



ALEXCO

# ALEXCO RESOURCE CORP.



**BUILDING OUT A WORLD CLASS SILVER ASSET IN CANADA**  
KENO HILL SILVER DISTRICT, YUKON

**APRIL 21, 2017 CORPORATE PRESENTATION**  
**TSX: AXR | NYSE MKT: AXU**



## CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This presentation 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 Alexco's business plans, including but not limited to anticipated results and developments in Alexco'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 presentation. Alexco does not intend, and does not assume any obligation, to update these forward-looking statements, except as required by applicable law.

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 presentation, Alexco has applied several material assumptions, including, but not limited to, the assumption that: (1) additional financing needed to fund certain contingent payment obligations and will be available on reasonable terms; (2) additional financing needed for the capacity related refund under the Silver Purchase Agreement with Silver 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 be materially consistent with or more favourable than those anticipated in the KHSD PEA, (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; (9) that other parties will continue to meet and satisfy their contractual obligations to the Corporation; and (10) that regulatory approval of any shelf prospectus filings or any other offerings will be obtained in a timely fashion. Forward-looking information contained in this presentation about prospective financial performance, financial position or cash flows is based on assumptions about future events, including economic conditions and proposed courses of action, based on management's assessment of the relevant information currently available. To the extent that such information may constitute a financial outlook within the meaning of applicable securities laws, such information has been approved by management and is provided for the purposes of providing information relating to management and Alexco's current expectations and plans. Readers are cautioned that any such financial outlook information contained herein should not be used for purposes other than for which it is disclosed herein.

The disclosure in this presentation 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, who is a Qualified Person as defined by National Instrument 43-101 - *Standards of Disclosure for Mineral Projects*.

### PRELIMINARY ECONOMIC ASSESSMENT CAUTIONARY STATEMENT

The material scientific and technical information in respect of Alexco's Keno Hill Silver District Project in the presentation is based upon information contained in the technical report dated March 28, 2017, entitled "Alexco and Silver Wheaton Amend Silver Purchase Agreement and Alexco Announces Positive Preliminary Economic Assessment for Expanded Silver Production at Keno Hill". Readers are encouraged to read the PEA, which is available under the Company's profile on SEDAR, for detailed information concerning the Keno Hill Silver District. All disclosure contained in this presentation regarding the resource estimate and economic analysis on the property is fully qualified by the full disclosure contained in the PEA.

Readers are cautioned that mineral resources are not mineral reserves and do not have demonstrated economic viability. The PEA is preliminary in nature. While the consolidated mine production under the PEA is derived primarily from indicated mineral resources, approximately 6% is derived from inferred mineral resources. There is no certainty that the PEA will be realized, and it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. Although the PEA contemplates an initial development and construction period beginning in the first quarter of 2018, with startup of commercial production in the first quarter of 2019, commencement of development and construction remains dependent on Alexco making a development decision, which would be dependent on a number of factors, including but not limited to expectations regarding market prices for silver, lead, zinc and gold as well as the US-Canadian dollar exchange rate, and the availability of development capital. Additionally, 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 6% inferred mineral resources in the mine plan.



# ALEXCO FUNDAMENTALS

**HIGH GRADE SILVER**

**SAFE JURISDICTION**

**MINE DEVELOPMENT IMMINENT**

**COMPETITIVE AISC –  
ROBUST PROJECT ECONOMICS**

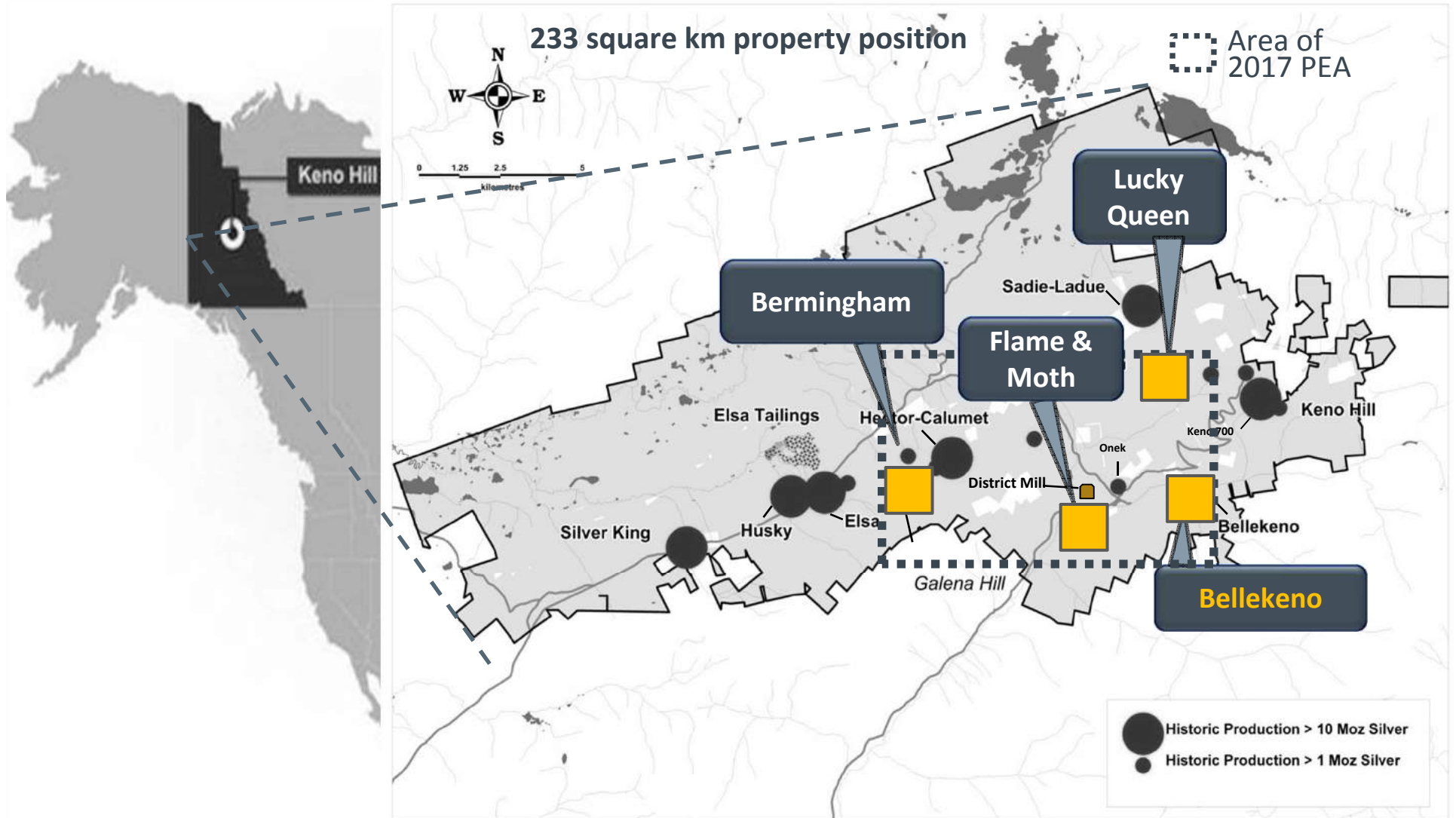
**PROVEN EXPLORATION PERFORMANCE**

**STRONG CASH POSITION**

**LEVERAGE**

*Please see News Release dated March 29, 2017 entitled "Alexco and Silver Wheaton Amend Silver Purchase Agreement and Alexco Announces Positive Preliminary Economic Assessment for Expanded Silver Production at Keno Hill"*

