

Precious Metals Summit
Beaver Creek, CO | September 10-12, 2014



ALEXCO

Restarting Silver Operations at Keno Hill
More Ounces – Lower Costs

NYSE-MKT: **AXU**
TSX: **AXR**





Forward Looking Statement

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 may include, but are not limited to, statements with respect to any proposed offering, anticipated closing of any proposed offering, potential exercise by the Underwriter of any over-allotment option, anticipated use of proceeds, the amendment to the Silver Purchase Agreement, its impact on Alexco and the Keno Hill Silver District and the parties' rights, obligations and conditions thereunder, including Alexco's condition to pay Silver Wheaton US\$20 million and obtain regulatory approvals for any financing related thereto, 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 anticipated timing of making a production decision in the Eastern Keno Hill Silver District including recommencement of production at the Bellekeno mining operation, the timing of activities, the amount of estimated revenues and expenses, the success of exploration activities, permitting time lines, requirements for additional capital and sources and uses of funds.

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 regulatory approval of any proposed offering; risks related to Alexco's ability to raise additional capital; the parties' performance under the amendment to the Silver Purchase Agreement, including Alexco's ability to raise additional capital to make the \$20 million payment to Silver Wheaton to meet its condition thereunder; success and timing of regulatory approvals; 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 Alexco 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 the section entitled "Risk Factors" in the MD&A included in Alexco's most recent interim and annual financial reports, its current AIF and U.S. Form 40-F, and various of its other continuous disclosure documents.

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) the Company will be able to raise additional capital, including to make the US\$20 million payment to Silver Wheaton under the amendment, and that regulatory approval will be obtained in a timely fashion; (2) the proposed development of its mineral projects will be viable operationally and economically and proceed as planned; (3) 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 EKHSD PEA, (4) the actual nature, size and grade of its mineral resources are materially consistent with the resource estimates reported in the supporting technical reports; and (5) any additional financing needed will be available on reasonable terms. Financial outlook information contained in this presentation about potential future 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. 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.



Preliminary Economic Assessment Cautionary Statement

On December 12, 2013, Alexco Resource Corp. filed a Preliminary Economic Assessment Technical Report entitled “Updated Preliminary Economic Assessment for the Eastern Keno Hill Silver District Project – Phase 2, Yukon, Canada”

Readers are cautioned that mineral resources are not mineral reserves and do not have demonstrated economic viability. The PEA is preliminary in nature; as well, 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. The PEA contemplates an initial development and construction period beginning in the second quarter of 2014, with startup of commercial production in the second quarter of 2015. 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.

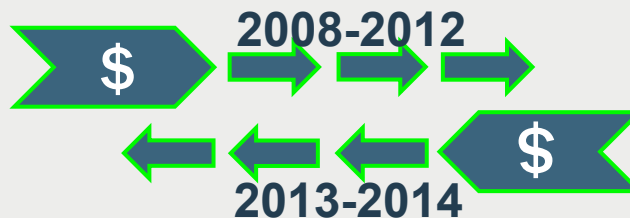


Alexco: A Silver Mining Company with a Valuable Subsidiary Business

Alexco Resource Corp.

NYSE-MKT: AXU
TSX: AXR

Alexco: Silver Development & Mining



Alexco Environmental Group (AEG)

- ◆ Keno Hill Silver District, Yukon, Canada
- ◆ World class silver grades
- ◆ Interim production suspension Q3 2013
- ◆ Driving future costs down by:
 - ◆ Developing Flame & Moth deposit
 - ◆ Achieving 400tpd throughput
 - ◆ Renegotiated silver streaming agreement
- ◆ Successful exploration program
- ◆ Silver production decision in H1-2015

- ◆ A branded, respected and growing environmental remediation business
- ◆ 2013 revenue: \$16.3 million, with a 42.5% margin normalized*
- ◆ Turnkey projects in Canada & U.S.
- ◆ Offices in Vancouver BC, Whitehorse YT, Denver and Toronto

*Reported gross margin for 2013 was 54%, including the impacts from the execution of the ARSA and changes in the estimates of the environmental services contract loss provision were included.



Alexco Objective: to be a Sustaining Silver Producer through all Silver Cycles

Tasks Completed During Interim Operations Suspension

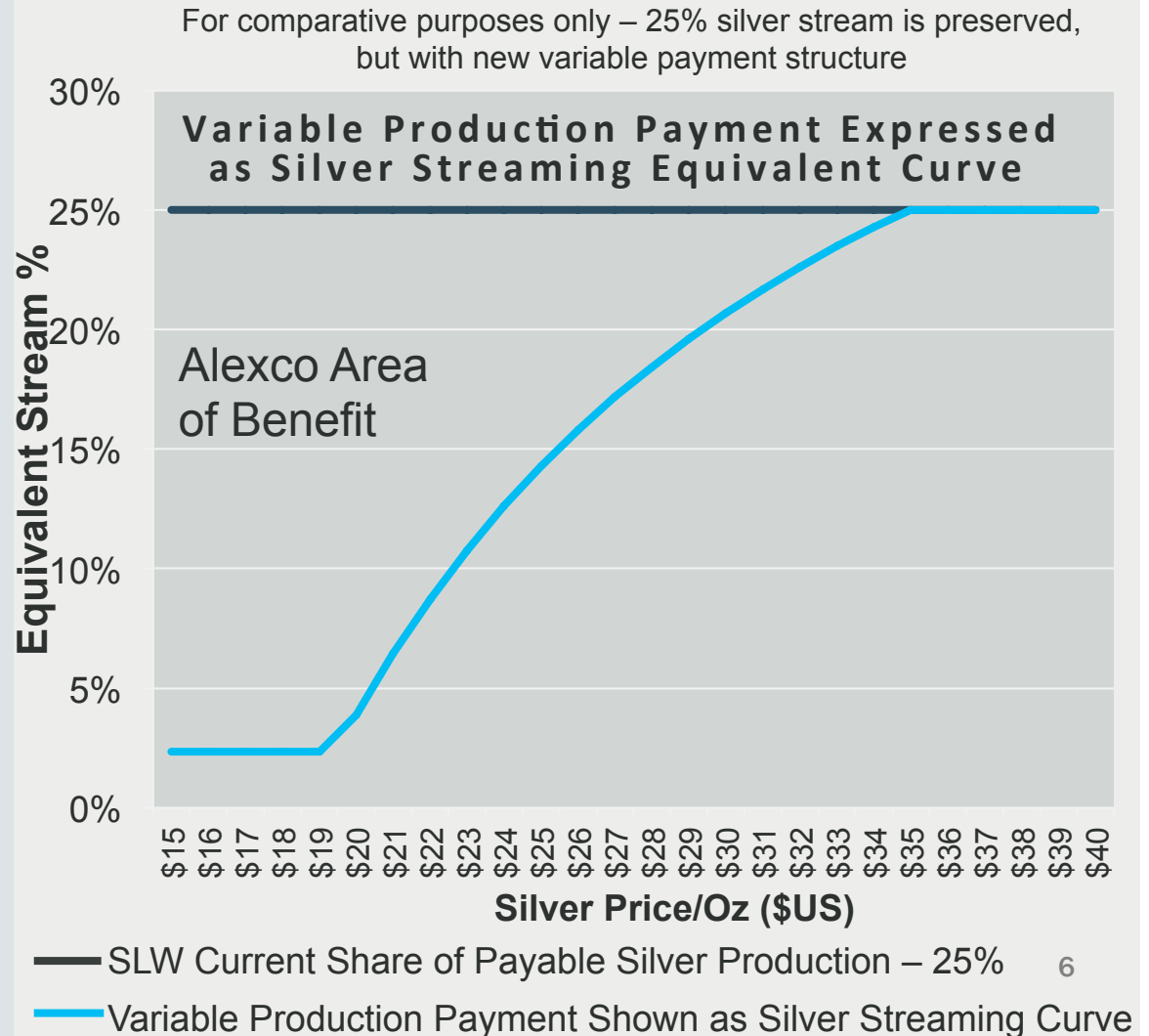
- ◆ Identified path to 400tpd as quickly as possible
- ◆ Renegotiated third party agreements
- ◆ Pushed the 'reset button' on underlying fixed costs:
 - ◆ Self mining, fly in/fly out, etc.
 - ◆ Reviewed vendor contracts
 - ◆ Labor rates
- ◆ Have a cornerstone discovery (Flame & Moth) that will provide 5-10 year planning horizon



Key Step: Resuming Production with Amended Silver Purchase Agreement

All US\$

- ◆ New variable production payment curve based on the spot silver price (previously a fixed \$3.90/oz payment)
- ◆ Production payment varies between \$18.00/oz and \$3.90/oz
- ◆ Subject to US\$20 million payment to SLW, with SLW to participate in \$5 million of Alexco equity raise
- ◆ 400 tonne per day completion test deferred up to 24 months after delivery of first concentrate to smelter





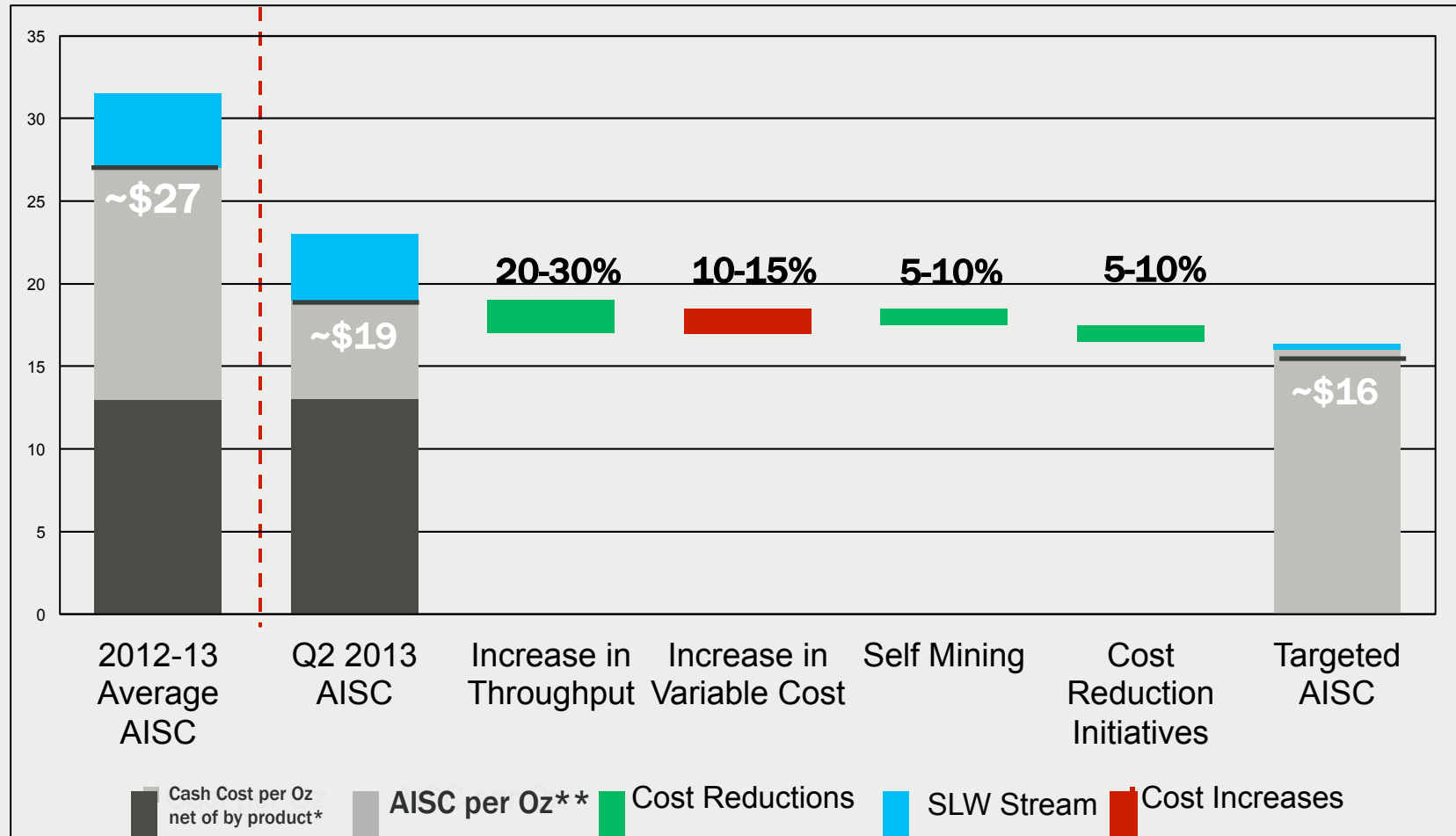
Total Alexco Gross Profit 2011-2013: \$50.8 Million

