

December 2015 Quarterly Activities Report

STRONG OPERATIONAL AND FINANCIAL PERFORMANCE AS NORTHERN STAR PREPARES FOR NEXT CHAPTER OF GROWTH

KEY POINTS

- ▶ **Outstanding December Quarter with production at the top end and costs below the bottom end of guidance respectively**
- ▶ **Production totalled 145,251oz at an all-in sustaining cost (AISC) of A\$1,040/oz (FY16 guidance is 535,000-570,000oz at AISC of A\$1,050-A\$1,100/oz)**
- ▶ **Cash, bullion and investments rose by A\$30m in the December Quarter to A\$226m after paying out A\$18m in dividends and A\$23.5m on organic growth and development; Northern Star remains debt-free**
- ▶ **Production for six months to 31 December totalled 285,494oz at an AISC of A\$1,062/oz**
- ▶ **Strong Progress made on strategy to grow production to 700,000ozpa in FY18 from organic sources**
- ▶ **Organic growth strategy reflects Northern Star's ongoing commitment to maximising financial returns for its Shareholders, including an industry-leading return on equity**
- ▶ **Turnaround at Plutonic continues with AISC down 11% from September Quarter and positive scoping study results from the Hermes Project**
- ▶ **December Quarter production:**
 - **Jundee Gold Operations:**
 - 60,273oz mined and 53,760oz sold at an AISC A\$986/oz
 - **Kundana Gold Operations:**
 - 29,271oz mined and 27,034oz sold at an AISC A\$898/oz
 - **Kanowna Belle Gold Operations:**
 - 27,028oz mined and 25,153oz sold at an AISC A\$811/oz
 - **Paulsens Gold Operations:**
 - 20,730oz mined and 19,161oz sold at an AISC A\$1,156/oz
 - **Plutonic Gold Operations:**
 - 21,315oz mined and 16,910oz sold at an AISC A\$1,645/oz
- ▶ **Northern Star will host a quarterly conference call today at 8.30am AWST (11.30am AEDT), Thursday, 28 January. The call can be accessed at <http://boardroom.media/broadcast/?refid=&eid=56a56ef42ac671c40a8c7007>**

Northern Star Resources Managing Director Bill Beament said:

"Northern Star enjoyed an outstanding quarter in every respect. The A\$30 million increase in cash, bullion and investments to A\$226 million, which came despite paying the full year dividend and investing in our growth program, reflects the fact that our operational success translates to financial success.

"We sold 142,017oz in the quarter at an average realised price of A\$1,484/oz, again highlighting the robust margins and strong cash flow our assets generate. And we are selling gold for A\$100/oz more in the current March quarter.

"We are now fully committed to the detailed planning which underpins our strategy to grow production to 700,000ozpa by FY18. This growth will all come from organic sources, further increasing our free cash flow and, importantly, enabling us to maintain our reputation for having one of the highest rates of return on capital on the ASX."

ASX ANNOUNCEMENT 28 January 2016

Australian Securities
Exchange Code: NST

Board of Directors

Mr Chris Rowe
Non-Executive Chairman

Mr Bill Beament
Managing Director

Mr Peter O'Connor
Non-Executive Director

Mr John Fitzgerald
Non-Executive Director

Ms Liza Carpene
Company Secretary

Issued Capital

Shares 600 million
Options 4.3 million

Current Share Price A\$3.23

Market Capitalisation
\$1.94 billion

Cash, Bullion & Investments
31 Dec 2015 - A\$226 million

Projects

Paulsens Mine
Plutonic Mine
Kanowna Belle Mine
Kundana Mines (51% of EKJV)
Jundee Mine
Ashburton
Central Tanami (25% of JV)

Listed Investments

VXR, DAU, RND, TBR, ALY

QUARTERLY ACTIVITIES REPORT

For the Quarter ended 31 December 2015



Northern Star	Units	Mar-15 Qtr	Jun-15 Qtr	Sept-15 Qtr	Dec-15 Qtr	YTD
Ore Hoisted	Tonnes	824,328	901,515	821,070	886,185	1,707,254
Mined Grade	gpt Au	5.3	5.6	5.7	5.6	5.6
Gold in Ore Hoisted	Oz	140,051	161,808	150,402	158,617	309,018
Milled Tonnes	Tonnes	883,969	959,999	911,818	970,999	1,882,817
Head Grade	gpt Au	5.1	5.5	5.3	5.1	5.2
Ounces Produced	Oz	144,044	168,767	154,445	159,133	313,578
Recovery	%	91	91	91	91	91
Gold Recovered	Oz	131,169	153,360	140,242	145,251	285,493
Ounces Sold	Oz	135,498	152,446	141,556	142,017	283,573
Average Gold Price	A\$/oz	1,500	1,497	1,509	1,484	1,497
Revenue	A\$M	203.3	228.3	213.6	210.8	424.4
Cash Operating Cost	A\$/oz	876	900	836	837	836
All in Sustaining Cost	A\$/oz	1,172	983	1,083	1,040	1,062
Total Stockpiles Contained Gold	Oz	80,124	73,339	70,061	70,453	70,453
Gold in Circuit (GIC)	Oz	18,333	19,016	17,505	20,816	20,816
Gold in Transit (GIT)	Oz	-	-	-	-	-

Table 1: Key Group Performance Figures (Quarterly)