# KENO HILL SILVER DISTRICT



Please see slide #2 for PEA cautionary statement



# EXPLORATION SUCCESS

AVERAGE  
DISCOVERY COST  
(2008 - 2016)  
~\$0.55/oz Ag

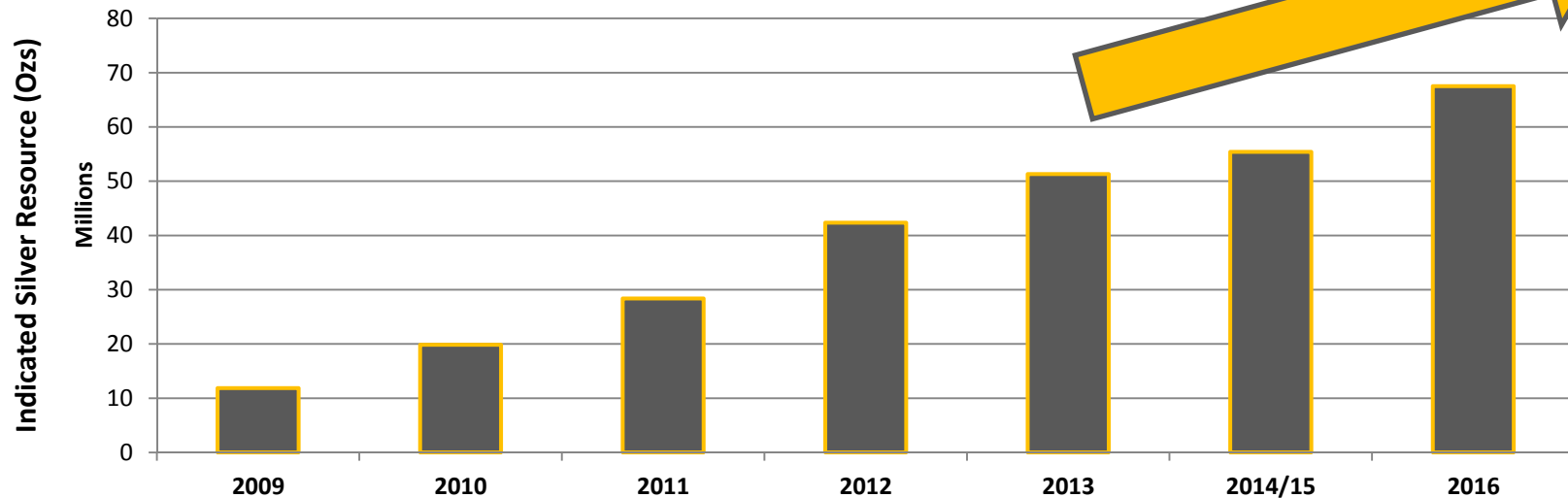
## 2013 – 2016 EXPLORATION SNAPSHOT

+23M Ozs  
Indicated

800 gpt

+8 YEARS  
MINE LIFE

## INDICATED SILVER RESOURCE



Please see Summary of Silver Resources on Alexco's website for full mineral resource disclosure



# KENO HILL DISTRICT – PRODUCTION PROFILE

## MARCH 2017 PEA

LOM TONNES AND GRADE  
1,021,000 Tonnes  
Ag gpt 843  
Pb % 3.31  
Zn % 4.2

BELLEKENO	FLAME & MOTH	BERMINGHAM	LUCKY QUEEN
TONNES 37,000	TONNES 683,000	TONNES 220,000	TONNES 81,000
GRADE Ag gpt 747	GRADE Ag gpt 666	GRADE Ag gpt 1276	GRADE Ag gpt 1206

Please see slide #2 for PEA cautionary statement and News Release dated March 29, 2017 entitled "Alexco and Silver Wheaton Amend Silver Purchase Agreement and Alexco Announces Positive Preliminary Economic Assessment for Expanded Silver Production at Keno Hill"

PEA Average Metal Price and Discount Rate Assumptions: Ag USD/oz \$18.60 initially and \$19.35 long term, Zn USD/lb \$1.07, Pb USD/lb \$0.97, Au USD/oz \$1,300, 5% Discount Rate



# KENO HILL DISTRICT – PRODUCTION PROFILE

MARCH 2017 PEA

## LOM PROJECT ECONOMICS (AFTER-TAX)

**NPV**  
**\$79.4M CAD**

**IRR**  
**75.3%**

**AVERAGE ANNUAL  
AG PRODUCTION OZS**  
**3.5M**

**MINE LIFE**  
**8 Years**  
**TONNES**  
**1.02M**

**Ag AISC**  
**\$13.51/oz**

**Ag GRADE**  
**843 gpt**

*Please see slide #2 for PEA cautionary statement and News Release dated March 29, 2017 entitled “Alexco and Silver Wheaton Amend Silver Purchase Agreement and Alexco Announces Positive Preliminary Economic Assessment for Expanded Silver Production at Keno Hill”*

*PEA Average Metal Price and Discount Rate Assumptions: Ag USD/oz \$18.60 initially and \$19.35 long term, Zn USD/lb \$1.07, Pb USD/lb \$0.97, Au USD/oz \$1,300, 5% Discount Rate*

*AISC calculated on a produced (contained) basis net of by-products, as defined by the World Gold Council*



# KENO HILL DISTRICT – PRODUCTION PROFILE

MARCH 2017 PEA

PRODUCTION YEARS 1-3 PROJECT HIGHLIGHTS

Ag GRADE  
931 gpt

Annualized Ag Ozs  
4.1 Million

Ag AISC  
\$12.18/oz

INITIAL CAPEX  
~\$27.0M

*Please see slide #2 for PEA cautionary statement and News Release dated March 29, 2017 entitled “Alexco and Silver Wheaton Amend Silver Purchase Agreement and Alexco Announces Positive Preliminary Economic Assessment for Expanded Silver Production at Keno Hill ”*

*PEA Average Metal Price and Discount Rate Assumptions: Ag USD/oz \$18.60 initially and \$19.35 long term, Zn USD/lb \$1.07, Pb USD/lb \$0.97, Au USD/oz \$1,300, 5% Discount Rate*

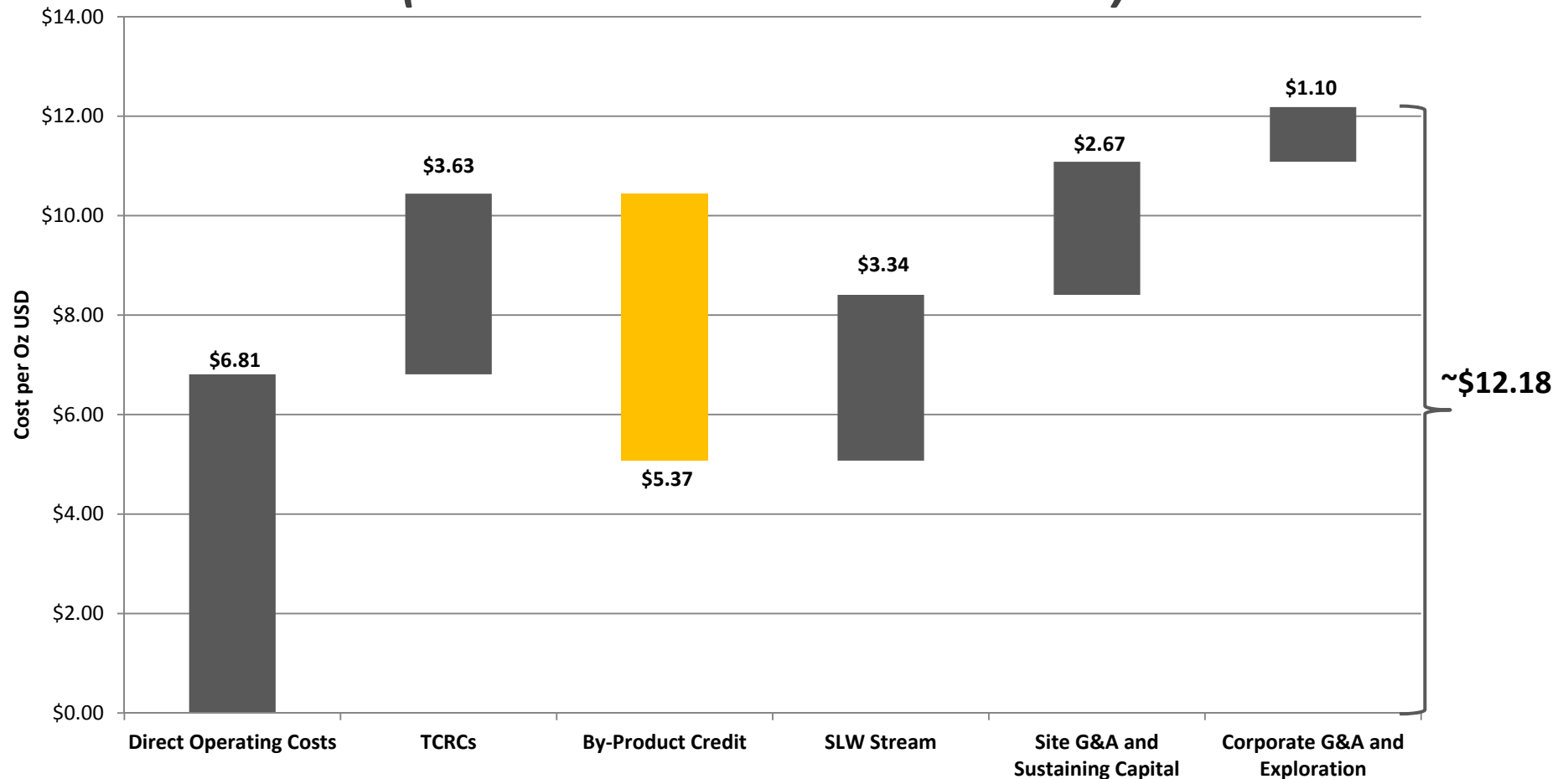
*AISC calculated on a produced (contained) basis net of by-products, as defined by the World Gold Council*