	TOTAL	2013¹	2012	2011
Ore tonnes processed	242,171	66,297	94,810	81,064
Mill throughput (tonnes per day avg)	250	271	260	222
Grade of ore processed:				
Silver (grams per tonne)	779	705	760	834
Lead	9.5%	7.7%	9.6%	10.2%
Zinc	5.1%	3.8%	4.8%	6%
Recoveries:				
Silver	93%	94%	93%	92%
Lead in lead concentrate	91%	92%	90%	90%
Zinc in zinc concentrate	61%	61%	56%	65%
Production – contained metal:				
Silver (ounces)	5,579,818	1,408,164	2,150,959	2,020,695
Lead in lead con (pounds)	44,963,128	10,324,978	18,183,755	16,454,395
Zinc in zinc con (pounds)	16,339,879	3,443,855	5,676,284	7,219,740
Cash costs of production²				
Per ounce of payable silver produced	\$11.81	\$14.00	\$11.89	\$10.17

¹ The year ended December 31, 2013 represents a shortened operating period encompassing 245 days.

² Cash costs of production per ounce of payable silver produced is a non-IFRS measure with no standardized meaning prescribed under IFRS. See page 16 of Alexco's December 31, 2013 MD&A for explanation and reconciliation.

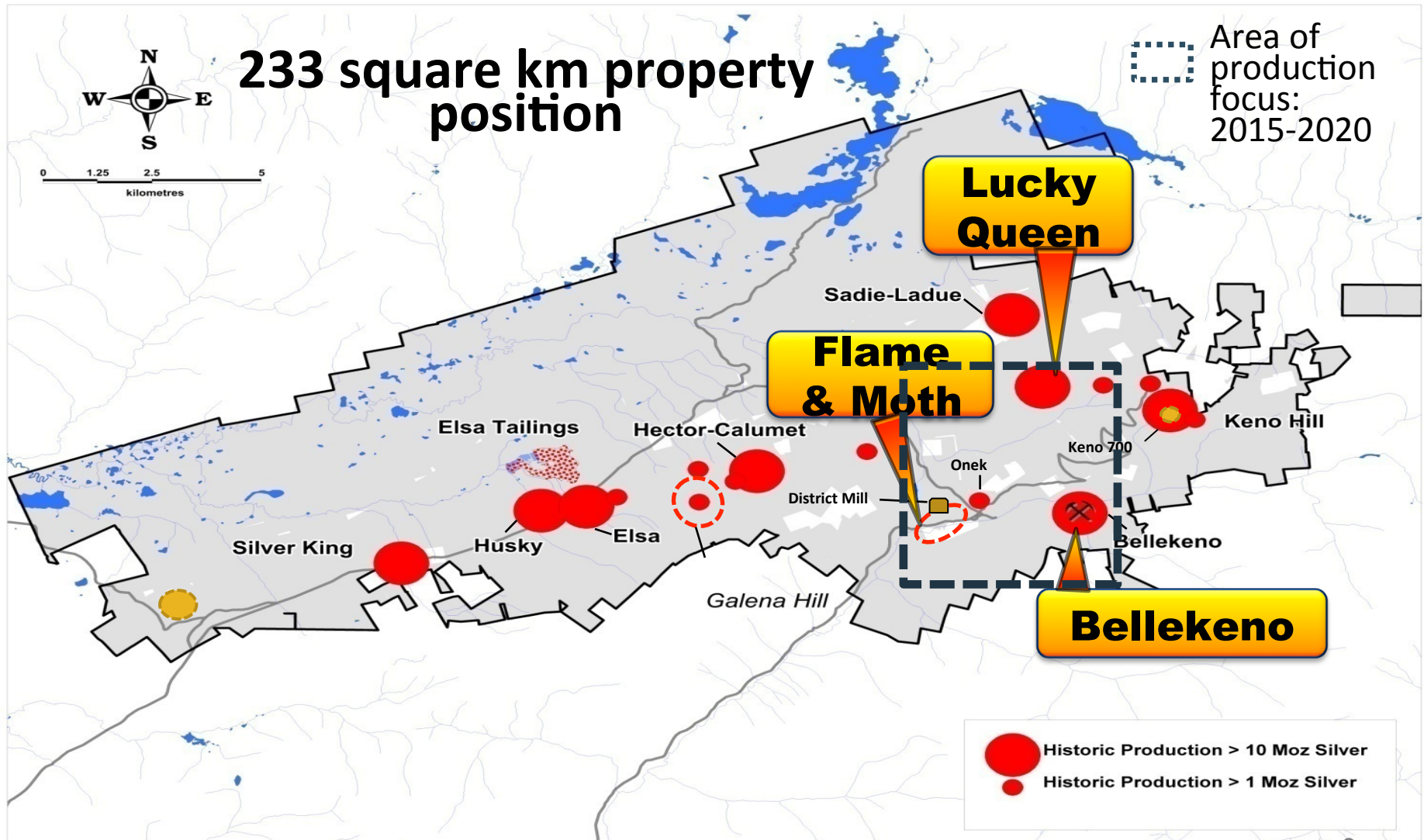
Targeted Potential Cost Reductions at Keno Hill



*Cost per Ounce is calculated on a payable ounces produced.

**AISC is calculated on payable ounces sold on a co product basis, as defined by the World Gold Council. Targeted AISC includes impact of Amended Silver Purchase Agreement.

Area of Production Focus: 2015-2020





2013 PEA Plan*

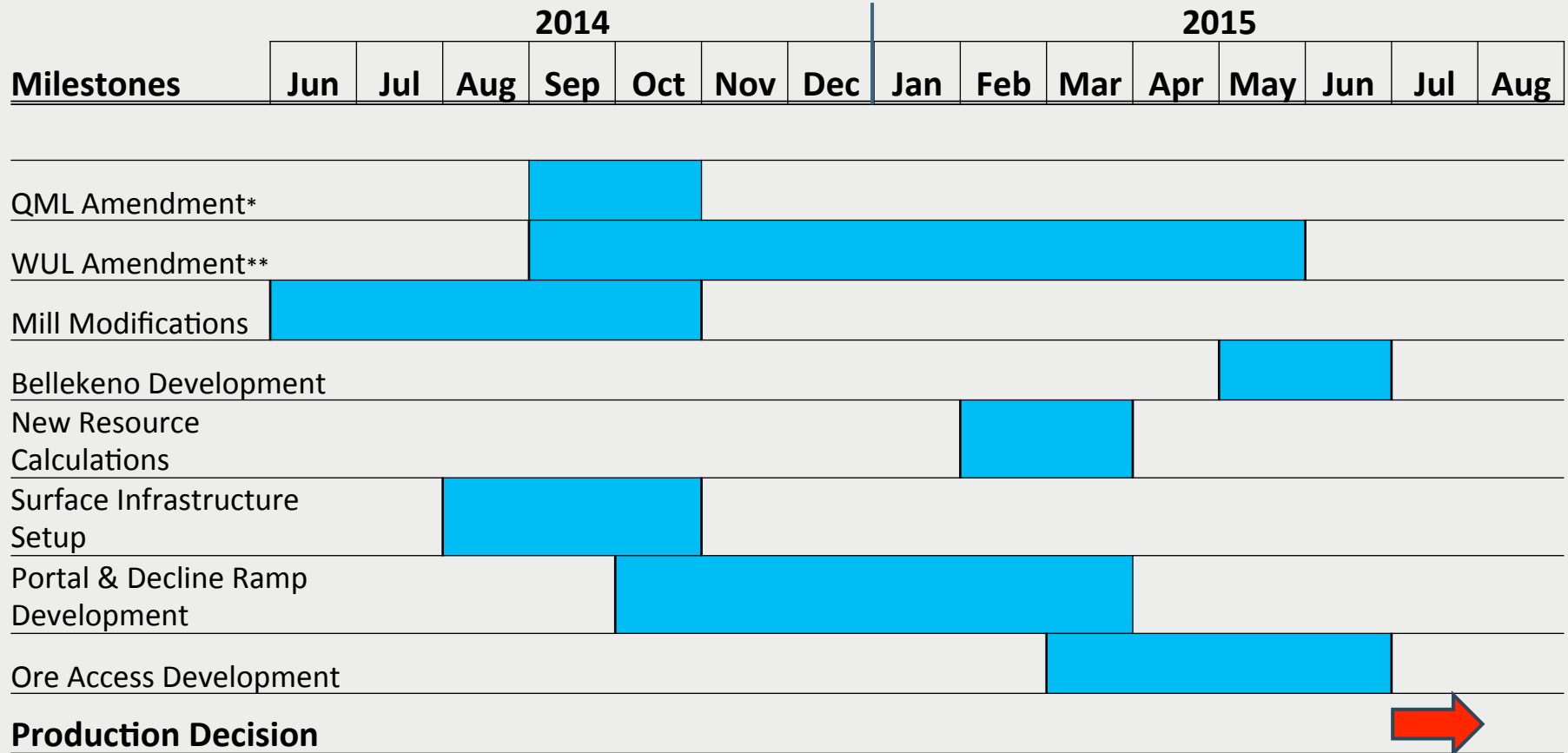
Flame & Moth, Bellekeno & Lucky Queen

- ◆ Sustainable 400tpd achieved by sequentially operating Bellekeno, Flame & Moth and Lucky Queen
- ◆ 9 month construction period for Flame & Moth
- ◆ 5.5 years of production
- ◆ Annual estimated average production:
 - ◆ 3.1 million ounces of payable silver
 - ◆ 6.8 million pounds of lead
 - ◆ 6.6 million pounds of zinc
 - ◆ 1,050 ounces of gold
- ◆ Initial capital (including working capital) of approximately \$25 million with optimization ongoing
 - ◆ Can be constructed in phases
- ◆ Optimization work well advanced

(*See Preliminary Economic Assessment (PEA) Cautionary Statement. The PEA is based on metal prices of US\$24 per ounce for silver, US\$0.95 per pound for lead, US\$0.85 per pound for zinc and US\$1,300 per ounce for gold.)



