



ASX Announcement
 21 January 2021

PRODUCTION AT TOP END OF GUIDANCE, UNAUDITED NPAT OF A\$100M AND DEBT CUT BY A\$125M

Gold sales of 252,899oz; Standout performance at Pogo in face of COVID-19 challenges; Strong balance sheet with corporate debt cut to A\$375M and A\$372M in cash, bullion and investments

HIGHLIGHTS

- Gold sold in the December quarter up 11% to 252,899oz; This was at the upper end of the published December quarter guidance range of 226,000-254,000oz
- Strong performance at all operations:
 - Australian Operations (including 50% KCGM) sold 198,701oz at an AISC of A\$1,526/oz (US\$1,115/oz)*
 - Pogo Operations sold 54,198oz at an AISC of US\$1,365/oz
- Group all-in cost (AIC) of A\$1,825/oz (US\$1,333/oz) (including substantial investments in production growth), KCGM open pit material movement increased 22% over previous quarter; significant progress achieved on Pogo mill expansion to 1.3Mtpa; Pogo's Jameson cell installed and gold recoveries +91%
- Average realised price of A\$2,295/oz in the December quarter; This included 48% of gold sold (~122,000oz) into hedged positions, reducing hedge book to ~10% of the next three years' production
- Strong underlying free cash flow of A\$93M generated during December quarter; This was despite investing ~A\$63M in growth capital and exploration
- Unaudited NPAT of ~A\$100M; Operating mine cashflow of A\$290M; Net mine cashflow of A\$169M
- Cash, bullion and investments of A\$372M at 31 December 2020 after repaying A\$125M of corporate bank debt, A\$40M in stamp duty/M&A and A\$10M for FY20 tax balancing payment during the quarter
- December quarter production:
 - Yandal Gold Operations:
 - 65,396oz mined and 68,405oz sold at an AISC A\$1,203/oz (US\$879/oz) with AIC of A\$1,407/oz
 - KCGM Gold Operations (50% Ownership):
 - 48,460oz mined and 58,565oz sold at an AISC A\$1,359/oz (US\$993/oz) with AIC of A\$1,561/oz
 - Kalgoorlie Gold Operations:
 - 71,709oz mined and 71,731oz sold at an AISC A\$1,968/oz (US\$1,437/oz) with AIC of A\$2,132/oz
 - Pogo Gold Operations:
 - 58,744oz mined and 54,198oz sold at an AISC US\$1,365/oz with AIC of US\$1,629/oz
- Second court date to finalise merger with Saracen Mineral Holdings (ASX: SAR) set for February 2, 2021
- Combined group on track to achieve annual production guidance of 1.6Moz with pathway to 2Moz while unlocking synergies of A\$1.5-2B
- Northern Star will host a quarterly conference call today, 21 January 2021, at 12:00pm AEDT (9:00am AWST). The call can be accessed at <https://webcast.boardroom.media/northern-star-resources-ltd/20201027/NaN5fff9378aec8340019d1c1dc>

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

Northern Star Resources (ASX: NST) is pleased to report strong results across the board for the December quarter, with production at the top end of guidance, outstanding free cashflow and significant debt reduction.

Gold sold in the December quarter totalled 252,899oz, which was at the top end of guidance of 226,000 – 254,000oz for the three months and up 11 per cent from the previous quarter. Gold sold for the six months to December 31 totalled 480,431oz, which is comfortably in line with Northern Star's FY21 guidance of 940,000 – 1.06Moz.

All-in costs were A\$1,825/oz (US\$1,333/oz) including the A\$63M (approximately A\$250/oz of gold sold) invested in growth capital and exploration during the period. This expenditure saw the amount of material moved at KCGM increase by 22 per cent from the previous quarter and included significant progress on Pogo's mill expansion to 1.3 million tonnes per annum, including the Jameson cell installation which helped increase gold recoveries to 91 per cent.

But despite this significant investment in growth, free underlying cashflow still totalled A\$93M while unaudited NPAT was A\$100M.

The strong production and cashflow enabled Northern Star to cut its corporate debt by A\$125M to A\$375M while cash, bullion and investments stood at A\$372M at 31 December 2020. During the quarter, the Company also paid A\$40M in stamp duty/M&A and A\$10M for a FY20 tax balancing payment.

Northern Star Executive Chair Bill Beament said the results showed the Company was meeting its operational, financial and strategic goals on all levels.

"It was a very robust performance with strong production and margins generating significant cashflow and enabling us to invest in further growth while strengthening our balance sheet in the process," Mr Beament said.

"Our Australian operations, including KCGM, performed very well. The results at the Yandal Operations were again exceptional and further progress was made in our push to increase production and lower costs at our Kalgoorlie Operations."

Mr Beament said the performance at Pogo was testimony to the skills and commitment of the team there in the face of the considerable challenges emanating from COVID-19.

"Our team managed more than 100 cases of COVID during the quarter," he said. "This has inevitable impacts on productivity at many levels. But despite this, nearly 59,000oz were mined there in the quarter, costs were three per cent lower than in FY20, and free cashflow was strong.

"This is a huge credit to our people at Pogo and I thank them enormously for their dedication in such difficult circumstances."

Mr Beament said the preparations for Northern Star's merger with Saracen were proceeding to plan.

"I am very confident that the combined group is on track to meet the production and financial targets we have outlined," he said. "The potential productivity gains and growth opportunities are immense and are particularly valuable to investors given the lack of growth in so much of the global gold industry."

