



ALEXCO

ALEXCO RESOURCE CORP.

MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE AND NINE MONTH PERIODS ENDED SEPTEMBER 30, 2019

This Management's Discussion and Analysis ("MD&A") of Alexco Resource Corp. ("Alexco" or the "Corporation") is dated November 14, 2019 and provides an analysis of Alexco's unaudited condensed consolidated financial results for the three and nine month periods ended September 30, 2019 compared to the three and nine month periods ended September 30, 2018.

The following information should be read in conjunction with the Corporation's September 30, 2019 unaudited interim condensed consolidated financial statements with accompanying notes (the "2019-Q3 Interim 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, 2018, which were prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. The 2019-Q3 Interim F/S follow the same accounting policies and methods of computation as compared with the most recent fiscal financial statements, except for those policies disclosed in Notes 3 and 11 of the 2019-Q3 Interim F/S. 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 and operations has been reviewed and approved by Neil Chambers, P.Eng., Mine Superintendent, 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.

2019-Q3 HIGHLIGHTS AND OVERALL PERFORMANCE

CORPORATE

- Overall, Alexco reported net loss of \$2,308,000, or \$(0.02) per share for the three month period ended September 30, 2019 and a loss before tax expense of \$2,240,000 including net non-cash cost adjustments of \$906,000. In the same period for 2018 the Corporation incurred a loss before taxes of \$1,548,000, including non-cash income adjustments of \$714,000. The operating loss for both periods was similar with offsetting differences to the net loss related to non-cash adjustments resulting from the treatment of the embedded derivative on the Wheaton Precious Metals ("Wheaton") and deferred income tax expense.
- The Corporation's cash and cash equivalents at September 30, 2019 totaled \$10,551,000 compared to \$8,576,000 at December 31, 2018, while net working capital (*see Non-GAAP Measures on page 20*) totaled \$13,853,000 compared to \$10,188,000 at December 31, 2018. The Corporation's restricted cash and deposits at September 30, 2019 totaled \$2,774,000 compared to \$2,725,000 at December 31, 2018.

MINE OPERATIONS AND EXPLORATION

- During the quarter, Alexco continued with surface exploration diamond drilling focused on potential resource expansion and deeper targets in the vicinity of the Bermingham deposit, as well as following up on reconnaissance drilling from the 2018 program. In September the Company announced initial results from the 2019 Bermingham “deep target” drilling program (see news release dated September 10, 2019, entitled “Alexco Intersects 8.1 Meters (True Width) at Composite Grade of 1,414 Grams per Tonne (45.5 oz/t) Silver at “Bermingham Deep” Target”) indicating this target is completely open and will require follow-up. The 2019 drill program was completed in mid-October with a total of 8,333 meters (“m”) drilled in 29 holes, and final results are expected to be available in Q4-2019.
- The Corporation completed the planned surface capital construction activities at the Bermingham deposit consistent with work outlined in the recently published pre-feasibility study (“PFS”), including installation of the underground production-related portal, construction of a lined treatment pond, initial construction of a coarse ore storage pad and upgrading of existing haul roads.
- Alexco has the requisite permits and authorizations for development and future ore production from the Bellekeno, Flame & Moth, Lucky Queen, and Onek deposits. Amendment of the Corporation’s Quartz Mining Licence (“QML”) is expected to be complete in the fourth quarter of 2019 which will allow Alexco to resume and complete the remaining underground development at Bermingham and begin ore production. Alexco is in the final steps of renewing the Water Use Licence (“WUL”) with a Technical Pre-Hearing Conference scheduled for early December 2019. Following this process step, the final issuance of the WUL renewal will be subject to consideration by the Yukon Water Board and will likely extend into Q1 2020.

ALEXCO ENVIRONMENTAL GROUP

- AEG recognized revenues of \$7,200,000 for the three month period ended September 30, 2019 for a gross profit of \$1,420,000 achieving a gross margin of 20%, compared to revenues of \$4,669,000 for the three month period ended September 30, 2018 for a gross profit of \$1,702,000 achieving a gross margin of 36%. AEG recognized operating income before taxes for the three month period ended September 30, 2019 of \$10,000 (see Note 22 in the financial statements for the three and nine month periods ended September 30, 2019). The gross profit margin percentage reduced during the quarter primarily as a result the use of third party contractors to complete construction of a larger water treatment system complex in Ontario as well as two new longer-term projects coming online, which incurred higher up-front costs.

OVERVIEW OF THE BUSINESS

Alexco owns substantially all of the historic Keno Hill Silver District (“KHSD” or the “District”), located in Canada’s Yukon Territory. The Bellekeno silver mine, one of the world’s highest-grade silver mines with a production grade averaging 779 grams per tonne (“g/t”) silver (“Ag”), 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 of silver during the 2010 – 2013 period. In September 2013 Alexco suspended Bellekeno mining operations in light of a sharply reduced silver and base metal prices. Since the suspension Alexco has focused on evaluating the Flame & Moth and the Bermingham deposits, renegotiating third party contracts and reviewing other opportunities to reduce future mining operating costs for future operations at Keno Hill. This work culminated with the announcement of PFS results in March 2019 and the publication of a technical report in May 2019. With the PFS completed, Alexco is moving toward resumption of silver production at Keno Hill, including production from the Bellekeno, Flame & Moth, Bermingham and Lucky Queen silver deposits, subject to a positive production decision.

Alexco also owns and operates an environmental consulting business, AEG, an environmental services business, providing consulting, remediation solutions and project management services in respect of environmental permitting and compliance and site remediation, primarily in Canada and the United States. AEG provides these services to both government and industry clients through its wholly owned subsidiaries, Alexco Environmental Group Holding Inc. (“AEG Holdings”) which wholly owns Alexco Environmental Group Inc. (“AEG Canada”), Alexco Water and Environment Inc. (“AWE”) and Contango Strategies Ltd. (“Contango”). Alexco also owns certain patent rights related to mine reclamation and closure processes including the in-situ immobilization of metals in groundwater, soils, waste stacks and pit lakes.

Alexco is a public company which is listed on the NYSE American Stock Exchange and the Toronto Stock Exchange (under the symbol AXU). Prior to August 12, 2019, the trading symbol on the Toronto Stock Exchange was AXR.

