



ALEXCO

ALEXCO RESOURCE CORP.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE THREE MONTH PERIOD ENDED MARCH 31, 2021

Suite 1225, 555 Burrard Street, Vancouver, BC V7X 1M9 | Phone: 604-633-4888 Fax: 604-633-4887

www.alexcoresource.com

TABLE OF CONTENTS

| | |
|--|----|
| 1. FIRST QUARTER 2021 HIGHLIGHTS..... | 3 |
| 2. OVERVIEW OF THE BUSINESS | 4 |
| 3. BUSINESS DEVELOPMENTS..... | 4 |
| 4. OUTLOOK AND STRATEGY..... | 5 |
| 5. RESULTS OF OPERATIONS | 7 |
| 6. FINANCIAL RESULTS | 8 |
| 7. LIQUIDITY, CASH FLOWS AND CAPITAL RESOURCES..... | 10 |
| 8. EMBEDDED DERIVATIVE ASSET AND FINANCIAL INSTRUMENTS | 12 |
| 9. KEY MANAGEMENT COMPENSATION..... | 13 |
| 10. CRITICAL ACCOUNTING POLICIES, ESTIMATES AND JUDGMENTS..... | 14 |
| 11. NON-GAAP MEASURES | 14 |
| 12. DISCLOSURE CONTROLS AND PROCEDURES..... | 15 |
| 13. RISK FACTORS | 15 |
| 14. CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS | 15 |
| 15. SUMMARY OF MINERAL RESERVE AND RESOURCE ESTIMATES..... | 16 |
| 16. TECHNICAL DISCLOSURE CAUTIONARY NOTE TO U.S. INVESTORS – INFORMATION CONCERNING PREPARATION OF RESOURCE ESTIMATES | 18 |



MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE THREE MONTH PERIOD ENDED MARCH 31, 2021

This Management's Discussion and Analysis ("MD&A") of Alexco Resource Corp. ("Alexco" or the "Corporation") is dated May 12, 2021 and provides an analysis of Alexco's unaudited interim condensed consolidated financial results for the three month period ended March 31, 2021 ("Q1 2021") compared to the three month period ended March 31, 2020 ("Q1 2020").

The following information should be read in conjunction with the Corporation's March 31, 2021 unaudited interim condensed consolidated financial statements with accompanying notes (the "2021-Q1 F/S"), which have been prepared in accordance with IAS 34 Interim Financial Reporting, and with the Corporation's audited consolidated financial statements with accompanying notes and related MD&A for the fiscal year ended December 31, 2020, which were prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. The 2021-Q1 F/S follow the same accounting policies and methods of computation as compared with the most recent fiscal financial statements. All dollar figures are expressed in Canadian dollars unless otherwise stated. These documents and additional information on the Corporation are available on the Corporation's website at www.alexcoresource.com and on the SEDAR website at www.sedar.com and Edgar at www.sec.gov.

Except where specifically indicated otherwise, the disclosure in this MD&A of scientific and technical information regarding exploration projects on Alexco's mineral properties has been reviewed and approved by Alan McOnie, FAusIMM, Vice President, Exploration, while that regarding mine development, operations and mineral resources has been reviewed and approved by Neil Chambers, P.Eng., Chief Mine Engineer, both of whom are Qualified Persons as defined by National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101").

All dollar figures are expressed in Canadian dollars unless otherwise stated.

1. FIRST QUARTER 2021 HIGHLIGHTS

Corporate

- The Corporation reported net income of \$4,159,000 for Q1 2021 compared to \$12,053,000 for Q1 2020 and total comprehensive income of \$3,229,000 for Q1 2021 compared to \$11,484,000 for Q1 2020. Net income in Q1 2021 was primarily derived from a gain on the sale of its net smelter return ("NSR") royalty in Golden Predator Exploration Ltd.'s ("Golden Predator") Brewery Creek Project, a gain on embedded derivative asset related to the Wheaton Precious Metals Corp. ("Wheaton") silver purchase agreement ("SPA"), and initial concentrate sales from mining operations, while net income for Q1 2020 was primarily a result of a gain on the embedded derivative asset and income related to the sale of Alexco's environmental consulting business, Alexco Environmental Group ("AEG").
- The Corporation's cash and cash equivalents as at March 31, 2021 totaled \$24,717,000 compared to \$23,742,000 as at December 31, 2020, while net working capital totaled \$19,397,000 compared to \$15,353,000 as at December 31, 2020 (see "Non-GAAP Measures" in Section 11). The Corporation's restricted cash and deposits as at March 31, 2021 totaled \$2,989,000 compared to \$2,932,000 as at December 31, 2020.
- The Corporation reported revenues of \$3,813,000 for Q1 2021 compared to \$567,000 for Q1 2020. Revenue in Q1 2021 was primarily derived from concentrate sales of \$2,733,000 resulting from ore production sourced from the Bellekeno mine, net of silver delivered under the Corporation's SPA with Wheaton, in addition to reclamation management services revenue of \$1,080,000.
- At the operations level, the Corporation reported a gross loss of \$1,066,000 for Q1 2021 compared to a gross profit of \$27,000 for Q1 2020, primarily related to continuing ramp-up related costs at Keno Hill. The Corporation reported an operating loss of \$3,054,000 for Q1 2021, compared to an operating loss of \$2,594,000 for Q1 2020, which was also related to ramp-up costs as the Corporation advances towards commercial production.

Mine Operations and Exploration

- Ramp-up of mining and milling operations continue with activities adjusted and moderated to comply with modified COVID-19 protocols in the Yukon. Highlights include:
 - Underground mining activity is focused at the Bellekeno mine where longhole drilling and blasting of



residual ore is providing feed to the mill, with concentrate shipments to the port of Skagway.

- The mill continues the commissioning process and is operating with a modified schedule to best match the ore delivery from Bellekeno as well as optimizing the metallurgical performance of the changes to the mill circuit.
- At the Birmingham mine, underground development is proceeding – with initial ore production anticipated in Q2 2021. The Alimak raise contractor has completed mobilization and setup and is currently advancing construction of the raise to surface, which is scheduled to break through in the second quarter of 2021 (“Q2 2021”).
- At the Flame & Moth mine, underground development commenced in the fourth quarter of 2020 (“Q4 2020”) – with initial ore production anticipated in the third quarter of 2021 (“Q3 2021”).
- In mid-March 2021, Alexco commenced a large-scale surface exploration program to drill a minimum of 25,000 meters (“m”) utilizing four drills focusing on infill and extension drilling of the Birmingham Northeast Deep zone mineralization. As of the end of April a total of 2,408 meters had been drilled in five completed holes and four holes in progress. Directional drill technology is being used to increase efficiency and accuracy of infill drilling with the objective of updating the existing Birmingham Mineral Resource Estimate in the fourth quarter of 2021, to include the Northeast Deep zone. A total of more than 50 holes are scheduled to be drilled as part of the directional drilling campaign.

Other Activities

- On January 4, 2021, the Corporation sold its NSR royalty in Golden Predator’s Brewery Creek Project to Wheaton for total cash consideration of \$4,500,000.
- On January 28, 2021, the Corporation completed an equity financing and issued 2,704,770 flow-through common shares for aggregate gross proceeds of \$11,700,666. The flow-through common shares comprise: (i) 2,053,670 flow-through shares with respect to “Canadian exploration expenses” (the “CEE Shares”) priced at \$4.48 per CEE Share; and (ii) 651,100 flow-through shares with respect to “Canadian development expenses” (the “CDE Shares”) priced at \$3.84 per CDE Share.