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

Northern Star	Units	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr	FYTD
Ore Hoisted – UG	Tonnes	1,638,465	1,817,494	1,574,229	1,586,661	3,160,890
Mined Grade	gpt Au	3.9	4.1	3.7	4.0	3.8
Gold in Ore Hoisted	Oz	206,206	237,219	187,426	201,880	389,306
Open Pit Ore Mined	Tonnes	885,304	859,236	1,210,570	851,540	2,062,110
Mined Grade	gpt Au	1.6	1.3	1.6	1.6	1.6
Gold in Open Pit Ore Mined	Oz	44,193	36,188	62,590	42,430	105,020
Total Mined Ounces	Oz	250,399	273,407	250,016	244,310	494,326
Milled Tonnes	Tonnes	3,149,968	3,472,351	3,229,433	3,227,432	6,456,865
Head Grade	gpt Au	2.7	2.7	2.5	2.7	2.6
Contained Ounces Milled	Oz	270,293	301,625	260,610	280,164	540,774
Recovery	%	88%	89%	89%	88%	89%
Gold Recovered	Oz	237,070	267,361	231,594	247,561	479,155
Gold Sold – Pre-Production	Oz	7,600	6,245	14,797	1,442	16,239
Gold Sold – Production	Oz	231,431	256,472	212,735	251,457	464,192
Ounces Sold	Oz	239,031	262,717	227,532	252,899	480,431
Cash Operating Cost	A\$/oz	1,301	1,164	1,190	1,201	1,196
All-in Sustaining Cost	A\$/oz	1,590	1,475	1,574	1,599	1,588
All-in Costs	A\$/oz	1,856	1,637	1,752	1,825	1,792
Total Stockpiles Contained Gold	Oz	1,657,810	1,634,335	1,633,758	1,603,914	1,603,914
Gold in Circuit (GIC)	Oz	35,317	40,179	43,177	38,314	38,314
Gold in safe/transit	Oz	159	-	-	-	-

Northern Star	Units	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr	FYTD
Revenue – Gold	A\$M	504.2	637.7	530.3	577.1	1,107.4
Average Price	A\$/oz	2,179	2,487	2,493	2,295	2,386

Table 1: Key Group Performance Figures (Quarterly)

Northern Star	Units	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr	FYTD
Underground Mining	A\$/oz	653	566	636	552	590
Open Pit Mining	A\$/oz	66	46	51	74	63
Processing	A\$/oz	475	395	467	379	420
Site Services	A\$/oz	80	88	100	93	96
Ore Stock & GIC Movements	A\$/oz	(20)	22	(107)	59	(17)
Royalties	A\$/oz	50	51	49	48	49
By Product Credits	A\$/oz	(3)	(4)	(6)	(4)	(5)
Cash Operating Costs	A\$/oz	1,301	1,164	1,190	1,201	1,196
Rehabilitation-Accretion & Amortisation	A\$/oz	10	6	10	8	9
Corporate Overheads ⁽¹⁾	A\$/oz	57	65	58	59	58
Mine Development/Sustaining CAPEX ⁽²⁾	A\$/oz	194	210	295	300	298
Mine Exploration	A\$/oz	28	30	21	31	27
All-in Sustaining Costs	A\$/oz	1,590	1,475	1,574	1,599	1,588
Exploration ⁽³⁾	A\$/oz	73	51	97	77	86
Growth Capital	A\$/oz	193	111	81	149	118
All-in Costs	A\$/oz	1,856	1,637	1,752	1,825	1,792
Depreciation & Amortisation	A\$/oz	425	393	399	380	389
Non-Cash Ore Stock & GIC Movements	A\$/oz	10	132	64	82	74

⁽¹⁾ NST includes non-cash share-based payment expenses in corporate overheads. These totalled A\$9/oz for the December quarter and A\$10/oz for the FYTD.

⁽²⁾ Includes equipment lease costs.

⁽³⁾ Excludes exploration spend at non-producing projects and regional sites (A\$4.1M Dec Qtr); (A\$7.9M Dec YTD).

Table 2: Key Group Cost per Ounce Measures

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

Production KPIs December Quarter	Units	Yandal Operations	Kalgoorlie Operations	KCGM Operations	Pogo Operations	Total
Ore Hoisted	Tonnes	444,512	736,276	203,174	202,699	1,586,661
Mined Grade	gpt Au	4.3	3.0	1.5	9.0	4.0
Gold in Ore Hoisted	Oz	61,877	71,709	9,549	58,744	201,880
Open Pit Ore Mined	Tonnes	83,169	-	768,371	-	851,540
Mined Grade	gpt Au	1.3	-	1.6	-	1.6
Gold in Open Pit Ore Mined	Oz	3,519	-	38,911	-	42,430
Total Mined Ounces	Oz	65,396	71,709	48,460	58,744	244,310
Milled Tonnes	Tonnes	663,981	715,588	1,644,821	203,042	3,227,432
Head Grade	gpt Au	3.7	3.0	1.4	9.0	2.7
Recovery	%	90	91	82	91	88
Gold Recovered	Oz	70,802	63,938	59,446	53,375	247,561
Gold Sold ⁽¹⁾	Oz	68,405	71,731	58,565	54,198	252,899
Cash Operating Cost	A\$/oz	883	1,452	1,175	1,299	1,201
All-in Sustaining Cost	A\$/oz	1,203	1,968	1,359	1,862	1,599
All-in Costs	A\$/oz	1,407	2,132	1,561	2,225	1,825
Depreciation & Amortisation	A\$/oz	298	419	387	386	380

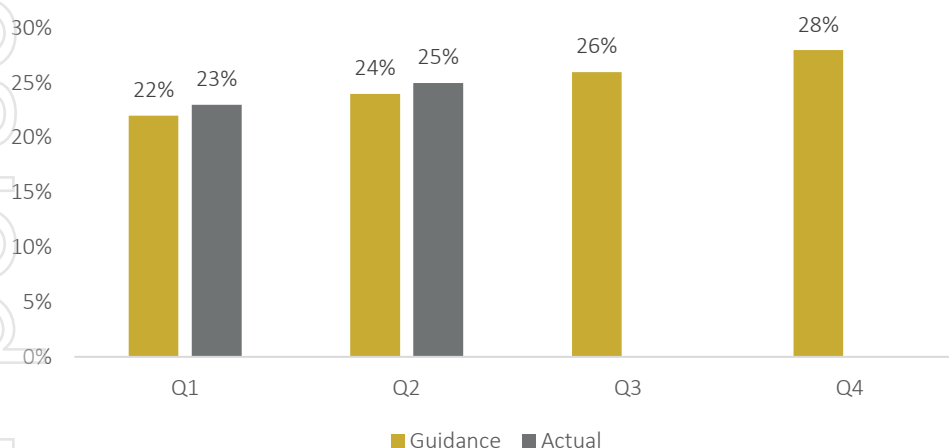
⁽¹⁾ KCGM: Includes 1,442 ounces sold (NST share) at KCGM Operations which are considered in pre-production phase.

Pogo Operations costs are presented in AUD which is the Group's presentation currency. USD cost disclosure is presented in Table 10.

Table 3: Key Quarterly Mine Production Performance

The quarterly guidance profile as a percentage of annual production can be seen in the graph below.