OUTLOOK AND STRATEGY

Keno Hill Silver District

Alexco’s current primary focus is to re-start mining operations at Keno Hill. Alexco has the requisite permits and authorizations for future ore production from the Flame & Moth, Lucky Queen, Bellekeno and Onek deposits. In November 2017 a project proposal for environmental assessment was submitted to the Yukon Environmental and Socio-economic Assessment Board (“YESAB”) for future production and processing of ore from the Bermingham deposit. A positive Decision Document was issued by the Yukon Government on July 27, 2018. Completion of Documentation for the amendments to Alexco’s QML is expected in Q4 2019, and a renewal of the WUL is expected Q1 2020. At that point Alexco will be fully permitted for a period of 15 years for ore production and processing from the Bermingham deposit in addition to the previously mentioned Flame & Moth, Lucky Queen, Bellekeno and Onek deposits.

The KHSD is located in the Yukon Territory approximately 330 kilometers north of Whitehorse in the vicinity of the communities of Mayo and Keno City and 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 (“CCBA”) 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, District closure activities and mine production.

Alexco Environmental Group

Alexco owns and operates AEG, an environmental services business, providing consulting, remediation solutions and project management services in respect of environmental permitting and compliance and site remediation, primarily in Canada and the United States. AEG has developed a strong client base within the mining industry and has also been able to establish new lines of business related to industrial site soil remediation, water treatment and historical mine pool remediation as well as emergency water treatment services. With the acquisition of Contango in June 2018, AEG has expanded its business lines into specialized biological water treatment systems for mining, oil and gas, and industrial operations.

AEG provides consulting services to Alexco’s wholly owned subsidiary, Elsa Reclamation and Development Ltd. (“ERDC”), for the on-going environmental care and maintenance program and reclamation and closure projects at Keno Hill with Canada and in accordance with the amended and restated Subsidiary Agreement (“ARSA”).

ERDC

As part of Alexco's 2006 acquisition of the United Keno Hill Mines ("UKHM") mineral rights in the District, ERDC is party to the ARSA with the Federal Government of Canada ("Canada"). Under the ARSA, ERDC is retained by Canada as a paid contractor responsible on a continuing basis for the environmental care and maintenance and ultimate closure reclamation of the former UKHM mineral properties. The ARSA provides that ERDC share the responsibility for the development of the ultimate closure plan with Canada. Upon regulatory approval, the closure plan will be implemented by ERDC. During the period required to develop the plan and until the closure plan is executed, ERDC is also responsible for carrying out the environmental care and maintenance at various sites within the UKHM mineral rights, for a fixed annual fee established on a per-site basis totaling \$850,000, adjustable for material changes in scope. ERDC receives agreed-to commercial contractor rates when retained by Canada to provide environmental services in the District outside the scope of care and maintenance and closure and reclamation planning under the ARSA.

ERDC currently holds a Type B WUL under the Yukon Waters Act to undertake care and maintenance activities in the Keno Hill area. The Existing State of Mine ("ESM") Reclamation Plan at Keno Hill was completed in September 2018 and was subsequently submitted for environmental assessment by the YESAB. The ESM Project Proposal is currently in the environmental assessment process under YESAA, the next step of which is the YESAB Evaluation Report. Subsequent to completion of the YESAB environmental assessment process, a WUL amendment will be required from the Yukon Water Board to authorize the activities necessary to effect closure of the site. After licencing, the ESM Reclamation Plan must be finalized for submission to Crown-Indigenous Relations and Northern Affairs Canada ("CIRNAC") for approval and funding, in order to proceed into implementation and execution of the final cleanup project.

Economic Climate

Silver, lead and zinc are the primary metals found within the District historically. With respect to the economic climate during the third quarter of 2019, the price of silver rose sharply with an average silver price of US\$16.98 per ounce of silver during the quarter. Silver traded from a high of US\$19.31 per ounce of silver on September 4, 2019 to a low of US\$14.38 per ounce of silver on May 29, 2019, while lead traded between US\$0.97 to US\$0.82 per pound and zinc traded between US\$1.36 to US\$1.00 per pound. As at the date of this MD&A, spot commodity prices are approximately US\$17.00 per ounce silver, US\$0.93 per pound for lead and US\$1.12 per pound for zinc and the Canadian-US exchange rate is approximately US\$0.76 per CAD. Consensus investment analyst forecasts over the next two years for silver average approximately US\$17.88 per ounce of silver, for lead average approximately US\$0.90 per pound, and for zinc US\$1.11 per pound, with the Canadian-US exchange rate forecast at US\$0.76 per CAD (see "Risk Factors" in the MD&A for the year ended December 31, 2018, including but not limited to "Potential Profitability Of Mineral Properties Depends Upon Other Factors Beyond the Control of the Corporation" and "General Economic Conditions May Adversely Affect the Corporation's Growth and Profitability" thereunder).

2019 DEVELOPMENTS

2019 Pre-Feasibility Study

On March 28 2019, Alexco announced the results of an independent PFS on the Keno Hill Silver Project (the "Project"), titled "Alexco Announces Positive Pre-Feasibility Study for Expanded Silver Production at Keno Hill Silver District" and on May 8, 2019 the Corporation released an updated National Instrument 43-101 compliant technical report entitled "NI 43-101 Technical Report on Preliminary Feasibility Study of the Keno Hill Silver District Project, Yukon Territory, Canada".

The Project contemplates the conventional mining and milling of silver-lead-zinc ore from four deposits in the District. There is an existing 400 tonne per day (“t/d”) mill which will process a high grade silver-lead-zinc ore from four deposits across the District. Over the eight year mine life contemplated in this PFS, the mines will produce 1.18 M tonnes of ore at an average 805 g/t Ag, 2.98% lead (“Pb”), 4.13% zinc (“Zn”) and 0.34 g/t gold (“Au”). Following commissioning, the mill will produce two concentrates; a high grade lead-silver LOM concentrate averaging 15,890 g/t Ag, 54% Pb, and 3.7 g/t Au, and a zinc-silver LOM concentrate averaging 649 g/t Ag and 53% Zn. The annualized silver content in concentrate is 4.0 M ounces (“oz”).