Timeline: Next Steps



*Quartz Mining Licence

**Water Use Licence



Flame & Moth Underground Development Capital Estimate & Schedule

Flexibility to Develop Flame & Moth in Phases

Category	\$ M Cdn
Surface Infrastructure/PPE	\$ 0.9
Water Treatment Plant	\$ 0.8
Primary Decline Ramp (622 m)	\$ 4.4
Ore and Level Accesses (500 m)	\$ 3.5
Ventilation Raise (99 m)	\$ 0.5
Underground Definition Drilling	\$ 1.0
Contingency (10%)	\$ 1.1
Total Development Cost	\$ 12.2

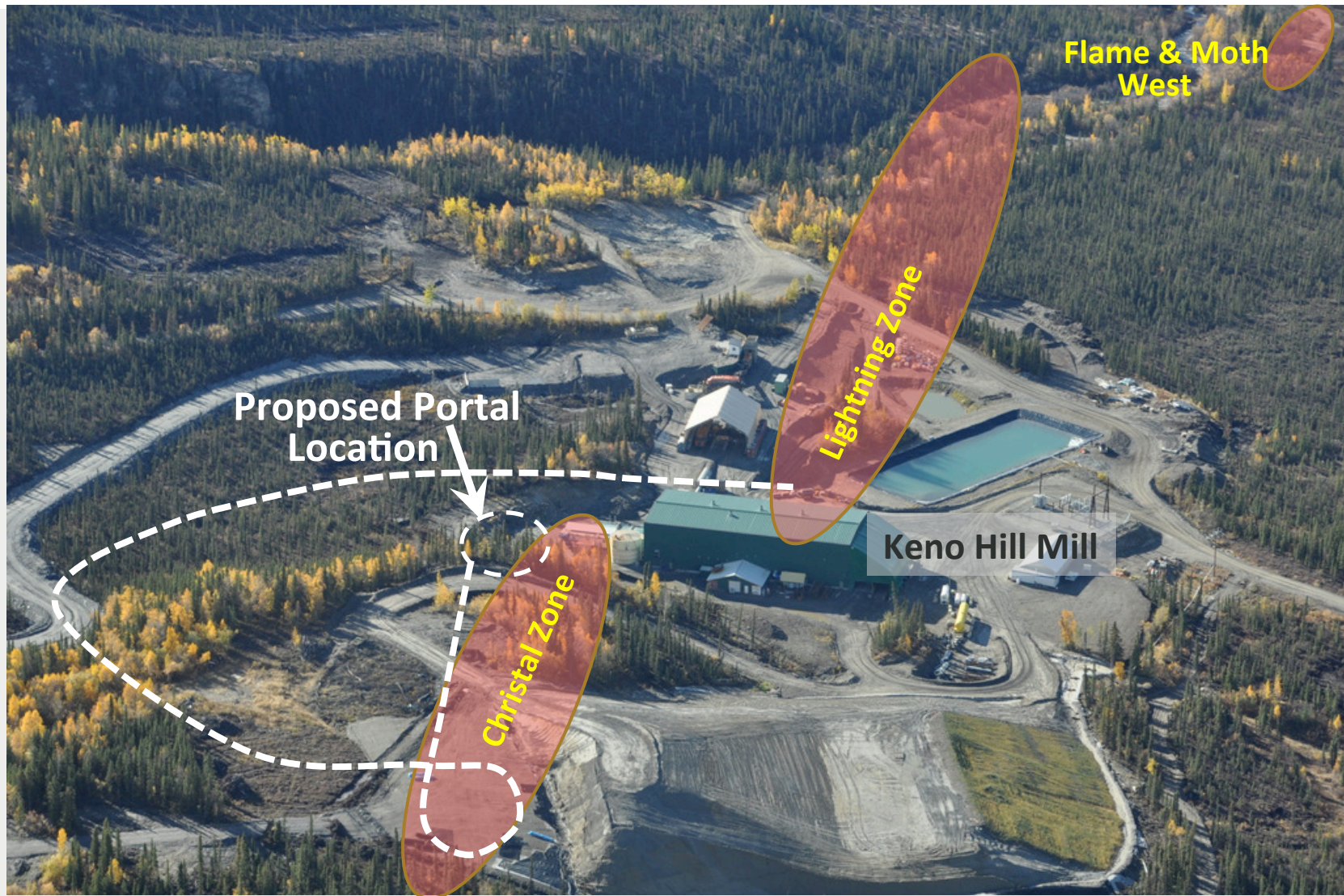
UNDERGROUND DEVELOPMENT SCHEDULE

- Permitting for Initial Development 2 months
- Underground Initial Development 8 months
- Ore Access, Stope Prep 2-4 months

(The underground development phase capital is a subset of the total initial capital required for the Flame & Moth deposit as described in the PEA. See PEA Cautionary Statement on slide 3.)

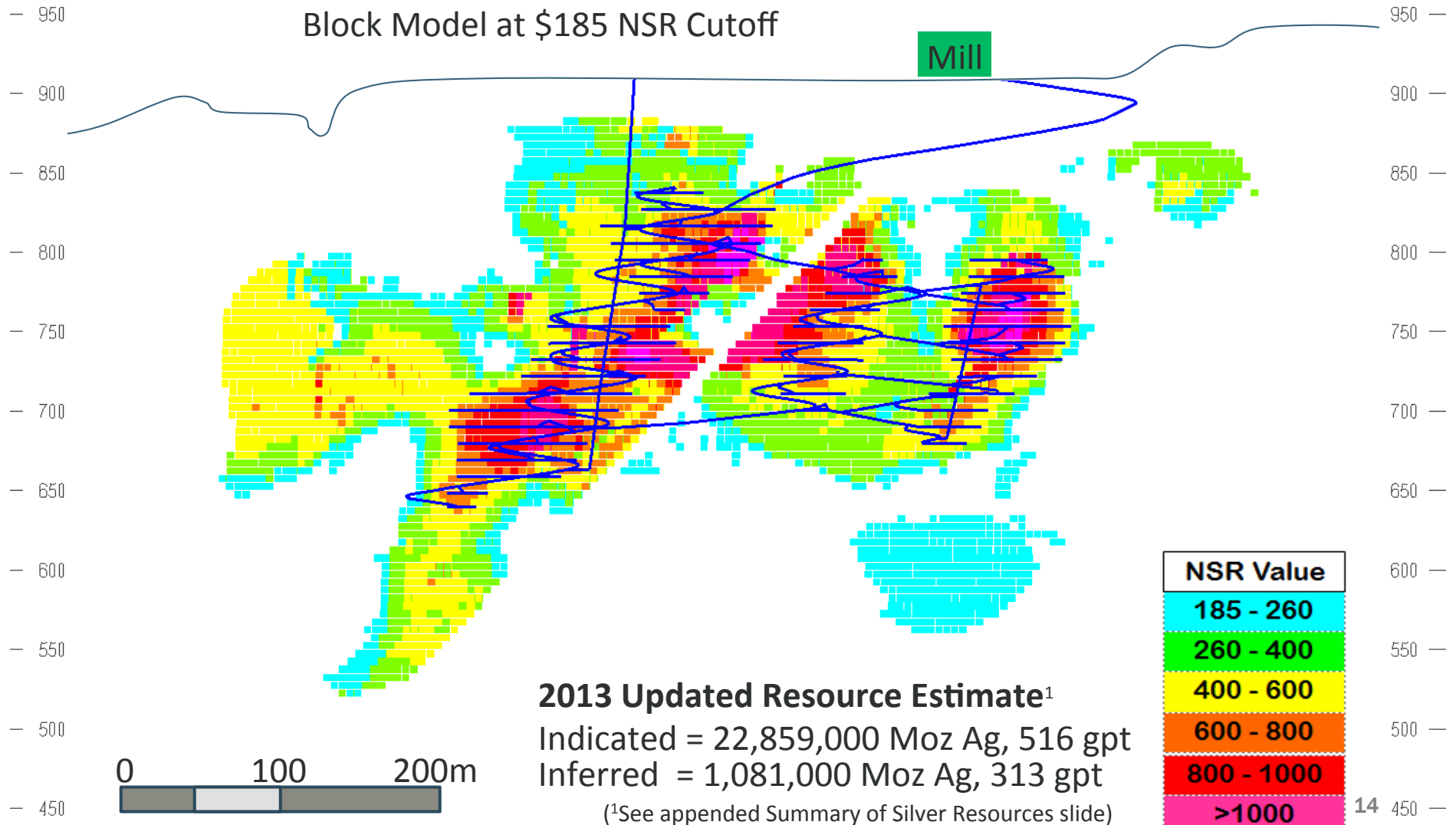


Flame & Moth: Cornerstone Asset for Next 6+ Years Conveniently Proximate to Mill





Flame & Moth Resource Proposed Development Design





Potential Mineable Tonnes included in PEA Plant Feed

2014 - 2020

Mine	Tonnes	Silver (gpt)	Gold (gpt)	Lead (%)	Zinc (%)
Flame & Moth	593,000	690	0.52	2.18	5.44
Bellekeno	85,700	660		6.74	4.15
Lucky Queen	129,000	1054	0.12	2.35	1.47
Total	807,700	745	0.40	2.69	4.67

Please see the December 12, 2013, Alexco Resource Corp. Preliminary Economic Assessment Technical Report entitled "Updated Preliminary Economic Assessment for the Eastern Keno Hill Silver District Project – Phase 2, Yukon, Canada" for further information.

Bellekeno Mine Plan

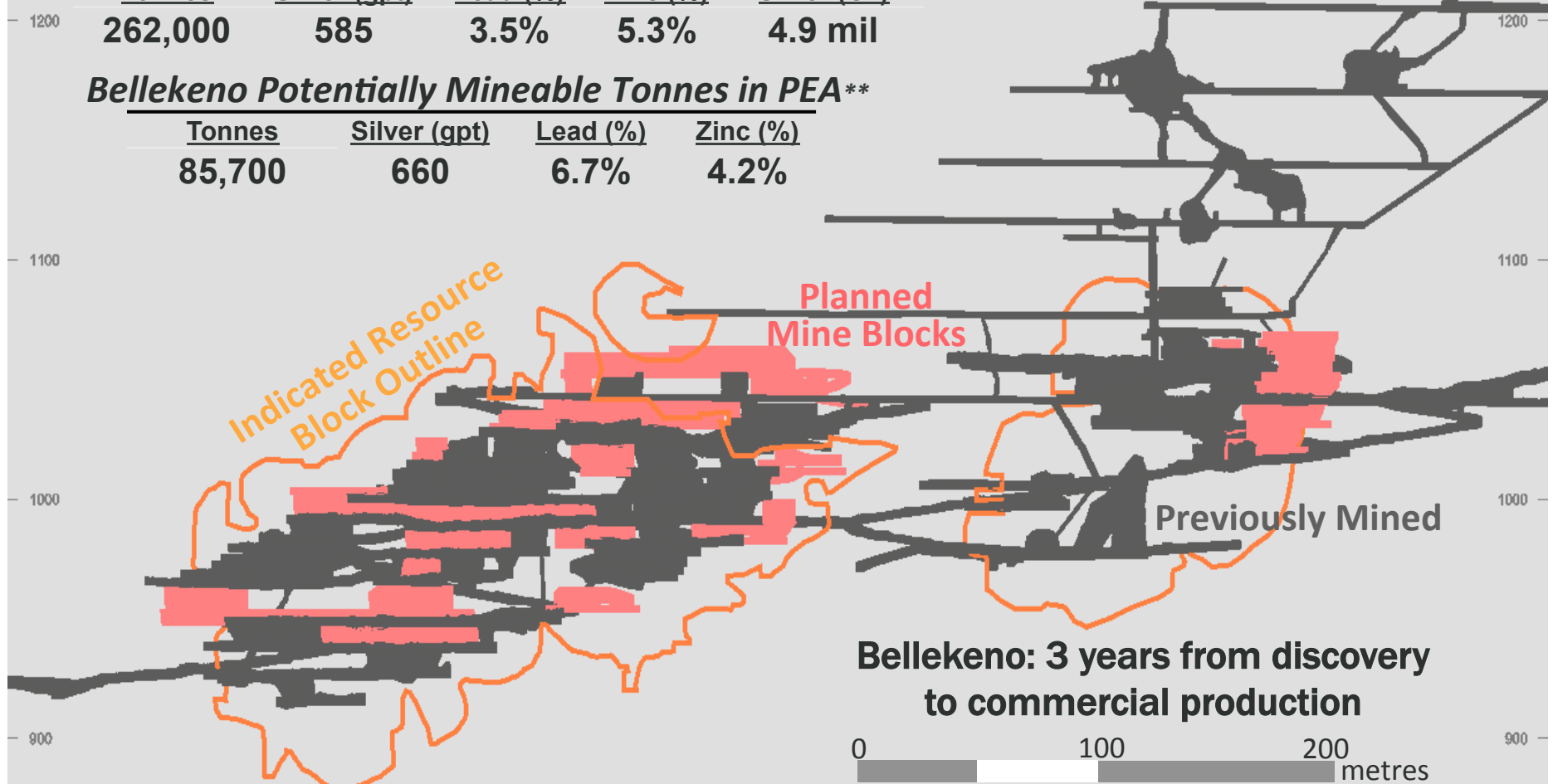
Bellekeno Indicated Mineral Resource Estimate*

<u>Tonnes</u>	<u>Silver (gpt)</u>	<u>Lead (%)</u>	<u>Zinc (%)</u>	<u>Silver (Oz)</u>
262,000	585	3.5%	5.3%	4.9 mil

Bellekeno Potentially Mineable Tonnes in PEA**

<u>Tonnes</u>	<u>Silver (gpt)</u>	<u>Lead (%)</u>	<u>Zinc (%)</u>
85,700	660	6.7%	4.2%

Note: Bellekeno East Zone Mineral Resource not shown in this figure



Bellekeno: 3 years from discovery to commercial production

*Please see appended Summary of Resources slide for full mineral resource disclosure.

