

## Group Total Ore Reserves as at 31/12/2018

(in accordance with the JORC Code 2012<sup>(1)</sup>)

### Total Open Pit and Underground Ore Reserve

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proven</i>	49,360	0.77	1.23
	<i>Probable</i>	210,999	1.03	6.98
	<i>Proven+Probable</i>	260,359	0.98	8.21
Non-Refractory	<i>Proven</i>	17,943	0.69	0.40
	<i>Probable</i>	64,572	1.21	2.50
	<i>Proven+Probable</i>	82,516	1.09	2.90
Refractory	<i>Proven</i>	31,417	0.82	0.83
	<i>Probable</i>	146,426	0.95	4.48
	<i>Proven+Probable</i>	177,843	0.93	5.31

Note: Figures may not add up due to rounding.

### Open Pit Ore Reserve

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proven</i>	49,033	0.73	1.15
	<i>Probable</i>	208,967	0.98	6.61
	<i>Proven+Probable</i>	258,000	0.94	7.76
Non-Refractory	<i>Proven</i>	17,616	0.57	0.32
	<i>Probable</i>	63,193	1.13	2.29
	<i>Proven+Probable</i>	80,809	1.01	2.61
Refractory	<i>Proven</i>	31,417	0.82	0.83
	<i>Probable</i>	145,774	0.92	4.32
	<i>Proven+Probable</i>	177,191	0.90	5.15

Note: Figures may not add up due to rounding.

### Underground Reserve

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proven</i>	327	7.21	0.08
	<i>Probable</i>	2,031	5.62	0.37
	<i>Proven+Probable</i>	2,359	5.84	0.44
Non-Refractory	<i>Proven</i>	327	7.21	0.08
	<i>Probable</i>	1,379	4.68	0.21
	<i>Proven+Probable</i>	1,707	5.16	0.28
Refractory	<i>Proven</i>	–	–	–
	<i>Probable</i>	652	7.60	0.16
	<i>Proven+Probable</i>	652	7.60	0.16

Note: Figures may not add up due to rounding.

# Reserves and Resources continued

## Group Mineral Resources as at 31/12/2018

(in accordance with the JORC Code 2012<sup>(1)</sup>)

### Total Open Pit and Underground Mineral Resource

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	69,778	0.89	1.99
	<i>Indicated</i>	417,735	0.90	12.06
	<i>Measured+Indicated</i>	487,513	0.90	14.05
	<i>Inferred</i>	236,188	0.85	6.47
Non-Refractory	<i>Measured</i>	33,735	0.96	1.04
	<i>Indicated</i>	144,365	1.03	4.80
	<i>Measured+Indicated</i>	178,099	1.02	5.84
	<i>Inferred</i>	58,154	1.25	2.34
Refractory	<i>Measured</i>	36,043	0.82	0.95
	<i>Indicated</i>	273,370	0.83	7.25
	<i>Measured+Indicated</i>	309,414	0.82	8.20
	<i>Inferred</i>	178,034	0.72	4.13

Note: Figures may not add up due to rounding.

### Open Pit Mineral Resource

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	68,525	0.81	1.79
	<i>Indicated</i>	413,124	0.86	11.44
	<i>Measured+Indicated</i>	481,649	0.85	13.24
	<i>Inferred</i>	232,070	0.82	6.09
Non-Refractory	<i>Measured</i>	32,481	0.81	0.84
	<i>Indicated</i>	141,080	0.97	4.41
	<i>Measured+Indicated</i>	173,561	0.94	5.25
	<i>Inferred</i>	54,822	1.15	2.04
Refractory	<i>Measured</i>	36,043	0.82	0.95
	<i>Indicated</i>	272,044	0.80	7.03
	<i>Measured+Indicated</i>	308,088	0.81	7.98
	<i>Inferred</i>	177,248	0.71	4.06

Note: Mineral Resources are reported inclusive of Ore Reserves. Figures may not add up due to rounding.

### Underground Mineral Resource

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	1,253	4.93	0.20
	<i>Indicated</i>	4,611	4.13	0.61
	<i>Measured+Indicated</i>	5,864	4.30	0.81
	<i>Inferred</i>	4,118	2.85	0.38
Non-Refractory	<i>Measured</i>	1,253	4.93	0.20
	<i>Indicated</i>	3,285	3.70	0.39
	<i>Measured+Indicated</i>	4,538	4.04	0.59
	<i>Inferred</i>	3,332	2.89	0.31
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	1,326	5.21	0.22
	<i>Measured+Indicated</i>	1,326	5.21	0.22
	<i>Inferred</i>	786	2.68	0.07

Note: Mineral Resources are reported inclusive of Ore Reserves. Figures may not add up due to rounding.

