: 51 \$87,7: 94 \$36,8i 51 \$77,8: 33) \$(33,92 97 \$43,9: 1 YE12/31 2031 33 38 3,00 57 \$513,34 73 \$150,6: 48 \$85,5: 15 \$135,2: 18) \$(33,90 77 \$101,3: 1 YE12/31 2037 \$101,3: 1 YE12/31 2037 \$3,44 15 \$638,2: 94 \$205,1:	34 \$393 338 \$84 361 \$331 361 \$331 361 \$331 372 \$100 3938 \$37 1 YE12/ 203 200 \$(40, 3064 31 \$153 315 \$188 772 \$111 3131 \$153 304) \$(37, 328 1 YE12/ 203 1 YE12/ 313 203 \$116 1 YE12/ 203 213 \$153 328 \$116 1 YE12/ 203 212 \$618	,101 \$,030 ,587 ,752 038) \$,774 (31 Y 2 ,243 ,202 \$,6698 \$,984 \$,984 (31 Y 120) \$,628 \$ (31 Y 8 ,308	\$373,074 \$62,398 \$14,764 \$62,427 \$62,427 \$22,171) \$40,256 E12/31 2033 3,562 \$519,064 \$19,064 \$132,364 \$132,364 \$132,364 \$112,979 \$12,931 \$2039 2,953	\$362,422 \$58,011 \$12,933 \$53,133 \$(21,683 \$31,45- YE12/31 2034 3,022 \$522,811 \$522,811 \$522,812 \$542,622 \$84,622 \$84,622 \$84,622 \$149,613 \$76,953 \$77,955 \$78,661 \$
51 \$87,7: 94 \$36,88 51 \$77,8: 31 \$(33,92) 97 \$43,9: 1 YE12/31 2031 38 38 300 57 \$513,33 73 \$150,6: 48 \$85,5: 15 \$135,2: 18) \$(33,90) 77 \$101,3: 1 YE12/31 2037 2037 23 3,44 15 \$638,2: 94 \$205,1:	'38 \$84 361 \$31 358 \$77 20) \$(40, 000) 338 \$37 1 YE12/ 203 203 364 3 368 \$553 515 \$188 515 \$153 514 \$153 304) \$(37, 228) 1 YE12/ 203 \$116 1 YE12/ 203 \$116 1 YE12/ 203 \$116 1 \$28 \$125 \$618	.030 .587 .752 .038) \$.714 .2 .243 .243 .202 \$.698 \$.984 \$.984 \$.984 \$.984 \$.308 \$.31 ¥1 .201 \$.628 \$.31 ¥1 .201 \$.338 \$.3388 \$.338 \$.338 .338 \$.338 \$.338 \$.338 \$.338 \$.338 \$.338	\$62,398 \$14,764 \$62,427 \$22,171 \$40,256 E12/31 2033 3,562 \$619,064 \$132,365 \$132,365 \$135,365 \$135,365 \$135,365 \$135,365	\$58,01: \$12,93: \$53,13 \$(21,683 \$31,45; YE12/31 2034 3,022 \$154,82; \$154,82; \$154,82; \$149,61: \$70,95: \$74,961 \$70,95: YE12/31 2040 2,655;
94 \$36,8t 51 \$77,8t \$30 \$(33,92) 97 \$43,92 97 \$43,92 1 ¥E12/31 2031 38 38 3,00 57 \$513,3t 73 \$150,6t 543,92 \$15 515 \$135,2t 18) \$(33,90) 77 \$101,3t 1 ¥E12/31 203 3,4t 415 \$638,2t 94 \$205,1t	361 \$31 358 \$77 20) \$(40, 0) 398 \$37 1 YE12/ 203 203 364 3 368 \$553 515 \$185 572 \$111 321 \$153 304) \$(37, 203) 1 YE12/ 203 \$116 1 YE12/ 203 \$116 318 3 325 \$618	,587 ,752 ,774 31 YI 2,202 \$ 6,698 \$ 6,698 \$ 9,844 \$ 1,748 \$ 120 \$ 6,628 \$ 3,628 \$ 3,748 \$ 120 \$ 6,628 \$ 3,748 \$ 120 \$ 6,628 \$ 3,008 \$ 2,000 \$ 120 \$ 1	\$14,764 \$62,427 \$(22,171) \$40,256 E12/31 2033 3,562 \$619,064 \$215,324 \$132,364 \$177,944 \$(54,965) \$112,979 E12/31 2039 2,953	\$12,93 \$53,13 \$(21,683 \$31,45 \$14,65 \$149,61 \$(78,661 \$(78,661 \$(78,661 \$(78,661 \$(78,661 \$(78,661 \$(78,661 \$(78,661 \$(78,661 \$(78,661)\$)\$(78,661)\$) \$(78,661)\$) \$(78,661)\$)\$(78,661)\$) \$(78,661)\$)\$(78,661)\$) \$(78,661)\$)\$(78,661)\$) \$(78,661)\$)\$(78,661)\$) \$(78,661)\$)\$(78,661)\$) \$(78,661)\$)\$(78,661)\$) \$(78,661)\$)\$(78,661)\$) \$(78,661)\$)\$(78,661)\$) \$(78,661)\$)
51 \$77,8' 33) \$(33,92) 97 \$43,9' 1 YE12/31 2031 38 38 3,00 57 \$513,37 73 \$150,6' 48 \$85,5' 15 \$135,2' 18) \$(33,90) 77 \$101,3' 1 YE12/31 2037 \$23,3,4' 15 \$638,2' 41 \$2638,2' 94 \$205,1'	358 \$77 20) \$(40, 0) 338 \$37 1 YE12/ 2036 \$537 1 YE12/ 2036 \$553 5155 \$185 5155 \$181 3131 \$153 204) \$(37, 2) 128 \$111 128 \$111 128 \$111 1 YE12/ 203 \$81 3125 \$618	752 038) \$ 7714 31 YI 2 3243 3,202 \$ 6,698 \$ 984 \$ 9,984 \$ 9,084 \$ 9,088 \$ 9,084 \$ 9,088 \$ 9,028 \$ 31 YI 38 \$ 9,008 \$ 9,0008 \$ 9,008 \$ 9,008 \$ 9,008 \$ 9,008 \$ 9,008 \$ 9,008 \$ 9,008 \$	\$62,427 (22,171) \$40,256 E12/31 2033 3,562 5619,064 5215,324 5132,364 5177,944 5(64,965) 5112,979 E12/31 2039 2,953	\$53,13 \$(21,683 \$31,45 YE12/31 2034 3,022 \$522,81 \$154,82 \$84,62 \$149,61 \$70,95 \$70,95 YE12/31 2040 2,655
33) \$(33,92) 97 \$43,93) 1 YE12/31 2031 338 38 3,00 57 \$513,34 73 \$150,63 48 \$85,57 15 \$135,22 18) \$(33,90) 77 \$101,33 1 YE12/31 2037 23 24 \$205,12	20) \$(40, 938 \$37 1 YE12/ 203 203 064 3 9668 \$553 915 \$185 972 \$111 131 \$153 928 \$116 1 YE12/ 203 \$116 1 YE12/ 203 \$116 1 YE12/ 203 \$16 1 \$25 \$618 \$37	038) \$,714 31 YI 2,243 ,202 \$,6698 \$,984 \$,6698 \$ 120) \$,6628 \$,628 \$,628 \$,628 \$,628 \$,628 \$,628 \$,628 \$,628 \$,628 \$,631 YI 8 ,0308	5(22,171) \$40,256 E12/31 2033 3,562 5619,064 \$215,324 \$132,364 \$122,379 \$122,379 \$122,312 \$239 \$2,953	\$(21,683 \$31,45 YE12/31 2034 3,02 \$522,81 \$154,82 \$149,61 \$(78,661 \$70,95 YE12/31 2040 2,65;
97 \$43,9: 1 YE12/31 2031 38 38 3,00 57 \$513,33 73 \$150,65 15 \$135,25 15 \$135,25 18) \$(33,90) 77 \$101,33 1 YE12/31 2037 23 23 3,44 15 \$638,22 94 \$205,12	938 \$37 1 YE12/ 203 064 3 968 \$553 915 \$188 915 \$185 915 \$153 914 \$153 904 \$(37, 208 916 \$(11) 1 YE12/ 203 1 YE12/ 203 181 3 925 \$618	7,714 (31 YI 2,243 5,698 \$ 5,698 \$ 5,748 \$ 120) \$ 5,628 \$ (31 YI 8 3,308	\$40,256 E12/31 3,562 5619,064 5215,324 5132,364 5177,944 5(64,965) 5112,979 E12/31 2039 2,953	\$31,45 YE12/31 2034 3,02 \$522,81 \$154,82 \$149,61 \$(78,661 \$(78,661 \$70,95 YE12/31 2040 2,65
L YE12/31 2031 38 3,00 57 \$513,30 73 \$150,61 48 \$85,55 15 \$135,22 38) \$(33,90 77 \$101,32 L YE12/31 2037 23 3,44 15 \$638,22 94 \$205,12	1 YE12/ 203 364 3 368 \$553 515 \$185 572 \$111 31 \$153 004 \$(37, 208 \$116 1 YE12/ 203 881 3 225 \$618	/31 YI 2,243 3,202 \$ 5,698 \$ 5,698 \$ 1,984 \$ 1,748 \$ 1,120) \$ 5,628 \$ 3,748 \$ 1,200 \$ 5,628 \$ 3,120 YI 8 3,308	E12/31 2033 3,562 5619,064 5215,324 5132,364 5177,944 5(64,965) 5112,979 E12/31 2039 2,953	YE12/31 2034 3,022 \$522,811 \$154,821 \$84,62 \$149,61 \$(78,661 \$70,95 YE12/31 2040 2,65
2031 38 3.00 57 \$513.37 73 \$150.67 48 \$85,57 15 \$135,27 18) \$(33,90 77 \$101,37 1 YE12/31 2037 23 3,44 15 \$638,27 94 \$205,12	203 364 3 368 \$553 315 \$185 372 \$111 31 \$153 304 \$(37, 328 \$116 1 YE12/ 203 881 3 325 \$618	2 3,243 3,202 \$ 5,698 \$ 5,748 \$ 120) \$ 5,628 \$ 731 Yl 8 3,308	2033 3,562 \$619,064 \$215,324 \$132,364 \$177,944 \$(64,965) \$112,979 \$112,979 \$12/31 2039 2,953	2034 3,02: \$522,81: \$154,82: \$84,62: \$149,61: \$(78,661 \$70,95: YE12/31 2040 2,65:
38 3,00 57 \$513,33 73 \$150,67 8 \$85,57 15 \$113,22 18) \$(33,90) 777 \$101,33 1 YE12/31 2037 23 3,44 \$265,822 94 \$205,12	064 3 368 \$553 515 \$185 572 \$111 131 \$153 04) \$(37, 328) 1 YE12/ 203 181 3 225 \$618	3,243 3,202 \$ 5,698 \$ 5,984 \$ 3,748 \$ 120) \$ 5,628 \$ (31 YI 8 3,308	3,562 \$619,064 \$215,324 \$132,364 \$177,944 \$(64,965) \$112,979 \$12/31 \$2039 \$2,953	3,02 \$522,81 \$154,82 \$84,62 \$149,61 \$(78,661 \$70,95 YE12/31 2040 2,65
57 \$513,34 73 \$150,6: 48 \$85,5: 15 \$135,2: 18) \$(33,90) 77 \$101,3: 1 YE12/31 2037 3,44 15 \$638,2: 94 \$205,14	368 \$553 315 \$185 572 \$111 331 \$153 304) \$(37, 328 1 YE12/ 203 181 3 325 \$618	3,202 \$ 5,698 \$ 9,748 \$ 120) \$ 5,628 \$ 731 YI 8 3,308	\$619,064 \$215,324 \$132,364 \$177,944 \$(64,965) \$112,979 \$112,979 \$12/31 2039 2,953	\$522,81 \$154,82 \$84,62 \$149,61 \$(78,661 \$70,95 YE12/31 2040 2,65
73 \$150,6: 48 \$85,5: 15 \$135,2: 18) \$(33,90) 77 \$101,3: 1 YE12/31 2037 23 3,44 15 \$638,2: 94 \$205,14	\$15 \$185 \$72 \$111 \$21 \$153 \$04) \$(37, 328 \$116 \$116 1 YE12/ 203 181 3 225 \$618	5,698 \$ 5,984 \$ 5,748 \$ 120) \$ 5,628 \$ (31 Y 8 8,308	5215,324 5132,364 5177,944 5(64,965) 5112,979 E12/31 2039 2,953	\$154,82 \$84,62 \$149,61 \$(78,661 \$70,95 YE12/31 2040 2,65
48 \$85,55 15 \$135,22 18) \$(33,90) 77 \$101,32 1 2037 23 3,44 15 \$638,22 94 \$205,14	772 \$111 231 \$153 04) \$(37, 528 \$116 1 YE12/ 203 81 3 225 \$618	,984 \$ 8,748 \$ 120) \$ 6,628 \$ /31 YI 8 8,308	\$132,364 \$177,944 \$(64,965) \$112,979 \$112,979 \$12/31 2039 2,953	\$84,62 \$149,61 \$(78,661 \$70,95 YE12/31 2040 2,65
15 \$135,2: 18 \$(33,90 77 \$101,3: 1 YE12/31 2037 23 3,44 15 \$638,2: 94 \$205,14	31 \$153 04) \$(37, 328) 328 \$116 1 YE12/ 203 181 3 225 \$618	8,748 \$ 120) \$ 5,628 \$ /31 YI 8 8,308	\$177,944 \$(64,965) \$112,979 E12/31 2039 2,953	\$149,61 \$(78,661 \$70,95 YE12/31 2040 2,65
 \$(33,90 \$(10,3) YE12/31 2037 23 3,48 \$638,22 \$638,25 \$205,14 	04) \$(37, 328 \$116 1 YE12/ 203 181 3 225 \$618	120) \$ 5,628 \$ /31 YI 8 9,308	6(64,965) 5112,979 E12/31 2039 2,953	\$(78,661 \$70,95 YE12/31 2040 2,65
77 \$101,32 L YE12/31 2037 23 3,48 15 \$638,22 94 \$205,14	328 \$116 1 YE12/ 203 181 3 225 \$618	5,628 \$ (31 YI 8 3,308	\$112,979 E12/31 2039 2,953	\$70,95 YE12/31 2040 2,65
77 \$101,32 L YE12/31 2037 23 3,48 15 \$638,22 94 \$205,14	1 YE12/ 203 181 3 225 \$618	/31 YI 8 8,308	E12/31 2039 2,953	YE12/31 2040 2,65 9
2037 23 3,48 15 \$638,22 94 \$205,14	203 181 3 225 \$618	8 8 ,308	2039 2,953	2040 2,65
23 3,48 15 \$638,22 94 \$205,14	181 3 225 \$618	3,308	2,953	2,65
15 \$638,22 94 \$205,14	25 \$618	·····		
94 \$205,14		3,446 \$	\$562,910	6547.04
	49 \$190			\$517,01
48 \$121.12),958 \$	\$163,745	\$150,04
		,624	\$83,396	\$79,54
90 \$174,94	943 \$171	,838 \$	\$153,628	\$138,32
78) \$(63,11	18) \$(74,	,744) \$	5(52,178)	\$(35,077
12 \$111,82	325 \$97	,094 \$	\$101,449	\$103,24
YE12/31	1 YE12/	/31 YI	E12/31	YE12/31
2043	204	4	2045	2046
		,504	1,147	1,14
33 \$432,40	105 \$310),415 \$		\$245,02
92 \$163,64	546 \$115	,279	\$82,962	\$84,91
51 \$103,89	393 \$67	,062	\$56,130	\$56,39
04 \$131,5	578 \$111	,482	\$78,873	\$73,99
0) \$(32,40	06) \$(16,	,899) \$	(22,623)	\$(17,389
23 \$99,1	.72 \$94	l,583	\$56,250	\$56,60
2 2,5 3,9 9,1 5,4 5,4	2 2043 1,821 2,1 2,533 \$432,4 3,992 \$163,6 0,151 \$103,8 5,404 \$131,5 880) \$(32,4)	2 2043 204 8,821 2,124 1 5,533 \$432,405 \$310 9,992 \$163,646 \$111 9,151 \$103,893 \$66 9,404 \$131,578 \$111 880) \$(32,406) \$(16)	2 2043 2044 4,821 2,124 1,504 5,533 \$432,405 \$310,415 \$ 9,992 \$163,646 \$115,279 \$ 9,151 \$103,893 \$67,062 \$ 4,404 \$131,578 \$111,482 \$ 880) \$(32,406) \$(16,899) \$	2 2043 2044 2045 ,821 2,124 1,504 1,147 ,533 \$432,405 \$310,415 \$239,824 ,992 \$163,646 \$115,279 \$82,962 ,151 \$103,893 \$67,062 \$56,130 ,404 \$131,578 \$111,482 \$78,873 ,880) \$(32,406) \$(16,899) \$(22,623)

9

	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31
	2047	2048	2049	2050	2051	2052
Production & Sales tonnes	1,152	1,151	1,147	1,145	1,150	1,151
Total Revenue	\$250,477	\$255,353	\$259,457	\$264,205	\$270,675	\$276,402
BITDA	\$86,985	\$88,741	\$90,123	\$91,953	\$94,720	\$96,464
let Income	\$57,379	\$57,306	\$56,385	\$55,409	\$56,916	\$58,687
Net Cash Provided by Operating Activities	\$75,029	\$76,216	\$77,221	\$78,584	\$80,464	\$81,827
Purchases of Property, Plant, and Equipment	\$(13,999)	\$(16,432)	\$(20,924)	\$(24,880)	\$(17,227)	\$(16,997)
Net Cash Flow	\$61,029	\$59,784	\$56,296	\$53,704	\$63,237	\$64,830
	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31
	2053	2054	2055	2056	2057	2058
Production & Sales tonnes	1,149	1,016	809	437	11	
īotal Revenue	\$281,461	\$254,502	\$207,028	\$116,946	\$2,919	\$
BITDA	\$98,676	\$83,364	\$68,788	\$54,740	\$2,282	\$-
Net Income	\$59,804	\$46,844	\$35,921	\$45,217	\$(3,918)	\$(1,177
Net Cash Provided by Operating Activities	\$83,397	\$75,074	\$63,550	\$31,102	\$(5,848)	\$(7,880
Purchases of Property, Plant, and Equipment	\$(19,175)	\$(21,624)	\$(8,199)	\$(5,725)	\$(3,148)	\$-
let Cash Flow	\$64,222	\$53,450	\$55,351	\$25,378	\$(8,996)	\$(7,880)
	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31
	2059	2060	2061	2062	2063	2064
Production & Sales tonnes	-	-	-	-	-	-
īotal Revenue	\$-	\$-	\$-	\$-	\$ -	\$-
BITDA	\$-	\$-	\$-	\$-	\$-	\$-
Net Income	\$(607)	\$(317)	\$(70)	\$(0)	\$(0)	\$(0
Net Cash Provided by Operating Activities	\$(4,019)	\$(3,221)	\$(895)	\$-	\$-	\$-
Purchases of Property, Plant, and Equipment	\$-	\$-	\$-	\$-	\$-	\$-
Net Cash Flow	\$(4,019)	\$(3,221)	\$(895)	\$-	\$-	\$-

* The Financial model includes 0.001 million tonnes of inferred coal production. Inferred coal represents 0.000001% of the total production, and none of this coal was included in the estimate of reserves.

Consolidated cash flows are driven by annual sales tonnage, which at steady-state level ranges from a peak of 3.6 million tonnes in 2033 to a low of 0.4 million tonnes in 2056. Projected consolidated revenue ranges from \$116.9 million to \$638.2 million at a steady state. Revenue totals \$13.0 billion for the project's life.

Consolidated cash flow from operations is positive throughout the projected operating period, with the exception of post-production years, due to end-of-mine reclamation spending. Consolidated cash flow from operations peaks at \$177.9 million in 2033 and totals \$3.4 billion over the project's life. Capital expenditures total \$167.9 million from 2024 through 2028 and \$1.2 billion over the project's life.

1.10.1 Discounted Cash Flow Analysis

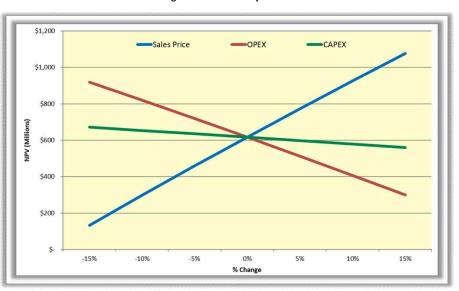
Cash flow after tax, but before debt service, generated over the life of the project was discounted to NPV at a 10.0% discount rate, which represents Coronado's estimate of the nominal dollar, risk adjusted weighted average cost of capital (*WACC*) for likely market participants if the subject reserves were offered for sale. On an un-levered basis, the NPV of the project cash flows represents the Enterprise Value of the project and amounts to \$616.8 million. The pre-feasibility financial model prepared for the TRS was developed to test the economic viability of each coal resource area. The NPV estimate was made for the purpose of confirming the economics for classification of coal reserves and not for purposes of valuing Coronado or its Logan assets. Mine plans were not optimized, and actual results of the operations may be different, but in all cases, the mine production plan assumes the properties are under competent management.

MARSHALL MILLER & ASSOCIATES, INC.

1.10.2 Sensitivity Analysis

Sensitivity of the NPV results to changes in the key drivers is presented in the chart below. The sensitivity study shows the NPV at the 10.0% discount rate when Base Case sales prices, operating costs, and capital costs are increased and decreased in increments of 5% within a +/-15% range.

Figure 1-4: Sensitivity of NPV



As shown, NPV is quite sensitive to changes in sales price and operating cost estimates, and slightly sensitive to changes in capital cost estimates.

1.11 Permitting

Coronado has obtained all mining and discharge permits to operate its active mines and processing, loadout or related support facilities. MM&A is unaware of any obvious or current Coronado permitting issues that are expected to prevent the issuance of future permits. Logan, along with all coal producers, is subject to a level of uncertainty regarding future clean water permits due to **United States Environmental Protection Agency (EPA)** and **United States Fish and Wildlife (USFW)** involvement with state programs.

1.12 Conclusion and Recommendations

Sufficient data has been obtained through various exploration and sampling programs and mining operations to support the geological interpretations of seam structure and thickness for

MARSHALL MILLER & ASSOCIATES, INC.

coal horizons situated on the Logan Property. The data is of sufficient quantity and reliability to reasonably support the coal resource and coal reserve estimates in this TRS.

The geological data and preliminary feasibility study, which consider mining plans, revenue, and operating and capital cost estimates are sufficient to support the classification of coal reserves provided herein.

This geologic evaluation conducted in conjunction with the preliminary feasibility study concludes that the 70.6 Mt of marketable coal reserves identified on the Property are economically mineable under reasonable expectations of market prices for metallurgical coal products, estimated operation costs, and capital expenditures.

2 Introduction

2.1 Registrant and Terms of Reference

This report was prepared for the sole use of **Coronado Global Resources Inc.** (*Coronado*) and its affiliated and subsidiary companies and advisors. This TRS updates the TRS titled, "*Coronado Global Resources Inc. Statement of Coal Resources and Reserves for the Logan County Complex in Accordance with the JORC Code and United States SEC Regulation S-K 1300 as of December 31, 2022 Central Appalachian Coal Basin West Virginia, USA February 2023," dated February 15, 2023, due to material differences in the key financial modifying factors including coal sales price assumptions, operating costs and capital costs from December 31, 2022 to December 31, 2023. Coal sales price assumptions are discussed in <i>Sections 12 and 16* of the TRS, while operating costs and capital costs are discussed in *Sections 12 and 16* of the TRS, while operating costs and capital costs are discussed in *Sections 18 and 19* of the TRS. The report provides a statement of coal resources and coal reserves for Coronado, as defined under the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code*) as well as under Subpart 1300 of Regulation S-K (Regulation S-K 1300) promulgated by the United States Securities and Exchange Commission (*SEC*). This report was also prepared in accordance with the *Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (VALMIN Code*).

The report provides a statement of coal resources and coal reserves for Coronado at Logan. Exploration results and Resource calculations were used as the basis for the mine planning and the preliminary feasibility study completed to determine the extent and viability of the reserve.

Coal resources and coal reserves are herein reported in metric units of measurement and are rounded to millions of metric tonnes (*Mt*).

MARSHALL MILLER & ASSOCIATES, INC.

2.2 Information Sources

This TRS is based on information provided by Coronado and reviewed by MM&A. Sources of data and information are listed below in *Table 2-1*:

Table 2-1: Information Provided to MM&A by Coronado

Category	Information Provided by Coronado	Report Section
	Geologic data including digital databases and original source data including	
Geological	geologist logs, driller's logs, geophysical logs	9.1
	Database of coal quality information supplemented with original source	
Coal Quality	laboratory sheets where available	10.1
	Historical productivities and manpower from operating and future Coronado	
Mining	mines	13.2, 13.4
Coal	Flow sheet and other information representing current and future methods	
Preparation	of coal processing	14.1
Waste	Engineering data and estimates representing remaining capacities for coarse	
Disposal	and fine coal waste disposal	17.2
	Historical and budgetary operating cost information used to derive cost	
Costs	drivers for reserve financial modeling	18.2
Economic	WACC and inflation rate used in discounted cash flow analysis	19.1, 19.2, 19.3
	and the second	

Note: While the sources of data listed in Table 2-1 are not exhaustive, they represent a significant portion of information which supports this TRS. MM&A reviewed the provided data and found it to be reasonable prior to incorporating it into the TRS. The TRS contains "forward-looking information" including forecasts of productivity and annual coal production, operating and capital cost estimates, coal sales price forecasts, the assumption that Coronado will continue to acquire necessary permits, and other assumptions. The TRS statements and conclusions are not a guarantee of future performance and undue reliance should not be placed on them. The ability of Coronado to recover the estimated coal reserves is dependent on multiple factors beyond the control of MM&A including, but notlimited to geologic factors, mining conditions, regulatory approvals, and changes in regulations. In all cases, the plans assume the Property is under competent management.

Coronado engaged MM&A to conduct a coal resource and reserve evaluation of the Coronado coal properties as of September 30, 2023. In the process, additions (mine data) and depletion (mine) have been used to bring the Resource and Reserve estimates forward to December 31, 2023, the effective date of this TRS for Logan. For the evaluation, the following tasks were to be completed:

- > Conduct site visits of the mines and mine infrastructure facilities;
- > Process the information supporting the estimation of coal resources and reserves into geological models;
- > Develop life-of-reserve mine (LOM) plans and financial models;
- > Hold discussions with Coronado company management; and
- > Prepare and issue a TRS providing a statement of coal resources and reserves which would include:
 - A description of the mines and facilities.
 - A description of the evaluation process.
 - An estimation of coal resources and reserves with compliance elements as stated under the JORC Code and the SEC Regulation S-K 1300.

MARSHALL MILLER & ASSOCIATES, INC.

2.3 Personal Inspections

MM&A is very familiar with Logan, having provided a variety of services in recent years and one of the QP's involved in this TRS has conducted multiple site visits.

3 Property Description

3.1 Location

The Logan County Complex is located in Logan, Boone, and Wyoming Counties in southern West Virginia. The Property encompasses the towns of Lorado and Pardee in the northern portion and Lacoma and Cyclone in the southern portion (approximately 6 kilometers between the northern and southern towns). The nearest major population centers are Huntington, West Virginia (145 kilometers northwest) and Charleston, West Virginia (129 kilometers north-northeast).

Attens Washing O Parkersburg Doddridge Harrise Barboar

Figure 3-1: Logan Property Location



The Logan property is composed of 13,183 total leased and owned hectares and is located in Logan, Boone, and Wyoming Counties. The Property is located on the following **United States Geological Survey** (*USGS*) Quadrangles: Lorado, Mallory, Amherstdale, and Oceana. Current mining projections fall within portions of all four quadrangles. The coordinate system and

MARSHALL MILLER & ASSOCIATES, INC.

datum used for the model of the Logan County Complex and the subsequent maps were produced in the West Virginia State Plane South system, NAD 27.

3.2 Titles, Claims or Leases

The Property is composed of 13,183 total hectares, 13,114 of which are leased from private landholders under approximately 15 individual leases, and 69 hectares are owned by Coronado. The latest Coronado lease of 45 hectares was obtained in 2022. Subject to Coronado exercising its renewal rights thereunder, a majority of the leases, covering a majority of the Logan reserves, expire upon exhaustion of the relevant coal reserves, which is expected to occur in 2057. One lease expires in 2032; however, Coronado is projected to have previously exhausted the reserves covered thereby. MM&A has not carried out a separate title verification for the coal properties and has not verified leases, deeds, surveys, or other property control instruments pertinent to the subject resources. Property tenure was separately reviewed by Coronado's legal advisors. Coronado has represented to MM&A that it controls the mining rights to the reserves as shown on its property maps, and MM&A has accepted these as being a true and accurate depiction of the mineral rights controlled by Coronado. The TRS assumes the properties are developed under responsible and experienced management.

3.3 Mineral Rights

Coronado supplied property control maps to MM&A related to properties for which mineral and/or surface property are controlled by Coronado. While MM&A accepted these representations as being true and accurate, MM&A has no knowledge of past property boundary disputes or other concerns, through past knowledge of the Property, that would signal concern over future mining operations or development potential.

Property control in Appalachia can be intricate. Coal mining properties are typically composed of numerous property tracts which are owned and/or leased from both land holding companies and private individuals or companies. It is common to encounter severed ownership, with different entities or individuals controlling the surface and mineral rights. Mineral control in the region is typically characterized by leases or ownership of larger tracts of land, with surface control generally comprised of smaller tracts, particularly in developed areas.

Legal mining rights may reflect a combination of in fee or mineral ownership and in fee or mineral leases of coal lands through various surface and mineral lease agreements. There is also a relatively small amount of area where the coal is partially-owned and/or partially leased on a limited number of individual tracts.

Control of the surface property is necessary to conduct surface mining but is not necessary to conduct underground mining.

Upon acquisition of mineral control for desired coal seams of surface-mineable economic interest, it is typical practice in the region for operators to delay the acquisition of surface control for purposes of surface mining and other surface development until plans are established for near-future development. Therefore, it is common for an operator to control mineral for proposed areas of mining for which they have not established the legal right to surface mine due to the lack of surface control. Acquisition of these rights is typically delayed

MARSHALL MILLER & ASSOCIATES, INC

in order to limit cost and royalty payments for areas not under consideration for near-future development. Coronado's executive management team has a history of surface mining in Central Appalachia and has conveyed to MM&A that it has been successful in acquiring surface rights where needed for past operations.

3.4 Encumbrances

No Title Encumbrances are known. By assignment, MM&A did not complete a query related to Title Encumbrances.

3.5 Other Risks

There is always risk involved in property control. As is common practice, Coronado, and its predecessors, have had their legal teams examine the deeds and title control in order to minimize the risk. Historically, property control has not posed any significant challenges related to Logan's operations.

4 Accessibility, Climate, Local Resources, Infrastructure and Physiography

4.1 Topography, Elevation, and Vegetation

Topography of the area surrounding the Logan County Complex is typical of the Central Appalachian Plateau, being rugged and deeply dissected by v-shaped river valleys, and generally flanked by steeply sided upland regions, with occasional gentle slopes in select areas such as river valleys. The drainage system in the region tends to be mostly dendritic in nature. Surface elevations near the mine complex range from approximately 823 meters above sea level in upland regions to roughly 338 meters at stream level. The Property is moderately to heavily vegetated, with oak-hickory forests as the dominant forest type and northern hardwood forest being less prominent. The Property is not situated near any major urban centers, and the surrounding area is rural.

4.2 Access and Transport

Access to the Logan Mine property consists of primary, secondary, and unimproved roads, forming a well-developed transportation network. Highway 119 is the primary highway in the area running southwest to northeast from the Kentucky-West Virginia line through Mingo, Logan, and Boone Counties. Secondary roads Route 16 and Route 10 provide the most direct access through the Property running east-west across the leased area. Numerous other secondary and unimproved roads provide direct access to the mine property, some being state-and county-maintained. These roads typically stay open throughout the year. Additionally, private access roads to existing mines provide transport corridors, and more such roads may be developed as needed. The Coronado-owned Saunders Preparation Plant services the mines. The ROM coal is delivered from the Lower War Eagle Mine via overland conveyor, all remaining production is or will be delivered to the plant site by truck.

MARSHALL MILLER & ASSOCIATES, INC.

4.3 Proximity to Population Centers

The Logan property lies near the town of Lorado in Logan County, West Virginia, approximately 145 kilometers southeast of Huntington, West Virginia and 129 kilometers south-southwest of Charleston, West Virginia. As of 2021, Logan County had a population of approximately 31,900 residents, Boone County had 21,300 residents, and Wyoming County had 21,000 residents.

4.4 Climate and Length of Operating Season

The region's climate is classified as humid, sub-tropical with four distinct seasons: warm summers, cold winters, and moderate fall and spring seasons. Precipitation in the region occurs throughout the year with the most rain falling in spring and the early months of summer. Average yearly rainfall is 67.69 centimeters. Summer months typically begin in late May and end in early September and range in average temperature from 53 to 84 degrees Fahrenheit (or 11.6 to 28.9 degrees Celsius). Winters typically begin in mid to late November and run until mid to late March with average temperatures ranging from 26 to 57 degrees Fahrenheit (or -3.3 to 13.9 degrees Celsius). Precipitation in the winter typically comes in the form of snowfall or as a wintery mix (sleet and snow) with severe snowfall events occurring occasionally. Seasonal variations in climate typically do not affect underground mining in West Virginia. However, weather events could potentially incumber surface mining and preparation plant operations on a very limited basis, typically lasting less than a few days.

4.5 Infrastructure

The Logan Mine Complex has sources of water, power, personnel, and supplies readily available for use. Personnel have historically been sourced from the surrounding communities in Logan, Boone, Wyoming, and Mingo counties, and have proven to be adequate in numbers to operate past and current mines. As mining is common in the surrounding areas, the workforce is generally familiar with mining practices and is comprised of a strong talent pool of experienced miners. Water is sourced locally from Buffalo Creek Public Service District and electricity is sourced from **American Electric Power (AEP)**. The service industry in the areas surrounding the mine complex has historically provided supplies, equipment repairs and fabrication, etc. The Coronado-owned Saunders Preparation plant services the mines and operates at a rate of 952 tph. The Coronado-owned Elk Lick Loadout serves as the primary means of shipment and is connected to a CSX rail line, which either serves the domestic market directly, or transports the coal to the Pier 9 and Dominion terminals at Norfolk, Virginia for overseas shipment.

5 History

5.1 Previous Operation

The Logan County properties were started in 1945 by Lorado Mining Company, were sold to **Buffalo Mining Company** in 1964 and then to **Pittston Coal Company** (*Pittston*) in 1971. Pittston operated the properties until the early 1990's. After being idle for a period, the properties were then sold to **Addington Resources** in 2004. **Imagin Natural Resources** acquired

MARSHALL MILLER & ASSOCIATES, INC.

the properties in 2007, and subsequently sold them to Cliffs in 2011, which in turn sold the properties to Coronado in 2014.

Coronado produced approximately 1.8 Mt in 2016, 2.6 Mt in 2017, 2.6 Mt in 2018, 2.7 Mt in 2019, 1.6 Mt in 2020, 1.9 Mt in 2021, 2.1 Mt in 2022, and 2.5 Mt in 2023.

5.2 Previous Exploration

The Properties have been extensively explored by subsurface drilling efforts carried out by numerous entities, most of which were completed prior to acquisition by Coronado.

