



CENTRAL  
ASIA  
METALS  
PLC

# BUILDING **A BIGGER** BUSINESS

H1 2018 RESULTS  
PRESENTATION

SEPTEMBER 2018

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## H1 2018 PERFORMANCE

- H1 2018 dividend 6.5p (H1 2017: 6.5p)
- Kounrad copper production 6,747t (H1 2017: 7,027t)
- Sasa production
  - Zinc 11,020t
  - Lead 14,386t
- Group gross revenue \$102.4m (H1 2017: \$38.6m)
  - Kounrad \$40.5m
  - Sasa \$61.9m
- EBITDA \$64.6m (H1 2017: \$24.3m), margin 63% (H1 2017: 63%)
  - Kounrad \$29.2m
  - Sasa \$41.7m
- Net debt 30 June 2018 \$125.2m (31 December 2017: \$136.1m)
- Shuak 2018 exploration programme underway, CHT programme complete August 2018
- 2018 production guidance
  - Copper 13,000-14,000t
  - Zinc 21,000-23,000t
  - Lead 28,000-30,000t





# OPERATIONAL REVIEW



## CAML CSR APPROACH

### Health and safety

- LTI Kounrad, 2 - LTI free hours to end H1 2018, 77,626
- LTI Sasa, 2 (sub-contractors) - LTI free hours to end H1 2018, 122,921
- Group Health and Safety Manager appointed
- Sasa Safety Engineer appointed

### Environmental

- Sasa
  - Q1 2018 ISO 14001 external inspection demonstrated Sasa full compliance
  - Q2 2018 Macedonian State Environmental Inspectorate visit, no non-compliances identified
- Kounrad
  - Government environmental checks successfully undertaken in H1 2018
  - Continued routine inspections of perimeter boreholes

### Community

- Kounrad Charitable Foundation approached with 29 requests during H1 2018
  - Currently actioning five, including construction of new playgrounds in Kounrad, repairs to roof of local school
- Sasa H1 sponsorship and support for various clubs, sporting facilities, community events
- Q1 2018, opening of Community Relations Office in Makedonska Kamenica
- H1 2018, Group social spending of \$0.3m





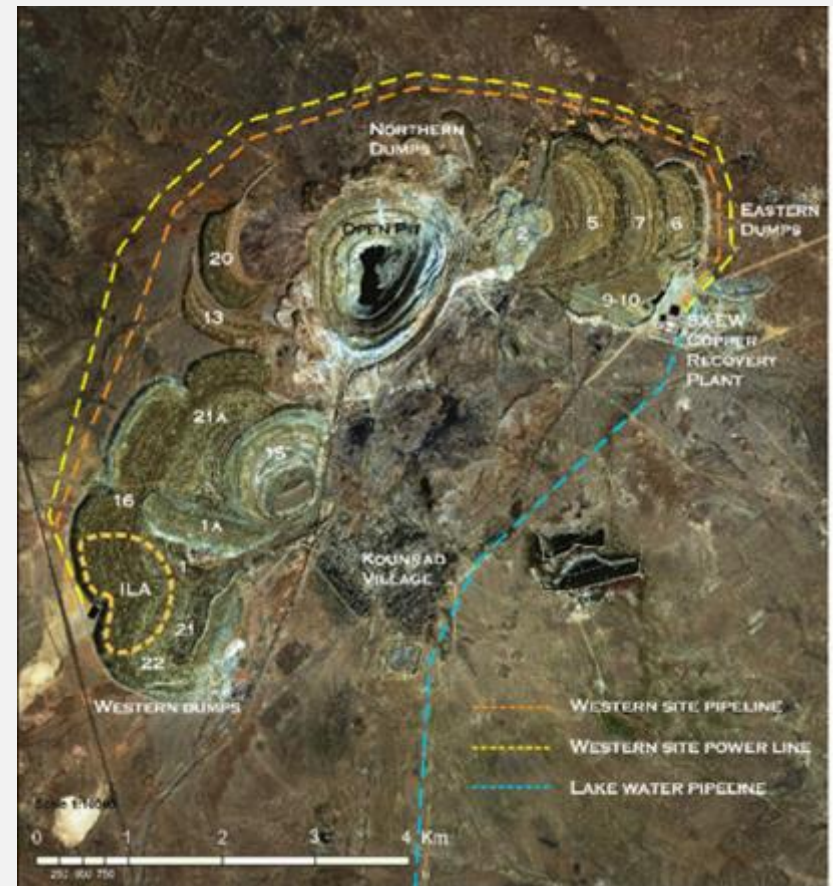
## KOUNRAD, OVERVIEW

### Eastern Dumps

- Commenced leaching Q2 2012
- Average dump height 20m, average leach time 8 months
- Average copper recovery 45-50%
- Leached 65,295t from Eastern Dumps
  - c.14,000t recoverable remaining

### Western Dumps

- Commenced leaching of ILA (part of dumps 16 and 22), Q2 2017
- Average dump height 40m, average leach time 20 months
- Average copper recovery 35-42%
- Leaching in line with expectations
- Leached 9,878t from Western Dumps
  - c.27,000t recoverable remaining in ILA,
  - c.164,000t recoverable remaining in total Western Dumps

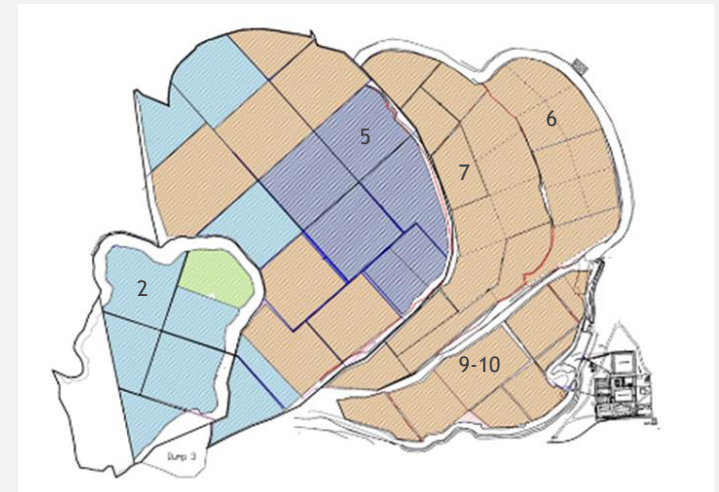
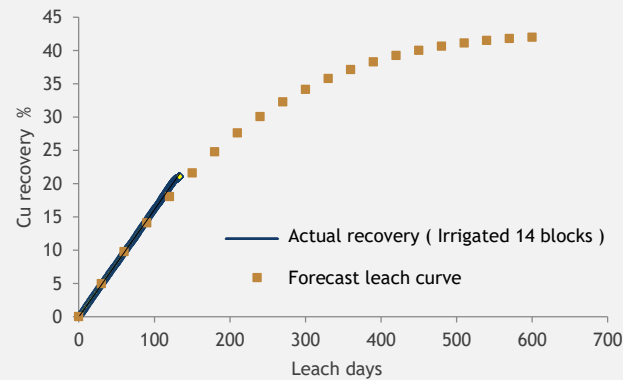
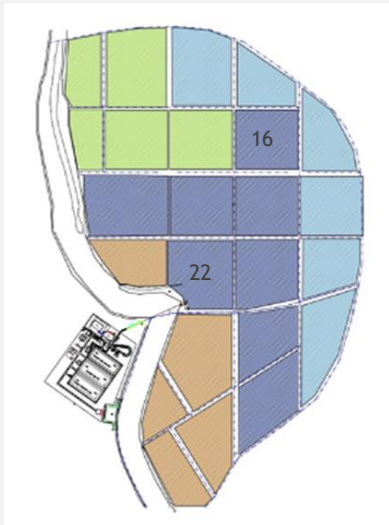


# WESTERN (ILA) AND EASTERN DUMP RESOURCES

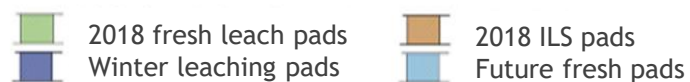
## Western Dumps

## ILA copper recovery

## Eastern Dumps



Dump	In-situ Cu, tonnes	Leached Cu, tonnes	Recoverable Cu, tonnes
16	54,418	6,186	16,670
22	33,372	3,692	10,325
Total	87,790	9,878	26,994



Dump	In-situ Cu, tonnes	Leached Cu, tonnes	Recoverable Cu, tonnes
9-10	23,450	11,882	77
6	14,610	7,372	105
7	43,060	21,275	688
5	60,774	24,766	3,188
2	25,210	0	10,490
Total	167,104	65,295	14,548

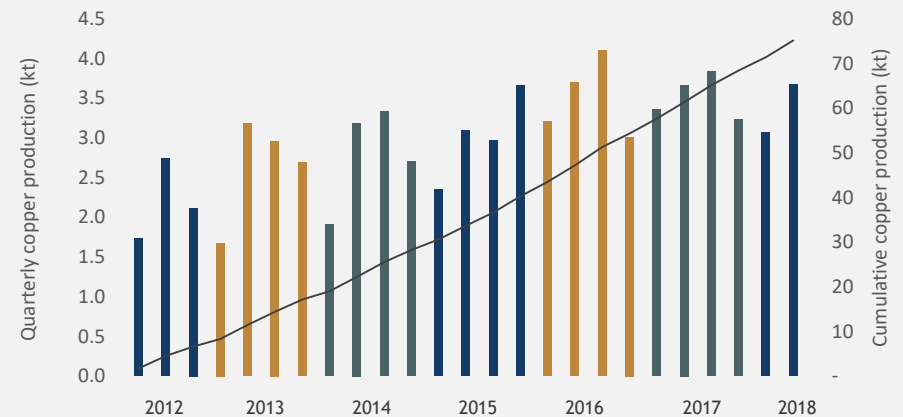
# KOUNRAD, PRODUCTION UPDATE AND OUTLOOK