## Summary of Ore Reserves by Asset as at 31/12/2018

(in accordance with the JORC Code 2012<sup>(1)</sup>)

### Pioneer Open Pit

	Category	Tonnage (kt)	Grade (g/t Au)	Gold (Moz Au)
Total	<i>Proven</i>	21,154	0.64	0.44
	<i>Probable</i>	80,301	0.80	2.06
	<i>Proven+Probable</i>	101,454	0.77	2.50
Non-Refractory	<i>Proven</i>	8,946	0.44	0.13
	<i>Probable</i>	13,654	0.84	0.37
	<i>Proven+Probable</i>	22,600	0.68	0.49
Refractory	<i>Proven</i>	12,208	0.79	0.31
	<i>Probable</i>	66,647	0.79	1.69
	<i>Proven+Probable</i>	78,854	0.79	2.00

### Pioneer Underground

	Category	Tonnage (kt)	Grade (g/t Au)	Gold (Moz Au)
Total	<i>Proven</i>	152	5.03	0.02
	<i>Probable</i>	1,679	5.86	0.32
	<i>Proven+Probable</i>	1,831	5.79	0.34
Non-Refractory	<i>Proven</i>	152	5.03	0.02
	<i>Probable</i>	1,027	4.75	0.16
	<i>Proven+Probable</i>	1,179	4.78	0.18
Refractory	<i>Proven</i>	–	–	–
	<i>Probable</i>	652	7.60	0.16
	<i>Proven+Probable</i>	652	7.60	0.16

### Pioneer Total

	Category	Tonnage (kt)	Grade (g/t Au)	Gold (Moz Au)
Total	<i>Proven</i>	21,305	0.67	0.46
	<i>Probable</i>	81,980	0.90	2.37
	<i>Proven+Probable</i>	103,285	0.85	2.84
Non-Refractory	<i>Proven</i>	9,098	0.51	0.15
	<i>Probable</i>	14,681	1.11	0.52
	<i>Proven+Probable</i>	23,779	0.88	0.67
Refractory	<i>Proven</i>	12,208	0.79	0.31
	<i>Probable</i>	67,299	0.86	1.85
	<i>Proven+Probable</i>	79,506	0.85	2.16

# Reserves and Resources continued

## Malomir Open Pit

	Category	Tonnage (kt)	Grade (g/t Au)	Gold (Moz Au)
Total	<i>Proven</i>	19,335	0.84	0.52
	<i>Probable</i>	69,051	1.00	2.23
	<i>Proven+Probable</i>	88,386	0.97	2.75
Non-Refractory	<i>Proven</i>	126	1.00	0.004
	<i>Probable</i>	618	1.37	0.03
	<i>Proven+Probable</i>	743	1.31	0.03
Refractory	<i>Proven</i>	19,210	0.84	0.52
	<i>Probable</i>	68,434	1.00	2.20
	<i>Proven+Probable</i>	87,643	0.97	2.72

## Malomir Underground

	Category	Tonnage (kt)	Grade (g/t Au)	Gold (Moz Au)
Total	<i>Proven</i>	176	9.09	0.05
	<i>Probable</i>	352	4.48	0.05
	<i>Proven+Probable</i>	528	6.01	0.10
Non-Refractory	<i>Proven</i>	176	9.09	0.05
	<i>Probable</i>	352	4.48	0.05
	<i>Proven+Probable</i>	528	6.01	0.10
Refractory	<i>Proven</i>	–	–	–
	<i>Probable</i>	–	–	–
	<i>Proven+Probable</i>	–	–	–

## Malomir Total

	Category	Tonnage (kt)	Grade (g/t Au)	Gold (Moz Au)
Total	<i>Proven</i>	19,511	0.92	0.58
	<i>Probable</i>	69,403	1.02	2.28
	<i>Proven+Probable</i>	88,914	1.00	2.86
Non-Refractory	<i>Proven</i>	301	5.72	0.05
	<i>Probable</i>	970	2.50	0.08
	<i>Proven+Probable</i>	1,271	3.26	0.13
Refractory	<i>Proven</i>	19,210	0.84	0.52
	<i>Probable</i>	68,434	1.00	2.20
	<i>Proven+Probable</i>	87,643	0.97	2.72