The mine plan is based on conventional mining methods. Based on the orientation, width of the veins, review of historic mining in the District, and geotechnical information, a combination of mechanized overhand cut and fill, and longhole stoping with cemented rock fill have been selected as the appropriate mining methods for all four deposits. The deposits require the use of mining methods that can adequately support the veins and that are flexible and selective while minimizing the direct mining costs. The backfill is planned to be a mixture of waste rock fill and tailings from the dry stack tailings facility with cement added as required.

The initial capital cost is estimated to be \$23,200,000, net of \$11,900,000 of offsetting revenue from concentrate sales. This initial capital (pre-production prior to achieving positive cash flow) comprises \$17,900,000 of mine development and PP&E and \$5,300,000 of net working capital for the initial construction and ramp up period of five months. The life-of-mine (“LOM”) sustaining capital is estimated at \$76,500,000, primarily for ongoing mine development.

The direct operating costs for the Project are estimated at a total of \$362,000,000 or \$312 per tonne of ore. These comprise \$226,000,000 direct mine costs, \$70,000,000 of direct mill costs, and \$67,000,000 for site general and administrative costs (excluding corporate). All-in sustaining costs (“AISC”) are estimated at US\$11.98/oz Ag (based on the PFS metal prices).

The project economics from the PFS show this to be a robust project with low capital and high returns with a pre-tax net present value at a 5% discount rate (“NPV₅”) of \$136,200,000 and after-tax NPV₅ of \$101,200,000. The pre-tax internal rate of return (“IRR”) is 84% and after-tax IRR is 74%. Considering the Project on a stand-alone basis, the undiscounted after-tax cash flow totals \$129,300,000 over the mine life. Simple payback occurs approximately two years from start of production, approximately 26 months after the end of the initial capital period.

A summary of the mineral reserve estimates are below:

Summary of Mineral Reserves Estimates

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

Notes: See page 21 and 22 for full disclosure on estimated mineral reserves and resources.

The PFS has been prepared in compliance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* (“NI 43-101”), and was compiled by Mining Plus Consulting Ltd. (“Mining Plus”) with contributions from a team of Qualified Persons as defined by NI 43-101. All mineral resources 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 with NI 43-101. The Technical Report is available on the Company's website at <https://www.alexcoresource.com/> as well as under the Company's profile on SEDAR at www.sedar.com.

Development Strategy

The Corporation is moving towards production in a two (2) phased approach. Phase 1 work commenced in June 2019 and focused on surface and mill capital improvements, mine planning and operating readiness and permitting, while Phase 2 will commence only once the Corporation makes a positive production decision. Phase 2 work will focus on underground development in preparation for production from the Bellekeno and Flame & Moth deposits, mill commissioning and final underground development of the Bermingham deposit.

2019 OUTLOOK

Keno Hill Silver District

2019 Flame & Moth Development

Flame & Moth had underground development totaling 452 m driven, primarily in 2018. That work included 371 m of linear decline advance and 81 m of infrastructure. Approximately 336 m of ramp and infrastructure development remains to reach the first ore level access at the Lightning Zone. In addition, a 100 m ventilation raise to surface will be required before commercial ore production can be achieved. Completion of the remaining ramp development, raise and infrastructure will commence in Phase II of the development strategy once a positive production decision is made.

The Flame & Moth decline will be constructed at a design of 15% grade and sized 3.7 m wide x 4.0 m high and will accommodate new underground drilling headings as well as haulage up to 250 to 400 tonnes of ore per day to the primary crusher which is located within 200 m of the mine portal.

2019 Bermingham Development

The Bermingham deposit has underground development totaling 550 m of decline and supporting development driven. Approximately 210 m of ramp and infrastructure development remains to reach the first ore level access. In addition, a 170 m ventilation raise to surface will be required before commercial ore production can be achieved. Completion of the remaining ramp development, raise and infrastructure will commence in Phase II of the development strategy once a positive production decision is made.

During the quarter the Corporation completed the planned surface capital construction activities at the Bermingham deposit, including the installation of the underground production-related portal, construction of a lined treatment pond, initial construction of a coarse ore storage pad upgrading existing haul road.

The Bermingham decline is constructed at a design of 15% grade and sized 3.7 m wide x 4.0 m high and will accommodate new underground drilling headings as well as haulage up to 250 to 400 tonnes of ore per day to the primary crusher.

Permitting Update

Alexco has the requisite permits and authorizations for development and future ore production from the Bellekeno, Flame & Moth, Lucky Queen, and Onek deposits. Amendment of the Corporation's QML is expected to be complete in Q4 2019 which will allow Alexco to resume and complete the remaining underground development at Bermingham and begin ore production.

Alexco is in the final steps of renewing the Water Use Licence ("WUL") with a Technical Pre-Hearing Conference scheduled for early December 2019. Following this process step, the final issuance of the

WUL renewal will be subject to consideration by the Yukon Water Board and will likely extend into Q1 2020.

Exploration

During 2019 the Corporation completed an 8,333 m, 29 hole surface exploration diamond drilling program:

- The program commenced in June 2019 with two drills sited in the vicinity of the Bermingham deposit, where 5,140 m were drilled in 10 holes targeting extensions of the shallower Northeast Zone reserve and resource, as well as testing the continuity and tenor of the high grade Bermingham mineralization at depth;
- The remaining 19 holes and 3,193 m of drilling were assisted by results from the 2018 geophysical survey flown over the Galena Hill area and targeted signatures exhibiting a similar structural and stratigraphic framework as the Bermingham deposit;
- On September 10, 2019 the Company announced initial results from the 2019 Bermingham “deep target” drilling program (see news release dated September 10, 2019, entitled “Alexco Intersects 8.1 Meters (True Width) at Composite Grade of 1,414 Grams per Tonne (45.5 oz/t) Silver at ‘Bermingham Deep’ Target”) indicating this target is completely open and will require follow-up; and
- The drilling program was completed in mid-October and assay results are pending for the balance of the 2019 surface drilling campaign and expected to be available in December 2019.

During the year the Corporation also focused on other exploration, including the shallow RAB drilling of six holes for 408 m and trenching to follow up on testing of blind mineralized structures on Galena Hill with signatures similar to that of Bermingham, that extend under shallow cover also identified by the detailed aerial geophysical survey conducted in late 2018.