**Please see appended Potentially Mineable Tonnes slide for full disclosure.

Lucky Queen Development

Current Resource

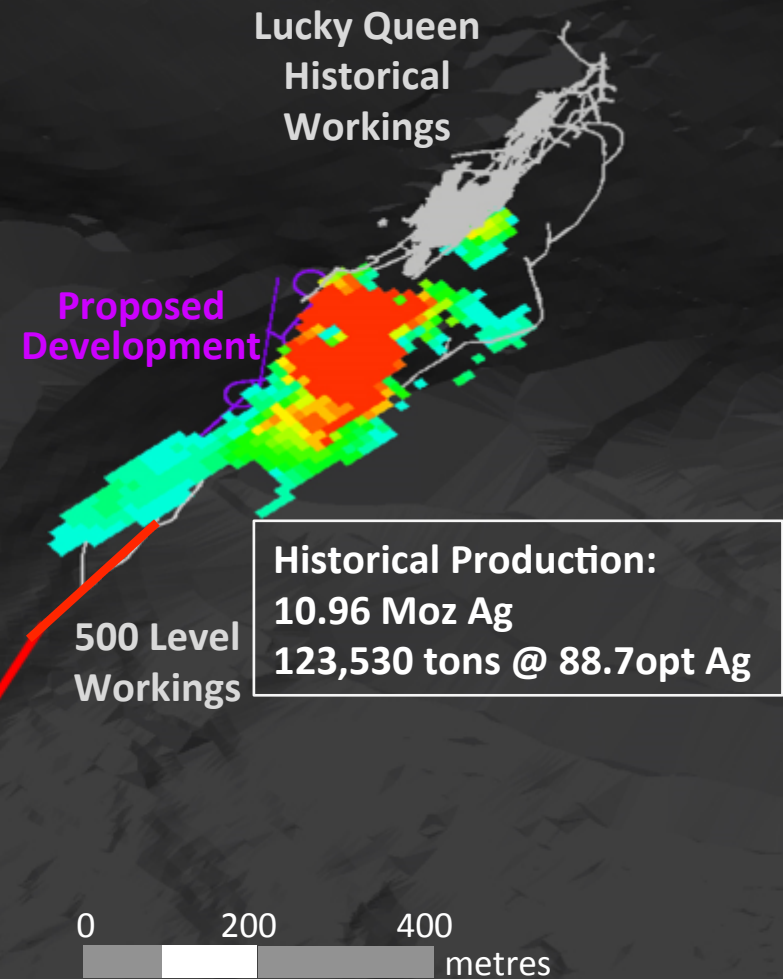
	Tonnes	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Ag ozs. (000)
Indicated	124,000	1,227	0.2	2.6	1.7	4,891
Inferred	150,000	571	0.2	1.4	0.9	2,753

(see appended Summary of Silver Resources slide)

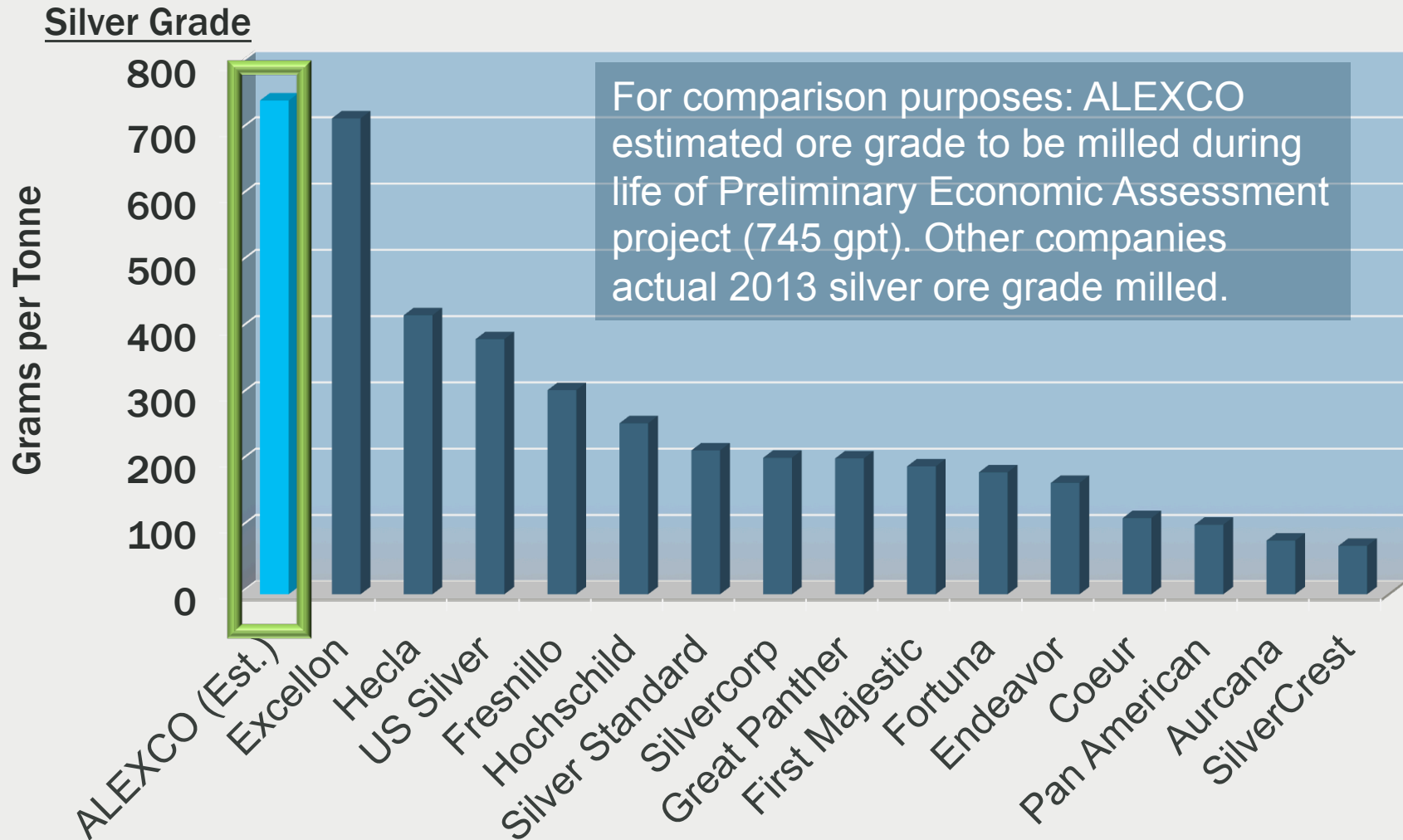
Lucky Queen Potentially Mineable Tonnes in PEA**

<u>Tonnes</u>	<u>Silver (gpt)</u>	<u>Au (gpt)</u>	<u>Lead (%)</u>	<u>Zinc (%)</u>
129,000	1054	0.12	2.35%	1.47%

(**Please see Potential Mineable Tonnes slide for full disclosure.)



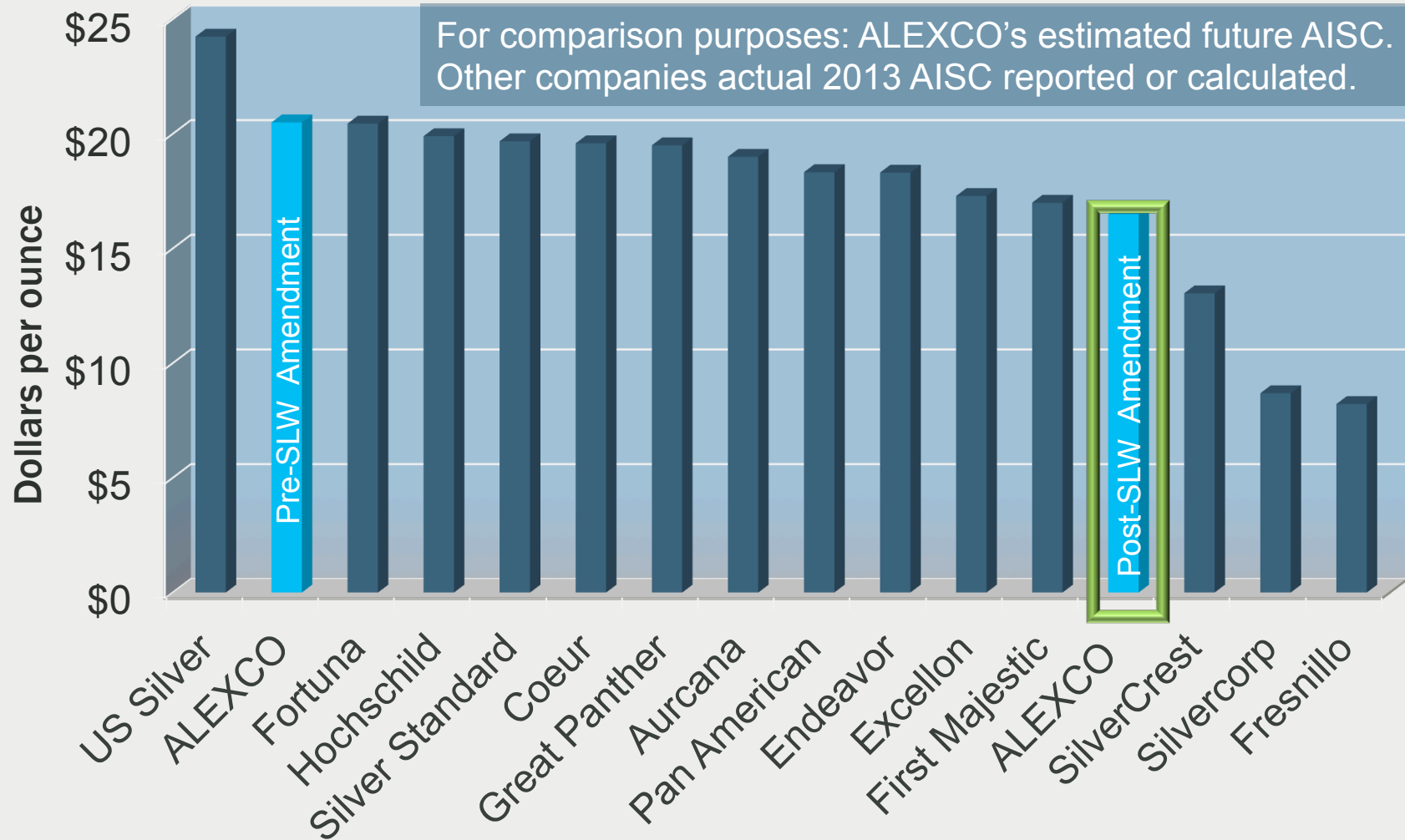
Where Do We Rank? Silver Ore Grade Milled