**Albyn**

	Category	Tonnage (kt)	Grade (g/t Au)	Gold (Moz Au)
Total	<i>Proven</i>	6,516	0.45	0.09
	<i>Probable</i>	57,420	1.20	2.22
	<i>Proven+Probable</i>	63,936	1.13	2.32
Non-Refractory	<i>Proven</i>	6,516	0.45	0.09
	<i>Probable</i>	46,726	1.20	1.80
	<i>Proven+Probable</i>	53,243	1.11	1.89
Refractory	<i>Proven</i>	–	–	–
	<i>Probable</i>	10,694	1.23	0.42
	<i>Proven+Probable</i>	10,694	1.23	0.42

**Tokur**

	Category	Tonnage (kt)	Grade (g/t Au)	Gold (Moz Au)
Total	<i>Proven</i>	2,028	1.47	0.10
	<i>Probable</i>	2,195	1.44	0.10
	<i>Proven+Probable</i>	4,223	1.45	0.20
Non-Refractory	<i>Proven</i>	2,028	1.47	0.10
	<i>Probable</i>	2,195	1.44	0.10
	<i>Proven+Probable</i>	4,223	1.45	0.20
Refractory	<i>Proven</i>	–	–	–
	<i>Probable</i>	–	–	–
	<i>Proven+Probable</i>	–	–	–

## Notes:

(1) Group Ore Reserves statements are prepared internally as an update of the April 2017 WAI estimate; Pioneer, Malomir and Albyn Reserves were prepared in February 2019 in accordance with JORC Code 2012; Tokur Reserves were prepared in 2010 in accordance with JORC Code 2004 and there have been no changes to the Tokur estimates since that date.

(2) Pioneer, Malomir and Albyn Ore Reserves for open pit extraction are estimated within economical pit shells using a \$1,200/oz gold price assumption and applying other modifying factors based on the projected performance of these operating mines. Tokur Reserves have been based on a \$1,000/oz gold price assumption, together with operating costs assumptions relevant at the time of the estimate

(3) The Open Pit Reserve cut-off grade for reporting varies from 0.3 to 0.5g/t Au, depending on the asset and processing method

(4) Underground Ore Reserve estimates use a mine design with decline access, trackless mining equipment and a sublevel open stope mining method with or without back fill

(5) Reserve figures have been adjusted for anticipated dilution and mine recovery

(6) The Underground Reserve cut-off grade for reporting is 1.5g/t Au for Pioneer and 1.7g/t Au for Malomir

(7) In accordance with JORC Code, all open pit and underground designs has been based on Measured and Indicated Resources; in addition to the Proven and Probable Reserve quoted above the design captures the following Inferred Resource:

– Pioneer: 1,281kt@1.04g/t (0.04Moz) of non-refractory and 8,600kt @ 0.61g/t (0.17Moz) of refractory;

– Malomir: 277kt @ 3.00g/t (0.03Moz) of non-refractory and 2,644kt@0.96g/t (0.08Moz) of refractory

– Albyn 1,921@1.38g/t (0.09Moz) of non-refractory and 348kt@ 1.08g/t (0.01Moz) of refractory

(8) Figures may not add up due to rounding

# Reserves and Resources continued

## Summary of Mineral Resources by Asset as at 31/12/2018

(in accordance with JORC Code 2012<sup>(1)</sup>)

### Pokrovskiy Open Pit

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	4,182	0.70	0.09
	<i>Indicated</i>	19,954	0.62	0.40
	<i>Measured+Indicated</i>	24,136	0.63	0.49
	<i>Inferred</i>	5,872	0.88	0.17
Non-Refractory	<i>Measured</i>	4,182	0.70	0.09
	<i>Indicated</i>	19,954	0.62	0.40
	<i>Measured+Indicated</i>	24,136	0.63	0.49
	<i>Inferred</i>	5,872	0.88	0.17
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	–	–	–
	<i>Measured+Indicated</i>	–	–	–
	<i>Inferred</i>	–	–	–

### Pokrovskiy Underground

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	827	3.20	0.09
	<i>Indicated</i>	1,196	2.45	0.09
	<i>Measured+Indicated</i>	2,023	2.76	0.18
	<i>Inferred</i>	506	2.96	0.05
Non-Refractory	<i>Measured</i>	827	3.20	0.09
	<i>Indicated</i>	1,196	2.45	0.09
	<i>Measured+Indicated</i>	2,023	2.76	0.18
	<i>Inferred</i>	506	2.96	0.05
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	–	–	–
	<i>Measured+Indicated</i>	–	–	–
	<i>Inferred</i>	–	–	–