## Copper production

- 2017 copper production 14,103t
- H1 2018 copper production 6,747t
- Total copper production to end H1 2018, 75,173t
- Western Dumps leaching commenced Q2 2017, 9,878t copper recovered to end H1 2018

## Outlook

- FY 2018 production guidance 13,000t to 14,000t
- 2018, 65% copper production to come from Western Dumps (2017, 40%)
  - H1 2018, 64%
- Increasing percentage of Western Dumps copper production from 2019 onwards





# KOUNRAD, H1 2018 OPERATIONAL OVERVIEW

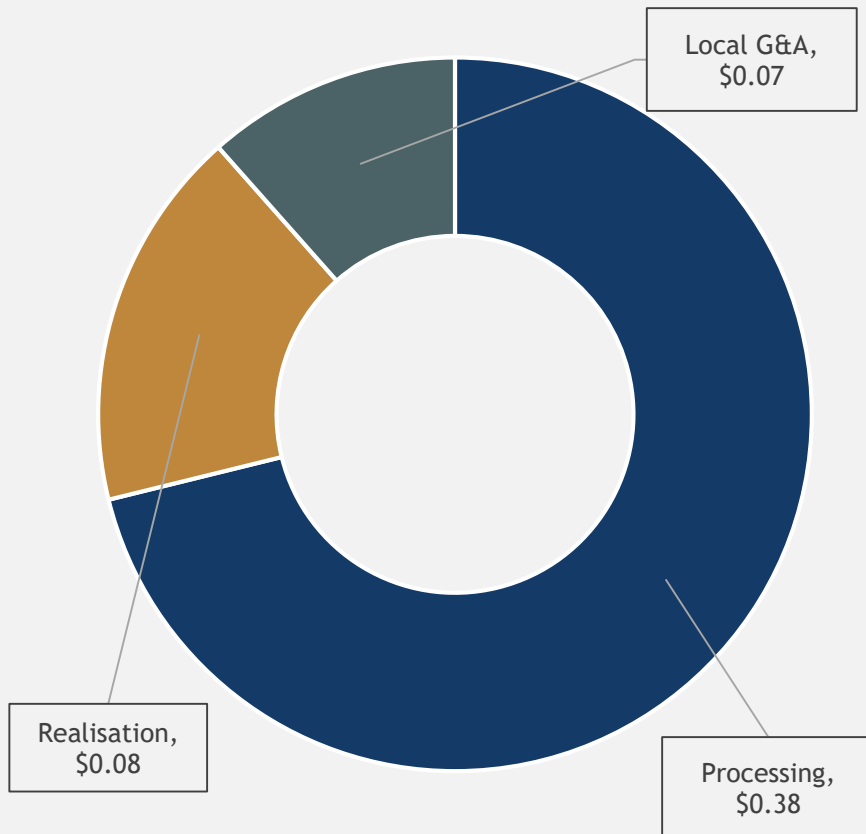
## H1 2018, stable operations

- H1 2018, 2 LTIs
  - LTI free hours reset, now 77,626
- Production in line with guidance
- \$1m capex invested at Kounrad
- Western Dumps contributed c.64% of H1 2018 production
- Production continues to be in line with leach curves
- 99.4% record plant availability, reflects positively on site management

	2012	2013	2014	2015	2016	2017	H1 2018
LTI	0	0	1	2	0	0	2
Cu production, t	6,586	10,509	11,136	12,071	14,020	14,103	6,747
Ave. PLS, m <sup>3</sup> /hr	383	532	771	784	888	921	942
PLS grade, gpl	3.9	3.0	2.2	2.3	2.4	2.5	2.2
Plant availability, %	96.9	99.3	98.7	99.1	98.6	99.5	99.4
Irrigation area, ha	15.29	17.19	28.06	33.05	35.9	39.2	42.7
Employees	211	224	254	276	300	343	350
Cathode purity, %	99.997	99.998	99.998	99.998	99.998	99.998	99.998

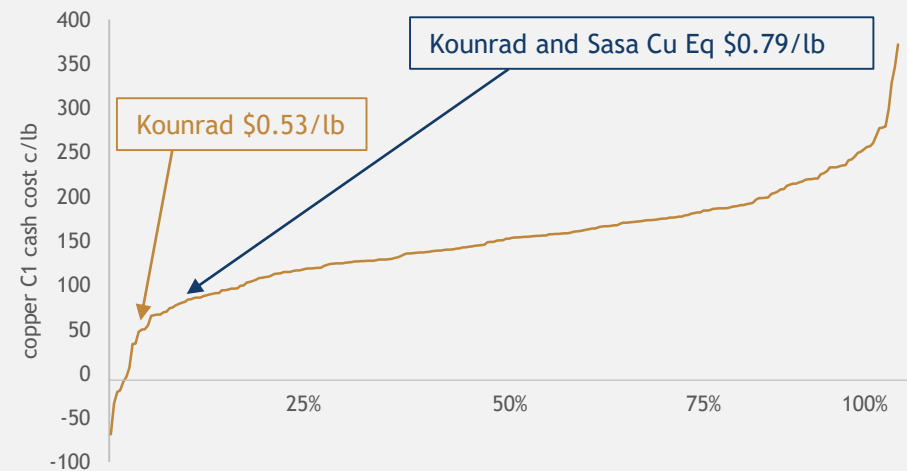
# H1 2018 KOUNRAD COPPER C1 CASH COST

H1 2018 C1 cash cost \$0.53/lb



Processing	H1 2018 \$/lb	H1 2017 \$/lb
Reagents	0.08	0.06
Power	0.07	0.06
Payroll	0.12	0.10
Materials	0.04	0.04
Consulting & other	0.07	0.05
Processing total	0.38	0.31

## Wood Mackenzie copper cost curve



Source: Wood Mackenzie

# SASA, PRODUCTION UPDATE AND OUTLOOK

## H1 2018 production and sales

- Underground ore production 390,932t
- Zinc in concentrate production 11,020t, payable sales 9,256t
- Lead in concentrate production 14,386t, payable sales 13,701t

## 2018 outlook

- Zinc production guidance 21,000 - 23,000t
- Lead production guidance 28,000 - 30,000t

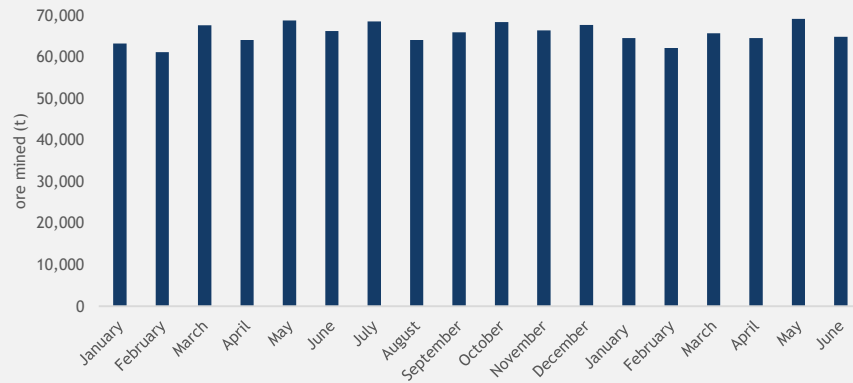


	Units	Q1 2018	Q2 2018	H1 2018	2017
Ore mined	t	192,372	198,560	390,932	792,068
Plant feed	t	196,364	197,241	393,605	793,332
Zinc grade	%	3.32	3.36	3.34	3.18
Zinc recovery	%	84.6	83.1	83.8	85.5
Lead grade	%	3.83	3.98	3.91	3.98
Lead recovery	%	93.3	93.8	93.5	94.6
Zinc concentrate	t (dry)	11,385	11,239	22,624	43,676
- Grade	%	48.5	49.0	48.7	49.4
- Contained zinc	t	5,518	5,502	11,020	21,585
Lead concentrate	t (dry)	9,587	10,125	19,712	40,757
- Grade	%	73.2	72.7	73.0	73.3
- Contained lead	t	7,020	7,366	14,386	29,881