FY21 Quarterly % of mid-point production guidance



FINANCE

The following is a table of the cash, bullion and investments held at the end of each quarter:

		Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Cash and cash equivalents	A\$M	\$499.8	\$677.3	\$379.2	\$317.4
Bullion awaiting settlement ⁽¹⁾	A\$M	\$31.0	\$70.8	\$66.1	\$28.0
Equity Investments	A\$M	\$20.6	\$21.4	\$24.4	\$26.5
Total	A\$M	\$551.4	\$769.5	\$469.7	\$371.9

⁽¹⁾ Bullion awaiting settlement is dore which has been received by the refiner in the quarter and sold and is awaiting settlement.

Table 4: Cash, bullion and equity investments

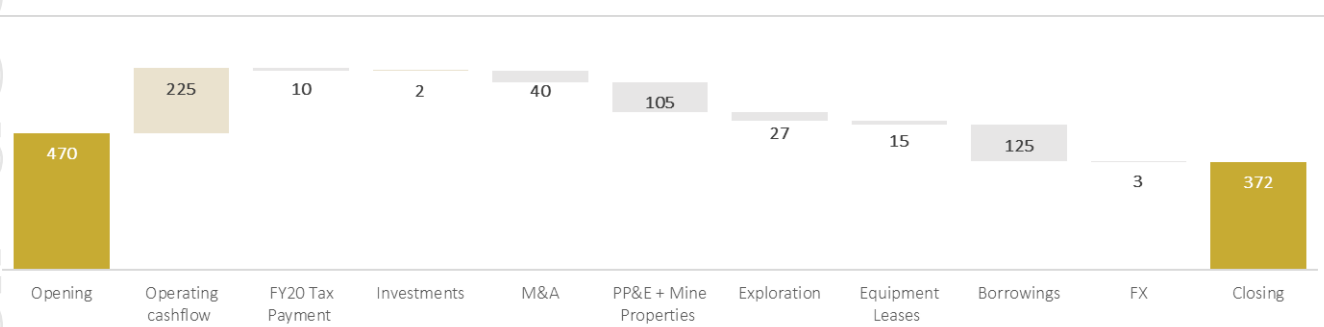
DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

The below table sets out the total of surface gold inventories:

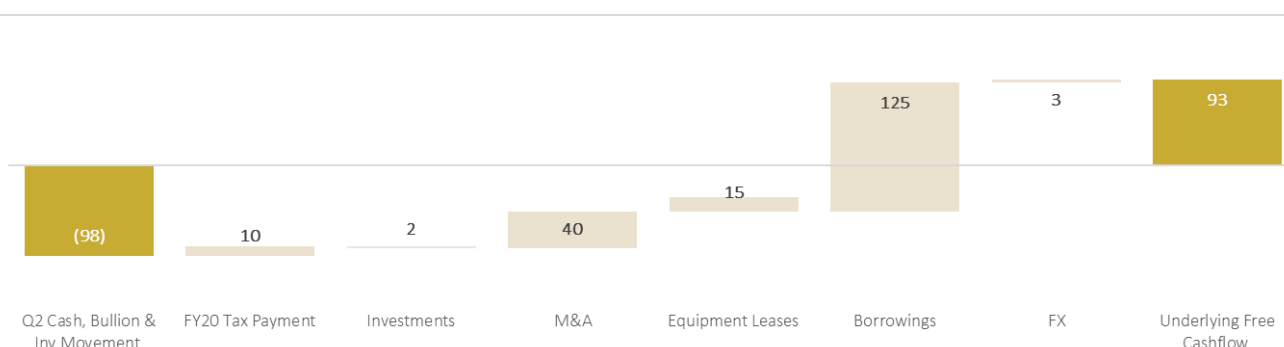
Gold Inventories	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Stockpiles contained gold (oz)	1,657,810	1,634,335	1,633,758	1,603,914
Gold in circuit (oz)	35,317	40,179	43,177	38,314
Gold in safe/transit (oz)	159	-	-	-
Total Gold Inventories (oz)	1,693,286	1,674,514	1,676,935	1,642,228

Table 5: Gold Inventories

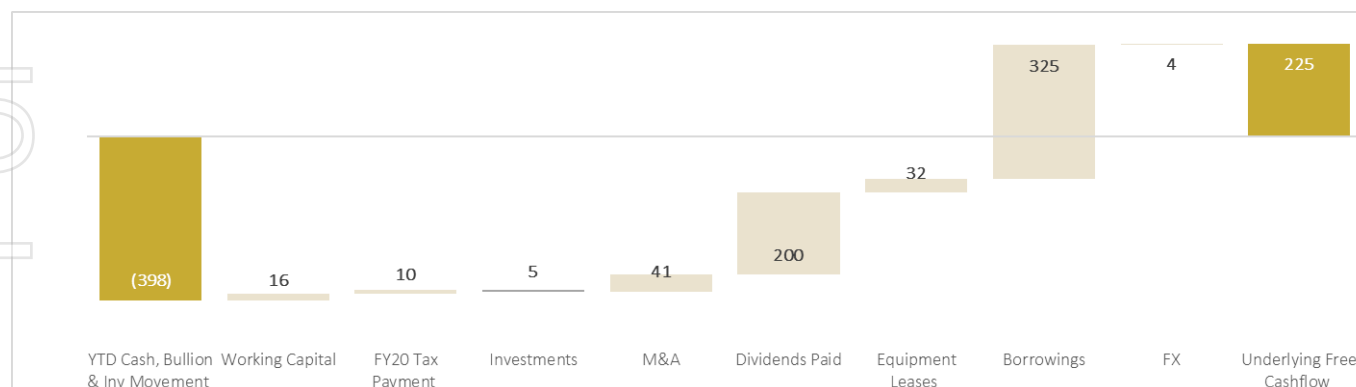
The below waterfall chart highlights the December quarter's operating cash flow together with movements in cash, bullion and investments (A\$M):



The below waterfall chart highlights the underlying free cash flow for the December quarter (A\$M):



The below waterfall chart highlights the underlying free cash flow for the December year to date (A\$M):



DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

Banking Facilities

At 31 December 2020, Northern Star had drawn corporate bank debt totalling A\$375 million. The Company repaid A\$125 million of corporate borrowings during the quarter.

