



**KAZ MINERALS LIMITED**  
**7<sup>TH</sup> FLOOR**  
**83 VICTORIA STREET**  
**LONDON SW1H 0HW**  
**Tel: +44 (0) 20 7901 7800**

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**KAZ MINERALS GROUP PRODUCTION AND SALES REPORT  
 FOR TWELVE MONTHS AND THE FOURTH QUARTER ENDED 31 DECEMBER 2022**

		12m 2022	12m 2021	Q4 2022	Q3 2022	Q4 2021
<b>Copper production<sup>1</sup></b>	<b>kt</b>	<b>379.7</b>	<b>298.7</b>	<b>97.8</b>	<b>102.0</b>	<b>74.8</b>
Aktogay	kt	227.5	138.4	59.7	63.6	36.1
Bozshakol	kt	102.1	107.5	24.2	26.3	25.9
East Region & Bozymchak	kt	50.1	52.8	13.9	12.1	12.8
Gold production <sup>2</sup>	koz	171.0	166.8	42.1	44.4	40.6
Silver production <sup>2</sup>	koz	3,768	3,417	1,050	986	904
Zinc in concentrate	kt	47.0	46.5	17.6	10.2	12.4
<b>Copper sales<sup>3</sup></b>	<b>kt</b>	<b>382.3</b>	<b>252.6</b>	<b>101.9</b>	<b>92.9</b>	<b>53.2</b>
Gold sales <sup>4</sup>	koz	177.5	136.9	35.2	42.8	38.4
Silver sales <sup>4</sup>	koz	3,898	2,935	903	1,003	719
Zinc in concentrate sales	kt	47.2	42.9	14.5	8.6	9.7

<sup>1</sup> Payable metal in concentrate and copper cathode from Aktogay oxide ore

<sup>2</sup> Payable metal in concentrate

<sup>3</sup> Payable metal in concentrate, toll processed metal and copper cathode from Aktogay oxide ore

<sup>4</sup> Payable metal in concentrate and toll processed metal

**Highlights**

- Copper production<sup>1</sup> increased by 27% to 380 kt in 2022 (FY 2021: 299 kt). The world class ramp-up of the second sulphide concentrator at Aktogay, as well as higher output from Sulphide 1, resulted in a 64% increase in Aktogay copper output to 227 kt in 2022 (FY 2021: 138 kt).
- Copper production<sup>1</sup> in the fourth quarter fell by 10% to 98 kt (Q3 2022: 102 kt) as maintenance resulted in lower output from Sulphide 1 at Aktogay and the sulphide plant at Bozshakol.
- Gold production<sup>2</sup> of 171 koz increased by 2% compared with the prior year (FY 2021: 167 koz). Bozshakol output rose as the site achieved improved recoveries and processed higher gold grades.
- Copper sales<sup>3</sup> were slightly higher than copper production in 2022, driven by the partial release of accumulated finished goods inventory which is expected to unwind fully during 2023.

Andrew Southam, Chief Executive Officer, said: “During 2022 KAZ Minerals achieved its highest ever copper output at 380 kt, a 27% increase on the prior year. The Group processed record volumes of ore in the year, driven by the world class ramp-up of the sulphide concentrator at Aktogay and excellent operational performance from the Group’s other assets.”

**For further information please contact:**

**KAZ Minerals**

Marie Edwards	Company Secretary, London	Tel: +44 20 7901 7832
Maksut Zhapabayev	Corporate Communications, Almaty	Tel: +7 727 244 03 53

## REGISTERED OFFICE

7<sup>th</sup> Floor, 83 Victoria Street, London SW1H 0HW, United Kingdom.

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## NOTES TO EDITORS

KAZ Minerals Limited (“KAZ Minerals” or “the Group”) is a high growth copper company focused on large scale, low cost, open pit mining in Kazakhstan. It operates the Aktogay and Bozshakol open pit copper mines in the Abay and Pavlodar regions of Kazakhstan, three underground mines and associated concentrators in the East Region of Kazakhstan and the Bozymchak copper-gold mine in Kyrgyzstan. The Group has completed a Bankable Feasibility Study for the greenfield Baimskaya copper project which it acquired in 2018. The Peschanka deposit within the Baimskaya licence area in Russia has JORC measured, indicated and inferred resources of 10.4 Mt of copper at an average grade of 0.39% and 17.5 Moz of gold at an average grade of 0.21 g/t. In 2022, KAZ Minerals’ total copper production was 380 kt with by-products of 171 koz of gold, 3,768 koz of silver and 47 kt of zinc in concentrate.