RESULTS OF OPERATIONS

Mine Site Care and Maintenance

Mine site care and maintenance costs for third quarter of 2019 totaled \$429,000 compared to \$651,000 for the third quarter of 2018. The costs decreased in the 2019 period compared to the 2018 period as the Corporation had increased mill maintenance and refurbishment initiatives related to future recommissioning of the mill and related plant during the third quarter of 2018. Included in mine site care and maintenance costs is depreciation expense of \$309,000 for the 2019 period compared to \$322,000 for the 2018 period.

General and Administrative Expenses

Corporate:

Corporate general and administrative expenses during the third quarter of 2019 totaled \$1,603,000 compared to \$1,698,000 for the third quarter of 2018. These included non-cash costs in the amounts of \$495,000 in the 2019 period and \$480,000 in the 2018 period, which relate to share-based compensation and amortization and depreciation expenses.

Environmental Services:

Environmental Services general and administrative expenses during the third quarter of 2019 totaled \$1,777,000 compared to \$1,341,000 for the third quarter of 2018. The increase in general and administrative expenses in the 2019 period is mainly attributable to increased support required for new projects including a joint operation partnership with Dena Nezziddi Limited Partnership, to supply and operate a water treatment system at the Wolverine mine located in the southeastern Yukon. Furthermore, in 2019 there has been additional investment in professional employees and support functions required to meet demand and growth in the business.

Alexco Environmental Group (AEG) and ERDC

Highlights during Q3-2019:

- AEG recognized revenues of \$7,200,000 in the third quarter of 2019 for a gross profit of \$1,420,000 achieving a gross margin of 20% compared to revenues of \$4,669,000 for a gross profit of \$1,702,000 achieving a gross margin of 36% in the third quarter of 2018. The decrease in gross profit margin during the 2019 period was primarily related to use of third party contractors to complete construction of a larger water treatment system complex in Ontario as well as two new longer-term projects coming online, which incurred higher up-front costs..
- During the quarter, under the contract with Canada for the remediation of legacy environmental conditions at Keno Hill, ERDC completed the Evaluation Process for the ESM Reclamation Plan and a final Evaluation Report by YESAB is expected to be issued in December 2019. In addition, ERDC continued with detailed engineering related to the final closure plan.
- During the quarter, the Corporation entered into an agreement with the Yukon Government to provide water treatment services at the Wolverine mine site located in the Yukon, Canada. As part of this agreement, AEG entered into a joint arrangement with Dena Nezziddi Limited Partnership (“DNLP”) to construct and operate a water treatment system until December 2020. AEG incurred upfront capital expenditures totalling \$1,100,000 for the water treatment system, which has been capitalized to property, plant and equipment. For fees relating specifically to construction of the water treatment system, the Corporation recorded \$800,000 in deferred revenue that will be recognized over the life of the contract.
- From a strategic perspective, Alexco continues to evaluate options to unlock value from AEG for the benefit of Alexco shareholders.

SUMMARY OF QUARTERLY RESULTS

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	Net Income (Loss)	Basic Income (Loss) per Share	Diluted Income (Loss) per Share	Expenditures Capitalized on Mineral Properties
2017-Q4	2,507	993	(1,791)	\$(0.03)	\$(0.03)	2,809
2017 Total	6,293	2,538	(4,104)	\$(0.05)	\$(0.05)	6,300
2018-Q1	2,764	830	(3,261)	\$(0.03)	\$(0.03)	3,147
2018-Q2	3,545	1,368	(1,896)	\$(0.02)	\$(0.02)	4,812
2018-Q3	4,669	1,702	(1,548)	\$(0.01)	\$(0.01)	6,517
2018-Q4	8,902	2,152	(1,795)	\$(0.02)	\$(0.02)	3,163
2018 Total	19,880	6,052	(8,501)	\$(0.08)	\$(0.08)	17,639
2019-Q1	7,233	1,472	1,207	\$ 0.01	\$ 0.01	1,266
2019-Q2	8,694	2,034	(1,471)	\$(0.01)	\$(0.01)	1,690
2019-Q3	7,200	1,420	(2,308)	\$(0.02)	\$(0.02)	2,531

Note: Sum of all the quarters may not add up to the yearly totals due to rounding

The net loss for the fourth quarter of 2017 reflects site-based expenditures, AEG restructure costs and general and administrative expenses, offset by AEG profits and a foreign exchange gain. The net loss from the 2018 quarters reflect fair value adjustment losses from the Corporation's investments, site-based expenditures, mill maintenance initiatives and general and administrative expenses offset by a non-cash fair value gain related to the embedded derivative on the Wheaton streaming agreement. The net income from the first quarter of 2019 reflects a gain on the embedded derivative related to the Wheaton streaming agreement, offset by site-based expenditures along with general and administrative expenses of the Corporation. The net loss for the second quarter of 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 on the Wheaton streaming agreement. The net loss for the third quarter of 2019 reflects continued site-based expenditures at Keno Hill along with general and administrative expenses.

The mineral property expenditures in the fourth quarter of 2017 reflect the advanced underground exploration program at the Birmingham deposit. The mineral property expenditures in the first quarter of 2018 mainly reflect the continued advancement of the underground exploration decline at the Birmingham deposit and the expenditures incurred in the second, third and fourth quarters of 2018 reflect completion of the advanced exploration decline, completion of the underground drilling program at the Birmingham deposit, commencement of the underground development decline at the Flame & Moth deposit and completion of a 15,314 m surface drilling program. The mineral property expenditures in the first nine months of 2019 mainly reflect continued work with independent contractors on the PFS, preparation and completion of the 2019 surface exploration drill program and infrastructure initiatives at site.

Liquidity, Cash Flows and Capital Resources

Liquidity

At September 30, 2019 the Corporation had cash and cash equivalents of \$10,551,000, and net working capital of \$13,853,000 compared to cash and cash equivalents of \$8,576,000 and net working capital of \$10,188,000 at December 31, 2018. The Corporation faces no known liquidity issues and is not aware of any significant credit risks in any of its financial assets. In addition, the Corporation's restricted cash and deposits at September 30, 2019 totalled \$2,774,000 compared to \$2,725,000 at December 31, 2018.