Northern Star	Units	Mar-15 Qtr	Jun-15 Qtr	Sept-15 Qtr	Dec-15 Qtr	YTD
Mining	\$/oz	546	510	551	561	556
Processing	\$/oz	195	180	189	188	189
Site Services	\$/oz	57	55	67	62	65
Ore Stock & GIC Movements	\$/oz	43	120	(3)	(9)	(6)
Royalties	\$/oz	38	38	35	40	37
By Product Credits	\$/oz	(3)	(3)	(3)	(4)	(4)
Rehabilitation-Accretion & Amortisation	\$/oz	50	(149)	8	2	5
Corporate Overheads	\$/oz	23	27	44	35	40
Mine Development/Sustaining CAPEX	\$/oz	184	179	177	147	162
Mine Exploration	\$/oz	39	26	18	19	19
All in Sustaining Costs	\$/oz	1,172	983	1,083	1,040	1,062
Depreciation & Amortisation	\$/oz	176	601	276	300	288

Table 2: Key Group Cost per Ounce Measures

Production KPIs Dec Quarter	Units	Paulsens	Plutonic	Kanowna Belle	Kundana	Jundee	Total
Total Ore Hoisted	Tonnes	92,772	173,450	207,061	114,213	298,689	886,185
Mine Grade	gpt Au	7.0	3.8	4.1	8.0	6.3	5.6
Gold in Ore Hoisted	Oz	20,730	21,315	27,028	29,271	60,273	158,617
Milled Tonnes	Tonnes	95,953	198,959	196,489	120,415	359,183	970,999
Head Grade	gpt Au	7.3	3.5	3.8	7.3	5.4	5.1
Recovery	%	90	78	94	96	93	91
Gold Recovered	Oz	20,152	17,248	22,572	27,034	58,246	145,251
Gold Sold	Oz	19,161	16,910	25,153	27,034	53,760	142,017
Cash Operating Costs	A\$/oz	795	1,531	753	655	764	837
All In Sustaining Costs	A\$/oz	1,156	1,645	811	898	986	1,040
Depreciation & Amortisation	A\$/oz	390	257	206	233	361	300

Table 3: Key Quarterly Mine Production Performance

FINANCE

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

	Units	Mar-15 Qtr	Jun-15 Qtr	Sep-15 Qtr	Dec-15 Qtr
Cash at bank	A\$M	\$77.4	\$167.5	\$163.4	\$210.9
Bullion awaiting settlement ⁽¹⁾	A\$M	\$29.1	\$2.7	\$26.1	\$9.1
Investments	A\$M	\$5.2	\$7.5	\$6.5	\$5.5
Total	A\$M	\$111.7	\$177.7	\$196.0	\$225.5

Table 4: Cash, Bullion and ASX equity investments

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

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

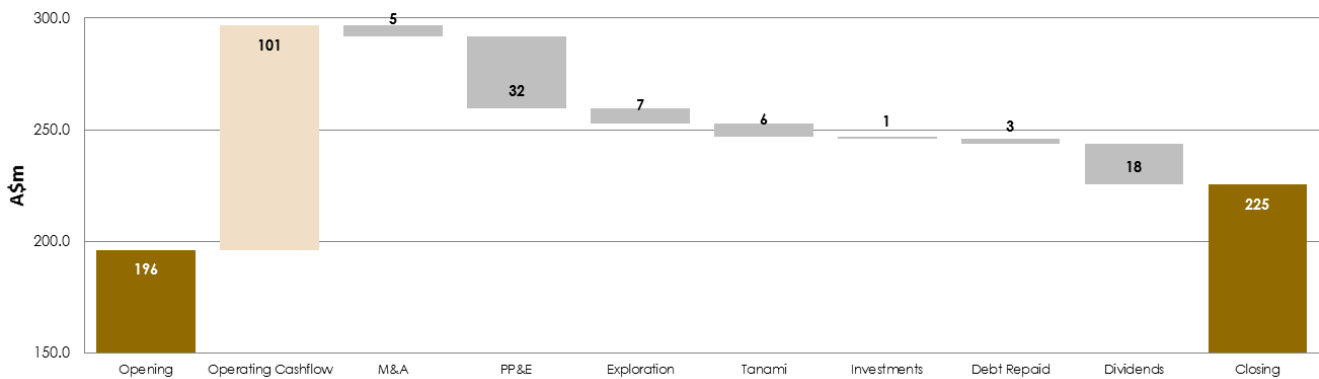
Gold Inventories	Mar-15 Qtr	Jun-15 Qtr	Sep-15 Qtr	Dec-15 Qtr
Stockpiles contained gold (oz)	80,124	73,339	70,061	70,453
Gold in circuit (oz)	18,333	19,016	17,505	20,816
Gold in transit (oz)	-	-	-	-
Total Gold Inventories (oz)	98,456	92,355	87,566	91,269