### Pokrovskiy Total

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	5,009	1.11	0.18
	<i>Indicated</i>	21,150	0.72	0.49
	<i>Measured+Indicated</i>	26,159	0.79	0.67
	<i>Inferred</i>	6,378	1.04	0.21
Non-Refractory	<i>Measured</i>	5,009	1.11	0.18
	<i>Indicated</i>	21,150	0.72	0.49
	<i>Measured+Indicated</i>	26,159	0.79	0.67
	<i>Inferred</i>	6,378	1.04	0.21
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	–	–	–
	<i>Measured+Indicated</i>	–	–	–
	<i>Inferred</i>	–	–	–

**Pioneer Open Pit**

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	25,107	0.67	0.54
	<i>Indicated</i>	162,330	0.69	3.60
	<i>Measured+Indicated</i>	187,437	0.69	4.14
	<i>Inferred</i>	62,629	0.60	1.21
Non-Refractory	<i>Measured</i>	9,190	0.45	0.13
	<i>Indicated</i>	37,752	0.69	0.84
	<i>Measured+Indicated</i>	46,941	0.65	0.98
	<i>Inferred</i>	6,827	0.74	0.16
Refractory	<i>Measured</i>	15,918	0.79	0.40
	<i>Indicated</i>	124,578	0.69	2.76
	<i>Measured+Indicated</i>	140,496	0.70	3.16
	<i>Inferred</i>	55,803	0.58	1.04

**Pioneer Underground**

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	183	6.38	0.04
	<i>Indicated</i>	2,637	5.08	0.43
	<i>Measured+Indicated</i>	2,820	5.16	0.47
	<i>Inferred</i>	1,297	3.04	0.13
Non-Refractory	<i>Measured</i>	183	6.38	0.04
	<i>Indicated</i>	1,311	4.95	0.21
	<i>Measured+Indicated</i>	1,495	5.12	0.25
	<i>Inferred</i>	511	3.59	0.06
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	1,326	5.21	0.22
	<i>Measured+Indicated</i>	1,326	5.21	0.22
	<i>Inferred</i>	786	2.68	0.07

**Pioneer Total**

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	25,291	0.71	0.58
	<i>Indicated</i>	164,968	0.76	4.03
	<i>Measured+Indicated</i>	190,258	0.75	4.61
	<i>Inferred</i>	63,927	0.65	1.33
Non-Refractory	<i>Measured</i>	9,373	0.57	0.17
	<i>Indicated</i>	39,064	0.84	1.05
	<i>Measured+Indicated</i>	48,437	0.78	1.22
	<i>Inferred</i>	7,338	0.94	0.22
Refractory	<i>Measured</i>	15,918	0.79	0.40
	<i>Indicated</i>	125,904	0.74	2.98
	<i>Measured+Indicated</i>	141,822	0.74	3.39
	<i>Inferred</i>	56,589	0.61	1.11

# Reserves and Resources continued

## Malomir Open Pit

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	20,248	0.84	0.55
	<i>Indicated</i>	133,488	0.87	3.74
	<i>Measured+Indicated</i>	153,736	0.87	4.29
	<i>Inferred</i>	107,375	0.71	2.47
Non-Refractory	<i>Measured</i>	135	0.99	0.004
	<i>Indicated</i>	802	1.19	0.03
	<i>Measured+Indicated</i>	936	1.16	0.03
	<i>Inferred</i>	513	0.82	0.01
Refractory	<i>Measured</i>	20,113	0.84	0.54
	<i>Indicated</i>	132,686	0.87	3.71
	<i>Measured+Indicated</i>	152,800	0.87	4.25
	<i>Inferred</i>	106,862	0.71	2.45

## Malomir Underground

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	243	9.71	0.08
	<i>Indicated</i>	403	4.37	0.06
	<i>Measured+Indicated</i>	646	6.38	0.13
	<i>Inferred</i>	354	3.45	0.04
Non-Refractory	<i>Measured</i>	243	9.71	0.08
	<i>Indicated</i>	403	4.37	0.06
	<i>Measured+Indicated</i>	646	6.38	0.13
	<i>Inferred</i>	354	3.45	0.04
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	–	–	–
	<i>Measured+Indicated</i>	–	–	–
	<i>Inferred</i>	–	–	–