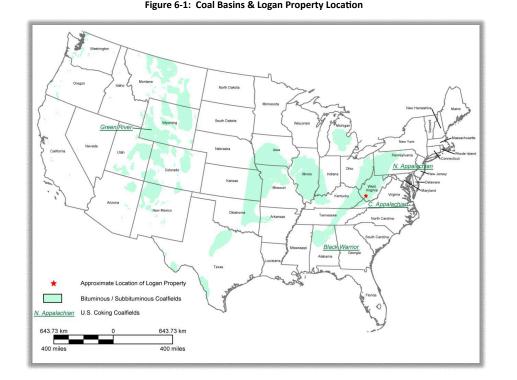
Drill records indicate that independent contract drilling operators have typically been engaged to carry out drilling on the Properties. Geophysical logging was typically performed by outside logging firms. MM&A, via its Geophysical Logging Systems subsidiary, has in the past logged a significant number of exploration holes and gas wells, and currently logs most of the recently drilled holes.

6 Geological Setting, Mineralization and Deposit

6.1 Regional, Local and Property Geology

The Property lies in the Central Appalachian Coal basin in the Appalachian Plateau physiographic province.

18



Coal deposits in the eastern USA are the oldest and most extensively developed in the country. The coal deposits on the Properties are Carboniferous in age, being of the Pennsylvanian system. Overall, these Carboniferous coals contain two-fifths of the USA's bituminous coal deposits and extend over 1,448 kilometers from northern Alabama to Pennsylvania and are part of what is known as the *Appalachian Basin*. The Appalachian Basin is more than 402 kilometers wide and, in some portions, contains over 60 coal seams of varying economic significance.

Within the Central Appalachian Basin, seams of economic significance typically range between 0.3 meters and 1.8 meters in thickness, with relatively little structural deformation. Regional structure is typically characterized by gently dipping strata to the northwest at less than one percent.

The coal-bearing formations of interest at Logan is of the lower section of the Kanawha Formation, which comprise a major portion of the exposed ridges. The coal-bearing Formation includes sedimentary sequences of sandstones, siltstones, shales, and mudstones with minor occurrences of siderite, limestone and flint clay.

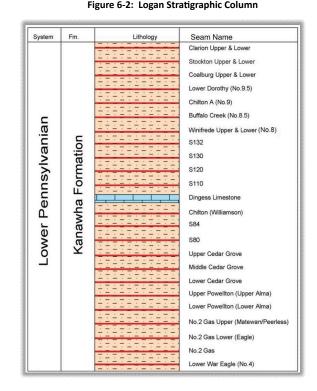
MARSHALL MILLER & ASSOCIATES, INC.

Coronado mines several coal seams within the Kanawha formation. The seams are as follows: Buffalo Creek, Upper Clarion Rider, Clarion, Lower Clarion, Upper Stockton, Lower Stockton, Lower Coalburg, Lower Dorothy, Upper Winifrede, Lower Winifrede, Chilton-A, Chilton, Upper Cedar Grove, Middle Cedar Grove, Lower Cedar Grove, No. 2 Gas, Upper Powellton, Lower Powellton, Eagle, and Lower War Eagle seams demonstrate mining potential on this property.

Logan in 2023 had two active surface mines and four active underground mines. The Elk Lick (Buffalo Creek South) and Toney Fork mines are surface mines, while the Eagle No. 1, Muddy Bridge and Lower War Eagle are underground mines. The North Fork Winifrede Mine was fully depleted in 2023. The Powellton No. 1 Mine was in process of being rehabilitated and had minimal production during the fourth quarter 2023, with plans to initiate full production with one mining section in the first quarter of 2024. The active Toney Fork surface mine has historically mined multiple seams including the Upper Winifrede, Lower Winifrede, Upper Clarion Rider, Upper Clarion, Lower Clarion, Lower Coalburg, Upper Coalburg, Upper Stockton, Lower Stockton, Chilton-A, and Lower Dorothy Seams. Future surface mine reserve production at Logan is anticipated to focus on those seams having the best opportunity for sale into the metallurgical coal markets, namely the Lower Coalburg seam and below. The Powellton No. 1 Mine is projected to extract the Lower and Upper Powellton jointly in some areas, while other areas are projected to extract only the Lower Powellton due to seam splitting. The Eagle No. 1 and Muddy Bridge Mines are projected to extract the Lower War Eagle seam.

6.2 Mineralization

The generalized stratigraphic columnar section in *Figure 6-1* demonstrates the vertical relationship of the principal coal seams and rock formations on the Property.



(not to scale)

6.3 Deposits

The coal produced at Logan Mine complex is typically high-volatile (typically 28 percent or greater volatile matter content) bituminous coal. Seam quality varies with distance from the cropline, so some seams will be shipped into both the thermal and metallurgical markets depending on mining method and ultimate quality. Saleable product from the surface operations is projected to be sold primarily into the metallurgical coal market; however, some production is planned to be sold into the thermal coal market due to quality limitations. Underground coal is sold almost exclusively in the metallurgical markets.

7 Exploration

7.1 Nature and Extent of Exploration

The Properties have been extensively explored by subsurface drilling efforts carried out by numerous entities, most of which were completed prior to acquisition by Coronado.

MARSHALL MILLER & ASSOCIATES, INC.

Diamond core, rotary, and gas well drilling are the three primary types of exploration on the Property. Drill hole collar elevations and total depths vary by hole due to the hilly terrain of the Property. Data for correlation and mining conditions are derived from core descriptions and geophysical logging (e-logging). Coal quality analyses were also employed during the core exploration process. A total of 1,133 core and rotary holes have been drilled for exploration purposes on and around the leased property.

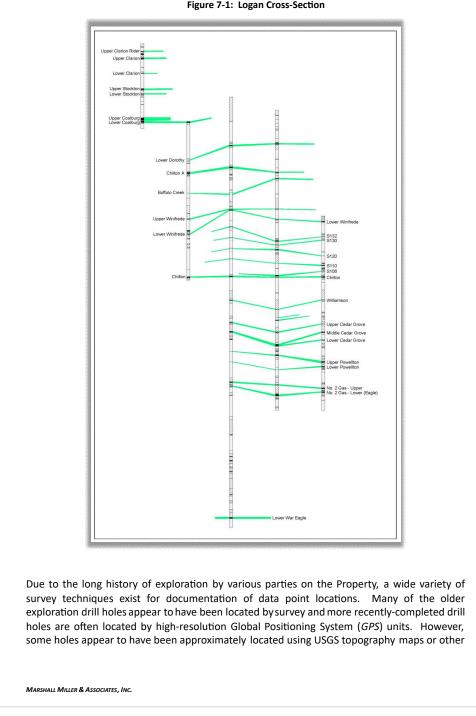
In 2023, Coronado completed one exploration hole, along the Toney Fork drainage and for the Lower War Eagle Mine reserve area, which has been incorporated herein.

Drill records indicate that independent contract drilling operators have typically been engaged to carry out drilling on the Property. Geophysical logging was typically performed by outside logging firms. MM&A, via its Geophysical Logging Systems subsidiary, has logged a significant number of the past exploration holes and gas wells, and currently logs most of the recently drilled holes.

The location of the drilling is shown on the maps included in Appendix B.

The concentration of exploration varies slightly across the Property. Drilling on the Property is typically sufficient for delineation of potential surface, highwall miner, and deep mineable benches. Core logging is performed by professional geologists in cases where roof and floor strata are of particular interest and in cases where greater resolution and geologic detail are needed. Even so, most of the drill hole data comes from more simplified driller's logs, which often lack specific details regarding geotechnical conditions and specific geology, making correlations and floor and roof conditions more difficult to determine. Geophysical logging (e-logging) techniques, by contrast, document specific details useful for geologic interpretation and mining conditions. Given the variability of data-gathering methods, *definitive* mapping of future mining conditions may not be possible, but projections and assumptions can be made within a *reasonable* degree of certainty. A significant effort was put into verifying the integrity of the database records. Once the data was verified, stratigraphic columnar sections were generated using cross-sectional analysis to establish or confirm coal seam correlations.

A typical cross-section is shown in Figure 7-1.



methods which are less accurate. Therefore, discretion by MM&A had to be used regarding the accuracy for the location and ground surface elevation of some of these older drill holes. In instances where a drill hole location (or associated coal seam elevations) appeared to be inconsistent with the overall structural trend (or surface topography for surface-mineable areas), the data point was not honored for geological modeling. Others with apparently minor variances were logically adjusted and then used by MM&A.

Surveying of the underground and surface mined areas has been performed by the mine operators and/or their consulting surveyors. By assignment, MM&A did not verify the accuracy or completeness of the supplied mine maps but accepted this information as being the work of responsible engineers and surveyors, as required by both State and Federal Law.

MM&A compiled comprehensive topographic map files by selecting the best available aerial mapping for each area, surface mine resources and reserves in particular, and filled any gaps with digital USGS topographic mapping.

7.2 Non-Drilling Procedures and Parameters

Some analyses, specifically ultimate ash and sulfur types are not as prevalent as others in the testing done on samples recovered by drilling. To supplement the information database, samples have been collected from mine stockpiles and either truck or train shipment samples.

7.3 Drilling Procedures

Core drilling methods utilize NX-size (5.4 centimeters) or similar-sized core cylinders to recover core samples, which can be used to delineate geologic characteristics, and for coal quality testing and geotechnical logging. For the core holes, the geophysical logs are especially useful in verifying the core recovery of both the coal samples (for assurance that sample is representative of the full seam) and of the roof and floor rock samples (for evaluating ground control characteristics of deep mineable coal seams). In addition to the core holes, rotary drilled holes also exist on most of the Properties. Data for the rotary drilled holes is mainly derived from downhole geophysical logs, which are used to interpret coal and rock thickness and depth since logging of the drill cuttings is not reliable.

A wide variety of core-logging techniques exist for the properties. For many of the core holes, the primary data source is a generalized lithology description by the driller, typically supplemented by a more detailed core log completed by a geologist. The Logan drilling logs were provided to MM&A as a geological database. MM&A geologists were not involved in the production of original core logs but did perform a basic check of information within the provided database. Where geophysical logs for such holes are available, they were used by MM&A geologists to verify the coal thickness and core recovery of each seam.

7.4 Mine Data

Mine data from underground mines was supplied to supplement the exploration drillhole records, by seam. In-seam mine data was provided from Coronado through Microsoft[®] Excel files or from coal section measurements recorded within maps of several mines. The mine data was processed for seam thickness and coal thickness, by seam and then appended to the

MARSHALL MILLER & ASSOCIATES, INC.

Carlson model database for seam model updates. Seam thickness data excluded roof and or floor strata records above and below the measured seam. In 2023, active underground mines that included supplemental mine data included Muddy Bridge and Eagle No. 1 Mine in the Lower No. 2 Gas (Eagle) seam and the Lower War Eagle mine.

In-mine seam measurements were taken by mine survey workers with a tape measure to record coal and parting(s) thicknesses and data locations. Subsequently, the thickness and location records were transferred into digital format and AutoCAD maps. Seam section data of these records were then used with drill hole seam data to update geologic models. Anomalous seam thickness data, of which there were only a few, were not honored for the update. Coal quality samples were not collected by surveyors with seam thickness measurements. The spacing of the in-mine measurements is tighter than that of the drill hole data. In general, the mine data fit thickness trends of the surrounding drill holes and emphasized existing thickness trends as seen from surrounding drill hole data. In a few places the in-mine data showed local thinning or thickening thickness trends of limited extent.

In-Mine seam measurement counts by seam are as follows:

- > Lower Winifrede seam includes 51 in-mine data locations taken from the adjacent, inactive deep mine.
- > Lower War Eagle seam includes 551 in-mine data locations, mainly located beside remaining mineable sections of the active deep mine.
- Lower No. 2 Gas seam includes 1,974 in-mine data locations. Of the 1,974 mine data locations, 478 are from the Muddy Bridge deep mine and 1,496 are from the Eagle No. 1 Mine. The Lower No. 2 Gas update displays a seam thickness differential between the thicker Muddy Bridge mine area and the thinner Eagle No. 1 Mine which is represented with the mine data.

7.5 Hydrology

Hydrologic testing and forecasting are necessary parts of the permitting process and as such are routinely considered in the mine planning process.

Logan has a lengthy history of operation and five currently active mines with no significant hydrologic concerns or material issues experienced in its history. Future mining is projected to occur in areas exhibiting similar hydrogeological conditions as past mining, including stream undermining and undermining of aquifers. Based upon the successful history of the operation with regards to hydrogeological features, MM&A assumes that the operation will not be hindered by such issues in the future.

7.6 Geotechnical Data

Mining plans for potential underground mines were developed by Coronado and modified by MM&A to fit current property constraints. Pillar stability was tested by MM&A using the *Analysis of Coal Pillar Stability (ACPS)* program that was developed by the **National Institute for Occupational Safety and Health (***NIOSH***)**. MM&A reviewed the results from the ACPS analysis

MARSHALL MILLER & ASSOCIATES, INC.

and considered it in the development of the LOM plan. Coal and rock strengths from core testing are used to verify the empirical assumptions integral to ACPS.

8 Sample Preparation, Analyses and Security

8.1 Prior to Sending to the Lab

Most of the coal samples have been obtained from the Property by subsurface exploration using core drilling techniques. The protocol for preparing and testing the samples has varied over time and is not well documented for the older holes drilled on the Property. Following a process, typical USA core drilling sampling technique is for the coal core sample, once recovered from the core barrel, to be described then wrapped in a sealed plastic sleeve and placed into a wooden core box, which is the length of the sample and covered with a lid so that the core can be delivered to a laboratory in relatively intact condition and with inherent moisture content. Each core sample box is identified with the seam, hole identification number and the sample interval depth scribed on the sample box lid. This process has been the norm for both historical and ongoing exploration activities at Logan.

This work is typically performed by the supervising driller, geologist or company personnel. Samples are most often delivered to the company by the driller after each shift or acquired by company personnel or representatives. Most of the coal core samples were obtained by previous or current operators on the Property. MM&A did not participate in the sample collection and analysis of the core samples. However, it is reasonable to assume, given the sophistication level of the previous operators, that these samples were generally collected and processed under industry best-practices. This assumption is based on MM&A's familiarity with the operating companies and the companies used to perform the analysis.

8.2 Lab Procedures

Coal quality testing has been performed over a large number of years by operating companies using different laboratories and testing regimens. Some of the samples have raw analyses and washabilities of the full seam (with coal and rock parting layers co-mingled) and are mainly useful for characterizing the coal quality for projected production from underground and highwall mine operations. Other samples have coal and rock analyzed separately, the results of which can be manipulated to forecast either surface or underground mine quality. Care has been taken to use only those analyses that are representative of the coal quality parameters for the appropriate mining type for each sample.

Standard procedure upon receipt of core samples by the testing laboratory is to log the depth and thickness of the sample, then perform testing as specified by a representative of the operating company. Each sample is then analyzed in accordance with procedures defined under **ASTM International (***ASTM***)** standards including, but not limited to; washability (ASTM D4371); ash (ASTM D3174); sulfur (ASTM D4239); Btu/lb. (ASTM D5865); volatile matter (ASTM D3175); Free Swell Index (*FSI*) (ASTM D720).

Since 1957 (the earliest coal quality information available), the Property has been controlled by various mining companies utilizing their own corporate laboratories including: **Buffalo Mining**

MARSHALL MILLER & ASSOCIATES, INC

Company (Lorado, West Virginia), Pittston Coal Group (Lyburn, West Virginia), and Clinchfield Coal Company (Clinchfield, Virginia).

Since 1985 to the present, additional laboratories *not* affiliated with coal companies who have provided analytical data for the Property include:

- Mineral Labs, Inc. (Salyersville, Kentucky) accredited by the Perry Johnson Laboratory Accreditation, Inc. (PJLA).
- Standard Laboratories, Inc (South Charleston, West Virginia) accredited by the ANSI National Accreditation Board (ANAB).
- > Standard Laboratories, Inc (Whitesburg, Kentucky) accredited by the ANAB.
- Commercial Testing & Engineering Company (Charleston, West Virginia) no longer in operation.
- > Gallagher Coal Research Center (Crab Orchard, West Virginia) no longer in operation.
- > Standard Laboratories, Inc. (Scott Depot, West Virginia) accredited by the ANAB.
- SGS North America (Sophia, West Virginia) a leading accredited body and a Nationally Recognized Test Laboratory (*NRTL*); currently utilized by Coronado for sample analysis.

9 Data Verification

9.1 Procedures of Qualified Person

MM&A reviewed the digital geologic database supplied by Coronado. The database consists of data records, which include drill hole information for holes that lie within and adjacent to the Property and records for numerous supplemental coal seam thickness measurements. For supplemental record verification, copies of each entry were printed, and cross referenced to the original document for verification. Once the initial integrity of the database was established, stratigraphic columnar sections were generated using cross-sectional analysis to establish or confirm coal seam correlations. Geophysical logs were used wherever available to assist in confirming the seam correlation and to verify proper seam thickness measurements and recovery of intercepted coal sections and collected samples.

After establishing and/or verifying proper seam correlation, seam data control maps and geological cross-sections were generated and again used to verify seam correlations and data integrity. Once the database was fully vetted, seam thickness, base of seam elevation, roof and floor lithology, and overburden maps were independently generated for use in the mine planning process.

9.2 Limitations

As with any exploration program, localized anomalies cannot always be discovered. Ideally, the greater the density of the samples taken, the less the risk. Once an area is identified as being

MARSHALL MILLER & ASSOCIATES, INC

of interest for inclusion in the mine plan, additional samples are taken to help reduce the risk in those specific areas. In general, provision is made in the mine planning portion of the study to allow for localized anomalies that are typically classed more as a nuisance than a hinderance.

9.3 Opinion of Qualified Person

Sufficient data has been obtained through various exploration and sampling programs and mining operations to support the geological interpretations of seam structure and thickness for coal horizons situated on the Property. The data is of sufficient quantity and reliability to reasonably support the coal resource and coal reserve estimates in this TRS.

10 Mineral Processing and Metallurgical Testing

10.1 Testing Procedures

Separate tabulations have been compiled for basic chemical analyses (both raw and washed quality), petrographic data, rheological data and chlorine, ash, ultimate and sulfur analysis. Some of the data categories from the analyses are not as prevalent and have been supplemented by samples collected from mine stockpiles and either truck or train shipment samples.

Available coal quality data were tabulated by resource area in a Microsoft[®] EXCEL workbook and the details of that work are maintained on file at the offices of Coronado and MM&A. These tables also provide basic statistical analyses of the coal quality attributes, including average value; maximum and minimum values; and the sample count (number of samples) available to represent each quality parameter of the seam. Coal samples that were deemed by MM&A geologists to be unrepresentative were not used for statistical analysis of coal quality, as documented in the tabulations. A representative group of drill hole samples from the Properties were then checked against the original drill laboratory reports to verify accuracy and correctness.

The amount and areal extent of coal sampling for geological data is generally sufficient to represent the quality characteristics of the coal horizons and allow for proper market placement of the subject coal seams. For some of the coal deposits, there are considerable laboratory data from core samples that are representative of the full extent of the resource area; and for others there are more limited data to represent the resource area. For example, in the active operations with considerable previous mining, there may be limited quality data within some of the remaining resource area; however, in those cases the core sampling data can be supplemented with operational data from mining and shipped quality samples representative of the resource area.

10.2 Relationship of Tests to the Whole

The extensive sampling and testing procedures typically followed in the coal industry result in an excellent correlation between samples and marketable product. Shipped analyses of the coal from Logan were reviewed to verify that the coal quality and characteristics were as

MARSHALL MILLER & ASSOCIATES, INC.

expected. The Logan properties have a long history of saleable production, under various owners, in the high-volatile metallurgical and thermal markets, confirming exploration results.

10.3 Lab Information

Each sample is analyzed at area Laboratories that operate in accordance with procedures defined under ASTM standards including, but not limited to the following (Note: not all analytical tests identified in this list have been run on each sample):

- > ASTM D 4371 Test Method for Determining Washability Characteristics of Coal
- > ASTM D 3174 Method for Ash in the Analysis Sample of Coal and Coke
- > ASTM D 4239 Test Methods for Sulphur in the Analysis Sample of Coal and Coke Using High-Temperature Tube Furnace Combustion Methods
- > ASTM D 5865 Test Method for Gross Calorific Value of Coal and Coke
- > ASTM D 3175 Test Method for Volatile Matter in the Analysis Sample of Coal and Coke
- > ASTM D 3176 Standard Practice for Ultimate Analysis of Coal and Coke
- > ASTM D 3178 Test Method for Carbon and Hydrogen in Coal and Coke
- > ASTM D 3179 Test Method for Nitrogen in Coal and Coke
- > ASTM D 720 Test Method for Free-Swelling Index (FSI) of Coal
- > ASTM D 5515 Test Method for Determination of the Swelling Properties of Bituminous Coal Using a Dilatometer (Arnu)
- > ASTM D 2639 Test Method for Plastic Properties of Coal (Gieseler)
- > ASTM D 3683 Trace Elements in Coal and Coke Ash by the Atomic Absorption Method
- > ASTM D 1857 Standard Test Method for Fusibility of Coal and Coke Ash
- > ASTM D 2798 Microscopical Determination of the Reflectance of Vitrinite in a Polished Specimen of Coal

Ultimate analysis is a process typically used which gives the composition of coal in terms of carbon, hydrogen, nitrogen, oxygen, ash, and sulfur without regard to origin. The sum of the carbon, hydrogen, nitrogen, sulfur, and ash are subtracted from 100 percent to calculate oxygen percent.

Heating value or calorific value is a measure of the heat produced from a unit weight of coal. In the United States, it is commonly expressed in British thermal units per pound (Btu/lb.). Other units are kilocalories per kilogram (Kcal/kg) and kilojoules per gram (KJ/g). Heating value is generally determined by burning a weighed coal sample, in oxygen, in a calorimeter.

MARSHALL MILLER & ASSOCIATES, INC.

As noted previously, since 1957 (the earliest coal quality information available), the Property has been controlled by various mining companies utilizing their own corporate laboratories including: **Buffalo Mining Company** (Lorado, West Virginia), **Pittston Coal Group** (Lyburn, West Virginia), and **Clinchfield Coal Company** (Clinchfield, Virginia).

Since 1985 to the present, additional laboratories *not* affiliated with coal companies who have provided analytical data for the Property include:

- > Mineral Labs, Inc. (Salyersville, Kentucky) accredited by the PJLA.
- > Standard Laboratories, Inc. (South Charleston, West Virginia) accredited by the ANAB.
- > Standard Laboratories, Inc. (Whitesburg, Kentucky) accredited by the ANAB.
- Commercial Testing & Engineering Company (Charleston, West Virginia) no longer in operation.
- > Gallagher Coal Research Center (Crab Orchard, West Virginia) no longer in operation.
- > Standard Laboratories, Inc. (Scott Depot, West Virginia) accredited by the ANAB.
- > SGS North America (Sophia, West Virginia) a leading accredited body and a NRTL; currently utilized by Coronado for sample analysis.

10.4 Relevant Results

No critical factors have been found that would adversely affect the recovery of the Reserve.

11 Mineral Resource Estimates

MM&A independently created geologic models to define the coal resources of Logan. Coal resources were estimated as of December 31, 2023.

11.1 Assumptions, Parameters and Methodology

Geological data was imported into Carlson Mining[®] software for geological modelling and resource estimates. The imported data, formatted in Microsoft[®] Excel files, incorporates drill hole collar elevations, seam and thickness picks, bottom seam elevations and raw and washed coal quality. These data files were validated prior to importing into the software. Once imported, a geologic model was created, reviewed, and verified with a key element being a gridded model of coal seam thickness. Resource tonnes were estimated by using the seam thickness grid based on each valid point of observation and by defining resource confidence arcs around the points of observation. Points of observation for Measured and Indicated confidence arcs were defined for all valid drill holes that intersected the seam using standards deemed acceptable by MM&A based on a detailed geologic evaluation and a statistical analysis of all drill holes within the projected reserve areas as described in *Section 11.1.1*. The geological evaluation incorporated an analysis of seam thickness related to depositional environments, adjacent roof and floor lithologies, and structural influences.

MARSHALL MILLER & ASSOCIATES, INC.

After establishing seam correlations, validated coal seam data, including seam thickness and elevation for seams of economic interest, were used to generate a geologic model. Due to the relative structural simplicity of the deposits and the reasonable continuity of the tabular coal beds, the principal geological interpretation necessary to define the lateral extent of the coal deposits is the proper modeling of seam thickness and elevation. Both coal thickness and quality data are deemed by MM&A to be reasonably sufficient within the resource areas. Therefore, there is a reasonable level of confidence in the geologic interpretations required for coal resource determination based on the available data and the techniques applied to the data.

Table 11-1 below provides the geological mapping and coal tonnage estimation criteria used for the coal resource and reserve evaluation. These cut-off parameters have been developed by MM&A based on its experience with the Coronado properties and are typical of mining operations in the Central Appalachian coal basin. This experience includes technical and economic evaluations of numerous properties in the region for the purposes of determining the economic viability of the subject coal reserves.

MARSHALL MILLER & ASSOCIATES, INC.

Table 11-1: General Reserve & Resource Criteria

Item General Criteria	Parameters	
		Technical Notes & Exceptions*
Reserve Classification	Reserve and Resource	Coal resources as reported are inclusive of coal reserves.
Reliability Categories	Reserve (Proven and Probable)	To better reflect geological conditions of the coal deposits, distance between points of observation is
	Resource (Measured, Indicated & Inferred)	standard USGS (in meters), respectively, for measured and indicated and inferred.
Effective Date of Resource Estimate	December 31, 2023	Coal resources were updated for depletion and non- material resource additions based on information from Coronado. Effective date for coal resources is as of December 31, 2023.
Effective Date of Reserve Estimate	December 31, 2023	Coal reserves were updated for depletion and non- material reserve additions based on information from Coronado. Effective date for coal reserves is as of December 31, 2023.
Seam Density	Variable, dependent upon seam characteristics (based on available drill hole quality). In the absence of laboratory data, estimated by (1) assuming specific gravity of 1.30 for coal and 2.25 to 2.5 for rock parting, or (2) 1280 kg/m ³ to 1324 kg/m ³ for a "clean" seam)	
 Underground-Mineable Criteria 		
Map Thickness	Total seam thickness	
Minimum Seam Thickness	0.76 meters (thermal coal); 0.68 meters (metallurgical coal)	
Minimum Mining Thickness	1.4 to 1.8 meters	
Minimum Total Coal Thickness	0.76 meters (thermal coal); 0.68 meters (metallurgical coal)	
Minimum In-Seam Wash Recovery	50 percent; 40 percent where coal is belted directly to preparation plant	
Wash Recovery Applied to Coal Reserves	Based on average yield for drill holes within reserve area, or in the absence of laboratory washability data, based on estimated visual	
	recovery using specific gravities noted above and 95 percent yield on "clean" coal	
Out-of-Seam Dilution Thickness for	0.05 meters minimum	2243 kg/m ³ density used for dilution tonnage estimate
Run-of-Mine Tonnes Applied to Coal Reserves		
	60.96-meter distance from abandoned mines and sealed or pillared areas; 30.4-meter distance from planned highwall miner panels	
Reserves	sealed or pillared areas; 30.4-meter distance from	
Reserves Mine Barrier	sealed or pillared areas; 30.4-meter distance from planned highwall miner panels 226,796 recoverable tonnes for individual area	
Reserves Mine Barrier Minimum Reserve Tonnage Minimum Overburden Depth Minimum Interval to Rider Coal	sealed or pillared areas; 30.4-meter distance from planned highwall miner panels 226,796 recoverable tonnes for individual area (logical mining unit) 30.48 meters Considered on a case-by-case basis, depending on interval lithology, etc.	<1.5 meters are resource
Reserves Mine Barrier Minimum Reserve Tonnage Minimum Overburden Depth	sealed or pillared areas; 30.4-meter distance from planned highwall miner panels 226,796 recoverable tonnes for individual area (logical mining unit) 30.48 meters Considered on a case-by-case basis, depending on	<1.5 meters are resource Typically, 12.19 meters
Reserves Mine Barrier Minimum Reserve Tonnage Minimum Overburden Depth Minimum Interval to Rider Coal Minimum Interval to Overlying or	sealed or pillared areas; 30.4-meter distance from planned highwall miner panels 226,796 recoverable tonnes for individual area (logical mining unit) 30.48 meters Considered on a case-by-case basis, depending on interval lithology, etc. Considered on a case-by-case basis, depending on interval lithology, etch and type of extraction,	

MARSHALL MILLER & ASSOCIATES, INC.

Surface Mineable Criteria		
Topographic Map Source	Reserves estimated based on aerial topography,	
	where available, and best available aerial	
	topography for other areas. Pre-law highwalls	
	also based on aerial topography, where available	
Map Thickness	Total mineable seam thickness (excluding removal partings)	
Mine Recovery Applied to Coal	90 percent; 25 percent for previously	
Reserves	underground mined areas.	
Wash Recovery	Not Applicable for most reserves estimated on a direct-ship basis. Where surface mineable coal is projected to be washed, based on average yield	
	for drill holes within reserve area, or in the	
	absence of laboratory washability data, based on	
	estimated visual recovery using specific gravities	
Minimum Thickness	noted above and 95 percent yield on "clean" coal	
	0.3 meter for principal seam (principal seam is any that is >0.76 meters from another mineable coal	
	bench)	
	0.15 meters for a split of a principal seam (split is	
	within 0.76 meters of another mineable coal bench)	
Minimum thickness of recoverable	0.6 meters	
coal within single seam CTR/Area/HWM areas		
Minimum HWM Cutting Height	0.8 meters	
Removable Rock Parting Thickness	0.07 meters	
Maximum Cumulative Area Mining	30:1 – Area	Exceptions considered for metallurgical grade coal
Strip Ratio	15:1 – CTR	products if deemed economical
Design Bench Width for Contour/HWM Areas	38.1 meters (Contour reserves estimated in conjunction with potential HWM reserves)	
Adjustments Applied to Marketable Coal Reserves	4.5 percent moisture increase	
Out-of-Seam Dilution Thickness Applied to Coal Reserves	NA	2% adjustment (addition) made to product coal quality ash to account for dilution
Surface Property Control	Reserves considered where surface is controlled; tonnage not estimated or classified as resource	
	where surface is uncontrolled.	
Highwall Miner Reserves		
Penetration Depth	91.4 – 243.8 meters	
Seam Density & Wash Recovery	Similar to underground-mineable reserves	
Mine Recovery Applied to Coal Reserves	40 percent	
Minimum Coal Thickness	0.6 meter	
Minimum Mining Height	0.9 meter	
Adjustments Applied to Marketable Coal Reserves	6 percent moisture increase and 5 percent loss for	
Coal Reserves Out-of-Seam Dilution Thickness	preparation plant inefficiency	2242 to 2402 kg/m ³ density used for dilution terran
Applied to Coal Reserves	0.9 meter less seam height	2242 to 2402 kg/m ³ density used for dilution tonnage estimate
	hese criteria to resource and reserve estimation are ma	
	hese criteria to resource and reserve estimationare main that allows for empirical evaluation of mining condition	

11.1.1 Geostatistical Analysis

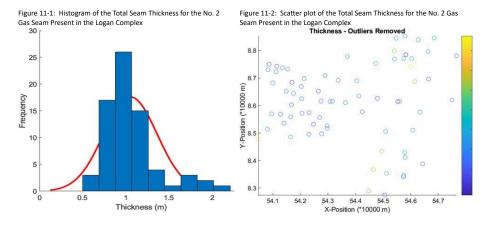
MM&A completed a geostatistical analysis on drill holes within the reserve boundaries to determine the applicability of the common United States classification system for measured and indicated and inferred coal resources. Historically, the United States has assumed that coal within 0.4-kilometer of a point of observation represents a measured resource whereas coal between 0.4 kilometer and 1.2 kilometer from a point of observation is classified as indicated. Inferred resources are commonly assumed to be located between 1.2 kilometers and 4.8 kilometers from a point of observation. Per SEC and JORC regulations, only measured and

MARSHALL MILLER & ASSOCIATES, INC.

indicated resources may be considered for reserve classification, respectively as proven and probable reserves.

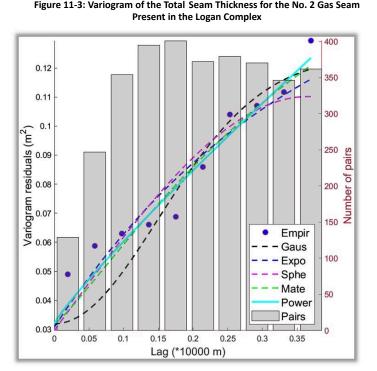
MM&A performed a geostatistical analysis test of the Logan data set using the Drill Hole Spacing Analysis (*DHSA*) method. This method attempts to quantify the uncertainty of applying a measurement from a central location to increasingly larger square blocks and provides recommendations for determining the distances between drill holes for measured, indicated, and inferred resources.

To perform DHSA the data set was processed to remove any erroneous data points, clustered data points, as well as directional trends. This was achieved through the use of histograms, as seen in *Figure 11-1*, color coded scatter plots showing the geospatial positioning of the borings, *Figure 11-2*, and trend analysis.



Following the completion of data processing, a variogram of the data set was created, *Figure 11-3*. The variogram plots average square difference against the separation distance between the data pairs. The separation distance is broken up into separate bins defined by a uniform lag distance (e.g., for a lag distance of 152 meters the bins would be 0 - 152 meters, 153 - 305 meters, etc.). Each pair of data points that are less than one lag distance apart are reported in the first bin. If the data pair is further apart than one lag distance but less than two lag distances apart, then the variance is reported in the second bin. The numerical average for differences reported for each bin is then plotted on the variogram. Care was taken to define the lag distance in such a way as to not overestimate any nugget effect present in the data set. Lastly, modeled equations, often spherical, gaussian, or exponential, are applied to the variogram in order to represent the data set across a continuous spectrum.

MARSHALL MILLER & ASSOCIATES, INC

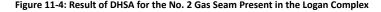


The estimation variance is then calculated using information from the modeled variogram as well as charts published by Journel and Huijbregts (1978). This value estimates the variance from applying a single central measurement to increasingly larger square blocks. Care was taken to ensure any nugget effect present was added back into the data. This process was repeated for each test block size.

The final step of the process is to calculate the global estimation variance. In this step, the number of square blocks that would fit inside the selected study area is determined for each block size that was investigated in the previous step. The estimation variance is then divided by the number of blocks that would fit inside the study area for each test block size. Following this determination, the data is then transformed back to represent the relative error in the 95th percentile range.

Figure 11-4 shows the results of the DHSA performed on the No. 2 Gas seam data for the Logan Complex. DHSA provides hole to hole spacing values, these distances need to be converted to radius from a central point in order to compare to the historical standards. A summary of the radius data is shown in *Table 11-2*. DHSA prescribes measured, indicated, and inferred drill hole spacings be determined at the 10-percent, 20-percent, and 50-percent levels of relative error, respectively.

MARSHALL MILLER & ASSOCIATES, INC.