The Group’s major operations at Aktogay and Bozshakol have delivered industry leading production growth and transformed KAZ Minerals into a company dominated by world class, open pit copper mines. The Aktogay expansion project to double sulphide processing capacity at the mine was officially opened in October 2021, with first shipments to customers dispatched in December 2021.

KAZ Minerals employs around 14,000 people across Kazakhstan, Kyrgyzstan and Russia.

		12m 2022	12m 2021	Q4 2022	Q3 2022	Q4 2021
<b>Ore extraction</b>	<b>kt</b>	<b>69,505</b>	<b>54,944</b>	<b>17,362</b>	<b>18,592</b>	<b>14,745</b>
Oxide	kt	15,355	20,655	2,603	4,005	3,192
Sulphide	kt	54,150	34,289	14,759	14,587	11,553
<b>Oxide</b>						
Oxide ore to leach pads	kt	15,355	20,655	2,603	4,005	3,192
Grade	%	0.29	0.32	0.33	0.28	0.33
<b>Copper cathode</b>	<b>kt</b>	<b>24.1</b>	<b>24.2</b>	<b>5.5</b>	<b>7.0</b>	<b>5.9</b>
<b>Sulphide</b>						
<b>Sulphide ore processed</b>	<b>kt</b>	<b>50,423</b>	<b>27,959</b>	<b>13,370</b>	<b>12,964</b>	<b>8,828</b>
Sulphide 1	kt	28,105	25,798	6,670	7,281	6,667
Sulphide 2	kt	22,318	2,161	6,700	5,683	2,161
Average grade processed	%	0.48	0.50	0.49	0.50	0.44
Recovery rate	%	87.7	84.9	85.9	90.7	80.9
Copper in concentrate	kt	212.9	119.6	56.7	59.3	31.7
<b>Copper production<sup>1</sup></b>	<b>kt</b>	<b>203.4</b>	<b>114.2</b>	<b>54.2</b>	<b>56.6</b>	<b>30.2</b>
<b>Total copper production</b>	<b>kt</b>	<b>227.5</b>	<b>138.4</b>	<b>59.7</b>	<b>63.6</b>	<b>36.1</b>
Silver production <sup>1</sup>	koz	1,130	594	281	321	301
Molybdenum in concentrate production	t	2,005	776	580	444	183

<sup>1</sup> Payable metal in concentrate.

Ore extraction at Aktogay of 17,362 kt in Q4 2022 was 7% below the previous quarter (Q3 2022: 18,592 kt) as lower oxide ore was removed, in line with the mining plan. Ore mined in the fourth quarter was 17% higher than the prior year comparative period (Q4 2021: 14,745 kt) to meet the increased demand from the two sulphide concentrators, which operated above design capacity in the quarter.

13,370 kt of sulphide ore was processed in Q4 2022, a 3% increase compared with the previous quarter (Q3 2022: 12,964 kt). Ore processed at Sulphide 1 reduced by 8% to 6,670 kt (Q3 2022: 7,281 kt) following a SAG mill relin in December, which was brought forward from January 2023. Sulphide 2 continued its successful ramp-up with throughput at the plant in the fourth quarter increasing by 18% to 6,700 kt (Q3 2022: 5,683 kt) despite relines at the SAG and ball mills performed in December.

Copper production from sulphide ore was 54.2 kt in Q4 2022, a 4% decrease compared with the previous quarter (Q3 2022: 56.6 kt), due to an expected reduction in the copper grade processed to 0.49% (Q3 2022: 0.50%) and an associated reduction in the recovery rate to 85.9% (Q3 2022: 90.7%).

Copper cathode output from oxide ore reduced by 21% in the quarter to 5.5 kt (Q3 2022: 7.0 kt) as a lower volume of ore was placed onto the heap leach pads during the quarter, reflecting lower volumes of oxide ore mined.

Silver production reduced to 281 koz in the fourth quarter (Q3 2022: 321 koz) following a decrease in the grades processed and silver recoveries at both plants.

Molybdenum in concentrate production of 580 tonnes was 31% higher than the previous quarter (Q3 2022: 444 t) as Aktogay management achieved improved operational performance in the molybdenum flotation cycle during the quarter.

Ore extraction over the full year increased by 17% to 69,505 kt (FY 2021: 54,944 kt). Sulphide ore mined rose by 58%, exceeding the combined throughput of the two sulphide concentrators and resulting in an increase in the stockpile of sulphide ore to 32.6 Mt, which will be processed in future periods. Oxide ore mined of 15,355 kt was 26% lower than the prior year (FY 2021: 20,655 kt) as oxide operations during 2022 focused on the reirrigation of previously extracted ore.

