

Management’s Discussion and Analysis (“MD&A”) For the Period Ended September 30, 2019

This Management Discussion and Analysis (“MD&A”) has been prepared as of October 29, 2019, and is intended to provide a review of the financial position and results of operations of Centerra Gold Inc. (“Centerra” or the “Company”) for the three and nine months ended September 30, 2019 in comparison with the corresponding periods ended September 30, 2018. This discussion should be read in conjunction with the Company’s unaudited condensed consolidated interim financial statements and the notes thereto for the three and nine months ended September 30, 2019 prepared in accordance with International Financial Reporting Standards (“IFRS”). This MD&A should also be read in conjunction with the Company’s audited annual consolidated financial statements for the years ended December 31, 2018 and 2017, the related MD&A and the Annual Information Form for the year ended December 31, 2018 (the “2018 Annual Information Form”). The Company’s unaudited condensed consolidated interim financial statements and the notes thereto for the three and nine months ended September 30, 2019, 2018 Annual Report and 2018 Annual Information Form are available at www.centerragold.com and on the System for Electronic Document Analysis and Retrieval (“SEDAR”) at www.sedar.com. In addition, this discussion contains forward-looking information regarding Centerra’s business and operations. Such forward-looking statements involve risks, uncertainties and other factors that could cause actual results to differ materially from those expressed or implied by such forward looking statements. See “Risk Factors” and “Caution Regarding Forward-Looking Information” in this discussion. All dollar amounts are expressed in United States dollars (“USD”), except as otherwise indicated.

TABLE OF CONTENTS

1.	Overview.....	2
2.	Consolidated Financial and Operational Highlights.....	3
3.	Overview of Consolidated Results.....	4
4.	2019 Outlook.....	5
5.	Financial Performance.....	8
6.	Balance Sheet Review.....	11
7.	Market Conditions.....	12
8.	Financial Instruments.....	13
9.	Operating Mines and Facilities.....	13
10.	Construction and Development Projects.....	26
11.	Quarterly Results – Previous Eight Quarters.....	27
12.	Contingencies.....	28
13.	Accounting Estimates, Policies and Changes.....	31
14.	Disclosure Controls and Procedures and Internal Control Over Financial Reporting.....	31
15.	Non-GAAP Measures.....	32
16.	Caution Regarding Forward-Looking Information.....	37

1. Overview

Centerra is a Canadian-based gold mining company focused on operating, developing, exploring and acquiring gold properties worldwide and is one of the largest Western-based gold producers in Central Asia. Centerra's principal operations are the Kumtor Gold mine located in the Kyrgyz Republic and the Mount Milligan Gold-Copper mine located in British Columbia, Canada. The Company is currently constructing its next gold mine, the Öksüt Project in Turkey, is developing two properties in Canada, the Kemess Project and the Greenstone Gold Project (50% ownership), and has options to acquire exploration joint venture properties in Canada, Finland, Mexico, Sweden, Turkey and the United States. The Company owns various assets included in its Molybdenum Business Unit consisting of the Langeloth metallurgical processing facility and Thompson Creek Mine in the United States of America, and the Endako Mine in British Columbia, Canada. See "Operating Mines and Facilities" and "Development Projects" for further details.

Centerra's common shares are listed for trading on the Toronto Stock Exchange under the symbol CG. As of October 29, 2019, there are 293,648,952 common shares issued and outstanding, options to acquire 4,413,358 common shares outstanding under its stock option plan and 1,238,170 units outstanding under its restricted share unit plan (exercisable on a 1:1 basis for common shares).

Management and Board changes – Gordon D. Reid, Vice President and Chief Operating Officer will be retiring on January 1, 2020 and will be succeeded by Daniel Desjardins, President of Kumtor Gold Company. As previously announced, Michael S. Parrett has succeeded Stephen A. Lang as independent Chair of the Board of Directors effective October 1, 2019.