Source: Public information available April 2014



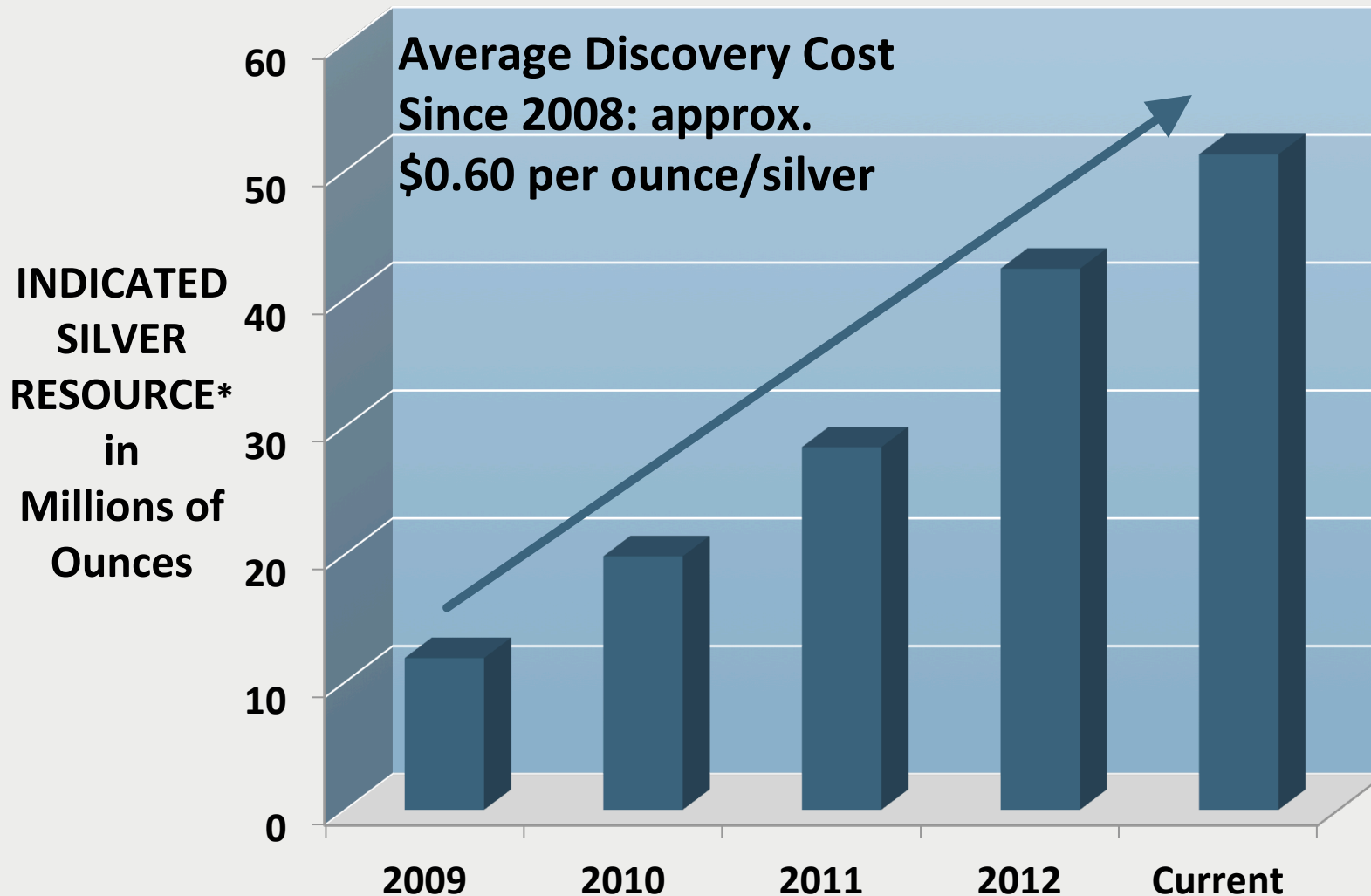
Where Do We Rank? All In Sustaining Costs (estimated comparison only)



Source: Public information available April 2014 and internal Alexco calculations



Significant Silver Resource Growth, Exploration Efficiency



*Please see appended Summary of Silver Resources slide for full mineral resource disclosure.



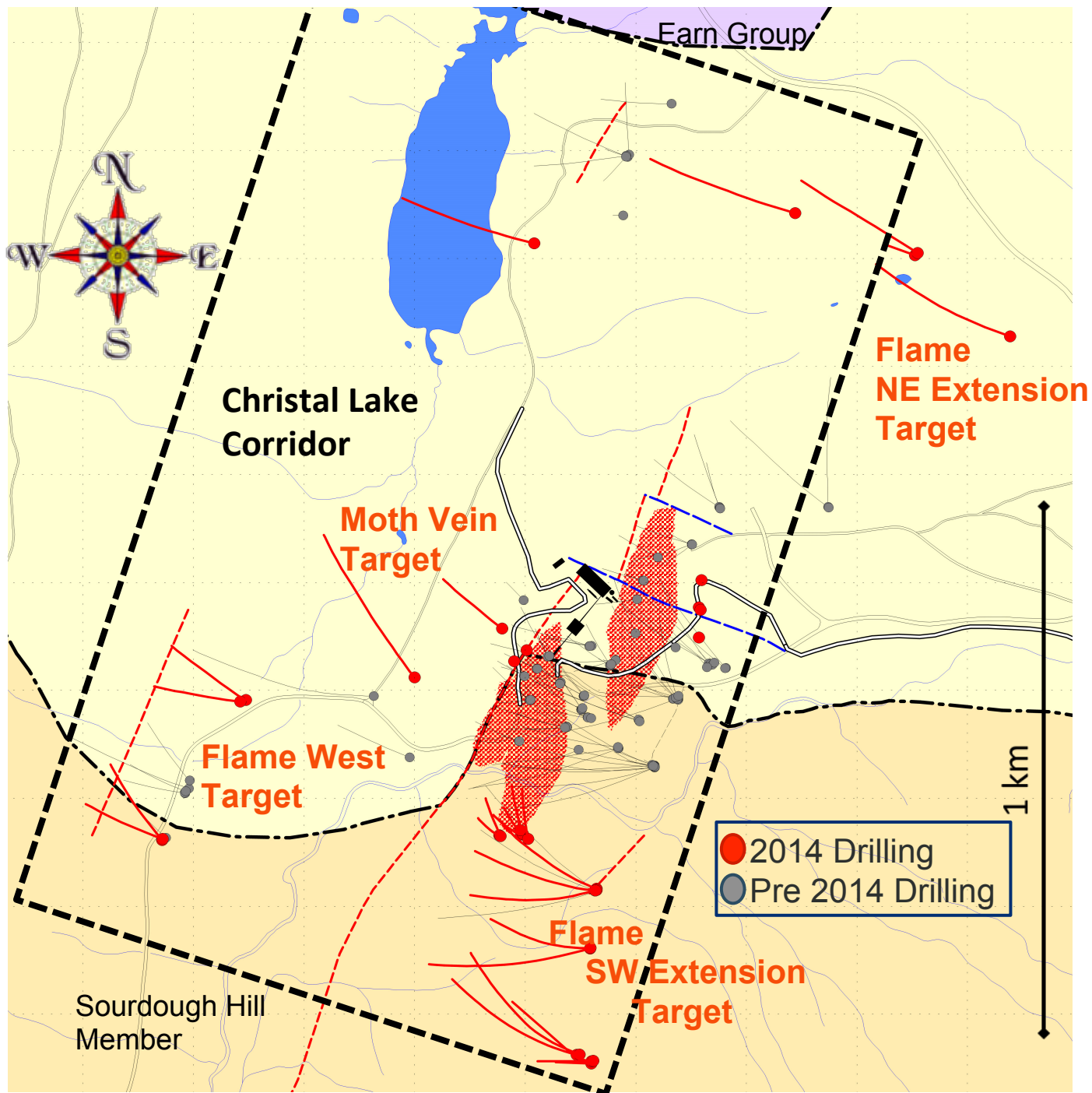
Exploration: An Unqualified Success

From inception to date, exploration spending is approximately \$65 million

◆ Efficient →

SILVER DISCOVERY	Inception – To Date	Inception – To Date
	<u>Discovery Cost</u>	<u>Discovery Rate</u>
All Exploration '05-'13	\$0.92/oz	500 oz/meter
Last 5 years '08-'13	\$0.60/oz	700 oz/meter
Flame & Moth	\$0.42/oz	1,040 oz/meter
Lucky Queen	\$0.72/oz	690 oz/meter
Bellekeno	\$1.08/oz	375 oz/meter
Onek	\$1.25/oz	400 oz/meter
Birmingham	\$1.69/oz	300 oz/meter

- ◆ 2014 Exploration Program - \$5 million
--Targeting minimum of 14,000 meters of surface exploration drilling in 2014



Flame & Moth

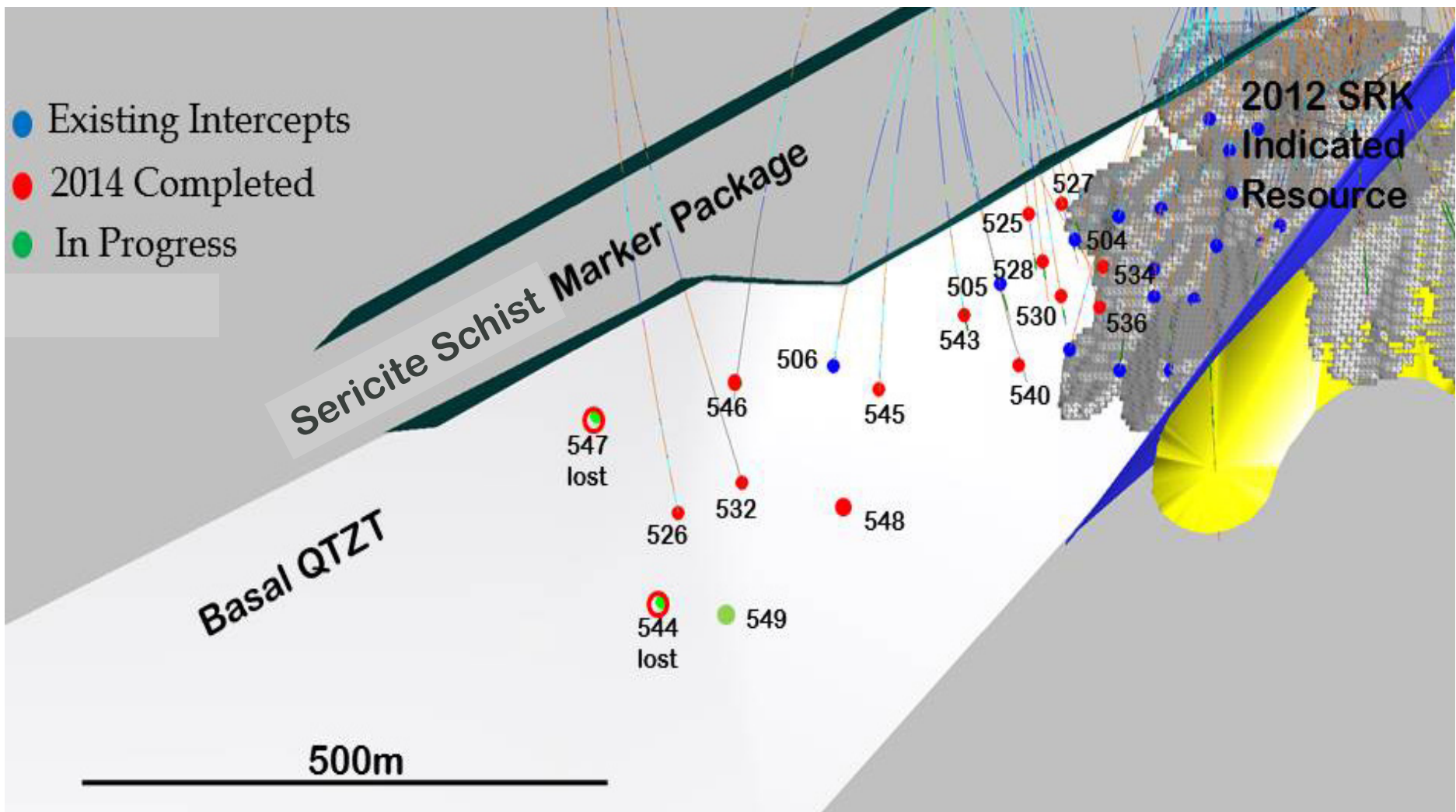
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Christal Lake Corridor 2014 Drilling