With its cash resources and net working capital on hand at September 30, 2019, and assuming no re-start of full scale mining operations within the next twelve months, Alexco anticipates it will have sufficient capital resources to service the working capital requirements of its mine site care and maintenance, exploration activities, environmental services business and corporate offices and administration, for at least the next 12 month period. As noted elsewhere in this MD&A, re-start of mining operations is dependent on a number of factors, including metal prices and foreign exchange rates. A re-start of underground production operations will require additional capital investment, in excess of the capital resources currently on hand. Because of these factors, combined with its long term objectives for the exploration and development of its mineral properties, the Corporation is likely to require future additional funding.

Historically, Alexco's main sources of funding have been from mining operations, AEG and equity issuances. All sources of finance reasonably available will be considered to fund future requirements, 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 interests. There can be no assurance of a re-start of mining operations or continued access to finance 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.

Cash Flows

	Three Months Ended September 30		Nine Months Ended September 30	
	2019	2018	2019	2018
Cash flow used in operating activities	\$ (469)	\$ (1,109)	\$ (5,158)	\$ (4,833)
Cash flow provided (used) in investing activities	(3,471)	(7,065)	(6,153)	(9,321)
Cash flow provided by financing activities	2,688	(126)	13,286	10,298
	\$ (1,252)	\$ (8,300)	\$ 1,975	\$ (3,856)

Cash outflow in operating activities was \$469,000 for the third quarter of 2019 versus \$1,109,000 for the third quarter of 2018. The majority of cash outflow from operating activities during the 2019 period and 2018 period were expended on capital requirements for their clients on AEG projects, site-based care and maintenance costs and general and administrative expenses. The decrease in cash outflow in 2019 relates to a decrease in working capital. Cash outflow from investing activities were \$3,471,000 for the third quarter of 2019 versus \$7,065,000 for the third quarter of 2018. The cash outflow during the third quarter of 2019 related primarily to the initial investment on the joint operation project and expenditures related to the surface exploration program. The 2018 period cash outflow related to the surface exploration program, completion of the Birmingham underground exploration program, continued advancement of underground development at the Flame & Moth deposit and work on a PFS. The cash inflows from financing activities were \$2,688,000 for the third quarter of 2019 versus a cash outflow of \$126,000 for the third quarter of 2018. The cash inflow from the 2019 period relates to proceeds from warrant and stock option exercises, partially offset by the repayment of office lease liabilities, whereas the 2018 cash outflow relates to share issuance costs from the June 2018 equity financing.

Silver Purchase Agreement ("SPA") with Wheaton

On October 2, 2008 (with subsequent amendments on October 20, 2008, December 10, 2008, December 22, 2009, March 31, 2010, January 15, 2013, March 11, 2014 and June 16, 2014), the Corporation entered into a SPA with Wheaton under which Wheaton will receive 25% of the life of mine payable silver produced by the Corporation from its District properties. The SPA anticipated that the initial silver deliveries would come from the Bellekeno property. Under the SPA, the Corporation received up-front deposit payments from Wheaton totaling US\$50,000,000 and received further payments of the lesser of US\$3.90 (increasing by 1% per annum after the third year of full production) and the prevailing

market price for each ounce of payable silver delivered, if as and when delivered. After the initial 40 year term of the streaming interest, the Corporation is required to refund the balance of any advance payments received and not yet notionally reduced through silver deliveries. The Corporation would also be required to refund the balance of advance payments received and not yet reduced if Wheaton exercised its right to terminate the streaming interest in an event of default by the Corporation. As of September 2013, Bellekeno mining operations were suspended in light of a reduced silver price environment.

On March 29, 2017 the Corporation and Wheaton amended the SPA such that Wheaton will continue to receive 25% of the life of mine payable silver from the District with a variable production payment based on monthly silver head grade and monthly silver spot price. The actual monthly production payment from Wheaton is determined based on the monthly average silver head grade at the mill and the monthly average spot price, as determined by a grade and pricing curve with an upper ceiling grade of 1,400 g/t silver and price of US\$25 per ounce of silver and a floor grade of 600 g/t silver and price of US\$13 per ounce of silver. Additional terms of the amendment include a date for completion of the 400 tpd mine and mill completion test, which has now been extended to December 31, 2020. If the completion test is not satisfied by December 31, 2020, the Corporation will be required to pay a capacity related refund to Wheaton in the maximum amount of US\$8,788,000, which can be further proportionately reduced by mine production and mill throughput exceeding 322 tonnes per day for a 30 day period prior to December 31, 2020. The Amended SPA is secured against the Corporation's mineral properties until repayment of the original deposit of US\$50,000,000.

As at September 30, 2019, the fair value of the embedded derivative 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 new production payment under the Amended SPA which varies depending on the monthly silver head grade and silver price. The model relies upon inputs from the PFS, such as payable ounces delivered, head grade and silver price and will continue to be updated as a result of any updated studies, mine plans and actual production. A discount rate of 13%, representing the implied discount rate applied to the payment made under the Amended SPA was used to calculate the net present value. There were adjustments totalling \$6,297,000 recorded during the first nine months of 2019 (2018 - \$2,600,000) primarily as a result of the updated PFS results including an updated mine plan with increased silver production. See Guidance on Embedded Derivative below.

Capital Resources

On June 7, 2019, the Corporation completed a bought deal public offering and issued 6,500,000 common shares at a price of US\$1.00 (CDN\$1.33) per share for aggregate gross proceeds of US\$6,500,000 (CDN\$8,634,000). The Corporation incurred share issuance costs of CDN\$965,000 for net cash proceeds of CDN\$7,669,000.

On April 23, 2019 the Corporation completed a private placement, on a bought deal basis, of 1,842,200 flow-through common shares at a price of \$1.90 per share for gross proceeds of \$3,500,000. The flow-through common shares are comprised of: (i) 1,579,000 flow-through shares with respect to "Canadian exploration expenses" (the "CEE Shares") priced at C\$1.90 per CEE Share; and (ii) 263,200 flow-through shares with respect to "Canadian development expenses" (the "CDE Shares") priced at C\$1.90 per CDE Share.