2. OVERVIEW OF THE BUSINESS

The Corporation owns the majority and most prospective part of the historic Keno Hill Silver District (“Keno Hill” or the “District”), located in Canada’s Yukon Territory. The Bellekeno silver mine, a high-grade silver operation, commenced commercial production at the beginning of 2011 and was Canada’s only operating primary silver mine from 2011 to 2013, producing a total of 5.6 million (“M”) ounces (“oz”) of silver during the 2010 – 2013 period. In September 2013, the Corporation suspended Bellekeno mining operations in light of sharply reduced silver and base metal prices. A new pre-feasibility study (“PFS”) was completed in March 2019 and published in May 2019, and updated and amended in February 2020. In June 2020, the Corporation announced it was moving forward with final development of its mines at Keno Hill, including production from the Bellekeno, Flame & Moth, and Birmingham deposits. Extraction of “startup ore” from the Bellekeno mine began in November 2020 for mill commissioning and will continue into Q2 2021 concurrent with underground development activities at the Birmingham and Flame & Moth mines.

Keno Hill lies within the traditional territory of the First Nation of Na-Cho Nyak Dun (“FNNND”). Alexco is party to a Comprehensive Cooperation and Benefits Agreement with the FNNND, setting out common understandings, obligations and opportunities arising from all of Alexco’s activities within the District including exploration, care and maintenance, historic District closure activities, and mine production.

Alexco is a public company which is listed on the Toronto Stock Exchange and the NYSE American Equities Exchange (under the symbol AXU).

3. BUSINESS DEVELOPMENTS

COVID-19

The Corporation continues to make efforts to safeguard the health of its employees and the communities within which we operate, while continuing to operate safely and maintaining essential business activity. In early November 2020, the Yukon Government ordered mandatory isolation requirements for anyone entering the Yukon. This requirement



has caused additional delays in capital development activity, especially with respect to availability of underground crews and supply line delays. Recently, the Yukon Government announced that these mandatory isolation requirements will no longer be required for fully vaccinated people, effective May 25, 2021. The Corporation is optimistic that with a large proportion of its workforce already having received their vaccination, operations will be able to return gradually and safely to levels originally planned. The Corporation notes that COVID-19 pandemic risk and its impact on development remains the foremost risk to schedule and scale-up activities at Keno Hill.

4. OUTLOOK AND STRATEGY

Production and Development at Keno Hill

Ramp-up of mining and milling operations continued in Q1 2021 with activities adjusted and moderated to comply with modified COVID-19 protocols in Yukon. Initial ore supply was sourced from the Bellekeno underground mine where longhole drilling and blasting of residual ore provided initial feed to the mill, with concentrate shipments to the port of Skagway also commencing in Q1 2021.

The mill continued the commissioning process in Q1, including concentrate production while operating with a modified schedule to best match the ore delivery from Bellekeno. As at March 31, 2021, 3,850 tonnes of ore have been milled at an average Ag head grade of 985 grams per tonne with Ag recoveries to date of 83%, producing 539 tonnes of Pb/Ag concentrate and 105 tonnes of Zn/Ag concentrate. Installation of the second ball mill and concentrate regrind mills will be complete in Q2 2021, in advance of higher ore production and mill throughput. Elsewhere, expansion of the camp accommodation complex, additional miner dry/wash facilities and the new administration complex is complete.

At Bermingham, underground development is proceeding, with initial ore production anticipated in Q2 2021. At the Flame & Moth mine, underground development activities resumed in Q1 2021. At both the Bermingham and Flame & Moth mines, improving underground cycle times in variable ground (quartzite and schist) remains a focus along with continued training of crews in operation of new equipment, particularly jumbos and bolters. At Bermingham, a primary ventilation raise is approximately 90% complete and breakthrough to surface is scheduled in Q2 2021.

On balance, the current operating conditions related to COVID-19 protocols and slower underground development (with the associated costs partially offset by higher silver grades in ore from the Bellekeno deposit), are anticipated to improve through Q2 2021 with design throughput of 400 tonnes per day achieved in the mill in the fourth quarter of 2021 ("Q4 2021"). The Corporation cautions however, that longer term continuation or increased COVID-19 related workplace restrictions will have the effect of extending the scale-up period.

Exploration

In mid-March 2021, Alexco commenced a large-scale surface exploration program to drill a minimum of 25,000 m utilizing four drills focusing on infill and extension drilling of the Bermingham Northeast Deep zone mineralization. The Corporation plans to update the existing Bermingham mineral resource estimate in Q4 2021 following receipt of results of the 2021 drilling program.

To date approximately 2,400 m of drilling is complete with five holes intersecting the target zone and a further four holes in progress. The results from this drilling program will be released when available.

ERDC

In parallel with mine operations, Alexco, through Elsa Reclamation & Development Company Ltd. ("ERDC"), continues to advance the reclamation project related to historic environmental disturbances in the District. As part of Alexco's 2006 acquisition of the United Keno Hill Mines Limited and UKH Minerals Limited ("UKHM") mineral rights in the District, ERDC, a wholly owned subsidiary of Alexco, is party to the amended and restated subsidiary agreement (the "ARSA") with the Canadian Government. Under the ARSA, ERDC is retained by the Canadian Government as a paid contractor responsible on a continuing basis for the environmental care and maintenance for the reclamation of the historical environmental liabilities of the former UKHM mineral properties. The ARSA provides that ERDC share the responsibility for the development of the ultimate closure plan with the Canadian Government.

ERDC currently holds a Type B Water Use License ("WUL") under the Yukon Waters Act to undertake care and maintenance activities in the Keno Hill area. ERDC is responsible for carrying out the environmental care and



MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE MONTH PERIOD ENDED MARCH 31, 2021

maintenance at various sites within the UKHM mineral rights, for a fixed annual fee established on a per-site basis totaling \$875,000, adjustable for material changes in scope.

The Reclamation Plan for the historical UKHM was submitted in September 2018 for environmental assessment by the Yukon Environmental and Socio-economic Assessment Board ("YESAB"). The final Evaluation Report for the Reclamation Plan to address legacy liabilities at Keno Hill was issued by YESAB in February 2020, and on July 20, 2020 a final Decision Document was issued. ERDC entered into the Yukon Water Board's water licencing process to authorize the activities necessary to effect closure of the site. After licencing, the Reclamation Plan must be finalized for submission to Crown-Indigenous Relations and Northern Affairs Canada for approval prior to execution of the final reclamation plan.

Economic Climate

Silver ("Ag"), lead ("Pb"), and zinc ("Zn") historically are the primary metals found within the District.

During Q1 2021, the average Ag price was US\$26.29 per ounce and traded from a high of US\$29.59 per ounce on February 1, 2021 to a low of US\$24.00 per ounce on March 31, 2021, while Pb traded between US\$0.97 to US\$0.87 per pound and Zn traded between US\$1.31 to US\$1.15 per pound. As at the date of this MD&A, spot commodity prices are approximately US\$27.25 per ounce for Ag, US\$0.99 per pound for Pb and US\$1.35 per pound for Zn and the Canadian-US exchange rate is approximately US\$0.83 per CAD.

Consensus investment analyst forecasts over the next two years for Ag average approximately US\$25.25 per ounce, while forecasts for Pb and Zn average approximately US\$0.92 per pound and US\$1.17 per pound, respectively. The Canadian-US exchange rate consensus forecast for the next two years is US\$0.79 per CAD (see "Risk Factors" in Section 11 of the MD&A for the year ended December 31, 2020, including but not limited to "Potential Profitability of Mineral Properties Depends Upon Other Factors Beyond the Control of Alexco" and "General Economic Conditions May Adversely Affect Alexco's Growth and Profitability" thereunder).