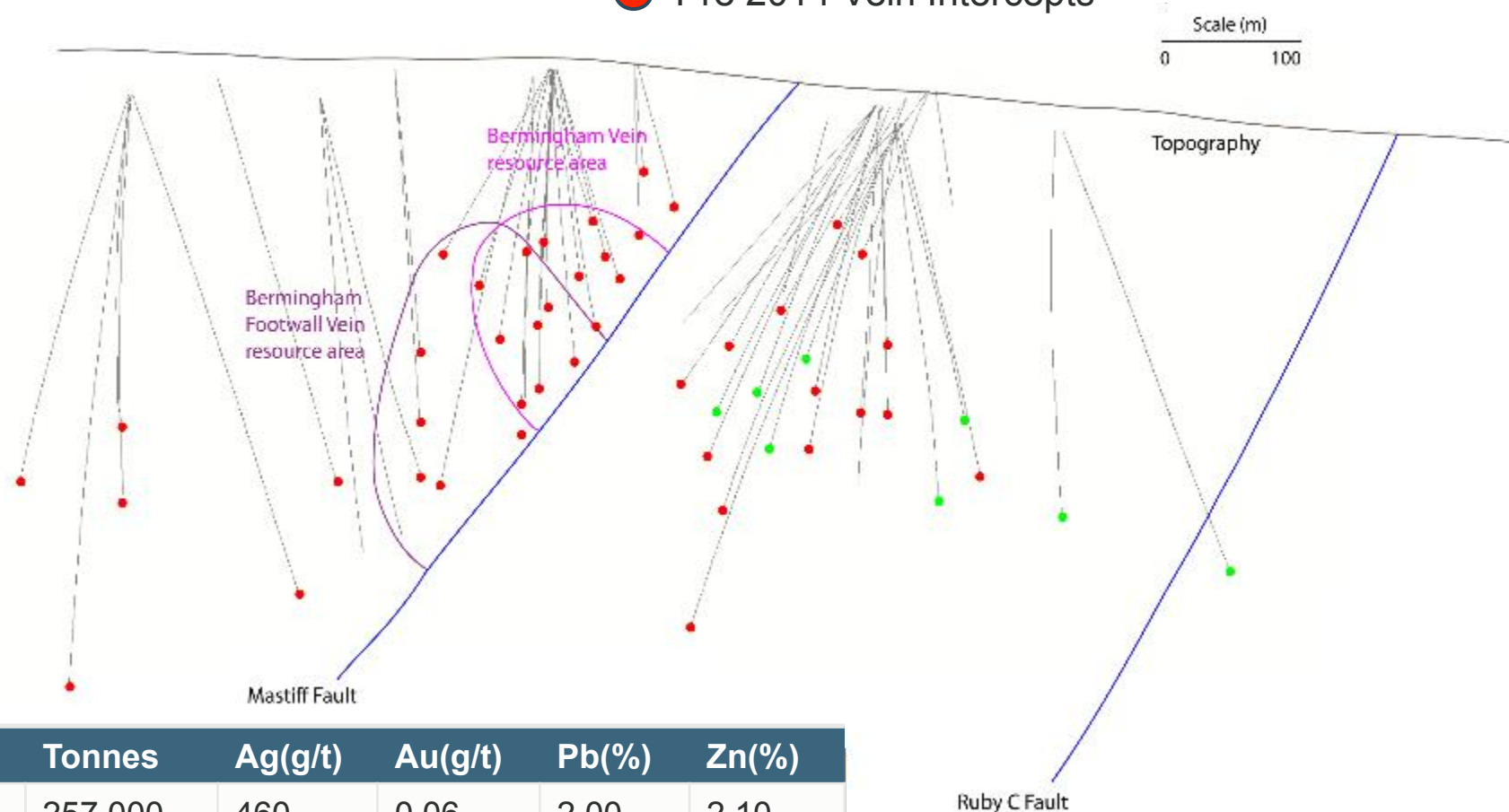
ALEXCO

Flame & Moth 2014 Drilling



Birmingham Longitudinal Section

- 2014 Completed
- Pre 2014 Vein Intercepts



Class	Tonnes	Ag(g/t)	Au(g/t)	Pb(%)	Zn(%)
Indicated	257,000	460	0.06	2.00	2.10
Inferred	102,000	372	0.09	1.12	1.83

(see appended Summary of Silver Resources slide)



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2014 – 2015 Plan of Action

- ◆ Conclude permitting for Flame & Moth deposit
- ◆ Continue to grow Flame & Moth silver resources through expanded 2014 exploration program
- ◆ Ready Bellekeno for operation
- ◆ Continue optimization work for development and production
- ◆ Monitor commodity and capital market conditions
- ◆ 2015: Production decision / start up



Alexco Environmental Group: Record Technical and Financial Results



Globeville smelter site, Denver, CO

- ◆ Patented remediation technologies
- ◆ Northern mine permitting/ environmental assessment expertise
- ◆ Globeville smelter cleanup
- ◆ Platoro in-situ underground mine treatment
- ◆ 2013 revenue: \$16.3 million, with a 42.5% margin normalized
- ◆ +\$70M backlog including Keno closure



The Alexco Advantage

NYSE-MKT:AXU / TSX:AXR
69.6 Million Shares Issued & Outstanding

- ◆ Owns 100% of high grade Keno Hill Silver District
- ◆ Safe jurisdiction, good infrastructure
- ◆ Favorable silver streaming amendment
- ◆ Moving toward long-term, sustainable silver production
- ◆ Indicated silver resources of 49.7 million ounces*
 - ◆ Additional 9.9 million oz Inferred resource*
 - ◆ Additional 5.4 million oz Historical resource*
- ◆ Alexco Environmental Group: an established brand – record growth and profitability
- ◆ Cash position :
 - ◆ End of Q2'14 -- \$6.3 million and net working capital of \$11.7 million
 - ◆ Subsequent bought deal for additional \$8 million



*Please see appended Summary of Silver Resources slide for full mineral resource disclosure.



Alexco Resource Corp.

APPENDIX SLIDES



Summary of Silver Resources: Keno Hill Silver District

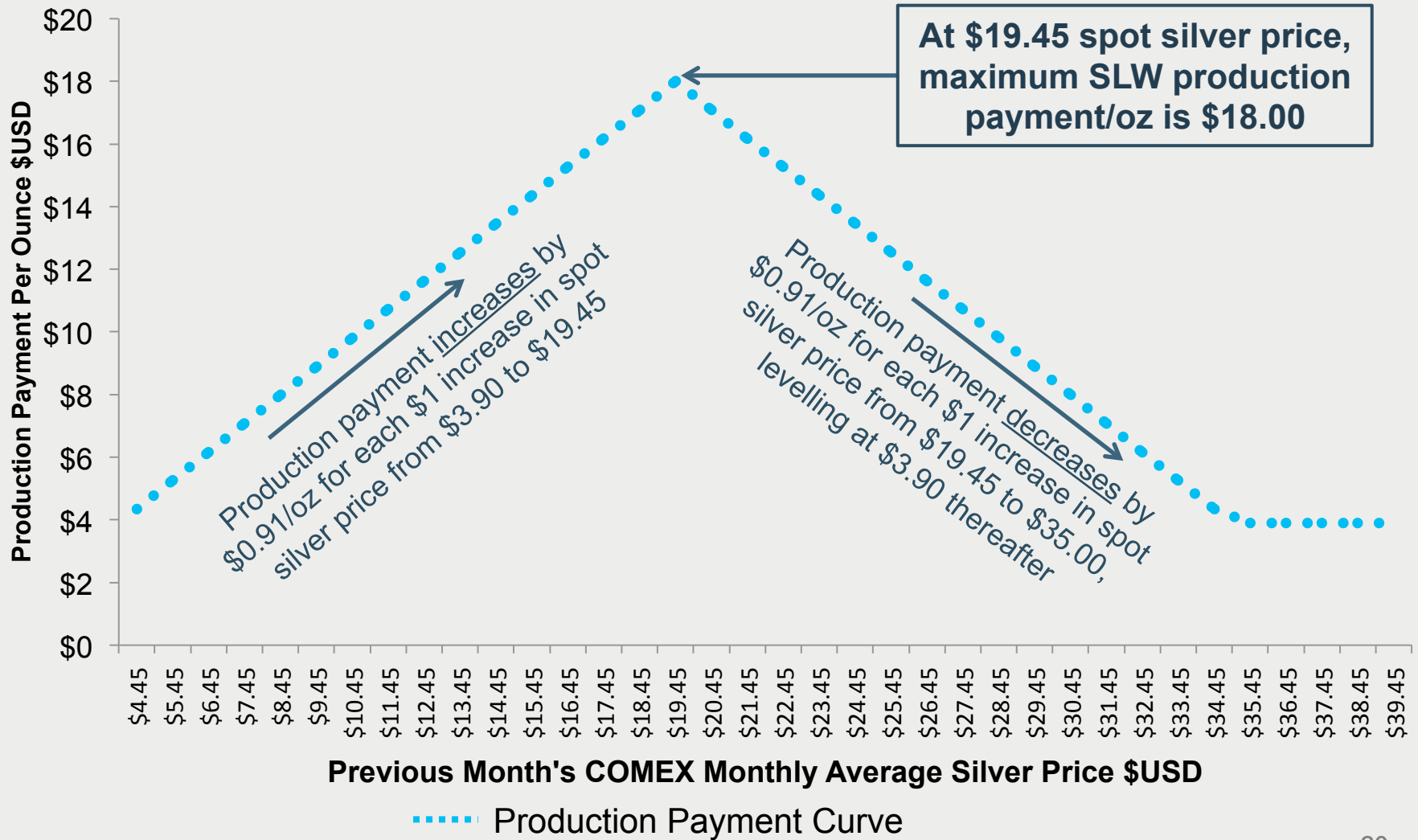
Category ^{1,2,11}	Property	Tonnes	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	Contained Ag (oz)
Indicated	Bellekeno Deposit ⁴	262,000	585	n/a	3.5%	5.3%	4,933,000
	Lucky Queen Deposit ⁵	124,000	1,227	0.2	2.6%	1.7%	4,891,000
	Flame & Moth Deposit ⁶	1,378,000	516	0.4	1.7%	5.7%	22,859,000
	Eastern Keno Hill Silver District³	1,764,000	576	n/a	2.0%	5.4%	32,683,000
	Onek ⁷	585,000	194	0.7	1.2%	13.7%	3,648,000
	Birmingham ⁸	257,000	460	0.1	2.0%	2.1%	3,800,000
	Total Indicated – Sub-Surface Deposits	2,606,000	479	n/a	1.9%	6.9%	40,131,000
	Elsa Tailings ⁹	2,490,000	119	0.1	1.0%	0.7%	9,526,000
	Total Indicated – All Deposits	5,096,000	303	n/a	1.4%	3.9%	49,657,000
Inferred	Bellekeno Deposit ⁴	243,000	428	n/a	4.1%	5.1%	3,338,000
	Lucky Queen Deposit ⁵	150,000	571	0.2	1.4%	0.9%	2,753,000
	Flame & Moth Deposit ⁶	107,000	313	0.3	0.9%	4.2%	1,081,000
	Eastern Keno Hill Silver District³	500,000	446	n/a	2.6%	3.7%	7,172,000
	Onek ⁷	236,000	203	0.4	1.1%	11.5%	1,540,000
	Birmingham ⁸	102,000	372	0.1	1.1%	1.8%	1,220,000
	Total Inferred	838,000	369	n/a	2.0%	5.6%	9,932,000
Historical Resources	Silver King ¹⁰						
	- Proven, probable and indicated	98,998	1,354	n/a	1.6%	0.1%	4,310,000
	- Inferred	22,581	1,456	n/a	0.1%	n/a	1,057,000