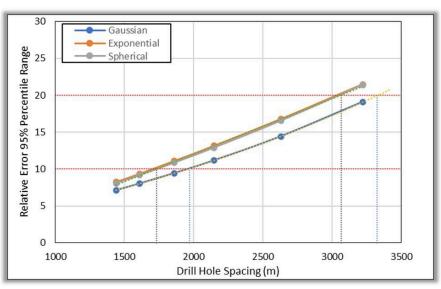


Table 11-2: DHSA Results Summary for Radius from a Central Point

Model:	Measured Radial Distance (10% Relative Error)	Indicated Radial Distance (20% Relative Error)	Inferred Radial Distance (50% Relative Error)
	(km)	(km)	(km)
Gaussian:	0.99	1.66	3.94
Spherical:	0.87	1.53	3.53
Exponential:	0.87	1.53	3.53

Comparing the results of the DHSA to the historical standards, it is evident that the historical standards are more conservative than even the most conservative DHSA model with regards to determining measured resources. The Exponential and Spherical models recommend using a radius of 0.87 kilometers for measured resources compared to the historical value of 0.4 kilometers. With respect to indicated resources, the Spherical and Exponential models recommend using a radius of 1.53 kilometers. The historical radius of 1.2 kilometers is therefore also more conservative than the DHSA results for indicated resources. These results have led the QPs to report the data following the historical classification standards, rather than use the results of the DHSA.

11.2 Qualified Person's Estimates

Mineral resources representing in-situ coal are estimated Inclusive of Reserve and Exclusive of Reserves. Based on the work and methods described above and detailed geologic modelling of the areas considering all defined parameters, a coal resource estimate, summarized in *Table 11-3*, was prepared as of December 31, 2023, for property controlled by Coronado.

MARSHALL MILLER & ASSOCIATES, INC.

		Resource Quality (Dry)					
Area	Measured	Indicated	Inferred	Total	Ash%	Sulfur%	VM%
Inclusive of Reserves	133.9	35.8	0.0	169.7			
Exclusive of Reserves	39.2	35.9	3.4	78.5	17	1.0	31
Total 12/31/2023	173.1	71.7	3.4	248.3			
Note: Resource tonne	es are inclusive of re	serve tonnes since	they include the i	n-situ tonnes fro	om which re	coverable coa	al reserves

are derived. Note 2: Coal resources are reported on a drv basis. Surface moisture and inherent moisture are excluded

Note 3: The Property has 75.1Mt of dry, in-place measured and indicated resource tonnes exclusive of reserves as of December 31, 2023.

11.3 Resources Exclusive of Reserves

The Property contains multiple resource blocks which were not deemed to exhibit reserve potential at the time of the study. These underground-mineable resources, formally identified as resources exclusive of reserves, are from the No. 2 Gas, Lower Powellton, Peerless, Lower Winifrede, Middle Cedar Grove and Beckley coal seams. A portion of the Lower Winifrede resources defined in the February 2023 TRS were converted to reserves as part of the current 2024 TRS by virtue of a mine plan and economic analysis in *Section 19*. There are also surface mineable resources exclusive of reserves in various seams. Reasons which may preclude elevation of resources to reserves include, but are not limited to:

- 1. Unfavorable economics at the PFS level, yet economics could become attractive in the future under different market conditions.
- Exclusion from LOM planning by mining operator due to remaining resource blocks which are relatively small, isolated blocks and not currently attractive from an operational perspective.

11.3.1 Initial Economic Assessment

MM&A completed an initial economic assessment to determine the potential economic viability of resources exclusive of reserves. Unlike the economic analysis presented in Section 19 developed to test reserves, the initial economic assessment below is presented on a real basis in 2023 dollars. MM&A applied relevant technical factors to estimate potential saleable tonnes without the resource blocks, should the resources be extracted via deep, continuous mining methods or surface area methods. MM&A developed cash cost profiles for the resource blocks, including direct cash costs (labor, supplies, roof control, maintenance and repair, power, and other); washing, trucking, materials handling, general and administrative, and environmental costs; and indirect cash costs (royalties, production taxes, property tax, insurance). Costs were developed based off relevant cost drivers (per-meter, per-bank cubic meter, per-raw-tonne, per-clean-tonne). Additionally, MM&A estimated capital costs to extract resources. Capital costs associated with mine development were amortized across the resource's potential saleable tonnages. Additional non-cash items (depreciation of equipment and depletion) and cash costs were compared to an assumed sale price of \$154 per tonne (FOB loadout) for underground-mineable resources, representing the long-term average price forecast for HVB provided by Coronado. Surface resources were assessed at a sales price of \$83 per tonne (FOB loadout) based on estimated historical pricing for Coronado's surface operations. The results of the analysis are shown below and demonstrate potential profitability on a fully loaded cost basis. Detailed summaries are shown in Appendix D.

MARSHALL MILLER & ASSOCIATES, INC.

Table 11-4: Results of Initial Economic Assessment (\$/tonn	e)
---	----

			Transportation,				Fully
	Resource	Direct	Washing,				Loaded
Mine	Block	Cash	Enviro, G&A	Indirect	Non-Cash	Total Cost	P&L
Toney Fork #2	N2G	\$70.46	\$17.34	\$19.81	\$17.53	\$125.13	\$29.19
Pardee	N2G	\$77.59	\$20.85	\$19.81	\$12.63	\$130.88	\$23.44
Sugar Camp	N2G	\$97.33	\$25.16	\$19.81	\$10.40	\$152.70	\$1.62
Lower Powellton Block A	LPOW	\$74.99	\$18.22	\$19.81	\$8.52	\$121.54	\$32.79
Lower Powellton Block B	LPOW	\$78.47	\$18.99	\$19.81	\$20.22	\$137.49	\$16.83
N2G Peerless	Peer	\$100.47	\$15.53	\$19.81	\$16.83	\$152.64	\$1.69
Beckley	Bec	\$68.42	\$16.72	\$19.81	\$17.09	\$122.03	\$32.29
Middle Cedar Grove	MCG	\$72.41	\$18.21	\$19.81	\$36.75	\$147.18	\$7.14
Lower Winifrede	LWIN	\$38.58	\$13.04	\$19.81	\$43.83	\$115.25	\$39.07
Powellton No. 1	UPOW	\$63.63	\$21.11	\$19.81	\$8.52	\$113.07	\$41.25
Thermal Area Mines (S)	S	\$50.27	\$6.34	\$12.73	\$8.52	\$77.87	\$4.81

Figure 11-5: Results of Initial Economic Assessment

\$154/TONNE SALE PRICE \$160.00 \$140.00 \$120.00 \$100.00 \$80.00 \$60.00 \$40.00 \$20.00 \$-Toney Fork #2 Parde Sugar Camp Lower N2G Beckley Middle Lower Upper Winifrede Powellton Therma Lowe (N2G) Powellton Powellton Peerless (BEC) Cedar Area (N2G) (N2G) Block A Block B (Peer) Grove Mines (S) Direct Cash Transportation, Washing, Enviro, G&A ■ Indirect Non Cash

11.4 Resources Inclusive of Reserves

The *Inclusive of Reserves* in-place resource account for 68-percent of the total 248.3 million estimated in-situ resource. Recoverable reserves for both surface and underground mine methods are derived from the *Inclusive of Reserve* 169.7 million in-situ resource. Logan reserves are discussed further in *Section 12*, Mineral Reserve Estimates below.

11.5 Qualified Person's Opinion

While there is some level of stratigraphically controlled seam-thickness variability due to seam splitting, sand channels, etc., the coal seams on the mine property in Logan County demonstrate reasonable thickness consistency according to the classification system of **measured** (0 – 0.4 kilometer), **indicated** (0.4 to 1.2 kilometers), and **inferred** (1.2 to 4.8 kilometers). MM&A geologists and engineers modeled the deposit and delineated mineable regions to reflect the nature of each seam and the practicality of mining constraints. Based on

MARSHALL MILLER & ASSOCIATES, INC.

MM&A's geostatistical analysis, it would be possible to extend the measured, indicated and inferred arcs slightly beyond historically accepted practices due to consistent geological settings. The QP's have again elected not to extend arc distances, introducing a level of conservatism in measured and indicated coal classification.

Based on the data review, the attendant work done to verify the data integrity and the creation of an independent geologic model, the QPs believe this is a fair and accurate representation of the Logan coal resources. Moreover, the QPs opine that additional exploration, mine planning and financial analysis could result in conversion of additional resources to reserves in the future; however, there is no guarantee that such will be the case until such time as that additional work is completed.

12 Mineral Reserve Estimates

12.1 Assumptions, Parameters and Methodology

Coal Reserves are classified as *proven* or *probable* considering "modifying factors" including mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors.

- Proven Coal Reserves are the economically mineable part of a measured coal resource, adjusted for diluting materials and allowances for losses when the material is mined. It is based on appropriate assessment and studies in consideration of and adjusted for reasonably assumed modifying factors. These assessments demonstrate that extraction could be reasonably justified at the time of reporting.
- Probable Coal Reserves are the economically mineable part of an indicated coal resource, and in some circumstances a measured coal resource, adjusted for diluting materials and allowances for losses when the material is mined. It is based on appropriate assessment and studies in consideration of and adjusted for reasonably assumed modifying factors. These assessments demonstrate that extraction could be reasonably justified at the time of reporting.

Upon completion of delineation and calculation of coal resources, MM&A generated a LOM plan for Logan. The footprint of each reserve area is shown on the maps in *Appendix B*. The Mine plan was generated based on the forecast mine plan and permit plan provided by Coronado with modifications by MM&A where necessary due to current property control limits, modifications to geologic mapping, or other factors determined during the evaluation.

Carlson Mining software was used to generate the LOM plan for Logan. The mine plan was sequenced based on productivity schedules provided by Coronado. MM&A judged the productivity estimates and plans to be reasonable based on experience and current industry practice.

Raw, ROM production data outputs from LOM plan sequencing were processed into Microsoft^{*} EXCEL spreadsheets and summarized on an annual basis for processing into the economic model. Average seam densities were estimated to determine raw coal tonnes produced from

MARSHALL MILLER & ASSOCIATES, INC.

the LOM plan. Average mine recovery and wash recovery factors were applied to determine coal reserve tonnes.

Coal reserve tonnes in this evaluation are reported at a 4.5 percent to 6.0 percent moisture and represent the saleable product from the Property.

Pricing data as provided by Coronado is described in *Section 16.2*. The pricing data assumes respective HVA, HVB and thermal FOB-mine prices of approximately \$162, \$144, and \$120 per metric tonne for calendar year 2024. HVA, HVB, and thermal prices respectively decrease to approximately \$161, \$143, and \$114 per metric tonne through year 2026, and then increase to \$308, \$273, and \$212 per metric tonne through year 2057.

The coal resource mapping and estimation process, described in this report was used as a basis for the coal reserve estimate. Proven and probable coal reserves were derived from the defined coal resource considering relevant processing, economic (including technical estimates of capital, revenue, and cost), marketing, legal, environmental, socio-economic, and regulatory factors and are presented on a moist, recoverable basis.

As is customary in the US, the categories for proven and probable coal reserves are based on the distances from valid points of measurement as determined by the QPs for the area under consideration. For this evaluation, measured resource, which may convert to a proven reserve, is based on a 0.4-kilometer radius from a valid point of observation.

Points of observation include exploration drill holes, gas wells, and mine measurements which have been fully vetted and processed into a geologic model. The geologic model is based on seam depositional modeling, the interrelationship of overlying and underlying strata on seam mineability, seam thickness trends, the impact of seam structure (i.e., faulting), intra-seam characteristics, etc. Once the geologic model was completed, a statistical analysis, described in *Section 11.1.1* was conducted and a 0.4-kilometer radius from a valid point of observation was selected to define Measured Resources.

Likewise, the distance between 0.4 and 1.2 of a kilometer radius was selected to define Indicated Resources. Indicated Resources may convert to Probable Reserves.

Inferred Resources (greater than a 1.2-kilometer radius from a valid point of observation) have been excluded from Reserve consideration.

12.2 Mineral Reserves

Logan reserves were derived from multiple coal seams located on the Property and shown in *Figure 7.1.* Reserves are estimated for both surface and underground mine methods. Surface reserves were estimated for three designated mine areas: Toney Fork, Buffalo Creek South, and Sugar Camp. Underground reserves were derived from six seams including the Upper Winifrede, Lower Winifrede, Chilton (Williamson), Upper Powellton, Lower Powellton, No. 2 Gas-Lower (Eagle) and Lower War Eagle. The 70.6 Mt of demonstrated marketable reserves are sited in the discussion below. *Table 12-2* shows the demonstrated tonnage by Proven and Probable category.

MARSHALL MILLER & ASSOCIATES, INC.

Individual seam maps are included in Appendix B herein.

12.2.1 Surface Reserves

Surface coal reserves of the Property include an estimated 32.2 Mt. Each surface mine area – Tony Fork, Buffalo Creek South and Sugar Camp – includes coal reserves from multiple seams. Two of the three surface reserve areas, Toney Fork and Buffalo Creek South, include both permitted and non-permitted tonnages, where Sugar Camp tonnage is not permitted. The Property has five surface mine permits for contour and highwall mining. Even so, in 2023 there was minor surface mine activity on just two of the five surface mine permits at Toney Fork Mine No. 3 and Elk Lick.

12.2.1.1 Toney Fork Surface

Toney Fork surface area is located north of Buffalo Creek on the north side of the Property. The Toney Fork drainage bisects much of the area which includes contour and highwall miner reserve from six seams. The Toney Fork reserve includes 11.2 Mt of both permitted and not-permitted status. There is one active permit – Toney Fork Mine No 3 (S-5007-09). In 2023, minimal tons were mined from this permit during the fourth quarter.

Mine depletion from surface and underground mining, seam dependent, exists in all seams of the Toney Fork reserve which include the Upper Coalburg, Lower Coalburg, Lower Dorothy, Chilton A, Upper Winifrede and Lower Winifrede seams.

12.2.1.2 Buffalo Creek South

Buffalo Creek South (Elklick) surface area includes an estimated 14.7 Mt from projected contour and highwall mines. The reserve total includes both permitted and not-permitted tonnages. Permitted tonnages are estimated from four surface mine permits – North Fork Winifrede Contour (S-5004-17), Middle Fork Surface (S-5004-22), and two at Elk Lick (S-5014-10 & S-5008-22). In 2023, minimal tons were mined and only at Elk Lick.

The highwall mineable tonnage is estimated for six seams with adequate seam heights which include the Lower Coalburg, Lower Dorothy, Chilton, Chilton A, Buffalo Creek and the Upper Winifrede. Contour mine tonnage is derived from the highwall mine seams, along with four additional seams with acceptable seam thickness. They include the Lower Clarion, Upper Stockton, Lower Stockton and Upper Coalburg. Mine depletion to various extents exists in the Buffalo Creek South seams.

12.2.1.3 Sugar Camp Surface

Sugar Camp surface area is a ridge above Sugar Camp Branch tributary of Huff Creek. The Sugar Camp reserve includes 6.2 Mt with a suitable surface mine strip ratio. Proposed surface mining includes reserve from 12 seams beginning with the Chilton A seam down to the S80 seam, each with an acceptable seam height. The seams included are Chilton A, Upper Winifrede, Lower Winifrede, Chilton, Upper Cedar Grove, Middle Cedar Grove, Lower Cedar Grove, S132 seam, S120 seam, S110 seam, S84 seam and S80 seam. No mine depletion exists in the seams of the reserve on the ridge.

MARSHALL MILLER & ASSOCIATES, INC.

12.2.2 Underground Reserves

Underground coal reserves of the Property include an estimated 38.4 Mt derived from the small above-drainage deposits in the Upper Winifrede and Lower Winifrede seams along with larger seam deposits of the deeper Chilton, Upper Powellton, Lower Powellton, No. 2 Gas-Lower (Eagle) and Lower War Eagle seams. Active underground mines are operating in the No. 2 Gas-Lower and the Lower War Eagle seams.

12.2.2.1 Upper Winifrede (No 8) Seam

The Upper Winifrede seam included two underground reserves in 2023, the permitted North Fork Winifrede Mine (U-5009-19) and a not-permitted proposed Upper Winifrede mine. The North Fork Winifrede Mine was fully depleted in 2023. The Proposed Upper Winifrede seam deposit along Sugar Camp Branch was evaluated for this report. On the Property, the Upper Winifrede seam has been extensively mined from both surface and underground mining.

12.2.2.2 Lower Winifrede

The Lower Winifrede seam reserve includes an estimated 2.1 Mt from one proposed mine situated north of the Toney Fork drainage. The average seam height for the two areas is 1.37 meters thick. On the Property, the Lower Winifrede seam has been mined, mainly by underground mining, immediately east of the proposed underground mine area.

12.2.2.3 Chilton (Williamson) Seam

The Chilton seam reserve includes an estimated 5.4 Mt from two proposed mine areas: Camp Branch and Elk Lick. The average seam height for the two areas is 1.17 meters and 1.06 meters, respectively. On the Property, the Chilton seam has been extensively mined, mainly by underground mining.

12.2.2.4 Upper Powellton (Upper Alma)

The Powellton No. 1 Mine permit provides access to the remaining 3.5 Mt of the Upper Powellton reserve. The seam has an average thickness of nearly 1.12 meters. The mine is bound by the property extent to the northeast and thin coal from a seam split to the west. The south end of Mine No. 1 is mined out. Elsewhere, no prior Upper Powellton seam mining is noted on the Property.

12.2.2.5 Lower Powellton (Lower Alma)

The Lower Powellton seam reserve includes an estimated 5.1 Mt from a proposed mine area situated north of Toney Fork. In the mapped resource area, the interval to the overlying Upper Powellton seam is in a range of 5.1 to 7.2 meters. Therefore, only resources (exclusive of reserves) are projected below the Upper Powellton underground mine where the two seams overlap. The Lower Powellton seam has an average reserve thickness of 0.89 meters and is bound by property control to the north, by low coal to the west and south and from overmining in the Upper Powellton seam to the east. No prior Lower Powellton seam mining is noted on the Property.

MARSHALL MILLER & ASSOCIATES, INC.

12.2.2.6 No. 2 Gas-Lower (Eagle)

The No. 2 Gas-Lower seam reserve includes an estimated 15.2 Mt. The demonstrated total includes both permitted and not permitted tonnes. Two active mines access the reserve – the Eagle No. 1 / Toney Fork Mine (U-5013-11) from Toney Fork Drainage and the Muddy Bridge 1 & 2 Mine (U-5034-96, U-5035-96) from Muddy Bridge Branch of Huff Creek. Mine boundaries of the two mines are immediately adjacent to one another and mine plans maximize the mineable area. The average seam height is 1.00 meter and 1.52 meters for the Eagle No. 1 and Muddy Bridge mines, respectively. On the Property, the No. 2 Gas-Lower reserve is limited by low coal thickness to the east and seam outcrop along large drainages elsewhere. Previous underground mining of the seam is mapped immediately west of the Property.

12.2.2.7 Lower War Eagle

The Lower War Eagle seam reserve includes an estimated 5.7 Mt. One underground Lower War Eagle mine (U-4002-99B) provides seam access from the portal located along Huff Creek. Mapped mine depletion is from within the existing mine. The Lower War Eagle reserve extent is limited to the north by low coal.

12.3 Qualified Person's Estimates

Reserve tonnage estimates provided herein report coal reserves derived from the in-situ resource tonnes presented in *Table 11-3*, and not in addition to coal resources. Proven and probable coal reserves were derived from the defined coal resource considering relevant mining, processing, infrastructure, economic (including estimates of capital, revenue, and cost), marketing, legal, environmental, socio-economic and regulatory factors. The coal reserves, as shown in *Table 12-2*, are based on a technical evaluation of the geology and a preliminary feasibility study of the coal deposits. The extent to which the coal reserves may be affected by any known environmental, permitting, legal, title, socio-economic, marketing, political, or other relevant issues has been reviewed rigorously. Similarly, the extent to which the estimates of coal reserves may be materially affected by mining, metallurgical, infrastructure and other relevant factors has also been considered. Coal reserves are presented on a ROM basis in *Table 12-1*.

Table 12-1: Coal Summary (ROM Basis (Moist)) as of December 31, 2023 (Mt)

Demonstrated Coal Reserves (Mt, Moist ROM)										
	egory	By Mining Type		By Control Type		Quality (Dry)				
Area / Mine	Proved	Probable	Total	Surface	UG	Owned	Leased	Ash	Sulfur	Vol
Logan Mine Complex	104.1	30.5	134.6	37.0	97.6	0.0	134.6	49	0.9	19

In the financial analysis some of the projected mines were not economically viable. The tonnes projected to be mined from these locations have not been included in the Reserve Base.

MARSHALL MILLER & ASSOCIATES, INC.

Table 12-2: Coal Reserves Summary (Marketable Sales Basis) as of December 31, 2023 (Mt)

Demonstrated Coal Reserves (Wet Ton nes, Washed or Direct Shipped, MT)											
By Reliability Category By Mining Type By Control Type Quality (Dry Basis)											
Proven	Probable	Total	Surface	UG	Owned	Leased	Ash%	Sulfur%	VM%		
54.9	15.7	70.6	32.2	38.4	0.0	70.6	8	0.9	35		
e tonnes are	reported on a	moist basis, in	ncluding a com	bination of	surface and i	nherent moistu	ure. The c	ombination			
moisture is	modeled betw	ween 4.5 and	6-percent, de	pending up	on mining m	ethod. Actua	I product	moisture is			
				ntract spec	ifications and	can exceed 8-	percent.	As such, the			
	By R Proven 54.9 re tonnes are re moisture is le geological f	By Reliability Category Proven Probable 54.9 15.7 re tonnes are reported on a tomosture is modeled between the geological factors, operational stress of the second stres stress of the second stress of the second stress of	By Reliability Category Proven Probable Total 54.9 15.7 70.6 re tonnes are reported on a moist basis, in rmoisture is modeled between 4.5 and le geological factors, operational factors,	By Reliability Category By Mining Proven Probable Total Surface 54.9 15.7 70.6 32.2 re tonnes are reported on a moist basis, including a com moisture is modeled between 4.5 and 6-percent, de 6-percent, de	By Reliability Category By Mining Type Proven Probable Total Surface UG 54.9 15.7 70.6 32.2 38.4 re tonnes are reported on a moist basis, including a combination of moisture is modeled between 4.5 and 6-percent, depending up the geological factors, operational factors, and product contract spect	By Reliability Category By Mining Type By Con Proven Probable Total Surface UG Owned 54.9 15.7 70.6 32.2 38.4 0.0 re tonnes are reported on a moist basis, including a combination of surface and i i moist uses and between 4.5 and 6-percent, depending upon mining me egological factors, operational factors, and product contract specifications and	By Reliability Category By Mining Type By Control Type Proven Probable Total Surface UG Owned Leased 54.9 15.7 70.6 32.2 38.4 0.0 70.6 re tonnes are reported on a moist basis, including a combination of surface and inherent moistur modeled between 4.5 and 6-percent, depending upon mining method. Actual Actual geological factors, operational factors, and product contract specifications and can exceed 8- Surface Surface Surface	By Reliability Category By Mining Type By Control Type Qui Proven Probable Total Surface UG Owned Leased Ash% 54.9 15.7 70.6 32.2 38.4 0.0 70.6 8 re tonnes are reported on a moist basis, including a combination of surface and inherent moisture. The c modeled between 4.5 and 6-percent, depending upon mining method. Actual product requestion and can exceed 8-percent. A	By Reliability Category By Mining Type By Control Type Quality (Dry Base of the control Type Proven Probable Total Surface UG Owned Leased Ash% Sulfur% 54.9 15.7 70.6 32.2 38.4 0.0 70.6 8 0.9 re tonnes are reported on a moist basis, including a combination of surface and inherent moisture. The combination is undered between 4.5 and 6-percent, depending upon mining method. Actual product moisture is egological factors, operational factors, and product contract specifications and can exceed 8-percent. As such, the		

The results of this TRS define an estimated 70.6 Mt of proven and probable marketable coal reserves. Of that total, 77 percent are proven, and 23 percent are probable. All 70.6 Mt are leased coal reserves and are assigned. Approximately 62.2 Mt of reserves are considered suitable for the metallurgical coal market and 8.4 Mt are projected to be sold into the thermal coal market.

12.4 Qualified Person's Opinion

The estimate of coal reserves was determined in accordance with the JORC Code along with SEC Regulation S-K 1300.

The LOM mining plan for Logan was prepared to the level of preliminary feasibility. Mine projections were prepared, and timing scheduled to match production with coal seam characteristics. Production timing was carried out from current locations to depletion of the coal reserve area. Coal reserve estimates could be materially affected by the risk factors described in *Section 22.2*.

Based on the Preliminary Feasibility Study and the attendant Economic Review, the QPs believe this is a fair and accurate calculation of the Logan coal reserves.

13 Mining Methods

Ten underground and three surface mining areas were modeled and tested economically. Once the Resources were calculated, mine plans were created to project operating each resource area to depletion, with crews and equipment scheduled to move to subsequent mining areas as depletion occurs. Underground mine operations are projected to be exhausted in 2044, surface mines deplete in 2055 and the highwall miners finish in 2057.

13.1 Geotech and Hydrology

Mining plans for potential underground mines were developed by Coronado and MM&A. Pillar stability was tested by MM&A using the *Analysis of Coal Pillar Stability (ACPS)* program that was developed by the **National Institute for Occupational Safety and Health (***NIOSH***).** MM&A reviewed the results from the ACPS and ALPS analysis and considered them in the development of the LOM plan.

For the HWM operation, Mining cuts are approximately 2.9 meters wide, and cuts are typically laid out on approximately 5.03-meter centers. A 2.1-meter to 2.4-meter solid coal fender is left in place between cuts. The mining plan provides that larger barrier pillars be provided

MARSHALL MILLER & ASSOCIATES, INC.

periodically, depending on overburden depth and characteristics and the immediate roof composition, typically after 15 to 20 cuts. Although this plan, with minor variations, is common throughout Appalachia, specific rock and coal strength information is used to verify whether or not this plan provided a sufficient factor of safety.

Hydrology has not been an issue of concern at Logan. Based on numerous site visits to both the surface and underground portions of the Property by the QPs, it has been determined that this is not a significant concern. Mining of future reserves is projected to occur in areas which exhibit similar hydrogeological characteristics as those formerly mined areas.

13.2 Production Rates

Operations at Logan by Coronado and its predecessors have been on-going for many years. The mine plan and productivity expectations reflect historical performance and efforts have been made to adjust the plan to reflect future conditions. MM&A is confident that the mine plan is reasonably representative to provide an accurate estimation of coal reserves. Mine development and operation have not been optimized within the TRS.

Carlson Mining software was used by MM&A to generate mine plans for the mineable coal seams. Mine plans were sequenced based on productivity schedules provided by Coronado, which were based on historically achieved productivity levels. All production forecasting ties assumed production rates to geological models as constructed by MM&A's team of geologists and mining engineers.

The projected underground mines are set up similarly to the four currently active operations. Each mine is scheduled to operate one to three production sections. All sections are configured as full supersections with two continuous miners per section. In all cases, mines are forecasted to produce coal two or three shifts each day. In most cases the third shift is reserved for maintenance and belt and power moves. Production is scheduled Monday through Friday each week, and every other Saturday.

Three surface resource areas were modeled. Mining operations are projected to utilize area mining as well as contour mining (*CTR*) methods with an emphasis on creating highwall for highwall mining activity.

The models assume that the operations will work two, 10-hour production shifts, 5 days per week plus every other Saturday, with sufficient staffing to float vacation during the year.

Coals from the surface operations are hauled to the loadout for direct ship or to the preparation plant for washing ultimately to be blended to shipment's specifications. Saleable product from the surface operations is projected to be sold primary into the thermal coal market on a raw basis; however, some production is planned to be washed for the metallurgical coal market.

The three areas planned for highwall mining are assumed to be mined by a contractor; therefore, the contractor costs included in the financial model assume that the contractor is responsible for staffing those operations along with providing necessary equipment capital.

MARSHALL MILLER & ASSOCIATES, INC.

Spoil for final highwall reclamation is expected to come from strategic placement of spoil on pre-existing benches by haul trucks such that they are within the push distance of the reclamation dozer.

13.3 Mining Related Requirements

13.3.1 Underground

A mine plan with sequenced mining projections was prepared for each logical mining unit. For each mine plan, the appropriate number of production units is selected for the resource area, and a productivity level assigned, expressed in meters of advance per unit-shift of production. The productivity is based on the equipment and personnel configuration, mining height and expected physical conditions.

At the underground mines, ventilation fans are installed to provide a sufficient volume of air to ventilate production sections, coal haulage and transport entries, battery charging stations, and transformers in accordance with approved plans. High-voltage cables deliver power throughout the mine where transformers reduce voltage for specific equipment requirements. *The Mine Improvement and New Emergency Response Act of 2006 (MINER Act)* requires that carbon monoxide detection systems be installed along mine conveyor belts and that electronic two-way tracking and communications systems be installed throughout underground mines. Water is required to control dust at production sections and along conveyor belts, and to cool electric motors. Water is available from nearby sources and is distributed within the mine by pipelines as required.

13.3.2 Surface Mine

A mine plan with sequenced mining projections was prepared for each logical mining unit. The mobile equipment spreads selected are representative of Coronado's equipment fleets and deemed to be appropriate for the local mining conditions.

13.3.3 HWM

Contract HWM units are available for assignment to contour surface mining pits in the Logan County Division. HWM substantially increases coal recovery from contour mining benches and is ideally suited for coal resource areas characterized by thin coal seams and irregular or narrow boundaries that are not well-suited for underground mining. The contour mining bench will extend into the highwall to the maximum overburden stripping ratio that is economically feasible or the minimum bench requirement for operation of the HWM unit.

13.4 Required Equipment and Personnel

13.4.1 Underground Mines

13.4.1.1 Powellton No. 1

The Powellton No. 1 Mine was in the process of being rehabilitated as of December 2023. It is scheduled to resume full production with one continuous mine section in the first quarter of

MARSHALL MILLER & ASSOCIATES, INC.

2024. The Upper Powellton seam is accessed via a shallow slope and crop. This mine produces metallurgical coal from leased mineral.

Production is scheduled for approximately 242 days each year, which represents production on Monday through Friday. On each day, the production section is scheduled to produce coal on two shifts; the third shift is reserved for maintenance and mine conveyor belt and power moves. The production section is configured as a full super section with two continuous miners. Productivity is planned at an average rate of 67.3 meters of advance and retreat per shift of operation. A total of 59 employees are assigned to the mine.

Principal production equipment includes two continuous miners, two roof bolters, four shuttle cars, and two scoops. Coal is extracted from the production face with the continuous miner and hauled to the mine conveyor in shuttle cars. At the conveyor belt, the coal is discharged from the shuttle cars onto a feeder breaker for transfer onto the conveyor. The conveyors carry the coal to the outside, where it is transported via overland conveyor to the preparation plant and load-out.

The Powellton No. 1 Mine was in the process of being rehabilitated as of December 2023 and all necessary infrastructure and utilities remain in place. All necessary permits have been obtained. Estimated expenditures for site closure and reclamation are included in the financial model for this site. Expected annual production averages approximately 208,000 marketable tonnes. The mine is scheduled to terminate during 2040.

13.4.1.2 Lower War Eagle

The Lower War Eagle Mine is active with three production sections. The Lower War Eagle seam is accessed via an existing slope. This mine is a metallurgical coal operation with all remaining production on leased mineral property.

Production is scheduled for approximately 242 days each year, which represents production on Monday through Friday. On each day, three production sections are scheduled to produce coal on two shifts; the third shift is reserved for maintenance and mine conveyor belt and power moves. The sections are configured as super sections with two continuous miners available for production. Productivity is planned at the rate of 75.6 meters of advance and retreat per shift of operation. A total of 150 employees are assigned to the mine.

Principal production equipment includes two continuous miners, two roof bolters, four shuttle cars, and two scoops for each operating section. Coal is extracted from the production face with the continuous miner and hauled to the mine conveyor in shuttle cars. At the conveyor belt, the coal is discharged from the shuttle cars onto a feeder breaker for transfer onto the conveyor. The conveyors carry the coal outside, where it is transported to the preparation plant and load-out via overland conveyor.

The Lower War Eagle Mine is an operating facility; all necessary infrastructure and utilities are in place. All necessary permits have been obtained. Estimated expenditures for site closure and reclamation are included in the financial model for this site. Expected annual production averages approximately 617,000 marketable tonnes. The mine is scheduled to terminate during 2033.

MARSHALL MILLER & ASSOCIATES, INC.

13.4.1.3 Eagle No. 1/Toney Fork #1

The Eagle No. 1 (Toney Fork #1) Mine is an active mine in the Eagle (No. 2 Gas Lower) seam with three production sections. This mine is a metallurgical coal operation on leased mineral property and is accessed via drift entries from the outcrop.

Production is scheduled for approximately 242 days each year, which represents production on Monday through Friday. On each day, three production sections are scheduled to produce coal on two shifts; the third shift is reserved for maintenance and mine conveyor belt and power moves. All sections are full super sections with two continuous miners per section. Productivity is planned at the rate of 73.5 meters of advance per shift (87.5 meters of retreat) for the super sections. A total of 176 employees are assigned to the mine.

The principal production equipment per section includes two continuous miners, two roof bolters, four shuttle cars, and two scoops. Coal is extracted from the production face with the continuous miner and hauled to the mine conveyor in shuttle cars. At the conveyor belt, the coal is discharged onto a feeder breaker for transfer onto the conveyor. The conveyors carry the coal outside, where it is stacked on the ground to await truck transport to the preparation plant and load-out.

The Eagle No. 1 Mine is an operating facility; all necessary infrastructure and utilities are in place. All necessary permits have been obtained; the underground footprint area expansion is pending final approval. Estimated expenditures for mine closure and site reclamation are included in the financial model.

Expected annual production averages approximately 684,000 marketable tonnes.

The mine is scheduled to terminate during 2040.

13.4.1.4 Muddy Bridge

The Muddy Bridge Mine is an active mine in the Eagle (No. 2 Gas Lower) seam. This mine is a metallurgical coal operation on leased mineral property and is accessed via drift entries from the outcrop.

Production is scheduled for approximately 242 days each year, which represents production on Monday through Friday. On each day, two production sections are scheduled to produce coal on two shifts; the third shift is reserved for maintenance and mine conveyor belt and power moves. The sections are configured as full super sections with two continuous miners available for production on each section. Productivity is planned at the rate of 72.3 meters of advance and retreat per shift of operation. A total of 122 employees are assigned to the mine.

Principal production equipment includes two continuous miners, two roof bolters, four shuttle cars, and two scoops for each operating section. Coal is extracted from the production face with the continuous miner and hauled to the mine conveyor via shuttle cars. At the conveyor belt, the coal is discharged from the haulage units onto a feeder breaker for transfer onto the conveyor. The conveyors carry the coal to the outside, where it is stacked on the ground to await truck transport to the Lower War Eagle mine for placement onto the overland conveyor leading to the preparation plant and load-out.

MARSHALL MILLER & ASSOCIATES, INC.

The Muddy Bridge Mine is an operating facility; all necessary infrastructure and utilities are in place. All necessary permits have been obtained. Coal mining permits are routinely obtained. Estimated expenditures for mine closure and site reclamation are included in the financial model.

Expected annual production averages approximately 691,000 marketable tonnes at steady state production levels.

The mine is scheduled to terminate during 2028.

13.4.1.5 Elklick Chilton

The proposed Elklick Chilton Mine is scheduled to begin production in 2028. The Chilton seam is accessed via drift entry. The seam is above drainage. This mine is projected to be a metallurgical coal operation on leased mineral property.

Production is scheduled for approximately 265 days each year, which represents production on Monday through Friday plus every other Saturday. On each day, one production section is scheduled to produce coal on two shifts; the third shift is reserved for maintenance and mine conveyor belt and power moves. The section is configured as a full super section with two continuous miners available for production on the section. Productivity is planned at the rate of 73.2 meters of advance (109.8 meters of retreat) per shift of operation. A total of 59 employees are assigned to the mine.