5. RESULTS OF OPERATIONS

Key operational metrics for the Q1 2021 ramp up period is summarized as follows:

| | Q1 2021 |
|--|-----------|
| Ore tonnes mined | 4,427 |
| Ore tonnes milled | 3,850 |
| Mill throughput (tonnes per day) ¹ | 112 |
| Head grade | |
| Silver (grams per tonne) | 985 |
| Lead | 11.9% |
| Zinc | 3.3% |
| Recoveries | |
| Silver | 83% |
| Lead in lead concentrate | 85% |
| Zinc in zinc concentrate | 31% |
| Concentrate production and grades | |
| Lead concentrate produced (tonnes) | 539 |
| Silver grade (grams per tonne) | 5,664 |
| Lead grade | 72% |
| Zinc concentrate produced (tonnes) | 105 |
| Silver grade (grams per tonne) | 775 |
| Zinc grade | 37% |
| Production – contained metal in concentrate | |
| Silver (ounces) | 100,984 |
| Lead (pounds) | 854,346 |
| Zinc (pounds) | 86,494 |
| Sales volumes by payable metal² | |
| Silver (ounces) | 88,523 |
| Lead (pounds) | 719,178 |
| Zinc (pounds) | 60,247 |
| Recognized metal prices³ | |
| Silver (per ounce) | US\$26.48 |
| Lead (per pound) | US\$0.92 |
| Zinc (per pound) | US\$1.24 |

1. Mill throughput (tonnes per day) based on 34 days during the quarter that the mill was operational.
2. Sales volumes by payable metal represents the volumes of each payable metal sold to the offtaker, prior to the 25% of silver that is delivered to Wheaton under the Wheaton SPA. Silver is the only metal deliverable to Wheaton under the Wheaton SPA.
3. Recognized metal prices represent average metal prices for revenue recognized over the period, weighted by dollar of revenue recognized.

During Q1 2021, the Corporation mined 4,427 tonnes of ore. Ore production was solely from the Bellekeno mine where longhole drilling and blasting of residual ore provided feed to the District mill. Ore grades from Bellekeno have generally exceeded block model grades and ore production is expected to continue from Bellekeno into Q2 2021. Underground development activities at Birmingham and Flame & Moth began in the third quarter of 2020 and these activities continue, with initial ore production from Birmingham targeted for Q2 2021 and from Flame & Moth targeted for Q3 2021. The Birmingham raise to surface is scheduled to break through in Q2 2021 preceding ore production.

During Q1 2021, the Corporation milled 3,850 tonnes of ore. Since initial commissioning in December 2020, the mill has been operating on a modified rotation schedule to match ore production from the Bellekeno mine. In the mill, installation of cyclones, the addition of a new tailings filter press, installation of a new fine ore feeder, and construction of a new building around the crusher have all been completed. In the meantime, mechanical adjustments and circuit modifications related to ongoing commissioning activity continue with a focus on metallurgical performance.



MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE MONTH PERIOD ENDED MARCH 31, 2021

During Q1 2021, the Corporation produced 539 tonnes of Pb/Ag concentrate and 105 tonnes of Zn/Ag concentrate. Recoveries are on plan having averaged 83% for Ag, with 97% of recovered Ag attributable to the Pb/Ag concentrate.

During Q1 2021, the Corporation sold 521 tonnes of Pb/Ag concentrate and 87 tonnes of Zn/Ag concentrate to Ocean Partners under the Corporation's offtake agreement.

During Q1 2021, the Corporation sold the equivalent of 88,523 ounces of silver to Ocean Partners under the Corporation's offtake agreement, of which 22,131 ounces of silver, or 25%, were delivered to Wheaton under the Wheaton SPA.

Exploration

In mid-March 2021, Alexco commenced a large-scale surface exploration program. Current progress as of the date of this MD&A is as follows:

- The program over the Northeast Deep zone commenced mid-March 2021 initially with three drills, and a fourth drill was added in April. The program is targeting extensions of the shallower Northeast Zone reserve and resource, as well as testing for continuity and tenor of high grade mineralization intersected at depth in 2020. To date 2,408 m have been drilled with five holes completed and four further holes in progress.
- The drilling program is utilizing directional drill technology which involves completion of an initial upper primary drill hole to target depth followed by a series of lower "daughter" holes collared internally from the primary drill hole. Deployment of directional drilling technology is a new initiative at Keno Hill (though the technology is well proven) and with success, is anticipated to increase the efficiency of deeper infill drilling.

ERDC

During the year ended December 31, 2020 ("FY 2020"), under the contract with the Canadian Government for the remediation of legacy environmental liabilities at Keno Hill, ERDC completed the environmental assessment for the Reclamation Plan. The final Evaluation Report for the Reclamation Plan to address legacy liabilities at Keno Hill was issued by YESAB in February 2020 and a final Decision Document was issued on July 20, 2020. The Reclamation Plan is now in the application process for renewal of the Type B Water License, which will include the conditions for implementation of the reclamation project.

6. FINANCIAL RESULTS

Key financial metrics is summarized as follows:

| <i>(expressed in thousands of Canadian dollars, except per share and share amounts)</i> | Q1 2021 | Q1 2020 |
|---|----------------|----------------|
| Revenues – Mining operations | 2,733 | - |
| Revenues – Reclamation management | 1,080 | 567 |
| Operating Loss | (3,054) | (2,594) |
| Adjusted Income (Loss) Before Taxes ¹ | 1,365 | (2,610) |
| Cash and cash equivalents | 24,717 | 22,308 |
| Net Working Capital ¹ | 19,397 | 23,219 |
| Adjusted Net Income (Loss) ¹ | 1,150 | 3,956 |
| Net Income ² | 4,159 | 12,053 |
| Shareholders | | |
| Basic and diluted net income (loss) per common share ² | 0.03 | 0.10 |
| Adjusted basic and diluted net income (loss) per common share ¹ | 0.01 | 0.03 |
| Total assets ³ | 185,604 | 163,653 |
| Total liabilities ⁴ | 25,769 | 16,845 |

1. See "Non-GAAP Measures" in Section 11.



MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE MONTH PERIOD ENDED MARCH 31, 2021

2. Net income for Q1 2021 includes a non-cash fair value adjustment relating to the gain from the embedded derivative asset totaling \$3,009,000 (Q1 2020 – \$8,097,000). Net income for Q1 2020 includes income net of tax from discontinued operations totaling \$7,336,000. Basic and diluted net income per common share for Q1 2020 includes Basic and diluted net income per common share from discontinued operations of \$0.06.
3. Total assets increased primarily due to an increase in mineral properties, plant and equipment, partially offset by a decrease in embedded derivative asset.
4. Total liabilities increased primarily due to increases in accounts payable and accrued liabilities and lease liabilities.

The Corporation reported an operating loss of \$3,054,000 for Q1 2021, compared to an operating loss of \$2,594,000 for Q1 2020. The increase in operating loss from Q1 2020 to Q1 2021 is primarily a result of increased ramp-up related costs at the Bellekeno mine and the District mill, partially offset by increased gross profit from reclamation management services.

