(in United States dollars, tabular amounts in millions, except where noted)

OPERATIONAL REVIEW

Peñasquito, Mexico (100%-owned)

	Three months ended December 31			Year ended December 31		
Operating Data	2016	2015	Change	2016	2015	Change
Tonnes of ore mined – sulphide (thousands)	14,342	9,784	47 %	46,735	39,079	20 %
Tonnes of ore mined – oxide (thousands)	—	65	(100)%	1,106	3,038	(64)%
Tonnes of waste removed (thousands)	27,501	38,590	(29)%	133,771	151,924	(12)%
Tonnes of total material moved (thousands)	41,843	48,441	(14)%	181,612	194,041	(6)%
Ratio of waste to ore	1.9	3.9	(51)%	2.8	3.6	(22)%
Average Gold head grade (grams/tonne)	0.95	0.79	20 %	0.70	1.00	(30)%
Average Silver head grade (grams/tonne)	21.98	26.88	(18)%	22.98	28.25	(19)%
Average Lead head grade	0.20%	0.27%	(26)%	0.22%	0.30%	(27)%
Average Zinc head grade	0.58%	0.63%	(8)%	0.54%	0.68%	(21)%
Sulphide Ore						
Tonnes of ore milled (thousands)	9,243	9,854	(6)%	34,112	38,870	(12)%
Average Gold recovery rate	69%	68%	1 %	63%	72%	(13)%
Average Silver recovery rate	81%	81%	— %	79%	80%	(1)%
Average Lead recovery rate	78%	72%	8 %	72%	71%	1 %
Average Zinc recovery rate	80%	77%	4 %	77%	79%	(3)%
Concentrates Produced – Payable Metal Produced						
Gold (thousands of ounces)	181	162	12 %	450	833	(46)%
Silver (thousands of ounces)	4,790	6,329	(24)%	17,628	25,284	(30)%
Lead (thousands of pounds)	29,600	40,500	(27)%	109,400	173,900	(37)%
Zinc (thousands of pounds)	78,300	89,300	(12)%	262,900	388,800	(32)%
Lead concentrate (dry metric tonnes)	33,500	39,000	(14)%	117,600	159,300	(26)%
Zinc concentrate (dry metric tonnes)	76,600	90,600	(15)%	273,400	375,100	(27)%
Oxide Ore						
Tonnes of ore processed (thousands of ounces)	—	65	(100)%	1,106	3,038	(64)%
Produced (thousands of ounces)						
Gold Produced (thousands of ounces)	2	8	(75)%	15	28	(46)%
Silver Produced (thousands of ounces)	40	130	(69)%	275	642	(57)%
Total Payable Metal Produced						
Gold (thousands of ounces)	183	170	8 %	465	860	(46)%
Silver (thousands of ounces)	4,830	6,459	(25)%	17,903	25,927	(31)%
Lead (thousands of pounds)	29,600	40,500	(27)%	109,400	173,900	(37)%
Zinc (thousands of pounds)	78,300	89,300	(12)%	262,900	388,800	(32)%
Gold equivalent (thousands of ounces) [1]	347	369	(6)%	1,050	1,689	(38)%

	Three months ended December 31			Year ended December 31		
	2016	2015	Change	2016	2015	Change
Sulphide and Oxide Ores – Payable Metal Sold						
Gold (thousands of ounces)	185	195	(5)%	449	893	(50)%
Silver (thousands of ounces)	5,038	6,794	(26)%	17,592	27,087	(35)%
Lead (thousands of pounds)	33,600	41,700	(19)%	110,000	178,400	(38)%
Zinc (thousands of pounds)	70,500	98,000	(28)%	259,800	388,200	(33)%
Total Cash Costs: By-product (per ounce) (3)	$ 205	$ 451	(55)%	$ 483	$ 320	51 %
Total Cash Costs: Co-product (per ounce) (3)	$ 598	$ 612	(2)%	$ 780	$ 562	39 %
AISC (per ounce)	$ 487	$ 687	(29)%	$ 937	$ 544	72 %
Mining cost (per tonne)	$ 1.79	$ 2.11	(15)%	$ 1.98	$ 2.09	(5)%
Milling cost (per tonne)	$ 5.25	$ 6.41	(18)%	$ 5.76	$ 6.61	(13)%
General and administrative cost (per tonne milled)	$ 3.26	$ 2.96	10 %	$ 2.57	$ 2.28	13 %
Off-site cost per tonne sold (lead)	$ 597	$ 690	(13)%	$ 630	$ 662	(5)%
Off-site cost per tonne sold (zinc)	$ 339	$ 323	5 %	$ 317	$ 338	(6)%
Financial Data (in millions)						
Revenues (2)	$ 362	$ 354	2 %	$ 1,044	$ 1,646	(37)%
Production costs	$ 183	$ 221	(17)%	$ 698	$ 890	(22)%
Depreciation and depletion	$ 78	$ 100	(22)%	$ 243	$ 391	(38)%
Earnings (loss) from operations	$ 100	$ (1,152)	n/a	$ 99	$ (821)	n/a
Expenditures on mining interests (cash basis)	$ 64	$ 50	28 %	$ 235	$ 202	16 %
– Sustaining	*$ 49*	*$ 41*	*20 %*	*$ 195*	*$ 186*	*5 %*
– Expansionary	*$ 15*	*$ 9*	*67 %*	*$ 40*	*$ 16*	*150 %*

(1) Gold equivalent ounces are calculated using the following assumptions: $1,100 per ounce of gold; by-product metal prices of $16.50 per ounce of silver; $0.90 per pound of zinc; and $0.95 per pound of lead (2015 – $1,300; $22.00; $0.90; and $0.90 respectively). By-product metals are converted to gold equivalent ounces by multiplying by-product metal production with the associated by-product metal price and dividing it by the gold price.

(2) Includes 25% of silver ounces sold to Silver Wheaton at $4.09 per ounce (2015 – $4.07 ounce). The remaining 75% of silver ounces are sold at market rates.