# AISC BUILD-UP PRODUCTION YEARS 1-3

*(PROJECT IS ECONOMIC TODAY)*



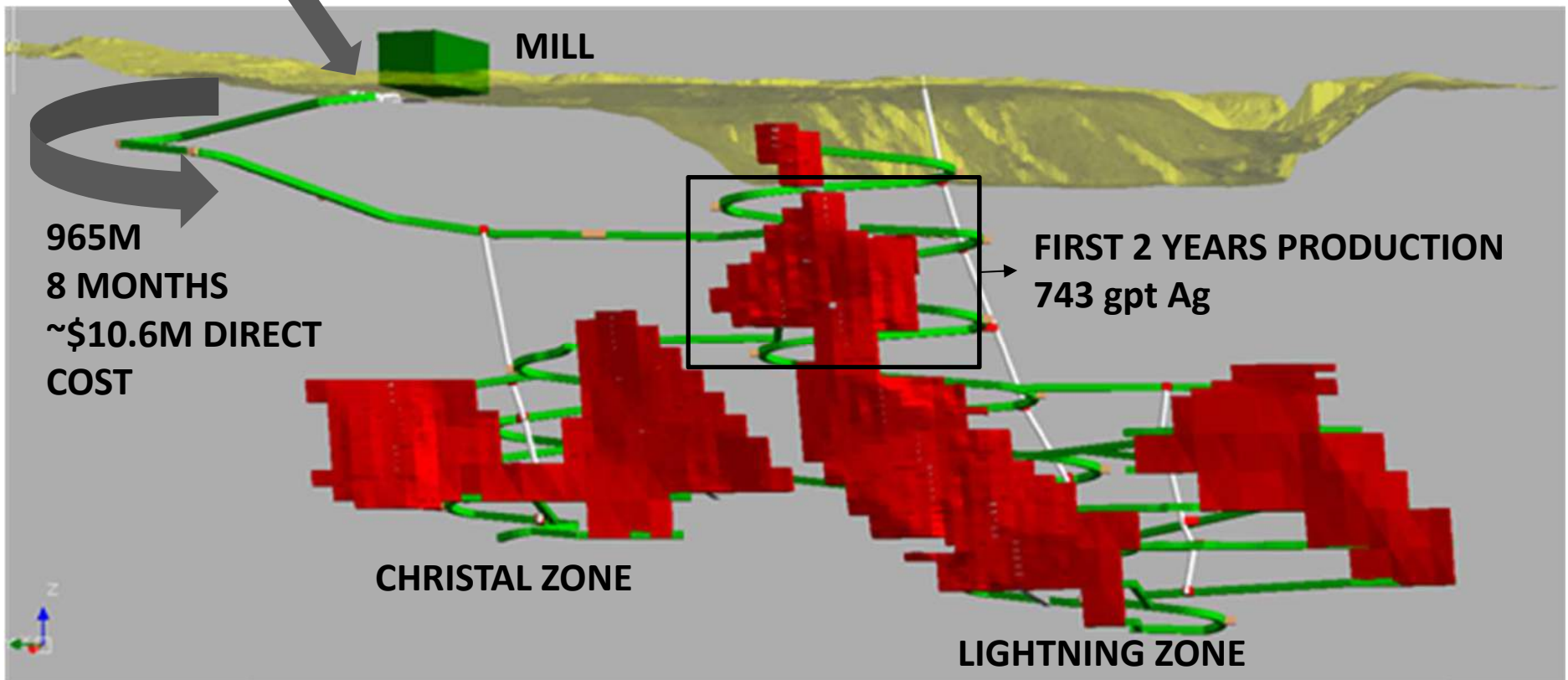
*\*AXR AISC calculated on a produced (contained) basis net of by-products for years 1-3 of PEA Commercial Production period*

*Please see slide #2 for PEA cautionary statement and News Release dated March 29, 2017 entitled "Alexco and Silver Wheaton Amend Silver Purchase Agreement and Alexco Announces Positive Preliminary Economic Assessment for Expanded Silver Production at Keno Hill"*

# FLAME & MOTH SCHEMATIC LONG SECTION



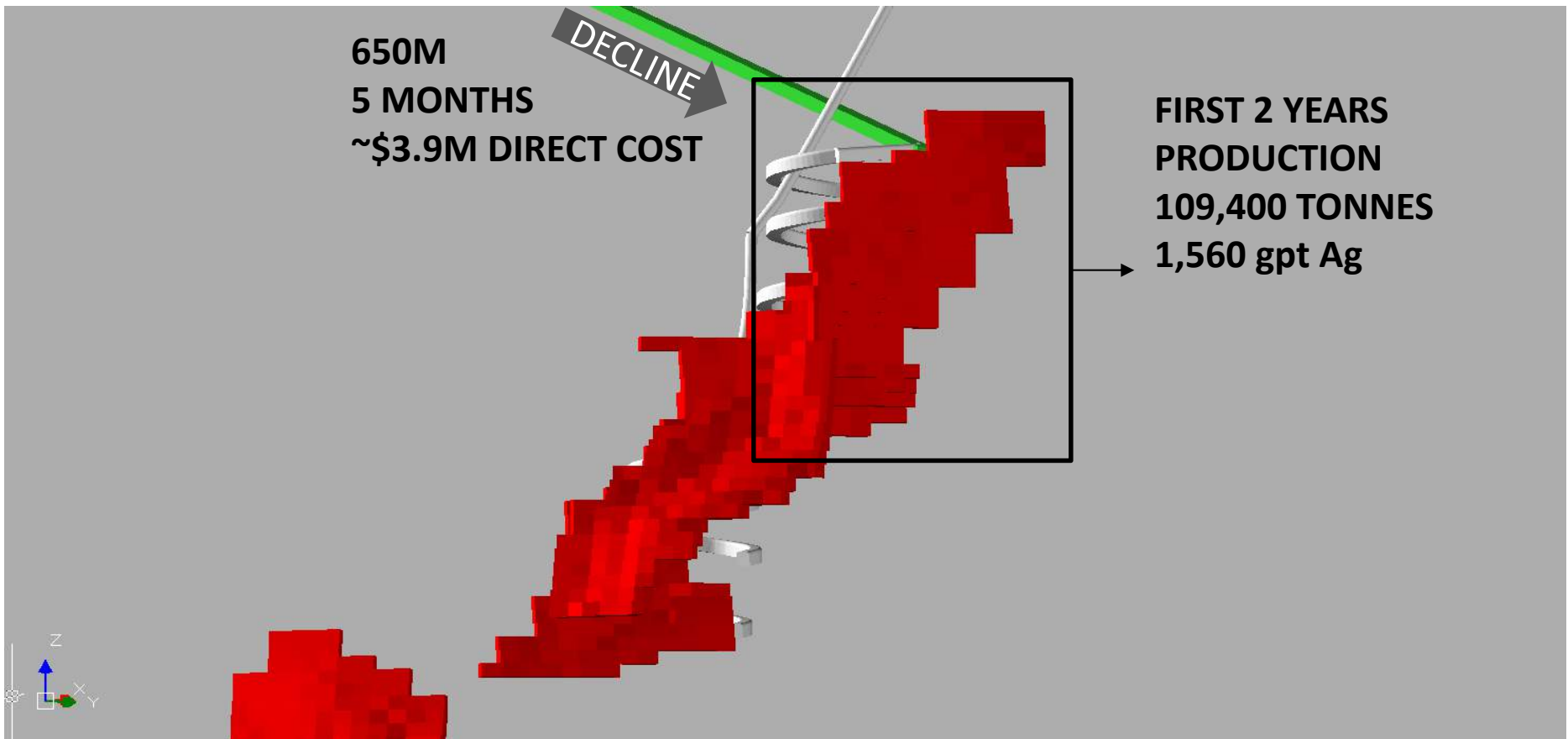
	Tonnes	Ag Grade gpt	Ozs
Indicated Resource	1,679,000	498	26,883,000
PEA Mineable Resource	683,000	666	14,622,965



*Please see slide #2 for PEA cautionary statement and News Release dated March 29, 2017 entitled "Alexco and Silver Wheaton Amend Silver Purchase Agreement and Alexco Announces Positive Preliminary Economic Assessment for Expanded Silver Production at Keno Hill"*