On April 30, 2019, AEG entered into an agreement with BMO for a revolving line of credit (“LOC”) for up to \$4,000,000. The LOC has an interest rate of approximately 5.7% on drawn funds, is secured against all AEG assets and has the following covenants (specific to AEG entities) in place to be tested on a quarterly basis as follows:

- Maintain debt service coverage ratio greater or equal 1.25:1 – first test to occur on June 30, 2020
- Maintain current ratio greater than or equal to 1.25:1 – first test occurred on June 30, 2019

On June 14, 2018, the Corporation completed an offering, on a bought deal basis, of 4,703,000 flow-through common shares at a blended price of approximately \$1.92 per share for gross proceeds of \$9,041,150. The securities issued under the offering were comprised of (i) 966,500 flow-through shares with respect to "Canadian exploration expenses" issued at \$2.05 per share; (ii) 1,736,500 flow-through shares with respect to "Canadian exploration expenses" that also qualify as "flow-through mining expenditures" issued at \$2.05 per share; and (iii) 2,000,000 flow-through shares with respect to "Canadian development expenses" issued at \$1.75. As of March 31, 2019 the Corporation had \$2,684,000 to be spent prior to December 31, 2019.

On February 23, 2018 the Corporation entered into a definitive credit agreement with Sprott Private Resource Lending (Collector), L.P. (“Sprott”) to provide a US\$15,000,000 credit facility (the “Credit Facility”) on the following key terms:

- Term of 3 years, Maturity Date – February 23, 2021
- Interest rate on funds drawn down: the greater of
 - 7% plus US Dollar 3 month LIBOR and
 - 8% per annum, payable monthly
- Repayable in quarterly installments from October 31, 2019 through to the Maturity Date
- Upon draw down of funds a 3% charge of the draw down is charged
- 1,000,000 share purchase warrants were issued to Sprott with a five-year term, an exercise price of \$2.25 per share and a right by the Corporation to accelerate the expiry date to 30 days following the closing price of the shares exceeding \$5.63 for more than 20 consecutive trading days
- Repayable in whole or in part, without penalty, provided not less than twelve (12) months of interest has been paid on any outstanding amount
- On February 14, 2019 the Corporation extended the availability period of draw down to August 23, 2019 from February 23, 2019 by issuing to Sprott 171,480 Alexco common shares

The Credit Facility was not drawn down and on August 23, 2019 Alexco and Sprott agreed to let the Credit Facility expire. Sprott provided Alexco with a non-binding indicative term sheet for a new credit facility on similar terms to the Credit Facility above, which Alexco can enter into once it makes a positive production decision.

On September 21, 2018 the Corporation filed a short form base shelf prospectus 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 would allow 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 September 21, 2018.

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

Contractual Obligations (expressed in thousands of dollars)	Payments Due by Period				
	Total	Less than 1 year	1 – 3 years	3 – 5 years	After 5 years
Operating leases	\$ 1,979	\$ 157	\$ 876	\$ 657	\$ 289
Purchase obligations	360	60	180	60	60
Decommissioning and rehabilitation provision (undiscounted basis)	6,444	-	719	292	5,433
Total	\$ 8,783	\$ 217	\$ 1,775	\$ 1,009	\$ 5,782

Guidance on Embedded Derivative

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

Based on assumptions used in the dynamic valuation model the value of the derivative asset as at September 30, 2019 is \$15,968,000. If, for example, the silver price was to decline to US\$13 per ounce and all other assumptions remained the same, the approximate derivative asset value would be \$20,141,000. Similarly, if the silver price was to increase to US\$25 per ounce and all other assumptions remained the same, the approximate derivative asset value would be \$270,000. The impacts of these swings in derivative asset value are recorded on the Statement of Profit and Loss through Other Income (Expenses) (see note 9 in the unaudited interim condensed consolidated financial statements for three and nine month periods ended September 30, 2019 and 2018). The inputs that to date have had the greatest influence on the dynamic valuation model include changes in silver prices, anticipated mine plan silver production, interest rate yield curve, US dollar relative strength and time to production realization.

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
Silver Price Increase	Decrease
Silver Price Volatility Increase	Decrease
Mill Silver Head Grade Increase	Decrease

Decrease in timeframe to reach production	Increase
Foreign Exchange: US dollar appreciates compared to CDN dollar	Increase
Risk Free Yield Increase	Decrease

Management expects that changes in the fair market value of the embedded derivative asset prior to mine production will largely be driven by the risk-free yield curve and silver price forward curve as well as proximity to production date. In a market where the price of silver 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 silver ounces are mined and delivered to Wheaton.

Share Data

As at the date of this MD&A, the Corporation has 118,679,336 common shares issued and outstanding. In addition, there are outstanding incentive share options for a further 8,883,333 common shares and restricted share units that can be settled by way of shares issued from treasury for a further 507,001 common shares.

Use of Financial Instruments

All of Alexco's cash and cash equivalents at September 30, 2019 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. Alexco's other financial instruments were its trade and other accounts receivable, its accounts payable and accrued liabilities, and its investment in marketable securities.

At September 30, 2019, a total of \$2,774,000 of Alexco'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 Alexco's mineral properties. The balance of Alexco's restricted cash and deposits represent security provided in respect of certain long-term operating lease commitments. The term deposits held at September 30, 2019 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 high grade, low risk investments, generally yielding between 1% and 2% per annum, and their carrying amounts approximate their fair values given their short terms and low yields.

The carrying amounts of Alexco'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 embedded derivative are marked to fair value at each balance sheet date. The fair values of all of Alexco's financial instruments measured at September 30, 2019, 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 as Level 1 measurements.

Substantially all of Alexco'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.

Alexco's accounts and other receivables at September 30, 2019 total \$8,899,000, comprising primarily of AEG trade receivables and goods and services tax refunds receivable from government. While the Corporation is exposed to credit losses due to the non-performance of its counterparties, there are no significant concentrations of credit risk and the Corporation does not consider this to be a material risk. The Corporation's customers with whom the current business operations are with include government bodies and reputable businesses. 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 the majority of its customers are considered to have low default risk and the Corporation does not extend credit to customers with a high default risk, the historical default rates are low and the lifetime expected credit loss allowance for trade receivables is nominal as at September 30, 2019. Accordingly, the Corporation did not record any adjustment relating to the implementation of the expected credit loss model for its trade receivables.