Principal production equipment includes two continuous miners, two roof bolters, four shuttle cars, and two scoops. Coal is extracted from the production face with the continuous miner and hauled to the mine conveyor via shuttle cars. At the conveyor belt, the coal is discharged from the haulage units onto a feeder breaker for transfer onto the conveyor. The conveyors carry the coal outside, where it is stacked on the ground to await truck transport to the preparation plant and load-out.

The Elklick Chilton mine is a permitted mine with surface infrastructure in place. The proposed mine is located in an area with a long history of coal mining, with numerous permitted operations in close proximity. Estimated expenditures for mine closure and site reclamation are included in the financial model.

Expected annual production averages approximately 301,000 marketable tonnes at steady state production levels.

The mine is scheduled to begin production in 2028 and terminate during 2040.

13.4.1.6 Camp Branch Chilton

The Camp Branch Chilton Mine is proposed mine in the Chilton seam which is accessed via drift entry from the outcrop and is scheduled to begin production in 2027. This mine is a metallurgical coal operation on leased mineral property.

Production is scheduled for approximately 265 days each year, which represents production on Monday through Friday plus every other Saturday. On each day, one production section is

MARSHALL MILLER & ASSOCIATES, INC.

scheduled to produce coal on two shifts; the third shift is reserved for maintenance and mine conveyor belt and power moves. The section is configured as a full super section with two continuous miners available for production on the section. Productivity is planned at the rate of 73.2 meters of advance (109.8 meters of retreat) per shift of operation. A total of 59 employees are assigned to the mine.

Principal production equipment includes two continuous miners, two roof bolters, four shuttle cars, and two scoops. Coal is extracted from the production face with the continuous miner and hauled to the mine conveyor via shuttle cars. At the conveyor belt, the coal is discharged from the haulage units onto a feeder breaker for transfer onto the conveyor. The conveyors carry the coal outside, where it is stacked on the ground to await truck transport to the preparation plant and load-out.

Due to the projected starting date for the Camp Branch Chilton Mine, no detailed design of infrastructure or surface facilities has been completed to date. The proposed mine is located in the Appalachian Basin, which has an extensive history (>100 years) of coal mining. There is a sufficient population base within commuting distance of the proposed operation; no Camp or Town construction will be required. Estimated mine access and utility capital expenditures are included in the financial model for the mine.

The proposed Camp Branch Chilton Mine has an existing permit. Estimated expenditures for mine closure and site reclamation are included in the financial model.

Expected annual production averages approximately 321,000 marketable tonnes at steady state production levels.

The mine is scheduled to begin production in 2027 and terminate during 2032.

13.4.1.7 Lower Winifrede

The Lower Winifrede Mine is a proposed mine in the Lower Winifrede seam which is accessed via drift entry from the outcrop and is scheduled to begin production in 2033. This mine is a metallurgical coal operation on leased mineral property.

Production is scheduled for approximately 242 days each year, which represents production on Monday through Friday. On each day, two production sections are scheduled to produce coal on two shifts; the third shift is reserved for maintenance and mine conveyor belt and power moves. The sections are configured as full super sections with two continuous miners available for production on each section. Productivity is planned at the rate of 64.0 meters of advance per shift of operation. A total of 122 employees are assigned to the mine.

Principal production equipment includes two continuous miners, two roof bolters, four shuttle cars, and two scoops for each section. Coal is extracted from the production face with the continuous miner and hauled to the mine conveyor via shuttle cars. At the conveyor belt, the coal is discharged from the haulage units onto a feeder breaker for transfer onto the conveyor. The conveyors carry the coal outside, where it is stacked on the ground to await truck transport to the preparation plant and load-out.

MARSHALL MILLER & ASSOCIATES, INC.

Due to the projected starting date for the Lower Winifrede Mine, no detailed design of infrastructure or surface facilities has been completed to date. The proposed mine is located in the Appalachian Basin, which has an extensive history (>100 years) of coal mining. There is a sufficient population base within commuting distance of the proposed operation; no Camp or Town construction will be required. Estimated mine access and utility capital expenditures are included in the financial model for the mine.

The mine is scheduled to begin production in 2033 and terminate during 2038.

13.4.1.8 Upper Winifrede

The proposed Upper Winifrede Mine is scheduled to begin production in 2036. The Upper Winifrede seam is accessed via a proposed drift along the outcrop. This mine is projected to be a metallurgical coal operation on leased mineral property.

Production is scheduled for approximately 265 days each year, which represents production on Monday through Friday plus every other Saturday. On each day, one production section is scheduled to produce coal on two shifts; the third shift is reserved for maintenance and mine conveyor belt and power moves. The section is configured as a full super section with two continuous miners available for production on the section. Productivity is planned at the rate of 73.2 meters of advance per shift of operation. A total of 59 employees are assigned to the mine.

Principal production equipment includes two continuous miners, two roof bolters, four shuttle cars, and two scoops. Coal is extracted from the production face with the continuous miner and hauled to the mine conveyor in shuttle cars. At the conveyor belt, the coal is discharged from the shuttle cars onto a feeder breaker for transfer onto the conveyor. The conveyors carry the coal outside, where it is stacked on the ground to await truck transport to the preparation plant and load-out.

Due to the projected starting date for the Upper Winifrede Mine, no detailed design of infrastructure or surface facilities has been completed to date. The proposed mine is located in the Appalachian Basin, which has an extensive history (>100 years) of coal mining. There is a sufficient population base within commuting distance of the proposed operation; no Camp or Town construction will be required. Estimated mine access and utility capital expenditures are included in the financial model for the mine.

Due to the projected start-up date of the Upper Winifrede Mine, no permit work has been completed to date. The proposed mine is located in an area with a long history of coal mining, with numerous permitted operations in close proximity. Coal mining permits are routinely obtained. Estimated expenditures for mine closure and site reclamation are included in the financial model for each mine or plant site.

Expected annual production averages approximately 464,000 marketable tonnes at steady state levels.

The mine is scheduled to begin production in 2036 and terminate during 2039.

MARSHALL MILLER & ASSOCIATES, INC.

13.4.1.9 Lower Powellton

The proposed Lower Powellton Mine is scheduled to begin production in 2032. The Lower Powellton seam is accessed via a proposed drift along the outcrop. This mine is projected to be a metallurgical coal operation on leased mineral property.

Production is scheduled for approximately 265 days each year, which represents production on Monday through Friday plus every other Saturday. On each day, two production sections are scheduled to produce coal on two shifts; the third shift is reserved for maintenance and mine conveyor belt and power moves. Both sections are configured as a super section with two continuous miners per section available for production. Productivity is planned at 73.2 meters of advance per shift (85.4 meters of retreat per shift). A total of 122 employees are assigned to the mine during steady state production.

Principal production equipment per section includes two continuous miners, two roof bolters, four shuttle cars, and one scoop. Coal is extracted from the production face with the continuous miner and hauled to the mine conveyor in shuttle cars. At the conveyor belt, the coal is discharged from the shuttle cars onto a feeder breaker for transfer onto the conveyor. The conveyors carry the coal outside, where it is stacked on the ground to await truck transport to the preparation plant and load-out.

Due to the projected starting date for the Lower Powellton Mine, no detailed design of infrastructure or surface facilities has been completed to date. The proposed mine is located in the Appalachian Basin, which has an extensive history (>100 years) of coal mining. There is a sufficient population base within commuting distance of the proposed operation; no Camp or Town construction will be required. Estimated mine access and utility capital expenditures are included in the financial model for the mine.

Due to the projected start-up date of the Lower Powellton Mine, no permit work has been completed to date. The proposed mine is located in an area with a long history of coal mining, with numerous permitted operations in close proximity. Coal mining permits are routinely obtained. Estimated expenditures for mine closure and site reclamation are included in the financial model for each mine or plant site.

Expected annual production averages approximately 501,000 marketable tonnes at steady state levels.

The mine is scheduled to begin production in 2032 and terminate during 2042.

13.4.2 Surface Mines and Highwall Miners

Three surface resource areas were modeled. Mining operations are projected to utilize area mining as well as contour mining (*CTR*) methods with an emphasis on creating highwall for highwall mining activity. The projected operations will employ a recently acquired Komatsu PC2000 hydraulic backhoe and a Caterpillar 993K front-end loader capable of a combined production rate of approximately 1,162 bank cubic meters per hour (*bcm/hr*) with supplemental assistance of 6 dozers that can generate approximately an additional 700 bcm/hr providing their spoil placement does not interfere with planned highwall mining activity. The

MARSHALL MILLER & ASSOCIATES, INC

front-end loader is not expected to contribute to production until late 2024. Dozer contribution is expected to be limited to contours that have lower benches available for placement of spoil. To encourage its usage, contour and highwall mining activity is generally expected to be mined from lower to upper seams. Larger area mining boundaries offer greater opportunities for dozers to contribute to production. Since the majority of the mining boundaries during the initial budget years are primarily contours, dozers will supplement production on a periodic basis. They, however, will likely also be used to help feed loading machines and reclaim highwalls when not directly contributing to production. The potential production level of combined machines is not projected to be achieved until 2025. Sufficient reserves allow mining to continue to the year 2055.

The models assume that the operations will work two, 10-hour production shifts, 5 days per week plus every other Saturday, with sufficient staffing to float vacation during the year. A total of 86 employees are assumed for the surface mines at full production. It is assumed that most of the spoil movement goes through a shovel or loader bucket and is eventually returned to the pit for final reclamation. The dozer's primary responsibility is cutting the initial benches for the drill and shaping the reclaimed contour highwall.

All highwall mining is assumed to be performed by a contractor. The contractor is responsible for staffing those operations along with providing necessary equipment capital. One highwall miner will be used until 2028 then an additional highwall miner will be introduced in 2029. In 2044, a third highwall miner will be introduced to keep the miners in close proximity to the surface mining activity.

Spoil for final highwall reclamation is expected to come from strategic placement of spoil on pre-existing benches by haul trucks such that they are within the push distance of the reclamation dozer.

13.4.2.1 Toney Fork

Toney Fork surface mining operations are projected to be completed in 2055, with emphasis placed on preparing space for HWM operations. Expected production for the operations averages approximately 234,000 marketable tonnes annually.

The Toney Fork HWM is projected to be completed in 2056 and mines an additional 176,000 marketable tonnes annually at steady state levels.

13.4.2.2 Buffalo Creek South

The Buffalo Creek South surface and/or HWM mining operations are projected to operate between 2024 and 2055, with emphasis placed on preparing space for HWM operations. Expected surface production for the operations totals approximately 245,000 marketable tonnes annually at steady state levels. The Buffalo Creek HWM mines an additional 212,000 marketable tonnes annually at steady state levels.

13.4.2.3 Sugar Camp

Sugar Camp surface mining operations are projected to be mined from 2029 to 2055. Expected production for the operations averages approximately 189,000 marketable tonnes annually.

MARSHALL MILLER & ASSOCIATES, INC.

The Sugar Camp HWM operates from 2029 to 2056 and mines an additional 47,000 marketable tonnes per year.

As shown in *Tables 13-1 through 13-3*, the areas planned for underground production continue until 2044, whereas surface and auger/HWM production is projected to finish in 2055 and 2057, respectively. Clean coal production varies directly with coal thickness in the case of the underground mines, and overburden removal for the surface mines.

Table 15	-1: Underg	rouna sur	nmary of P	roduction	by rear (1	onnes x 1,	000)	
Mine Name	2024	2025	2026	2027	2028	2029	2030	2031
Camp Br Chilton	0	0	0	0	0	38	361	366
Ramaco N2G	0	0	0	0	0	0	0	0
Eagle No. 1 (Toney Fork)	665	682	647	669	619	774	679	556
Elk Lick Chilton	0	0	0	0	0	227	252	275
Lower Powellton	0	0	0	0	0	0	0	0
Lower War Eagle	453	467	483	464	492	630	664	687
Powellton No. 1	151	171	165	165	158	230	232	231
Muddy Br No.2 Gas	636	575	581	518	403	0	0	0
Lower Winifrede	0	0	0	0	0	0	0	0
Upper Winifrede	0	0	0	0	0	0	0	0
Winifrede (Chilton Rider)	0	0	0	0	0	0	0	0
Total	1,905	1,895	1,876	1,817	1,673	1,900	2,188	2,114
Mine Name	2032	2033	2034	2035	2036	2037	2038	2039
Camp Br Chilton	324	283	235	0	0	0	0	0
Ramaco N2G	0	0	0	0	0	0	76	274
Eagle No. 1 (Toney Fork)	773	713	674	611	645	636	676	580
Elk Lick Chilton	285	277	292	247	298	346	360	313
Lower Powellton	0	0	101	466	508	496	504	507
Lower War Eagle	678	711	0	0	0	0	0	0
Powellton No. 1	232	231	227	214	219	216	214	210
Muddy Br No.2 Gas	0	0	0	0	0	0	0	0
Lower Winifrede	0	396	545	491	266	247	146	0
Upper Winifrede	0	0	0	0	412	567	361	98
Winifrede (Chilton Rider)	0	0	0	0	0	0	0	0
Total	2,292	2,612	2,075	2,030	2,349	2,509	2,337	1,982

Table 13-1: Underground Summary of Production by Year (Tonnes x 1,000)

MARSHALL MILLER & ASSOCIATES, INC.

Mine Name	2040	2041	2042	2043	2044	2045	2046	2047
Camp Br Chilton	0	0	0	0	0	0	0	0
Ramaco N2G	291	265	268	271	74	0	0	0
Eagle No. 1 (Toney Fork)	359	0	0	0	0	0	0	0
Elk Lick Chilton	319	317	0	0	0	0	0	0
Lower Powellton	508	507	510	704	284	0	0	0
Lower War Eagle	0	0	0	0	0	0	0	0
Powellton No. 1	209	0	0	0	0	0	0	0
Muddy Br No.2 Gas	0	0	0	0	0	0	0	0
Lower Winifrede	0	0	0	0	0	0	0	0
Upper Winifrede	0	0	0	0	0	0	0	0
Winifrede (Chilton Rider)	0	0	0	0	0	0	0	0
Total	1,687	1,089	777	975	358	0	0	0

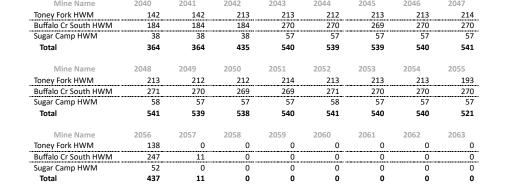
Table 13-2: Surface Summary of Production by Year (Tonnes x 1,000)

Mine Name	2024	2025	2026	2027	2028	2029	2030	2031
Toney Fork Surf	0	0	0	0	0	233	233	233
Buffalo Cr South Area	470	593	625	591	725	174	174	174
Sugar Camp Area 1	0	0	0	0	0	188	188	188
Total	470	593	625	591	725	595	595	595
Mine Name	2032	2033	2034	2035	2036	2037	2038	2039
Toney Fork Surf	233	233	233	240	239	239	238	239
Buffalo Cr South Area	174	174	174	174	178	178	178	177
Sugar Camp Area 1	188	188	188	193	192	192	191	192
Total	595	595	595	607	609	609	607	608
Mine Name	2040	2041	2042	2043	2044	2045	2046	2047
Toney Fork Surf	239	239	239	239	238	239	239	240
Buffalo Cr South Area	178	178	178	178	178	177	178	178
Sugar Camp Area 1	192	192	192	192	191	192	192	193
Total	609	609	609	609	607	608	609	611
Mine Name	2048	2049	2050	2051	2052	2053	2054	2055
Toney Fork Surf	239	238	238	240	239	239	164	208
Buffalo Cr South Area	178	178	177	177	178	178	178	73
Sugar Camp Area 1	192	191	191	193	192	192	134	7
Total	609	607	607	610	609	609	476	288

Table 13-3: Highwall Summary of Production by Year (Tonnes x 1,000)

Mine Name	2024	2025	2026	2027	2028	2029	2030	2031
Toney Fork HWM	0	0	0	0	0	138	138	138
Buffalo Cr South HWM	168	208	201	119	0	179	179	179
Sugar Camp HWM	0	0	0	0	0	37	37	37
Total	168	208	201	119	0	355	355	355
Mine Name	2032	2033	2034	2035	2036	2037	2038	2039
Toney Fork HWM	138	138	138	142	142	142	141	142
Buffalo Cr South HWM	179	179	179	179	184	184	184	183
Sugar Camp HWM	37	37	37	37	38	38	38	38
Total	355	355	355	359	365	364	363	363

MARSHALL MILLER & ASSOCIATES, INC.



14 Processing and Recovery Methods

14.1 Description or Flowsheet

The Logan County Division includes the Saunders Preparation Plant in addition to the mines. The plant site includes raw coal storage, clean coal storage, a railroad loadout, and refuse disposal area. The plant has a feed rate capacity of 1,088 raw tonnes per hour. Primary separation equipment includes a heavy media vessel, heavy media cyclones, classifying cyclones, spirals, flotation cells, and column flotation, supported by the requisite screens, centrifuges, vacuum filters, sumps, pumps, and distribution systems. Coarse and fine refuse are disposed separately in an adjacent refuse area which incorporates slurry cells.

Processes and equipment are typical of those used in the coal industry and are in use in nearly all plants in the Central Appalachian Basin.

14.2 Requirements for Energy, Water, Material and Personnel

Personnel have historically been sourced from the surrounding communities in Logan, Boone, Wyoming, and Mingo counties, and have proven to be adequate in numbers to operate past and current mines. As mining is common in the surrounding areas, the workforce is generally familiar with mining practices and is comprised of a strong talent pool of experienced miners.

Water is sourced locally from Buffalo Creek Public Service District and/or locally from streams via water withdrawal permits, and electricity is sourced from AEP. The service industry in the areas surrounding the mine complex has historically provided supplies, equipment repairs and fabrication, etc.

MARSHALL MILLER & ASSOCIATES, INC.

15 Infrastructure

The Coronado-owned Saunders Preparation Plant services the mines. The ROM coal is delivered from the Lower War Eagle Mine via overland conveyor, all remaining production is or will be delivered to the plant site by truck.

The CSX rail line serves as the main means of transport from the mine complex/loadout.

As an active operation, the necessary support infrastructure for Logan is in place.

As new areas are developed, the infrastructure requirements will change. These changes have been considered in the LOM plans and financial model.

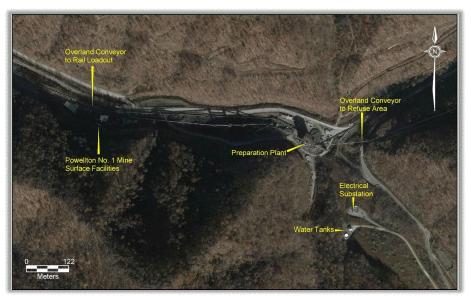
A few of the seams lie below drainage; however, a substantial number of metallurgical coal seams are situated above drainage. The underground mining resource areas which are located above-drainage require an access road and mine access development along the outcrop, whereas below-drainage mines are accessed based on other proposed surface infrastructure locations and/or surface property control. In some cases, the access and face-up may be developed as part of surface mining activities. A mine transformer and water tank are located at the face-up, along with the mine fan, stacker conveyor, supply facilities, shop, office, and bath house.

The surface mining mobile equipment spreads advance the contour and area mining pits while systematically reclaiming the trailing side of pits where coal has been removed. The coal haul roads are extended and maintained as the pits advance. Support facilities are maintained nearby but away from the active mining, and include storage areas for blasting agents, fuel and lubricants, and mine supplies along with maintenance facilities and offices.

The HWM equipment advances along with the contour mining pits. The rate of advance of contour mining is somewhat constrained by the advancement rate of the HWM. A diesel-powered generator trails the highwall miner and powers the continuous mining unit. Other support facilities are provided along with the contour mining support facilities.

A map of the existing facilities in *Figure 15-1* shows the layout of the required infrastructure.

Figure 15-1: Logan Surface Facilities



16 Market Studies

16.1 Market Description

The quality characteristics for the subject coal resources and coal reserves have been reviewed in detail by MM&A. The drill hole data was utilized to develop average coal quality characteristics for the mining site. These average coal quality characteristics were then utilized as the basis for determining the various markets into which the saleable coal will likely be placed.

The projected quality specifications for the Logan products are as shown in Table 16-1.

MARSHALL MILLER & ASSOCIATES, INC.

Table 16-1: Quality Specifications by Product

		Inermai				
	HVA	HVB	(A/R)			
Moisture (%)	7.50	8.00	7.50			
Ash (%)	7.50	8.00	12.50			
Sulfur (%)	0.90	0.95	1.00			
Volatile Matter (%)	32.5	37.0	36.0			
Btu/lb.	N/A	N/A	12,300			
Fluidity (ddpm)	30,000	25,000	N/A			
MMR (%)	1.04	0.93	N/A			
CSR	62	58	N/A			
FSI	8.00	8.00	N/A			
Note: All Specs are dry basis except Moisture and Thermal						

Note: An opens are any basis except Molstare and merinar

The mine production serves both the high-volatile metallurgical and thermal markets.

16.2 Price Forecasts

Coronado provided MM&A with price forecasts for the various coal markets supplied by its active and future operations in terms of 2024 (January) real dollars.1 MM&A applied a 2% annual inflation rate to the Coronado price forecast in order to estimate revenues in nominal dollars. Customer coal pricing is derived from market observed forward estimates based on global economic supply and demand analysis which is applied to mine plan sales volumes and product mix and is supplemented with Coronado's in-house knowledge of applicable rail transportation charges, ocean freight charges and port charges. MM&A utilized this data for price forecasting in financial modeling. Concurrent with aforementioned-quality parameters in the preceding section, production from the proposed operations is assumed to be primarily sold in metallurgical markets with limited thermal sales. Pricing was provided through calendar year 2057. The pricing data assumes respective HVA, HVB and thermal FOB-mine prices of approximately \$162, \$144, and \$120 per metric tonne for calendar year 2024. HVA, HVB, and thermal prices respectively decrease to approximately \$161, \$143, and \$114 per metric tonne through year 2026, and then increase to \$308, \$273, and \$212 per metric tonne through year 2057.

16.3 Contract Requirements

Some contracts are necessary for successful marketing of the coal. For Logan, since all mining, preparation and marketing is done in-house, the remaining contracts required are:

1 The Coronado pricing forecast was provided to MM&A in real 2024 (January) dollars based on Coronado's internal budget sales pricing for the first 5 years of the forecast. Beyond the first 5 years, Coronado's forecast is based on sales price information from AME Group adjusted for transportation costs to an FOB Mine basis.

MARSHALL MILLER & ASSOCIATES, INC.

- Transportation The Mine contracts with the CSX Railroad to transport the coal to either the domestic customers or to the Pier 9 and Dominion terminals at Norfolk, Virginia for overseas shipment.
- Sales Sales contracts are a mix of spot and contract sales. With the volatility of the market, long-term contracts are not typically written.

17 Environmental Studies, Permitting and Plans, Negotiations or Agreements with Local Individuals

17.1 Results of Studies

MM&A completed a Limited Phase I Environmental Site Assessment (*ESA*) on the Logan Property in May 2017 on behalf of Coronado. Coronado reports not having conducted such a study since the MM&A studies. The ESA completed by MM&A included a site inspection, review of historical records, a database search of State and Federal regulatory records and interviews to identify potential recognized environmental conditions (*RECs*) that may create environmental liability for the sites. MM&A concluded that no long-term liabilities existed at the time of these ESAs.

Based on these former ESAs completed by MM&A, it is the QPs' opinion that Logan has a generally typical coal industry record of compliance with applicable mining, water quality, and environmental laws. Estimated costs for mine closure, including water quality monitoring during site reclamation, are included in the financial models.

17.2 Requirements and Plans for Waste Disposal

The original design for the North Fork Refuse Area (*North Fork*) at the Logan Property projected a crest to elevation 686 meters. The present elevation of the deck is \pm 685meters. In 2018 MSHA approved an expansion plan to raise the cross-valley crest to elevation 802 meters, and from there converting to a sidehill fill. This will allow for a total volume of 50 million CM which would be sufficient capacity for all the refuse generated by the LOM plan that underpins the current Logan County Division reserves. Further plans for the North Fork site call for conversion of the fill to a total cross-valley configuration, predicated on completion of surface mining on the ridge between North Fork and Middle Fork. This has the potential of providing an additional 10 million CM of capacity.

17.3 Permit Requirements and Status

All mining operations are subject to federal and state laws and must obtain permits to operate mines, coal preparation and related facilities, haul roads, and other incidental surface disturbances necessary for mining to occur. Permits generally require that the permittee post a performance bond in an amount established by the regulatory program to provide assurance that any disturbance or liability created during mining operations is properly restored to an

MARSHALL MILLER & ASSOCIATES, INC.

approved post-mining land use and that all regulations and requirements of the permits are fully satisfied before the bond is returned to the permittee. Significant penalties exist for any permittee who fails to meet the obligations of the permits including cessation of mining operations, which can lead to potential forfeiture of the bond. Any company, and its directors, owners and officers, which are subject to bond forfeiture can be denied future permits under the program.2

New permits or permit revisions will occasionally be necessary to facilitate the expansion or addition of new mining areas on the properties, such as amendments to existing permits and new permits for mining of reserve areas. Exploration permits also are required. Property under lease includes provisions for exploration among the terms of the lease. New or modified mining permits are subject to a public advertisement process and comment period, and the public is provided an opportunity to raise objections to any proposed mining operation. MM&A is not aware of any specific prohibition of mining on the subject property and given sufficient time and planning, Coronado should be able to secure new permits to maintain its planned mining operations within the context of current regulations. Necessary permits are in place to support current production on the properties, but future permits are required to maintain and expand production. Portions of the properties are located near local communities. Regulations prohibit mining activities within 91.4 meters of a residential dwelling, school, church, or similar structure unless written consent is first obtained from the owner of the structure. Where required, such consents have been obtained where mining is proposed beyond the regulatory limits.

Coronado has obtained all mining and discharge permits to operate its mines and processing, loadout or related facilities. MM&A is unaware of any obvious or current Coronado permitting issues that are expected to prevent the issuance of future permits. Logan, along with all coal producers, is subject to a level of uncertainty regarding future clean water permits due to **United States Environmental Protection Agency (EPA)** and **United States Fish and Wildlife (USFW)** involvement with state programs.

The Mining permits currently held by Logan are shown in *Table 17-1*.

2 Monitored under the Applicant Violator System (AVS) by the Federal Office of Surface Mining.

MARSHALL MILLER & ASSOCIATES, INC.

Table 17-1: Logan Mining Permits

				8				
Туре	Permit ID	Permit Name	\$ Bond	Current Status	Issued Date	Expiration Date	Hectares	NPDES
Other	0001984	North Fork Refuse ¹	\$1,033,200	Renewed	4/11/1984	4/11/2024	116.03	WV0095699
Other – Loadout Only	O009283	Elk Lick Dock	\$33,000	Renewed	6/10/1983	6/10/2028	13.31	WV1023071
Other	O009883	Saunders Prep Plant	\$223,200	Renewed	6/24/1983	6/24/2028	36.36	WV0095699
Other – Refuse Disposal	O012383	Middle Fork Refuse ¹	\$364,800	Renewed	9/27/1983	9/27/2028	46.13	WV0096156
Other – Loadout Only	O500513	Toney Fork Loadout	\$32,000	Renewed	9/11/2014	9/11/2024	12.67	WV1028081
Other – Refuse Disposal	0501108	Elklick Branch Haulroad/Refuse ¹	\$15,000	Renewed	11/13/2008	11/13/2028	5.83	WV1029843
Coal Surface Mine	S500417	North Fork Winifrede Contour Mine	\$78,000	Not Started	2/13/2018	2/13/2028	50.59	WV1028430
Coal Surface Mine	S500615	Toney Fork A-Ridge Surface Mine	\$150,000	Phase 1 Released	2/24/2016	2/24/2026	15.8	WV1028278
Coal Surface Mine	S500709	Toney Fork Surface Mine No. 3	\$2,625,000	Renewed	11/20/2013	11/20/2028	340.83	WV1019902
Coal Surface Mine	S501210	Toney Fork West Surface Mine	\$1,660,000	Active Rec. Only	2/29/2012	12/7/2026	134.3	WV1024990
Coal Surface Mine	S501410	Elklick Surface Mine	\$2,767,600	Renewed	8/16/2013	8/16/2028	328.42	WV1025015
Coal Surface Mine	S503395	TONEY FORK SURFACE #2	\$5,605,000	Renewed	5/28/1998	5/22/2028	453.61	WV1016750
Coal Underground	U004485	Dingess Br. No. 1	\$0	Inactive	6/12/1985	PHII Released	4.05	WV1008340
Coal Underground	U400299	Paynter Branch Mine No. 1	\$73,000	Renewed	4/5/2002	4/5/2027	10.01	WV1018728
Coal Underground	U500109	Chilton Deep Mine No. 1	\$30,800	Inactive	1/31/2011	1/31/2026	5.53	WV1019821
Coal Underground	U500789	WA #1 Mine	\$0	Completely Released	7/31/1990	PHII Released	0	WV0096385
Coal Underground	U500919	North Fork Winifrede Deep Mine	\$16,320	Active Rec. Only	3/3/2020	3/3/2025	3.58	WV1030990
Coal Underground	U501311	Eagle No. 1 Mine	\$143,520	Renewed	5/20/2013	5/20/2028	20.68	WV1025139
Coal Underground	U502008	Dingess Br-Chilton Mine No. 2	\$22,570	Phase 2 Released	10/10/2008	PHII Released	11.62	WV1029908
Coal Underground	U505392	ALMA NO. 1 MINE	\$286,160	Renewed	3/3/1995	3/3/2025	39.43	WV1013408
Coal Underground	U506686	Camp Branch Deep Mine	\$96,200	Rec., Chem. Water Treatment	1/26/1987	1/26/1997	26.24	WV0093122
Coal Surface Mine	S500615	Toney Fork A-Ridge Surface Mine	\$80,000	Phase 1 Released	2/24/2016	2/24/2026	15.8	WV1028278
Coal Underground	U501015	CB Chilton #1 Mine	\$10,600	Not Started	12/28/2016	12/28/2026	1.68	WV1028316
Coal Underground	U503496	Muddy Bridge Branch #1	\$33,040	Renewed	8/4/1997	8/4/2027	5.46	WV1016954
Coal Underground	U503596	Muddy Bridge Branch #2	\$65,520	Renewed	8/4/1997	8/4/2027	10.35	WV1016954
River Dock	810-8037	Big Sandy Dock	\$222,200	Active	7/10/1986	7/10/2026	7.38	KYGE40032
Coal Surface Mine	S500422	Middle Fork Surface Mine	\$571,200	Renewed	12/9/2022	12/9/2027	81.73	WV1031198
Coal Surface Mine	S500822	Elklick Contour Surface mine	\$1,307,520	Not Started	2/27/2023	2/27/2028	182.45	WV1031228

Notes:

Permits containing refuse placement.
 Does not include prospect permits.

MARSHALL MILLER & ASSOCIATES, INC.

17.4 Local Plans, Negotiations or Agreements

MM&A found no indication of agreements beyond the scope of Federal or State Regulations.

17.5 Mine Closure Plans

Applicable regulations require that mines be properly closed, and reclamation commenced immediately upon abandonment. In general, site reclamation includes removal of structures, backfilling, regrading, and revegetation of disturbed areas. For surface mines, the majority of the expense for backfilling and regrading is completed as part of ongoing mining operations, with only reclamation of final pits and HWM benches required at end-of-mine life. Sediment control is required during the establishment of vegetation, and bond release generally requires a minimum five-year period of site maintenance, water sampling, and sediment control following mine completion. This requirement is reduced to two years for certain operations involving re-mining. Reclamation of underground mines includes closure and sealing of mine openings such as portals and shafts in addition to the items listed above.

Estimated costs for mine closure, including water quality monitoring during site reclamation, are included in the financial models. As with all mining companies, an accretion calculation is performed annually so the necessary Asset Retirement Obligations (*ARO*) can be shown as a Liability on the Balance Sheet.

17.6 Qualified Person's Opinion

The Logan complex is an operating facility; all necessary permits for current production have been obtained. The QPs know of no reason that any permits revisions that may be required cannot be obtained.

Estimated expenditures for site closure and reclamation are included in the financial model for this site.

18 Capital and Operating Costs

18.1 Capital Cost Estimate

The production sequence selected for a property must consider the proximity of each reserve area to coal preparation plants, river docks and railroad loading points, along with suitability of production equipment to coal seam conditions. The in-place infrastructure was evaluated, and any future needs were planned to a level suitable for a Preliminary Feasibility Study and included in the Capital Forecast.

Coronado provided MM&A with an inventory of operating equipment available at Logan. MM&A's capital schedules assume that major equipment rebuilds occur over the course of each machine's remaining assumed operating life. Replacement equipment was scheduled based on MM&A's experience and knowledge of mining equipment and industry standards with respect to the useful life of such equipment. As one mine is depleted, the equipment is moved to its replacement.

MARSHALL MILLER & ASSOCIATES, INC.

A summary of the estimated capital for the Property is provided in *Figure 18-1* below.

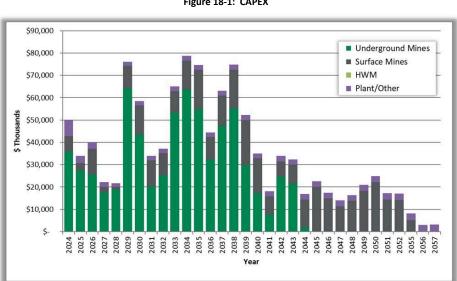


Figure 18-1: CAPEX

18.2 Operating Cost Estimate

Coronado provided historical and a preliminary 5-year projection of operating costs for MM&A's review. MM&A used the historical and/or budget cost information as a reference and developed a personnel schedule for the mine. Hourly labor rates and salaries were based upon information contained in Coronado's financial summaries. Fringe benefit costs were developed for vacation and holidays, federal and state unemployment insurance, retirement, workers' compensation and pneumoconiosis, casualty and life insurance, healthcare and bonuses. A cost factor for mine supplies was developed that relates expenditures to mine advance rates for roof control costs and other mine supply costs experienced at underground mines. Other factors were developed for maintenance and repair costs, rentals, mine power, outside services and other direct mining costs.

Other cost factors were developed for coal preparation plant processing, refuse handling, coal loading, property taxes, and insurance and bonding. Appropriate royalty rates were assigned for production from leased coal lands and sales taxes were calculated for state severance taxes, the federal black lung excise tax, and federal and state reclamation fees.

Mandated Sales Related Costs such as Black Lung Excise are summarized in Table 18-1.

MARSHALL MILLER & ASSOCIATES, INC.

Table 18-1: Estimated Coal Production Taxes and Sales Costs

Description of Tax or Sales Cost	Basis of Assessment	Cost
Federal Black Lung Excise Tax – Underground	Per Tonne	\$1.21
Federal Black Lung Excise Tax – Surface	Per Tonne	\$0.61
Federal Black Lung Excise Tax – Highwall Miner	Per Tonne	\$0.61
Federal Reclamation Fees – Underground	Per Tonne	\$0.13
Federal Reclamation Fees – Surface	Per Tonne	\$0.31
Federal Reclamation Fees – Highwall Miner	Per Tonne	\$0.31
West Virginia Reclamation Tax – Underground	Per Tonne	\$0.308
West Virginia Reclamation Tax – Surface	Per Tonne	\$0.308
West Virginia Reclamation Tax – Highwall Miner	Per Tonne	\$0.308
West Virginia Severance Tax	Percentage of Revenue	1 to 5%
Royalties – Underground	Percentage of Revenue	5 to 8.5%
Royalties – Surface	Percentage of Revenue	9%
Royalties – Highwall Miner	Percentage of Revenue	9%
Notes: 1. Federal black lung excise tax is paid only on	coal sold domestically. MM&A e	stimated a weighted average black

lung excise tax of \$0.66 per tonne in the economic analysis below.