(3) The calculation of total cash costs per ounce of gold is net of by-product silver, lead and zinc sales revenues. If silver, lead and zinc were treated as co-products, total cash costs for the three months and year ended December 31, 2016 would have been $598 per ounce of gold, $7.88 per ounce of silver, $0.69 per pound of lead and $0.67 per pound of zinc, and $780 per ounce of gold, $9.81 per ounce of silver, $0.87 per pound of lead and $0.79 per pound of zinc, respectively (three months and year ended December 31, 2015 – $612, $8.60, $0.76, and $0.72, and $562, $8.00, $0.68, and $0.69, respectively). Production costs are allocated to each co-product based on the ratio of actual sales volumes multiplied by budget metal prices (see page 46). The actual and budget silver price for Peñasquito takes into consideration that 25% of silver ounces are sold to Silver Wheaton at $4.09 per ounce (2015 – $4.07 ounce) with the remaining 75% of silver ounces sold at market rates.

Operating Highlights

Gold production for 2016 was 46% lower than 2015 primarily due to lower ore grade as a result of mine sequencing, lower throughput due to harder ore types processed, a longer than anticipated period to ramp up to full production following a planned 10 day shut down in the second quarter, and lower recoveries associated with processing low grade stockpiled ore. In 2015, the mine sequence had ore sourced from the comparatively higher grade area of Phase 5C.

During 2016 Peñasquito stockpiled an additional 12.6 million tonnes of sulphide ore due to the high carbon content. As part of the Pyrite Leach project, a carbon pre-flotation facility is being constructed, which is anticipated to be completed in the second quarter of 2018, which is expected to allow for the efficient processing of the higher carbon content ore.

Financial Highlights

Earnings from operations of $99 million in 2016 compared to earnings of $360 million in 2015 (excluding the $1,181 million impairment in mining interest). Earnings decreased as lower production resulted in lower revenues, partially offset by lower depreciation and production costs. Production costs decreased as productivity in the pit improved significantly during 2016 due to improved pit conditions with large and wide cut-backs being established, continued focus on balancing truck haulage with available loading units, and optimization of drill-and-blast activities. The ongoing cost efficiency initiatives are expected to result in further productivity improvements in 2017.

AISC for 2016 were 72% higher than 2015 due to lower gold production, partially offset by higher by-product credits per ounce, lower operating costs, and the devaluation of the Mexican peso.

The Northern Well Field project reached full production capacity during the fourth quarter of 2016 and is expected to satisfy Peñasquito's long-term water requirements. The project was delivered within budget and project demobilization activities were substantially complete in December.

Fourth Quarter 2016 Results

Gold production for the fourth quarter of 2016 was 8% higher than the fourth quarter of 2015, as the mine sequenced into higher grade Phase 5D ore in the last quarter of 2016. Phase 5D is expected to produce high grade ore until the third quarter of 2017.

AISC for the fourth quarter of 2016 were 29% lower than the fourth quarter of 2015 due to higher gold production and lower production costs.

2017 Outlook

Peñasquito is expected to produce 410,000 ounces of gold (+/-5%). The decrease compared to 2016 is due to lower grades as the high-grade ore from Phase 5D is expected to be mined by the third quarter of 2017, and more low-grade ore from the stockpiles will be processed during the year.

In addition, the pit will undergo a significant stripping campaign for Phase 6D, a higher grade portion of the pit, with current plans to begin mining Phase 6D in the fourth quarter of 2018. Pre-stripping of the Chile Colorado pit is expected to commence in the second quarter of 2017, with mining of ore expected to commence in late 2018.

AISC is expected to be $825 per ounce (+/-5%). The decrease compared to 2016 is due to productivity improvements that are expected to be partially offset by lower gold production. Sustaining capital is expected to be higher than normal in 2017 as the mine plan requires increased stripping in 2017 compared to 2016 and the tailings dam is being raised.

Cerro Negro, Argentina (100%-owned)

	Three months ended December 31			Year ended December 31		
Operating Data	2016	2015	Change	2016	2015	Change
Tonnes of ore mined (thousands)	166	313	(47)%	811	845	(4)%
Tonnes of ore milled (thousands)	166	330	(50)%	827	1,256	(34)%
Average mill Gold grade (grams/tonne)	14.43	15.34	(6)%	14.35	13.47	7 %
Average mill Silver grade (grams/tonne)	112.7	163.6	(31)%	132.1	180.4	(27)%
Average Gold recovery rate	96%	94%	2 %	95%	94%	1 %
Average Silver recovery rate	88%	86%	2 %	87%	83%	5 %
Gold Produced (thousands of ounces)	66	147	(55)%	363	507	(28)%
Silver Produced (thousands of ounces)	478	1,489	(68)%	3,087	6,100	(49)%
Gold equivalent ounces produced (thousands of ounces)(1)	73	173	(58)%	410	611	(33)%
Gold Sold (thousands of ounces)	70	132	(47)%	382	580	(34)%
Silver Sold (thousands of ounces)	540	1,450	(63)%	3,308	7,395	(55)%
Total Cash Costs: By-product (per ounce) (2)	$ 778	$ 577	35 %	$ 505	$ 600	(16)%
Total Cash Costs: Co-product (per ounce) (2)	$ 810	$ 627	29 %	$ 574	$ 667	(14)%
AISC (per ounce)	$ 1,024	$ 872	17 %	$ 705	$ 769	(8)%
Mining cost (per tonne)	$ 111.93	$ 87.50	28 %	$ 102.42	$ 108.77	(6)%
Milling cost (per tonne)	$ 39.05	$ 43.59	(10)%	$ 40.47	$ 42.94	(6)%
General and administrative cost (per tonne milled)	$ 160.30	$ 110.30	45 %	$ 127.61	$ 113.33	13 %
Financial Data (in millions)						
Revenues	$ 90	$ 166	(46)%	$ 532	$ 790	(33)%
Production costs	$ 64	$ 97	(34)%	$ 249	$ 465	(46)%
Depreciation and depletion	$ 45	$ 76	(41)%	$ 217	$ 348	(38)%
Earnings (loss) from operations	$ (23)	$ (8)	188 %	$ 52	$ (23)	n/a
Expenditures on mining interests (cash basis)	$ 22	$ 47	(53)%	$ 97	$ 247	(61)%
– Sustaining	*$ 15*	*$ 39*	*(62)%*	*$ 68*	*$ 95*	*(28)%*
– Expansionary	*$ 7*	*$ 8*	*(13)%*	*$ 29*	*$ 152*	*(81)%*

(1) Gold equivalent ounces are calculated using the following assumptions: $1,100 per ounce of gold and a by-product metal price of $16.50 per ounce of silver (2015 – $1,300 and $22.00, respectively). By-product metals are converted to gold equivalent ounces by multiplying by-product metal production with the associated by-product metal price and dividing it by the gold price.