Substantially all of Alexco's property, plant and equipment and mineral properties are located in Canada; all of its mining operations and mineral exploration occur in Canada; and a significant portion of AEG's revenues are earned in Canada. However, a significant portion of AEG's revenues are in US dollars, and receivables arising therefrom are accordingly denominated in US dollars. 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.

Off-Balance Sheet Arrangements

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

Related Party Transactions

The Corporation's related parties include its subsidiaries and key management personnel:

Key Management Personnel Compensation

(a) Key Management Personnel Compensation

	Three Months Ended		Nine Months Ended	
	2019	2018	2019	2018
Salaries and other short-term benefits	\$ 570	\$ 531	\$ 2,048	\$ 1,610
Share-based compensation	369	441	1,859	2,015
	\$ 939	\$ 972	\$ 3,907	\$ 3,625

Key management includes the Corporation's Board of Directors and members of senior management.

Critical Accounting Estimates and Judgments

The Corporation's significant accounting policies as well as significant judgment and estimates are presented in Notes 3 and 5 of Alexco's December 31, 2018 annual consolidated financial statements, except for those policies disclosed in Note 3 of the 2019-Q3 Interim F/S.

Summary of New and Amended Accounting Policies

Interests in Joint Arrangements

The Corporation entered into two new joint arrangements this year providing remediation and water treatment services at two mine sites located in the Yukon, Canada.

A joint arrangement can take the form of a joint venture or joint operation. All joint arrangements involve a contractual arrangement that establishes joint control, which exists only when decisions about the activities that significantly affect the returns of the investee require unanimous consent of the parties sharing control. A joint operation is a joint arrangement in which the Corporation has rights to the assets and liabilities relating to the arrangement. A joint venture is a joint arrangement in which the Corporation has rights to only the net assets of the arrangement.

Joint ventures are accounted for in accordance with the policy "Investments in Joint Ventures". Joint operations are accounted for by recognizing the Corporation's share of the assets, liabilities, revenues, expenses and cash flows of the joint operation in the Corporation's consolidated financial statements.

Investments in Joint Ventures

Investments in joint ventures are accounted for using the equity method as prescribed under IAS 28. The equity method involves recording the initial investment at cost and subsequently adjusting the carrying value of the investment for the Corporation's proportionate share of the profit and loss, other comprehensive income or loss and any other changes in the joint venture's net assets such as dividends. The proportionate share of the joint venture's profit or loss and other comprehensive income or loss is based on its most recent financial statements. Adjustments are made to align any inconsistencies between our accounting policies and the joint venture's policies before applying the equity method.

If the Corporation's share of the joint venture's losses equal or exceeds the investment in the joint venture, recognition of further losses is discontinued. After the interest is reduced to zero, additional losses will be provided for and a liability recognized only to the extent that we have incurred legal or constructive obligations or made payments on behalf of the joint venture. If the joint venture subsequently reports profits, then the Corporation resumes recognizing its proportionate share of profits only after its share of the profits equals the share of losses not recognized. At the balance sheet date, the Corporation considers whether there any indicators of impairment in the joint venture. If indicators exist, the Corporation will determine if impairment to the joint venture will be recorded.

Adoption of IFRS 16: Leases

The Corporation adopted IFRS 16 *Leases* ("IFRS 16") effective January 1, 2019 using the modified retrospective approach. The modified retrospective approach does not require restatement of prior period financial information and the prior period financial information continues to be reported under IAS 17, *Leases* ("IAS 17") and IFRIC 4, *Determining Whether an Arrangement Contains a Lease* ("IFRIC 4"). IFRS 16 provides a single lessee accounting model, requiring lessees to recognize a right-of-use ("ROU") asset and a lease obligation at the lease commencement date.

The Corporation completed its review of all existing operating leases and service contracts to identify contracts in scope for IFRS 16 and assessed contracts for embedded leases. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset, and the Corporation has the right to obtain substantially all of the economic benefits from the use of the asset during the term of the arrangement. The Corporation incorporates both the lease and non-lease components as part of the total lease payment, as the Corporation elected not to separate non-lease components.

The Corporation, on adoption of IFRS 16, recognized lease liabilities in relation to office leases which had previously been classified as operating leases under the principles of IAS 17. In relation, under the principles of the new standard these leases are measured as lease liabilities at the present value of the remaining lease payments, discounted using the Corporation's incremental borrowing rate as at January 1, 2019. The associated ROU assets have been measured at an amount equal to the lease liability on January 1, 2019. The ROU asset is subsequently depreciated from the commencement date to the earlier of the end of the lease term, or the end of the useful life of the asset. Furthermore, the ROU asset may be reduced due to impairment losses.

On initial adoption, the Corporation recorded right-of-use assets of \$1,883,000 within property, plant and equipment, measured at an amount equal to the lease liability. The Corporation has elected to use the following practical expedients permitted under the standard:

- Apply a single discount rate to a portfolio of leases with similar characteristics;
- Account for leases with a remaining term of less than twelve (12) months as at January 1, 2019 as short-term leases, recognized as an expense over the lease term; and
- Account for lease payments as an expense and not recognize a ROU asset if the underlying asset is of low dollar value (less than \$5,000 CAD).

The following table reconciles the Corporation's operating lease commitments at December 31, 2018, as previously disclosed in the Corporation's annual consolidated financial statements, to the lease liability recognized on adoption of IFRS 16 at January 1, 2019.

	Adoption of IFRS 16
Lease commitments as at December 31, 2018	\$ 1,440
Less:	
Short-term commitments	(50)
Add:	
Operating lease obligations on adoption of IFRS 16	1,048
	<u>2,438</u>
Impact of discounting	<u>(555)</u>
Lease liability as of January 1, 2019	<u>\$ 1,883</u>

The following is the amended accounting policy as a result of the adoption of IFRS 16.