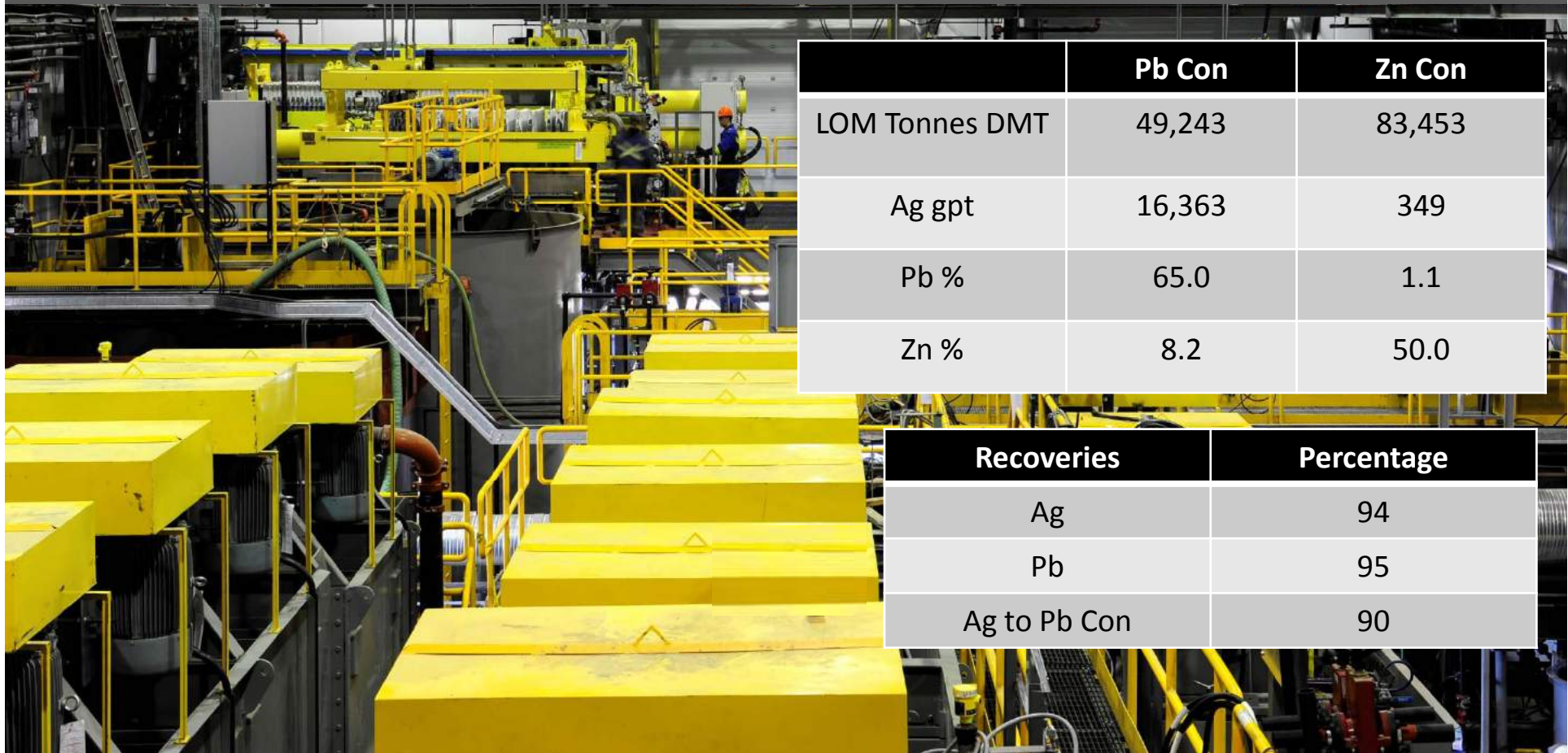
# BERMINGHAM – SCHEMATIC SECTION

	Tonnes	Ag Grade gpt	Ozs
Indicated Resource	858,000	628	17,324,000
PEA Mineable Resource	220,000	1,276	9,026,869



Please see slide #2 for PEA cautionary statement and News Release dated March 29, 2017 entitled "Alexco and Silver Wheaton Amend Silver Purchase Agreement and Alexco Announces Positive Preliminary Economic Assessment for Expanded Silver Production at Keno Hill"

# KENO HILL, CANADA: BUILDING OUT A **WORLD CLASS** SILVER ASSET IN CANADA

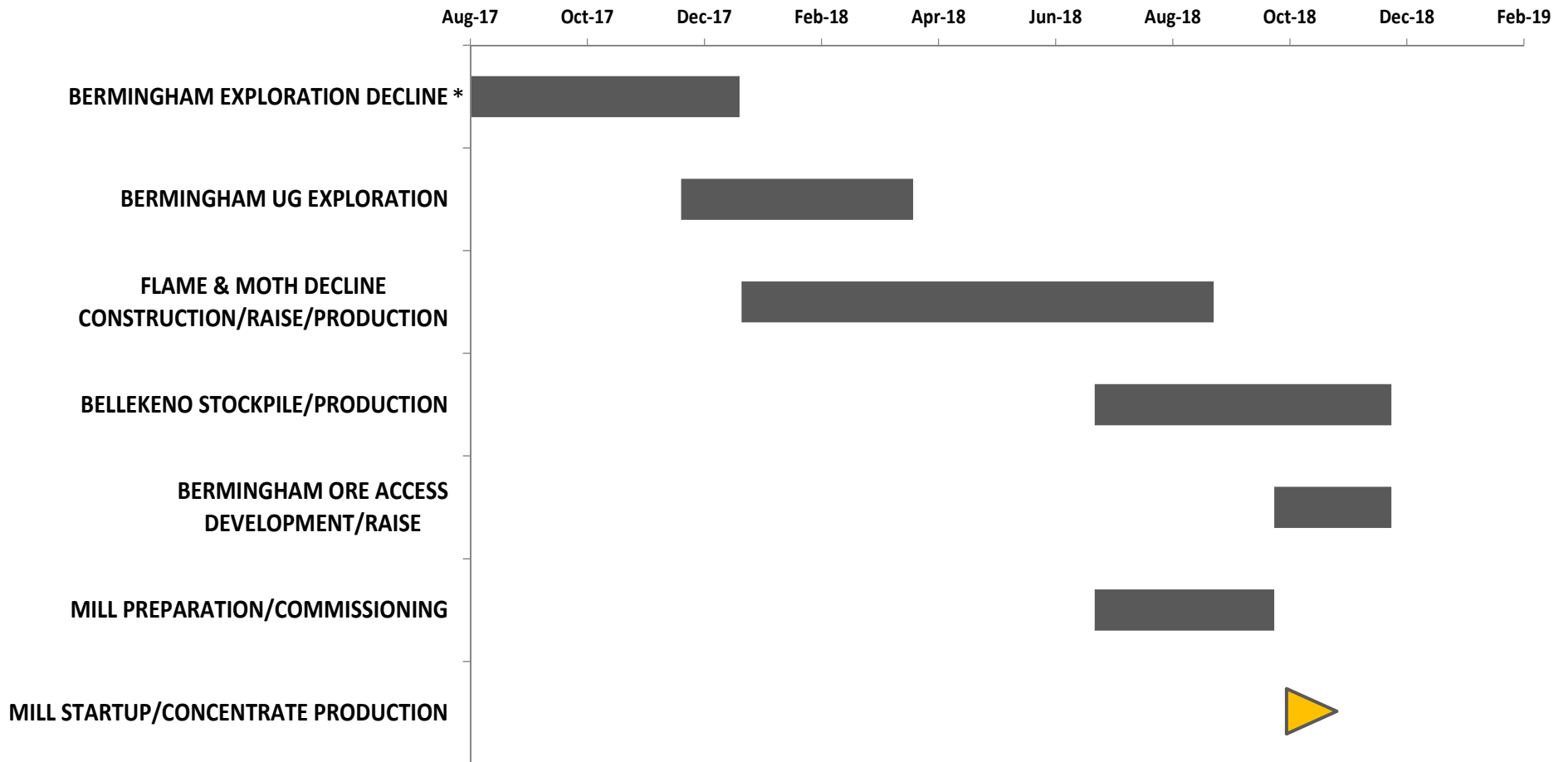


	<b>Pb Con</b>	<b>Zn Con</b>
LOM Tonnes DMT	49,243	83,453
Ag gpt	16,363	349
Pb %	65.0	1.1
Zn %	8.2	50.0