Total copper production in 2022 increased by 64% compared with the prior year to 227.5 kt (FY 2021: 138.4 kt). The exceptional ramp-up of Sulphide 2 enabled the plant to deliver production of 90.9 kt (FY 2021: 4.6 kt). Copper production from Sulphide 1 also rose, increasing by 2.9 kt to 112.5 kt of copper. Aktogay has implemented a range of operational improvements in 2022 aimed at maximising throughput, which have enabled Sulphide 1 to achieve record throughput of 28.1 Mt, 12% above its design capacity. Production from Sulphide 1 also benefited from improved recovery rates which offset a reduction in the copper grade processed to 0.48% (FY 2021: 0.52%). Over the coming years, the average grade processed at Aktogay is expected to reduce towards the life of mine grade, and as a result management will remain focused on optimising operational performance to maximise throughput.

Silver production increased by 90% to 1,130 koz (FY 2021: 594 koz), reflecting the contribution of Sulphide 2 as well as increased recovery rates at Sulphide 1.

Molybdenum in concentrate production rose to 2,005 tonnes, an increase of 158% compared with the prior year (FY 2021: 776 t). Throughout 2022, Aktogay management has stabilised and enhanced performance in the molybdenum circuit at Sulphide 1, as well as benefiting from incremental production from Sulphide 2 which was commissioned in February 2022.

		12m 2022	12m 2021	Q4 2022	Q3 2022	Q4 2021
<b>Ore extraction</b>	<b>kt</b>	<b>28,769</b>	<b>27,474</b>	<b>8,774</b>	<b>7,222</b>	<b>5,475</b>
Sulphide	kt	23,491	23,577	5,868	5,542	4,743
Clay	kt	5,278	3,897	2,906	1,680	732
<b>Ore processed</b>	<b>kt</b>	<b>32,811</b>	<b>32,700</b>	<b>7,892</b>	<b>8,398</b>	<b>8,771</b>
<b>Copper</b>						
Average copper grade processed	%	0.43	0.46	0.42	0.43	0.43
Copper recovery rate	%	75.4	74.4	76.5	76.0	71.5
Copper in concentrate	kt	106.9	112.6	25.4	27.5	27.1
<b>Copper production<sup>1</sup></b>	<b>kt</b>	<b>102.1</b>	<b>107.5</b>	<b>24.2</b>	<b>26.3</b>	<b>25.9</b>
<b>Gold</b>						
Average gold grade processed	g/t	0.22	0.21	0.21	0.22	0.21
Gold recovery rate	%	54.7	53.5	54.9	54.8	49.8
Gold in concentrate	koz	127.4	120.8	29.8	32.8	30.1
<b>Gold production<sup>1</sup></b>	<b>koz</b>	<b>119.1</b>	<b>112.9</b>	<b>27.7</b>	<b>30.8</b>	<b>28.1</b>
<b>Silver production<sup>1</sup></b>	<b>koz</b>	<b>737</b>	<b>732</b>	<b>181</b>	209	178

<sup>1</sup> Payable metal in concentrate.

Ore extraction in Q4 2022 of 8,774 kt increased by 21% compared with the previous quarter (Q3 2022: 7,222 kt) as additional clay ore was mined to expose sulphide ore sections for future extraction.

Ore processed in Q4 2022 of 7,892 kt decreased by 6% compared with the previous quarter (Q3 2022: 8,398 kt) and by 10% compared with the prior year comparative period (Q4 2021: 8,771 kt), primarily as a result of maintenance works at the sulphide plant performed in December 2022, which were brought forward from January 2023. The clay plant operated above design capacity throughout the quarter.

Copper production in Q4 2022 of 24.2 kt was 8% below the previous quarter (Q3 2022: 26.3 kt) as lower volumes of ore were processed at the sulphide plant, and lower grade ore was processed at the clay plant (Q4 2022: 0.45%; Q3 2022: 0.50%).

Gold production in Q4 2022 of 27.7 koz was 10% below the previous quarter (Q3 2022: 30.8 koz), also due to lower volumes of ore processed and lower gold grades processed at the clay plant.

Silver production in Q4 2022 decreased to 181 koz, a 13% reduction compared with the previous quarter (Q3 2022: 209 koz) due to a reduction in the average silver recovery rate from 65% in Q3 2022 to 58% in Q4 2022 resulting from the ore composition.

Copper production in 2022 of 102.1 kt reduced by 5% in comparison with the prior year (FY 2021: 107.5 kt) mainly due to a reduction in the average grade processed to 0.43% (FY 2021: 0.46%). During 2022, Bozshakol management implemented the same artificial intelligence software as Aktogay, which contributed towards improvements in both throughput and recovery. Despite more downtime for planned maintenance at the sulphide plant in 2022, ore processed was maintained at similar levels to the prior year, and recovery rates improved even though the average copper grade processed fell.