Leases

The ROU asset is initially recorded at cost, which comprises the initial amount of the lease liability and any initial direct costs incurred less any lease payments made at or before the initial adoption date. The ROU is depreciated on a straight-line basis over the shorter of the estimated useful life of the asset or the lease term. The lease term includes periods covered by an option to extend if the Corporation's intention is to exercise that option. The ROU asset is periodically reduced by impairment losses, if any, and adjusted for re-measurements of the lease obligation.

The Corporation elected to apply the practical expedient not to recognize ROU assets and lease liabilities for short-term leases that have a lease term of twelve months or less and leases of low value assets. These lease payments associated with these leases are recognized as an expense over the lease term.

The lease liability is measured at the present value of the expected lease payments over the lease term, discounted at the implicit rate in the lease; if the rate cannot be determined, the incremental borrowing rate is used. The liability is increased for the passage of time and payments on the lease are offset against the lease liability. The liability is subsequently re-measured when there is a change in the lease agreement, such as a change in future lease payments or if the Corporation decides to purchase, extend or terminate the lease option. When the lease liability is re-measured, an adjustment is applied to the carrying value of the ROU asset.

Non-GAAP Measure

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

Net Working Capital

Consolidated net working capital comprises those components of current assets and liabilities which support and results 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 excludes: deferred revenue and flow-through share premium pending renunciation.

Internal Control Over Disclosure Controls and Procedures and Financial Reporting

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 changes in the Corporation's internal control over financial reporting that occurred during the most recent interim period, being the three months ended September 30, 2019, that have materially affected, or are reasonably likely to materially affect, the Corporation's internal control over financial reporting.

Risk Factors

For a detailed listing of major risk factors management has identified which relates to Alexco's business activities, please refer to Alexco's MD&A and Annual Information Form for the year ended December 31, 2018.

Summary of Mineral Reserve and Resources Estimates

The following table sets forth the estimated mineral reserves and resources for Alexco's mineral properties within the Keno Hill Silver District:

Summary of Mineral Reserve 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 Mineral Reserves		1,177,380	804	0.34	3.0	4.1	30,453,000

Notes:

- 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.
- All numbers have been rounded to reflect the relative accuracy of the estimates.
- 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 technical report filed on SEDAR dated May 8, 2019 with an effective date of March 28, 2019.
- 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 1,2,3,9	Property	Tonnes	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Contained Ag (oz)
Indicated	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&7}	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 ⁸	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
Inferred	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&7}	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

Notes:

- All mineral resources are classified following the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) of NI 43-101.
- Indicated mineralization is 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 March 8, 2019 with an effective date of March 28, 2019. The mineral resource estimate for Birmingham has been updated by disclosure in note 7 below.
- The mineral resource estimate for the Bellekeno deposit is based on a geologic resource estimate having an effective date of September 30, 2012. The Bellekeno indicated mineral resources are as at September 30, 2013, and reflect the geologic resource less estimated subsequent depletion from mine production.
- The mineral resource estimate for the Lucky Queen, Flame & Moth and Onek deposits have an effective date of January 3, 2017.

7. The resource estimate for the Bermingham deposit has an effective date of March 28, 2019 and is supported by disclosure in the news release entitled "Alexco Announces Positive Pre-Feasibility Study for Expanded Silver Production at Keno Hill Silver District".
8. 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".
9. 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 Neil Chambers, P.Eng., Mine Superintendent and a Qualified Person 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 - Proven, probable and indicated	99,000	1,354	n/a	1.6%	0.1%	4,310,000
	- Inferred	22,500	1,456	n/a	0.1%	n/a	1,057,000

Notes:

1. 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.
2. 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.

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 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 requirements for additional capital and sources and uses of funds. 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 mining activities; 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; possible variations in mineable resources, grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accidents, labour disputes and other risks of the mining industry; First Nation rights and title; continued capitalization and commercial viability; global economic conditions; competition; and delays in obtaining governmental approvals or financing or in the completion of development 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 are based on 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 needed for the capacity related refund under the silver purchase agreement with Wheaton will be available on reasonable terms; (2) additional financing needed for further exploration and development work on the Corporation's properties will be available on reasonable terms; (3) the proposed development of its mineral projects will be viable operationally and economically and proceed as planned; (4) 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 unaudited interim condensed consolidated financial statements for the three and nine month periods ended September 30, 2019; (5) 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 (as defined under "Description of the Business – KHSD Property"); (6) the actual nature, size and grade of its mineral resources are materially consistent with the resource estimates reported in the supporting technical reports; (7) labor and other industry services will be available to the Corporation at prices consistent with internal estimates; (8) the continuances of existing and, in certain circumstances,

proposed tax and royalty regimes; and (9) 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 if the property is developed. Other material factors and assumptions are discussed throughout this MD&A and, in particular, under both “Critical Accounting Estimates” 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.

Cautionary Note to U.S. Investors – Information Concerning Preparation of Resource Estimates

This MD&A has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of United States securities laws. The terms “mineral reserve”, “proven mineral reserve” and “probable mineral reserve” are Canadian mining terms as defined in accordance with 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. These definitions differ from the definitions in the United States Securities and Exchange Commission’s (“**SEC**”) Industry Guide 7 under the United States Securities Act of 1933, as amended. Under SEC Industry Guide 7 standards, mineralization cannot be classified as a “reserve” unless the determination has been made that the mineralization could be economically and legally extracted at the time the reserve determination is made. As applied under SEC Industry Guide 7, a “final” or “bankable” feasibility study is required to report reserves, the three-year historical average price is used in any reserve or cash flow analysis to designate reserves, and all necessary permits and government authorizations must be filed with the appropriate governmental authority.

In addition, the terms “mineral resource”, “measured mineral resource”, “indicated mineral resource” and “inferred mineral resource” are defined in and required to be disclosed by NI 43-101; however, these terms are not defined terms under SEC Industry Guide 7 and are normally not permitted to be used in reports and registration statements filed with the SEC. Investors are cautioned not to assume that all or any part of a mineral deposit in these categories will ever be converted into reserves. “Inferred mineral resources” have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources 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. It is reasonably expected that the majority of inferred mineral resources could be upgraded to indicated mineral resources with continued exploration. Disclosure of “contained ounces” in a resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute “reserves” by SEC Industry Guide 7 standards as in place tonnage and grade without reference to unit measures.

Accordingly, information concerning mineral deposits contained in this MD&A 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.