<b>Recoveries</b>	<b>Percentage</b>
Ag	94
Pb	95
Ag to Pb Con	90



# SCHEMATIC SCHEDULE 2017-2018



***CAN BE ACCELERATED UNDER CERTAIN CONDITIONS***

*\*Permitting drives start date*

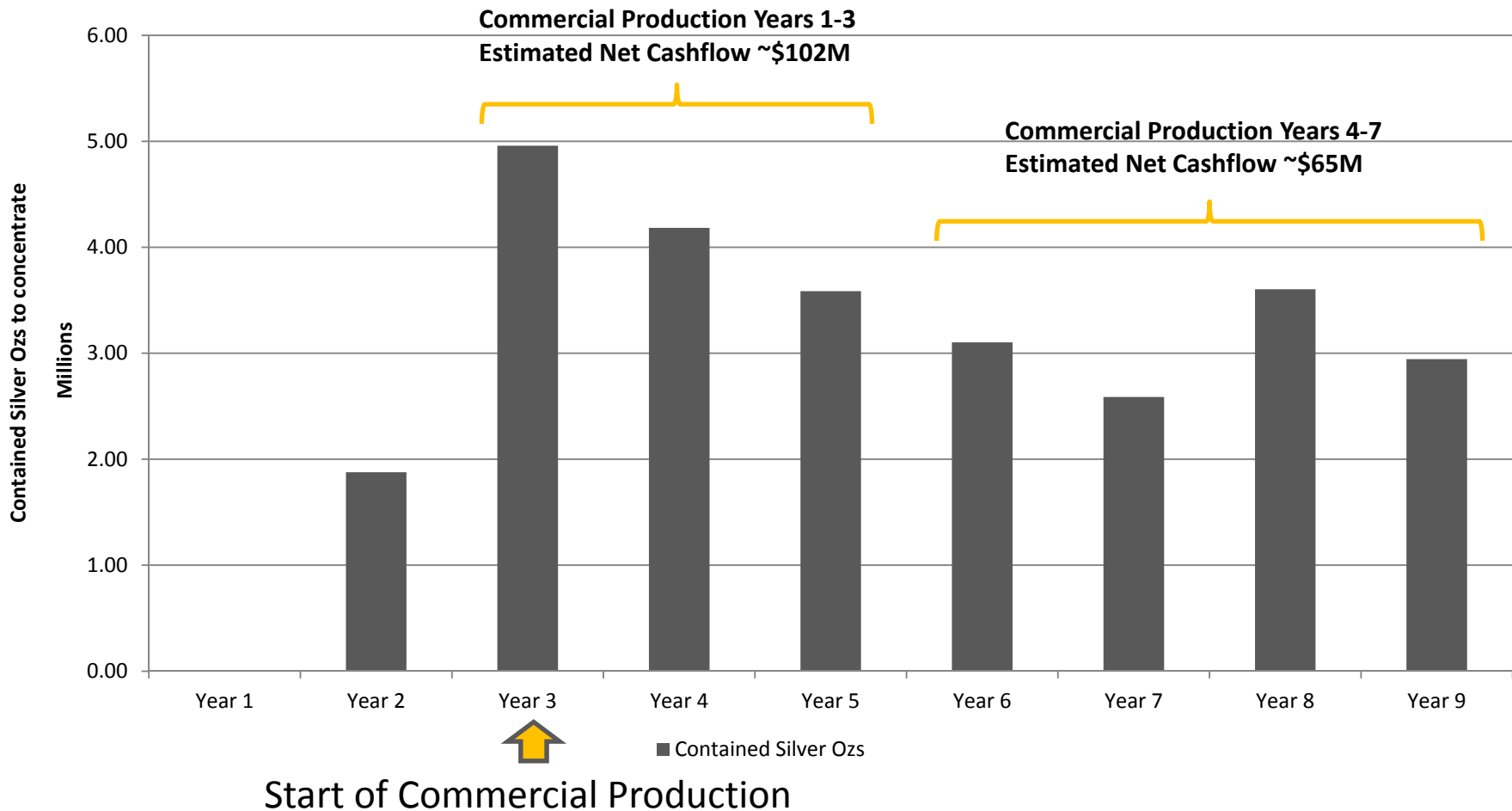
*Please see slide #2 for PEA cautionary statement and News Release dated March 29, 2017 entitled "Alexco and Silver Wheaton Amend Silver Purchase Agreement and Alexco Announces Positive Preliminary Economic Assessment for Expanded Silver Production at Keno Hill"*

*See risks disclosed in Annual Information Form dated March 29, 2017*



# KENO HILL DISTRICT - READY FOR PRODUCTION

## MARCH 2017 PEA SILVER PRODUCTION AND CASHFLOW

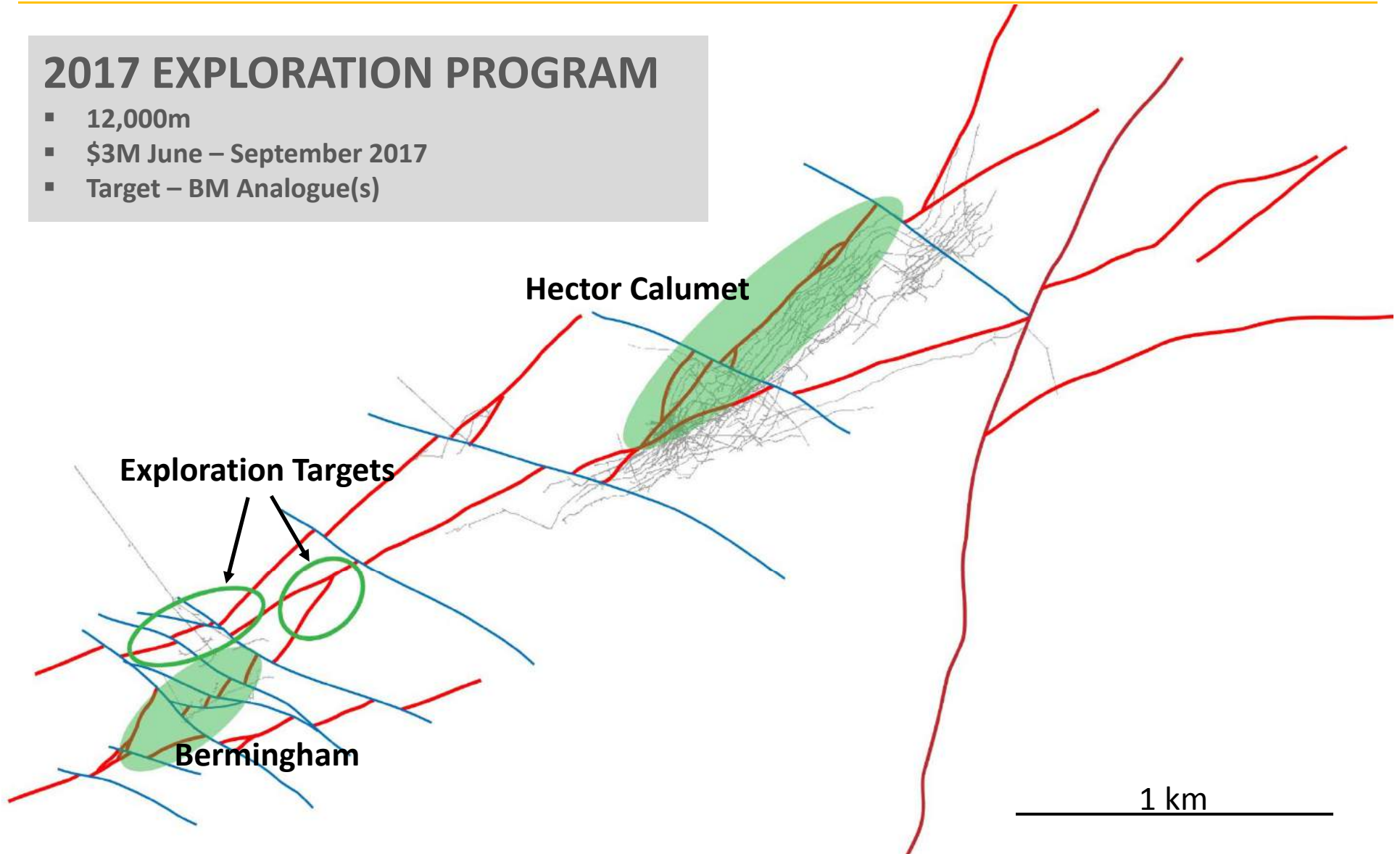


Please see slide #2 for PEA cautionary statement and News Release dated March 29, 2017 entitled "Alexco and Silver Wheaton Amend Silver Purchase Agreement and Alexco Announces Positive Preliminary Economic Assessment for Expanded Silver Production at Keno Hill"