Table 5: Gold Inventories

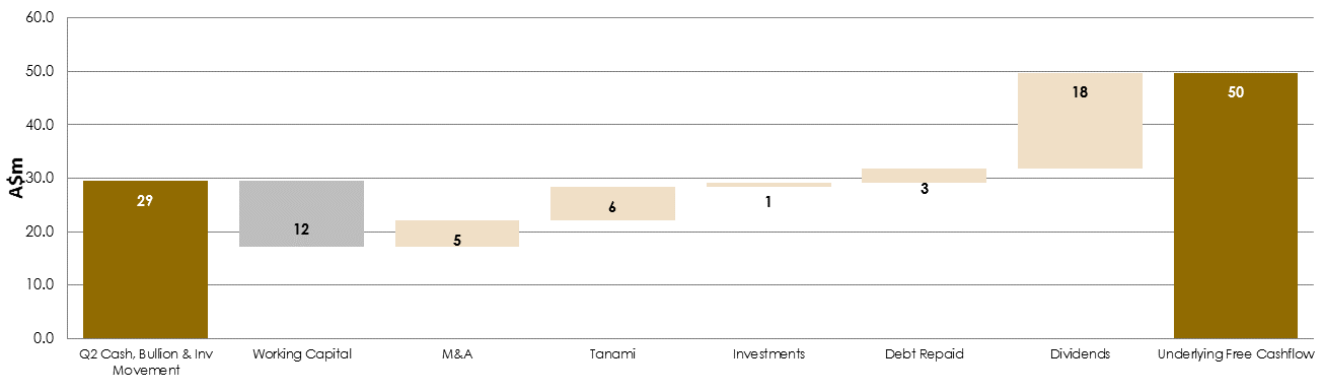
QUARTERLY ACTIVITIES REPORT

For the Quarter ended 31 December 2015

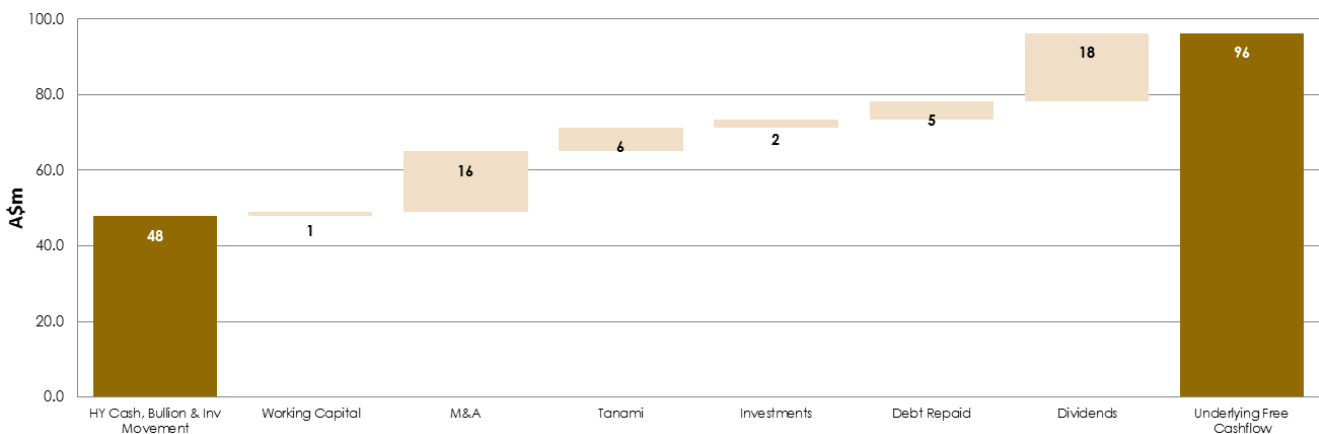
The below waterfall chart highlights the December Quarter's operating cash flow together with movements in cash, bullion and investments:



The below waterfall chart highlights the underlying free cash flow for the December Quarter:



The below waterfall chart provides an overview of year to date underlying free cash flow:



Banking Facilities

During the quarter the Company's Revolving Loan Facility (RLF) limit of A\$100M has been reduced to A\$90M per the amortisation schedule. The RLF is undrawn with the limit available for draw down.

Hedging

The below table outlines the Company's current hedging position:

Term	Mar -16 Qtr	Jun -16 Qtr	Sep -16 Qtr	Dec -16 Qtr	Total
Ounces	39,000	39,000	19,500	19,500	117,000
Gold Price	A\$1,615	A\$1,618	A\$1,638	A\$1,640	A\$1,624

Table 6: Hedging commitments

During the quarter 72,000oz of hedging was added for delivery across CY16 at an average of A\$1,642/oz.

QUARTERLY ACTIVITIES REPORT

For the Quarter ended 31 December 2015



OPERATIONS

Paulsens Gold Operations

Production Summary Paulsens		Mar-15 Qtr	Jun-15 Qtr	Sep-15 Qtr	Dec-15 Qtr	YTD
Ore Mined	Tonnes	94,124	115,723	105,832	92,772	198,604
Mined Grade	gpt Au	5.2	5.9	7.9	7.0	7.5
Ounces Mined	Oz	15,671	21,918	26,892	20,730	47,622
Milled Tonnes	Tonnes	124,003	110,551	101,311	95,953	197,264
Head Grade	gpt Au	5.1	6.1	7.8	7.3	7.5
Recovery	%	90	89	92	90	91
Gold Recovered	Oz	18,177	19,260	23,259	20,152	43,411
Gold Sold	Oz	18,868	19,848	22,736	19,161	41,897
Cost per Ounce						
Mining	A\$/oz	444	431	377	447	409
Processing	A\$/oz	244	274	189	245	215
Site Services	A\$/oz	55	74	62	74	67
Ore Stock Movements	A\$/oz	226	36	(23)	(6)	(15)
Royalties	A\$/oz	39	37	36	38	37
By Product Credits	A\$/oz	(2)	(3)	(2)	(2)	(2)
Cash Operating Costs	A\$/oz	1,005	849	639	795	710
Rehabilitation - Accretion & Amortisation	A\$/oz	3	10	6	5	5
Corporate Overheads	A\$/oz	23	28	45	35	41
Mine Development / Sustaining CAPEX	A\$/oz	199	236	292	315	303
Paulsens Mine Exploration	A\$/oz	44	42	25	5	15
All in Sustaining Costs	A\$/oz	1,275	1,165	1,007	1,156	1,075
Depreciation & Amortisation	A\$/oz	341	340	360	390	374