(2) The calculation of total cash costs per ounce of gold is net of by-product silver sales revenues. If silver were treated as a co-product, average total cash costs at Cerro Negro for the three months and year ended December 31, 2016 would be $810 per ounce of gold and $12.14 per ounce of silver and $574 per ounce of gold and $8.74 per ounce of silver, respectively (three months and year ended December 31, 2015 – $627 and $9.85, $667 and $10.46, respectively). Production costs are allocated to each co-product based on the ratio of actual sales volumes multiplied by budget metal prices (see page 46).

Operating Highlights

Gold production for 2016 was 28% lower than 2015 primarily due to production in 2015 included processing 410,000 tonnes of ore from stockpiles and 4% lower mine production in 2016. The ramp up of mining operations at Cerro Negro was impacted by labour disruptions associated with the workforce reduction that was undertaken as part of the restructuring process in the second quarter to align costs and staffing levels with production capability. Management implemented a maintenance and supply chain improvement program during the second half of 2016 to improve underground equipment availability.

Financial Highlights

Earnings from operations were $52 million in 2016 compared to a loss of $23 million in 2015. Earnings increased due to a decrease in production costs of $216 million including the elimination of Argentina's tax on doré exports, a devaluation of the Argentine peso and a higher realized gold price, partially offset by lower gold production and inflation.

AISC for 2016 were 8% lower than 2015 due to lower sustaining capital costs, partially offset by lower gold production. On a per unit basis, mining costs held steady with lower tonnes matching lower costs, while milling unit costs improved 6% as cost control measures more than offset lower milled tonnes.

Sustaining capital expenditures decreased by 28% as management established new investment rates in the mine related to the cost management program. Expansionary capital expenditures decreased by 81% due to the completion of the Cerro Negro construction phase activities in early 2015.

Fourth Quarter 2016 Results

Gold production for the fourth quarter of 2016 was 55% lower than the fourth quarter of 2015 due to the processing in 2015 of 47,000 tonnes from the stockpile and the 2016 work stoppages that were associated with the workforce reduction.

AISC for the fourth quarter of 2016 were 17% higher than the fourth quarter of 2015 due to lower production partially offset by lower production costs.

2017 Outlook

Cerro Negro is expected to produce 410,000 ounces of gold (+/-5%). The increase compared to 2016 is due to the continued ramp up of the mine as development rates improve. The production ramp-up to 4,000 tonnes per day is expected to be achieved during the second half of 2018.

During the fourth quarter of 2016 the prefeasibility study on the optimal mine design, development execution plan, and production schedule was completed. The plan has development at Mariana Norte continuing to ramp up through 2017 with first ore production expected in 2018. Development of the Emilia vein is expected to begin in the second half of 2017 and is expected to replace production from Eureka in 2019.

AISC is expected to be $685 per ounce (+/-5%), similar to 2016, as a result of lower grades and higher sustaining capital, offset by continued optimization of the cost structure.

Sustaining capital for 2017 is mainly for mine development, expansion of the tailings dam facility and equipment purchases. Cerro Negro has commenced a prefeasibility study to determine whether filtered tailings and/or paste backfill would have a positive effect on NAV.

Pueblo Viejo, Dominican Republic (40%-owned)

(tabular amounts below represent Goldcorp's proportionate 40% share)

	Three months ended December 31			Year ended December 31		
Operating Data	2016	2015	Change	2016	2015	Change
Tonnes of ore mined (thousands)	1,741	2,851	(39)%	7,452	7,368	1 %
Tonnes of waste removed (thousands)	1,671	1,324	26 %	8,066	7,789	4 %
Ratio of waste to ore	1.0	0.5	100 %	1.1	1.1	— %
Tonnes of ore processed (thousands)	826	546	51 %	3,018	2,767	9 %
Average mill head grade (grams/tonne)	5.07	5.93	(15)%	5.28	4.94	7 %
Average recovery rate	93%	86%	8 %	91%	87%	5 %
Gold Produced (thousands of ounces)	127	90	41 %	467	382	22 %
Gold Sold (thousands of ounces)	132	93	42 %	467	450	4 %
Total Cash Costs: By-product (per ounce)(1)	$ 202	$ 502	(60)%	$ 343	$ 495	(31)%
Total Cash Costs: Co-product (per ounce)(1)	$ 252	$ 529	(52)%	$ 380	$ 516	(26)%
AISC (per ounce)	$ 311	$ 608	(49)%	$ 439	$ 607	(28)%
Mining cost (per tonne)	$ 2.98	$ 2.83	5 %	$ 2.82	$ 2.69	5 %
Milling cost (per tonne)	$ 18.91	$ 60.76	(69)%	$ 37.88	$ 50.63	(25)%
General and administrative cost (per tonne milled)	$ 9.79	$ 15.36	(36)%	$ 10.67	$ 11.62	(8)%
Financial Data (in millions) (2)						
Revenues	$ 168	$ 108	56 %	$ 607	$ 542	12 %
Production costs	$ 36	$ 52	(31)%	$ 185	$ 242	(24)%
Depreciation and depletion	$ 3	$ 22	(86)%	$ 35	$ 120	(71)%
Earnings (loss) from operations	$ 129	$ (576)	n/a	$ 387	$ (429)	n/a
Expenditures on mining interests (cash basis)	$ 12	$ 7	71 %	$ 40	$ 41	(2)%
– Sustaining	*$ 12*	*$ 7*	*71 %*	*$ 40*	*$ 41*	*(2)%*
– Expansionary	*$ —*	*$ —*	*—*	*$ —*	*$ —*	*—*

(1) The calculation of total cash costs per ounce of gold is net of by-product silver sales revenue. If silver were treated as a co-product, total cash costs for the three months and year ended December 31, 2016 would be $252 per ounce of gold and $3.43 per ounce of silver and $380 per ounce of gold and $5.16 per ounce of silver, respectively (three months and year ended December 31, 2015 – $529 and $7.92, $516 and $7.74, respectively). Production costs are allocated to each co-product based on the ratio of actual sales volumes multiplied by budget metal prices (see page 33).