# TARGET: ANOTHER BERMINGHAM-LIKE DEPOSIT

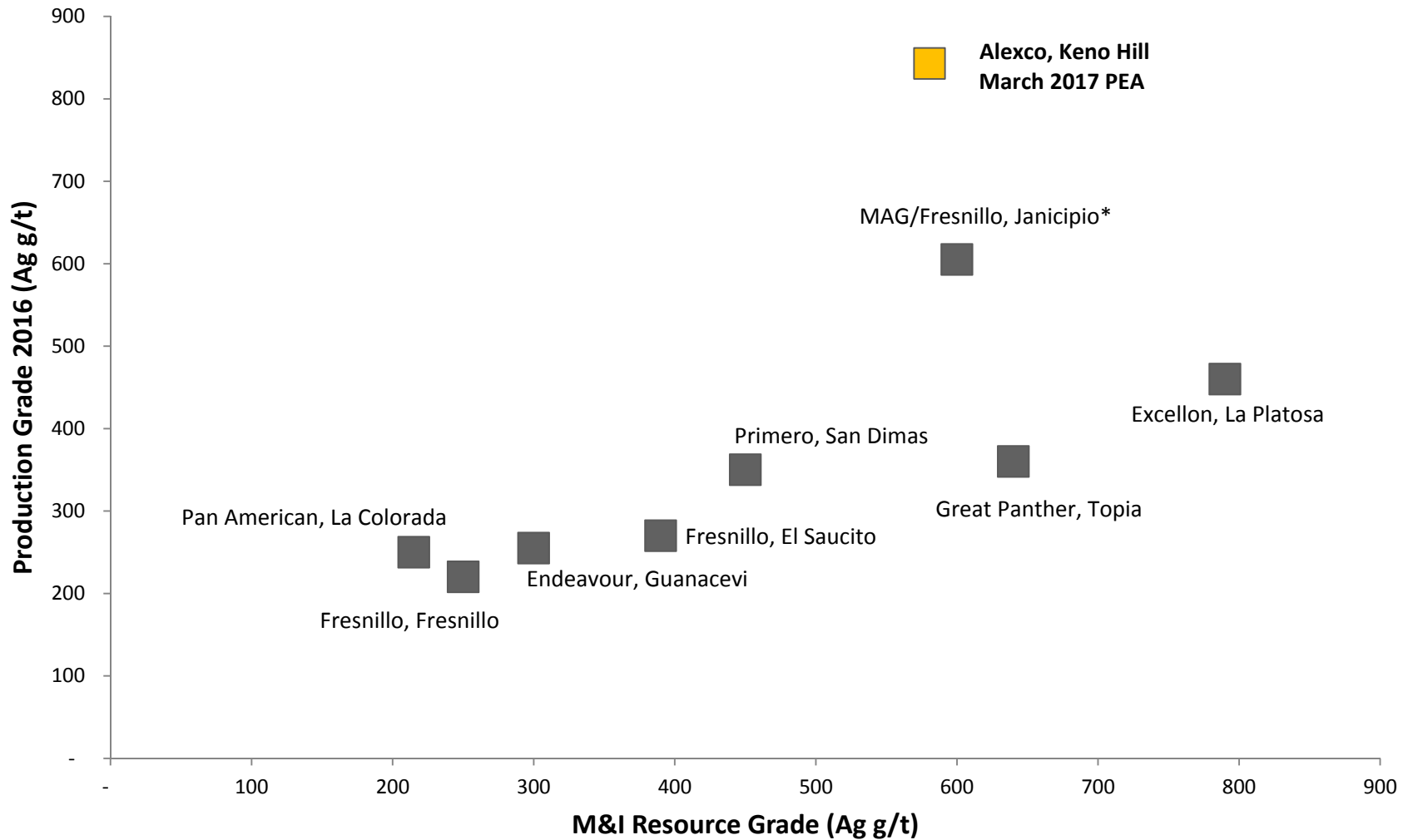
## 2017 EXPLORATION PROGRAM

- 12,000m
- \$3M June – September 2017
- Target – BM Analogue(s)





# HIGH GRADE RESOURCE AND PRODUCTION

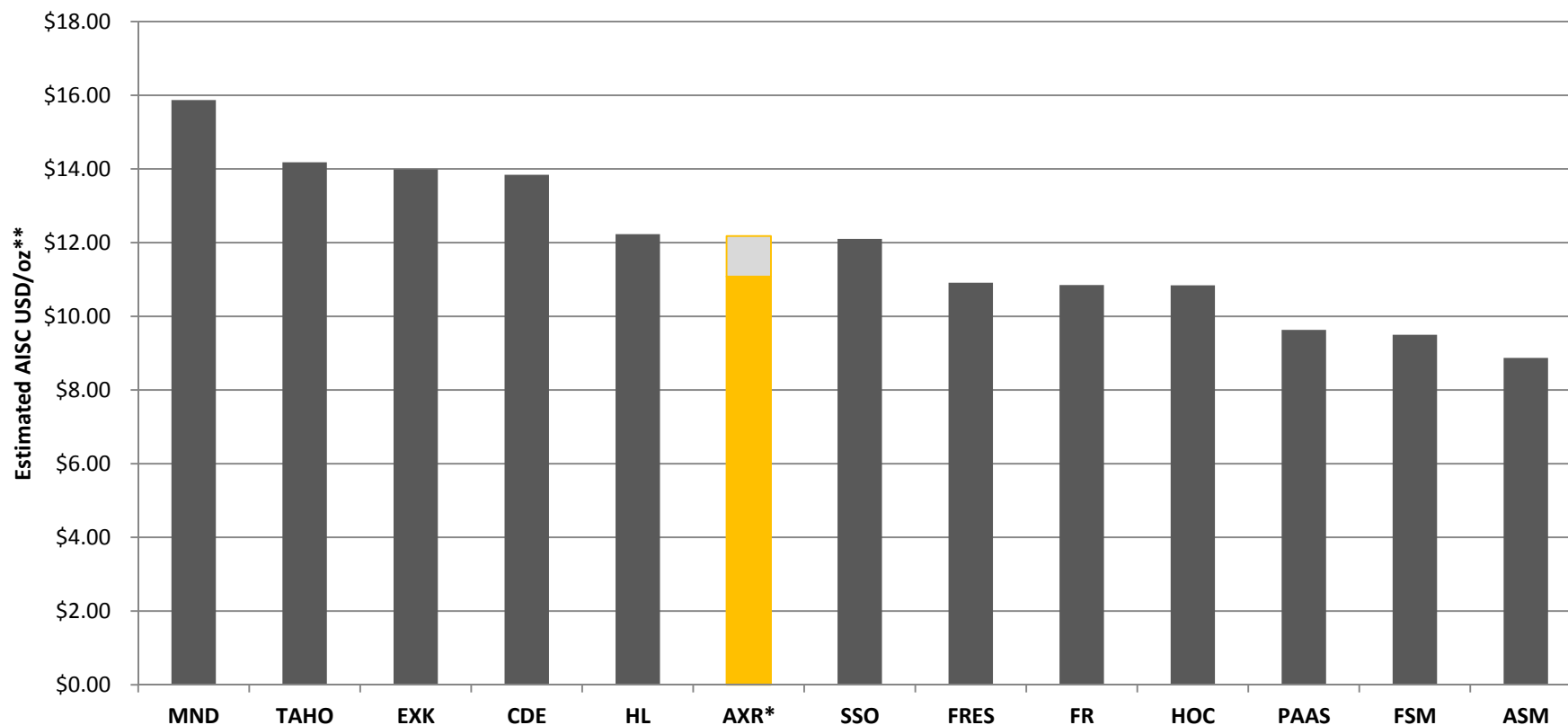


*Please see slide #2 for PEA cautionary statement  
Based on most recently available public disclosure documents*





# AISC COMPARISON



\*AXR AISC calculated on a produced (contained) basis net of by-products for years 1-3 of PEA Commercial Production period