Table 7: Summary Details – Paulsens

Plutonic Gold Operations

Production Summary Plutonic		Mar-15 Qtr	Jun-15 Qtr	Sep-15 Qtr	Dec-15 Qtr	YTD
Ore Mined	Tonnes	190,537	200,549	159,172	173,450	332,622
Mined Grade	gpt Au	3.7	3.7	4.0	3.8	3.9
Ounces Mined	Oz	22,757	24,068	20,651	21,315	41,966
Milled Tonnes	Tonnes	192,054	214,359	175,640	198,959	374,598
Head Grade	gpt Au	3.6	3.6	3.7	3.5	3.6
Recovery	%	83	79	77	78	78
Gold Recovered	Oz	18,712	19,570	16,147	17,248	33,395
Gold Sold	Oz	19,675	19,287	16,365	16,910	33,275
Cost per Ounce						
Mining	A\$/oz	966	1,052	1,274	1,107	1,189
Processing	A\$/oz	266	308	270	309	290
Site Services	A\$/oz	89	95	113	87	100
Ore Stock Movements	A\$/oz	26	20	5	(9)	(2)
Royalties	A\$/oz	39	38	31	40	36
By Product Credits	A\$/oz	(2)	(2)	(2)	(3)	(3)
Cash Operating Costs	A\$/oz	1,383	1,511	1,691	1,531	1,609
Rehabilitation - Accretion & Amortisation	A\$/oz	99	(449)	14	(6)	4
Corporate Overheads	A\$/oz	24	27	46	35	41
Mine Development / Sustaining CAPEX	A\$/oz	209	20	81	85	83
Plutonic Mine Exploration	A\$/oz	68	51	-	-	-
All in Sustaining Costs	A\$/oz	1,784	1,160	1,832	1,645	1,737
Depreciation & Amortisation	A\$/oz	135	1,155	330	257	293

Table 8: Summary Details – Plutonic

QUARTERLY ACTIVITIES REPORT

For the Quarter ended 31 December 2015

Kanowna Belle Gold Operations

Production Summary Kanowna Belle		Mar-15 Qtr	Jun-15 Qtr	Sep-15 Qtr	Dec-15 Qtr	YTD
Ore Mined	Tonnes	157,653	186,208	183,668	207,061	390,728
Mined Grade	gpt Au	4.5	4.9	4.8	4.1	4.4
Ounces Mined	Oz	22,701	29,379	28,597	27,028	55,625
Milled Tonnes	Tonnes	178,234	198,129	195,650	196,489	392,139
Head Grade	gpt Au	4.1	4.9	4.3	3.8	4.1
Recovery	%	92	93	94	94	94
Gold Recovered	Oz	21,411	28,956	25,524	22,572	48,095
Gold Sold	Oz	23,601	27,276	27,074	25,153	52,226
Cost per Ounce						
Mining	A\$/oz	532	424	443	513	476
Processing	A\$/oz	189	99	166	122	145
Site Services	A\$/oz	37	39	80	74	78
Ore Stock Movements	A\$/oz	49	192	(26)	3	(12)
Royalties	A\$/oz	38	39	35	47	41
By Product Credits	A\$/oz	(4)	(6)	(6)	(6)	(6)
Cash Operating Costs	A\$/oz	841	787	692	753	721
Rehabilitation - Accretion & Amortisation	A\$/oz	50	(166)	11	(1)	5
Corporate Overheads	A\$/oz	21	27	45	34	40
Mine Development / Sustaining CAPEX	A\$/oz	70	152	3	15	9
Kanowna Belle Mine Exploration	A\$/oz	-	-	12	9	11
All in Sustaining Costs	A\$/oz	982	800	763	811	787
Depreciation & Amortisation	A\$/oz	35	586	138	206	170

Table 9: Summary Details – Kanowna Belle

Kundana Gold Operations

Production Summary Kundana		Mar-15 Qtr	Jun-15 Qtr	Sep-15 Qtr	Dec-15 Qtr	YTD
Ore Mined	Tonnes	89,025	108,313	92,660	114,213	206,872
Mined Grade	gpt Au	8.4	8.6	6.7	8.0	7.4
Ounces Mined	Oz	23,988	29,898	19,820	29,271	49,091
Milled Tonnes	Tonnes	74,283	99,053	91,658	120,415	212,074
Head Grade	gpt Au	8.4	8.8	7.5	7.3	7.4
Recovery	%	96	96	96	96	96
Gold Recovered	Oz	19,284	27,024	21,219	27,034	48,253
Gold Sold	Oz	19,285	27,022	21,219	27,034	48,253
Cost per Ounce						
Mining	A\$/oz	438	365	464	438	450
Processing	A\$/oz	162	154	186	134	157
Site Services	A\$/oz	46	35	50	45	47
Ore Stock Movements	A\$/oz	(51)	(6)	(29)	6	(9)
Royalties	A\$/oz	36	35	31	36	34
By Product Credits	A\$/oz	(4)	(5)	(4)	(4)	(4)
Cash Operating Costs	A\$/oz	627	578	698	655	674
Rehabilitation - Accretion & Amortisation	A\$/oz	3	(13)	-	-	-
Corporate Overheads	A\$/oz	25	27	42	36	39
Mine Development / Sustaining CAPEX	A\$/oz	245	172	191	172	181
Kundana Mine Exploration	A\$/oz	40	24	31	35	33
All in Sustaining Costs	A\$/oz	940	788	962	898	926
Depreciation & Amortisation	A\$/oz	109	616	277	233	252