A summary of the projected Operating Costs is in *Table 18-2*.

Table 18-2: Logan Operating Costs

	Total	YE 12/31 2024	YE 12/31 2025	YE 12/31 2026	YE 12/31 2027	YE 12/31 2028	YE 12/31 2029	YE 12/31 2030	YE 12/31 2031	Remaining LOM Average
ROM Production Tonnes	136.5	6.6	7.1	7.0	7.1	6.8	6.2	6.8	6.9	3.2
Yield	51.72%	38.35%	37.78%	38.86%	35.51%	35.18%	45.80%	46.02%	44.48%	59.43%
Saleable Production	70.6	2.5	2.7	2.7	2.5	2.4	2.9	3.1	3.1	1.9
Tonnes										
Thermal Tonnes	4.69	0.14	0.18	0.19	0.18	0.22	0.14	0.14	0.14	0.13
Domestic Met Tonnes	65.90	2.40	2.52	2.51	2.35	2.18	2.71	3.00	2.92	1.74
Export Met Tonnes	-	-	-	-	-	-	-	-	-	-
Total Saleable Tonnes	70.59	2.54	2.70	2.70	2.53	2.40	2.85	3.14	3.06	1.9
Cash Costs per Tonne:										
Mining Costs	\$84.51	\$77.01	\$75.72	\$76.41	\$82.69	\$85.48	\$73.27	\$73.73	\$77.23	\$87.70
Processing and Transport	\$19.71	\$19.17	\$19.99	\$20.15	\$22.12	\$22.53	\$18.41	\$18.66	\$19.66	\$19.59
Sales Related Costs	\$20.25	\$16.61	\$15.80	\$14.76	\$14.89	\$15.59	\$17.01	\$17.89	\$18.20	\$21.97
G&A	\$3.30	\$3.49	\$3.08	\$3.08	\$3.29	\$3.31	\$3.31	\$3.31	\$3.31	\$3.31
Total Cash Costs	\$127.78	\$116.28	\$114.60	\$114.39	\$122.99	\$126.90	\$111.99	\$113.59	\$118.40	\$132.57

* The Financial model includes 0.001 million tonnes of inferred coal production. Inferred coal represents 0.000001% of the total production, and none of this coal was included in the estimate of reserves.

19 Economic Analysis

19.1 Assumptions, Parameters and Methods

A pre-feasibility LOM plan was prepared by MM&A for the Logan operations. MM&A prepared mine projections and production timing forecasts based on coal seam characteristics. Production timing was carried out from 2024 to depletion (exhaustion) of the coal reserve areas, which is projected for the year 2057. All costs and prices are based on year-end 2023 nominal United States dollars.

The Mine plan, productivity expectations and cost estimates generally reflect historical performance by Coronado and efforts have been made to adjust plans and costs to reflect

MARSHALL MILLER & ASSOCIATES, INC.

future conditions. MM&A is confident that the mine plan and financial model are reasonably representative to provide an accurate estimation of coal reserves.

Capital schedules were developed by MM&A for mine development, infrastructure, and ongoing capital requirements for the life of the mine. Staffing levels were prepared, and operating costs estimated by MM&A. MM&A utilized historical cost data provided by Coronado and its own knowledge and experience to estimate direct and indirect operating costs.

The preliminary feasibility financial model, prepared for this TRS, was developed to test the economic viability of the coal reserve area. The results of this financial model are not intended to represent a bankable feasibility study, required for financing of any current or future mining operations, but are intended to prove the economic viability of the estimated coal reserves. All costs and prices are based on year-end 2023 nominal United States dollars assuming a 2% inflation rate.

On an unlevered basis, the NPV of the project cash flows after taxes was estimated for the purpose of classifying coal reserves. The project cash flows, excluding debt service, are calculated by subtracting direct and indirect operating expenses and capital expenditures from revenue. Direct costs include labor, drilling and blasting, operating supplies, maintenance and repairs, facilities costs for materials handling, coal preparation, refuse disposal, coal loading, sampling and analysis services, reclamation and general and administrative costs. Indirect costs include statutory and legally agreed upon fees related to direct extraction of the mineral. The indirect costs are the Federal black lung tax, Federal and State reclamation taxes, property taxes, local transportation prior to delivery at rail or barge loading sites, coal production royalties, sales and use taxes, income taxes and State severance taxes. Coronado's historical costs provided a useful reference for MM&A's cost estimates.

Sales revenue is based on the metallurgical coal price information provided to MM&A by Coronado.

Projected debt service is excluded from the P&L and cash flow model in order to determine Enterprise Value.

The financial model expresses coal sales prices, operating costs, and capital expenditures in current day dollars without adjustment for inflation. Capital expenditures and reclamation costs are included based on engineering estimates for each mine by year. The Coronado division's existing allocations of administrative costs are continued in the future projections.

Coronado will pay royalties for the various current and projected operations. The royalty rates vary by mining method and location. The royalty rates for Logan are estimated to be 5 to 9% of the sales revenue.

The projection model also includes consolidated income tax calculations at the Coronado level, incorporating statutory depletion calculations, as well as state income taxes, and a federal tax rate of 21%. To the extent the mine generates net operating losses for tax purposes, the losses are carried over to offset future taxable income. The terms "cash flows" and "project cash flows" used in this report refer to after tax cash flows.

MARSHALL MILLER & ASSOCIATES, INC.

Consolidated cash flows are driven by annual sales tonnage, which at steady-state level ranges from a peak of 3.6 million tonnes in 2033 to a low of 0.4 million tonnes in 2056. Projected consolidated revenue ranges from \$116.9 million to \$638.2 million at a steady state. Revenue totals \$13.0 billion for the project's life.

Consolidated cash flow from operations is positive throughout the projected operating period, with the exception of post-production years, due to end-of-mine reclamation spending. Consolidated cash flow from operations peaks at \$177.9 million in 2033 and totals \$3.4 billion over the project's life. Capital expenditures total \$167.9 million from 2024 through 2028 and \$1.2 billion over the project's life.

Coal price forecasts for coal products were prepared by Coronado for its proposed operations. Such prices were used for the revenue input into the financial model. Sales variable costs such as production royalties and severance taxes were based upon the revenue input.

19.2 Results

The pre-feasibility financial model, prepared by MM&A for this TRS, was developed to test the economic viability of each coal resource area. The results of this financial model are not intended to represent a bankable feasibility study, as may be required for financing of any current or future mining operations contemplated but are intended to prove the economic viability of the estimated coal reserves. Optimization of the LOM plan was outside the scope of the engagement.

Figure 19-1 shows the annual variance of cash costs per ton. *Table 19-1* shows LOM tonnage, P&L, and EBITDA for Logan.

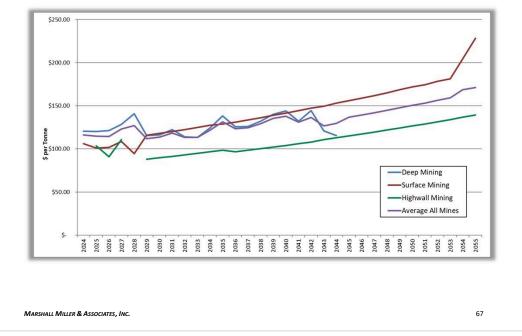


Figure 19-1: Cash Costs per Tonne

As shown above, Logan's average cash cost ranges between approximately \$114 and \$168 per tonne for most of the operating period.

Table 19-1: Life-of-Mine Tonnage, P&L before Tax, and EBITDA (\$000)

		0,			
	LOM	LOM	P&L	LOM	EBITDA
	Tonnes*	Pre-Tax P&L	Per Tonne	EBITDA	Per Tonne
Deep Mines					
Camp Br Chilton	1,607	\$61,067	\$38.00	\$92,000	\$57.24
Ramaco N2G	1,519	\$38,659	\$25.45	\$84,549	\$55.66
Eagle No. 1 (Toney Fork)	10,962	\$177,450	\$16.19	\$344,402	\$31.42
Elk Lick Chilton	3,809	\$184,040	\$48.32	\$250,250	\$65.70
Lower Powellton	5,095	\$216,991	\$42.59	\$328,684	\$64.51
Lower War Eagle	5,731	\$230,836	\$40.28	\$336,103	\$58.65
Powellton No. 1	3,474	\$37,743	\$10.86	\$142,820	\$41.11
Muddy Br No.2 Gas	2,713	\$43,531	\$16.05	\$83,882	\$30.92
Upper Winifrede	1,438	\$89,318	\$62.11	\$113,233	\$78.74
Lower Winifrede	2,091	\$83,351	\$39.86	\$118,042	\$56.45
Winifrede (Chilton Rider)**	-	\$(1,302)	\$-	\$(1,302)	\$-
Consolidated Deep Mines	38,439	\$1,161,684	\$30.22	\$1,892,665	\$49.24
Surface Mines					
Toney Fork Surf	6,313	\$184,154	\$29.17	\$367,638	\$58.23
Buffalo Cr South Area	7,673	\$125,604	\$16.37	\$279,578	\$36.44
Sugar Camp Area 1	4,912	\$(11,563)	\$(2.35)	\$149,696	\$30.47
Surface Mines Consolidated	18,899	\$298,195	\$15.78	\$796,912	\$42.17

HWM Consolidated 13,251 \$1,210,588 \$91.36 \$1,265,728	
54gar 64mp 111111 1,526 \$217,5212 \$56612; \$2126,652	\$96.90
Sugar Camp HWM 1,328 \$117,241 \$88.27 \$128,692	, ćoc.oo
Buffalo Cr South HWM 7,004 \$624,409 \$89.15 \$648,796	\$92.63
HWM Operations Toney Fork HWM 4,919 \$468,937 \$95.33 \$488,239	\$99.25
LOM LOM P&L LOM Tonnes Pre-Tax P&L Per Tonne EBITDA	EBITDA Per Tonne

The Financial model includes 0.001 million tonnes of inferred coal production. Inferred coal represents
 0.000001% of the total production, and none of this coal was included in the estimate of reserves.
 ** The Winifrede (Chilton Rider) was depleted in the 4th quarter of 2023.

As shown in *Table 19-1*, the Logan Complex shows positive EBITDA over the LOM. Overall, Coronado's consolidated operations show positive LOM P&L and LOM EBITDA of \$2.7 billion and \$4.0 billion, respectively. A summary of the key financial performance metrics projected through 2031 is provided below in *Table 19-2*.

MARSHALL MILLER & ASSOCIATES, INC.

Table 19-2: Summary of Logan Key Financial Performance Metrics (2024-2031)

		YE 12/31	YE 12/31	YE 12/31	YE 12/31	YE 12/31	YE 12/31	YE 12/31	YE 12/31	Remaining LOM
	Total	2024	2025	2026	2027	2028	2029	2030	2031	Average
ROM Production Tonnes	136.5	6.6	7.1	7.0	7.1	6.8	6.2	6.8	6.9	3.2
Yield	51.72%	38.35%	37.78%	38.86%	35.51%	35.18%	45.80%	46.02%	44.48%	59.43%
Saleable Production Tonnes	70.6	2.5	2.7	2.7	2.5	2.4	2.9	3.1	3.1	1.9
Thermal Tonnes	4.69	0.14	0.18	0.19	0.18	0.22	0.14	0.14	0.14	0.13
Domestic Met Tonnes	65.90	2.40	2.52	2.51	2.35	2.18	2.71	3.00	2.92	1.74
Export Met Tonnes	-	-	-	-	-	-	-	-	-	-
Total Saleable Tonnes	70.59	2.54	2.70	2.70	2.53	2.40	2.85	3.14	3.06	1.9
Cash Costs per Tonne:										
Mining Costs	\$84.51	\$77.01	\$75.72	\$76.41	\$82.69	\$85.48	\$73.27	\$73.73	\$77.23	\$87.70
Processing and Transport	\$19.71	\$19.17	\$19.99	\$20.15	\$22.12	\$22.53	\$18.41	\$18.66	\$19.66	\$19.59
Sales Related Costs	\$20.25	\$16.61	\$15.80	\$14.76	\$14.89	\$15.59	\$17.01	\$17.89	\$18.20	\$21.97
G&A	\$3.30	\$3.49	\$3.08	\$3.08	\$3.29	\$3.31	\$3.31	\$3.31	\$3.31	\$3.31
Total Cash Costs	\$127.78	\$116.28	\$114.60	\$114.39	\$122.99	\$126.90	\$111.99	\$113.59	\$118.40	\$132.57
EBITDA per Tonne	\$56.03	\$30.50	\$32.54	\$31.10	\$24.70	\$24.18	\$48.98	\$50.43	\$49.16	\$64.46
Expansion CapEx (\$M)	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Maintenance CapEx (\$M)	\$1,170.9	\$50.1	\$33.9	\$40.0	\$22.2	\$21.7	\$76.0	\$58.4	\$33.9	\$32.1
Total CapEx	\$1,170.9	\$50.1	\$33.9	\$40.0	\$22.2	\$21.7	\$76.0	\$58.4	\$33.9	\$32.1
* The Financial model includes	0.001 million	tonnes of i	inferred coa	I productio	n. Inferred	coal repres	ents 0.000	001% of the	total prod	uction, and

none of this coal was included in the estimate of reserves.

After Tax Cash Flows were developed in order to calculate the NPV for this Property. The NPV is estimated to be \$616.8 million at a discount rate of 10.0%. A summary of the Logan after-tax cash flow is shown in *Table 19-3*.

MARSHALL MILLER & ASSOCIATES, INC.

	Project Cash I					
	Total	YE12/31 2024	YE12/31 2025	YE12/31 2026	YE12/31 2027	YE12/31 2028
Production & Sales tonnes	70,589	2,543	2,696	2,702	2,526	2,3
Total Revenue	\$12,974,983	\$373,206	\$396,734	\$393,101	\$373,074	\$362,4
EBITDA	\$3,955,305	\$77,551	\$87,738	\$84,030	\$62,398	\$58,0
Net Income	\$2,228,588	\$26,894	\$36,861	\$31,587	\$14,764	\$12,9
Net Cash Provided by Operating Activities	\$3,424,770	\$51,951	\$77,858	\$77,752	\$62,427	\$53,1
Purchases of Property, Plant, and Equipment	\$(1,170,916)	\$(50,053)	\$(33,920)	\$(40,038)	\$(22,171)	\$(21,6
Net Cash Flow	\$2,253,854	\$1,897	\$43,938	\$37,714	\$40,256	\$31,4
	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31
	2029	2030	2031	2032	2033	2034
Production & Sales tonnes	2,850	3,138	3,064	3,243	3,562	3,0
Total Revenue	\$458,804	\$514,757	\$513,368	\$553,202	\$619,064	\$522,8
EBITDA	\$139,605	\$158,273	\$150,615	\$185,698	\$215,324	\$154,8
Net Income	\$79,578	\$89,148	\$85,572	\$111,984	\$132,364	\$84,6
Net Cash Provided by Operating Activities	\$106,155	\$135,115	\$135,231	\$153,748	\$177,944	\$149,6
Purchases of Property, Plant, and Equipment Net Cash Flow	\$(76,046) \$30,109	\$(58,438) \$76,677	\$(33,904) \$101,328	\$(37,120) \$116,628	\$(64,965) \$112,979	\$(78,6 \$70,9
	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31
	2035	2036	2037	2038	2039	2040
Production & Sales tonnes	2,996	3,323	3,481	3,308	2,953	2,6
Total Revenue	\$527,811	\$597,215	\$638,225	\$618,446	\$562,910	\$517,0
EBITDA	\$133,825	\$186,994	\$205,149	\$190,958	\$163,745	\$150,0
Net Income	\$67,184	\$112,148	\$121,122	\$101,624	\$83,396	\$79,5
Net Cash Provided by Operating Activities	\$124,743	\$156,490	\$174,943	\$171,838	\$153,628	\$138,3
Purchases of Property, Plant, and Equipment	\$(74,607)	\$(44,478)	\$(63,118)	\$(74,744)	\$(52,178)	\$(35,0
Net Cash Flow	\$50,136	\$112,012	\$111,825	\$97,094	\$101,449	\$103,2
	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31
	2041	2042	2043	2044	2045	2046
Production & Sales tonnes	2,061	1,821	2,124	1,504	1,147	1,1
Total Revenue	\$403,182	\$362,533	\$432,405	\$310,415	\$239,824	\$245,0
EBITDA	\$132,897	\$113,992	\$163,646	\$115,279	\$82,962	\$84,9
Net Income	\$80,858	\$69,151	\$103,893	\$67,062	\$56,130	\$56,3
Net Cash Provided by Operating Activities	\$121,947	\$105,404	\$131,578	\$111,482	\$78,873	\$73,9
Purchases of Property, Plant, and Equipment Net Cash Flow	\$(18,189) \$103,758	\$(33,880) \$71,523	\$(32,406) \$99,172	\$(16,899) \$94,583	\$(22,623) \$56,250	\$(17,3 \$56,
	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31	YE12/3
	2047	2048	2049	2050	2051	2052
Production & Sales tonnes	1,152	1,151	1,147	1,145	1,150	1,:
Total Revenue	\$250,477	\$255,353	\$259,457	\$264,205	\$270,675	\$276,4
EBITDA	\$86,985	\$88,741	\$90,123	\$91,953	\$94,720	\$96,4
	\$57,379	\$57,306	\$56,385	\$55,409	\$56,916	\$58,
Net Income			\$77,221	\$78,584	\$80,464	\$81,8
Net Cash Provided by Operating Activities	\$75,029	\$76,216		4/04.000	A(4 = 0.0 =)	
	\$75,029 \$(13,999) \$61,029	\$76,216 \$(16,432) \$59,784	\$(20,924) \$56,296	\$(24,880) \$53,704	\$(17,227) \$63,237	\$(16,9 \$64

MARSHALL MILLER & ASSOCIATES, INC.

	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31
	2053	2054	2055	2056	2057	2058
Production & Sales tonnes	1,149	1,016	809	437	11	-
Total Revenue	\$281,461	\$254,502	\$207,028	\$116,946	\$2,919	\$-
EBITDA	\$98,676	\$83,364	\$68,788	\$54,740	\$2,282	\$-
Net Income	\$59,804	\$46,844	\$35,921	\$45,217	\$(3,918)	\$(1,177
Net Cash Provided by Operating Activities	\$83,397	\$75,074	\$63,550	\$31,102	\$(5,848)	\$(7,880
Purchases of Property, Plant, and Equipment	\$(19,175)	\$(21,624)	\$(8,199)	\$(5,725)	\$(3,148)	\$-
Net Cash Flow	\$64,222	\$53,450	\$55,351	\$25,378	\$(8,996)	\$(7,880
	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31	YE12/31
	2059	2060	2061	2062	2063	2064
Production & Sales tonnes	-	-	-	-	-	
Total Revenue	\$-	\$-	\$-	\$-	\$-	\$
EBITDA	\$-	\$-	\$-	\$-	\$-	\$
Net Income	\$(607)	\$(317)	\$(70)	\$(0)	\$(0)	\$(0
Net Cash Provided by Operating Activities	\$(4,019)	\$(3,221)	\$(895)	\$-	\$-	\$
Purchases of Property, Plant, and Equipment	\$-	\$-	\$-	\$-	\$-	\$
Net Cash Flow	\$(4,019)	\$(3,221)	\$(895)	\$-	\$-	\$

* The Financial model includes 0.001 million tonnes of inferred coal production. Inferred coal represents 0.000001% of the total production, and none of this coal was included in the estimate of reserves.

19.3 Sensitivity

Sensitivity of the NPV results to changes in the key drivers is presented in the chart below. The sensitivity study shows the NPV at the 10.0% discount rate when Base Case sales prices, operating costs, and capital costs are increased and decreased in increments of 5% within a +/- 15% range.

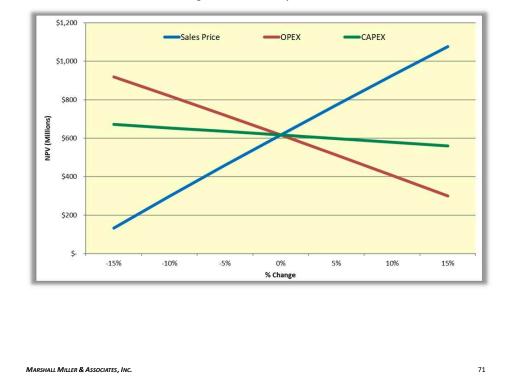


Figure 19-2: Sensitivity of NPV

As shown, NPV is quite sensitive to changes in sales price and operating cost estimates, and slightly sensitive to changes in capital cost estimates.

20 Adjacent Properties

20.1 Information Used

No Proprietary information associated with neighboring properties was used as part of this study.

21 Other Relevant Data and Information

MM&A performed a previous audit of all the Properties in year 2017 for Coronado based on SEC Industry Guide 7 standards. In addition, MM&A completed a Limited Phase I Environmental Site Assessment (*ESA*) on the Property in 2017 on behalf of Coronado. MM&A has subsequently conducted Joint Ore Reserve Committee (*JORC*) compliant resource and reserve assessments of the Logan County assets as of: (1) December 31, 2017, (2) December 31, 2020, (3) December 31, 2021, and (4) December 31, 2022. By assignment, the JORC assessment included a preliminary feasibility level study of the subject coal reserves, encompassing detailed mine planning and cost analysis through depletion of Logan's JORC-compliant coal reserves. MM&A utilized these former preliminary feasibility studies as the basis of an updated study which meets those standards set forth by the SEC in Regulation S-K 1300.

22 Interpretation and Conclusions

22.1 Conclusion

Sufficient data has been obtained through various exploration and sampling programs and mining operations to support the geological interpretations of seam structure and thickness for coal horizons situated on the Property. The data is of sufficient quantity and reliability to reasonably support the coal resource and coal reserve estimates in this TRS.

The geological data and preliminary feasibility study, which consider mining plans, revenue, and operating and capital cost estimates are sufficient to support the classification of coal reserves provided herein.

This geologic evaluation conducted in conjunction with the preliminary feasibility study is sufficient to conclude that the 70.6 Mt of marketable coal reserves identified on the Property are economically mineable under reasonable expectations of market prices for metallurgical coal products, estimated operation costs, and capital expenditures.

22.2 Risk Factors

Risks have been identified for operational, technical and administrative subjects addressed in the Pre-Feasibility Study. A risk matrix has been constructed to present the risk levels for all

MARSHALL MILLER & ASSOCIATES, INC.

the risk factors identified and quantified in the risk assessment process. The risk matrix and risk assessment process are modelled to that presented in the Australian and New Zealand Standard on Risk Management (AS/NZS 4360).

The purpose of the characterization of the project risk components is to inform the project stakeholders of key aspects of the Coronado projects that can be impacted by events whose consequences can affect the success of the venture. The significance of an impacted aspect of the operation is directly related to both the probability of occurrence and the severity of the consequences. The initial risk for a risk factor is herein defined as the risk level after the potential impact of the risk factor is addressed by competent and prudent management utilizing control measures readily available. Residual risk for a risk factor is herein defined as the risk level following application of special mitigation measures if management determines that the initial risk level is unacceptable. Initial risk and residual risk can be quantified numerically, derived by the product of values assigned to probability and consequence ranging from very low risk to very high risk.

The probability and consequence parameters are subjective numerical estimates made by practiced mine engineers and managers. Both are assigned values from 1 to 5 for which the value 1 represents the lowest probability and least consequence, and the value 5 represents the highest probability and greatest consequence. The products which define the Risk Level are classified from very low to very high.

Risk Level Table (R = P x C)

Risk Level (R) Very Low (1 to 2) Low (3 to 5) Moderate (6 to 11) High (12 to 19) Very High (20 to 25)

Risk aspects identified and evaluated during this assignment total 13. No residual risks are rated Very High. One (1) residual risk is rated High. Eight (8) of the risk aspects could be associated with Moderate residual risk. Four (4) of the risk aspects were attributed Low or Very Low residual risks.

22.2.1 Governing Assumptions

The listing of the aspects is not presumed to be exhaustive. Instead that listing is presented based on the experiences of the contributors to the TRS.

- 1. The probability and consequence ratings are subjectively assigned, and it is assumed that this subjectivity reasonably reflects the condition of the active and projected mine operations.
- 2. The Control Measures shown in the matrices presented in this chapter are not exhaustive. They represent a condensed collection of activities that the author of the risk assessment section has observed to be effective in coal mining scenarios.

MARSHALL MILLER & ASSOCIATES, INC.

- Mitigation Measures listed for each risk factor of the operation are not exhaustive. The measures listed, however, have been observed by the author to be effective.
- 4. The monetary values used in ranking the consequences are generally-accepted quantities for the coal mining industry.

22.2.2 Limitations

The risk assessment proposed in this report is subject to the limitations of the information currently collected, tested, and interpreted at the time of the writing of the report.

22.2.3 Methodology

The numerical quantities (i.e., risk levels) attributable to either "initial" or "residual" risks are derived by the product of values assigned to probability and consequence ranging from very low risk to very high risk.

R = P x C Where: R = Risk Level P = Probability of Occurrence C = Consequence of Occurrence

The Probability (P) and Consequence (C) parameters recited in the formula are subjective numerical estimates made by practiced mine engineers and managers. Both P and C are assigned integer values ranging from 1 to 5 for which the value 1 represents the lowest probability and least consequence, and the value 5 represents the highest probability and greatest consequence. The products ($R = P \times C$) which define the Risk Level, are thereafter classified from very low to very high.

Risk Level Table

Risk Level (R) Very Low (1 to 2) Low (3 to 5) Moderate (6 to 11) High (12 to 19) Very High (20 to 25)

Very high initial risks are considered to be unacceptable and require corrective action well in advance of project development. In short, measures must be applied to reduce very high initial risks to a tolerable level.

As shown and discussed above, after taking into account the operational, technical, and administrative actions that have been applied or are available for action when required, the residual risk can be determined. The residual risk provides a basis for the management team to determine if the residual risk level is acceptable or tolerable. If the risk level is determined

MARSHALL MILLER & ASSOCIATES, INC.

to be unacceptable, further actions should be considered to reduce the residual risk to acceptable or tolerable levels to provide justification for continuation of the proposed operation.

22.2.4 Development of the Risk Matrix

Risks have been identified for the technical, operational, and administrative subjects addressed in the TRS. The risk matrix and risk assessment process are modelled to that presented in the Australian and New Zealand Standard on Risk Management (AS/NZS 4360).

MARSHALL MILLER & ASSOCIATES, INC.

22.2.4.1 Probability Level Table

Table 22-1: Probability Level Table

Catego	ory	Probability Level (P)	
1	Remote	Not likely to occur except in exceptional circumstances.	<10%
2	Unlikely	Not likely to occur; small in degree.	10 - 30%
3	Possible	Capable of occuring.	30 - 60%
4	Likely	High chance of occurring in most circumstances.	60 - 90%
5	Almost Certain	Event is expected under most circumstances; impossible to avoid.	>90%

The lowest rated probability of occurrence is assigned the value of 1 and described as remote, with a likelihood of occurrence of less than ten percent. Increasing values are assigned to each higher probability of occurrence, culminating with the value of 5 assigned to incidents considered to be almost certain to occur.

22.2.4.2 Consequence Level Table

Table 22-2 lists the consequence levels.

Table 22-2: Consequence Level Table

			Correlation o Unplanned Loss of	f Events in Key Element	s of the Project Program to Event S	everity Category	
Category	Severity of the Event	Financial Impact of the Event	Production (Impact on Commercial Operations)	Events Impacting on the Environment Insignificant loss of	Events Affecting th' Program's Social and Community Relations	Resultant Regulatory / Sovereign Risk	Events Affecting Occupational Health & Safety
1	Insignificant	< USD \$0.5 million	≤ 12 hours	habitat; no irreversible effects on water, soil and the environment.	Occasional nuisance impact on travel.	-	Event recurrence avoided by corrective action through established procedures (Engineering, guarding, training).
2	Minor	USD \$0.5 million to \$2.0 million	≤ 1 day	No significant change to species populations; short- term reversible perturbation to ecosystem function.	Persistent nuisance impact on travel. Transient adverse media coverage.	-	First aid – lost time. Event recurrence avoided by corrective action through established procedures.
3	Moderate	USD \$2.0 million to \$10.0 million	≤1 week	Appreciable change to species population; medium-term (≤10 years) detriment to ecosystem function.	Measurable impact on travel and water/air quality. Significant adverse media coverage / transient public outrage.	Uncertainty securing or retaining essential approval / license. Change to regulations (tax; bonds; standards).	Medical Treatment – permanent incapacitation. Avoiding event recurrence requires modification to established corrective action procedures.
4	Major	USD \$10.0 million to \$50.0 million	1 to 2 weeks	Change to species population threatening viability; long-term (>10 years) detriment to ecosystem function.	Long-term, serious impact on travel and use of water resources; degradation of air quality; sustained and effective public opposition.	Suspension / long-delay in securing essential approval / license. Change to laws (tax; bonds; standards).	Fatality. Avoiding event recurrence requires modification to established corrective action procedures and staff retraining.
5	Critical	>USD \$50.0 million	>1 month	Species extinction; irreversible damage to ecosystem function.	Loss of social license.	Withdraw / failure to secure essential approval / license.	Multiple fatalities. Avoiding event recurrence requires major overhaul of policies and procedures.

The lowest rated consequence is assigned the value of 1 and is described as an Insignificant Consequence, parameters of which include non-reportable safety incidents with zero days lost accidents, no environmental damage, loss of production or systems for less than 12 hours and cost of less than USD \$0.5 million. Increasing values are assigned to each higher consequence, culminating with the value of 5 assigned to critical consequences, the parameters of which include multiple-fatality accidents, major environmental damage, and loss of production or systems for longer than one month and cost of greater than USD \$50.0 million.

Composite Risk Matrix R = P x C and Color-Code Convention

The risk level, defined as the product of probability of occurrence and consequence, ranges in value from 1 (lowest possible risk) to 25 (maximum risk level). The values are color-coded to facilitate identification of the highest risk aspects.

Table 22-3: Risk Matrix

	P x C = R		Insignificant 1	(Minor 2	Consequence (C) Moderate 3	Major 4	Critical 5
	Remote	1	1	2	3	4	5
Lopaphility Level (P) Possiple 3 Likely 4	Unlikely	2	2	4	6	8	10
	3	3	6	9	12	15	
	Likely	4	4	8	12	16	20
	Almost Certain	5	5	10	15	20	25

22.2.5 Categorization of Risk Levels and Color Code Convention

Very high risks are considered to be unacceptable and require corrective action. Risk reduction measures must be applied to reduce very high risks to a tolerable level.

22.2.6 Description of the Coal Property

The Logan Mine Complex (*Logan*) is located in Logan, Boone, and Wyoming Counties, West Virginia –is an active operation with four underground mines and two surface mines. Active underground operations within the Logan Mine Complex all utilize continuous mining production sections. Large mining operations are conducted at the Muddy Bridge, Eagle No. 1 Mine and Lower War Eagle Mine. The North Fork Winifrede Mine was fully depleted in 2023. The Powellton No. 1 Mine was in process of being rehabilitated and had minimal production during the fourth quarter 2023, with plans to initiate full production with one mining section in the first quarter of 2024. Other operations are projected on relatively small reserve blocks to be developed sequentially to sustain production levels as each reserve is depleted. The method

MARSHALL MILLER & ASSOCIATES, INC.

provides continuity, preserving skilled work groups and enabling effective utilization of production equipment. Mines located above drainage have access via drift entries. A few of the coal seams are below drainage and are accessed with slopes and shafts or box cuts.

The Logan Mine Complex also includes two active surface mines: Toney Fork and Elklick (Buffalo Creek South). Both area and contour surface mining are employed. Highwall mining is conducted by contract operators. The surface operations are relatively small and developed sequentially to sustain production levels. Similar to the underground operations, the method provides continuity while preserving skilled work groups and enabling effective utilization of production equipment. The surface mining methods selected utilize hydraulic shovels, front-end loaders, large tractors and rock trucks for overburden removal.

22.2.7 Summary of Residual Risk Ratings

Each risk factor is numbered, and a risk level for each is determined by multiplying the assigned probability by the assigned consequence. The risk levels are plotted on a risk matrix to provide a composite view of the Coronado risk profile. The average risk level is 7.7, which is defined as Moderate.

Table 22-4: Risk Assessment Matrix

	Critical	>\$50 MM	8, 9				
JCe	Major	\$10-50MM				6	
Consequence	Moderate	\$2-10 MM	12		1, 2, 3, 4		
ō	Minor	\$0.5-\$2 MM			13	5, 10	7
	Low	<\$0.5 MM			11		
			<10% Remote	10-30% Unlikely	30-60% Possible	60-90% Likely	>90% Almost Certain

22.2.8 Risk Factors

A high-level approach is utilized to characterize risk factors that are generally similar across a number of the active and proposed mining operations. Risk factors that are unique to a specific operation or are particularly noteworthy are addressed individually.

22.2.8.1 Geological and Coal Resource

Coal mining is accompanied by risk that, despite exploration efforts, mining areas will be encountered where geological conditions render extraction of the resource to be uneconomic, or that coal quality characteristics disqualify the product for sale into target markets.

MARSHALL MILLER & ASSOCIATES, INC.

Offsetting the geological and coal resource risk are the massive size of the controlled property which allows large areas to be mined sufficiently away from areas where coal quality and mineability may be less favorable. In addition, several mines are designed to operate with multiple production sections, which lessens the immediate impact when one section encounters difficulties. The large reserve areas also provide a mitigation strategy of developing an additional (spare) section at each mine, or additional mines, which can be activated when adverse conditions are encountered, thereby maintaining consistent production and quality. The spare section or mines require additional mine extension cost but increase flexibility and performance consistency.

The larger reserve areas will be developed with multiple production sections and the small, replacement production reserve areas provide ready access to alternative locations if geological and coal resource characteristics require abandonment of an active production area.

Table 22-5: Geological and Coal Resource Risk Assessment (Risks 1 and 2)

Recidual Rick

3

Aspect	Impact	Control Measures	Initial Risk Level		.evel	Mitigation Measures	Level		11514	
			Р	С	R		Р	С	R	
Recoverable coal tonnes recognized to be significantly less than previously estimated.	Reserve base is adequate to serve market commitments and respond to opportunities for many years. Local adverse conditions may increase frequency and cost of production unit relocations.	Previous and ongoing exploration and extensive regional mining history provide a high level of confidence of coal seam correlation, continuity of the coal seams, and coal resource tonnes.	4	4	16	Optimize mine plan to increase resource recovery; develop mine plan to provide readily available alternate mining locations to sustain expected production level.	3	3	9	
Coal quality locally proves to be lower than initially projected.	If uncontrolled, production and sale of coal that is out of specification can result in rejection of deliveries, cancellation of coal sales agreements and damage to reputation.	Exploration and vast experience and history in local coal seams provide confidence in coal quality; limited excursions can be managed with careful product segregation and blending.	3	5	15	Develop mine plan to provide readily available alternate mining locations to sustain expected production level; modify coal sales agreements to reflect coal quality.	3	3	9	

22.2.8.2 Environmental

MM&A completed a Limited Phase I Environmental Site Assessment (*ESA*) on the Logan County Property in May 2017 on behalf of Coronado. MM&A concluded that no long-term liabilities existed at the time of this ESA.

Water quality and other permit requirements are subject to modification and such changes could have a material impact on the capability of the operator to meet modified standards or to receive new permits and modifications to existing permits. Permit protests may result in delays or denials to permit applications.