Hedging

The below table outlines the Company's outstanding hedges at 31 December 2020:

Term	Jun-21 Half	Dec-21 Half	Jun-22 Half	Dec-22 Half	Total
Ounces (oz)	152,388	89,119	54,000	54,000	349,507
Gold Price (A\$/oz)	2,055	2,196	2,175	2,180	2,128

Table 6: Hedging commitments

No hedge commitments were added during the quarter.

OPERATIONS

Yandal Gold Operations

Production Summary - Yandal Operations		Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr	FYTD
Ore Mined – Underground	Tonnes	530,878	584,066	437,382	444,512	881,894
Mined Grade	gpt Au	3.6	4.5	3.6	4.3	4.0
Ounces Mined – Underground	Oz	60,767	84,333	50,657	61,877	112,534
Ore Mined – Open Pit	Tonnes	299,433	342,279	478,022	83,169	561,191
Mined Grade	gpt Au	1.5	1.6	1.9	1.3	1.8
Ounces Mined – Open Pit	Oz	14,332	17,865	29,289	3,519	32,808
Total Mined Ounces	Oz	75,099	102,198	79,946	65,396	145,342
Milled Tonnes	Tonnes	501,827	638,733	708,016	663,981	1,371,997
Head Grade	gpt Au	3.8	4.3	3.3	3.7	3.5
Recovery	%	89	92	90	90	90
Gold Recovered	Oz	54,568	80,666	67,896	70,802	138,698
Gold Sold	Oz	52,629	77,788	73,743	68,405	142,148
Cost per Ounce						
Underground Mining	A\$/oz	737	521	474	553	512
Open Pit Mining	A\$/oz	105	63	58	21	40
Processing	A\$/oz	255	168	202	204	203
Site Services	A\$/oz	67	50	43	51	46
Ore Stock & GIC Movements	A\$/oz	(182)	(36)	69	(4)	34
Royalties	A\$/oz	62	62	67	62	65
By Product Credits	A\$/oz	(3)	(3)	(5)	(4)	(4)
Cash Operating Costs	A\$/oz	1,041	825	908	883	896
Rehabilitation - Accretion & Amortisation	A\$/oz	7	5	4	5	5
Corporate Overheads	A\$/oz	60	66	64	63	63
Mine Development / Sustaining CAPEX	A\$/oz	235	137	213	224	218
Jundee Mine Exploration	A\$/oz	46	45	20	28	24
All-in Sustaining Costs	A\$/oz	1,389	1,078	1,209	1,203	1,206
Exploration	A\$/oz	55	68	95	62	79
Growth Capital	A\$/oz	348	94	82	142	111
All-in Costs	A\$/oz	1,792	1,240	1,386	1,407	1,396
Depreciation & Amortisation	A\$/oz	434	385	262	298	279
Non-Cash Ore Stock & GIC Movements	A\$/oz	(92)	(56)	70	21	46

Table 7: Summary Details - Yandal Operations

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

Kalgoorlie Gold Operations

Production Summary - Kalgoorlie Operations		Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr	FYTD
Ore Mined	Tonnes	748,618	846,966	697,921	736,276	1,434,197
Mined Grade	gpt Au	3.2	3.1	2.9	3.0	2.9
Ounces Mined	Oz	77,067	83,720	64,064	71,709	135,773
Milled Tonnes	Tonnes	887,021	974,046	680,205	715,588	1,395,793
Head Grade	gpt Au	2.9	3.0	2.7	3.0	2.9
Recovery	%	90	89	91	91	91
Gold Recovered	Oz	74,598	83,945	54,699	63,938	118,637
Gold Sold	Oz	77,425	79,057	48,824	71,731	120,555
Cost per Ounce						
Mining	A\$/oz	798	774	1,168	828	966
Processing	A\$/oz	372	387	561	313	414
Site Services	A\$/oz	58	58	100	72	83
Ore Stock & GIC Movements	A\$/oz	22	15	(439)	188	(66)
Royalties	A\$/oz	61	59	61	55	57
By Product Credits	A\$/oz	(4)	(5)	(7)	(4)	(5)
Cash Operating Costs	A\$/oz	1,307	1,288	1,444	1,452	1,449
Rehabilitation - Accretion & Amortisation	A\$/oz	7	7	15	10	12
Corporate Overheads	A\$/oz	62	66	66	63	64
Mine Development / Sustaining CAPEX	A\$/oz	194	208	532	377	440
Kalgoorlie Operations Mine Exploration	A\$/oz	49	46	59	66	63
All-in Sustaining Costs	A\$/oz	1,619	1,615	2,116	1,968	2,028
Exploration	A\$/oz	108	80	192	125	152
Growth Capital	A\$/oz	134	52	39	39	39
All-in Costs	A\$/oz	1,861	1,747	2,347	2,132	2,219
Depreciation & Amortisation	A\$/oz	426	418	567	419	479
Non-Cash Ore Stock & GIC Movements	A\$/oz	24	27	(96)	30	(21)

Table 8: Summary Details - Kalgoorlie Operations

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

KCGM Gold Operations (50% ownership share)

Production Summary - KCGM Operations		Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr	FYTD
Ore Mined – Underground	Tonnes	145,948	182,802	228,435	203,174	431,609
Mined Grade	gpt Au	2.5	2.4	1.7	1.5	1.6
Ounces Mined - Underground	Oz	11,801	14,241	12,717	9,549	22,266
Ore Mined – Open Pit	Tonnes	585,871	516,957	732,548	768,371	1,500,919
Mined Grade	gpt Au	1.6	1.1	1.4	1.6	1.5
Ounces Mined – Open Pit	Oz	29,861	18,323	33,301	38,911	72,212
Total Mined Ounces	Oz	41,662	32,564	46,018	48,460	94,478
Milled Tonnes	Tonnes	1,552,814	1,656,488	1,632,296	1,644,821	3,277,117
Head Grade	gpt Au	1.4	1.2	1.3	1.4	1.3
Recovery	%	83	83	84	82	83
Gold Recovered	Oz	58,564	53,397	55,189	59,446	114,636
Gold Sold – Pre-Production ⁽¹⁾	Oz	7,600	6,245	14,797	1,442	16,239
Gold Sold – Production	Oz	52,604	49,375	39,162	57,123	96,285
Gold Sold – Total	Oz	60,204	55,621	53,959	58,565	112,524
Cost per Ounce						
Underground Mining	A\$/oz	130	146	210	131	163
Open Pit Mining	A\$/oz	185	141	166	300	246
Processing	A\$/oz	706	623	767	557	642
Site Services	A\$/oz	68	90	98	88	93
Royalties	A\$/oz	67	71	62	71	67
Ore Stock & GIC Movements ⁽²⁾	A\$/oz	125	81	52	33	(2)
By Product Credits	A\$/oz	(4)	(6)	(13)	(5)	(8)
Cash Operating Costs	A\$/oz	1,277	1,146	1,238	1,175	1,201
Rehabilitation - Accretion & Amortisation	A\$/oz	14	6	13	9	11
Corporate Overheads	A\$/oz	63	68	66	62	62
Mine Development / Sustaining CAPEX	A\$/oz	98	180	144	113	126
All-in Sustaining Costs	A\$/oz	1,452	1,400	1,461	1,359	1,400
Exploration	A\$/oz	40	19	39	41	40
Growth Capital	A\$/oz	112	156	(27)	162	85
All-in Costs	A\$/oz	1,604	1,575	1,473	1,561	1,525
Depreciation & Amortisation	A\$/oz	346	287	369	387	380
Non-Cash Ore Stock & GIC Movements ⁽³⁾	A\$/oz	120	719	373	297	328