Table 10: Summary Details – Kundana

Jundee Gold Operations

Production Summary Jundee		Mar-15 Qtr	Jun-15 Qtr	Sep-15 Qtr	Dec-15 Qtr	YTD
Ore Mined	Tonnes	292,989	290,722	279,738	298,689	578,427
Mined Grade	gpt Au	5.8	6.1	6.1	6.3	6.2
Ounces Mined	Oz	54,933	56,545	54,442	60,273	114,715
Milled Tonnes	Tonnes	315,395	337,907	347,559	359,183	706,742
Head Grade	gpt Au	5.7	5.8	5.3	5.4	5.3
Recovery	%	93	93	92	93	92
Gold Recovered	Oz	53,584	58,550	54,094	58,246	112,339
Gold Sold	Oz	54,070	59,014	54,163	53,760	107,923
Cost per Ounce						
Mining	A\$/oz	474	467	494	514	503
Processing	A\$/oz	168	158	178	187	183
Site Services	A\$/oz	59	51	56	52	54
Ore Stock Movements	A\$/oz	16	205	24	(24)	-
Royalties	A\$/oz	39	38	37	38	38
By Product Credits	A\$/oz	(3)	(3)	(3)	(3)	(3)
Cash Operating Costs	A\$/oz	752	916	786	764	775
Rehabilitation - Accretion & Amortisation	A\$/oz	64	(158)	8	6	7
Corporate Overheads	A\$/oz	23	27	45	35	40
Mine Development / Sustaining CAPEX	A\$/oz	196	227	238	155	197
Jundee Mine Exploration	A\$/oz	44	25	20	26	23
All in Sustaining Costs	A\$/oz	1,079	1,037	1,097	986	1,042
Depreciation & Amortisation	A\$/oz	218	507	294	361	327

Table 11: Summary Details – Jundee

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

EXPLORATION AND DEVELOPMENT - OPERATIONS

Kanowna Belle

Underground diamond drilling of the Velvet target (located 600m west of the Lowes underground orebody) from the new drill drive development accelerated during the quarter with 13,590m completed. Initial results have outlined a zone of gold mineralisation hosted in a volcanic unit within the "Grit Dam" grit adjacent to the main Fitzroy Fault. Detailed infill drilling will continue during the next quarter ahead of an initial Resource estimate being completed.

Reserve definition drilling on Lowes D block east defined a modest extension to the existing Lowes mineralisation. The results are being incorporated into revised mining designs for the area.

Kundana (NST 51% EKJV)

Underground Resource definition and exploration drilling continued at Rubicon, Hornet, Pegasus and Raleigh during the quarter.

Extensional drilling programs at Hornet North returned significant results expanding the high grade zone both laterally and down-dip. In addition, several holes intersected significant mineralisation in the hanging wall to the main K2 zone opening up future opportunities in this area.

Drilling at Rubicon South extended the high grade mineralisation down-dip returning significant intersections within a well-developed K2 structure with some holes also returning significant results associated with the K2B and newly identified hanging wall structures. An extensional drilling program at Rubicon North has commenced targeting down-dip extensions on the K2 structure.

At Pegasus South, diamond drilling returned significant results at depth on the K2 structure and mixed results from development drilling on the K2E structure in the upper levels.

At Raleigh, drilling continues to return significant intersections from the Skinners Vein (in the Raleigh hangingwall) and broad intersections in the Z-Zone (between Skinners and the main Raleigh structure) with further drilling planned. In addition, this drilling achieved significant high grade intersections on the Raleigh Main Vein indicating the Raleigh structure is open further to the south over a significant extent of the mine providing a key future exploration target.

Surface exploration drilling programs at the Falcon and Lunar Duck Prospects were undertaken during the quarter. RC and diamond drilling programs at the Lunar Duck Prospect targeting the K2 structure north from

Pegasus achieved narrow intersections. At the Falcon Prospect, located in the hangingwall to the west of Pegasus, RC and diamond drilling targeted the K2 and associated structures identified in previous drilling. Assay results are pending.

Kundana (100% NST)

Surface exploration focussed on extensional and infill diamond drilling at Millennium throughout the quarter. Results from infill drilling received to date have helped to further define the extent of the mineralised K2 structure at Millennium and recorded scattered significant intersections within the K2B zone.

Diamond drilling down-dip and down-plunge of the Millennium Resource has accelerated with a significant intersection containing abundant visible gold approximately 100m below the existing Resource envelope achieved late in the quarter. Assays are pending.

Jundee

During the quarter, exploration and development of expansion projects progressed in conjunction with the existing mining operations. Seven underground diamond drilling rigs focussed on Resource conversion and expansion programs with surface diamond drilling in the mine precinct continuing at the Gateway South and Revelation Trend areas.

Key activity areas include:

- In-mine Resource development drilling on defined targets at Wilson, NIM, Invicta Hughes, Moneyline, Gringotts and Gateway.
- Development of the 2.4km long deep drill drive from the base of the Barton Mine continued on schedule during the quarter (58% complete). Diamond drilling from positions in the new drill drive commenced in the quarter with encouraging results, identifying mineralised structures in the FW and HW positions to the main Jundee mine sequence.
- Development for the drilling platform on the 19 level at Gateway is complete with diamond drilling commencing in January targeting extensions of the main Gateway system.
- Diamond drilling continued along the new "Revelation trend" from both underground and surface positions. Underground diamond drilling targeted the mineralisation north towards existing infrastructure and the Nexus and Gateway with surface diamond drilling targeting southern extensions of the mineralised trend. A second surface diamond drilling rig be added to the program in January.
- A surface diamond drilling program targeting extensions to the current Gateway South Resource intersected the target structures in all holes at the anticipated depths. The mineralised system continues for ~200m south of the current resource model with further analysis required to justify the development of a dedicated underground drill platform into this area.

Paulsens

Underground diamond drilling for the quarter consisted of Resource extension drilling targeting the Voyager 2 zone down plunge from the lower level drill platform. Grade control drilling continued at Voyager 2 Upper Zone, Titan and Paulsens lower zone ore bodies at various levels in the mine.

Underground development continued with the majority occurring within the high grade Voyager 2 ore zone with additional development within the Gemini, Cassini, Titan and Paulsens lodes.

Surface exploration included diamond drilling of geophysical anomalies at Paulsens East and the Southern Gabbro prospects. Drilling commenced in early December with two drill holes completed for 805.5m. At the Southern Gabbro prospect, intercalated graphitic siltstone with minor sulphides coincides with the targeted anomaly. The two remaining geophysical targets will be tested in January 2016.