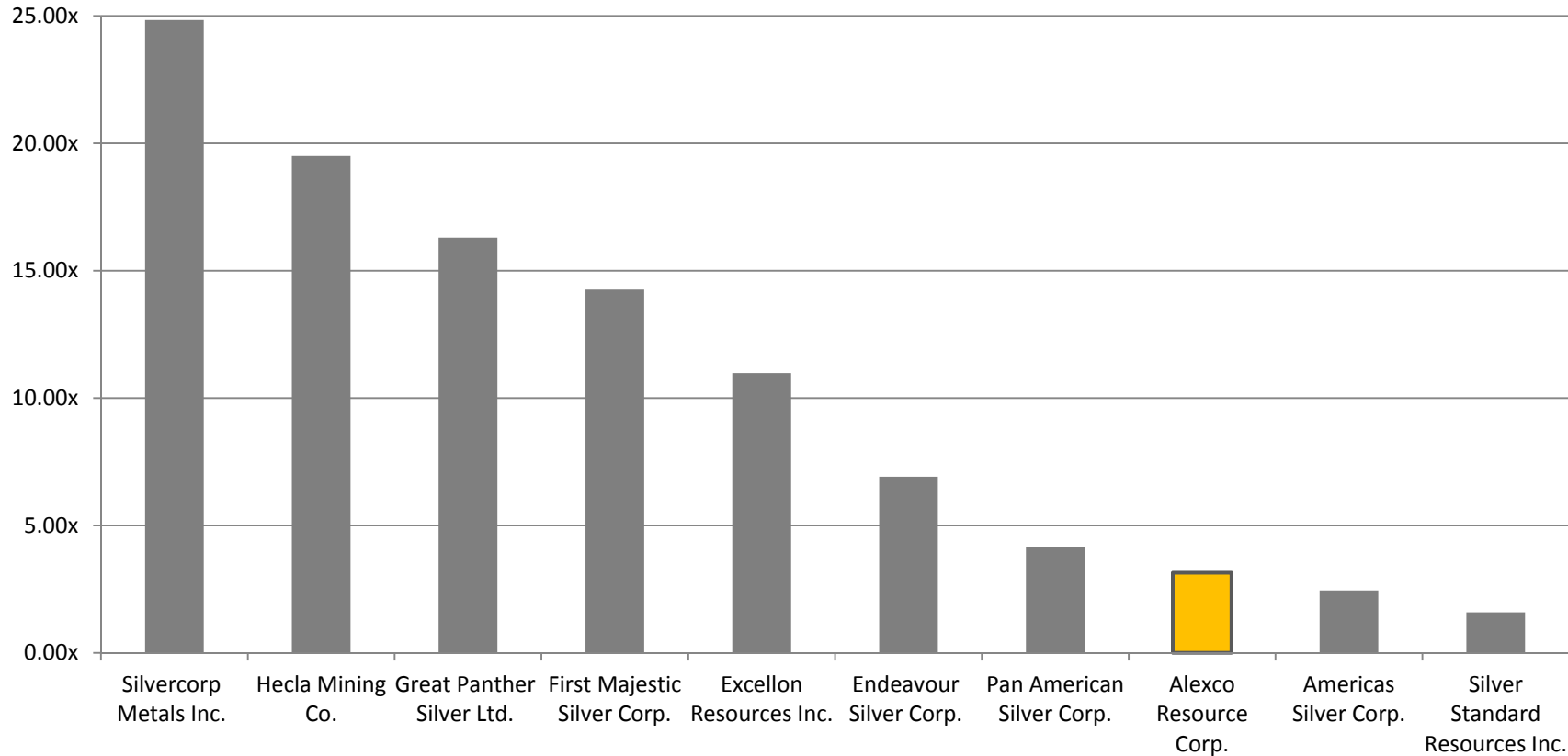
\*\*As of March 22, 2017 and based on most recently available public disclosure documents. Market data used in this presentation may be based on independent reports by market research firms, or other published independent sources. Some data is also based on Alexco's good faith estimates that are derived from its review of internal data and information. Although Alexco believes these sources are reliable, Alexco has not independently reviewed the information and cannot guarantee its accuracy or completeness.

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# ATTRACTIVE VALUATION

## ENTERPRISE VALUE / M&I RESOURCES AG (OZ)



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# ALEXCO ENVIRONMENTAL GROUP



**SUCCESSFUL ENVIRONMENTAL BUSINESS**

**PATENTED REMEDIATION TECHNOLOGIES**

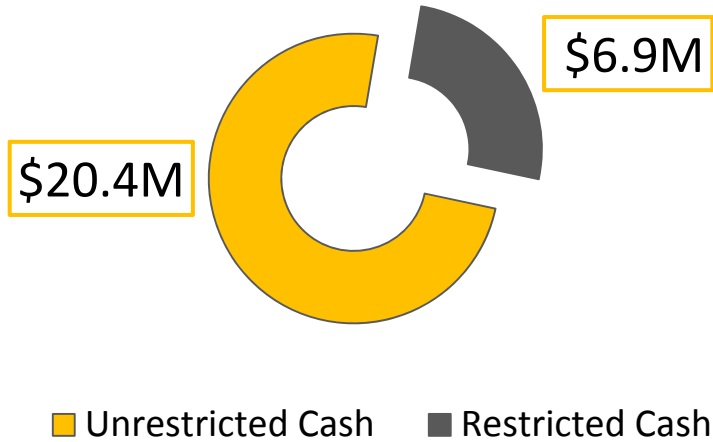
**2016  
REVENUE  
\$11.4M  
25% Margin**

**SIGNATURE  
PROJECTS**  
- Globeville (CO)  
- Gold King (CO)  
- Keno Hill (Yukon)

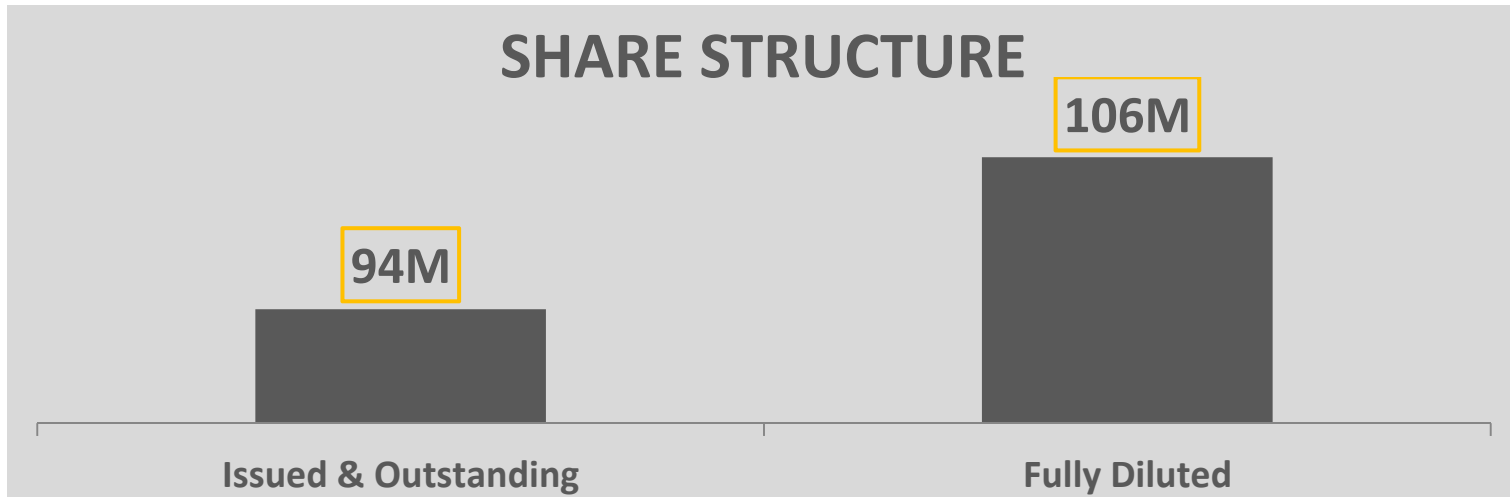
**BACKLOG  
\$100M +**

# FINANCIAL STABILITY

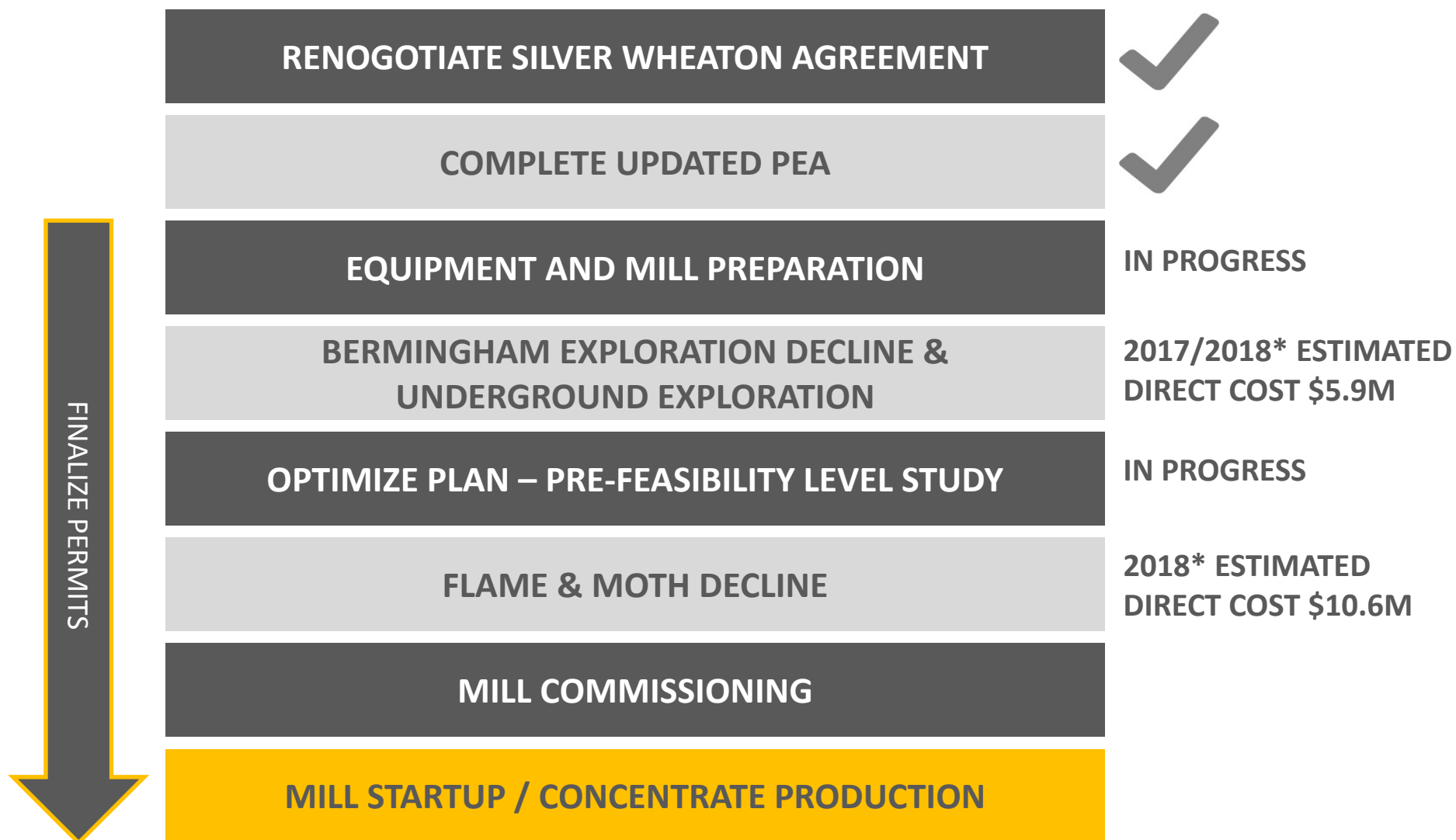
## KEY FINANCIAL METRICS – DECEMBER 31, 2016