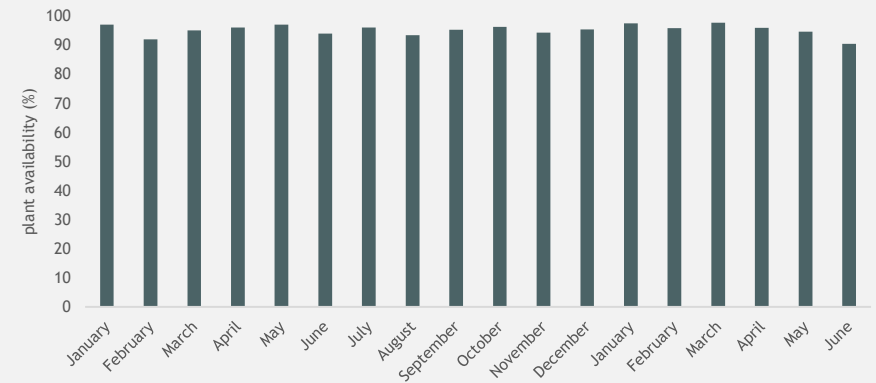


# SASA PRODUCTION STATISTICS

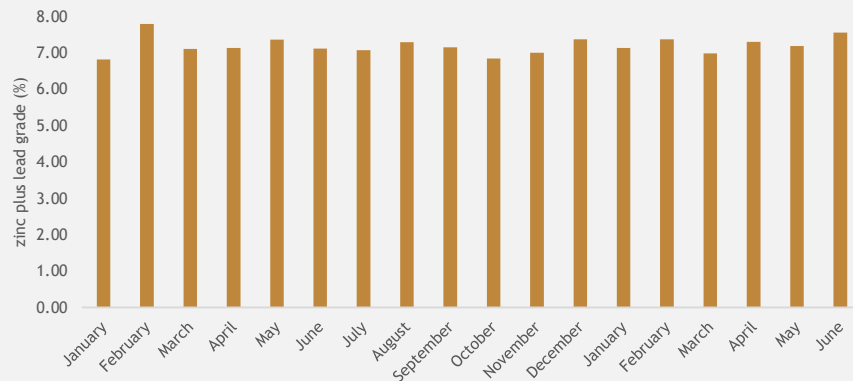
## 2017 - H1 2018 ore mined



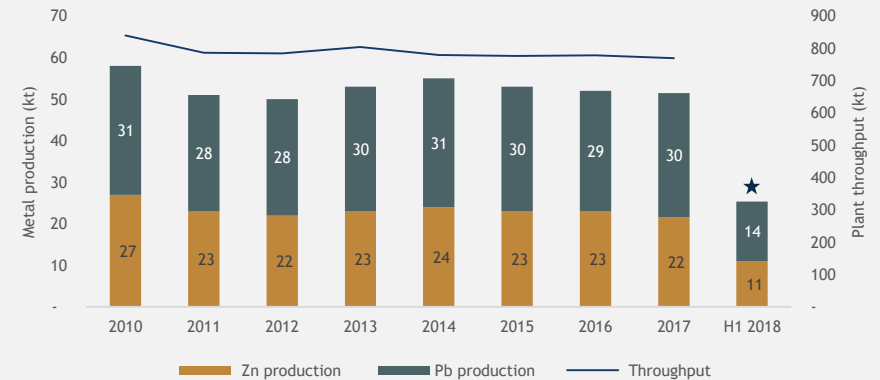
## 2017 - H1 2018 plant availability



## 2017 - H1 2018 combined grade

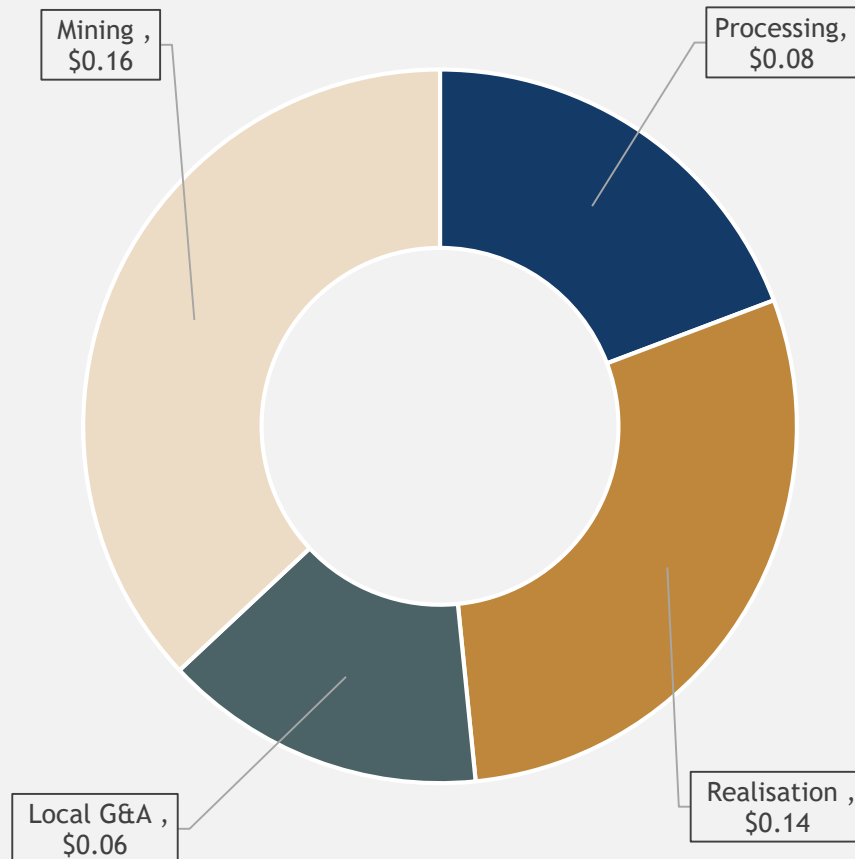


## Production, 2010 - H1 2018



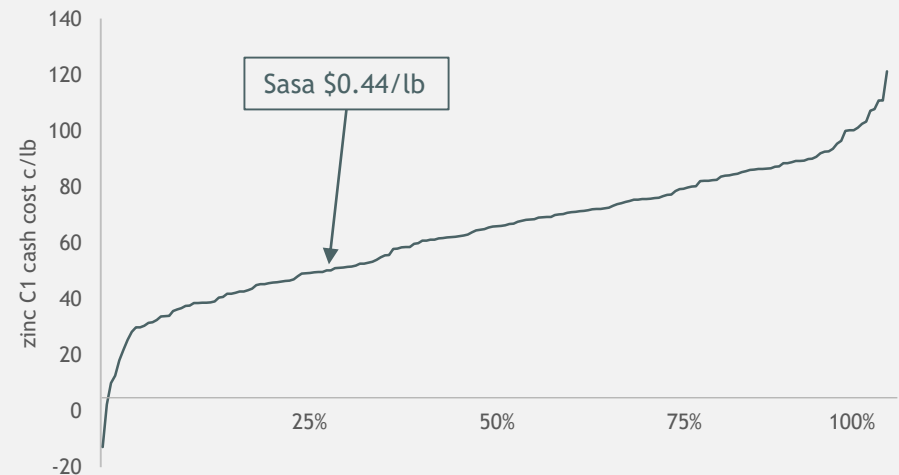
# H1 2018 SASA ZINC EQ. C1 CASH COST

H1 2018 C1 cash cost \$0.44/lb



Unit costs, Run of Mine (RoM)	H1 2018	2017
Mining, \$000	7,449	14,413
Processing, \$000	3,816	7,499
Local G&A, \$000	2,497	5,019
<b>Total operating costs, \$000</b>	<b>13,762</b>	<b>26,931</b>
RoM, t	390,931	792,068
<b>Unit cost, \$/t</b>	<b>35.2</b>	<b>34.0</b>

## Wood Mackenzie zinc cost curve



Source: Wood Mackenzie

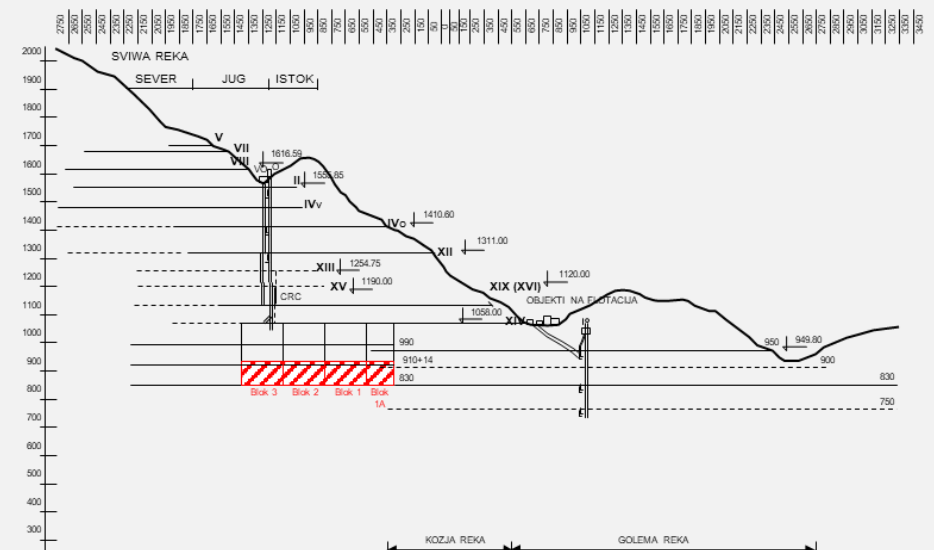
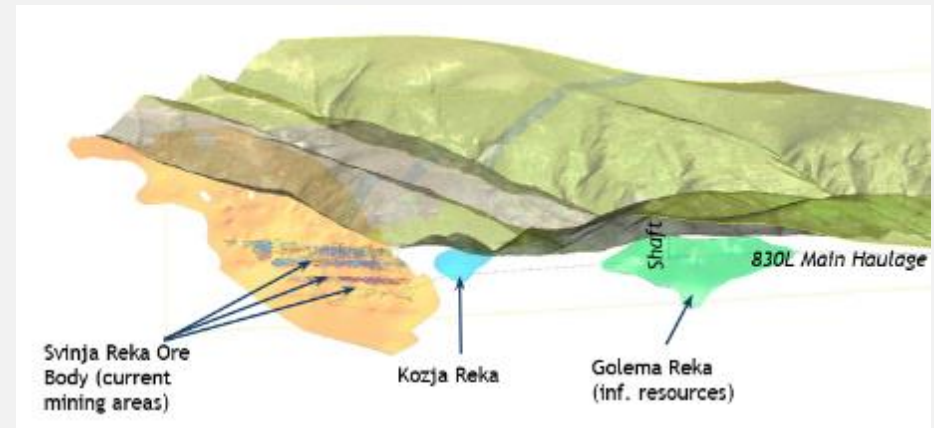
# SASA FOR THE FUTURE