Plutonic

Three underground diamond drill rigs continued with drilling focused on the Caribbean and Pacific mining areas. Resource development drilling programs completed at Caspian, Indian, Cortez achieved significant intersections (refer ASX announcement dated 9 December 2015).

Extensional diamond drilling at Baltic and Baltic Extended intersected significant mineralisation along strike from existing Resources. Assays are pending.

REGIONAL EXPLORATION

Kalgoorlie

Regional exploration in the Kalgoorlie district continued with RC and diamond drilling programs completed at several prospects during the quarter.

At Six Mile, located 5.1km north-west of Kanowna Belle, a 15 hole RC drilling program successfully extended the mineralised trend north of the current resource area. The mineralisation remains open along strike into an area with no historic drilling. Interpretation of the results is underway prior to updating the Resource model.

At the Golden Eye prospect, located 12km north of Kanowna Belle, an 18 hole RC drilling program was completed to define the potential of two parallel mineralised trends (Flying Circle and Auric) outlined by quartz veining and associated soil geochemical anomalies.

Carbine

Exploration in the Carbine region entailed air core drilling programs at Don Quixote and Carbine East.

A total of 73 holes (3,481m) were completed targeting potential Paradigm analogues and historic soil sample anomalies in the area. Results indicate two areas of anomalism associated with lithological contacts which will be tested with by an RC drilling program next quarter.

Central Tanami Project (25% NST)

An extensive RC and diamond infill drilling program commenced during the quarter at the Groundrush deposit, located approximately 50km north of the Central Tanami plant site.

The infill drilling program is focussed on establishing the continuity of mineralisation to a vertical depth of 300m below the surface within the Groundrush deposit providing the knowledge and confidence needed to design an underground mining operation via declines from the existing open pit.

During the quarter, a total of 63 RC/diamond drill holes have been completed totalling 20,176m. Initial assay results have been received for the first 45 drill holes outlining a large number of significant intersections beneath the southern end of the existing Groundrush open pit (see ASX announcements dated 10 December 2015 and 20 January 2016).

The current phase of the drilling program is expected to be completed in late January with final assays received by the end of the March Quarter.

Jundee

The regional field mapping program over the entire Jundee tenement holding is nearing completion with interpretative bedrock and 3D geological plans to be finalised early next quarter.

RC drilling programs were completed over potential extensions to the Thor and Morrison mineralised trends at Gourdis-Vause, located 30km south of Jundee. The drilling has successfully extended the zone of oxide gold mineralisation approximately 400m long to the south east of the existing Thor open pit. Further infill drilling is planned.

Plutonic

Regional exploration focussed target generation in the Overthrust/Mine Mafic stratigraphy north of the 114 North Fault and parallel subsidiary structures northeast of Zone 114.

A second generative program to test for potential extensions to the Spur-Timor mineralised trend north of the Zone 114 Fault progressed as planned.

Hermes

During the quarter, the Hermes scoping study results were released (see ASX announcement dated 9 December 2015) providing a pathway to the future development of the project.

Resource development and sterilisation drilling programs will recommence next quarter to provide data for the feasibility study for the proposed development.

During the quarter, preparations for the program were advanced including the completion of heritage clearances for the site.

Bryah Basin Joint Venture (NST earning 80%)

Exploration commenced within the Joint Venture area during the quarter with the completion of a regional airborne geophysical survey and auger geochemical drilling programs on selected targets.

Pilbara Regional

Regional geochemical programs continued over the Big Sarah trend, Wandarray, Little Pingandy, Star of the East, Dead Finish and Cummings (Ashburton Downs) prospects. All assay results are pending.

A review of historical drilling was completed at the Peake deposit (Ashburton Project area) to identify the oxidation surface within the resource model. Further drilling is planned.

Fortescue Joint Venture

Prospectivity analysis based on regional geochemical data has identified a number of discrete gold and pathfinder element anomalies which will prioritise future exploration programs.

CORPORATE

- The 2015 Annual General Meeting was held on 30 November 2015 with all resolutions passed on a show of hands.
- Subsequent to the quarter end, the Company entered into a power purchasing agreement with Enerji Ltd for the supply and installation of a 1.5MW heat-to-power plant at the Jundee Gold Operations which will enable the capture of waste heat and conversion into useable power.
- During the quarter, Northern Star participated in the Macquarie Securities conference in Perth, the annual Citi conference in Sydney, the annual Kalgoorlie 'What's down the track' forum, Institutional investor meetings and several Investor site tours to its Jundee, Kalgoorlie and Plutonic operations. The Company maintains a proactive presentation calendar to stockbroking firms, institutional and retail investors to promote the Company and its activities.
- Issued Capital
 - During the quarter, 21,776 employee shares were released from voluntary escrow following cessation of employment in accordance with the Company's 2011 Employee Share Plan.
 - Subsequent to the quarter end, 48,306 employee shares were released from voluntary escrow following cessation of employment in accordance with the Company's 2011 Employee Share Plan.

The issued capital of the Company at the date of this report is:

Class of Securities	Issued capital
Fully Paid Ordinary Shares	600,029,557
Unlisted Options (various expiry dates)	4,276,094

Table 12: Issued Capital

Yours faithfully



BILL BEAMENT
Managing Director
Northern Star Resources Limited

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Forward Looking Statements

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APPENDIX 1 – ADDITIONAL INFORMATION - OPERATIONS

Paulsens Gold Operations

► Safety

There was one (1) Lost Time Injury (LTI) recorded during the quarter.

On 16 November 2015, a contractor working at the Paulsens Gold Mine became seriously unwell and passed away. An investigation is still in progress and the Company is assisting the relevant authorities in this matter. Operations recommenced on 18 November 2015.