**WORKING CAPITAL**  
**\$23M**



# NEXT STEPS – A PATHWAY TO PRODUCTION



*\*Permitting drives start date*

# THE ALEXCO OPPORTUNITY

**HIGH GRADE SILVER**

**SAFE JURISDICTION**

**MINE DEVELOPMENT IMMINENT**

**COMPETITIVE AISC –  
ROBUST PROJECT ECONOMICS**

**PROVEN EXPLORATION PERFORMANCE**

**STRONG CASH POSITION**

**LEVERAGE**





KENO HILL, CANADA:  
DEVELOPING A **WORLD CLASS** SILVER PROPERTY

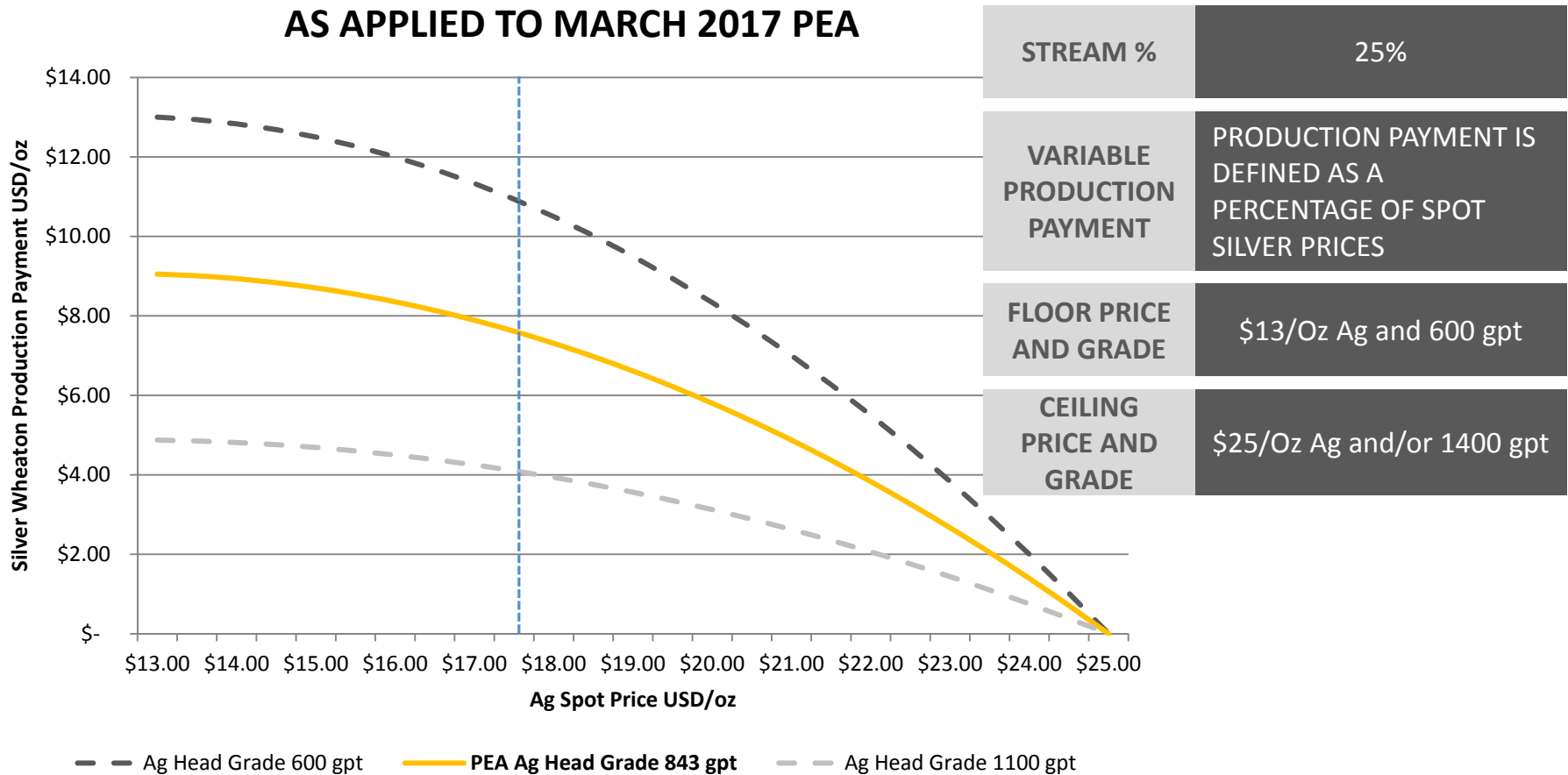


APPENDIX



# KENO HILL AMENDED SILVER STREAM

## POTENTIAL SILVER WHEATON PRODUCTION PAYMENT AS APPLIED TO MARCH 2017 PEA



Please see slide #2 for PEA cautionary statement and News Release dated March 29, 2017 entitled "Alexco and Silver Wheaton Amend Silver Purchase Agreement and Alexco Announces Positive Preliminary Economic Assessment for Expanded Silver Production at Keno Hill"





# RESOURCE TABLE

Category	Property	Tonnes	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Contained Ag (oz)
<b>Indicated</b>	Bellekeno Deposit	262,000	585	n/a	3.5%	5.3%	4,927,000
	Lucky Queen Deposit	132,300	1,167	0.2	2.4%	1.6%	4,964,000
	Flame & Moth Deposit	1,679,000	498	0.4	1.9%	5.3%	26,883,000
	Onek	700,200	191	0.6	1.2%	11.9%	4,300,000
	Birmingham	858,000	628	0.1	2.4%	1.7%	17,324,000
	Total Indicated – Sub-Surface	3,631,500	500	0.3	2.0%	5.6%	58,398,000
	Elsa Tailings	2,490,000	119	0.1	1.0%	0.7%	9,527,000
	<b>Total Indicated – All Deposits</b>	<b>6,121,500</b>	<b>345</b>	<b>0.3</b>	<b>1.6%</b>	<b>3.6%</b>	<b>67,925,000</b>
<b>Inferred</b>	Bellekeno Deposit	243,000	428	n/a	4.1%	5.1%	3,344,000
	Lucky Queen Deposit	257,900	473	0.1	1.0%	0.8%	3,922,000
	Flame & Moth Deposit	365,200	356	0.3	0.5%	4.3%	4,180,000
	Onek	285,100	118	0.4	1.2%	8.3%	1,082,000
	Birmingham	220,000	770	0.2	2.1%	2.2%	5,446,000
	<b>Total Inferred</b>	<b>1,371,000</b>	<b>408</b>	<b>0.2</b>	<b>1.6%</b>	<b>4.3%</b>	<b>17,974,000</b>
<b>Historical Resources</b>	Silver King						
	- 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



# KEY MANAGEMENT

## EXPERIENCED MANAGEMENT TEAM

**Clynt  
Nauman**  
CEO

**Brad  
Thrall**  
COO

**Michael  
Clark**  
CFO

**Al  
McOnie**  
VP Exploration

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