Key financial information for the most recent eight quarters is summarized as follows, reported in thousands of Canadian dollars except for per share amounts:

| Period | Revenue | Gross Profit (Loss) | Net Income (Loss) | Basic Income (Loss) per Share | Diluted Income (Loss) per Share | Gain (Loss) on Embedded Derivative Asset | Expenditures Capitalized on Mineral Properties |
|-------------------|---------------|---------------------|-------------------|-------------------------------|---------------------------------|--|--|
| 2019-Q2 | 8,694 | 2,034 | (1,471) | \$(0.01) | \$(0.01) | 1,005 | 1,690 |
| 2019-Q3 | 7,200 | 1,420 | (2,308) | \$(0.02) | \$(0.02) | (191) | 2,531 |
| 2019-Q4 | 6,079 | 1,150 | (6,343) | \$(0.06) | \$(0.06) | (807) | 1,794 |
| 2019 Total | 21,973 | 4,604 | (10,122) | \$(0.09) | \$(0.09) | 7 | 6,015 |
| 2020-Q1 | 567 | 27 | 12,053 | \$ 0.10 | \$ 0.10 | 8,097 | 1,975 |
| 2020-Q2 | 871 | (24) | (12,229) | \$(0.10) | \$(0.10) | (11,579) | 1,396 |
| 2020-Q3 | 795 | (153) | (15,241) | \$(0.11) | \$(0.11) | (11,976) | 4,817 |
| 2020-Q4 | 633 | (284) | (15,817) | \$(0.12) | \$(0.12) | (6,270) | 10,196 |
| 2020 Total | 2,866 | (434) | (31,234) | \$(0.23) | \$(0.23) | (21,728) | 18,384 |
| 2020-Q1 | 3,813 | (1,066) | 4,159 | \$ 0.03 | \$ 0.03 | 3,009 | 10,770 |

1. Sum of all the quarters may not add up to the yearly totals due to rounding.
2. The table includes results from continuing and discontinued operations (applicable to the 2020 periods).

The net loss for Q2 2019 reflects site-based expenditures along with general and administrative expenses, which were partially offset by a non-cash fair value gain related to the embedded derivative asset on the Wheaton streaming agreement. The net loss for Q3 2019 reflects continued site-based expenditures at Keno Hill along with general and administrative expenses. The net loss for Q4 2019 reflects increased non-cash costs related to a loss on the fair value of the derivative asset related to the Wheaton stream and an increase in share-based compensation expense. The net income from Q1 2020 reflects a gain on the sale Alexco's environmental services business, AEG, and a gain on the embedded derivative asset related to the Wheaton streaming agreement, offset by site-based expenditures along with general and administrative expenses of the Corporation. The net loss in Q2 2020 reflects a non-cash fair value loss of \$11,579,000 on the embedded derivative asset related to the Wheaton streaming agreement, as well as site-based expenditures related to non-capital mill refurbishments in anticipation of mill commissioning and general and administrative expenses of the Corporation. The net loss for Q3 2020 reflects a non-cash fair value loss of \$11,976,000 related to the embedded derivative asset on the Wheaton streaming agreement and an increase in site-based expenditures at the Bellekeno deposit and the District mill in preparation of mill commissioning. The net loss for Q4 2020 reflects a non-cash fair value loss of \$6,270,000 on the embedded derivative asset related to the Wheaton streaming agreement, mine site expenditures at the Bellekeno deposit and the District mill in preparation for mill commissioning, and a write-down of non-current ore in stockpile at Bellekeno of \$2,773,000. The net income for Q1 2021 reflects a non-cash fair value gain of \$3,009,000 on the embedded derivative asset related to the Wheaton streaming agreement, \$4,500,000 gain on sale of Alexco's NSR Royalty in Golden Predator, partially offset by gross loss from mining operations and general and administrative expenses.

The gain on embedded derivative asset is related to the Wheaton SPA. Changes in the fair value of the embedded derivative asset are recorded as a gain (loss) on embedded derivative asset on the statements of loss and comprehensive loss. See "Embedded Derivative Asset and Financial Instruments" in Section 8 of the MD&A for the three month period ended March 31, 2021 for further discussion and analysis on the gain (loss) on embedded derivative asset.



The mineral property expenditures in FY 2019 mainly reflect continued work with independent contractors on the PFS, completion of the 2019 surface exploration drilling program, and development infrastructure initiatives at site. The mineral property expenditures in Q1 and Q2 2020 reflect completion of an airborne geophysical program, development activities at site, and preparation for the upcoming surface exploration drilling program. The mineral property expenditures in Q3 2020 mainly reflect the commencement of the surface drilling program and development activities associated with the positive decision to move the District to production. The mineral property expenditures in Q4 2020 and Q1 2021 mainly reflect development activities at Bermingham and Flame & Moth.

General and Administrative Expenses

Corporate general and administrative expenses during Q1 2021 totaled \$1,988,000 compared to \$1,808,000 for Q1 2020. Both periods included non-cash costs in the amounts of \$463,000 and \$477,000, respectively, which relate to share-based compensation and depreciation expenses.

7. LIQUIDITY, CASH FLOWS AND CAPITAL RESOURCES

Liquidity

The Corporation's cash and cash equivalents as at March 31, 2021 totaled \$24,717,000 compared to \$23,742,000 as at December 31, 2020, while net working capital (see "Non-GAAP Measures" in Section 11) totaled \$19,397,000 compared to \$15,353,000 at December 31, 2020. The Corporation's restricted cash and deposits as at March 31, 2021 totaled \$2,989,000 compared to \$2,932,000 as at December 31, 2020.

In accordance with the PFS, the pre-production capital required for the development of Keno Hill and restart of underground production operations was estimated to be \$17,900,000 plus an additional \$5,300,000 for working capital. During the year ended December 31, 2020 and Q1 2021, the Corporation invested a significant portion towards this pre-production capital with remainder of the expenditure outlay anticipated by the end of 2021. As a result of the slower ramp-up of production to comply with the COVID-19 protocols in the Yukon, the Corporation anticipates that the working capital requirements will increase.

With its cash resources and net working capital on hand as at March 31, 2021, the Corporation anticipates it will have sufficient capital resources to service the working capital requirements of its capital and development costs for a restart of underground production operations, mine site maintenance, exploration activities, and corporate offices and administration, for at least the next 12 month period. As noted elsewhere in this MD&A, any unforeseen capital and development expenditures in excess of current plans, as well as funding necessary to achieve the Corporation's long-term objectives for the ongoing exploration and future development of its mineral properties, may require the Corporation to raise additional funding in the future.

The Corporation's main sources of funding have been from reclamation management revenue from ERDC (and prior to February 14, 2020 from environmental services provided through AEG) and equity issuances. All sources of financings reasonably available will be considered to fund future capital requirements should they arise, including but not limited to issuance of new capital, issuance of new debt, and the sale of assets in whole or in part, including mineral property interests or other property interests. There can be no assurance of profitable mining operations or continued access to financing in the future, and an inability to generate or secure such funding may require the Corporation to substantially curtail and defer its planned exploration and development activities.

The Corporation's activities expose it to a variety of financial risks: market risk (currency risk), credit risk, commodity risk and liquidity risk. Risk management is carried out by Management under policies approved by the Board of Directors. Management identifies and evaluates the financial risks in co-operation with the Corporation's operating units. The Corporation's overall risk management program seeks to minimize potential adverse effects on the Corporation's financial performance, in the context of its general capital management objectives as further described in Note 21 of the Corporation's annual consolidated financial statements for the year ended December 31, 2020.

The Corporation manages liquidity uncertainty by monitoring actual and projected cash flows on a regular basis to try to ensure the Corporation can service its contractual obligations and commitments such as flow through financing commitments. Factors that can impact the Corporation's liquidity are monitored regularly and include operational levels, operating costs, capital costs and foreign exchange rates.



MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE MONTH PERIOD ENDED MARCH 31, 2021

Cash Flows

| <i>(expressed in thousands of Canadian dollars)</i> | Q1 2021 | Q1 2020 |
|---|----------------|------------------|
| Cash used in operating activities | \$ (4,686) | \$ (2,594) |
| Cash from (used in) investing activities | (6,941) | 9,666 |
| Cash from financing activities | 12,602 | 8,058 |
| | \$ 975 | \$ 15,130 |

Cash used in operating activities was \$4,686,000 for Q1 2021 versus \$2,594,000 for Q1 2020. The majority of cash used in operating activities during Q1 2021 was expended on ramp up costs at the Bellekeno mine and Keno Hill mill to advance the District to production. The Corporation also incurred general and administrative expenses. Cash used in investing activities was \$6,941,000 for Q1 2021 versus cash from investing activities of \$9,666,000 for Q1 2020. The majority of cash used in investing activities during Q1 2021 was expended on mineral properties, plant and equipment, partially offset by proceeds from sale of a net smelter return royalty. The cash from financing activities was \$12,602,000 for Q1 2021 versus cash from financing activities of \$8,058,000 for Q1 2020. The majority of cash from in financing activities during Q1 2021 was due to proceeds from an equity financing and the exercise of stock options.

Capital Resources

On November 2, 2020 the Corporation filed a short-form base shelf prospectus (the "Shelf") with the securities commissions in each of the Provinces of British Columbia, Alberta, Saskatchewan, Manitoba and Ontario and a corresponding amendment to its registration statement on Form F-10 (Registration Statement) with the United States Securities and Exchange Commission (SEC) under the U.S./Canada Multijurisdictional Disclosure System, which allows the Corporation to make offerings of common shares, warrants, subscription receipts and/or units up to an aggregate total of \$50,000,000 during the 25-month period following November 2, 2020. As of the date of this MD&A, \$11,700,666 has been applied against this Shelf.

On January 28, 2021, the Corporation completed an equity financing and issued 2,704,770 flow-through common shares for aggregate gross proceeds of \$11,700,666. The flow-through common shares comprise: (i) 2,053,670 flow-through CEE Shares priced at \$4.48 per CEE Share; and (ii) 651,100 flow-through CDE Shares priced at \$3.84 per CDE Share.

The Corporation holds a \$1,250,000 promissory note that is payable to Alexco on June 30, 2022, bearing interest of 5%.

The following table summarizes the current contractual obligations of the Corporation and associated payment requirements over the next five years and thereafter:

| Contractual Obligations <i>(expressed in thousands of Canadian dollars)</i> | Payments Due by Period | | | | |
|---|-------------------------------|-------------------------|--------------------|--------------------|----------------------|
| | Total | Less than 1 year | 1 – 3 years | 3 – 5 years | After 5 years |
| Leases | \$ 7,491 | \$ 2,515 | \$ 4,976 | \$ Nil | \$ Nil |
| Decommissioning and rehabilitation provision (undiscounted basis) | 7,178 | 934 | 3 | 130 | 6,111 |
| Committed Expenditures: | | | | | |
| Purchase obligations | 1,098 | 825 | 201 | 72 | Nil |
| Total | \$ 15,767 | \$ 4,274 | \$ 5,180 | \$ 202 | \$ 6,111 |

Share Data

As at the date of this MD&A, the Corporation has 142,467,774 common shares issued and outstanding. In addition, there are outstanding incentive share options exercisable into a further 8,058,652 common shares, warrants to be



settled by way of common shares issued from treasury for a further 2,000,000 common shares, restricted share units to be settled by way of common shares issued from treasury for a further 316,339 common shares and deferred share units to be settled by way of common shares issued from treasury for a further 528,000 common shares.

Off-Balance Sheet Arrangements

Alexco has no off-balance sheet arrangements as defined by National Instrument 52-109.

8. EMBEDDED DERIVATIVE ASSET AND FINANCIAL INSTRUMENTS

Embedded Derivative Asset

During Q1 2021, the change in fair value of the embedded derivative asset related to the Wheaton SPA resulted in a fair value adjustment of \$3,009,000 (Q1 2020 – \$8,097,000). The embedded derivative asset was calculated based on the discounted future cash flows associated with the difference between the original US\$3.90 per ounce production payment Wheaton would pay for each payable ounce delivered under the SPA and the Amended Production Payment under the Amended SPA which varies depending on the Ag pricing curve. The model currently relies upon inputs from the current mine plan, and considers payable ounces delivered. The model is updated quarterly for the Corporation's credit spread, Wheaton's credit spread, risk-free yield curve, Ag price forward curve, historical Ag price volatility, mineral reserves and resources and the production profile.

Based on assumptions used in the dynamic valuation model, the value of the derivative asset as at March 31, 2021 is \$16,083,000. If, for example, silver prices were to decline from the current spot and forward prices as at March 31, 2021 by 10% per ounce and all other assumptions remained the same, the approximate derivative asset value would be \$22,151,000. Similarly, if silver prices were to increase from the current spot and forward prices as at March 31, 2021 by 10% per ounce and all other assumptions remained the same, the approximate derivative asset value would be \$11,994,000.

As discussed above, the valuation model for the embedded derivative asset related to the Wheaton SPA currently relies upon inputs from the current mine plan, such as payable ounces delivered, and will be updated as a result of updated studies, mine plans and actual production. Furthermore, the valuation model for the embedded derivative asset is updated quarterly to utilize a probability based dynamic pricing structure as opposed to a static pricing structure. As such, the discount rate used and Ag price assumptions being updated quarterly are based on the risk-free yield curve and Ag price forward curve at quarter end.

The following table summarizes the expected stand-alone impact on the embedded derivative asset value based on changes in model inputs:

| Dynamic Model Input Change | Expected Impact on Embedded Derivative Asset Value |
|--|---|
| Ag Price Increase | Decrease |
| Ag Price Volatility Increase | Decrease |
| Increase in production rate | Increase |
| Foreign Exchange: US dollar appreciates compared to CDN dollar | Increase |
| Risk Free Yield Increase | Decrease |

Management expects that changes in the fair value of the embedded derivative asset during production will largely be driven by the risk-free yield curve and Ag price forward curve as well as production rate. In a market where the price of Ag is static, these changes are expected to be nominal relative to a production scenario, at which time management expects the variability of the fair value adjustments to increase significantly as Ag ounces are mined and delivered to Wheaton. In volatile Ag price environments, the valuation changes to the embedded derivative asset are expected to be material.



Financial Instruments

All of the Corporation's cash and cash equivalents as at March 31, 2021 were held in the form of demand deposits. Alexco's restricted cash and deposits were held in the form of term deposits and demand deposits. The Corporation's other financial instruments were its trade and other accounts receivable, its accounts payable and accrued liabilities, its promissory note receivable, and its investment in marketable securities.

As at March 31, 2021, a total of \$2,989,000 of the Corporation's restricted cash and deposits represents cash collateral posted with a surety company to underwrite surety bonds for security in respect of mine-site reclamation at certain of the Corporation's mineral properties. The balance of the Corporation's restricted cash and deposits represent security provided in respect of certain long-term operating lease commitments. The term deposits held as at March 31, 2021 as individual financial instruments carry initial maturity periods of one year or less. They have been classified as investments and accordingly are carried at amortized cost using the effective interest method. All term deposits held are investment grade, low risk investments, generally yielding between 0.25% and 1.5% per annum, and their carrying amounts approximate their fair values given their short terms and low yields.