(2) The Company's 40% interest in Pueblo Viejo is classified as an investment in associate and is accounted for using the equity method with the Company's share of net earnings and net assets separately disclosed in the Consolidated Statements of Earnings (Loss) and Consolidated Balance Sheets, respectively. The financial data disclosed in the table represents the financial data of Pueblo Viejo on a proportionate rather than equity basis. For the three months and year ended December 31, 2016, the Company's equity earnings from Pueblo Viejo were $60 million and $169 million, respectively (three months and year ended December 31, 2015 – equity earnings of $13 million and $53 million and an impairment charge of $610 million, respectively).

Operating Highlights

Gold production for 2016 was 22% higher than 2015 primarily due to higher ore milled, grades and recoveries. Ore milled in 2016 increased by 9% in comparison with 2015 as a consequence of lower tonnage processed in 2015 primarily due to the oxygen plant failure in November. Higher gold recovery in 2016 was a result of ore processed containing lower organic carbon than in 2015. The increase in head grades was attributable to the mining sequence.

Material mined in 2016 was slightly above 2015 as a result of improvements in the utilization of equipment, the use of contractors to perform re-handle activities, and a more efficient loading fleet.

Financial Highlights

Earnings from operations were $387 million in 2016 compared to earnings of $181 million in 2015 (excluding the $610 million 2015 impairment in mining interest). Earnings increased from higher revenues from increased production, a higher gold price, lower production costs, the receipt of insurance proceeds relating to the oxygen plant failure in 2015 and lower depreciation and depletion costs.

AISC for 2016 were 28% lower than 2015 due to lower operating costs and higher production. Operating costs were lower in 2016 than 2015 primarily due to lower maintenance costs which resulted from a major maintenance shutdown in late 2015, and lower power costs due to reduced rates.

Sustaining capital expenditures for 2016 were in line with 2015.

Fourth Quarter 2016 Results

Gold production in the fourth quarter of 2016 was 41% higher than the fourth quarter of 2015 primarily due to higher throughput as the mill experienced an oxygen plant failure which reduced throughput in the fourth quarter of 2015.

AISC for the fourth quarter of 2016 were 49% lower than the fourth quarter 2015 due to higher gold production and lower production costs. Higher production in 2016 resulted from lower throughput in 2015 due to the oxygen plant failure. Lower production costs in 2016 were primarily due to the receipt of insurance proceeds related to the oxygen plant failure.

2017 Outlook

Pueblo Viejo is expected to produce 415,000 ounces of gold (+/-5%). The decrease compared to 2016 is due to lower grade. AISC is expected to be $530 per ounce (+/-5%). The increase compared to 2016 is due to the insurance proceeds received in 2016 and higher sustaining capital expenditures.

Red Lake, Canada (100%-owned)

	Three months ended December 31			Year ended December 31		
Operating Data	2016	2015	Change	2016	2015	Change
Tonnes of ore milled (thousands)	170	201	(15)%	646	646	— %
Average mill head grade (grams/tonne)	15.04	15.57	(3)%	16.18	18.44	(12)%
Average recovery rate	96%	95%	1 %	96%	96%	— %
Gold Produced (thousands of ounces)(1)	88	100	(12)%	324	376	(14)%
Gold Sold (thousands of ounces)	76	92	(17)%	313	366	(14)%
Total Cash Costs: By-product (per ounce)	$ 608	$ 610	— %	$ 582	$ 572	2 %
AISC (per ounce)	$ 932	$ 959	(3)%	$ 872	$ 906	(4)%
Mining cost (per tonne)	$ 199.65	$ 170.34	17 %	$ 196.49	$ 198.63	(1)%
Milling cost (per tonne) (1)	$ 43.05	$ 39.64	9 %	$ 45.77	$ 48.56	(6)%
General and administrative cost (per tonne milled)	$ 90.50	$ 58.99	53 %	$ 66.75	$ 70.26	(5)%
Financial Data (in millions)						
Revenues	$ 87	$ 102	(15)%	$ 388	$ 427	(9)%
Production costs	$ 42	$ 51	(18)%	$ 179	$ 196	(9)%
Depreciation and depletion	$ 33	$ 32	3 %	$ 123	$ 123	— %
Earnings (loss) from operations	$ 5	$ (1,201)	n/a	$ 64	$ (1,132)	n/a
Expenditures on mining interests (cash basis)	$ 24	$ 38	(37)%	$ 100	$ 170	(41)%
– Sustaining	*$ 22*	*$ 25*	(12)%	*$ 78*	*$ 93*	(16)%
– Expansionary	*$ 2*	*$ 13*	(85)%	*$ 22*	*$ 77*	(71)%

(1) Included in tonnes of ore milled and gold ounces produced for the fourth quarter and year ended 2016 year are 21,000 tonnes (2015 - 11,000 tonnes) and 35,000 tonnes (2015 - 27,000 tonnes), respectively, from the Cochenour project.

Operating Highlights

Gold production for 2016 was 14% lower than 2015 primarily due to lower grade. Grade was lower as the High Grade Zone and Campbell continued to deplete and production was replaced with lower grade ore from Upper Red Lake. In 2015, Red Lake focused on the conversion of mining methods to longhole mining in the High Grade Zone, mechanized bulk mining in the Upper Red Lake Zone, and tele-remote mining to provide additional economic tonnes to offset the depletion of the High Grade Zone.