Notes:

- All mineral resources are classified following the CIM Definition Standards for Mineral Resources and Mineral Reserves (December 2005), in accordance with the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines and the guidelines of NI 43-101.
- Mineral resources are not mineral reserves and do not have demonstrated economic viability. All numbers have been rounded to reflect the relative accuracy of the estimates.
- The Eastern Keno Hill Silver District property is comprised of three deposits: Bellekeno, Lucky Queen and Flame & Moth. The resource estimates for the Eastern Keno Hill Silver District are supported by disclosure in the news release dated December 5, 2013 entitled "Alexco Releases Positive Preliminary Economic Assessment for Expanded Silver Production from Eastern Keno Hill Silver District, Yukon" and by a technical report filed on SEDAR dated November 15, 2013 entitled "Updated Preliminary Economic Assessment for the Eastern Keno Hill Silver District Project – Phase 2, Yukon, Canada".
- The resource estimates for the Bellekeno deposit are based on a geologic resource estimate having an effective date of May 31, 2012. The Bellekeno indicated resources are as at September 30, 2013, and reflect the geologic resource less estimated subsequent depletion from mine production.
- The resource estimates for the Lucky Queen deposit have an effective date of July 27, 2011.
- The resource estimates for the Flame & Moth deposit have an effective date of January 30, 2013.
- The resource estimates for Onek have an effective date of July 27, 2011, and are supported by disclosure in the news release dated July 27, 2011 entitled "Alexco Announces Initial Resource Estimates for Lucky Queen and Onek" and by a technical report filed on SEDAR dated September 8, 2011 entitled "Technical Report on the Onek Deposit, Onek Property, Keno Hill District, Yukon".
- The resource estimates for Birmingham have an effective date of June 27, 2012, and are supported by disclosure in the news release dated June 28, 2012 entitled "Alexco Announces Initial Resource Estimates for Flame & Moth and Birmingham" and by a technical report filed on SEDAR and signature dated August 8, 2012 entitled "Technical Report on the Birmingham Deposit, Birmingham Property, Keno Hill District, Yukon".
- The 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".
- Historical resources for Silver King were estimated by United Keno Hill Mines Limited, 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) method and the 1997 CIM definitions for resource categories. These estimated historical resources include a total of 55,674 tonnes classified as proven and probable reserves and 43,324 tonnes classified as indicated resources, plus an additional 22,581 tonnes classified as inferred resources. Though believed by Alexco management to be relevant and reliable, this estimate of historical resources has not been verified by Alexco, pre-dates NI 43-101 and is not compliant with NI 43-101 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 has not done sufficient work to classify this estimate of historical resources as current, nor is Alexco treating this historical estimate as a current mineral resource.
- The disclosure regarding the summary of estimated resources for Alexco's mineral properties within the Keno Hill District has been reviewed and approved by Scott Smith, P.Eng., former Bellekeno Mine Manager and a Qualified Person as defined by NI 43-101.



Amended Silver Purchase Agreement: Variable Production Payment Curve





Amended SPA Agreement: Impact on 2013 Preliminary Economic Assessment Plan (PEA)

(All \$Cdn)

<i>At US\$19/oz silver price</i>	<u>PEA - Original SLW Agreement</u>	<u>PEA - Amended SLW Agreement</u>
PEA Pre-tax NPV	(\$14 million)	\$13 million (net of \$22M SLW buy-down)
Silver stream expressed as NSR	20%	2%
PEA cumulative net cash	(\$11.5 million)	\$26 million (net of SLW buy-down)
Alexco share of project cumulative net margin	Under Water	90%

2013 PEA and Alexco Metrics* (\$Cdn)

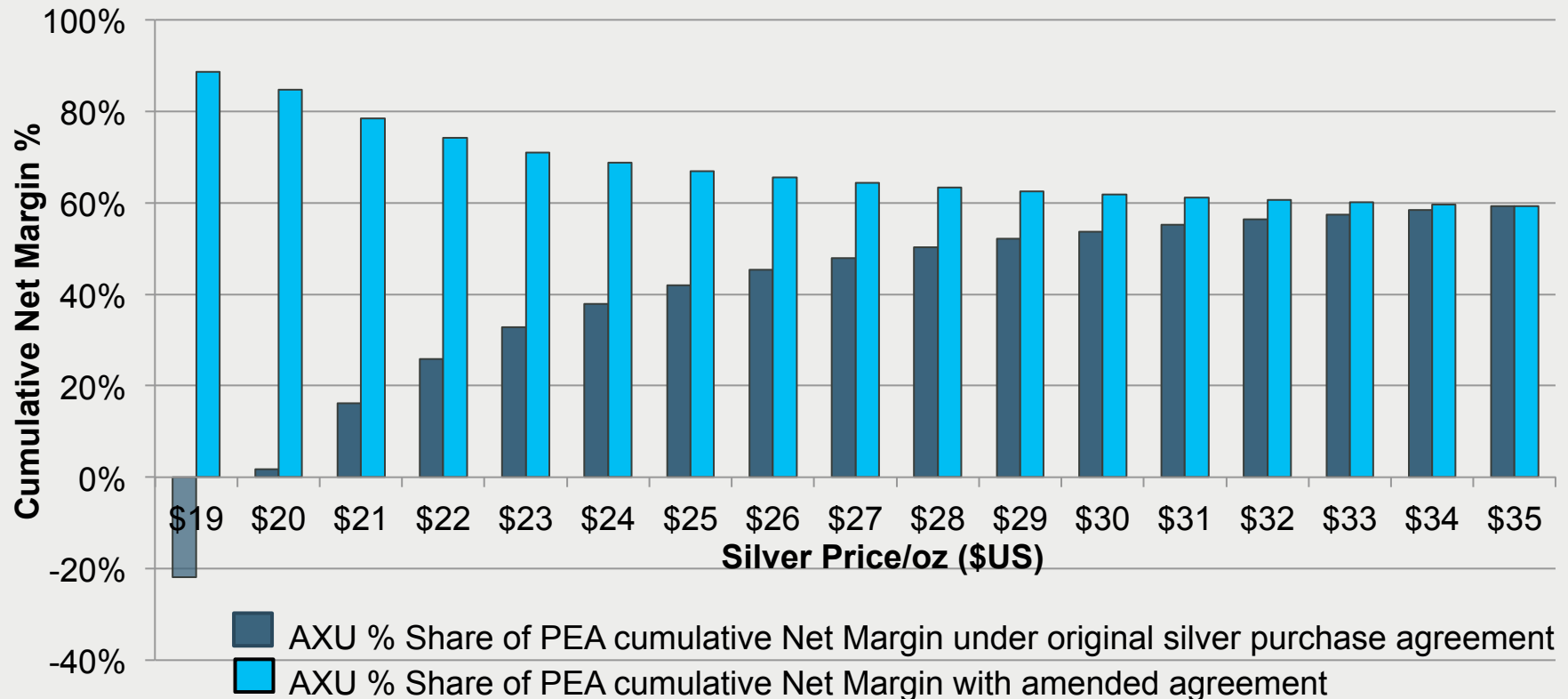
- ◆ 9 month construction period; 5.5 years of production
- ◆ Annual production: average 3.1 million ounces of payable silver, 6.8 million pounds of lead, 6.6 million pounds of zinc and 1,050 ounces of gold
- ◆ Underground development capital - \$12.2 million (Alexco internal estimate)
- ◆ Working capital, sustaining development, scale up – additional \$12 million (Alexco internal estimate)

(*See PEA Cautionary Statement on slide 3. The PEA (2013) is based on metal prices of US\$24 per ounce for silver, US \$0.95 per pound for lead, US\$0.85 per pound for zinc and US\$1,300 per ounce for gold.)



PEA Impact: Cumulative Net Margin % Increase

- At \$20/oz silver, Alexco's share of cumulative net margin under the amended agreement is 85%, compared to just 2% under the original agreement
- Between \$20-\$30/oz silver, under the original agreement SLW's share of cumulative net margin averaged ~69%, reduced to ~37% under the amended agreement

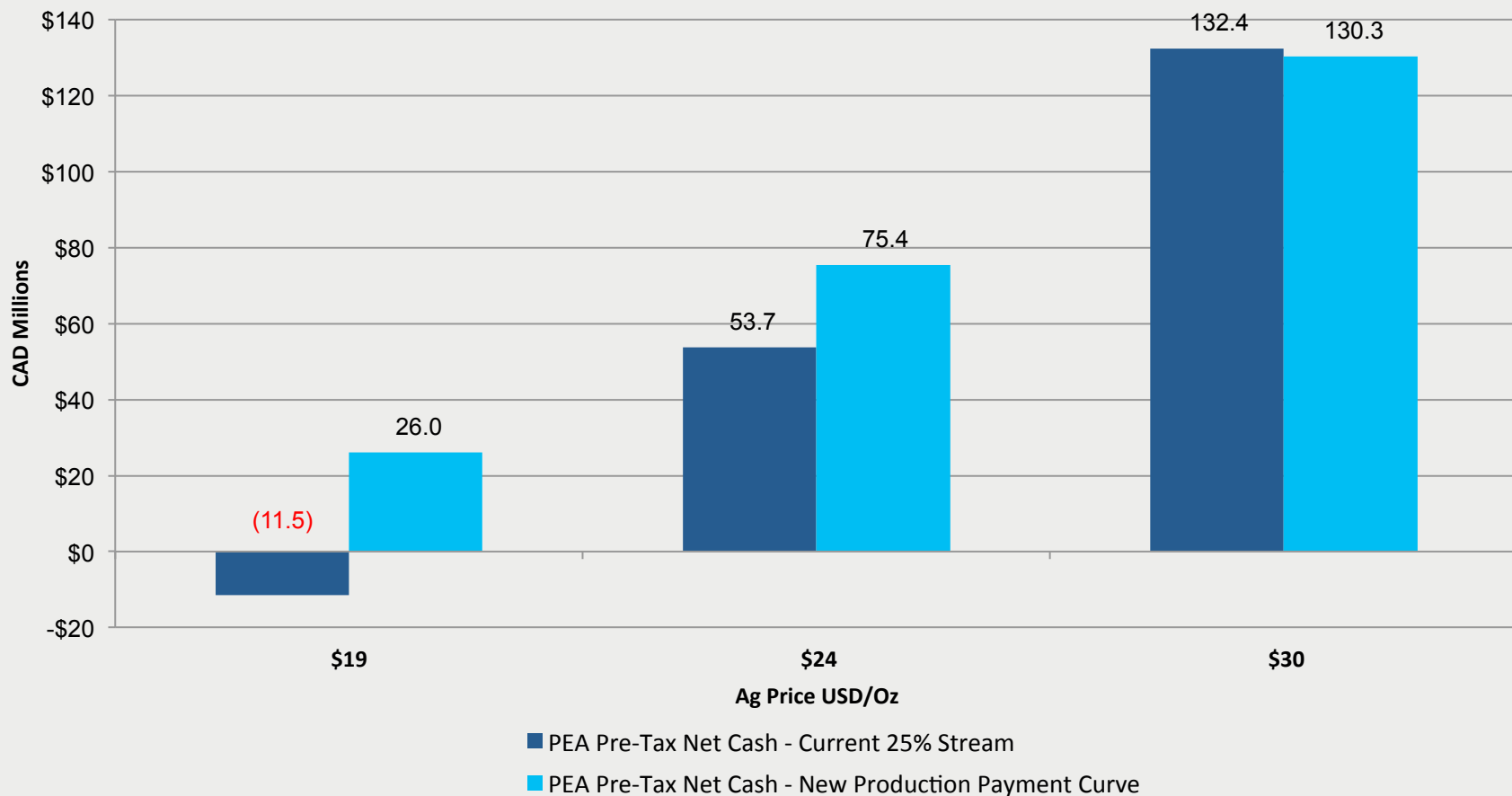


(See PEA Cautionary Statement on slide 3. The PEA (2013) is based on metal prices of US\$24 per ounce for silver, US \$0.95 per pound for lead, US\$0.85 per pound for zinc and US\$1,300 per ounce for gold.)