► Underground Production

Mine Development:

	Mar -15 Qtr	Jun -15 Qtr	Sep-15 Qtr	Dec -15 Qtr
Decline	195.1m	391.3m	327	175m
Level	433.5m	455.7m	320	535m
Strike driving	420.0m	711.5m	759	479m
Total (metres)	1,048.6m	1,558.5m	1406	1,189m

Table 1: Underground Production – Mine Development

Capital development focused on advancing the decline towards the 239mRL level and the 256mRL and 273mRL operating levels, which access the Voyager 2 Upper Zone ore body and commencing the 285mRL drill drive. Capital development saw the Titan Ore Body accessed on the 375mRL.

During the quarter development continued of high grade Voyager 2 Upper Zone mining areas on the 307mRL and 290mRL with grades higher than forecast. Additional operating development was completed in the Upper levels in Titan and Voyager 1 at the 375, Cassini at the 1125mRL and Gemini at the 1116mRL and 1130mRL.

Development yielded 31,252 tonnes at an average reconciled grade of 5.36gpt.

	Mar -15 Qtr	Jun -15 Qtr	Sep-15 Qtr	Dec -15 Qtr
Development ore (t)	22,553	41,357	47,460	31,252
Development grade (gpt)	4.6	9.6	8.1	5.4
Stope ore (t)	66,526	70,720	55,516	56,092
Stope grade (gpt)	5.7	4.0	8.1	8.4
Low grade ore (t)	5,045	3,646	2,856	5,428
Low grade (gpt)	1.3	1.6	1.4	1.5
Total ore (t)	94,124	115,723	105,832	92,772
Total grade (gpt)	5.2	5.9	7.9	7.0
Contained gold (oz)	15,671	21,908	26,892	20,730

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

Table 2: Ore Development – Mine Development

Stope production was 56,092 tonnes at 8.4pt sourced predominately from the Voyager 1 upper zone on the 375, 390 and 441 levels and the Voyager 2 upper zone on 290, 307, 324, 341 and 358 levels.

► Gold Production

95,953 tonnes were milled during the quarter at 7.3gpt and 90% recovery for 20,152oz produced. The scheduled depletion of ROM stocks occurred throughout the quarter. Improvements to the efficiency of processing and underground mining have seen the cost profile reduce significantly further during the quarter.

Ore stocks at the end of the quarter totaled 6,219oz of gold.

► Gold Sales

19,161oz were sold.

Plutonic Gold Operations

► Safety

There were three (3) Lost Time Injuries (LTI) recorded during the quarter.

► Underground Production

Mine Development:

	Mar-15 Qtr	Jun-15 Qtr	Sep -15 Qtr	Dec -15 Qtr
Decline	246m	253m	256m	174m
Level	283m	325m	344m	192m
Strike driving	2,088m	2,189m	1,676m	1,752m
Total (metres)	2,617m	2,766m	2,276m	2,118m

Table 3: Underground Production – Mine Development

Development rates were maintained in the quarter in line with production requirements. Decline and access development continued as priority in the Caribbean zone in which the decline has now been completed.

Ore development continued in the Caribbean, West, North, Baltic, Pacific East, Mariner, Timor, Coral and Vent Decline areas.

	Mar-15 Qtr	Jun-15 Qtr	Sep -15 Qtr	Dec -15 Qtr
Development ore (t)	56,349	70,180	38,973	49,197
Development grade (gpt)	3.0	3.2	4.7	2.8
Stope ore (t)	134,188	130,369	120,199	124,253
Stope grade (gpt)	4.0	4.0	3.8	4.2
Low grade ore (t)				
Low grade (gpt)				
Total ore (t)	190,537	200,549	159,172	173,450
Total grade (gpt)	3.7	3.7	4.0	3.8
Contained gold (oz)	22,757	24,068	20,651	21,315

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

Table 4: Underground Production – Ore Tonnes

Underground stoping produced 124,253 tonnes at 4.2gpt predominately from the Caribbean 16 and 20 levels along with the North Decline 26 level as well the Pacific East 22 and Timor Vent 21 levels.

► Gold Production

198,959 tonnes were milled during the quarter at 3.5gpt and 78% recovery for 17,248oz. Milling operations continue to operate on a campaign basis.

Surface ore stocks at the end of the quarter contained 273oz of gold.

► Gold Sales

16,910oz were sold.

Kanowna Belle Gold Operations

► Safety

There was no Lost Time Injuries (LTI) during the quarter.

► Underground Production

Mine Development:

	Mar -15 Qtr	June -15 Qtr	Sep -15 Qtr	Dec -15 Qtr
Decline	6m	83m	494m	345m
Level	Nil	Nil	Nil	Nil
Strike driving ⁽¹⁾	350m	731m	488m	835m
Total (metres)	356m	814m	982m	1,180m

Note (1) includes development through paste-fill

Table 5: Underground Production – Mine Development

Development for the quarter focussed on establishing the stopes in the upper level ore zones and development of the Velvet exploration decline. The Velvet Stage1 drill drive was completed and further diamond drilling delivered encouraging results supporting the continuation of Velvet Development. Phase 2 of Velvet development commenced during the quarter. During the Third quarter, Velvet access development will continue with Diamond drilling occurring simultaneously.

	Mar -15 Qtr	Jun -15 Qtr	Sep -15 Qtr	Dec -15 Qtr
Development ore (t)	12,336	27,031	11,524	33,184
Development grade (gpt)	5.1	3.7	3.9	2.8
Stope ore (t)	145,317	159,177	172,143	173,877
Stope grade (gpt)	4.4	5.1	4.9	4.3
Low grade ore (t)	Nil	Nil	Nil	Nil
Low grade (gpt)	Nil	Nil	Nil	Nil
Total ore (t)	157,653	186,208	183,668	207,061
Total grade (gpt)	4.5	4.9	4.8	4.1
Contained gold (oz)	22,701	29,379	28,597	27,028

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

Table 6: Underground Production – Ore Production

Stope production was 173,877 tonnes at 4.3gpt which exceeded planned tonnage and on plan for grade.