Financial Highlights

Earnings from operations of $64 million in 2016 compared to earnings of $81 million in 2015 (excluding the $1,213 million 2015 impairment in mining interest). The earnings decrease was due to lower sold ounces, partially offset by higher gold prices as well as lower mining, processing, administration and exploration costs.

AISC in 2016 were 4% lower than 2015 due to lower production costs and lower sustaining capital that was partially offset by lower gold production.

Sustaining capital expenditures for 2016 decreased by 16% due to efficiency improvements in development unit costs. Expansionary capital declined by 71% as project activities at Cochenour decreased significantly in 2016, with work focusing on geological understanding of the ore body in order to support development of the Cochenour starter mine concept study.

Fourth Quarter 2016 Results

Gold production for the fourth quarter of 2016 was 12% lower than the fourth quarter of 2015 due to lower tonnes from the depletion of the Campbell mine as well as a focus on mine development to increase mining front availability.

AISC in the fourth quarter of 2016 were 3% lower than the fourth quarter of 2015 due to lower production costs and lower sustaining capital, offset by lower gold production.

2017 Outlook

Red Lake is expected to produce 300,000 ounces of gold (+/-5%). The decrease compared to 2016 is due to lower grades as the High Grade Zone depletes. At Red Lake there are two key growth projects, Cochenour and HG Young, that are advancing through the Company's investment framework that have the potential to provide new sources of ore over the long-term.

AISC is expected to be $870 per ounce (+/-5%), comparable to 2016 as lower operating costs are offset by lower production. The site is focused on realizing new cost efficiencies through the rationalization of site infrastructure and initiatives. The Number One Shaft was placed on care and maintenance in the third quarter of 2016, the Red Lake mill was placed on care and maintenance in the first quarter of 2017 and the Campbell shaft is expected be placed on care and maintenance in the second quarter of 2017.

Éléonore, Canada (100%-owned)

	Three months ended December 31			Year ended December 31		
Operating Data	2016	2015	Change	2016	2015	Change
Tonnes of ore mined (thousands)	401	428	(6)%	1,688	1,381	22 %
Tonnes of ore milled (thousands)	399	517	(23)%	1,688	1,707	(1)%
Average mill head grade (grams/tonne)	5.50	7.57	(27)%	5.48	5.91	(7)%
Average recovery rate	90%	85%	6 %	90%	86%	5 %
Gold Produced (thousands of ounces)	65	105	(38)%	274	268	2 %
Gold Sold (thousands of ounces)	69	103	(33)%	278	265	5 %
Total Cash Costs: By-product (per ounce)	$ 965	$ 677	43 %	$ 875	$ 911	(4)%
AISC (per ounce)	$ 1,075	$ 761	41 %	$ 981	$ 1,007	(3)%
Mining cost (per tonne)	$ 72.71	$ 58.26	25 %	$ 65.24	$ 73.58	(11)%
Milling cost (per tonne)	$ 36.03	$ 37.85	(5)%	$ 37.45	$ 39.37	(5)%
General and administrative cost (per tonne milled)	$ 38.96	$ 32.31	21 %	$ 35.68	$ 36.09	(1)%
Financial Data (in millions)						
Revenues [1]	$ 82	$ 112	(27)%	$ 346	$ 259	34 %
Production costs	$ 66	$ 65	2 %	$ 243	$ 201	21 %
Depreciation and depletion	$ 39	$ 59	(34)%	$ 146	$ 137	7 %
Loss from operations	$ (24)	$ (410)	(94)%	$ (43)	$ (476)	(91)%
Expenditures on mining interests (cash basis)	$ 32	$ 30	7 %	$ 94	$ 267	(65)%
– Sustaining	*$ 8*	*$ 8*	*— %*	*$ 28*	*$ 21*	*33 %*
– Expansionary	*$ 24*	*$ 22*	*9 %*	*$ 66*	*$ 246*	*(73)%*

(1) During the pre-commissioning production period (prior to April 1, 2015), costs incurred, net of proceeds from sales of $48 million, were offset against capitalized mining costs and are referred to as pre-operating expenditures.

Operating Highlights

Gold production for 2016 was 2% higher than 2015 due to an increase in mined tonnes, which was partially offset by the exhaustion of surface stockpiles that contributed to mill feed in 2015. Éléonore mined 22% more tonnes in 2016 than 2015 as mining on four levels was established and higher productivity was achieved with the completion of the production shaft in the fourth quarter of 2016 and the ore handling system on the 690 meter level.

Financial Highlights

Loss from operations of $43 million in 2016 compared to a loss from operations of $78 million in 2015 (excluding the $398 million 2015 impairment in mining interest). The loss decreased as a result of a higher realized gold price, as well as lower production costs on a per unit basis as the mine completed key infrastructure.

AISC for 2016 were 3% lower than 2015 due to increased efficiencies resulting in lower operating costs. Mining costs per tonne decreased by 11% as the mine increased output and greater efficiency was achieved from the completion of the production shaft and ore handling systems.

Sustaining capital expenditures for the year ended 2016 increased 33% compared to 2015 as the mine continued to expand operations. Expansionary capital expenditures decreased by 73% as the majority of the permanent mine infrastructure was completed in 2015.

Fourth Quarter 2016 Results

Gold production for the fourth quarter of 2016 was 38% lower than the fourth quarter of 2015 due to lower milled tonnes and lower grade. Lower milled tonnes were the result of the depletion of surface stockpiles in 2015 and lower grades were consistent with the mine plan.

AISC for the fourth quarter of 2016 was 41% higher than the fourth quarter of 2015 due to lower production.

2017 Outlook

Eleonore expects to produce 315,000 ounces of gold (+/-5%). The increase compared to 2016 is due to the continued ramp up of the mine. The production ramp-up into full capacity is expected to continue into 2018 with the anticipated addition of a fifth production horizon. A life of mine study is underway to determine the sustainable mining rate from the Roberto deposit.