## Mine and processing plant activities

- A well capitalised mine
- Infrastructure to access stoping block between 830 and 750 levels continued in 2018
- Installation of new SMD mill
- Current exploration objective is to replace resources and maintain approximately 20 year life of mine

## CAML Life of Mine review

- Sasa commenced life of mine project to review:
  - Mining method into the future
  - Processing plant capacity
  - Tailings storage requirements
  - Geology / reserves / resources (encouraging down dip drilling intersections to date from Golema Reka)
- To ensure optimal operation for the long term





## TAILINGS STORAGE FACILITY 4 (TSF4)

### TSF4 under construction

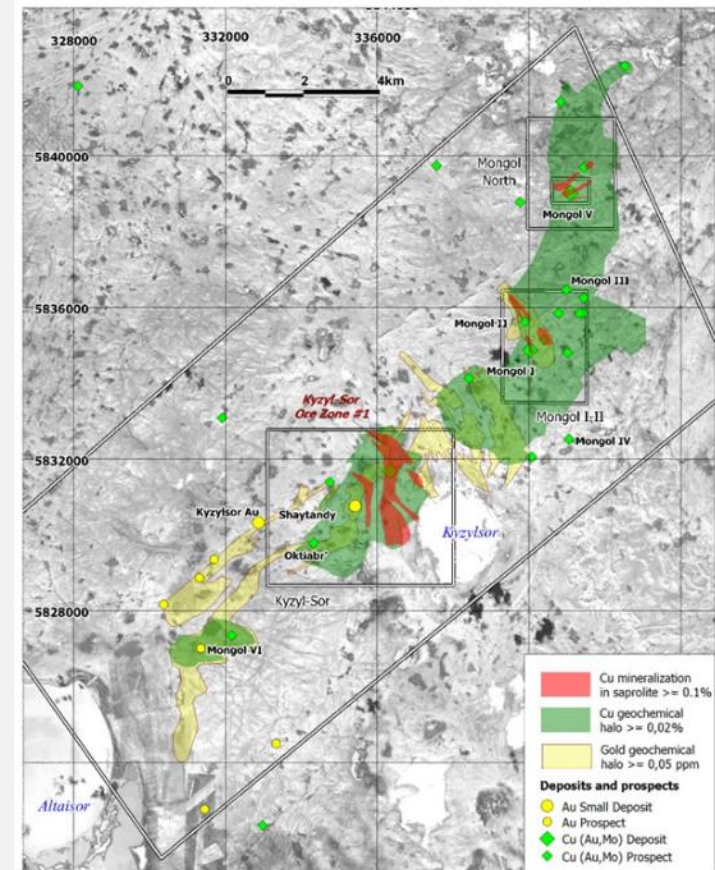
- Currently using TSF3.2
- Construction of TSF4 commenced in Q2 2017
  - Completion expected H2 2018
  - Designed to contain 6.5+Mt tailings
  - Sufficient for operations 2019-2026+
  - 2018 cost estimate \$7.6m
  - Total cost estimate \$11.5m
- H1 2018, completion of
  - River diversion tunnel
  - Water channel
  - Starter dam



# SHUAK UPDATE

## 2018 exploration underway

- Exploration commenced May 2018
- 19,461m of core hydrotransport (CHT) undertaken, programme now complete
- Diamond drilling commenced August 2018, focusing on Kyzyl-Sor oxide potential
  - 1,050m diamond drilling completed to date
- An induced polarisation ('IP') survey is being undertaken to identify sulphide mineralisation
  - 77km completed
  - 7-10km to be surveyed in H2 2018





# FINANCIAL REVIEW





# H1 2018 MARKET CONDITIONS

## Copper

- Price decreased by 7% to \$6,646/t
- 2018 broker consensus price \$6,878/t (September)
- H1 2018 realised price \$6,672/t

## Zinc

- Price decreased by 11% to \$2,948/t
- 2018 broker consensus price \$3,145/t (September)
- H1 2018 realised price \$3,256/t

## Lead

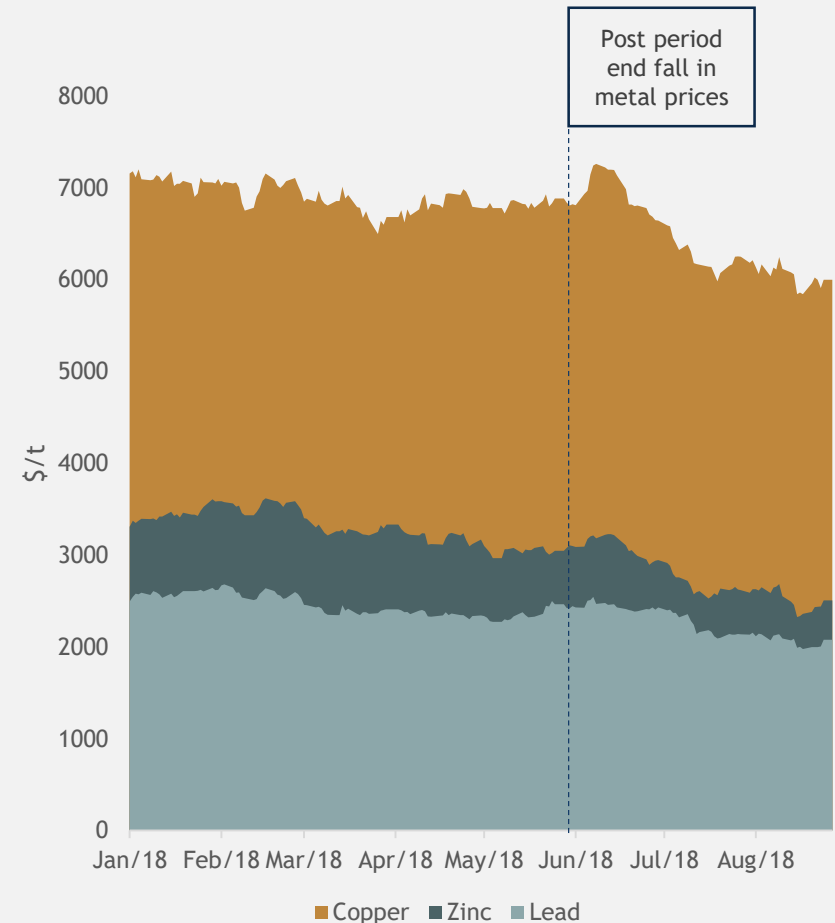
- Price decreased by 3% to \$2,431/t
- 2018 broker consensus price \$2,403/t (September)
- H1 2018 realised price \$2,478/t

## Currencies

- Kazakh Tenge (KZT) to USD average 326, since weakened to 380
- Macedonian Denar (MKD) pegged to Euro
- US economy strong, US Dollar strong against all major currencies

## Post period end metal price movements

- Copper down 12%, zinc down 18%, lead down 15%
- Strong long term fundamentals for base metals, but fears for global growth due to trade wars adversely affecting near term prices



# H1 2018 INCOME STATEMENT

## Increased Group EBITDA reflects Sasa acquisition

- H1 2018 results reflect full period for both Kounrad and Sasa
- Kounrad
  - Gross revenue \$40.5m (H1 2017: \$38.6m)
  - EBITDA \$29.2m
  - Revenue increase HoH of 5% reflects:
    - higher copper price
    - 13.6% decrease in sales volumes
- Sasa
  - Gross revenue \$61.9m
  - EBITDA \$41.7m
- Finance costs of \$6.3m relate to interest on debt

	H1 2018 \$m	H1 2017 \$m	% change
Gross revenue	102.4	38.6	+165%
Profit before tax	38.4	20.7	+86%
Group EBITDA*	64.6	24.3	+166%
EBITDA, % margin*	63.1%	63.0%	+0%
EPS, cents *	16.37	13.77	+19%

\* EPS and EBITDA from continued operations

Earnings accretion	H1 2017 - H1 2018
EBITDA per share	70%
EPS	19%

## H1 2018 CASH COSTS

### Kounrad copper C1 cash cost \$0.53/lb

- Remains firmly in lowest quartile of industry cash cost curve
- Increase due to production from Western Dumps & payrise at Kounrad
- Average C1 cash cost over life of project \$0.57/lb

### Sasa zinc equivalent C1 cash cost \$0.44/lb

- Lower end of the second quartile of zinc industry cost curve

### CAML Cu eq. C1 cash cost \$0.79/lb

- Following acquisition of Sasa mine, CAML reports Group C1 cash cost on a copper equivalent basis

	H1 2018 \$/lb	H1 2017 \$/lb	2017 \$/lb
Kounrad copper C1 cash cost	0.53	0.45	0.52
Sasa zinc eq. C1 cash cost	0.44	-	0.44*
Cu eq. production, t	16,041	7,027	35,264*
CAML copper eq. C1 cash cost	0.79	-	0.76*

\*calculation based on 12 month Sasa production





# H1 2018 FULLY INCLUSIVE CU EQ. UNIT COST

## H1 2018, \$1.51/lb

- Sasa and Kounrad fully inclusive copper eq. unit cost \$1.51/lb
  - Increase as a result of interest charges associated with debt
- Change in calculation methodology
  - Depreciation and amortisation distorts the fully inclusive cost due to fair value uplift amortisation following Sasa acquisition
  - New methodology includes capex and excludes depreciation as this better reflects the Group's cash cost to produce copper equivalent tonnes