► Gold Production

Kanowna Belle milled 196,489 tonnes in the December Quarter at 3.8gpt and 94% recovery for 22,572oz.

Ore stocks at the end of the quarter totalled 22,519oz of gold (NST ore from KB and EKJV).

► Gold Sales

25,153oz were sold.

Kundana Gold Operations

► Introduction

The Kundana Gold Operations includes the Rubicon, Hornet, Raleigh and Pegasus deposits. These mines are part of the East Kundana Joint Venture (EKJV) with companies Rand Mining Ltd and Tribune Resources Ltd.

► Safety

There was one (1) Lost Time Injury (LTI) during the quarter.

► Underground Production

All mine production physicals associated with the EKJV are reported as 100% of those physicals to better represent overall mine performance.

Mine Development:

	Mar -15 Qtr	Jun -15 Qtr	Sep -15 Qtr	Dec -15 Qtr
Decline	613m	485m	612m	501m
Level	685m	848m	997m	703m
Strike driving (incl paste)	1,446m	1,659m	1,452m	2,313m
Total (metres)	2,774m	2,992m	3,061m	3,517m

Table 7: Underground Production – Mine Development (physicals represent 100% EKJV)

The main focus on capital development has been the Pegasus Incline, Pegasus Decline, Rubicon Decline and Hornet Decline. The Pegasus Incline is at the 6214mRL and the Pegasus Decline is at the 6007mRL at the end of the December Quarter. The Hornet Decline has progressed to the 5799mRL and the Rubicon Decline is at the 5951mRL. 2,312m of strike driving was completed in December Quarter.

Development yielded 128,586 tonnes at an average reconciled grade of 7.3gpt.

	Mar -14 Qtr	Jun -15 Qtr	Sep -15 Qtr	Dec -15 Qtr
Development ore (t)	81,506	103,790	84,470	128,586
Development grade (gpt)	6.5	5.9	5.4	7.3
Stope ore (t)	93,111	109,260	97,837	96,147
Stope grade (gpt)	10.0	11.1	7.8	8.8
Low grade ore (t)	NA	NA	NA	NA
Low grade (gpt)	NA	NA	NA	NA
Total ore (t)	174,917	213,050	182,307	224,733
Total grade (gpt)	8.4	8.6	6.7	8.0
Contained gold (oz)	47,125	58,827	39,024	57,673

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

Table 8: Underground Production – Ore production (physicals represent 100% EKJV)

Stope production for the December Quarter was 96,147 tonnes at 8.8gpt with grade representative of the modelled sources and sequence of mining.

► Gold Production

Kundana ore milled in December Quarter (NST share) was 120,415 tonnes at 7.3gpt and 96.2% recovery for 27,034 gold ounces.

Ore stocks at the end of the quarter (NST share) totalled 11,971oz of gold.

► Gold Sales

27,034 oz were sold.

Jundee Gold Operations

► Safety

There were zero (0) Lost Time Injuries (LTI) during the quarter.

► Underground Production

Mine Development:

	Mar -15 Qtr	Jun -15 Qtr	Sep -15 Qtr	Dec -15 Qtr
Decline	545m	775m	1,243m	1,320
Level	889m	970m	866m	660
Operating	2,385m	2,299m	2,084m	2,060
Total (metres)	3,819m	4,045m	4,193m	4,040m

Table 9: Underground Production – Mine Development

The 39WSN DDR (Diamond Drill Drive) was the focus for capital development in the December Quarter. Diamond drilling has commenced in the initial platforms whilst the remainder of the DDR is completed. Operating development occurred across the operation with positive ore extensions in the lower GTW and WWN levels in particular.

QUARTERLY ACTIVITIES REPORT

For the Quarter ended 31 December 2015

	Mar -15 Qtr	Jun -15 Qtr	Sep -15 Qtr	Dec -15 Qtr
Development ore (t)	121,884	127,830	94,843	104,312
Development grade (gpt)	4.1	5.3	3.4	3.0
Stope ore (t)	171,104	162,891	184,895	194,377
Stope grade (gpt)	7.1	6.7	7.4	8.0
Total ore (t)	292,989	290,722	279,738	298,689
Total grade (gpt)	5.8	6.0	6.1	6.3
Contained gold (oz)	54,933	56,545	54,442	60,274

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

Table 10: Underground Production – Ore production

Production from the WWN bulk stope commenced in December and is performing to design. Other production came from the GTW / GGT, Nim3, WSS/WSN and WWN mine areas – with the WWN stopes performing strongly for reconciled grade. Production blasting began a transition from ANFO to Emulsion during the quarter as an initiative to minimise ore dilution with encouraging results. The Stopping front is well set-up for consistent production with several stoping locations available. Similar to the previous quarter, the development priority has focused on capital advance rather than ore development as the mine continues to extend laterally and down dip.

► Gold Production

Jundee ore milled in the December Quarter was 359,183 tonnes at 5.4gpt and 93.3% recovery for 58,246 gold ounces.

Milling throughput was a blend of 81% underground fresh rock and 19% oxide feed. There were no milling issues with steady throughput and excellent recoveries achieved – a 3 day planned maintenance shut was successfully completed in November.

Gold in circuit stocks increased by 4,538ozs for the quarter to finish at 7,508ozs. Ore stocks at the end of the quarter totalled 32,462ozs of gold.

► Gold Sales

53,760oz sold.