Full year gold output of 119.1 koz in 2022 was 5% above the prior year (FY 2021: 112.9 koz), and benefited from higher grades processed and an improved recovery rate.

Silver production in 2022 of 737 koz was broadly in line with the prior year (FY 2022: 732 koz).

		12m 2022	12m 2021	Q4 2022	Q3 2022	Q4 2021
<b>Ore extraction</b>	kt	<b>3,886</b>	<b>3,851</b>	<b>1,154</b>	<b>891</b>	<b>984</b>
<b>Ore processed</b>	kt	<b>3,722</b>	<b>3,734</b>	<b>988</b>	<b>941</b>	<b>931</b>
<b>Copper</b>						
<b>Average grade processed</b>	%	<b>1.58</b>	<b>1.66</b>	<b>1.66</b>	<b>1.52</b>	<b>1.61</b>
East Region	%	1.98	2.07	2.06	1.90	1.99
Bozymchak	%	0.66	0.71	0.66	0.64	0.66
<b>Average recovery rate</b>	%	<b>89.5</b>	<b>89.7</b>	<b>88.7</b>	<b>89.2</b>	<b>89.8</b>
East Region	%	89.6	90.0	88.6	89.3	90.1
Bozymchak	%	88.6	87.7	88.9	88.9	87.6
<b>Copper in concentrate</b>	kt	<b>52.7</b>	<b>55.6</b>	<b>14.6</b>	<b>12.7</b>	<b>13.5</b>
East Region	kt	46.2	48.7	12.9	11.1	12.0
Bozymchak	kt	6.5	6.9	1.7	1.6	1.5
<b>Copper production<sup>1</sup></b>	kt	<b>50.1</b>	<b>52.8</b>	<b>13.8</b>	<b>12.1</b>	<b>12.8</b>
East Region	kt	43.9	46.2	12.3	10.5	11.3
Bozymchak	kt	6.2	6.6	1.6	1.6	1.5
Gold production <sup>1</sup>	koz	51.9	53.8	14.4	13.6	12.6
Silver production <sup>1</sup>	koz	1,901	2,091	588	456	542
Zinc in concentrate	kt	47.0	46.5	17.6	10.2	12.4

<sup>1</sup> Payable metal in concentrate

Ore mined in Q4 2022 was of 1,154 kt was 29% higher than the previous quarter (Q3 2022: 891 kt), as higher volumes were extracted at Bozymchak in order to fulfil the full year mining plan, following reduced volumes mined in Q2 due to a localised landslip.

Ore processed in Q4 2022 increased by 5% compared with the previous quarter to 988 kt (Q3 2022: 941 kt) driven by higher throughput at the Orlovsky concentrator.

Copper production in Q4 2022 increased by 14% to 13.8 kt (Q3 2022: 12.1 kt) following higher grade ore processed and increased throughput at the East Region concentrators. Bozymchak copper output was in line with the previous quarter.

Gold production in Q4 2022 of 14.4 koz was 6% above the previous quarter (Q3 2022: 13.6 koz) as gold grades processed at East Region increased to 0.63 g/t (Q3 2022: 0.48 g/t) which more than offset lower output from Bozymchak, where gold grades decreased in the quarter.

Silver production of 588 koz in Q4 2022 represented an increase of 29% compared with the previous quarter (Q3 2022: 456 koz) due to higher grades in the ore processed at both East Region and Bozymchak.

Zinc in concentrate output rose to 17.6 kt in the fourth quarter (Q3 2022: 10.2 kt) due to higher throughput and improved grades in the ore processed at East Region.

Full year copper production of 50.1 kt in 2022 decreased by 5% compared with the prior year (FY 2021: 52.8 kt) as a result of an expected reduction in the average copper grade in the ore processed.

Gold production of 51.9 koz was 4% below the prior year (FY 2021: 53.8 koz) as higher output from East Region was offset by lower production at Bozymchak, impacted by an expected reduction in the grades processed.

Silver output fell by 9% to 1,901 koz in 2022 (FY 2021: 2,091 koz) as lower grades were processed at both East Region and Bozymchak.

Zinc in concentrate production of 47.0 kt in 2022 was 0.5 kt or 1% ahead of the prior year (FY 2021: 46.5 kt) as higher output from the Nikolayevsky concentrator was largely offset by lower output from the Orlovsky concentrator due to lower grades processed from Orlovsky material.