	H1 2018		2017*	
	New method \$/lb	Historic reported \$/lb	New method \$/lb	Historic reported \$/lb
C1 Cash cost	0.79	0.79	0.76	0.76
Depreciation		0.49		0.27
Capital expenditure	0.24		0.21	
Concession tax	0.04	0.04	0.04	0.04
Mineral extraction tax	0.07	0.07	0.13	0.13
Loan interest	0.18	0.18	0.09	0.09
Corporate overheads	0.19	0.19	0.14	0.14
<b>Fully inclusive cost</b>	<b>1.51</b>	<b>1.76</b>	<b>1.37</b>	<b>1.43</b>

\*calculation based on 12 month Sasa production

# H1 2018 CAPEX

## Sasa

- Major capex items include
  - Underground mine development \$1.3m
  - SMD mill, \$0.7m
  - Granby wagons, \$0.2m
- Construction of new tailings storage facility expected to be incurred every 5-7 years

## Kounrad

- Includes replacement cathodes and strengthening of trenches

## Shuak

- Geophysics and CHT drilling costs
- Classified as ‘purchase of intangible assets’

## Group

- FY2018E capex, \$16-17m

	H1 2018 \$m
Total Sasa capex	7.2
- Sasa sustaining capex	3.3
- Sasa tailings dam construction	3.9
Kounrad capex	1.0
<b>Total CAML capex</b>	<b>8.2</b>
Shuak exploration costs	0.2
<b>Total</b>	<b>8.4</b>

## H1 2018 BALANCE SHEET

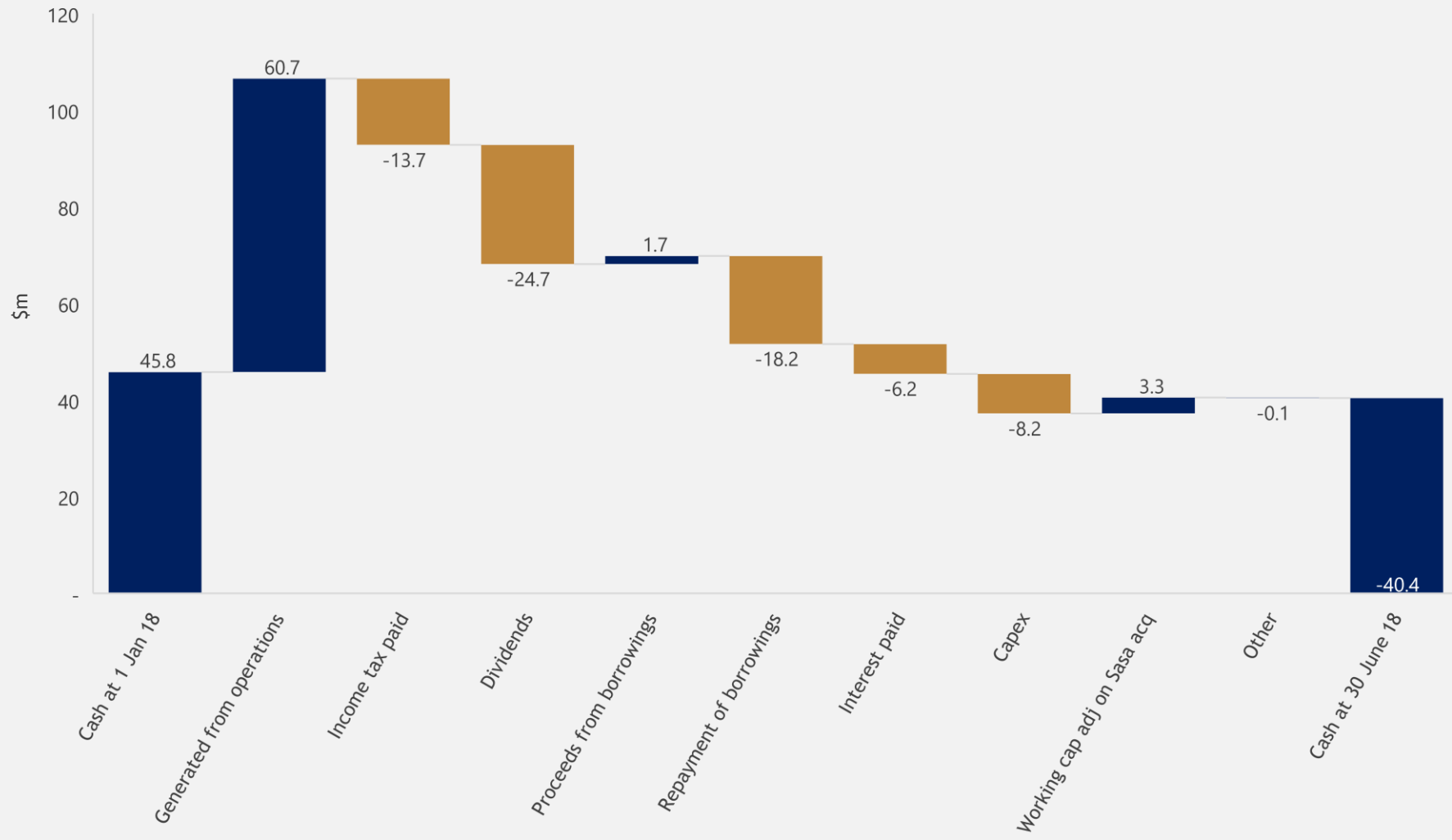
### Net debt \$125.2m

- Group continues to report a strong net asset position at 30 June 2018
- Manageable debt levels
- Other liabilities includes
  - \$12.0m Lynx acquisition deferred cash consideration payable in next 12 months
  - \$1.4m of Kazakhstan tax relating mainly to MET
  - \$1.9m of Lynx tax payable
- Group gross debt as at 30 June 2018 \$165.7m
- Group cash balance as at 30 June 2018 \$40.4m

	H1 2018 \$m	2017 \$m
PPE	440.6	461.0
Intangible assets	67.2	70.3
Cash	37.6	43.0
Restricted cash	2.8	2.8
Other assets	27.9	27.8
<b>Total assets</b>	<b>576.1</b>	<b>604.9</b>
Borrowings	165.7	181.9
Other liabilities	43.7	50.3
Deferred tax & provisions	33.9	35.7
Equity & reserves	332.8	337.0
<b>Total equity &amp; liabilities</b>	<b>576.1</b>	<b>604.9</b>

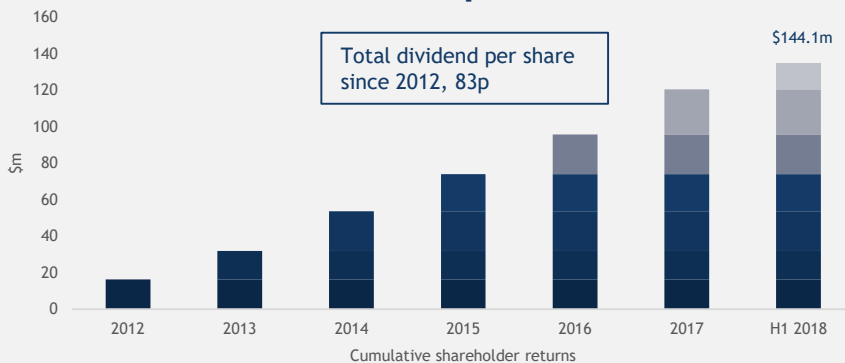


## H1 2018 CASH FLOW

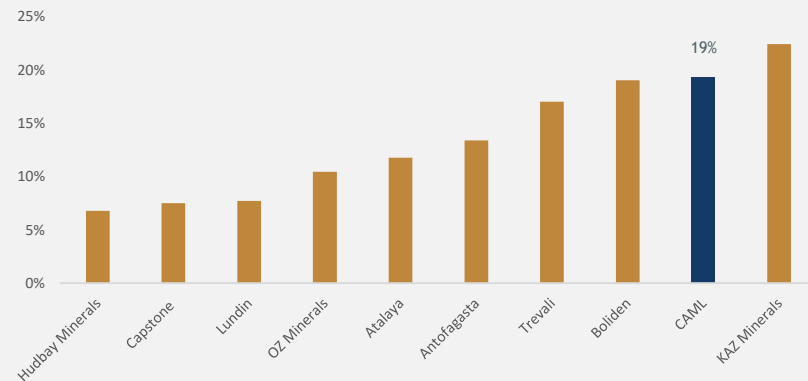


# DELIVERING SHAREHOLDER VALUE

## H1 2018 dividend 6.5p



## 2018E peer group ROCE



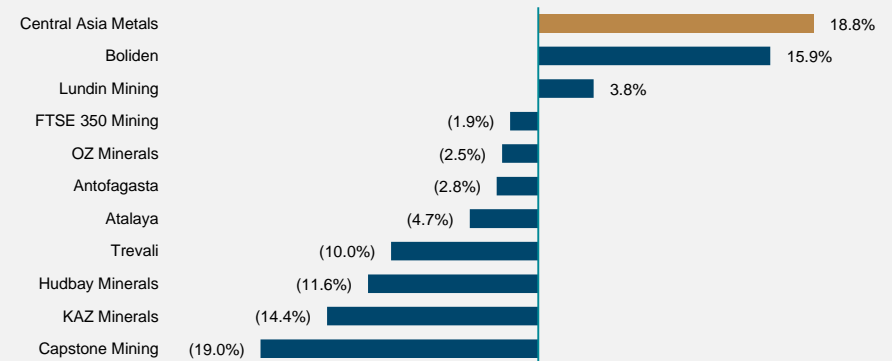
ROCE = EBIT / (total assets - current liabilities)