AISC is expected to be $985 per ounce (+/-5%). While there is expected to be a decrease in operating costs as the mine benefits from a full year of production from the permanent ore handling system, including the production shaft, and efficiencies from higher throughput rates, this is expected to be offset by higher sustaining capital related to tailings management facility expansion.

Porcupine, Canada (100%-owned)

	Three months ended December 31			Year ended December 31		
Operating Data	2016	2015	Change	2016	2015	Change
Tonnes of ore milled (thousands)	808	1,118	(28)%	3,491	4,015	(13)%
Average mill head grade (grams/tonne)	2.78	2.43	14 %	2.64	2.37	11 %
Average recovery rate	92%	89%	3 %	92%	90%	2 %
Gold Produced (thousands of ounces)	66	74	(11)%	277	274	1 %
Gold Sold (thousands of ounces)	63	74	(15)%	275	273	1 %
Total Cash Costs: By-product (per ounce)	$ 733	$ 769	(5)%	$ 688	$ 776	(11)%
AISC (per ounce)	$ 985	$ 1,031	(4)%	$ 898	$ 1,078	(17)%
Mining cost underground (per tonne)	$ 127.37	$ 85.85	48 %	$ 105.81	$ 101.35	4 %
Mining cost open pit (per tonne)	$ 4.70	$ 4.92	(4)%	$ 4.94	$ 5.56	(11)%
Milling cost (per tonne)	$ 8.20	$ 7.67	7 %	$ 7.75	$ 8.47	(9)%
General and administrative cost (per tonne milled)	$ 10.52	$ 11.23	(6)%	$ 10.83	$ 12.34	(12)%
Financial Data (in millions)						
Revenues	$ 76	$ 82	(7)%	$ 343	$ 315	9 %
Production costs (1)	$ 8	$ (4)	n/a	$ 151	$ 142	6 %
Depreciation and depletion	$ 7	$ 14	(50)%	$ 63	$ 50	26 %
Earnings (loss) from operations	$ 59	$ (52)	n/a	$ 123	$ (1)	n/a
Expenditures on mining interests (cash basis)	$ 21	$ 26	(19)%	$ 62	$ 97	(36)%
– Sustaining	*$ 15*	*$ 15*	*— %*	*$ 46*	*$ 67*	*(31)%*
– Expansionary	*$ 6*	*$ 11*	*(45)%*	*$ 16*	*$ 30*	*(47)%*

(1) Production costs for the fourth quarter of 2016 were $46 million compared to $53 million in 2015, excluding a change in estimate of reclamation costs for closed sites.

Operating Highlights

Gold production for 2016 was comparable to 2015 as lower ounces from the Dome underground were offset by higher production from the Hollinger Open Pit, which commenced 24 hour a day production in October 2015 and displaced the lower grade stockpile ore processed in 2015. New efficiencies for ore and people movement were realized in 2016 at Hoyle Pond with the completion of the Hoyle Deep winze.

Financial Highlights

Earnings from operations were $123 million in 2016 compared to earnings of $122 million in 2015 (excluding the $123 million 2015 impairment in mining interest).

AISC for 2016 were 17% lower than 2015 due to lower sustaining capital expenditures as Hoyle Deep was completed early in 2016. Expansionary capital decreased in 2016 as construction at Hollinger ended in 2015.

Fourth Quarter 2016 Results

Gold production for the fourth quarter of 2016 was 11% lower than the fourth quarter of 2015 due to planned lower production from the depletion of the Dome underground and lower tonnes were milled as depletion of the low grade stockpile was partially offset by the increased production at Hollinger Open Pit.

AISC for the fourth quarter of 2016 were 4% lower than the fourth quarter of 2015 due to lower production costs, partially offset by lower gold production.

2017 Outlook

Porcupine is expected to produce 285,000 ounces (+/-5%), with AISC expected to be $900 per ounce (+/-5%), consistent with 2016.

Musselwhite, Canada (100%-owned)

	Three months ended December 31			Year ended December 31		
Operating Data	2016	2015	Change	2016	2015	Change
Tonnes of ore milled (thousands)	348	314	11 %	1,188	1,209	(2)%
Average mill head grade (grams/tonne)	7.13	7.95	(10)%	7.17	7.15	— %
Average recovery rate	95%	97%	(2)%	96%	97%	(1)%
Gold Produced (thousands of ounces)	75	81	(7)%	261	270	(3)%
Gold Sold (thousands of ounces)	74	83	(11)%	260	269	(3)%
Total Cash Costs: By-product (per ounce)	$ 511	$ 527	(3)%	$ 538	$ 599	(10)%
AISC (per ounce)	$ 696	$ 699	— %	$ 678	$ 766	(11)%
Mining cost (per tonne)	$ 55.03	$ 59.55	(8)%	$ 60.41	$ 65.18	(7)%
Milling cost (per tonne)	$ 13.46	$ 11.97	12 %	$ 12.95	$ 13.01	— %
General and administrative cost (per tonne milled)	$ 34.31	$ 40.03	(14)%	$ 40.75	$ 39.44	3 %
Financial Data (in millions)						
Revenues	$ 87	$ 92	(5)%	$ 321	$ 311	3 %
Production costs	$ 37	$ 40	(8)%	$ 140	$ 150	(7)%
Depreciation and depletion	$ 12	$ 19	(37)%	$ 59	$ 63	(6)%
Earnings from operations	$ 38	$ 33	15 %	$ 118	$ 92	28 %
Expenditures on mining interests (cash basis)	$ 18	$ 13	38 %	$ 37	$ 38	(3)%
– Sustaining	*$ 12*	*$ 13*	*(8)%*	*$ 29*	*$ 38*	*(24)%*
– Expansionary	*$ 6*	*$ —*	*—*	*$ 8*	*$ —*	*—*

Operating Highlights

Gold production for 2016 was comparable to 2015. Mining activities continued to primarily be based in the PQ Deep and Lynx zones.