Substantially all the Corporation's cash, demand deposits and term deposits are held with major financial institutions in Canada. With respect to these instruments, management believes the exposure to credit risk is insignificant due to the nature of the institutions with which they are held, and that the exposure to liquidity and interest rate risk is similarly insignificant given the low-risk-premium yields and the demand or short-maturity-period character of the deposits.

The Corporation's accounts and other receivables as at March 31, 2021 total \$1,863,000, and primarily relates to a receivable from a government agency. The Corporation is exposed to credit losses due to the non-performance of its counterparties. The Corporation's customer for the current reclamation management operations (carried out by ERDC) is a government body and therefore is not considered a material risk. For its trade receivables, the Corporation applies the simplified approach for determining expected credit losses, which require the Corporation to determine the lifetime, expected losses for all its trade receivables. The expected lifetime credit loss provision for its trade receivables is based on historical counterparty default rates and adjusted for relevant forward-looking information, when required. Because of factors including that its customers have been considered a low default risk to date, the historical default rates are low and the lifetime expected credit loss allowance for trade receivables is nominal as at March 31, 2021.

The Corporation's promissory note receivable as at March 31, 2021 totals \$1,250,000 and relates to the sale of AEG. The Corporation is exposed to credit losses due to the non-performance of its counterparties and considering its promissory note is with one party, concentrating the risk, it does consider this to be a material risk. Furthermore, the maturity date of the promissory note receivable was deferred from February 14, 2021 to June 30, 2022, bearing interest of 5% for the duration of this period and payable on maturity. This deferral was negotiated and approved by both parties on January 14, 2021. The Corporation considered the expected lifetime credit losses associated with the deferral, and considering the continued business relationship with Ensero Solutions, Inc (formerly AEG), concluded it was nominal as at March 31, 2021.

The carrying amounts of the Corporation's trade and other accounts receivable and accounts payable and accrued liabilities are estimated to reasonably approximate their fair values, while the carrying amount of investments in marketable securities and the embedded derivative asset are adjusted to fair value at each balance sheet date. The fair values of all of the Corporation's financial instruments measured as at March 31, 2021, other than the marketable securities that are included in investments, constitute Level 2 and Level 3 measurements within the fair value hierarchy defined under IFRS. The fair value of the investments in marketable securities constitute Level 1 measurements.

All of the Corporation's mineral properties, plant and equipment are located in Canada and all of its mining operations and mineral exploration occur in Canada. Also, while a significant majority of the Corporation's operating costs are denominated in Canadian dollars, it does have some exposure to costs, and therefore accounts payable and accrued liabilities, denominated in US dollars.

The Corporation has not employed any hedging activities in respect of the prices for its payable metals or for its exposure to fluctuations in the value of the US dollar.

9. KEY MANAGEMENT COMPENSATION

The remuneration of directors and those persons having authority and responsibility for planning, directing and controlling activities of the Corporation for the three month periods ended March 31, 2021 and 2020 was as follows:



MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE MONTH PERIOD ENDED MARCH 31, 2021

| <i>(expressed in thousands of Canadian dollars)</i> | Q1 2021 | Q1 2020 |
|---|----------|----------|
| Salaries and other short-term benefits | \$ 725 | \$ 834 |
| Share-based compensation | 360 | 363 |
| | \$ 1,085 | \$ 1,197 |

10. CRITICAL ACCOUNTING POLICIES, ESTIMATES AND JUDGMENTS

The Corporation has adopted a new accounting policy related to *Revenue recognition* and early adopted a new accounting standard *IAS 16, Property, Plant and Equipment: Proceeds before Intended Use*, which is described in Notes 2 and 3 of Alexco's March 31, 2021 interim condensed consolidated financial statements. All other significant accounting policies as well as significant judgment and estimates are consistent with those presented in Notes 3 and 5 of Alexco's December 31, 2020 annual consolidated financial statements.

11. NON-GAAP MEASURES

The Corporation presents non-GAAP measures, which are not defined in IFRS. A description and calculation of the measures are given below and may differ from similarly named measures provided by other issuers. We disclose these measures because we believe it assists readers in understanding Alexco's financial position. These measures should not be considered in isolation or used in substitute for other measures prepared in accordance with IFRS.

Adjusted Income (Loss) Before Taxes, Adjusted Net Income (Loss) and Adjusted basic and diluted net income (loss) per common share

The Adjusted Income (Loss) Before Taxes excludes amounts recorded with respect to the change in fair value on the embedded derivative asset related to the Wheaton stream, and within this MD&A is provided before tax, net of tax and on a per-share basis (see Adjusted Net Income (Loss) and Adjusted basic and diluted net income (loss) per common share). These measures are used by management to facilitate comparability between periods, and are believed to be relevant to external users for the same reason. They are intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.

These measures are reconciled to Income (Loss) Before Taxes from the interim condensed consolidated statements of loss and comprehensive loss for Q1 2021 and Q1 2020. Adjusted basic and diluted net income (loss) per common share has been calculated using the same weighted average number of common shares outstanding included in the interim 2021-Q1 Interim F/S. The reconciliation is as follows:

| <i>(expressed in thousands of Canadian dollars, except per share and share amounts)</i> | For the three month periods ended March 31 | |
|---|--|----------|
| | 2021 | 2020 |
| Income Before Taxes | \$ 4,374 | \$ 5,487 |
| Subtract: | | |
| Gain on embedded derivative asset | 3,009 | 8,097 |
| Adjusted Income (Loss) Before Taxes | 1,365 | (2,610) |
| Income tax provision (recovery) | 215 | 770 |
| Income net of tax from discontinued operations | - | 7,336 |
| Adjusted Net Income (Loss) | \$ 1,150 | \$ 3,956 |
| Adjusted basic and diluted net income (loss) per common share | \$ 0.01 | \$ 0.03 |

Net Working Capital

Consolidated net working capital comprises those components of current assets and liabilities which support and result from the Corporation's ongoing running of its current operations. It is provided to give a quantifiable indication of the Corporation's short-term cash generation ability and business efficiency. As a measure linked to current operations and



sustainability of the business, net working capital includes: cash and cash equivalents, accounts and other receivables, investments, inventories, and prepaid expenses and other, less accounts payable and accrued liabilities, lease liabilities, and environmental services contract loss provision. Excluded components are deferred revenue, decommissioning and rehabilitation provision and flow-through share premium.

12. DISCLOSURE CONTROLS AND PROCEDURES

Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the accounting principles under which the Corporation's financial statements are prepared. As required under National Instrument 52-109, management advises that there have been no significant changes in the Corporation's internal control over financial reporting during Q1 2021 that have materially affected, or are reasonably likely to materially affect, the Corporation's internal control over financial reporting.

13. RISK FACTORS

There have been no material changes to the risk factors set forth in Alexco's Annual Information Form for the year ended December 31, 2020. The risk factors included in our Annual Information Form for the year ended December 31, 2020, in addition to the other information set forth in this MD&A, could materially affect our business, financial condition or results of operations. Additional risks and uncertainties not currently known to us or that we deem to be immaterial could also materially adversely affect our business, financial condition or results of operations.

14. CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This MD&A contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 and "forward-looking information" within the meaning of applicable Canadian securities laws (together, "forward-looking statements") concerning the Corporation's business plans, including but not limited to anticipated results and developments in the Corporation's operations in future periods, planned exploration and development of its mineral properties, plans related to its business and other matters that may occur in the future, made as of the date of this MD&A.