Source: Peel Hunt

## CAML dividend policy

“CAML will return to shareholders a target range of between 30% and 50% of free cash flow, defined as net cash generated from operating activities less capital expenditure”

## TSR CAGR since IPO



Source: Peel Hunt

## OUTLOOK



- Strong H1 2018 CAML financial performance with EBITDA and EPS accretion demonstrating Sasa acquisition rationale
- Attractive cash flow based dividend policy - H1 2018, 6.5p
- Two low cost, low capex operations in prospective jurisdictions, plus exploration potential in Shuak
- Exposure to three base metals with attractive fundamentals - copper, zinc and lead
- Challenging H2 2018 market conditions
- H1 2018 production demonstrates both operations on track to meet 2018 guidance
  - Copper 13,000-14,000t
  - Zinc 21,000-23,000t
  - Lead 28,000-30,000t



## INVESTOR RELATIONS CONTACT



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# APPENDIX



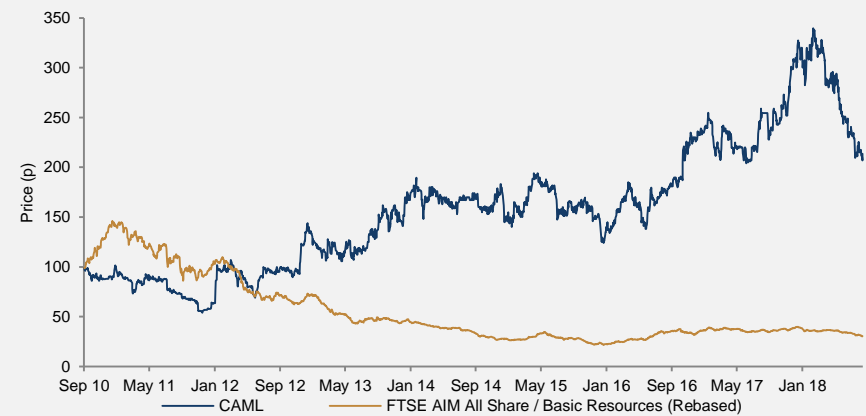
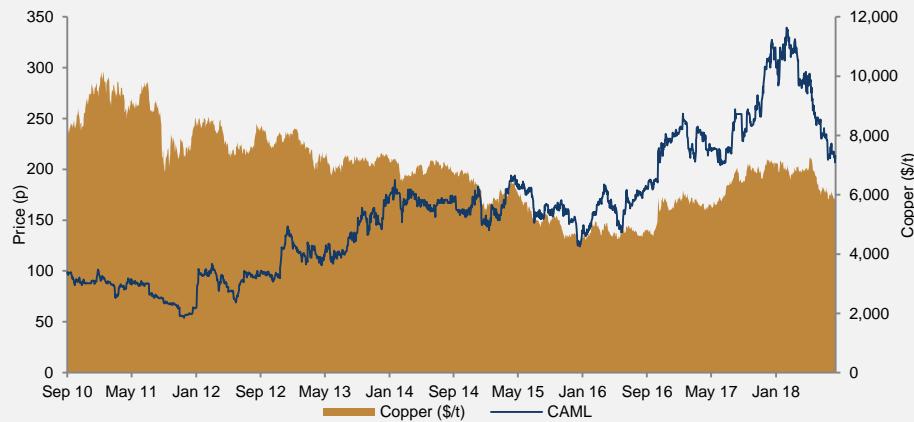
## CAML SUMMARY FINANCIAL PERFORMANCE

	Total (74 months)	H1 2018	2017 (Sasa 2 months)	2016	2015	2014	2013	2012 (8 months)
Kounrad Cu production, tonnes	75,173	6,747	14,103	14,020	12,071	11,136	10,509	6,586
Sasa Pb production, tonnes	19,337	14,386	4,951	-	-	-	-	-
Sasa Zn production, tonnes	14,645	11,020	3,625	-	-	-	-	-
Group Cu eq. payable tonnes	87,799	16,041	17,436	14,020	12,071	11,136	10,509	6,586
Average Cu sale price, \$/t	6,235	6,672	6,107	4,994	5,336	6,794	7,114	7,995
Average Pb sale price, \$/t	2,459	2,478	2,401	-	-	-	-	-
Average Zn sale price, \$/t	3,252	3,256	3,239	-	-	-	-	-
C1 cash cost, Cu eq. \$/lb	0.62	0.79	0.76*	0.43	0.60	0.62	0.66	0.63
Group revenue, \$m	549.2	102.4	106.5	69.3	67.3	76.6	76.0	51.1
Group adjusted EBITDA, \$m	333.3	64.6	66.4	39.9	34.9	47.3	48.1	31.8
Group adjusted EBITDA, %margin	60%	63%	62%	58%	52%	62%	63%	62%
Dividend/share buy-back, \$m	144.1	14.6	34.0	21.6	20.3	21.8	15.6	16.2

\*calculated on a 12 month 2017 basis for Sasa



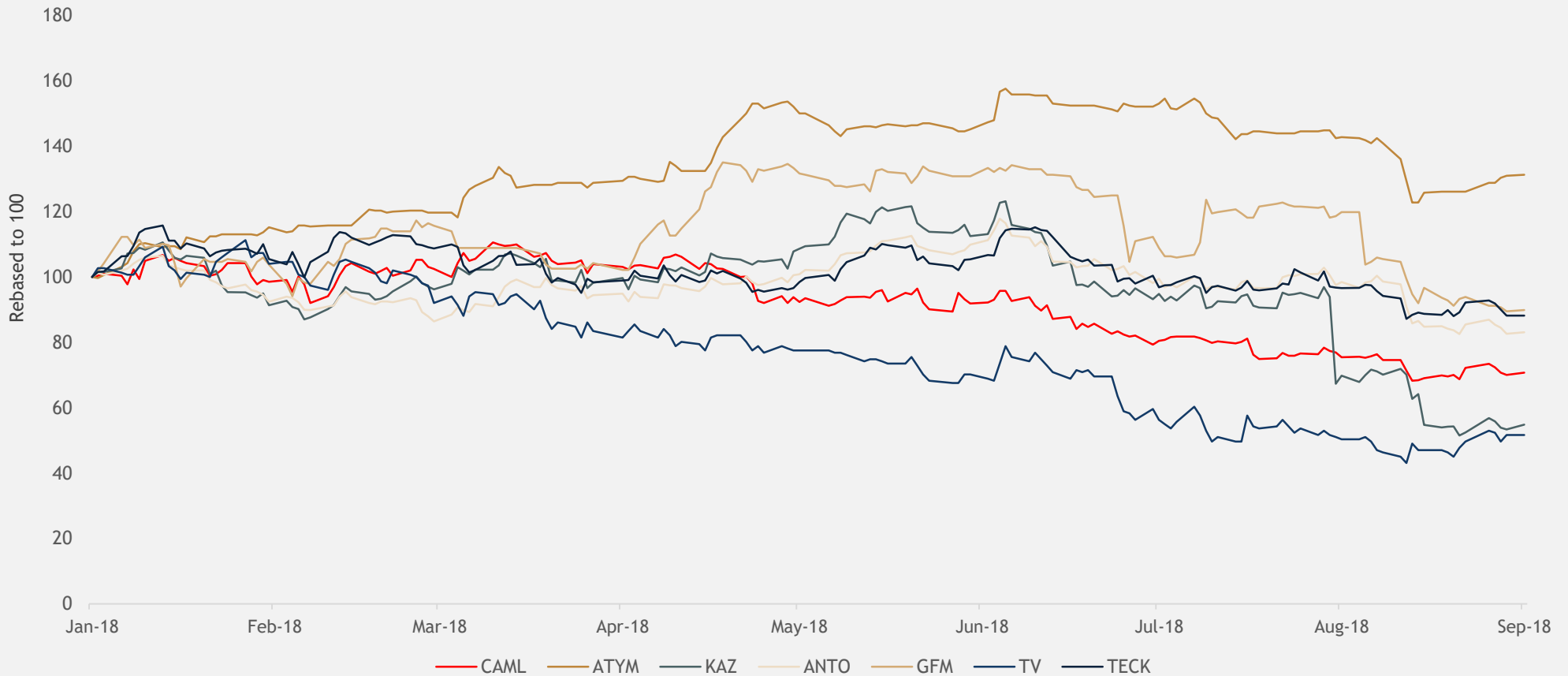
# SHARE PRICE AND SHAREHOLDERS



Share price (CAML:AIM)	£2.16*
Total no. voting shares	175,986,619
Treasury shares	511,647
Issued shares	176,498,266
Market capitalisation	£381m
Free float	96%
Average daily volume	0.6m

Shareholders	No. shares	% holding
JO Hambro Capital Mgt	16,616,445	9.44
Orion Mine Finance	15,278,528	8.68
FIL Investment International	13,661,178	7.76
BlackRock Investment Mgt	13,332,377	7.58
Canaccord Genuity Wealth Mgt	13,219,508	7.51
Majedie Asset Mgt	8,941,432	5.08
AXA Investment Mgrs	7,025,000	3.99

# CAML RELATIVE SHARE PRICE PERFORMANCE



# CENTRAL ASIA METALS OPERATIONS

## SHUAK (80%)

- 197km<sup>2</sup> exploration licence, northern Kazakhstan
- Potential for copper oxide and sulphide resources
- Extensively explored in Soviet times
- 22,000m+ drilling undertaken in 2017