Environmental standards and permit requirements have evolved significantly over the past 50 years and to-date, mining operators and regulatory bodies have been able to adapt successfully to evolving environmental requirements.

Table 22-6: Environmental (Risks 3 and 4)

			Initia	l Risk I	.evel	Mitigation	Resid	ual Risk	Level
Aspect	Impact	Control Measures	Р	С	R	Measures	Р	С	R
Environmental performance standards are modified in the future.	Delays in receiving new permits and modifications to existing permits; cost of testing and treatment of water and soils	Work with regulatory agencies to understand and influence final standards; implement testing, treatment and other actions to comply with new standards.	3	4	12	Modify mining and reclamation plans to improve compliance with new standards while reducing cost of compliance.	3	3	9
New permits and permit modifications are increasingly delayed or denied.	Interruption of production and delayed implementation of replacement production from new mines.	Comply quickly with testing, treatment and other actions required; continue excellent compliance performance within existing permits.	3	4	12	Establish and maintain close and constructive working relationships with regulatory agencies, local communites and community action groups.	3	3	9

22.2.8.3 Regulatory Requirements

Federal and state health and safety regulatory agencies occasionally amend mine laws and regulations. The impact is industry-wide. Mining operators and regulatory agencies have been able to adapt successfully to evolving health and safety requirements.

Table 22-7: Regulatory Requirements (Risk 5)



22.2.8.4 Market and Transportation

Most of the current and future production is expected to be directed to domestic and international metallurgical markets. Historically the metallurgical markets have been cyclical and highly volatile. Thermal coal markets are also cyclical and domestic markets have been adversely affected by competition from natural gas and subsidized renewable energy sources and regulation.

MARSHALL MILLER & ASSOCIATES, INC.

							Resi	idual I	Risk	
				Risk L		Mitigation		Level		
Aspect Volatile coal prices drop precipitously.	Impact Loss of revenue adversely affects profitability; reduced cash flow may disrupt capital expenditures plan.	Control Measures Cost control measures implemented; capital spending deferred.	P 4	C 5	R 20	Measures High-cost operations closed, and employees temporarily furloughed.	P 4	C 4	R 16	
operator can p	ay or interruption of ossibly minimize the i ations promptly and r Table 22-5	mpact of delays by	oeing orking	a pr g rela	eferi ation	ed customer by ships.				
operator can p	ossibly minimize the i ations promptly and r	mpact of delays by maintaining close we	oeing orking	a pr g rela	eferi ation	ed customer by ships.				
operator can p	ossibly minimize the i ations promptly and r	mpact of delays by maintaining close we	oeing orking oortat	a pr g rela	eferi ation Risk	ed customer by ships.	y fulf	fillin		.eve

Occupational health and safety risks are inherent in mining operations. Comprehensive training and retraining programs, internal safety audits and examinations, regular mine inspections, safety meetings, along with support of trained fire brigades and mine rescue teams are among activities that greatly reduce accident risks. Employee health monitoring programs coupled with dust and noise monitoring and abatement reduce health risks to miners.

As underground and surface mines are developed and extended, observation of geological, hydrogeological and geotechnical conditions leads to modification of mine plans and procedures to enable safe work within the mine environments.

Highlighted below are selected examples of safety and external factors relevant to Coronado operations.

22.2.8.5.1 Methane Management

Coalbed methane is present in coal operations below drainage. Often the methane concentration in shallow coal seams is at such low levels that it can be readily managed with frequent testing and monitoring, vigilance and routine mine ventilation. Very high methane concentrations may be present at greater depths. High methane concentrations may require

MARSHALL MILLER & ASSOCIATES, INC.

degasification of the coal seam to assure safe mining. Due to the seams being targeted and their depths, excessive methane is not expected to be encountered at Logan.

Table 22-10: Methane Management (Risk 8)



22.2.8.5.2 Mine Fires

Mine fires, once common at mine operations, are rare today. Most active coal miners have not encountered a mine fire. Vastly improved mine power and equipment electrical systems, along with safe mine practices reduce mine fire risks. Crew training and fire brigade support and training improve response for containment and control if a fire occurs. Spontaneous combustion within coal mines, which is the source of most fires that occur today, is not expected to commonly occur at the Logan property. When spontaneous combustion conditions are present, monitoring systems are employed for early detection and mine plans are designed to facilitate isolation, containment and rapid extinguishment.

6

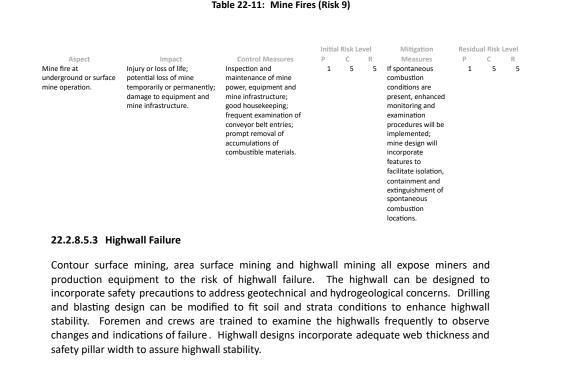
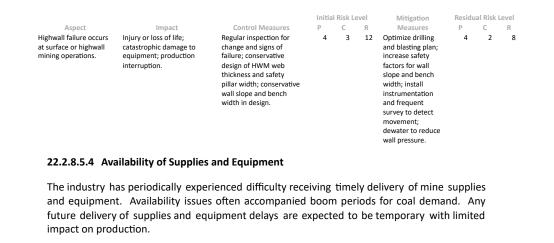
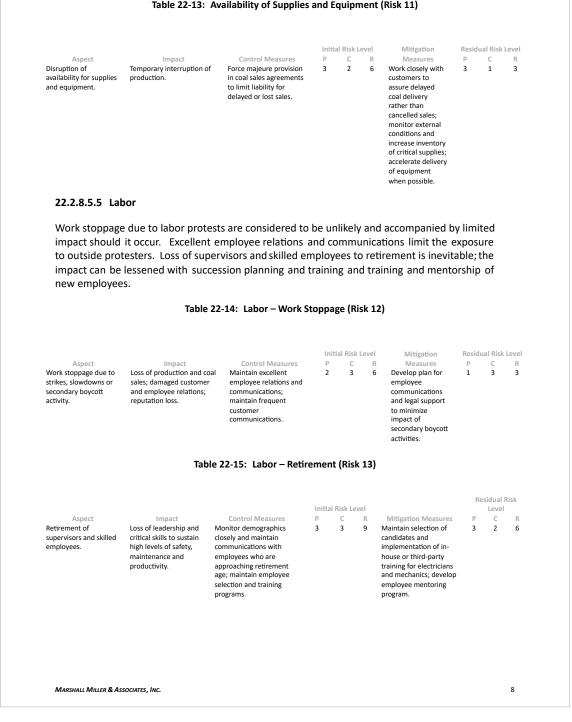


Table 22-12: Highwall Failure (Risk 10)



MARSHALL MILLER & ASSOCIATES, INC.



23 Recommendations

Coronado is continuing to work both internally and with outside assistance to further define their Resource Base and to Optimize the LOM Plan.

24 References

Publicly available information from various State and Federal agencies was used where relevant.

25 Reliance on Information Provided by the Registrant

A summary of the information provided by Coronado relied upon by MM&A for the purposes of this TRS is provided in *Table 25-1*.

Table 25-1: Information from Registrant Relied Upon by MM&A

		Report
Category	Information Provided by Coronado	Section
Marketing	Long-term price forecast used in financial projections	16.2
Legal	Mineral control and surface control rights as shown on maps	3.2, 3.3
Environmental	Permit and bonding information	17.3

9

APPENDIX



MM&A QUALIFICATIONS



MM&A provides geological and engineering services to both surface and underground mine operations throughout the world in support of Mineral Resource and Mineral Reserve Reporting. MM&A geologists and engineers have extensive backgrounds in a variety of mining scenarios.



Technical Report Summaries (*TRSs***)** are prepared in order to document in-place mineral resource estimates and mineral reserve estimates on a recoverable basis by different mining methods both on small tracts and on properties encompassing several thousand acres. The goal of the TRSs is to document the economic viability of the mineral reserves as well as the initial economic assessment of the mineral resources. Evaluations of mineral deposits satisfy legal, economic and technical feasibility criteria, consistent with regulations and guidelines of the United States Securities and Exchange Commission (*SEC*) S-K 1300 standards, the Australasian Joint Ore Reserve Committee (*JORC*) guidelines, Canada's National Instrument 43-101, and the AIM standards on the London Exchange. The resource assessment addresses pertinent geologic parameters that are related to the deposit thickness, grade, and geographic distribution. MM&A's technical staff include Registered Members of the Society of Mining Engineers or are Registered Certified Professional Geologists by the American Institute of Professional Geologists. Both organizations are listed as approved Recognized Professional Organizations, and therefore MM&A's technical staff are considered Competent Persons by international standards. Reserve Technical Reports have been prepared for reporting in stock exchanges in the United States as well as Australia, Southeast Asia, China, Canada, Great Britain, Turkey, and other countries.

Geological Services

- > Exploration Program Development and Implementation
- > Field Mapping
- > Field Exploration Supervision
- > Geological Assessment
- > Detailed Core Logging
- Core or Mineral Sampling
 Geophysical Logging
- > Geophysical Logging> Supervise Analytical Testing
- Database Compilation
- Computer-Aided Geologic
 Modeling
- > Resource/Reserve Computation
- > Hazard Mapping
- > Lineament Mapping
- > Geotechnical Analysis

- > Mine Roof and Floor Condition Assessment
- > Pillar Stability Analysis
- > Subsidence Studies
- > Horizontal Stress Mapping

Mining Engineering Services

- > Determine Optimum Mining Methods
- > Equipment Selection
- > Productivity Estimates
- > Labor Requirements and Scheduling
- > Life-of-Mine Plans for Proposed and Existing Mines
- > Mine and Facilities Layout and Planning
- > Market and Transportation Studies

- > Environmental Review and Reclamation Liability Estimates
- > Capital Requirements
- Ventilation, Permitting and Drainage Control

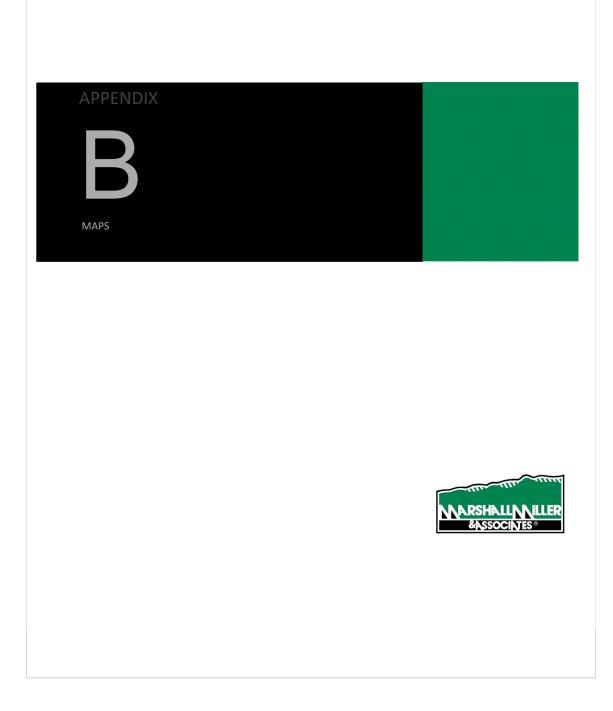
Economic Analysis

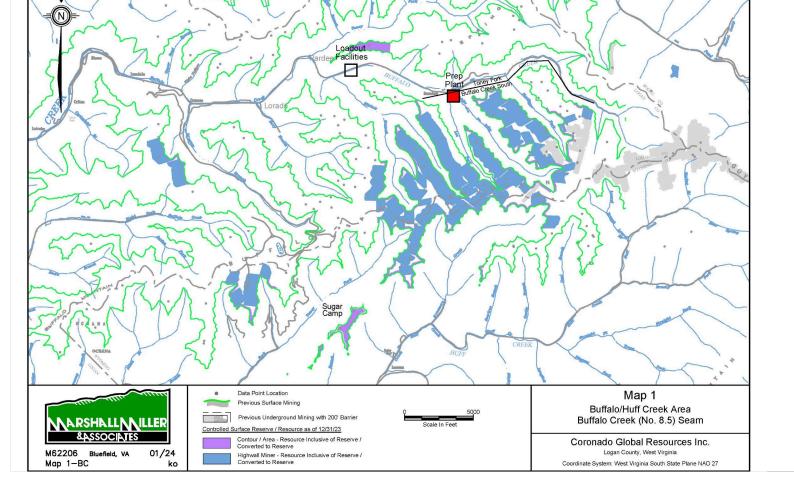
- Estimate of Operating Costs (Labor, Supplies, and Fixed Costs)
- > Capital Budget Assessments
- > Discounted Cash Flow Analysis
- > Risk Assessment

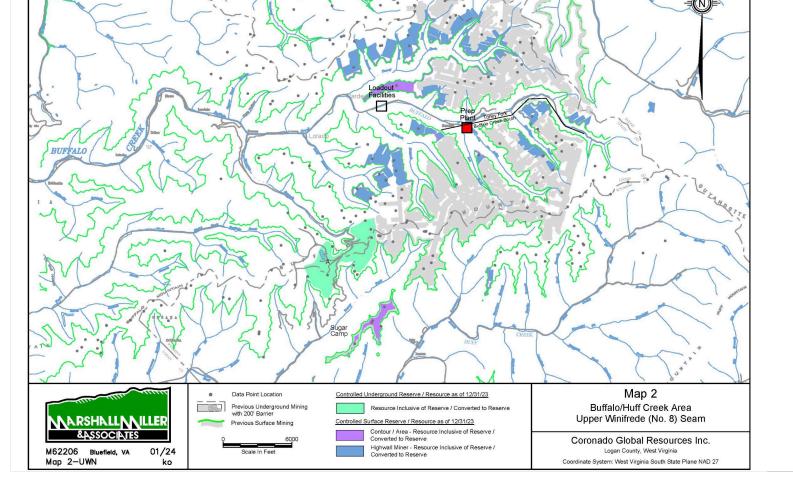
For More Information Contact:

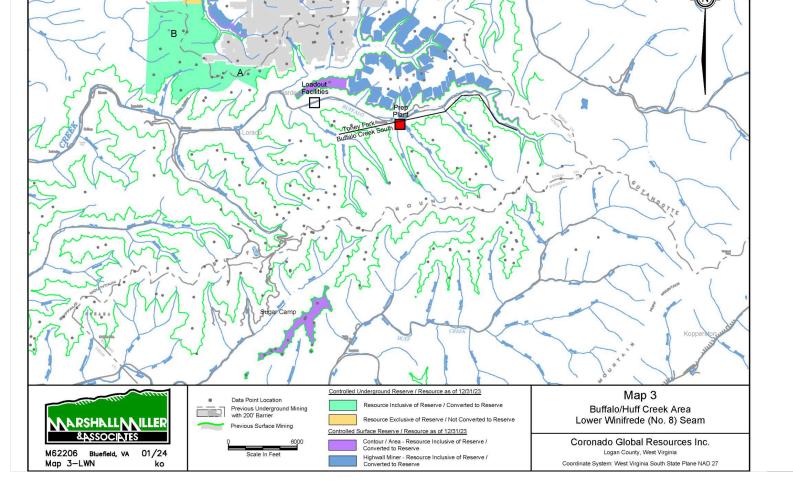
582 Industrial Park Road Bluefield, VA 24605 Phone +1 276 322 5467 www.mma1.com

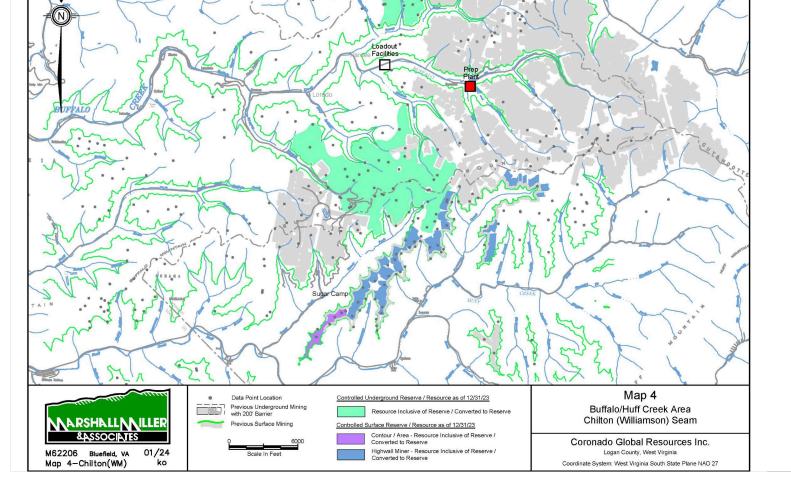
July 1, 2020

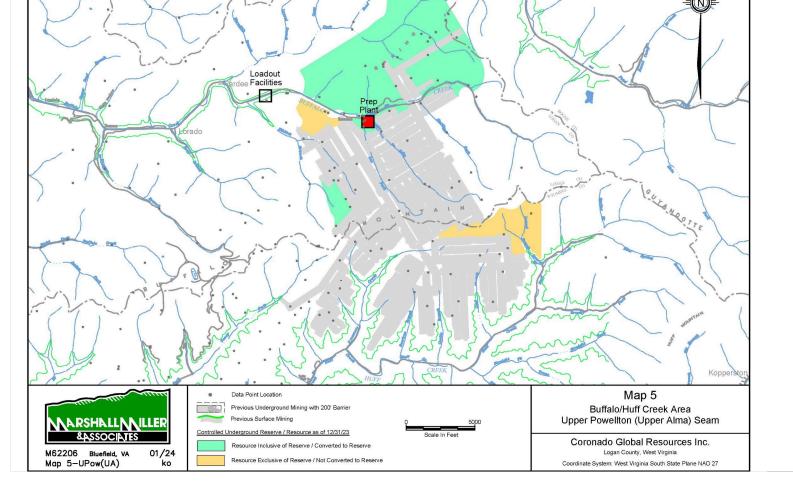


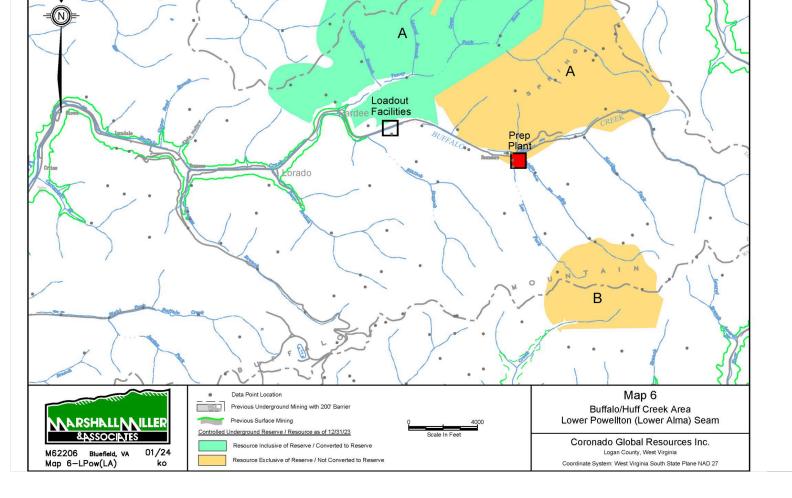


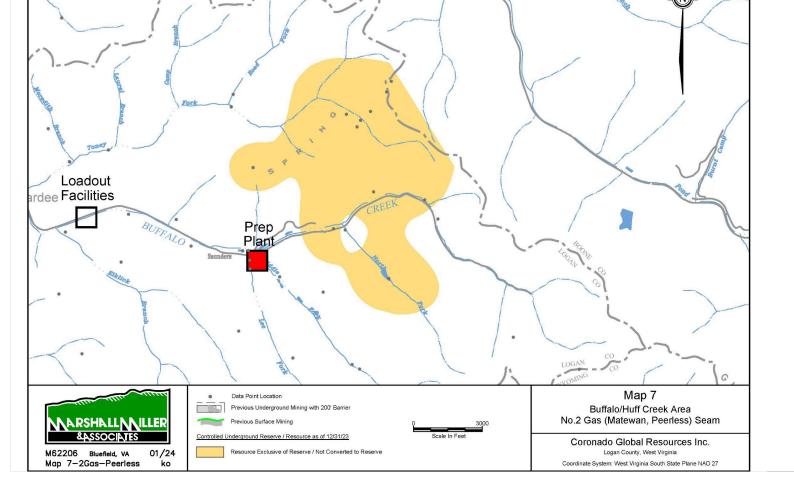


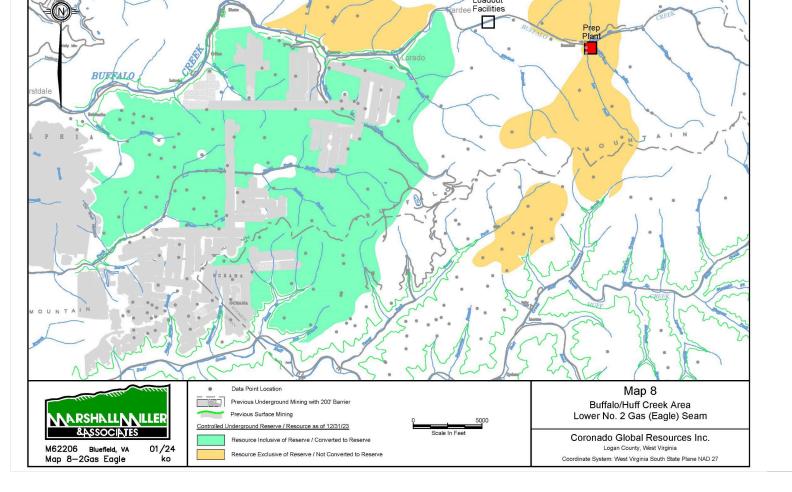


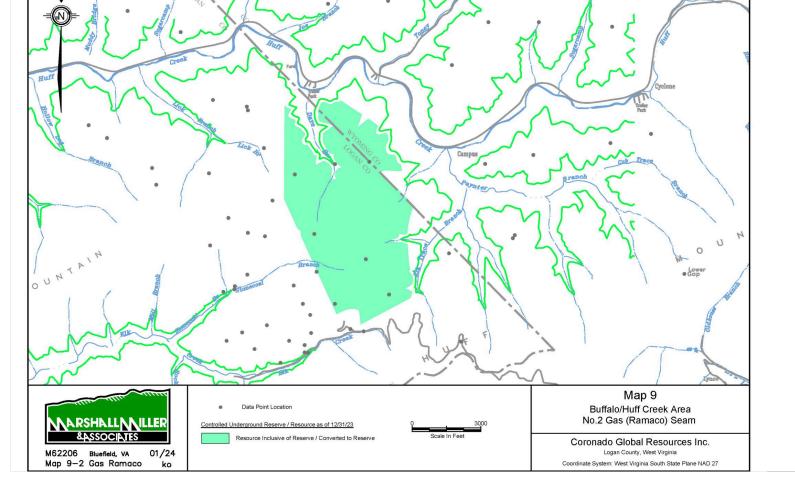


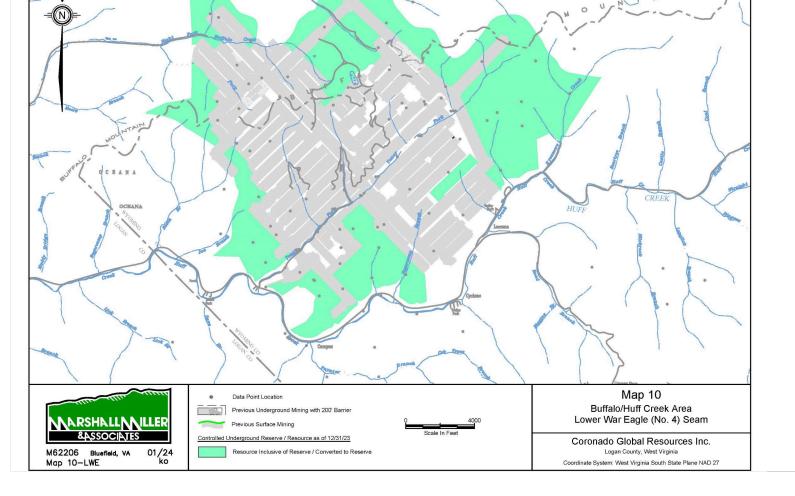


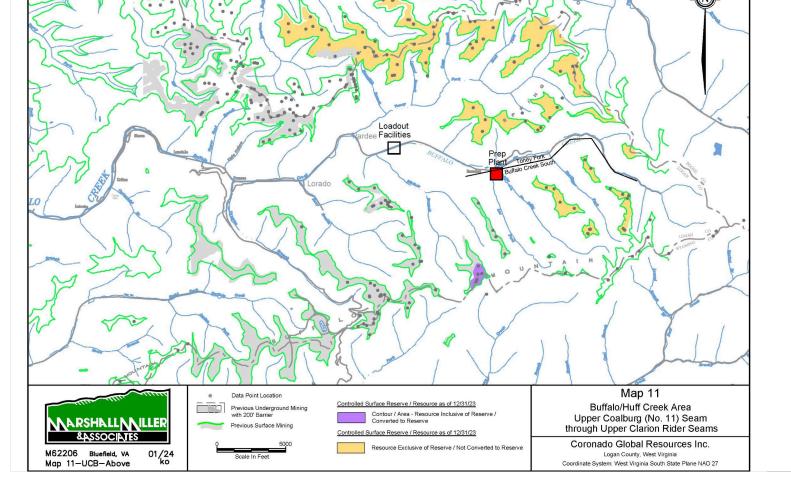


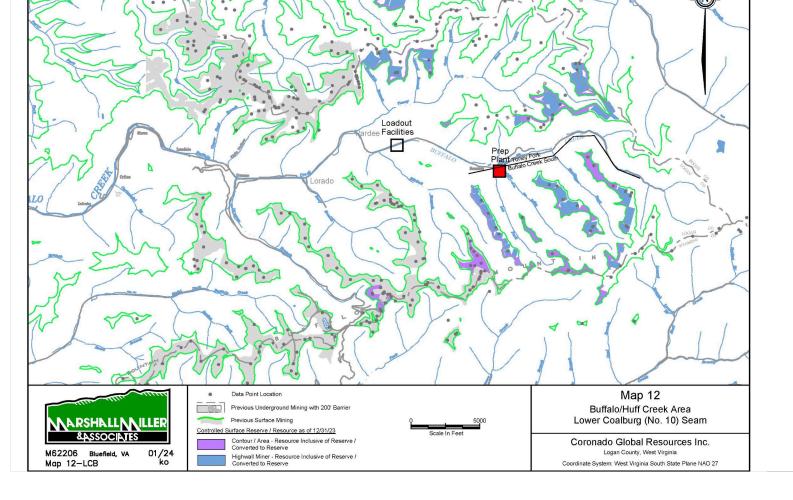


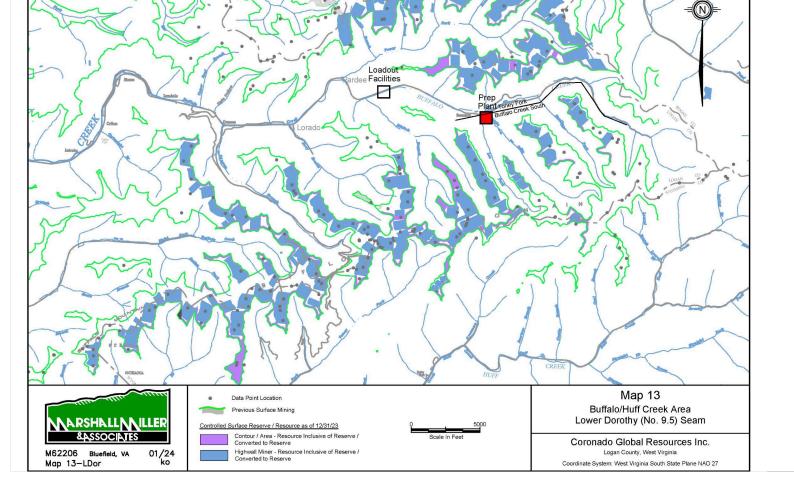


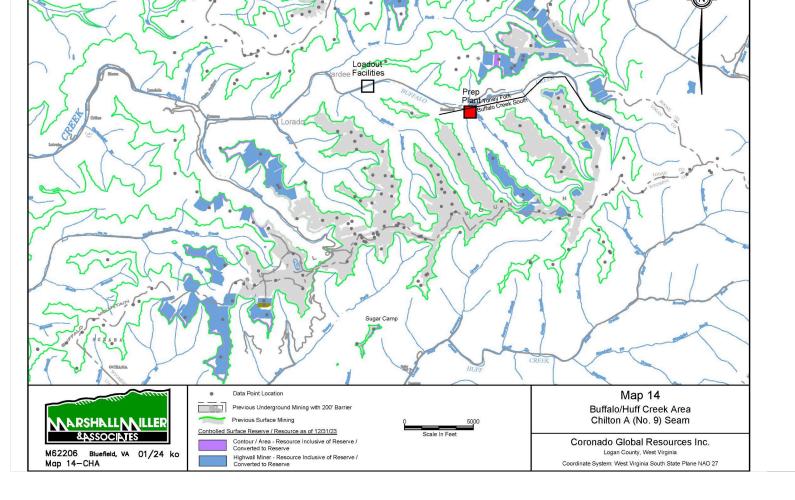


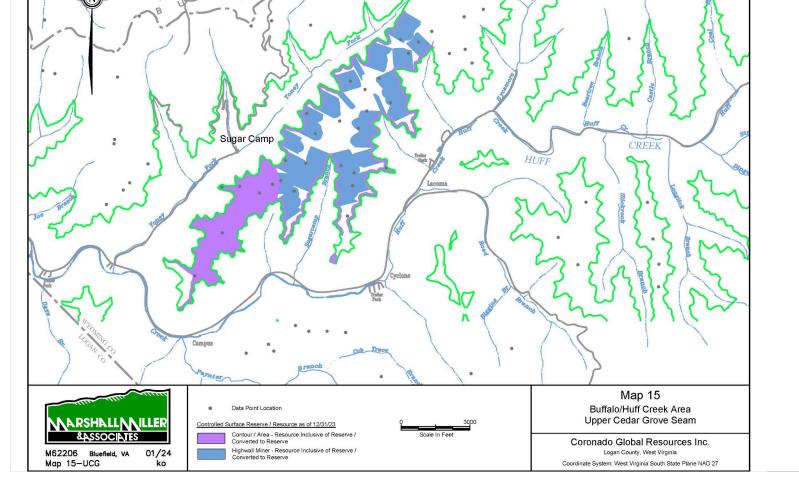


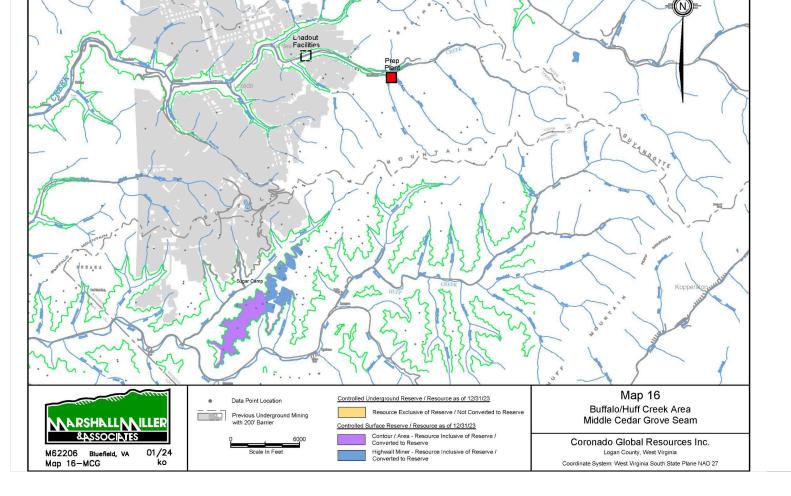


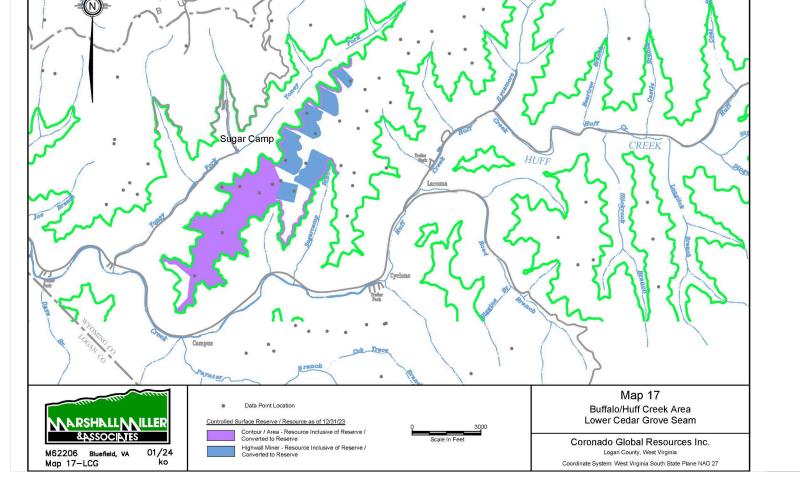


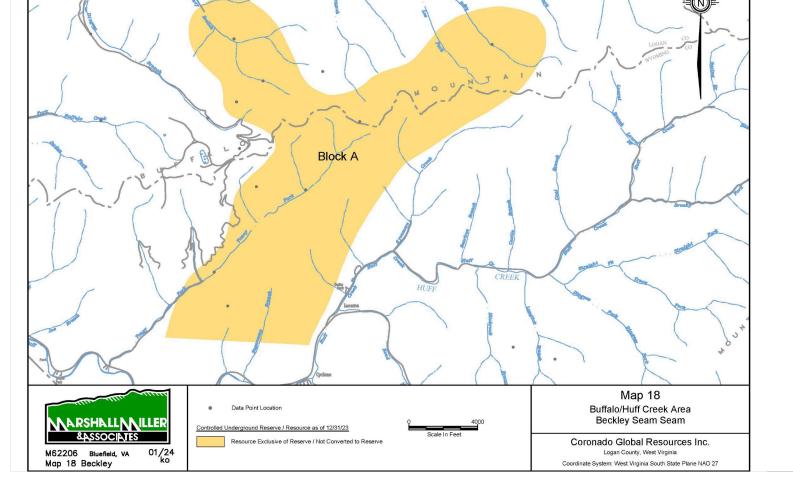


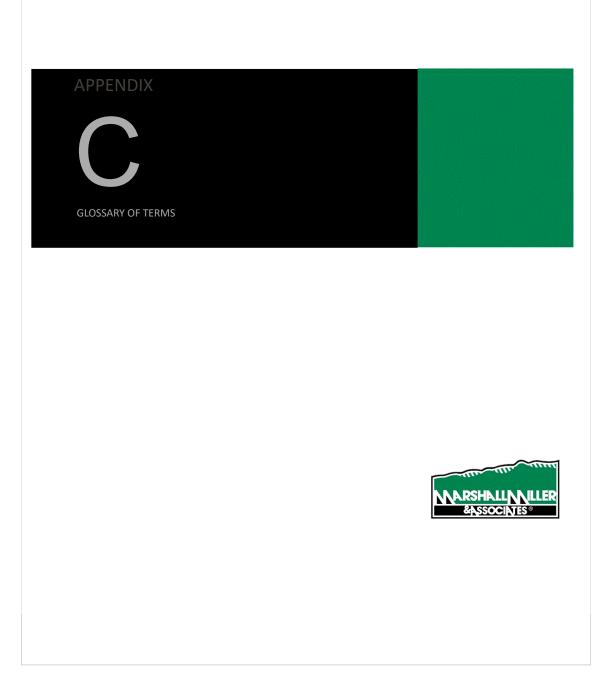












Abbreviation	Definition
ACPS	Analysis of Coal Pillar Stability
ANAB	ANSI National Accreditation Board
ASTM	ASTM International
AVS	Applicant Violator System
bcm	Bank cubic meters
bcm/hr	Bank cubic meters per hour
Btu/lb.	British Thermal Unit per pound
Carlson	Carlson Mining – formerly SurvCADD [*] – a prevalent software package used for
	modeling in the Appalachian region
CFR	Code of Federal Regulations
Coronado	Coronado Global Resources Inc.
CSR	Coke strength after reaction
CSX	CSX Corporation, a rail-based freight transportation company
CTR	Contour mining
Demonstrated	
reserves	Demonstrated reserves are the sum of proven and probable reserves.
EBITDA	Earnings before Interest, Taxes, Depreciation, and Amortization
EOM	End-of-mine reclamation
EPA	United States Environmental Protection Agency
ESA	Limited Phase I Environmental Site Assessment
Feasibility Study	"comprehensive technical and economic study of the selected development option for a mineral project, which includes detailed assessments of all applicable modifying factors together with any other relevant operational factors, and detailed financial analysis that are necessary to demonstrate, at the time of reporting, that extraction is economically viable. According to the proposed definition, the results of the study may serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. Thus, a feasibility study is more comprehensive, with a higher degree of accuracy, and yielding results with a higher level of confidence, than a pre-feasibility study."
HWM	Highwall mining
In situ	Its natural position; said specific of a rock, soil, or fossil when in the situation in which was originally formed or deposited
Indicated	Indicated resources are those lying between 0.4-kilometer and 1.2-kilometer radius
Resources	from such an observation point and reported herein as in-situ mineral resources.
Inferred	Inferred resources lie more than a 1.2-kilometer radius from a valid point of
Resources	measurement but less than 4.8 kilometers from one, and reported herein as in-situ mineral resources.
JORC Code	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
lb. SO ₂ / mm Btu	Pounds per sulfur dioxide per million British thermal units
LOM	Life-of-mine
M&R	Maintenance and repair
Measured	Measured resources are those lying within 0.4-kilometer radius from a valid point of
Resources	measurement and reported herein as in-situ mineral resources.
MINER Act	Mine Improvement and New Emergency Response Act of 2006