## Malomir Total

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	20,492	0.95	0.62
	<i>Indicated</i>	133,891	0.88	3.79
	<i>Measured+Indicated</i>	154,382	0.89	4.42
	<i>Inferred</i>	107,728	0.72	2.51
Non-Refractory	<i>Measured</i>	378	6.60	0.08
	<i>Indicated</i>	1,204	2.25	0.09
	<i>Measured+Indicated</i>	1,582	3.29	0.17
	<i>Inferred</i>	867	1.89	0.05
Refractory	<i>Measured</i>	20,113	0.84	0.54
	<i>Indicated</i>	132,686	0.87	3.71
	<i>Measured+Indicated</i>	152,800	0.87	4.25
	<i>Inferred</i>	106,862	0.71	2.45



**Albyn Open Pit**

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	7,023	0.50	0.11
	<i>Indicated</i>	81,256	1.21	3.16
	<i>Measured+Indicated</i>	88,291	1.15	3.27
	<i>Inferred</i>	45,488	1.29	1.88
Non-Refractory	<i>Measured</i>	7,023	0.50	0.11
	<i>Indicated</i>	66,477	1.21	2.59
	<i>Measured+Indicated</i>	73,499	1.15	2.71
	<i>Inferred</i>	30,904	1.33	1.32
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	14,792	1.19	0.57
	<i>Measured+Indicated</i>	14,792	1.19	0.57
	<i>Inferred</i>	14,584	1.20	0.56

**Albyn Underground**

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	–	–	–
	<i>Indicated</i>	375	2.61	0.03
	<i>Measured+Indicated</i>	375	2.61	0.03
	<i>Inferred</i>	1,961	2.58	0.16
Non-Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	375	2.61	0.03
	<i>Measured+Indicated</i>	375	2.61	0.03
	<i>Inferred</i>	1,961	2.58	0.16
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	–	–	–
	<i>Measured+Indicated</i>	–	–	–
	<i>Inferred</i>	–	–	–

**Albyn Total**

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	7,023	0.50	0.11
	<i>Indicated</i>	81,644	1.22	3.19
	<i>Measured+Indicated</i>	88,666	1.16	3.31
	<i>Inferred</i>	47,449	1.34	2.04
Non-Refractory	<i>Measured</i>	7,023	0.50	0.11
	<i>Indicated</i>	66,852	1.22	2.63
	<i>Measured+Indicated</i>	73,874	1.15	2.74
	<i>Inferred</i>	32,866	1.40	1.48
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	14,792	1.19	0.57
	<i>Measured+Indicated</i>	14,792	1.19	0.57
	<i>Inferred</i>	14,584	1.20	0.56

# Reserves and Resources continued

## Tokur

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	11,952	1.30	0.50
	<i>Indicated</i>	16,096	1.06	0.55
	<i>Measured+Indicated</i>	28,048	1.16	1.05
	<i>Inferred</i>	10,706	1.09	0.38
Non-Refractory	<i>Measured</i>	11,952	1.30	0.5
	<i>Indicated</i>	16,096	1.06	0.55
	<i>Measured+Indicated</i>	28,048	1.16	1.05
	<i>Inferred</i>	10,706	1.09	0.38
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	–	–	–
	<i>Measured+Indicated</i>	–	–	–
	<i>Inferred</i>	–	–	–

### Notes:

(1) Mineral Resources include Ore Reserves

(2) Mineral Resource estimates for Pokrovskiy, Pioneer, Malomir and Albyn were prepared internally by the Group in accordance with JORC Code 2012 as an update of the April 2017 statement audited by WAI; Mineral Resources for Tokur were reviewed by WAI in 2010 in accordance with JORC Code 2004 and there have been no changes to the Tokur estimates since that date

(3) Open Pit Mineral Resources for Pokrovskiy, Pioneer, Malomir and Albyn are constrained by conceptual open-pit shells at a US\$1,500/oz long term gold price; Tokur Mineral Resources have no open pit constraints

(4) The cut-off grade for Mineral Resources for open pit mining varies from 0.30 to 0.35g/t depending on the type of mineralisation and proposed processing method

(5) A cut-off grade of 1.5g/t is used to report Mineral Resources for potential underground mining

(6) Mineral Resources are not Reserves until they have demonstrated economic viability based on a feasibility or pre-feasibility study

(7) Grade represents estimated contained metal in the ground and has not been adjusted for metallurgical recovery