## KAZAKHSTAN

- Population, 18.0 million
- GDP per capita, \$8,837



## SASA (100%)

- Underground zinc and lead mine, northeast Macedonia
- Production commenced in 1960's
- Produces 21,000-23,000t zinc and 28,000-30,000t lead in concentrate annually
- Life of mine to 2038+
- 2017 production, 21,585t zinc and 29,881t lead

SKOPJE SASA

MACEDONIA

## MACEDONIA

- Population, 2.1 million
- GDP per capita, \$5,443



## KOUNRAD (100%)

- In-situ dump leach and SX-EW processing facility, central Kazakhstan
- In production for 6 years
- Produces 13,000-14,000t copper One of the lowest cost copper producers globally
- Life of operation to 2030+
- 2017 production, 14,103t copper

## BOARD OF DIRECTORS





## DIRECTOR BIOGRAPHIES

**NICK CLARKE, CHAIRMAN.** Nick has over 40 years of mining experience, including 16 years spent within senior management positions in production and technical services in South Africa, Ghana and Saudi Arabia. Nick served as the managing director of Oriel Resources until its acquisition by OAO Mechel for \$1.5 billion in 2008. In addition, Nick was managing director at Wardell Armstrong International, where he managed numerous multidisciplinary consulting projects in the resource sector. He is a graduate of Camborne School of Mines and a Chartered Engineer. Nick is also a non-executive director of Wolf Minerals. In 2013, Nick was named CEO of the year at the Mining Journal outstanding achievements awards. He joined the Company in 2009 as Chief Executive Officer prior to the Company's initial public offering on AIM in 2010 which raised US\$60 million. He assumed the role of Chairman in June 2016.

**NIGEL HURST-BROWN, DEPUTY CHAIRMAN.** Nigel is currently chief executive of Hotchkis and Wiley. Previously he was chairman of Lloyds Investment Managers between 1986 and 1990 before becoming a director of Mercury Asset Management and later a managing director of Merrill Lynch Investment Managers. He is also a director of Borders & Southern Petroleum and a Fellow of The Institute of Chartered Accountants in England and Wales.

**NIGEL ROBINSON, CHIEF EXECUTIVE OFFICER.** Nigel is a member of the Institute of Chartered Accountants in England & Wales and was formerly a Royal Naval Officer in the Fleet Air Arm. Upon leaving the Royal Navy, he qualified with KPMG where he stayed for a further three years before leaving to work in commerce. He worked for six years in management with British Airways plc before leaving in 2002. Following a period consulting to smaller enterprises in the private sector, he joined CAML in November 2007 as Group Financial Controller. In April 2009, he was appointed Chief Financial Officer of the Group and, since then, has been instrumental in growing the business. He became CEO in April 2018.

**GAVIN FERRAR, CHIEF FINANCIAL OFFICER.** Gavin holds post-graduate degrees in geology and finance and has been involved in the mining sector for 21 years. His career in industry began at Anglo American in the New Mining Business Division. He spent 10 years in the investment banking sector focusing on equity and debt financing for junior and major mining clients of Barclays Capital and Investec. He joined the Company in June 2014 as business development director and became CFO in April 2018.

**DAVID SWAN, NON-EXECUTIVE DIRECTOR.** David is a chartered accountant with extensive experience across the natural resources sector. He is also CFO of Scotgold Resources, a non-executive director of Sunrise Resources and Oriel Resources. He joined CAML in June 2014.

**ROBERT CATHERY, NON-EXECUTIVE DIRECTOR.** Robert became a member of the London Stock Exchange in 1967 and was managing director and Head of Oil and Gas at Canaccord Europe. During his career in the City he was a director of Vickers da Costa and Schroders Securities and Head of Corporate Sales at SG Securities (London). He is a co-founder of Salamander Energy and has previously served as a non-executive director of that company. He has also served as non-executive independent director of SOCO International. He is a founder shareholder of CAML.

**NURLAN ZHAKUPOV, NON-EXECUTIVE DIRECTOR.** Nurlan is a Kazakh national. He has extensive experience in capital markets and has held positions at UBS and RBS. He is currently the CEO of SPK Astana, a Kazakh regional development institution, and is an Independent Non-Executive Director of Zerde National Infocommunication Holding. Most recently, he was Chief Business Development and Investment Officer, Member of the Executive Board of JSC Kazatomprom. He has previously held a number of positions in the Kazakhstan resource sector for Tau-Ken Samruk (the national mining company), Chambishi Metals and ENRC. He holds bachelor and master's degrees in economics from the Moscow State Institute for International Relations. Nurlan joined the Company in October 2011.

**ROGER DAVEY, NON-EXECUTIVE DIRECTOR.** Roger, a Chartered Engineer, has over 45 years of experience in the international mining industry. He is also a non-executive director of a number of other companies in the mining sector quoted on AIM and the Main Market, namely Atalaya Mining where he serves as Chairman, Tharisa and Highfield Resources. Until 2010, he was an Assistant Director and the Senior Mining Engineer at N. M. Rothschild in the mining and metals project finance team. Previously, he held senior management and director level roles in mining companies in South America and Africa as well as the UK, covering the financing, development and operation of underground and surface mining operations. Roger joined the Company in December 2015.

## SENIOR MANAGEMENT BIOGRAPHIES

**HOWARD NICHOLSON, TECHNICAL DIRECTOR.** Howard is a metallurgist with 35 years of experience in project development and mine operations management. Formerly the COO of European Minerals Corporation, he contributed to the development of Varvarinskoye, a copper-gold mine in Kazakhstan, and prior to this had held senior management positions with Ashanti Goldfields, Lonrho, and Anglo American.

**SCOTT YELLAND, CHIEF OPERATING OFFICER.** Scott is a mining engineer with over 35 years' experience in underground and surface mining operations. Before joining CAML, he was COO of Shanta Gold and has previously held senior executive roles with Konkola Copper Mines, Highland Gold Mining, Forte Energy and Berkeley Resources. Scott has a Master's degree in Mining Engineering from the Camborne School of Mines, and started his career working in the Cornish tin mines. He is a Chartered Engineer and a Fellow of the Institute of Materials, Minerals and Mining.

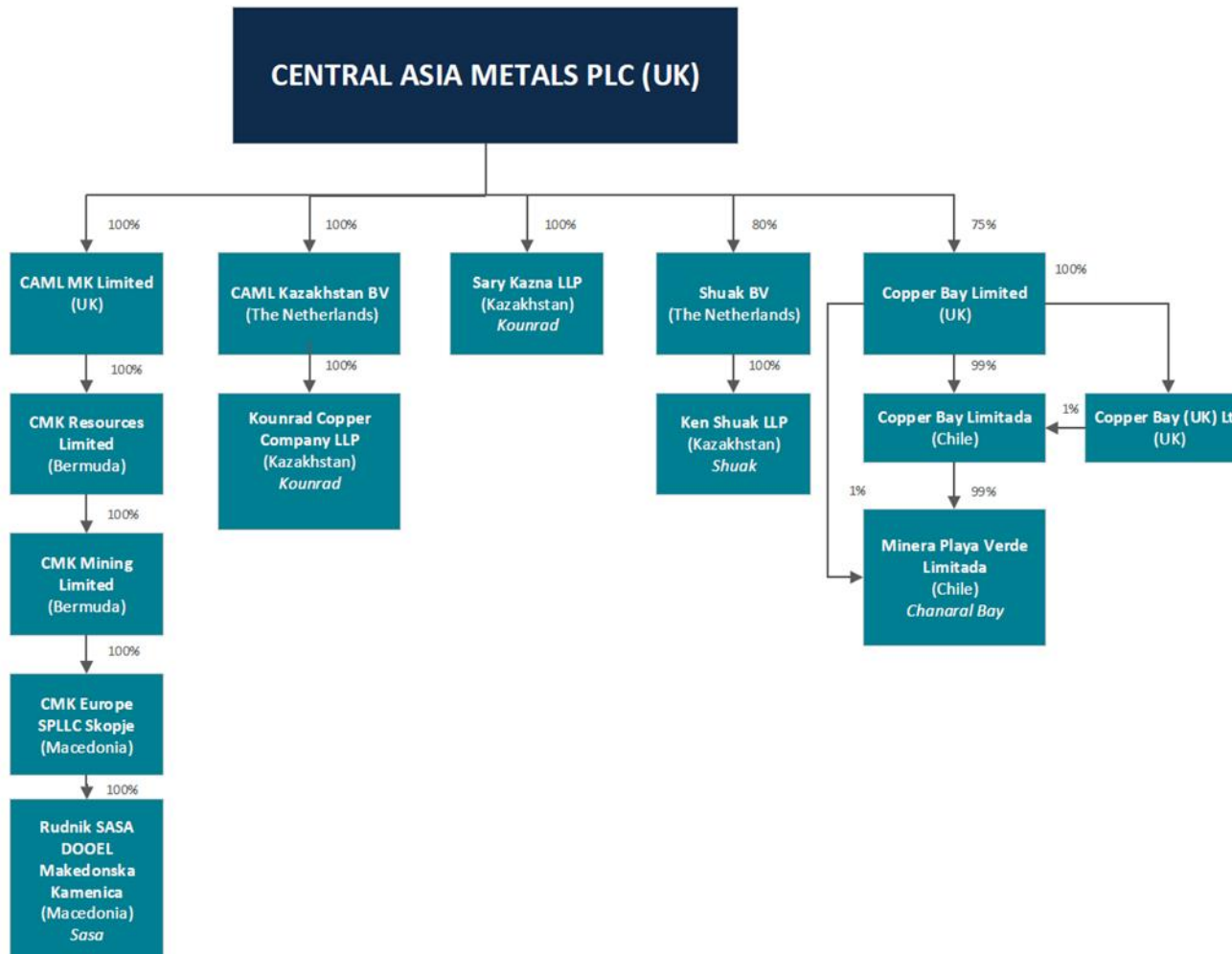
**NICK SHIRLEY, CSR DIRECTOR.** Nick has over 20 years of experience in the fields of environmental sciences, social responsibility and hydrogeology gained predominately in the international overseas mining industry in Central Asia, the Former Soviet Union and West Africa. He has formerly worked for the Environment Agency in the United Kingdom, Avocet Mining, Newmont-BHP's joint venture Soci  t   de la Mine de Fer de Guineea, and Orsu Metals as well as operating his own consultancy practice.