iviinerai keserve	the economically mineable part of a liveasured and/or indicated ivineral
	Resource. It includes dilution materials and allowances for losses, which occur
	when the material is mined or extracted and is defined by studies at Preliminary
	Feasibility or Feasibility level as appropriate that include Modifying Factors. Such
	studies demonstrate that, at the time of reporting, extraction of the mineral reserve
	is economically viable under reasonable investment and marketing assumptions".
Mineral Resource	"a concentration or occurrence of solid material of economic interest or on the
	Earth's crust in such form, grade or quality that there are reasonable prospects for
	eventual economic extraction. The location, quantity, grade, continuity and other
	geological characteristics and continuity of a Mineral Resource are known,
	estimated or interpreted from specific geological evidence and knowledge, includin
	sampling."
MM&A	Marshall Miller & Associates, Inc.
Modifying Factors	"considerations used to convert Mineral Resources to Mineral Reserves. These
	include, but are not restricted to, mining, processing, metallurgical, infrastructure,
	economic, marketing, legal, environmental compliance, plans, negotiations, or
	agreements with local individuals or groups and governmental factors."
MRMR MSHA	Mineral Resources to Mineral Reserves
	United States Department of Labor Mine Safety and Health Administration
Mt	Million metric tonnes
NIOSH	National Institute for Occupational Safety and Health
NRTL	Nationally Recognized Test Laboratory
NS O&M	Norfolk Southern Corporation, a rail-based freight transportation company
	Operating and maintenance
OSD	Out-of-seam dilution
P&L P.E.	Profit and loss before tax
P.E. PJLA	Professional Engineer
Preliminary	Perry Johnson Laboratory Accreditation, Inc.
Feasibility Study	"as a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a qualified person
	has determined (in the case of underground mining) a preferred mining method, or
	in the case of surface mining) a pit configuration, and in all cases has determined ar effective method of mineral processing and an effective plan to sell the product. Th
	study's financial analysis must have the level of detail necessary to demonstrate, at
	the time of reporting, that extraction is economically viable. In addition, as noted in
	the proposed definition of a pre-feasibility study, while a pre-feasibility study is less
	comprehensive and results in a lower confidence level than a feasibility study, a pre-
	feasibility study is more comprehensive and results in a higher confidence level that
	an initial assessment."
Property(ies)	Bituminous coal deposits located in Boone, Logan, and Wyoming Counties, West
,	Virginia.
QP	Qualified Person
Qualified Person	"a person who is a mineral industry professional with at least five years of relevan
	experience in the type of mineralization and type of deposit under consideration
	and in the specific type of activity that person is undertaking on behalf of the
	registrant. In addition, the proposed definition requires a qualified person to be an
MARSHALL MILLER & AS	ssociates, Inc. 2

	eligible member or licensee in good standing of a recognized professional organization at the
	time the technical report is prepared".
RECs	Recognized Environmental Conditions
Resource	The Resource Database is established by the collection, validation, recording, storir
Database	and processing of data and forms the foundation necessary for the estimation of Mineral Resource and Mineral Reserve.
	A quality assurance and quality control program is essential and must be establishe to govern the collection of all data. In reporting, a Mineral Resource must meet the minimum requirement of "reasonable prospects for economic extraction". This will require the concurrent collection and storage of preliminary economic, mining, metallurgical, environmental, legal and social data and other information for use in the estimation of MRMR.
	The Resource Database will include both "primary" (observation and measurement and "interpreted" data. It is recommended that data be stored digitally, using a documented, standard format and a reliable storage medium that allows for easy and complete retrieval of the data.
ROM	Run-of-mine
S-К 1300	United States Securities and Exchange Commission Regulation S-K 1300 Modernization of Property Disclosures
SEC	U.S. Securities and Exchange Commission
SMCRA	Surface Mining Control and Reclamation Act of 1977 is the primary federal law that regulates the environmental effects of coal mining in the United States.
Strip Ratio	Represented by bcm of overburden to recoverable coal tonnes
tph	tonnes per hour
TRS	Technical Report Summary
USA	United States of America
USFW	United States Fish and Wildlife
USGS	United States Geologic Survey
VALMIN Code	Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets

APPENDIX



INITIAL ECONOMIC ASSESSMENT FOR RESOURCES EXCLUSIVE OF RESERVES



Appenaix D: Logan Complex

	Seam:	No. 2 Gas	No. 2 Gas	No. 2 Gas	Lower Powellton	Lower Powellton	Peerless	Beckley	Middle Cedar Grove	Lower Winifrede	Upper Powellton
	Jeann.	Logan	Logan	Logan	Logan	Logan	Logan			Logan	
			Logan	Logan				Logan	Logan		Logan
	Area:	Toney Fork #2 (D)	Pardee (D)	Sugar Camp (D)		Powellton Block B	N2G Peerless	Beckley	Middle Cedar Grove	Lower Winifrede	Powellton No. 1
In-Place Resource Tonnes (not adjusted for Q4 2023 Depletion)	Aleu.	4,768,997	9,101,631	2,423,394	8,102,010	2,650,651	6.771.674	26,497,662	1,362,175	1,208,867	2,495,052
Potentially Recoverable Tonnes*	_	1,110,858	2,435,033	532,346	2,613,663	855,085	1,444,126	6,890,822	354,239	283,243	593,782
Mining Method		Deep - CM	Deep - CM	Deep - CM	Deep - CM	Deep - CM	Deep - CM	Deep - CM	Deep - CM	Deep - CM	Deep - CM
Assumed Sales Realization at Plant**		\$ 154	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154	\$ 154
Inital Capex Estimate to Access Resources***		\$ 10,000,000	\$ 10,000,000	\$ 1,000,000	\$ -	\$ 10,000,000	\$ 12,000,000	\$ 59,000,000	\$ 10,000,000	\$ 10,000,000	\$ -
Direct Mining Costs:							1				
Labor****		\$ 41.53	\$ 45.28	\$ 56.61	\$ 43.65	\$ 45.57	\$ 59.08	\$ 39.24	\$ 42.16	\$ 22.94	\$ 36.51
Supplies, Excluding Roof Control		\$ 9.15	\$ 9.98	\$ 12.47	\$ 9.62	\$ 10.04	\$ 13.01	\$ 8.64	\$ 9.29	\$ 5.05	\$ 8.04
Roof Control		\$ 10.46	\$ 11.40	\$ 14.25	\$ 10.99	\$ 11.47	\$ 14.87	\$ 9.88	\$ 10.61	\$ 5.78	\$ 9.19
M&R		\$ 4.66	\$ 5.47	\$ 7.00	\$ 5.37	\$ 5.69	\$ 6.75	\$ 5.33	\$ 5.17	\$ 2.40	\$ 4.95
Power		\$ 2.33	\$ 2.73	\$ 3.50	\$ 2.68	\$ 2.85	\$ 3.37	\$ 2.66	\$ 2.59	\$ 1.20	\$ 2.47
Other		\$ 2.33	\$ 2.73	\$ 3.50	\$ 2.68	\$ 2.85	\$ 3.37	\$ 2.66	\$ 2.59	\$ 1.20	\$ 2.47
Total Direct Cash Costs		\$ 70.46	\$ 77.59	\$ 97.33	\$ 74.99	\$ 78.47	\$ 100.47	\$ 68.42	\$ 72.41	\$ 38.58	\$ 63.63
Transporation, Washing, Environmental & G&A Costs											
Coal Prep****		\$ 6.99	\$ 8.20	\$ 10.49	\$ 8.05	\$ 8.54	\$ 10.12	\$ 7.99	\$ 7.76	\$ 3.61	\$ 7.42
Materials Handling		\$ 1.65	\$ 1.65	\$ 1.65	\$ 1.65	\$ 1.65	\$ 1.65	\$ 1.65	\$ 1.65	\$ 1.65	\$ 1.65
Raw Coal Trucking*****		\$ 4.95	\$ 7.25	\$ 9.27	\$ 4.76	\$ 5.05	\$ -	\$ 3.33	\$ 5.04	\$ 4.03	\$ 8.29
Clean Coal Trucking		\$ 1.38	\$ 1.38	\$ 1.38	\$ 1.38	\$ 1.38	\$ 1.38	\$ 1.38	\$ 1.38	\$ 1.38	\$ 1.38
Enviro*****		\$ 0.39	\$ 0.39	\$ 0.39	\$ 0.39	\$ 0.39	\$ 0.39	\$ 0.39	\$ 0.39	\$ 0.39	\$ 0.39
G&A		\$ 1.98	\$ 1.98	\$ 1.98	\$ 1.98	\$ 1.98	\$ 1.98	\$ 1.98	\$ 1.98	\$ 1.98	\$ 1.98
Total Transporation, Washing, Environmental & G&A Costs:		\$ 17.34	\$ 20.85	\$ 25.16	\$ 18.22	\$ 18.99	\$ 15.53	\$ 16.72	\$ 18.21	\$ 13.04	\$ 21.11
Indirect Cash Costs			1								
Royalty		\$ 10.80	\$ 10.80	\$ 10.80	\$ 10.80	\$ 10.80	\$ 10.80	\$ 10.80	\$ 10.80	\$ 10.80	\$ 10.80
Black Lung Excise Tax		\$ 0.61	\$ 0.61	\$ 0.61	\$ 0.61	\$ 0.61	\$ 0.61	\$ 0.61	\$ 0.61	\$ 0.61	\$ 0.61
SMCRA		\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.13
State Severance		\$ 7.72	\$ 7.72	\$ 7.72	\$ 7.72	\$ 7.72	\$ 7.72	\$ 7.72	\$ 7.72	\$ 7.72	\$ 7.72
Property Tax & Insurance		\$ 0.55	\$ 0.55	\$ 0.55	\$ 0.55	\$ 0.55	\$ 0.55	\$ 0.55	\$ 0.55	\$ 0.55	\$ 0.55
Total Indirect Cash Costs		\$ 19.81	\$ 19.81	\$ 19.81	\$ 19.81	\$ 19.81	\$ 19.81	\$ 19.81	\$ 19.81	\$ 19.81	\$ 19.81
Non Cash Costs											
Amoritiztion of Development Capital		\$ 9.00	\$ 4.11	\$ 1.88	\$ -	\$ 11.69	\$ 8.31	\$ 8.56	\$ 28.23	\$ 35.31	\$ -
Depreciation of Initial Equipment and Sustaining Capital		\$ 7.42	\$ 7.42	\$ 7.42	\$ 7.42	\$ 7.42	\$ 7.42	\$ 7.42	\$ 7.42	\$ 7.42	\$ 7.42
Depletion		\$ 1.10	\$ 1.10	\$ 1.10	\$ 1.10	\$ 1.10	\$ 1.10	\$ 1.10	\$ 1.10	\$ 1.10	\$ 1.10
Total Non Cash		\$ 17.53		\$ 10.40			\$ 16.83	\$ 17.09		\$ 43.83	\$ 8.52

Logan Initial Economic Assessment Resources Exclusive of Reserves 01-11-24 (M62206).xlsx

Page 1 of 2

Appenaix D: Logan Complex

Seam:	No. 2 Gas Logan Toney Fork #2		No. 2 Gas Logan	Logan		Lower Powellton Logan Lower Powellton		Lower n Powellton Logan n Powellton Block		Peerless Logan		Beckley Logan		Middle Cedar Grove Logan Middle Cedar		Lower Winifrede Logan Lower		Upper Powellton Logan Powellton	
Area:	(D)	_	Pardee (D)	Sugar Cam	p (D)	Block A		В	N2	2G Peerless		Beckley	_	Grove	N	/inifrede	_	No. 1	
Total Cash Cost	\$ 107.6	1 :	\$ 118.25	\$ 14	2.30	\$ 113.01	\$	117.27	\$	135.80	\$	104.95	\$	110.43	\$	71.42	\$	104.55	
EBITDA	\$ 46.7	2	\$ 36.07	\$ 1	2.03	\$ 41.31	\$	37.05	\$	18.52	\$	49.38	\$	43.90	\$	82.90	\$	49.77	
Fully Loaded Cost	\$ 125.1	.3	\$ 130.88	\$ 15	2.70	\$ 121.54	\$	137.49	\$	152.64	\$	122.03	\$	147.18	\$	115.25	\$	113.07	
Fully Loaded P&L	\$ 29.1	.9	\$ 23.44	\$	1.62	\$ 32.79	\$	16.83	\$	1.69	\$	32.29	\$	7.14	\$	39.07	\$	41.25	
Passes Resource Iniital Economic Assessment?	YES		YES	YES		YES		YES		YES		YES		YES		YES		YES	

*Potentially recoverable tons are calculated by applying appropriate modifying factors to in-place resource tonnages **Sales relization represents estimated long range sales price provided by Coronado. ***No initial capital required. Resources are accessible from existing Buchanan Mine. ****Labor rates are driven based off of super section productivities assuming 250 feet per unit shift per section. ****Processing assumed to occur at Buchanan plant, hoisted directly to plant. *****Environmental costs assumed to include permiting, outfall maintenance, etc.

Logan Initial Economic Assessment Resources Exclusive of Reserves 01-11-24 (M62206).xlsx

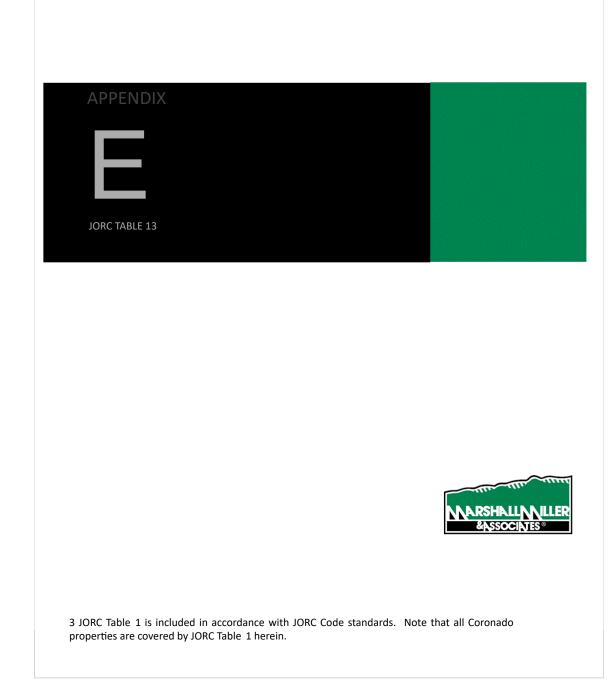
Page 2 of 2

Logan Surface Resources Exclusive of Reserves (per Metric Tonne) Appendix D: Logan Complex

	 rmal Area lines (S)
In-Place Resource Tonnes (not adjusted for Q4 2023 Depletion)	13,219,403
Potentially Recoverable Tonnes*	12,458,076
Mining Method	Area
Assumed Sales Realization at Plant**	\$ 83
Inital Capex Estimate to Access Resources***	\$ -
Total Direct Cash Costs****	\$ 50.27
Transporation, Washing, Environmental & G&A Costs:	
Materials Handling	\$ 1.65
Coal Prep****	\$ 1.76
Raw Coal Trucking*****	\$ -
Clean Coal Trucking	\$ 0.55
Enviro*****	\$ 0.39
G&A	\$ 1.98
Total Transporation, Washing, Environmental & G&A Costs:	\$ 6.34
Indirect Cash Costs	
Royalty	\$ 7.44
Black Lung Excise Tax	\$ 0.28
SMCRA	\$ 0.31
State Severance	\$ 4.16
Property Tax & Insurance	\$ 0.55
Total Indirect Cash Costs	\$ 12.73
Non Cash Costs	
Amoritiztion of Development Capital	\$ -
Depreciation of Initial Equipment and Sustaining Capital	\$ 7.42
Depletion	\$ 1.10
Total Non Cash	\$ 8.52
Total Cash Cost	\$ 69.34
EBITDA	\$ 13.33
Fully Loaded Cost	\$ 77.87
Fully Loaded P&L	\$ 4.81
Passes Resource Iniital Economic Assessment?	YES

Logan Initial Economic Assessment Resources Exclusive of Reserves 01-11-24 (M62206).xlsx

Page 1 of 1



Section 1 Sampling Techniques and Data

Commentary

- Most of the coal samples have been obtained from the Properties by subsurface exploration using core drilling techniques. The protocol for preparing andtesting the samples has varied over time and is not well documented for the older holes drilled on the Properties.
- Typical USA core drilling sampling technique is for the coal core sample, once recovered from the core barrel, to be described then wrapped in a sealed plastic sleeve and placed into a covered core box, which is the length of the sample so that the core can be delivered to a laboratory in relatively intact condition and with original moisture content.
- It is reasonable to assume, given the sophistication level of the previous operators, that these samples were generally collected and processed under industry bestpractices. This assumption is based on MM&A's familiarity with the operating companies and the companies used to perform the analysis.
- > Some of the drill holes were air rotary bored and no coal core samples were collected. Seam thickness for rotary-drilled bore holes is verified by calibrated downhole gamma-density logs.
- Coal samples that were deemed by MM&A geologists to be unrepresentative were not used for statistical analysis of coal quality, as documented in the tabulations. A representative group of drill hole samples from the Properties were then checked against the original drill laboratory reports to verify accuracy and correctness.
- The Properties have been extensively explored by subsurface drilling efforts carried out by numerous entities, most of which were completed prior to acquisition by Coronado. The majority of the drilling was accomplished using vertical continuous (diamond) coring or air rotary methods.
- > Core drilling methods utilize NX-size (5.4 centimeter) or similar-sized core cylinders to recover core samples, which can be used to delineategeologic characteristics, and for coal quality testing and geotechnical logging.
- > Data for the rotary drilled holes is mainly derived from downhole geophysical logs, which are used to interpret coal and rock thickness and depth since logging of the drill cuttings is not reliable.
- > Geophysical logging was performed on many of the holes, either by Geological Logging Systems (a division of MM&A), other geophysical logging contractors, and on those properties acquired from CONSOL geophysical logging was oftenperformed by CONSOL's in-house logging services.
- > Where available, core recovery thickness of coal samples was reconciled with the thickness interpreted from geophysical logs.
- > Core recovery of the older coal samples lacking geophysical logs is sometimes not well-documented: however, when the laboratory results for such holes had anomalous values, the data was disqualified and not used.

 Method of recording and assessing core and chip sample recoveries and results assessed.

oriented and if so, by what method, etc.).

 Measures taken to maximise sample recovery and ensure representative nature of the samples.

IORC Code explanation

meaning of sampling.

detailed information.

>

>

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 downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad

Include reference to measures taken to ensure sample representivity and the

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 (e.g. 'reverse circulation drilling was used to obtain 1 m

samples from which 3 kg was pulverised to produce a 30 g charge for fire

assay'). In other cases, more explanation may be required, such as where there

is coarse gold that has inherent sampling problems. Unusual commodities or

mineralisation types (e.g. submarine nodules) may warrant disclosure of

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

appropriate calibration of any measurement tools or systems used

> 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.

MARSHALL MILLER & ASSOCIATES, INC.

Criteria

Sampling

techniques

Drilling

techniques

Drill sample

recovery

Criteria	JORC Code explanation	Commenta
Logging	> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	> A wide variety of core-logging techniques e core holes, the primary data source is a driller, in some cases supplemented by a
	 Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. 	geologist.> The logging of core thickness and depth is
	> The total length and percentage of the relevant intersections logged.	coal seams, logging of rock strata type is qualitative.
Sub-sampling	> If core, whether cut or sawn and whether quarter, half or all core taken.	> Typical US practice in the Appalachian Basi
techniques and sample	> If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	core samples are not sawn or subsampled (s the entire seam is mined and co-mingled). I
preparation	 For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	analysized.Oftentimes, core for surface-mineable coal
	 Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	 the various coal and rock layers (plies). MM&A has exercised diligence to use only to
	 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. 	the coal quality parameters for the appropr
	 Sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	
Quality of	> The nature, quality and appropriateness of the assaying and laboratory	> Sample analysis was typically carried out by
assay data and	procedures used and whether the technique is considered partial or total.	> Standard procedure upon receipt of core sa
laboratory tests	> For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and	the depth and thickness of the sample, representative of the operating compan
	model, reading times, calibrations factors applied and their derivation, etc. > Nature of quality control procedures adopted (e.g. standards, blanks,	accordance with procedures defined unde including, but not limited to; washability (/
	duplicates, external laboratory checks) and whether acceptable levels of	(ASTM D4239); Btu/lb. (ASTM D5865); vo
	accuracy (i.e. lack of bias) and precision have been established.	 Index (FSI) (ASTM D720). Geophysical tools are calibrated by the validated using a calibration hole.
Verification of	> The verification of significant intersections by either independent or alternative	 All coal intersection data used to general
sampling and	company personnel.	referenced with the lithological and geophy
assaying	> The use of twinned holes.	> Laboratory quality was adjusted from dry b
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	 product moisture. Coal guality results were verified by spot-
	 Discuss any adjustment to assay data. 	MM&A before inclusion into the geologic m
Location of	> Accuracy and quality of surveys used to locate drill holes (collar and down-hole	> Due to the long history of exploration by v
data points	surveys), trenches, mineworkings and otherlocations used in Mineral Resource estimation.	variety of survey techniques exist for docur of the older exploration drill holes appear
	> Specification of the grid system used.	more recently completed drill holes are
	 Quality and adequacy of topographic control. 	Positioning System (GPS) units.
		 Grid systems used are typically the State Pla property.
		 Topography is based on either the USGS top on recent aerial photogrammetry as necess

ntary

- s exist for the properties. For many of the a generalized lithology description by the a more detailed core log completed by a
- is quantitative. With the exception of the more subjective and best considered as
- sin is that core samples for deep mineable (since seams are not of great thickness and). The entire coal interval drilled is generally
- al seams are bench sampled separately by
- y those analyses that are representative of priate mining type for each sample.
- by accredited US laboratories.
- samples by the testing laboratory is to log e, then perform testing as specified by a nary. Each sample is then analyzed in der **ASTM International (ASTM)** standards v (ASTM D4371); ash (ASTM D3174); suffur volatile matter (ASTM D3175); Free Swell
- e logging company and where possible,
- erate the geologic model has been cross hysical logs by MM&A.
- basis to reflect the anticipated marketable
- t-check with laboratory analysis sheets by model and use in the resource estimate. various parties on the Properties, a wide
- umentation of data point locations. Many ar to have been located by ground survey; e often located by high-resolution Global
- Plane Coordinate System pertinent to each
- opographic 7.5-minute quadrangle mapsor essary (subject to availability). on recent aerial photogrammetry as ne

Criteria IORC Code explanation Commentary Data spacing for reporting of Exploration Results. Spacing and distribution of data point information may vary from seam to seam Data spacing > Whether the data spacing and distribution is sufficient to establish the degree within each mining area. The areas estimated for coal resource and coal reserve and distribution of geological and grade continuity appropriate for the Mineral Resource and tonnes have been limited so that the data spacing and distribution is sufficient to Ore Reserve estimation procedure(s) and classifications applied. establish the degree of geological continuity appropriate for the estimation and Whether sample compositing has been applied. classification of the coal tonnes. MM&A performed a geostatistical analysis using the Drill Hole Spacing Analysis (DHSA) method. This method attempts to quantify the uncertainty of applying a measurement from a central location to increasingly larger square blocks and provides recommendations for determining the distances between drill holes for measured, indicated, and inferred resources. All of the coal resource tonnes are in the measured, indicated, and inferred categories, and all of the coal reserve tonnes are in the proved and probable categories in accordance with the JORC Code and SEC standards Orientation of Whether the orientation of sampling achieves unbiased sampling of possible > Drill holes have been vertically drilled. No downhole deviation logs have been data in 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 collected and it is therefore not known if the drill holes have deviated away from vertical. Based on the relatively shallow seam depths, any deviation is expected to relation to geological mineralised structures is considered to have introduced a sampling bias, this be insignificant and immaterial to the geologic characterization of the Property. structure should be assessed and reported if material. The dip of the coal seams is relatively minor, generally 1-2 degrees, and not a material issue for representation of seam thickness or quality. Sample handling procedures employed by explorationists follow typical US protocol Sample The measures taken to ensure sample security. security and should be adequate to ensure sample security. Audits or The results of any audits or reviews of sampling techniques and data. MM&A has reviewed all available geological information for the Properties in > reviews developing the geologic model. Only that data deemed suitable has been used for the purpose of generating the resource and reserve estimates.

Section 2 Reporting of Exploration Results

Criteria JORC Code explanation Mineral Type, reference name/number, location and ownership including agreements tenement and or material issues with third parties such as joint ventures, partnerships, land tenure overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. status The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.

- Commentary
- The Coronado coal resources are located within the United States of America in the states of Virginia; West Virginia; and Pennsylvania. Control of these Properties is governed by multiple agreements.
- MM&A has not carried out separate title verification for the coal properties and has not verified leases, deeds, surveys or other property control instruments pertinent to the subject resources.
- Coronado has represented to MM&A that it controls the mining rights to the coal deposits as shown on its property maps, and MM&A has accepted these as being a true and accurate depiction of the mineral rights controlled by Coronado. The TRS assumes the properties are developed under responsible and experienced management.
- There are no known legal or environmental encumbrances that would impede > development of the subject coal reserves.

MARSHALL MILLER & ASSOCIATES, INC.

Criteria		JORC Code explanation		Commentary
Exploration done by other parties	>	Acknowledgment and appraisal of exploration by other parties.	>	The Properties have been extensively explored by subsurface drilling efforts carried out by numerous entities, most of which were completed prior to acquisition by Coronado.
			>	This exploration work was generally performed to prevailing US best practice standards and deemed adequate for the purposes of this TRS.
Geology	>	Deposit type, geological setting and style of mineralisation.	>	The Coronado coal resources are located within the Northern and Central Appalachian Coal Basins.
			>	The coal deposits are Carboniferous in age, being of the Pennsylvanian system with. sedimentary, stratigraphic deposition.
			>	Seam of economic significance typically range between 0.3 meters and 1.8 meters in thickness, with relatively little structural deformation.
			>	Regional structure is typically characterized by gently dipping strata to the northwest at less than one percent.
Drill hole Information	>	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	>	MM&A reviewed and entered all pertinent data into a digital geologic database for each Coronado property. The database consists of thousands of data records, which include drill hole and supplemental coal seamthickness measurements from outcrop
	?	easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the	>	and mine exposures. All drill holes in the database are provided with a collar elevation and the State Plane
	8	drill hole collar	-	Coordinate System easting and northing coordinate.
	?	dip and azimuth of the hole	>	After MM&A confirmed proper coal seam thickness and correlation, the seam data
	?	down hole length and interception depth		was modelled and compiled into coal resource maps.
	2	hole length.	>	The maps are provided in the TRS and show drill hole locations; however, a tabulation
	>	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.		of the thousands of individual data records is not practical to include.
Data aggregation methods	>	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.	>	If a coal seam has been bench sampled, the individual analyses for the coal plies would be weight-averaged to represent the total of recoverable coal to be included in the quality model.
methods	>	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such	>	Coal quality summary results have been documented in the TRS. Average coal quality on a per-seam basis is used to represent the coal resources within a given mining
		aggregation should be stated and some typical examples of such aggregations		area.
		should be shown in detail.	>	Average coal quality for each Coronado complex is provided in Tables 1-1, 1-2 and 1-
	>	The assumptions used for any reporting of metal equivalent values should be		3 of this TRS.
Relationship	>	clearly stated.	> >	No other data aggregations methods are used. Coal thickness values from all coal intersections and down hole geophysical logs are
between		These relationships are particularly important in the reporting of Exploration Results.	,	considered to be vertical thicknesses. Seam dip of approximately 2.0 to 3.0 degrees
mineralisation	>	If the geometry of the mineralisation with respect to the drill hole angle is		has little effect on the vertical thickness of the seam.
widths and	-	known, its nature should be reported.		
intercept	>	If it is not known and only the down hole lengths are reported, there should		
lengths		be a clear statement to this effect (e.g. 'down hole length, true width not known').		
Diagrams	>	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should	>	Diagrams and maps showing the coal seam intercepts are presented in the TRS.

4

Criteria		JORC Code explanation include, but not be limited to a plan view of drill hole collar locations and		Comme
Balanced reporting	>	appropriate sectional views. 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.	> >	All of the available, qualified exploral tabulations, maps, and diagrams for this Both coal thickness and quality data a sufficient within the resource areas. T confidence in the geologic interpretation based on the available data and the tech
Other substantive exploration data	>	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	>	Informational material available from the State Surveys was used to assist in the Re
Further work	>	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	>	Further work is expected to include addit quality analyses, and coal property acqui
		Section 3 Estimation and Repo (Criteria listed in the preceding sec		
Criteria		JORC Code explanation		Com
Database integrity	>	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral	>	MM&A confirmed coal seam thickness a modelling. Representative records were
	>	Resource estimation purposes. Data validation procedures used.	>	Geophysical logs were used wherever av and to verify proper seam thickness mea
Site visits	>	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	>	MM&A is very familiar with the Prope evaluations of the Property and adjoinin
	>	If no site visits have been undertaken indicate why this is the case.	>	A site visit to Mon Valley was conducted no facilities or surface expression of the areas for mine facilities were viewed.

Geological Confidence in (or conversely, the uncertainty of) the geological interpretation of the > interpretation 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.
- no facilities or surface expression of the coal reserves on the Property. Planned surface areas for mine facilities were viewed. Due to the relative structural simplicity of the deposits and the reasonable continuity of the abular coal beds, the principal geological interpretation necessary to define the geometry of the coal deposits is the proper modeling of their thickness and elevation.

MM&A is very familiar with the Properties and has conducted multiple site visits and evaluations of the Property and adjoining properties throughout the years. A site visit to Mon Valley was conducted as recently as December 2023, although there are

Commentary MM&A confirmed coal seam thickness and correlations in databases used for coal deposit

modelling. Representative records were spot-checked for data entry validation. Geophysical logs were used wherever available to assist in confirming the seam correlation and to verify proper seam thickness measurements and recovery of coal samples.

Commentary

tabulations, maps, and diagrams for this TRS.

quality analyses, and coal property acquisition.

>

All of the available, qualified exploration data has been included within the

Both coal thickness and quality data are deemed by MM&A to be reasonably sufficient within the resource areas. Therefore, there is a reasonable level of confidence in the geologic interpretations required for coal resource determination

Informational material available from the U.S. Geological Survey and the respective

Further work is expected to include additional exploration, geotechnical testing, coal

based on the available data and the techniques applied to the data.

State Surveys was used to assist in the Resource estimate.

- Both coal thickness and quality data are deemed by MM&A to be reasonable within the > resource areas.
- Therefore, there is a reasonable level of confidence in the geologic interpretations required for coal resource determination based on the available data and the techniques applied to > the data.

Criteria		JORC Code explanation		Commentary
Dimensions	>	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	> > >	The subject coalresource areas mostly exist in discreet, individual deposits of highly variable dimensions, shapes and depth below the ground surface. Such factors are best depicted in the maps contained in the TRS. Details of the parameters are cited within the TRS and included in the table of Cut-off Parameters listed in Section 11.1 of the TRS.
Estimation and modelling techniques	> > > > > > > >	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. 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 about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of bais 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.	~ ~ ~ ~ ~ ~ ~ ~ ~ ~	 Geological data was imported into Carlson Mining® (formerly SurvCADD®) geological modelling software in the form of Microsoft® Excel files incorporating, drill hole collars, seam and thickness picks, bottom seam elevations and raw and washed coal quality. These data files were validated prior to importing into the software. Once imported, a geologic model was created. The geological model was verified and reviewed. Resources were estimated by defining seam thickness at each point of observation and by defining resource confidence arcs around the points of observation. Points of observation for Measured and Indicated confidence arcs were defined for all drill holes that intersected the seam. As prescribed by the common United States classification system the following distances from points of observation were used to define the corresponding Resource category arcs: Inferred Resources – 3,960 feet (1.2 kilometers) Measured Resources – 1,320 feet (0.4 kilometers) Measured Resources – 1,320 feet (0.4 kilometers) Measured ageostatistical analysis test of the Coronado data sets using the Drill Hole Spacing Analysis (DHSA) method to justify coal resource confidence levels. Based on MM&A's analysis, it would be possible to extend the measured, indicated and inferred arcs slightly beyond historically accepted practices due to consistent geological settings.
Moisture	>	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	> >	conservatism in the coal classification. Coal resource tonnes are presented on a dry, in-situ basis. Reserve tonnes are presented on a moist basis at anticipated product moisture ranging from 4.0 to 6.0 percent. Moisture content based on historic analyses of shipped coal from the region.
Cut-off Parameters	>	The basis of the adopted cut-off grade(s) or quality parameters applied.	> > >	The cut-off parameters were tailored for each of the Coronado properties to be in accordance with mining/ processing capabilities and market conditions prevalent at each operation. Examples include minimum recoverable coal thickness, acceptable ash content and wash recovery, and manageable overburden to coal ratio for surface mineable coal. Details of the parameters are cited within the TRS and included in the table of Cut-off Parameters listed in Section 11.1 of this TRS. These cut-off parameters have been developed by MM&A based on its experience with the Coronado properties and other mining operations of the Central and Northern Appalachian coal basin. This experience includes technical and economic evaluations of numerous

Criteria		JORC Code explanation		Commentary
				properties in the region for the purposes of determining the economic viability of the subject coal reserves.
Mining factors or assumptions	>	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	> > >	Mining factors such as dilution, mining and washing recovery are variable and have been applied at the coal deposits at each operation based on site-specific characteristics. Details of the factors are cited within the TRS. Factors that would typically preclude conversion of a coal resource to coal reserve include the following: inferred resource classification; absence of coal quality; poor mine recovery; lack of access; insufficient exploration; or uncontrolled surface property for areas of proposed for surface mining. While such factors were used to preclude the conversion of a very limited number of coal resources to coal reserves in this report, the extensive history of mining on the Properties would suggest that there are reasonable prospects for eventual economic extractions of all coal resources under favorable market conditions.
Metallurgical factors or assumptions	>	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	> > >	The products mined from coal resources controlled by Coronado can be sold into high-, mid- , and low-volatile metallurgical coal markets because of their inherent quality characteristics. Run-of-mine production is washed at the coal preparation plants as needed for quality control. Coronado may blend production from multiple sources to manage ash and sulfur content along with the rheological and petrographic characteristics of the shipped products.
Environmental factors or assumptions	>	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	> > >	A study completed on behalf of Coronado for Mon Valley has identified a Preferred Site for refuse disposal at Pangburn with capacity of 22.6 million cubic meters. Estimated requirements for Pangburn and Shaner combined is 29.7 million tonnes or approximately 13.2 million cubic meters. Permitting for such a facility is anticipated to be achievable. MM&A completed a Limited Phase I Environmental Site Assessment (ESA) on the Buchanan property in April 2016, and on the Logan County and Greenbrier Properties in May 2017 on behalf of Coronado. Coronado reports not having conducted such a study since the MM&A studies. The ESAs completed by MM&A included a site inspection, review of historical records, a database search of State andFederal regulatory records and interviews toidentify potential recognized environmental conditions (RECs) that may create environmental liability for the sites. MM&A identified one REC at Greenbrier associated with stained soil and gravel near a fueling and maintenance area. Coronado reported to MM&A that satisfactory clean-up efforts were completed at Greenbrier. Based on these former ESAs completed byMM&A, it is MM&A's opinion that Coronado has a generally typical coal industry record of compliance with applicable mining, water quality, and environmental laws. Estimated costs for mine closure, including water quality, and environmental laws.
Bulk density	>	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	>	Laboratory derived seam densities measured in specific gravity were used where available. As needed, these data were supplemented by estimated seam density values based on the relative proportion of coal and non-coal material within the seam (typically at 1.30 and 2.25 specific gravity, respectively).