Financial Highlights

Earnings from operations were $118 million in 2016 compared to earnings of $92 million in 2015. Earnings increased due to higher gold prices and continued cost reduction efforts, partially offset by lower ounces sold.

AISC for 2016 were 11% lower than 2015 due to lower production costs and lower sustaining capital, partially offset by lower gold production.

Sustaining capital expenditures for 2016 decreased by 24% primarily as a result of lower capital development.

Fourth Quarter 2016 Results

Gold production for the fourth quarter of 2016 was 7% lower than the fourth quarter of 2015 due to lower head grade and a lower recovery rate.

AISC for the fourth quarter of 2016 were essentially unchanged from the fourth quarter of 2015 due to reduced operating costs, offset by lower gold production.

2017 Outlook

Musselwhite is expected to produce 265,000 ounces of gold (+/-5%) in line with 2016. AISC is expected to be $715 per ounce (+/-5%), in line with 2016.

OTHER MINE SITE OPERATING AND FINANCIAL DATA

The Company's Other operations consist of Los Filos (100%-owned) in Mexico, Marlin (100%-owned) in Guatemala, and Alumbrera (37.5%-owned) in Argentina.

Los Filos, Mexico (100%-owned)

	Three months ended December 31			Year ended December 31		
Operating Data	2016	2015	Change	2016	2015	Change
Tonnes of ore mined (thousands)	2,130	5,482	(61)%	10,717	18,738	(43)%
Tonnes of waste removed (thousands)	1,950	8,368	(77)%	13,344	43,862	(70)%
Ratio of waste to ore	0.9	1.6	(44)%	1.3	2.4	(46)%
Tonnes of ore processed (thousands)	2,205	5,468	(60)%	10,809	18,607	(42)%
Average grade processed (grams/tonne)	0.78	0.78	— %	0.82	0.76	8 %
Gold Produced (thousands of ounces)	37	75	(51)%	231	273	(15)%
Gold Sold (thousands of ounces)	45	77	(42)%	235	271	(13)%
Total Cash Costs: By-product (per ounce) (1)	$ 806	$ 2,004	(60)%	$ 756	$ 1,313	(42)%
AISC (per ounce) (1)	$ 977	$ 2,131	(54)%	$ 878	$ 1,488	(41)%
Financial Data (in millions)						
Expenditures on mining interests (cash basis)	$ 5	$ 9	(44)%	$ 24	$ 43	(44)%
– Sustaining	*$ 5*	*$ 9*	*(44)%*	*$ 24*	*$ 43*	*(44)%*
– Expansionary	*$ —*	*$ —*	*—*	*$ —*	*$ —*	*—*

(1) Cash reductions to the carrying value of the heap leach ore inventory to net realizable value were recorded during the three months and year ended December 31, 2015 for $92 million and $131 million, respectively. Total cash costs by-product and AISC, excluding the impact of carrying value reduction for the year ended 2015 were $829 per ounce and $1,003 per ounce, respectively (three months ended December 31, 2015, $811 per ounce and $937 per ounce, respectively).

Operating Highlights

On January 12, 2017 the Company announced the sale of Los Filos to Leagold which is expected to close by the end of the first quarter of 2017.

Commencing in 2016, Los Filos has been operating under a revised life of mine plan that includes a smaller pit and lower stripping costs.

Gold production for 2016 was 15% lower than 2015 primarily due to the revision of the mine plan. The lower tonnes placed on the heap leach pad that reduced gold production were partially offset by higher grade ore mined and higher recovered ounces from enhanced recovery strategies for the leach pad inventories, including higher solution flow, high pressure solution injection and deeper surface ripping.

AISC for 2016 were 41% lower than 2015 due to the 2015 year end heap leach inventory being reduced by $131 million to net realizable value. Excluding the impact of the heap leach write down, AISC for 2016 were 12% lower than 2015 due to lower operating costs, a weaker Mexican peso and lower sustaining capital expenditures, partially offset by lower gold production.

Sustaining capital expenditures for the year ended 2016 were 44% lower than 2015 as a result of lower development costs tied to the revised life of mine plan.

Fourth Quarter 2016 Results

Gold production for the fourth quarter of 2016 was 51% lower than fourth quarter of 2015 due to the revision of the mine plan. The lower tonnes placed on the heap leach pad that reduced gold production were partially offset by higher recovered ounces from enhanced recovery strategies for the leach pad inventories.

Excluding the impact of the heap leach write down, AISC for fourth quarter of 2016 was in line with 2015.

Marlin, Guatemala (100% owned)

	Three months ended December 31			Year ended December 31		
Operating Data	2016	2015	Change	2016	2015	Change
Tonnes of ore milled (thousands)	266	310	(14)%	1,006	1,310	(23)%
Average mill Gold grade (grams/tonne)	3.39	4.12	(18)%	3.65	4.12	(11)%
Average mill Silver grade (grams/tonne)	203	198	3 %	184	185	(1)%
Average Gold recovery rate	97%	97%	— %	97%	97%	— %
Average Silver recovery rate	96%	95%	1 %	96%	95%	1 %
Gold Produced (thousands of ounces)	28	41	(32)%	115	169	(32)%
Silver Produced (thousands of ounces)	1,651	1,884	(12)%	5,747	7,338	(22)%
Gold equivalent ounces produced (thousands of ounces)(1)	52	73	(29)%	201	293	(31)%
Gold Sold (thousands of ounces)	27	44	(39)%	116	169	(31)%
Silver Sold (thousands of ounces)	1,536	1,993	(23)%	5,739	7,294	(21)%
Total Cash Costs: By-product (per ounce) (2)	$ 600	$ 287	109 %	$ 803	$ 336	139 %
Total Cash Costs: Co-product (per ounce) (2)	$ 874	$ 563	55 %	$ 977	$ 611	60 %
AISC (per ounce)	$ 716	$ 787	(9)%	$ 986	$ 868	14 %
Financial Data (in millions)						
Expenditures on mining interests (cash basis)	$ —	$ 17	(100)%	$ 2	$ 67	(97)%
– Sustaining	*$ —*	*$ 17*	*(100)%*	*$ 2*	*$ 67*	*(97)%*
– Expansionary	*$ —*	*$ —*	*—*	*$ —*	*$ —*	*—*

(1) Gold equivalent ounces are calculated using the following assumptions: $1,100 per ounce of gold and a by-product metal price of $16.50 per ounce of silver (2015 – $1,300; $22.00, respectively). By-product metals are converted to gold equivalent ounces by multiplying by-product metal production with the associated by-product metal price and dividing it by the gold price.