⁽¹⁾ Mining activity and sales from Morrison pit are considered in pre-production phase with costs associated excluded from cash cost and AISC metrics. All associated costs and revenues are capitalised as growth capital until commercial production is reached. Cost per ounce metrics are calculated using Gold Sold – Production ounces.

⁽²⁾ Cash movements only.

⁽³⁾ A fair value of A\$449.4 million was attributed to non-ROM ore stockpiles on acquisition of 50% of KCGM, which at acquisition contained an estimated 1.57 million ounces (NST share). The fair value attributed to these stockpiles is not included in Cash Operating Costs and All-in Sustaining Costs. The non-cash Ore Stock & GIC inventory movements disclosed in the table above are inclusive of the expensing of these acquired stockpiles as processed and sold.

Table 9: Summary Details - KCGM Operations

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

Pogo Gold Operations

Production Summary - Pogo Operations		Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr	FYTD
Ore Mined	Tonnes	213,021	203,660	210,491	202,699	413,190
Mined Grade	gpt Au	8.3	8.4	8.9	9.0	9.0
Ounces Mined	Oz	56,571	54,925	59,988	58,744	118,732
Milled Tonnes	Tonnes	208,306	203,084	208,916	203,042	411,958
Head Grade	gpt Au	8.2	8.5	8.9	9.0	9.0
Recovery	%	89	89	90	91	91
Gold Recovered	Oz	49,340	49,353	53,810	53,375	107,185
Gold Sold	Oz	48,773	50,251	51,006	54,198	105,204
Cost per Ounce						
Mining	US\$/oz	590	476	490	460	475
Processing	US\$/oz	413	349	381	365	373
Site Services	US\$/oz	92	125	134	129	130
Ore Stock & GIC Movements	US\$/oz	(50)	45	(57)	1	(27)
By Product Credits	US\$/oz	(1)	(1)	(2)	(1)	(1)
Cash Operating Costs	US\$/oz	1,044	994	946	954	950
Rehabilitation - Accretion & Amortisation	US\$/oz	6	6	7	6	7
Corporate Overheads	US\$/oz	27	38	27	31	29
Mine Development / Sustaining CAPEX	US\$/oz	167	231	218	357	289
Pogo Mine Exploration	US\$/oz	4	6	1	17	9
All-in Sustaining Costs	US\$/oz	1,248	1,275	1,199	1,365	1,284
Exploration	US\$/oz	48	8	36	53	45
Growth Capital	US\$/oz	134	124	145	211	179
All-in Costs	US\$/oz	1,430	1,407	1,380	1,629	1,508
Depreciation & Amortisation	US\$/oz	290	280	299	281	290
Non-Cash Ore Stock & GIC Movements	US\$/oz	(14)	9	(19)	3	(7)

Table 10: Summary Details - Pogo Operations (US\$)

Additional information on the individual operations can be found in Appendix 1.

EXPLORATION AND DEVELOPMENT - OPERATIONS

Northern Star's in-mine exploration and development drilling activity was maintained across all operational sites leading into a brief shutdown over the Christmas-New Year period.

Yandal

The Jundee underground diamond drill fleet maintained a high level of operating performance with increased focus on resource conversion programs across the quarter.

Resource development drilling programs concentrated within Clovis, Deakin North, Gateway, Griffin, Invicta, Lyons, Nexus, and Wilson systems. Stronger than expected results were recorded in extensions to the Deakin North, Clovis, Lyons and Griffin trends.

Exploration drilling activity continued within and outside the main mine corridors. Within the mine area, exploration drilling within the "Invicta Gap" area (Deakin North, Invicta) continued to generate encouraging results. Further south, new programs targeting extensions to the Hughes, McLarty, Nimary, Nexus and Westside systems also returned encouraging early results.

North of the mine infrastructure, exploration drilling continued to intersect encouraging mineralisation beneath, and along strike from, the existing Griffin and Cook open pits while deeper drilling in the Atlantis area outlined two potential new mineralisation trends at depth. Further south, drilling has continued to define new zones of mineralisation in the footwall of the Barton and Westside systems in addition to potential extensions to the Fisher and Menzies trends.

Further south, surface resource definition drilling programs are underway at both Julius and Orelia projects with all assay results pending at the end of the quarter.

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

Kanowna Belle

Underground resource definition drilling across the upper levels of the Kanowna Belle Mine continued to define extensions to the hanging wall Sims and Troy systems.

In-mine exploration drilling targeted the Lowes system extensions eastward across B and C Block areas with some success, while drilling also successfully extended the main Velvet system up plunge and tested the Reed area between Velvet and Lowes systems, west of E Block.

Kundana

Underground diamond resource definition drilling focussed on the extension of the Pope John, Moonbeam and Xmas deposits during the quarter with results within expectations. Exploration drilling programs targeted potential extensions to the Barkers and Falcon trends from the Pope John and Moonbeam mine infrastructure.

EKJV (NST 51%)

Underground and surface diamond drilling programs successfully extended the Pode system north from the Pegasus Mine and defined new mineralised surfaces within the hanging wall of the Hornet Mine.

Exploration drilling focussed on extensions to the Hera mineralisation at Rubicon, shallow mineralisation in the upper levels of the Hornet Mine and the northern extents of the Falcon mineralisation.