Criteria		JORC Code explanation		Commentary
	>	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.	>	Average seam density was determined for each coal deposit and used to convert coal volumes into coal tonnage estimates.
	>	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.		
Classification	>	The basis for the classification of the Mineral Resources into varying confidence categories.	>	The Resource has been classified based on suitable distances from points of observations prescribed in the common United States classification system.
	>	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in	>	The use of the United States standards is appropriate and customary for this resource jurisdiction and deposition type.
		continuity of geology and metal values, quality, quantity and distribution of the data).	>	MM&A performed a geostatistical analysis test of the Coronado data sets using the Drill Hole Spacing Analysis (DHSA) method.
	>	Whether the result appropriately reflects the Competent	>	Based on MM&A's analysis, it would be possible to extend the measured, indicated and
	>	Person's view of the deposit.		inferred arcs slightly beyond historically accepted practices due to consistent geological settings. The QP's have elected not to extend arc distances, introducing a level of conservatism in the coal classification.
			>	All relevant factors have been accounted for and reflect the Competent Person's view of the deposit.
Audits or reviews	>	The results of any audits or reviews of Mineral Resource estimates.	>	MM&A completed prepared a statement of coal resources and reserves for the Properties in accordance with the JORC Code as of December 31, 2017. MM&A also subsequently updated the estimate of resources and reserves for depletion as of December 31, 2018, December 31, 2019, December 31, 2020, December 31, 2021, and December 31, 2022.
			>	MM&A performed a previous audit of the Properties in year 2017 for Coronado based on U.S. Securities and Exchange Commission (SEC) Industry Guide 7 and USGS Circular 891 standards.
			>	Earlier audits were performed by various independent consultants for predecessors-in-title to Coronado and at various levels of detail depending on the clients concerns and the allotted time for completion. Previous audits and reviews defined the primary coal resource areas and estimated the recoverable tonnes for each seam based on the expected mining methods.
			>	Additionally, MM&A has performed proprietary evaluations for predecessors-in-title to Coronado, which encompass portions of the Properties included in this TRS.
Discussion of relative	>	Where appropriate a statement of the relative accuracy and confidence level in the	>	The relative accuracy of and confidence in the coal tonnage and quality estimates provided
accuracy/ confidence		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	>	herein are judged to be in conformance with current industry best-practices. The representation of average coal quality characteristics should be understood to represent a reasonably representative sampling that is generally indicative of coal quality and does not represent a statistically rigorous approach to coal quality modeling.
		discussion of the factors that could affect the relative accuracy and confidence of the estimate.	>	Resource estimation has been completed using standard coal estimation methods which are deemed appropriate for this deposit.
	>	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.		

8

Section 4 Estimation and Reporting of Ore Reserves (Criteria listed in the preceding section also apply to this section.)

	JORC Code explanation		Commentary
>	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	>	The coal resource estimate was prepared as part of the report Coronado Global Resour Inc. Statement of Coal Resources and Reserves in Accordance with JORC Code and Unit States SEC Standards as of December 31, 2023 – Northern and Central Appalachian C Basins – Virginia, West Virginia and Pennsylvania, USA – February 2024 prepared by MM. The resource estimation criteria were developed by MM&A based on the capabilities of mining equipment used within the production model and on industry-accepted standa to assure that the basic geologic characteristics of the coal resources are in reasona conformity with those to be mined and marketed by Coronado.
>	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	>	Coal resources generally are reported inclusive of the coal reserves. In some cas resources are reported in addition to coal reserves. Tables 1-1 and 11-3 of the TRS clee identify resources "inclusive of mine plan" from which coal reserves were estimated alc with those resources "exclusive of mine plan" from which no reserves were estimated.
>	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	> >	MM&A is veryfamiliar with the Properties and has conducted multiple site visits and rese evaluations throughout the years. A site visit was conducted to Mon Valley as recently as December 2023 to assess propo surface mine facilities areas. Currently there are no mine facilities or surface expression the coal reserve on the Property.
>	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	>	A preliminary feasibility LOM plan was prepared by MM&A for active and proposed min
>	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.	> > >	This geologic evaluation conducted in accordance with JORC and SEC standards and conjunction with the preliminary feasibility study is sufficient to conclude that the surfar highwall miner and underground coal reserves identified on the Properties are economic mineable under reasonable expectations of market prices for thermaland metallurgical products, estimated operation costs, and capital expenditures. The pre-feasibility financial models, prepared by MM&A for this TRS, was developed to the economic viability of each coal resource area. Proved and probable coal reserve were derived from the defined in-situ coal resource.
>	The basis of the adopted cut-off grade(s) or quality parameters applied.	> > >	considering relevant processing, economic (including independent estimates of cap revenue and cost, marketing, legal, environmental, socioeconomic, and regulatory facto The cut-off parameters were tailored for each of the Coronado properties to be accordance with mining/ processing capabilities and market conditions prevalent at e operation. Examples include minimum recoverable coal thickness, acceptable ash content and w recovery, and manageable overburden to coal ratio for surface mineable coal. Details of the parameters are cited within the TRS and included in the table of Cut Parameters listed in Section 11.1 of this TRS.
	> > >	 > 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. > Comment on any site visits undertaken by the Competent Person and the outcome of those visits. > 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. 	 > 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. > Comment on any site visits undertaken by the Competent Person and the outcome of those visits. > The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. > The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. > The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. > The basis of the adopted cut-off grade(s) or quality parameters applied.

Criteria	JORC Code explanation		Commentary
			numerous properties in the region for the purposes of determining the economic viability of the subject coal reserves.
Mining factors or > assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	> / > /	After validating coal seam data and establishing correlations, the thickness and elevation for seams of economic interest were used to generate a geologic model. A pre-feasibility LOM plan was prepared by MM&A for active and proposed mines. MM&A prepared mine projections and production timing forecasts based on coal seam characteristics. Production timing was carried out from 2024 to depletion (exhaustion) of
>	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.	<pre></pre>	the coal reserve areas. The room-and-pillar mining method was selected to model the underground mining resources, utilizing continuousminers for coalextraction, shuttle carsfor production section haulage and roof bolters for roof control, with the exception that the Buchanan Mine also uses longwall shearers, armored face conveyors, and hydraulic self-advancing roof support. The resource areas located above drainage are relatively small and often have irregular boundaries. The Buchanan Mine in Buchanan County, Virginia is the only active longwall mine currently being operated by Coronado. The Coronado underground mining resource areas which are located above-drainage require an access road and mine access development along the outcrop, whereas below- drainage mines are accessed via shaft or slope based on other proposed surface infrastructure locations and/or surface property control. The surface mining method selected utilizes highly productive hydraulic shovels, front-end loaders, large tractors and rock trucks for overburden removal. The mobile equipment spreads adapt readily to winding coal outcrops for contour surface mining and are effective for point-removal and area mining applications.
		r	Application of highwall and auger mining units is an effective method to recover coal resources not suitable for underground mining and under excessive cover for surface mining.
>	The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.	۱ < ۱	Imming. Mining Plans for potential underground mines were developed by MM&A. Pillar stability was tested by MM&A using the Analysis of Coal Pillar Stability (ACPS) program that was developed by the National Institute for Occupational Safety and Health (NIOSH). Coronado must obtain approved mining plans from United States Department of Labor
		H r v	Mine Safety and Health Administration (MSHA) that define safety parameters for the highwalls developed during contour and area mining. MM&A's planning model does not require input of specific highwall design parameters, but provides for timing of mining within mine plan polygons that is representative of the operation performance attained at Central Appalachia surface mines.
		1 0 2 1	Highwall and auger mining is conducted under highwalls designed and constructed to meet MSHA permit requirements. To better assure highwall stability and safety during highwall coal extraction, MSHA requires that coal fenders, or stumps, be left in place between successive cuts. Periodic barrier pillars must be left in place as an additional safeguard. MM&A has adjusted the expected mining recovery for highwall and auger mining resources to reflect highwall stability and safety requirements.
>	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	6	Underground Mining Resources: For metallurgical resources, minimum coalseam thickness extends down to between 0.6 and 1.2 meters and a minimum overburden (depth of cover) of 30.5 meters. A 61-meter horizontal distance is maintained from abandoned mines and

Criteria JORC Code explanation Commentary sealed or pillared areas, and a 30-meter horizontal distance is maintained from planned highwall miner panels. Mine recovery is reduced when a rider coal seam is present within a 1.5- to 3.0-meter interval above the coal seam. No mining is projected when the interval between overlying and underlying reserves is less than 12 meters. Surface Mining Resources: For classification as a surface-mineable resource, a seam must be at least 0.3 meters in thickness as a stand-alone (principal) seam and 0.15 meters in thickness when less than 0.8 meters from a principal seam. The maximum cumulative area mining strip ratio is generally 20:1 for thermal coal and 30:1 for metallurgical coal. Some areas were assessed for their economic viability at higher ratios, and were included as reserves if deemed economic. For contour surface mining, a minimum of 38-meter bench is provided to support HWM. HWM and Auger Mining Resources: HWM cut depth (penetration) is established at a maximum of 244 meters. The minimum mineable coal thickness is limited at 0.6 meters. For coal seams less than 0.8 meters thick, roof and/or floor characteristics must allow OSD cutting to maintain a 0.8-meter minimum cutting height. Auger mining cut depth is established at an average of 91 meters. The minimum mineable coal thickness is limited at 0.5 meters. Underground Mining Reserves: The planning model assigns minimum mining heights of 1.4 The mining dilution factors used. to 1.8 meters for mains and panel development. At the Buchanan Mine, a minimum mining height of 1.8 meters was used due to the longwall mining method being employed. For coal seams thinner than the assigned mining height, the difference between the coal seam height and assigned mining height consists of OSD. In all cases a minimum of 0.05 meters of OSD was assumed, with the exception of the Mon Valley mines, where a minimum 0.15 meters of OSD was assumed due to weaker floor strata. Surface Mining Reserves: Area mining is generally limited to a cumulative overburden ratio of 30:1 and a 15:1 ratio for contour mining. Exceptions were considered for mining of metallurgical grade coal where deemed economical. It is assumed that careful cleaning of exposed coal pits will result in minimal OSD. HWM and Auger Mining Reserves: The mining plan assumes that the HWM cutting height is a minimum of 76 to 99 centimeters for clearance purposes. When the coal seam is less than 76 to 99 centimeters thick, OSD assumed and included in the ROM product. Because the auger has very limited OSD cutting ability, it is assumed that an appropriate auger diameter will be chosen based on the coal seam thickness and that OSD will be minimal. The mining recovery factors used. Underground Mining Reserves: Mine recovery generally varies between 40 and 60 percent for continuous mining panels, and 100 percent for longwall. Surface Mining Reserves: Mining recovery is 90 percent for virgin areas. Mining recovery is reduced where second mining is projected in previously underground and auger mined areas. HWM and Auger Mining Reserves: A mine recovery of 40 percent has been applied for HWM. A mine recovery of 35 percent has been applied for auger mining. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and Underground Mining Reserves: Typical entry width is 5.8 to 6.1 meters. Proved and probable coal reserve were derived from the defined in-situ coal resource the sensitivity of the outcome to their inclusion. considering relevant processing, economic (including independent estimates of capital,

MARSHALL MILLER & ASSOCIATES, INC.

11

revenue and cost, marketing, legal, environmental, socioeconomic, and regulatory factors).

Criteria JORC Code explanation Commentary Mine plan LOM tonnage includes inferred coal and those areas that do not meet the > minimum coal thickness requirement for classification as reserve. Inferred coal represents approximately 0.6% of the LOM production for Mon Valley and 0.000001% of the total LOM production for Logan. None of this coal was included in the estimate of reserves. The infrastructure requirements of the selected mining methods. Underground Mining Resources: The continuous mining method provides for the extraction of coal from the production faces using continuous miners (and longwall shearing machine at Buchanan) and haulage using shuttle cars or battery haulers to a feeder-breaker located at the tail of the section conveyor belt. The feeder-breaker crushes large pieces of coal and rock and regulates coal feed onto the mine conveyor. A chain conveyor is used to remove coal from the longwall face at the Buchanan Mine for placement onto the conveyor belt which is ultimately delivered to an underground storage bunker. Roof-bolting machines are used to install roof bolts, and battery scoops are available to clean the mine entries and assist in delivery of mine supplies to work areas. Surface ventilation fans are installed as needed to provide a sufficient volume of air to ventilate production sections, coal haulage and transport entries, battery charging stations, and transformers in accordance with approved plans. Coronado currently operates three coal preparation plants, one each at the Buchanan, Logan County and Greenbrier Divisions. The Buchanan Plant operates at a feed rate of approximately 907 raw tonnes per hour (tph), whereas the Saunders Plant (Logan County Division) has a nominal feed rate of 816 tph, and the Mountaineer Plant (Greenbrier Division) operates at 544 tph. MM&A has included capital estimates for construction of additional coal preparation plants at the Russell County and Mon Valley Complex for the purposes of this TRS. Surface Mining Resources: The surface mining mobile equipment spreads advance the contour and area mining pits while systematically reclaiming the trailing side of pits where coal has been removed. The coal haul roads are extended and maintained as the pits advance. Support facilities are maintained nearby but away from the active mining, and include storage areas for blasting agents, fuel and lubricants, and mine supplies along with maintenance facilities and offices. Most of the surface mine production is transported to a loading point for crushing, blending and direct-shipment to customers. HWM and Auger Resources: The HWM equipment advances along with the contour mining pits. The rate of advance of the contour mining is governed by the advancement rate of the HWM. A diesel-powered generator trails the highwall miner and powers the continuous mining unit. Other support facilities are provided along with the contour mining support facilities. HWM production is all transported by truck to the coal preparation plant for washing. Metallurgical factors The metallurgical process proposed and the appropriateness of that process to the Coarse material is washed in a heavy medium vessel. Intermediate-size material is washed or assumptions style of mineralisation. in heavy medium cyclones. Fine material is washed using conventional froth flotation cells. Processes are typical of those used in the coal industry and are in use at adjacent coal > Whether the metallurgical process is well-tested technology or novel in nature. > processing plants. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding The quality characteristics for the subject coal resources and coal reserves have been reviewed in detail by MM&A. The drill hole data were utilized to develop average coal > >

MARSHALL MILLER & ASSOCIATES, INC.

metallurgical recovery factors applied.

12

quality characteristics mining site. These average coal quality characteristics were then

Criteria		JORC Code explanation		Commentary
				utilized as the basis for determining the various markets into which the saleable coal will likely be placed.
	>	Any assumptions or allowances made for deleterious elements.	>	No significant effects on product quality are anticipated from dilution material; float product quality was used to model final product quality.
	>	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	>	No bulk sample or pilot scale work has been completed.
	>	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet specifications?	>	Notwithstanding the complexity of the coal quality data set, the seams of the central and northern Appalachiancoalfields have a longhistory of providingboth high-Btu thermalcoals and high-, mid- and low-volatile coking coals with favorable metallurgical properties.
Environmental	>	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of protective structure of the structure structure of the structure structure of the structure s	>	A study completed on behalf of Coronado has identified a Preferred Site for refuse disposal at Pangburn with capacity of 22.6 million cubic meters. Estimated requirements for Particular debug and the study of a study of the
		potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	>	Pangburn and Shaner combined is 29.7 million tonnes or approximately 13.2 million. MM&A completed a Limited Phase IEnvironmental Site Assessment (ESA) on the Buchanan property in April 2016, and on the Logan County and Greenbrier Properties in May 2017 on behalf of Coronado.
			>	MM&A identified one REC at Greenbrier associated with stained soil and gravel near a fueling and maintenance area. Coronado reported to MM&A that satisfactory clean-up efforts were completed at Greenbrier.
			>	Based on these former ESAs completed byMM&A, it is MM&A's opinion that Coronado has a generally typical coal industry record of compliance with applicable mining, water quality, and environmental laws. Estimated costs for mine closure, including water quality monitoring during site reclamation, are included in the TRS financial models.
Infrastructure	>	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided	>	Coronado currentiy operates one surface mine (Toney Fork Mine at the Logan Mine Complex); Coronado also controls the idle Midland Surface Mine at the Greenbrier Mine Complex.
		or accessed.	>	Coronado operates five underground mines as follows: Buchanan Mine at the Buchanan Mine Complex; Winifrede, Eagle No. 1, Muddy Bridge and Lower War Eagle Mines in the Logan Mine Complex; the Mountaineer #1 Mine at the Greenbrier Mine Complex is
			>	currently idle. All ROM production is currently planned for either truck transportation from the mines to the processing or shipping facilities, or in some cases there is either a current or planned mine mouth preparation plant and barge/rail loading facility.
			>	There is a network of publichighways that provide serviceable coal haul routes and private, internal roads on the Properties would be developed as may be needed. Rail service to the Properties is most readily provided by NS and CSX with connections to both domestic consumers and international trans-shipment points. NS track is located across the Monongahela River from the proposed Pangburn Hollow load-out facility. Coal would be
Costs	>	The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs.	>	shipped tocustomers via bargeand rail andsold as both metallurgical and thermal products. Coronado provided historical and 5-year budget operating costs for its active mines for MM&A's review. MM&A used the historical and/or budget cost information as a reference and developed personnel schedules for each mine. Hourly labor rates and salaries were based upon information contained in Coronado's financial summaries. Fringe benefit costs were developed for vacation and holidays, federal and state unemployment insurance, retirement, workers' compensation and pneumoconiosis, casualty and life insurance,

Criteria	JORC Code explanation		Commentary
Criteria	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.	> > > >	healthcare and bonuses. A cost factor for mine supplies was developed that relates expenditures to mine advance rates for roof control costs and other mine supply costs at underground mines. Other factors were developed for maintenance and repair costs, rentals, mine power, outside services and other direct mining costs. Surface mine direct operating costs were developed as a function of overburden ratio for repair and maintenance supplies, diesel fuel, explosives and blasting, and miscellaneous supplies and services. Operating costs for highwallmines are based on costs per ROM tonne estimates. Other cost factors were developed for coal preparation plant processing, refuse handling, coal loading, trucking, property taxes, and insurance and bonding. Appropriate royalty rates were assigned for production form leased coal lands and sales taxes were calculated for state severance taxes, the federal black lung excise tax, and federal and state reclamation fees. Capital schedules were developed by MM&A for mine development, infrastructure, and ongoing capital requirements for the life of each projected mine. Staffing levels were prepared and operating costs estimated by MM&A for each projected mine. MM&A utilized historical costdata provided by Coronado and its own knowledge and experience to estimate direct and indirect operating costs. No allowances have been made for deleterious elements; no impact to quality from deleterious elements is anticipated. Coronado provided MM&A with is applied to mine plan sales volumes and product mix and is supplemented with Coronado's in-house knowledge of applicable rail transportation is charges, ocean freight charges and port charges. Coal price forecasts for the various
>	Derivation of transportation charges.	>	products were provided by Coronado for various coal markets in terms of US real dollars per metric tonne. MM&A applied a 2% inflation factor in order to estimate the prices in nominal dollars. Coronado provided MM&A with price forecasts for all Properties. Customer coal pricing is derived from market observed forward estimates based on global economic supply and demand analysis which is applied to mine plan sales volumes and product mix and is supplemented with Coronado's in-house knowledge of applicable rail transportation charges, ocean freight charges andport charges Coalprice forecasts for thevarious products were provided by Coronado for various coal markets in terms of US real dollars per metric tonne. MM&A applied a 2% inflation factor in order to estimate the prices in nominal
>	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	>	dollars. MM&A utilized historical cost data provided by Coronado and its own knowledge and experience to estimate direct and indirect operating costs. All ROM production is currently planned for either truck transportation from the mines to the processing or shipping facilities, or insome cases there is either a current or plannedmine mouth preparationplant and barge/rail loading facility.
>	The allowances made for royalties payable, both Government and private.	>	Appropriate royalty rates were assigned for production from leased coal lands and sales taxes were calculated for state severance taxes, the federal black lung excise tax, and federal and state reclamation fees.

Criteria		JORC Code explanation		Commentary
Revenue factors	>	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	>	Coronado provided MM&A with price forecasts for all Properties. Customer coal pricing is derived from market observed forward estimates based on global economic supply and demand analysis which is applied to mine plan sales volumes and product mix and is supplemented with Coronado's in-house knowledge of applicable rail transportation charges, ocean freight charges and port charges. Coal price forecasts for the various products were provided by Coronado for various coal markets in terms of US real dollars per metric tonne. MM&A applied a 2% inflation factor in order to estimate the prices in nominal dollars. The Greenbrier property is not considered material to Coronado's business or financial conditions, and thus no update was completed for Greenbrier in 2024. Resources exclusive of reserves, as well as reserves, are based on assumed long-term average price as of
				December 31, 2022 provided by Coronado, representing Coronado's long-term average price forecast for Greenbrier at that time.
	>	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	>	Coal sales prices as defined above. All reported reserves are on a marketable basis.
Market assessment	>	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	>	Coronado provided MM&A with price forecasts for all Properties. Customer coal pricing is derived from market observed forward estimates based on global economic supply and demand analysis which is applied to mine plan sales volumes and product mix and is supplemented with Coronado's in-house knowledge of applicable rail transportation charges, ocean freight charges and port charges. Coal price forecasts for the various products were provided by Coronado for various coal markets in terms of US real dollars per metric tonne. MM&A applied a 2% inflation factor in order to estimate the prices in nominal dollars.
	>	A customer and competitor analysis along with the identification of likely market windows for the product.	>	All of the mine production serves metallurgical and thermal markets. The metallurgical coal is marketed as high-volatile (typically 28 percent or greater volatile matter content); mid- volatile (typically 23- to 27-percent volatile matter content) and low-volatile (typically less than 23 percent volatile matter content) products.
			>	Raw ROM production that requires washing is currently processed through Coronado owned and operated coal preparation plants.
			>	ROM coal that does not require further processing is delivered directly to the loading points for sizing and delivery to customers. Coronado has access to two rail-loading points serviced by the Norfolk Southern Corporation (NS) and two rail-loading points serviced by CSX Corporation (CSX).
	>	Price and volume forecasts and the basis for these forecasts.	>	Carlson Mining [®] was used by MM&Ato generate mine plans for underground- and surface- mineable coal seams. Underground mine plans were sequenced based on productivity schedules provided by Coronado, which were based on historically achieved productivity levels. Surface mine plans were generated under productivityassumptions (bank cubicyard per shift) as provided by Coronado and reviewed by MM&A, again based heavily on productivity levels achieved by Coronado. All production forecasting ties assumed production rates to geological models as constructed independently by MM&A's team of geologists and mining engineers. Coronado provided MM&A with price forecasts for all Properties. Customer coal pricing is derived from market observed forward estimates based on global economic supply and demand analysis which is applied to mine plan sales volumes and product mix and is

Criteria	JORC Code explanation	Commentary
		supplemented with Coronado's in-house knowledge of applicable rail transportation charges, ocean freight charges and port charges. Coal price forecasts for the various products were provided by Coronado for various coal markets in terms of US real dollars per metric tonne. MM&A applied a 2% inflation factor in order to estimate the prices in nominal dollars.
Economic	> The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	 On an unlevered basis, the NPV of the project cash flows after taxes was estimated for the purpose of classifying coal reserves. The project cash flows, excluding debt service, are calculated by subtracting direct and indirect operating expenses and capital expenditures from revenue. Direct costs include labor, drilling and blasting, operating supplies, maintenance and repairs, facilities costs for materials handling, coal preparation, refuse disposal, coal loading, sampling and analysis services, reclamation and general and administrative costs. Indirect costs include statutory and legally agreed upon fees related to direct extraction of themineral. The indirect costs are the Federal black lung tax, Federal and State reclamation taxes, property taxes, local transportation prior to delivery at rail or barge loading sites, coal production royalties, sales and use taxes, income taxes and State severance taxes. Coronado's historical costs provided a useful reference for MM&A's cost estimates. Coronado provided MM&A with price forecasts for all Properties. Customer coal pricing is derived from market observed forward estimates based on global economic supply and demand analysis which is applied to mine plan sales volumes and product mix and is supplemented with Coronado's in-house knowledge of applicable rail transportation charges, ocean freight charges and port charges. Coal price forecasts for the various products were provided by Coronado for various coal amarkets in terms of US real dollars. All costs and prices are based on year-end 2023 nominal United States dollars. A pre-feasibility LOM plan was prepared by MM&A for active and proposed mines. MM&A prepared mine projections and production timing forecasts based on coal seam characteristics. Production timing was carried out from 2024 to depletion (exhaustion) of the coal reserve areas, which is projected for the year 2101.
		> The all-mines average cash cost ranges between approximately \$73 and \$338 pertonne for most of the operating period.
	> NPV ranges and sensitivity to variations in the significant assumptions and inputs.	 An estimate of NPV at a base discount rate of 10.0% was included in Section 19 of the TRS. NPV of the Buchanan, Russell, Mon Valley, Logan and Greenbrier Properties was estimated to be \$1.804 billion, \$155.1 million, \$563.4 million, \$616.8 million and \$62.7 million, respectively. The Greenbrier NPV is based on December 31, 2022 coal sales price information provided by Coronado as described previously. The sensitivity study shows the NPV at the 10.0% discount rate when Base Case sales prices, operating costs, and capital costs are increased and decreased in increments of 5% within a +/- 15% range.
Social	> The status of agreements with key stakeholders and matters leading to social license to operate.	Portions of the properties are located near local communities. Regulations prohibit mining activities within 91 meters of a residential dwelling, school, church, or similar structure unless written consent is first obtained from the owner of the structure. Where required, such consents have been obtained where mining is proposed beyond the regulatory limits.
Μαρςμαιι Μιιτερ & Δεςοριά		

Criteria	JORC Code explanation	Commentary
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	
		 No material naturally occurring risks have been identified.
	> Any identified material naturally occurring risks.	
	> The status of material legal agreements and marketing arrangements.	> The Coronado coal resources are located in Buchanan, Russell and Tazewell Counties, Virginia; Greenbrier, Logan, Boone, Wyoming and Greenbrier Counties, West Virginia; Allegheny, Washington and Westmoreland Counties, Pennsylvania.
		> MM&A has not carried out separate title verification for the coal properties and has not verified leases, deeds, surveys or other property control instruments pertinent to the subject resources.
		 Coronado has represented to MM&A that it controls the mining rights to the reserves as
		shown on its property maps, and MM&A has accepted these as being a true and accurate depiction of the mineral rights controlled by Coronado. The TRS assumes the properties are developed under responsible and experienced management.
	> The status of government agreements and approvals critical to the viability of the	> Coronado has obtained all mining and discharge permits to operate 19 underground mines,
	project, such as mineral tenement status and government and statutory approvals.	15 surface mines, and 16 processing, loadout or related facilities. MM&A is unaware of any
	There must be reasonable grounds to expect that all necessary Government	obvious or current Coronado permitting issues that are expected to prevent the issuance of
	approvals will be received within the timeframes anticipated in the Pre-Feasibility or	future permits. Coronado, along with all Central and Northern Appalachian basin coal
	Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third part on which extraction of the reserve is contingent.	producers, is subject to a level of uncertainty regarding future clean water permits due to United States Environmental Protection Agency (EPA) involvement with state programs.
Classification	 The basis for the classification of the Ore Reserves into varying confidence 	 Measured and indicated resources have been converted to proved and probable reserves,
classification	categories. Whether the result appropriately reflects the Competent Person's view	respectively.
	of the deposit. The proportion of Probable Ore Reserves that have been derived	> None of the probable coal reserves have been derived from measured resources.
	from Measured Mineral Resources (if any).	In a limited number of cases where there was only very limited data available to demonstrate the metallurgical suitability of a given coal deposit, that deposit was classified
		as a probable reserve instead of a proved reserve.
		> The results of this TRS define an estimated total initial ROM recoverable ore (coal) reserve estimate of 548 million tonnes for Coronado as follows:
		a) Buchanan = 154 Mt
		b) Logan = 135 Mt
		c) Greenbrier= 12 Mt
		d) Russell = 50 Mt
		e) Mon Valley = 197 Mt
		> Coronado controls a total of 333 Mt (moist basis) of marketable coal reserves for Coronado as of December 31, 2023 (total may not add due to rounding). Of that total, 74 percent are proved, and 26 percent are probable. Total reserves by complex are as follows:
		a) Buchanan = 92 Mt
		b) Logan = 71 Mt
		c) Greenbrier = 7 Mt
		d) Russell = 30 Mt
		e) Mon Valley = 134 Mt
Audits or reviews	> The results of any audits or reviews of Ore Reserve estimates.	> MM&A completed prepared a statement of coal resources and reserves for the Properties in accordance with the JORC Code as of December 31, 2017. MM&A also subsequently

Discussion of relative

accuracy/ confidence

>

>

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

procedures to quantify the relative accuracy of the reserve within stated confidence

limits, or, if such an approach is not deemed appropriate, a gualitative discussion of

the factors which could affect the relative accuracy and confidence of the estimate.

The statement should specify whether it relates to global or local estimates, and, if

economic evaluation. Documentation should include assumptions made and the

Competent Person. For example, the application of statistical or geostatistical

local, state the relevant tonnages, which should be relevant to technical and

Commentary

updated the estimate of resources and reserves for depletion as of December 31, 2018, December 31, 2019, December 31, 2020, December 31, 2021, and December 31, 2022.

- MM&A performed a previous audit of the Properties in year 2017 for Coronado based on U.S. Securities and Exchange Commission (SEC) Industry Guide 7 standards. Earlier audits were performed by various independent consultants for predecessors-in-title to Coronado and at various levels of detail depending on the clients concerns and the allotted time for completion. Previous audits and reviews defined the primary coal resource areas and estimated the recoverable tonnes for each seam based on the expected mining methods. Additionally, MM&A has performed proprietary evaluations for predecessors-in-title to
- Coronado, which encompass portions of the Properties included in this TRS. Operations on the Properties by Coronado and its predecessors have been on-going for >
- many years.
- MM&A is confident that the mine plans and financial models are reasonably representative > to provide an accurate estimation of coal reserves.
- > Mine development and operation have not been optimized within the TRS.
- Proved and probable coal reserve were derived from the defined in-situ coal resource considering relevant processing, economic (including independent estimates of capital, revenue and cost), marketing, legal, environmental, socioeconomic, and regulatory factors on a global scale as current local data reflects the global assumptions.
- procedures used. Accuracy and confidence discussions should extend to specific discussions of any The major risk factors for the active Coronado mines and future resource development are applied Modifying Factors that may have a material impact on Ore Reserve viability, summarized below: or for which there are remaining areas of uncertainty at the current study stage.
 - Mine Accidents
 - Highwall Failure. Highwall failures are likely to result in a temporary mine closure and should not have a material impact on the mine sustainability. The risk is considered to be probable
 - Adverse Geological Conditions. Adverse geological conditions include such conditions as faults and sandstone washouts. The risk is considered to be probable. The impact is expected to be temporary with little material impact on mine sustainability.
 - Environmental Risk. Numerous federal and state permits are required to operate coalmines and mine surface facilities. Permitting rulesare complex and may change over time, making compliance difficult or impossible.
 - Water Quality. Permit requirements to fulfill Clean Water Act obligations are subject to modification. The probability of water quality changes having a material impact on mine operations is possible. As a contemporary example, the selenium discharge issue that affects western Canadian and Central Appalachian Basin operators has only recently emerged as a concern and its ultimate impact has not been determined.
 - New Permits. Permit protests by environmental groups and individuals can contribute to permit delays or denial and increase the cost of permitting and delaydevelopment. Surface mining activities, coal refuse disposal and construction of access roads in mountainous terrain often require storage of material in valley fills. Authority to dispose of fill material into waters of the United States must be granted by the United States Army Corps of Engineers (COE). COE permits are increasingly difficult to obtain.

Criteria	JORC Code explanation		Commentary
		>	Regulatory Requirements. Adverse impact from regulatory changes is considered to be probable. The impact will likely affect the broader industry and is not expected to result in mine closure.
		>	Market Risk. Metallurgical and thermal coal markets ultimately depend upon the global steel and thermal coal demand and are considered to be volatile. Currently, the US coal market has seen a decline in demand for thermal coal due to thermal plant closures, as a result of new air and water pollution regulations, and competitionfrom other commodities used for power generation such as natural gas. This has resulted in an overall decline in CAPP coal production. Continued regulatory changes and declining demand could result in material changes in domestic and global coal markets. The impact cannot be predicted at this time; however, while MM&A expects the coal reserve within this TRS to remain economically viable throughout the life of the projected mines, the LOM financial model is very sensitive to changes in coal sales price and therefore market risk is not insignificant. Labor Risk. Work stoppage due to organized labor protests is considered to be unlikely and not likely to lead to permanent mine closure. The mines are likely to suffer the loss of key supervisors and skilled employeesdue to reterment as the workforce ages. The problem is industry-wide and the impact is expected to be temporary and have no sustained impacton. Availability of Equipment and Supples. Risk of equipment and supply availability is likely to
		>	Transportation Delay. Interruption of coal transport services by river or rail is considered to be probable but unlikely to have a sustained impact on coal production.
>	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.	>	Mine plans, productivity expectations and cost estimates generally reflect historical performance and efforts have been made to adjust plans and costs to reflect future conditions.