**PAVEL SEMENCHENKO, GENERAL DIRECTOR, KOUNRAD.** With over 17 years' experience of managing businesses in Kazakhstan and a proven track record in the resources industry, Pavel has excellent management skills and an in-depth knowledge of the country's business environment.

**OLEG TELNOI, GENERAL DIRECTOR, SASA.** Oleg joined CAML in 2007 with over ten years of experience in finance management in the mining industry in Central Asia. He is a qualified engineer and received a MBA in 1997.

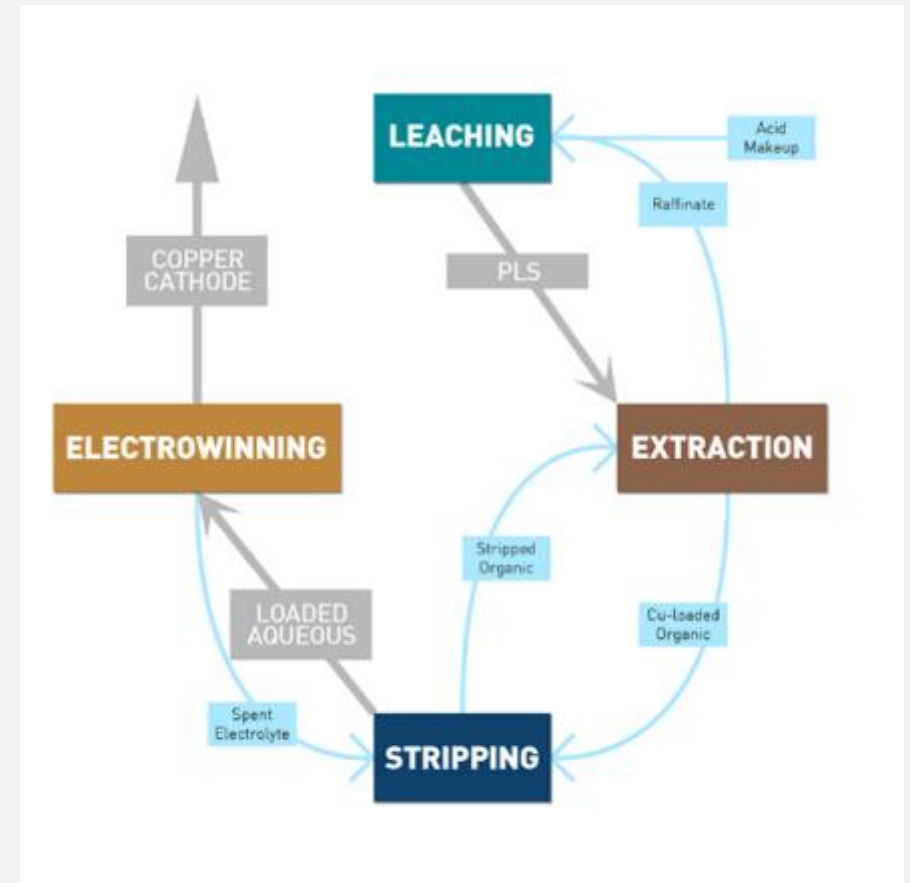
**SAKEN ASHIRBEKOVA, GENERAL DIRECTOR, KEN SHUAK.** Saken joined CAML in 2010 in order to oversee the development of the commercial SX-EW plant at Kounrad. She was General Director of JSC Varvarinskoye, a wholly-owned subsidiary of European Minerals Corporation, having worked for that company in Kazakhstan since 1996. She is a graduate of the Moscow Institute of Steel and Alloys with a degree and a PhD in metallurgy, and is a Kazakh national.

# CORPORATE STRUCTURE



## KOUNRAD RESOURCE AND TECHNOLOGY

Category	Quantity, Mt	Grade (%)	Contained copper, kt
Eastern Dumps			
Indicated	89.7	0.10	85.8
Inferred	79.6	0.10	81.7
Total	169.3	0.10	167.5
Western Dumps			
Indicated	296.4	0.10	282.4
Inferred	181.5	0.09	164.3
Total	477.9		446.7
Total East and West	647.1		614.2





# KOUNRAD, PLS AND GROUNDWATER MODEL

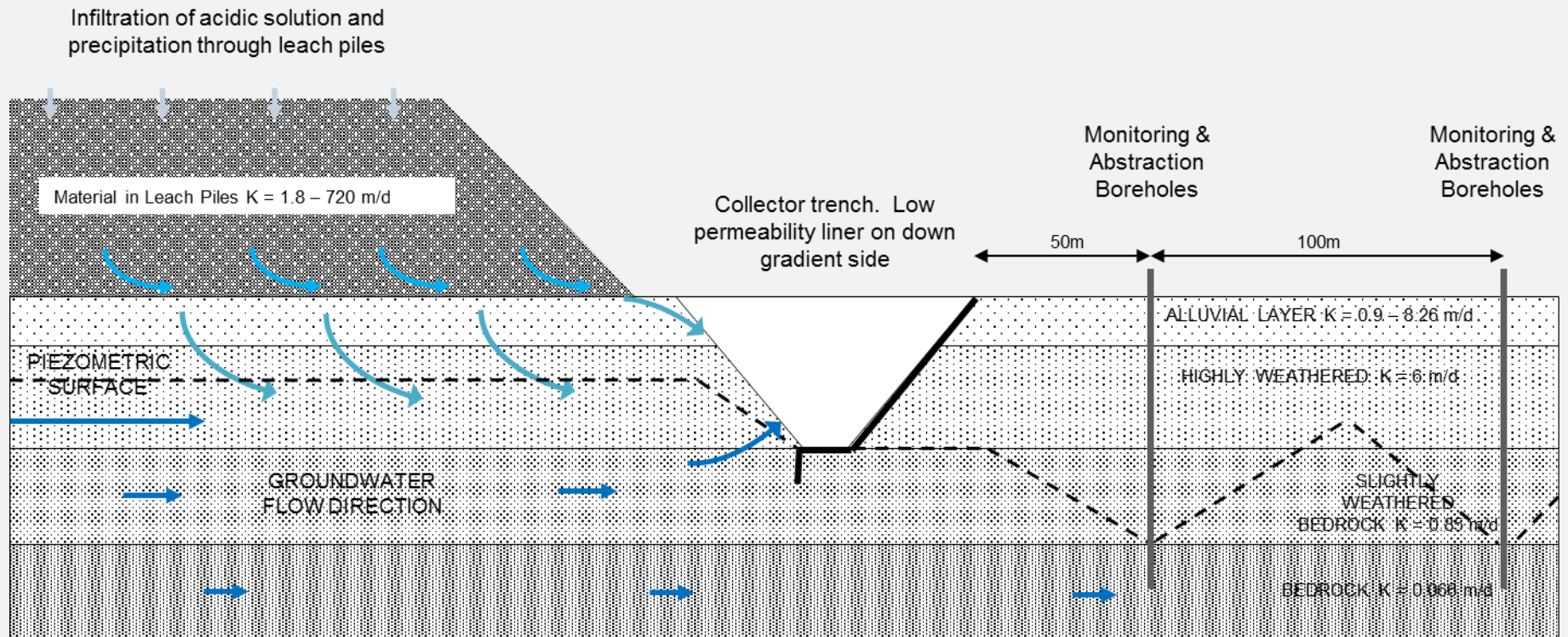


Diagram not to scale

## SASA, RESERVES AND RESOURCES

- Sasa is a zinc / lead skarn deposit
- Ore body dips at approximately 35°, with 2-3 parallel lenses, 1km strike, vertical distance of approximately 700m (accessible by adits into the mountain)
- Mining method: sub-level caving, sub levels at 7m intervals
- Uses single boom jumbos and diesel loaders, and either trucks (30% ore) or ore passes, rail and shaft to surface (70% ore)
- Primary ore body, Svinja Reka, with reserves of 10.9mt
- Capital development to all main mine levels already completed, multiple access via two adits and shaft
- Growth potential from significant inferred mineral resources and other brownfield exploration targets
- Plan to further explore along strike and at depth, and to implement modern exploration techniques

Category	Quantity	Grade			Contained		
	Mt	Pb (%)	Zn (%)	Ag (g/t)	Pb (kt)	Zn (kt)	Ag (koz)
Svinja Reka, Reserves							
Probable	10.9	3.9	3.1	18.4	421	337	6,447
Total	10.9	3.9	3.1	18.4	421	337	6,447
Svinja Reka, Resources							
Indicated	13.3	4.6	3.7	22.2	611	490	9,403
Inferred	2.7	3.2	2.1	16.6	84	56	1,426
Total	16.0	4.3	3.4	21.1	695	546	10,829
Golema Reka, Resources							
Inferred	7.4	3.7	1.5	18.6	273	112	4,424
Total	7.4	3.7	1.5	18.6	273	112	4,424

Prepared by SRK in July 2017



# SASA PROCESSING FLOW SHEET