(2) The calculation of total cash costs per ounce of gold is net of by-product silver sales revenues. If silver were treated as a co-product, average total cash costs at Marlin for the three months and year ended December 31, 2016 would be $874 per ounce of gold and $12.20 per ounce of silver and $977 per ounce of gold and $13.60 per ounce of silver, respectively (three months and year ended December 31, 2015 – $563 and $8.71, and $611 and $9.42, respectively). Production costs are allocated to each co-product based on the ratio of actual sales volumes multiplied by budget metal prices (see page 46).

Operating Highlights

The Marlin mine has commenced closure activities and the remaining production is expected to be completed by the end of the first quarter of 2017.

Gold production for 2016 was 32% lower than 2015 primarily due to less ore from remnant mining and 11% lower head grade. Tonnes processed were 23% lower in line with the reduced mine production.

AISC for 2016 were 14% higher than 2015 due to lower gold production, partially offset by lower sustaining capital expenditures.

Sustaining capital expenditures for 2016 were negligible due to the short mine life.

Fourth Quarter 2016 Results

Gold production for the fourth quarter of 2016 was 32% lower than the fourth quarter of 2015 due to 14% lower tonnes processed and 18% lower head grade.

AISC for the fourth quarter of 2016 were 9% lower than the fourth quarter of 2015 due to lower sustaining capital expenditures, partially offset by lower gold production.

Alumbrera, Argentina (37.5%-owned)

(tabular amounts below represent Goldcorp's proportionate 37.5% share)

	Three months ended December 31			Year ended December 31		
Operating Data	2016	2015	Change	2016	2015	Change
Tonnes of ore mined (thousands)	3,269	3,117	5 %	12,567	14,227	(12)%
Tonnes of waste removed (thousands)	1,215	3,563	(66)%	9,478	17,119	(45)%
Ratio of waste to ore	0.4	1.1	(64)%	0.8	1.2	(33)%
Tonnes of ore milled (thousands)	3,501	3,165	11 %	12,999	12,401	5 %
Average mill Gold grade (grams/tonne)	0.31	0.35	(11)%	0.33	0.27	22 %
Average mill Copper grade	0.30%	0.36%	(17)%	0.28%	0.24%	17 %
Average Gold recovery rate	76%	72%	6 %	71%	67%	6 %
Average Copper recovery rate	88%	86%	2 %	84%	74%	14 %
Gold Produced (thousands of ounces)	26	26	— %	96	74	30 %
Copper Produced (thousands of pounds)	20,200	21,300	(5)%	67,700	51,100	32 %
Gold equivalent ounces produced (thousands of ounces)[1]	80	77	4 %	273	198	38 %
Gold Sold (thousands of ounces)	27	25	8 %	94	73	29 %
Copper Sold (thousands of pounds)	21,400	16,900	27 %	66,500	51,000	30 %
Total Cash Costs: By-product (per ounce) [2]	$ 56	$ 1,028	(95)%	$ 509	$ 1,264	(60)%
Total Cash Costs: Co-product (per ounce) [2]	$ 644	$ 813	(21)%	$ 723	$ 954	(24)%
AISC (per ounce)	$ 140	$ 1,274	(89)%	$ 603	$ 1,670	(64)%
Financial Data (in millions)						
Expenditures on mining interests (cash basis)	$ 1	$ 4	(75)%	$ 1	$ 18	(94)%
– Sustaining	*$ 1*	*$ 4*	*—*	*$ 1*	*$ 18*	*(94)%*
– Expansionary	*$ —*	*$ —*	*— %*	*$ —*	*$ —*	*— %*

(1) Gold equivalent ounces are calculated using the following assumptions: $1,100 per ounce of gold and a by-product metal price of $2.75 per pound of copper (2015 – $1,300 and $3.00, respectively). By-product metals are converted to gold equivalent ounces by multiplying by-product metal production with the associated by-product metal price and dividing it by the gold price.

(2) The calculation of total cash costs per ounce of gold is net of by-product copper sales revenue. If copper were treated as a co-product, total cash costs for the three months and year ended December 31, 2016 would be $644 per ounce and gold and $1.81 per pound of copper and $723 per ounce of gold and $1.97 per pound of copper, respectively (three months and year ended December 31, 2015 – $813 and $2.32, $954 and $2.69, respectively). Production costs are allocated to each co-product based on the ratio of actual sales volumes multiplied by budget metal prices (see page 46).

Operating Highlights

Gold and copper production for 2016 were 30% and 32%, higher, respectively, than 2015 primarily due to higher ore milled, grades and recoveries.

Head grades were higher than 2015 due to ore mined from the higher grade areas of phase 12 of Alumbrera pit, while in 2015 ore mined was from the lower grade phase 11 portion of the pit. Ore milled in 2016 was higher than 2015 due to softer ore from Bajo el Durazno pit and higher mill utilization. Higher gold recoveries were due to better head grades. Copper recoveries were higher due to better head grades than 2015 and due to the presence of soluble copper material in 2015.

AISC for 2016 were 64% lower than 2015 due to higher production volume, lower sustaining capital expenditures, a weaker Argentine Peso and lower production taxes due to elimination by the government in February 2016 of the eight percent export duty.

Fourth Quarter 2016 Results

Gold production in the fourth quarter of 2016 was consistent with the fourth quarter of 2015. Copper production was 5% lower than the fourth quarter of 2015 due to lower head grade.

AISC for the fourth quarter of 2016 were 89% lower than the fourth quarter of 2015 due to lower waste material moved, higher by-product copper credits, lower sustaining capital expenditures, and a weaker Argentine Peso.