South Kalgoorlie

The in-mine underground resource drilling program continued to successfully extend the main NOZ trends and defined an emerging area of footwall mineralisation adjacent to the existing NOZ mine infrastructure.

Surface diamond drilling continues to target the deeper extents of the Mutooroo/NOZ mineralisation together with an early test of the potential of the West Mutooroo area.

KCGM (NST 50%)

Underground exploration drilling programs at Mount Charlotte targeted the Unit 6 stockwork, Duke and Kal East areas. In-mine exploration drilling into the Unit 6 stockwork continued to intersect multiple zones of "Mt Charlotte style" stockwork mineralisation in all holes. Further drilling into the Duke and Kal East prospects also intersected additional "Fimiston" style mineralisation while late in the quarter, underground exploration drilling also targeted the Little Wonder area to extend the recent surface drilling results (see below).

Surface resource definition diamond drilling continued adjacent to, and beneath, the LOM pit shell at Fimiston South. Additional resource definition programs were completed at Brownhill and Fimiston to support mining activities.

Surface exploration diamond drilling programs at Little Wonder and Mt Percy returned excellent visual indications of broad zones of stockwork mineralisation. Several surface diamond drill holes targeted the Golden Pike Stockwork target before moving to complete diamond tails on previous drilled holes at Jacks Reward late in the quarter.

Pogo

Underground diamond drilling activity within the mine area increased steadily across the quarter with improved productivity and COVID-19 protocols in place.

Underground drilling remained focussed on production and reserve definition programs across all the major production areas with results generally within expectations. Excellent intersections were recorded from the Liese 2 and South Pogo areas in addition to numerous unmodelled structures across the mine area.

REGIONAL EXPLORATION

Group regional exploration activity accelerated across the quarter in line with changes to regulatory and Northern Star internal COVID-19 protocols.

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

Yandal

Regional exploration continued with resource definition and regional reconnaissance drilling programs across selected areas of the acquired Bronzewing tenure.

Resource definition surface RC and diamond drilling continued across the central Corboys prospect area during the period with broad intersections recorded across a wide area. A large number of assays remain outstanding for the program.

A resource definition surface RC drilling program was completed at the Dragon-Venus project area targeting depth and hanging wall extensions to the previously mined mineralisation. Visual results have confirmed the geological interpretation with all assays outstanding at the end of the quarter.

Kanowna

A surface diamond drill hole tested the Kanowna Belle mine sequence immediately east of the deposit intersected modest mineralisation in an equivalent hanging wall position to the Velvet deposit.

Two surface diamond drill holes also tested the eastern extents of the BLC mineralised system, approximately three kilometres northeast of Kanowna Belle. Drilling intersected broad zones of stockwork veining and pervasive alteration with all assay results pending.

Further east, exploration RC drilling programs were also completed at the Kingswood prospect (north of Red Hill), the Lily Australis and Bonnie Charlie prospects on the White Feather mineralised trend. All assay results are pending.

EKJV

A surface RC resource definition drill program was completed at the Golden Hind prospect during the quarter. All holes successfully intersected the Strzelecki structure over variable widths with an upgraded resource model in preparation for detailed economic assessment.

South Kalgoorlie

In the Coolgardie area, surface RC exploration drilling continued at the Golden Eagle and Tindal's prospects extending known mineralisation trends.

In the central region, surface RC exploration drilling programs at Colnago and Freddo prospects targeted shallow extensions to known mineralisation trends. Further east, RC exploration drilling tested multiple targets in the Greater Boulder-Lefroy area including Mongoose, Porcupine, Dibley and Milani prospects.

Assay results for all programs were outstanding at the end of the quarter.

Carbine

The surface diamond drilling program beneath the Carbine open pit continued during the quarter outlining significant extensions to the Carbine Main Lode structure together with multiple zones of mineralisation in the both the footwall and hanging wall of the main structure. Early assay results have been very encouraging with most assays still outstanding.

To the north, surface RC drilling at the Phantom deposit continued to extend the shallow mineralisation northwards which will be further tested with a diamond drilling program next quarter.

At Paradigm, surface RC sterilisation drilling was completed over the proposed waste dump location while a single diamond drill hole beneath proposed infrastructure sites at the Eremenco prospect intersected several zones of quartz-sulphide veining. Assay results are pending.

At the adjacent Anthill prospect, surface RC and diamond drilling has confirmed a revised geological model and defined additional zones of mineralisation. Further infill drilling and metallurgical testwork is in progress ahead of a revised resource estimate for the project.

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

Carnage

Initial reconnaissance RC drilling programs were completed at the Bronze John, Aroggy and Chadwin prospects to test anomalous legacy drill results coincident with the Zuleika Shear Zone.

Pogo

The surface resource definition diamond drilling program on the Goodpaster project continued across the quarter prior to the shut down for the Christmas break. The planned program covers the north-eastern portion of the known Goodpaster mineralised system on 80m x 80m centres with the objective to deliver a maiden resource for the project.

Central Tanami Project (NST 40%)

No significant exploration undertaken due to COVID-19 restrictions and the onset of the "Wet season".

Tanami Regional Project (100% NST)

No significant exploration undertaken due to COVID-19 restrictions and the onset of the "Wet season".

Western Tanami

During the quarter, surface geophysical surveys were completed over several regional prospects including Osprey (Bald Hill mining centre), Gremlin, Road Runner North and Coyote East.