Net Cumulative Pre-Tax Cash: 25% Silver Stream versus Variable Production Payment

**Variable Production Payment Curve –
Impact on PEA Cumulative Pre-Tax Net Cash Net of USD\$20M Buy-down**

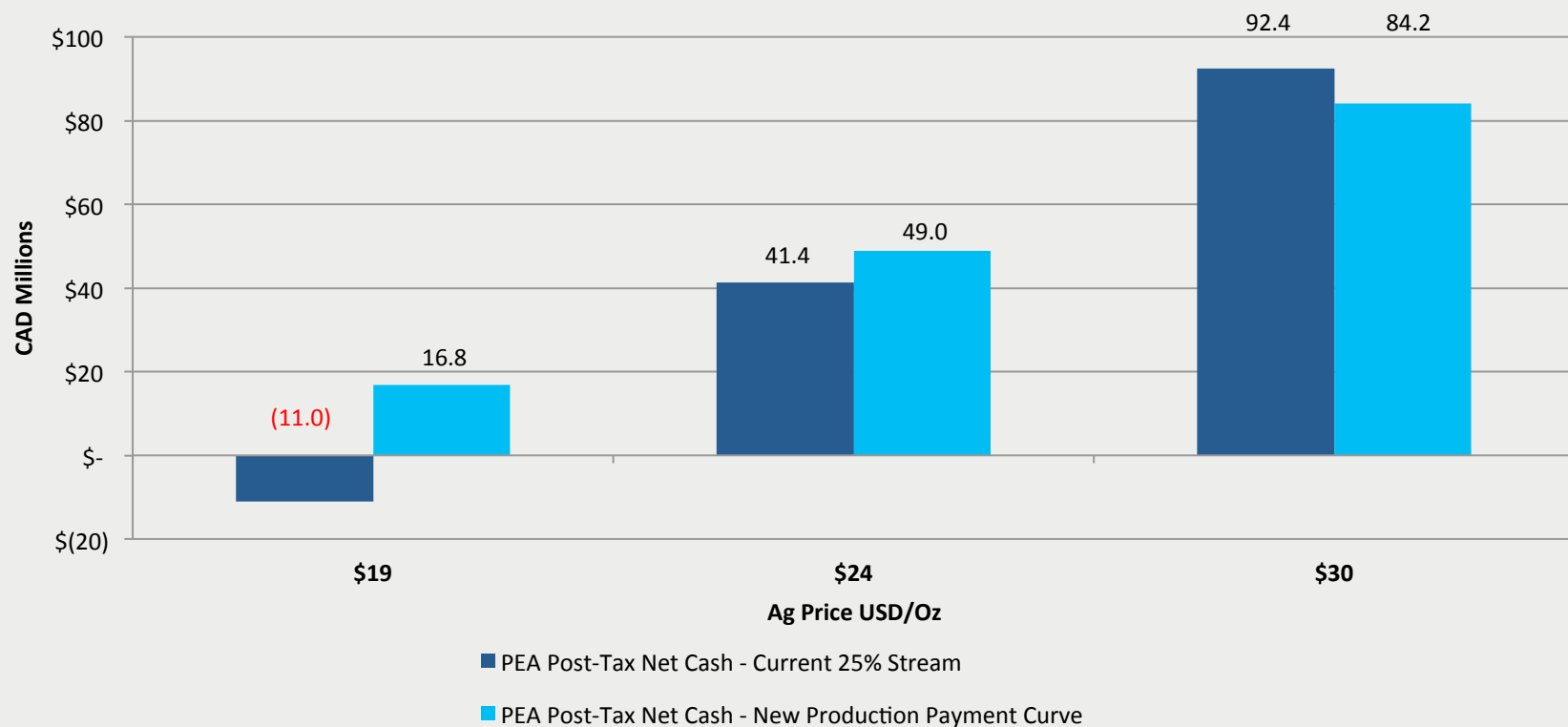


(See PEA Cautionary Statement on slide 3. The PEA (2013) is based on metal prices of US\$24 per ounce for silver, US\$0.95 per pound for lead, US\$0.85 per pound for zinc and US\$1,300 per ounce for gold.)



Net Cumulative Post-Tax Cash: 25% Silver Stream versus Variable Production Payment

**Variable Production Payment Curve –
Impact on PEA Cumulative Post-Tax Net Cash, Net of USD\$20M Buy-down**



(See PEA Cautionary Statement on slide 3. The PEA (2013) is based on metal prices of US\$24 per ounce for silver, US\$0.95 per pound for lead, US\$0.85 per pound for zinc and US\$1,300 per ounce for gold.)



Silver Wheaton's Expanded 'Area of Interest'

Keno Hill Silver District

Current 233 square km property position



PEA – Key Metrics

Consolidated production	806,900 tonnes (t)
Consolidated production grade	745 grams per tonne (gpt) silver (Ag), 0.4 gpt gold (Au), 2.7% lead (Pb), 4.7% zinc (Zn)
Commercial production period	Q2 2015 – Q2 2020
Development, construction period	Q2 2014 – Q1 2015
Mill throughput	Average 406 tonnes per day (tpd)
Mill recoveries	Ag 93.6%, Au 71.3%, Pb 83.9%, Zn 60.4%
Concentrate produced (6% moisture)	30,685 tonnes Pb con, 51,026 tonnes Zn con
Total payable metal production	Ag 16.8Moz, Au 5,800oz, Pb 37.7Mlb, Zn 36.4Mlb
Production cost (mining, milling and G&A)	\$253 per tonne of ore
Net Smelter Return (NSR) per tonne of ore (after incorporation of original Silver Purchase Agreement)	\$419 per tonne of ore
Total capital (life of mine)	\$76 million, including \$37 million underground development
Initial capital to achieve positive cash flow	\$25 million
Net Cash Contribution Pre-Tax	\$53.7 million
IRR Pre-tax	45%
NPV Pre-tax (5%)	\$39.9 million
Net Cash Contribution After Tax	\$41.4 million
IRR After Tax	38%
NPV After Tax (5%)	\$29.6 million
Prices Used in PEA	Ag US\$24.00/oz, Pb US\$0.95/lb, Zn US\$0.85/lb, Au US\$1,300/oz

(See PEA Cautionary Statement on slide 3.)



A Win-Win Partnership

A unique business model combining mine operations and environmental remediation expertise

- ◆ A “Win-Win” partnership between Alexco/Canada/Yukon/First Nations through a cooperative District Closure Plan
- ◆ Contributions of \$22M to date to remediate historical environmental liabilities
- ◆ Reduction of zinc release to the environment from the historical Galkeno 300 mine by 99.5%, reduced the concentration of zinc in Christal Creek by 75%
- ◆ Taxpayer liability reduced



Alexco History

- ◆ **2005** Company Founded
- ◆ **2006** Listed with TSX; symbol AXR
- ◆ **2006** Acquired Keno Hill Silver District, initiated exploration
- ◆ **2007** Listed with NYSE-MKT; symbol AXU
“Discovery” of Bellekeno deposit
- ◆ **2008** Silver Wheaton Agreement - \$50 million and \$3.90/oz for 25% of future silver mined
- ◆ **2009** Bellekeno Construction Begins
- ◆ **2010** Comprehensive Cooperation Agreement with First Nation
- ◆ **2011** Bellekeno Mine Production – Three years discovery to production
- ◆ **2012** 52% Increase in Indicated Silver Resources
- ◆ **2013** Grew Flame & Moth to approx. 23 million oz Indicated resource
- ◆ **2013** Announced interim winter shutdown of operations to optimize costs, Published new PEA for Eastern Keno Hill Silver District
- ◆ **2014** Announced amended silver streaming agreement



Share Structure

- ◆ Trading Symbol: NYSE-MKT:AXU TSX:AXR

- ◆ Issued & Outstanding: 69.6 million shares
- ◆ Fully diluted: 77.4 million shares

- ◆ Major Shareholders:
 - Alexco Directors & Officers
 - Sprott Inc.
 - Columbia Wanger Asset Mgt.
 - Global X Management Co. LLC
 - Pathstone Family Office LLC
 - Canada Pension Plan Investment

Senior Management & Board of Directors



ALEXCO

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SENIOR MANAGEMENT

- | | |
|--|---|
| Clynton R. Nauman, B.Sc.
(Hons.) | - President & CEO |
| Brad A. Thrall, B.Sc., MBA | - Executive Vice President, COO &
President, Alexco Environmental Group |
| David E. Whittle, C.A. | - Senior Vice President & CFO |
| Al McOnie, M.Sc.
(Geology), FAusIMM | - Vice President, Exploration |
| Jim Harrington, M.Sc. | - Senior Vice President & Chief Technology Officer,
Alexco Environmental Group |
| Vicki Veltkamp | - Vice President, Investor Relations |

BOARD OF DIRECTORS

George Brack, Chairman
Michael Winn
David H. Searle, C.M., Q.C.
Terry Krepiakevich, C.A., ICD.D.
Rick Van Nieuwenhuyse, M.Sc.
Rick Zimmer, P.Eng., MBA
Clynton R. Nauman, B.Sc. (Hons.)





Qualified Persons & Cautionary Note Concerning Reserve & Resources Estimate

Except where specifically indicated otherwise, 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, while that regarding mine development and operations has been approved by Scott Smith, P.Eng., former Bellekeno Mine Manager, both of whom are Qualified Persons as defined by National Investment 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101"). All material technical information included herein has previously been disclosed by Alexco, and the viewer is particularly directed to the company's most recently filed AIF and U.S. Form 40-F and its most recently filed interim and annual financial reports; as well as the remaining filings completing Alexco's continuous disclosure records.

This presentation has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of U.S. securities laws. Unless otherwise indicated, all resource and reserve estimates included in this presentation have been prepared in accordance with NI 43-101 and the Canadian Institute of Mining and Metallurgy Classification System. NI 43-101 is a rule developed by the Canadian Securities Administrators which establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. NI 43-101 permits the disclosure of an historical estimate made prior to the adoption of NI 43-101 that does not otherwise comply with NI 43-101, using the historical terminology, if the disclosure: (a) identifies the source and date of the historical estimate; (b) comments on the relevance and reliability of the historical estimate; (c) to the extent known, provides the key assumptions, parameters and methods used to prepare the historical estimate; (d) states whether the historical estimate uses categories other than those prescribed by NI 43-101 and if so includes an explanation of the differences; (e) includes any more recent estimates or data available to the issuer; (f) comments on what work needs to be done to upgrade or verify the historical estimate as current mineral resources or mineral reserves; and (g) states with equal prominence that a qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves and that the issuer is not treating the historical estimate as current mineral resources or mineral reserves.

Canadian standards, including NI 43-101, differ significantly from the requirements of Industry Guide 7 promulgated by the United States Securities and Exchange Commission ("SEC") under the United States Securities Act of 1933, as amended, and resource and reserve information contained herein may not be comparable to similar information disclosed by U.S. companies. In particular, and without limiting the generality of the foregoing, the term "resource" does not equate to the term "reserves". Under U.S. standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. The SEC's disclosure standards under Industry Guide 7 do not define the terms and normally do not permit the inclusion of information concerning "measured mineral resources", "indicated mineral resources" or "inferred mineral resources" or other descriptions of the amount of mineralization in mineral deposits that do not constitute "reserves" by U.S. standards in documents filed with the SEC. U.S. Investors should also understand that "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, estimated "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.

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 standards as in place tonnage and grade without reference to unit measures. The requirements of NI 43-101 for identification of "reserves" are also not the same as those of the SEC's Industry Guide 7, and reserves reported by the Corporation in compliance with NI 43-101 may not qualify as "reserves" under Industry Guide 7 standards. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.

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Vicki Veltkamp, Vice President, Investor Relations

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