Forward-looking statements may include, but are not limited to, statements with respect to additional capital requirements to fund further exploration and development work on the Corporation's properties, future remediation and reclamation activities, future mineral exploration, the estimation of mineral reserves and mineral resources, the realization of mineral reserve and mineral resource estimates, future mine construction and development activities, future mine operation and production, the timing of activities, the amount of estimated revenues and expenses, the success of exploration activities, permitting timelines, requirements for additional capital and sources, uses of funds, and the Corporation's ability to successfully withstand the impact of the COVID-19 pandemic. Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, using words or phrases such as "expects", "anticipates", "plans", "estimates", "intends", "strategy", "goals", "objectives" or stating that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved, or the negative of any of these terms and similar expressions) are not statements of historical fact and may be "forward-looking statements".

Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors which could cause actual events or results to differ from those expressed or implied by the forward-looking statements. Such factors include, but are not limited to, risks related to actual results and timing of exploration and development activities; actual results and timing of exploration, development and mining activities; inability of the Corporation to finance the development of its mineral properties; uncertainty of capital costs, operating costs, production and economic returns; actual results and timing of environmental services operations; actual results and timing of remediation and reclamation activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of silver, gold, lead, zinc and other commodities; uncertainties relating to the interpretation of drill results, the geology, grade and continuity of the Corporation's mineral deposits; possible variations in resources, grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; the Corporation's need to attract and retain qualified management and technical personnel; accidents, labour disputes and other risks of the mining industry; First Nation rights and title; continued capitalization and commercial viability; global economic conditions; competition; risks related to governmental regulation, including environmental regulation; delays or inability of the Corporation in obtaining governmental approvals necessary to develop and operate mines on the Corporation's properties; inability of the Corporation to obtain additional financing needed to fund certain contingent payment obligations on reasonable terms or at all; variations in interest rates and foreign exchange rates; and the impact of COVID-19 and the instability thereof,



MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE MONTH PERIOD ENDED MARCH 31, 2021

including disruption or delay of exploration and mining activities. Furthermore, forward-looking statements are statements about the future and are inherently uncertain, and actual achievements of the Corporation or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, including but not limited to those referred to in this MD&A under the heading "Risk Factors" and elsewhere.

Forward-looking statements relate to analyses and other information that are based on forecasts of future results, estimates of amounts not yet determinable and certain assumptions that management believes are reasonable at the time they are made. In making the forward-looking statements included in this MD&A, the Corporation has applied several material assumptions, including, but not limited to, the assumption that: (1) additional financing may be needed to fund certain contingent payment obligations to Wheaton; (2) additional financing needed for the capacity related refund under the Amended SPA with Wheaton will be available on reasonable terms; (3) additional financing needed for further exploration and development work on the Corporation's properties will be available on reasonable terms; (4) the proposed development of its mineral projects will be viable operationally and economically and proceed as planned; (5) market fundamentals will result in sustained silver, gold, lead and zinc demand and prices, and such prices will not be materially lower than those estimated by management in preparing the interim condensed consolidated financial statements for the three month period ended March 31, 2021; (6) market fundamentals will result in sustained silver, gold, lead and zinc demand and prices, and such prices will be materially consistent with or more favourable than those anticipated in the PFS; (7) the actual nature, size and grade of its mineral reserves and mineral resources are materially consistent with the mineral reserve and mineral resource estimates reported in the supporting technical reports, including the PFS; (8) labour and other industry services will be available to the Corporation at prices consistent with internal estimates; (9) the continuances of existing and, in certain circumstances, proposed tax and royalty regimes; and (10) that other parties will continue to meet and satisfy their contractual obligations to the Corporation. Statements concerning mineral reserve and mineral resource estimates may also be deemed to constitute forward-looking information to the extent that they involve estimates of the mineralization that will be encountered as the Keno Hill project is developed. Other material factors and assumptions are discussed throughout this MD&A and, in particular, under the headings "Critical Accounting Estimates and Judgments" and "Risk Factors".

The Corporation's forward-looking statements are based on the beliefs, expectations and opinions of management on the date the statements are made and should not be relied on as representing the Corporation's views on any subsequent date. While the Corporation anticipates that subsequent events may cause its views to change, the Corporation specifically disclaims any intention or any obligation to update forward-looking statements if circumstances or management's beliefs, expectations or opinions should change, except as required by applicable law. For the reasons set forth above, investors should not place undue reliance on forward-looking statements.

15. SUMMARY OF MINERAL RESERVE AND RESOURCE ESTIMATES

The following tables sets forth the estimated Probable Mineral Reserves and Mineral Resources for the Corporation's mineral properties within the KHSD:

Summary of Mineral Reserves Estimates

| Category ^{1,2,4} | Property | Tonnes | Ag (g/t) | Au (g/t) | Pb (%) | Zn (%) | Contained Ag (oz) |
|--|---------------------------|------------------|------------|-------------|------------|------------|-------------------|
| Probable | Bellekeno ³ | 40,109 | 843 | - | 11.8 | 6.3 | 1,087,000 |
| | Lucky Queen ³ | 70,717 | 1,244 | 0.12 | 2.6 | 1.4 | 2,828,000 |
| | Flame & Moth ³ | 704,211 | 672 | 0.49 | 2.7 | 5.7 | 15,215,000 |
| | Birmingham ³ | 362,343 | 972 | 0.13 | 2.6 | 1.3 | 11,323,000 |
| Total Probable Mineral Reserves | | 1,177,380 | 804 | 0.34 | 3.0 | 4.1 | 30,453,000 |

1. All mineral reserves for this table have the effective date of March 28, 2019 and are classified following the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014), in accordance with the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines and the guidelines of NI 43-101.
2. All numbers have been rounded to reflect the relative accuracy of the estimates.
3. The Bellekeno, Lucky Queen, Flame & Moth and Birmingham deposits are incorporated into the current mine plan supported by disclosure in the news release dated March 28, 2019 entitled "Alexco Announces Positive Pre-Feasibility Study for Expanded Silver Production at Keno Hill Silver District" and the PFS filed on SEDAR dated February 13, 2020 with an effective date of March 28, 2019.



MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE MONTH PERIOD ENDED MARCH 31, 2021

4. The disclosure regarding the summary of Probable Mineral Reserves for Alexco's mineral properties within the Keno Hill District has been reviewed and approved by Neil Chambers, P.Eng., Mine Superintendent and a Qualified Person as defined by NI 43-101.

Summary of Indicated and Inferred Resource Estimates

| Category 1,2,3,7,9 | Property | Tonnes | Ag (g/t) | Au (g/t) | Pb (%) | Zn (%) | Contained Ag (oz) |
|---|---------------------------------------|------------------|------------|------------|------------|------------|----------------------|
| <i>Indicated</i> | Bellekeno ^{2,4&5} | 262,000 | 585 | n/a | 3.5 | 5.3 | 4,928,000 |
| | Lucky Queen ^{2,4&6} | 132,300 | 1,167 | 0.2 | 2.4 | 1.6 | 4,964,000 |
| | Flame & Moth ^{2,4&6} | 1,679,000 | 498 | 0.4 | 1.9 | 5.3 | 26,883,000 |
| | Onek ^{4&6} | 700,200 | 191 | 0.6 | 1.2 | 11.9 | 4,300,000 |
| | Birmingham ^{2,4&5} | 1,102,300 | 930 | 0.1 | 2.4 | 1.7 | 32,959,000 |
| Total Indicated Sub-Surface Deposits | | 3,875,800 | 594 | 0.3 | 2.0 | 5.3 | 74,034,000 |
| | Elsa Historical Tailings ⁷ | 2,490,000 | 119 | 0.1 | 1.0 | 0.7 | 9,527,000 |
| Total Indicated All Deposits | | 6,365,800 | 408 | 0.3 | 1.6 | 3.5 | 83,561,000 |
| <i>Inferred</i> | Bellekeno ^{4&5} | 243,000 | 428 | n/a | 4.1 | 5.1 | 3,344,000 |
| | Lucky Queen ^{4&6} | 257,900 | 473 | 0.1 | 1.0 | 0.8 | 3,922,000 |
| | Flame & Moth ^{4&6} | 365,200 | 356 | 0.3 | 0.5 | 4.3 | 4,180,000 |
| | Onek ^{4&6} | 285,100 | 118 | 0.4 | 1.2 | 8.3 | 1,082,000 |
| | Birmingham ^{4&5} | 509,400 | 717 | 0.2 | 1.7 | 1.5 | 11,743,000 |
| Total Inferred | | 1,660,600 | 455 | 0.2 | 1.6 | 3.7 | 24,271,000 |