CORPORATE

- On 6 October 2020, the Company announced the execution of a Merger Implementation Deed with Saracen Mineral Holdings Ltd for a proposed merger of equals, under which Northern Star will acquire 100% of the shares on issue in Saracen, and eligible Saracen shareholders will receive 0.3763 Northern Star shares for each Saracen share held at the Scheme record date of 5 February 2021. Implementation of the Scheme of Arrangement will occur on 12 February 2021 subject to the approval of the Supreme Court of Western Australia being confirmed on 2 February 2021.
- The issued capital of the Company at the date of this report is:

Class of Securities	Issued Capital
Fully Paid Ordinary Shares (NST)	740,962,173
FY17 Long Term Incentive Plan - Unlisted Performance Rights issued in FY19 to employees other than the KMP, to be measured for vesting on 30 June 2021 (NSTAA)	327,000
FY20 Share Plan - Unlisted long term incentive Performance Rights issued in FY20, to be measured for vesting on 30 June 2022 (NSTAA)	1,171,226
FY20 Share Plan - Unlisted short term incentive Performance Rights issued in FY21, to be measured for vesting on 30 June 2021 (NSTAA)	489,671
FY20 Share Plan - Unlisted long term incentive Performance Rights issued in FY21, to be measured for vesting on 30 June 2023 (NSTAA)	1,054,663
FY20 Non-Executive Directors Share Plan - Unlisted Share Rights issued in FY21, vesting on 30 June 2021 (NSTAC)	18,560

Table 11: Issued Capital

- During the quarter, Northern Star hosted an investor site tour in conjunction with Saracen Mineral Holdings to the KCGM Operations, attended the Diggers and Dealers conference in Kalgoorlie, the annual Resources Rising Stars conference and Macquarie WA Forum in Perth, and the Goldman Sachs Global Metals & Mining conference (virtually). The Company maintains a proactive presentation calendar to stockbroking firms, institutional and retail investors to promote the Company and its activities.

Authorised for release to ASX by Bill Beament, Executive Chair.

Investor Relations Enquiries:

Rebecca Ciotti
Northern Star Resources Limited
T: +61 8 6188 2100
E: info@nsrltd.com

Media Enquiries:

Paul Armstrong
Read Corporate
T: +61 8 9388 1474
E: paul@readcorporate.com.au

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

ASX Listing Rules Disclosures

The information underpinning the combined group's combined gold production guidance in this announcement has been extracted from:

- (i) the ASX release by Northern Star entitled "Resources and Reserves, Production and Cost Guidance Update (ex-KCGM)" dated 13 August 2020, available at www.nsrld.com and www.asx.com (**Northern Star Announcement**);
- (ii) the ASX release by Saracen entitled "Carosue Dam and Thunderbox only – Reserves rise to 3.7Moz" dated 4 August 2020, available at www.saracen.com.au and www.asx.com (**Saracen Announcement**), and
- (iii) Northern Star's and Saracen's joint ASX announcement entitled "KCGM Reserves, Resources and Guidance Update" dated 18 August 2020, available at www.nsrld.com and www.asx.com (**KCGM Announcement**).

For the purposes of ASX Listing Rule 5.19:

- (a) Northern Star confirms that all material assumptions and technical parameters underpinning the production targets in the Northern Star Announcement continue to apply and have not materially changed. Northern Star confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from that announcement,
- (b) Saracen confirms that all material assumptions and technical parameters underpinning the production targets in the Saracen Announcement continue to apply and have not materially changed. Saracen confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from that announcement,
- (c) Both Northern Star and Saracen confirm that all material assumptions and technical parameters underpinning the production targets in the KCGM Announcement continue to apply and have not materially changed. Saracen and Northern Star confirm that the form and context in which the Competent Person's findings are presented have not been materially modified from that announcement.

Forward Looking Statements

Northern Star Resources Limited has prepared this announcement based on information available to it. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this announcement. To the maximum extent permitted by law, none of Northern Star Resources Limited, its directors, employees or agents, advisers, nor any other person accepts any liability, including, without limitation, any liability arising from fault or negligence on the part of any of them or any other person, for any loss arising from the use of this announcement or its contents or otherwise arising in connection with it.

This announcement is not an offer, invitation, solicitation or other recommendation with respect to the subscription for, purchase or sale of any security, and neither this announcement nor anything in it shall form the basis of any contract or commitment whatsoever. This announcement may contain forward looking statements that are subject to risk factors associated with gold exploration, mining and production businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to price fluctuations, actual demand, currency fluctuations, drilling and production results, Resource or Reserve estimations, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory changes, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

Currency Conversion Rate

*All currency conversions in this announcement have been converted at a currency of A\$/US\$ conversion rate of A\$0.7304 for the December quarter.

Financial Metrics

Operating mine cash flow is revenue minus site cash operating costs and excludes inventory movements.

Net mine cash flow is operating mine cash flow minus sustaining and growth capital (excludes exploration investment and corporate cost allocation).

All-in Cost (AIC) is all-in-sustaining cost plus exploration and growth capital. Regional exploration costs and exploration investment and care and maintenance costs undertaken at project centres (e.g. Paulsens, Tanami) are excluded from Group AIC metrics.

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

APPENDIX 1 – ADDITIONAL INFORMATION - OPERATIONS

Yandal Gold Operations

Safety

There were zero Lost Time Injuries during the quarter.

Underground Production

Mine Development:

	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Decline	478m	189m	407	519
Level	1,076m	718m	1,158	989
Operating	3,603m	4,045m	3,158	3,670
Total (metres)	5,157m	4,952m	4,723	5,178

Table 1: Underground Production – Mine Development

Decline development at Jundee continued in the Moneyline, Gringotts, Lyons, Invicta and Deakin South mining areas. Capital development continued through the Revelation, Moneyline, Hampton, Gringotts, Hughes, Deakin North, Westside North, Nimary, Nimary East, Partridge, Nexus and Cardassian mining areas.

	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Development ore (t)	154,052	176,466	98,592	127,317
Development grade (gpt)	3.0	6.0	6.0	4.4
Stope ore (t)	376,826	407,600	338,790	317,195
Stope grade (gpt)	3.8	3.9	2.9	4.3
Total ore (t)	530,878	584,066	437,382	444,512
Total grade (gpt)	3.6	4.5	3.6	4.3
Contained gold (oz)	60,767	84,333	50,657	61,877

t=tonnes, gpt=grams per tonne, oz=ounces

Table 2: Underground Production – Ore Production

Open Pit Production

Open pit mining reached pit bottom at Ramone, south of Jundee, in October.

Mine Movements:

	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Waste Mined (BCM)	258,840	226,992	65,141	-
Ore Mined (BCM)	117,925	134,127	170,428	8,855
Total Mine Movement (BCM)	376,765	361,119	235,569	8,855

Table 3: Open Pit Movement

	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Total Ore (t)	299,433	342,279	478,022	83,169
Total Grade (gpt)	1.5	1.6	1.9	1.3
Contained gold (oz)	14,332	17,865	29,289	3,519

t=tonnes, gpt=grams per tonne, oz=ounces

Table 4: Open Pit Production – Ore Mined

Gold Production

Yandal ore milled in the December quarter was 663,981 tonnes at 3.7gpt and 90% recovery for 70,802oz produced.

Ore stocks at the end of the quarter totalled 75,225oz of gold, with a further 6,465oz in GIC.

Gold Sales

68,405oz were sold.

Kalgoorlie Gold Operations

Introduction

Kalgoorlie Gold Operations consist of the Kundana, EKJV (East Kundana Joint Venture), Kanowna Belle and HBJ (South Kalgoorlie) operations.

Safety

There were three lost time injuries during the quarter.

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

Underground Production

Mine Development:

	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Decline	1,035m	1,374m	887m	729m
Level	2,772m	1,040m	2,674m	2,657m
Operating	4,257m	5,088m	4,269m	5,172m
Total (metres)	8,064m	7,502m	7,830m	8,558m

Table 5: Underground Production – Mine Development (physicals represent 100% share of EKJV development metres)

Development at the Kundana operation focussed on ore development, along with decline advance at Moonbeam, Pope John, Millennium and Centenary declines. Kanowna Belle's focus remained on blocks A, C, D-East, and E opportunity. HBJ focused on decline and level access as a priority in the NOZ area as well as opening required infrastructure positions for Mutooroo. EKJV development focussed on the Hornet and Pode declines and associated ore drives, along with continuation of both lower and upper Pegasus mining areas.

	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Development ore (t)	244,799	275,500	210,569	263,802
Development grade (gpt)	2.8	2.5	2.3	2.6
Stope ore (t)	503,818	571,465	487,352	472,473
Stope grade (gpt)	3.4	3.4	3.1	3.2
Total ore (t)	748,618	846,966	697,921	736,275
Total grade (gpt)	3.2	3.1	2.9	3.0
Contained gold (oz)	77,067	83,720	64,064	71,709

t=tonnes, gpt=grams per tonne, oz=ounces

Table 6: Underground Production – Ore Production (physicals represent Northern Star's 51% share of JV ore)

Gold Production

A total of 715,588 tonnes of ore was milled in the December quarter at 3.06gpt and 90.8% recovery for 63,937oz produced utilising the Northern Star owned processing plants.

Ore stocks at the end of the quarter totalled 31,473oz of gold, with a further 13,264oz in GIC.

Gold Sales

71,731oz were sold.

KCGM Operations (100%)

Safety

There were two Lost Time Injuries during the quarter.

Open Pit Production

Mine Movements:

	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Waste Mined (t)	5,474,319	8,488,711	10,677,812	13,273,736
Ore Mined (t)	1,171,741	1,033,914	1,465,097	1,536,742
Total Mine Movement (t)	6,646,060	9,522,625	12,142,909	14,810,487

Table 7: Open Pit Movement

	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Total Ore (t)	1,171,741	1,033,914	1,465,097	1,536,742
Total Grade (gpt)	1.6	1.1	1.4	1.6
Contained gold (oz)	59,721	36,645	66,603	77,823

t=tonnes, gpt=grams per tonne, oz=ounces

Table 8: Open Pit Production – Ore Mined

Ore production for the quarter was sourced from the Golden Pike, Morrison and Oroya Brownhill (OBH) areas of the open pit with increased grade due to increased production from the higher grade Golden Pike area. KCGM open pit material movement increased by 22% over the previous quarter as all available open pit mining fronts were utilised.

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

Underground Production (Mt Charlotte)

Mine Development:

	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Decline	0m	64m	171m	150m
Level	49m	66m	386m	197m
Operating	993m	1,192m	722m	629m
Total (metres)	1,042m	1,322m	1,279m	976m

Table 9: Underground Production – Mine Development

	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Total ore (t)	291,897	365,603	456,870	406,348
Total grade (gpt)	2.5	2.4	1.7	1.5
Contained gold (oz)	23,556	28,483	25,434	19,099

t=tonnes, gpt=grams per tonne, oz=ounces

Table 10: Underground Production – Ore Production

Underground ore production was sourced from the Mt Charlotte and Hidden Secret areas, with greater volumes mined from the lower grade sub-level cave and remnant areas. Development focus was on rehabilitation of the bottom decline to re-establish exploration drill locations to target orebody extensions.

Gold Production (50%)

Ore milled in the December quarter was 1,644,821 tonnes at 1.4gpt and 82% recovery for 59,446oz produced.

There was a total of 12,709oz in GIC.

Gold Sales (50%)

Northern Star's gold sales were 58,565oz.

Pogo Operations

Safety

There were no Lost Time Injuries during the quarter. There were 107 COVID-19 cases during the quarter, all recovered.

Underground Production

Mine Development:

	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Decline	183m	521m	468m	608m
Level	1,194m	832m	729m	1,242m
Operating	2,066m	2,259m	2,427m	1,286m
Total (metres)	3,443m	3,612m	3,623m	3,136m

Table 11: Underground Production – Mine Development

	Mar-20 Qtr	Jun-20 Qtr	Sept-20 Qtr	Dec-20 Qtr
Development ore (t)	69,116	76,348	81,732	46,537
Development grade (gpt)	7.9	8.7	10.0	9.8
Stope ore (t)	143,905	127,312	128,759	156,163
Stope grade (gpt)	8.4	8.2	8.1	8.8
Total ore (t)	213,021	203,660	210,491	202,699
Total grade (gpt)	8.3	8.4	8.9	9.0
Contained gold (oz)	56,571	54,925	59,988	58,744

t=tonnes, gpt=grams per tonne, oz=ounces

Table 12: Underground Production – Ore Production

There was continued focus on advancing the South Pogo, Liese and Fun Zone declines with 608m of development for the quarter. In addition to this infrastructure development for exploration drill platforms has been a strong focus.

The December quarter still saw impacts from COVID processes across Pogo and Alaska. These impacts were impeding the flow of personnel and materials to the Pogo operations. On site the focus from Pogo personnel has been fantastic ensuring that any direct COVID illness or suspected illness is being managed very well and any wider impacts significantly minimised.

Even during this period, the focus has been ensuring Pogo concentrates on the longer-term priorities with continued geological data collection and advancement of the declines to ensure we set the operation up for future success. Even with lower personnel levels and output, the delivery of ore for processing has been managed well during this period.

DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

► Gold Production

Pogo ore milled in the December quarter was 203,042 tonnes at 9.0gpt and 90.6% recovery for 53,375oz produced.
There was a total of 5,876oz in GIC.

► Gold Sales

54,198oz were sold.

For personal use only