- All Mineral Resources, except the Elsa Historical Tailings Resource, are classified following the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) of NI 43-101.
- Indicated Mineral Resources are inclusive of Mineral Reserves estimates.
- Mineral Resources are not all Mineral Reserves and do not have demonstrated economic viability. All numbers have been rounded to reflect the relative accuracy of the estimates.
- The Mineral Resource estimates comprising Bellekeno, Lucky Queen and Flame & Moth, Onek and Birmingham are supported by disclosure in the news release dated March 28, 2019 entitled "Alexco Announces Positive Pre-Feasibility Study for Expanded Silver Production at Keno Hill Silver District" and the technical report filed on SEDAR dated February 13, 2020 with an effective date of March 28, 2019.
- The mineral resource estimate for the Birmingham and Bellekeno deposits are based on mineral resource estimates having an effective date of March 28, 2019. The Bellekeno deposit has been depleted to reflect all mine production from the Bellekeno mine to date.
- The mineral resource estimate for the Lucky Queen, Flame & Moth and Onek deposits have an effective date of January 3, 2017.
- The mineral resource estimate for the Elsa Tailings has an effective date of April 22, 2010 and is supported by the technical report dated June 16, 2010 entitled "Mineral Resource Estimation, Elsa Tailings Project, Yukon, Canada". The Elsa Historical Tailings Resource is classified following the CIM Definition Standards for Mineral Resources and Mineral Reserves (December 2005 of NI 43-101).
- The disclosure regarding the summary of estimated Mineral Resources for Alexco's mineral properties within the Keno Hill District has been reviewed and approved by Dr. Gilles Arseneau, P. Geo (Lucky Queen, Flame & Moth, and Onek deposits), Cliff Revering, P. Eng (Birmingham deposit), and David Farrow, P. GEO.PrSciNat (Bellekeno deposit), Qualified Persons as defined by NI 43-101.

Summary of Historical Resource Estimates

| | Tonnes | Ag (g/t) | Au (g/t) | Pb (%) | Zn (%) | Contained Ag (oz) | |
|-----------------------------|--------------------------------|---------------|--------------|------------|-------------|----------------------|------------------|
| Historical Resources | Silver King ^{1,2} | | | | | | |
| | Proven, probable and indicated | 99,000 | 1,354 | <i>n/a</i> | 1.6% | 0.1% | 4,310,000 |
| | Inferred | 22,500 | 1,456 | <i>n/a</i> | 0.1% | <i>n/a</i> | 1,057,000 |

- Historical resources for Silver King were estimated by UKHM, as documented in an internal report entitled "Mineral Resources and Mineable Ore Reserves" dated March 9, 1997. The historical resources were estimated based on a combination of surface and underground drill holes and chip samples taken on the vein and calculated using the polygonal (block) model and the 1997 CIM definitions for resource categories. Verification of the estimate would require new drill holes into a statistically significant number of the historical resource blocks and/or a combination of on-vein sampling. A Qualified Person (as defined by NI 43-101) has not done sufficient work to classify this estimate of historical resources as current Mineral Resources or Mineral Reserves, nor is Alexco treating this historical estimate as current Mineral Resources or Mineral Reserves.
- The disclosure regarding the summary of historical Mineral Resources for Alexco's mineral properties within the Keno Hill District has been reviewed and approved by Neil Chambers, P.Eng., Mine Superintendent and a Qualified Person as defined by NI 43-101.



16. TECHNICAL DISCLOSURE CAUTIONARY NOTE TO U.S. INVESTORS – INFORMATION CONCERNING PREPARATION OF RESOURCE ESTIMATES

The material scientific and technical information in respect of Alexco's Keno Hill Silver District project in the MD&A, unless otherwise indicated, is based upon the information contained in the PFS. Readers are encouraged to read the PFS, which is available under the Corporation's profile on SEDAR, for detailed information concerning KHSD. All disclosure contained in this MD&A regarding the Mineral Reserves and Mineral Resource estimates and economic analysis on the property is fully qualified by the full disclosure contained in the PFS.

A production decision which is made without a feasibility study of Mineral Reserves demonstrating economic and technical viability carries additional potential risks which include, but are not limited to, the risk that additional detailed work may be necessary with respect to mine design and mining schedules, metallurgical flow sheets and process plant designs, and the noted inherent risks pertaining to the inclusion of approximately 2% Inferred Mineral Resources (as defined herein) in the mine plan.

This MD&A has been prepared in accordance with the requirements of Canadian provincial securities laws, which differ from the requirements of U.S. securities laws. Unless otherwise indicated, all mineral reserve and mineral resource estimates included have been prepared in accordance with Canadian National Instrument 43-101— *Standards of Disclosure for Mineral Projects* ("NI 43-101") and the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") – *CIM Definition Standards on Mineral Resources and Mineral Reserves*, adopted by the CIM Council, as amended. NI 43-101 is an instrument developed by the Canadian securities administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. These definitions differ from the definitions in requirements under United States securities laws adopted by the United States Securities and Exchange Commission (the "SEC").

Under Canadian rules, estimates of Inferred Mineral Resources (as defined herein) may not form the basis of feasibility or pre-feasibility studies, except in rare cases. Investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically or legally mineable. An "Inferred Mineral Resource" is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource (as defined herein) and must not be converted to a mineral reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Investors are cautioned not to assume that all or any part of mineral reserves and mineral resources determined in accordance with NI 43-101 and CIM standards will qualify as, or be identical to, mineral reserves and mineral resources estimated under the standards of the SEC applicable to U.S. companies. The SEC has adopted amendments to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC. As a foreign private issuer that files its annual report on Form 40-F with the SEC pursuant to the multi-jurisdictional disclosure system, the Corporation is not required to provide disclosure on its mineral properties under the SEC's new rules and will continue to provide disclosure under NI 43-101 and the CIM standards. If the Corporation ceases to be a foreign private issuer or lose its eligibility to file its annual report on Form 40-F pursuant to the multi-jurisdictional disclosure system, then the Corporation will be subject to the SEC's new rules, which differ from the requirements of NI 43-101 and the CIM standards.

Accordingly, information contained in this MD&A that contain descriptions of the Corporation's mineral deposits may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.

Additional Information

Additional information relating to Alexco, including Alexco's Annual Information Form for the year ended December 31, 2020 can be found on the Corporation's profile on SEDAR at www.sedar.com and on the Corporation's website at www.alexcoresource.com and the Edgar website at www.sec.gov.