2. Consolidated Financial and Operational Highlights

<i>Unaudited (\$ millions, except as noted)</i>	Three months ended September 30			Nine months ended September 30		
	2019	2018	% Change	2019	2018	% Change
Financial Highlights						
Revenue	\$ 388.3	\$ 259.1	50%	\$ 1,062.8	\$ 737.8	44%
Cost of sales	236.6	189.0	25%	698.4	529.2	32%
Earnings from mine operations	148.7	66.7	123%	355.4	188.1	89%
Net (loss) earnings	\$ (165.1)	\$ 6.0	(2855%)	\$ (81.3)	\$ 58.6	(239%)
Adjusted earnings⁽³⁾	\$ 75.4	\$ 14.5	420%	\$ 159.2	\$ 28.9	451%
Cash provided by operations	31.9	37.6	(15%)	241.6	65.9	267%
Adjusted cash provided by operations ⁽³⁾	94.5	37.6	151%	304.2	70.3	333%
Free cash flow (unlevered) ⁽³⁾	(52.5)	(24.1)	118%	35.6	(133.9)	(127%)
Adjusted free cash flow (unlevered) ⁽³⁾	10.1	(24.1)	(142%)	98.2	(129.5)	(176%)
Capital expenditures (sustaining)	21.2	20.2	5%	61.8	65.0	(5%)
Capital expenditures (growth and development projects)	45.8	31.7	45%	108.6	67.1	62%
Capital expenditures (stripping)	23.6	16.5	43%	62.1	102.8	(40%)
Total assets	\$ 2,697.8	\$ 2,890.7	(7%)	\$ 2,697.8	\$ 2,890.7	(7%)
Long-term debt and lease obligation	91.5	296.0	(69%)	91.5	296.0	(69%)
Cash, cash equivalents and restricted cash	109.1	222.1	(51%)	109.1	222.1	(51%)
Per Share Data						
Net (loss) earnings per common share - \$ basic ⁽¹⁾	\$ (0.56)	\$ 0.02	(2900%)	\$ (0.28)	\$ 0.20	(240%)
Net (loss) earnings per common share - \$ diluted ⁽¹⁾	\$ (0.56)	\$ 0.01	(5700%)	\$ (0.28)	\$ 0.19	(247%)
Adjusted earnings per common share - \$ basic ⁽¹⁾⁽³⁾	\$ 0.26	\$ 0.05	420%	\$ 0.54	\$ 0.10	440%
Adjusted earnings per common share - \$ diluted ⁽¹⁾⁽³⁾	\$ 0.26	\$ 0.05	420%	\$ 0.54	\$ 0.10	440%
Per Ounce Data (except as noted)						
Average gold spot price - \$/oz ⁽²⁾	1,447	1,213	19%	1,344	1,283	5%
Average copper spot price - \$/lbs ⁽²⁾	2.77	3.12	(11%)	2.80	3.14	(11%)
Average realized gold price (Kumtor) - \$/oz ⁽³⁾	1,464	1,195	23%	1,352	1,263	7%
Average realized gold price (Mount Milligan - combined) - \$/oz ⁽³⁾⁽⁴⁾	1,114	947	18%	1,063	964	10%
Average realized gold price (consolidated) - \$/oz ⁽³⁾⁽⁴⁾	1,374	1,125	22%	1,282	1,186	8%
Average realized copper price (consolidated) - \$/lbs ⁽³⁾⁽⁴⁾	1.89	2.01	(6%)	2.04	2.13	(4%)
Operating Highlights						
Gold produced – ounces	205,660	181,243	13%	588,802	441,189	33%
Gold sold – ounces	216,023	166,716	30%	610,761	439,575	39%
Payable Copper Produced (000's lbs)	21,229	12,704	67%	53,066	35,295	50%
Copper Sales (000's payable lbs)	21,907	13,605	61%	53,129	30,779	73%
Unit Costs						
Gold - All-in sustaining costs on a by-product basis – \$/oz sold ⁽³⁾⁽⁴⁾	\$ 666	\$ 698	(5%)	\$ 683	\$ 861	(21%)
Gold - All-in sustaining costs on a by-product basis (including taxes) – \$/oz sold ⁽³⁾⁽⁴⁾	\$ 825	\$ 824	0%	\$ 833	\$ 1,012	(18%)
Gold - All-in sustaining costs on a co-product basis (before taxes) – \$/oz sold ⁽³⁾⁽⁴⁾	\$ 717	\$ 709	1%	\$ 711	\$ 858	(17%)
Copper - All-in sustaining costs on a co-product basis (before taxes) – \$/pound sold ⁽³⁾⁽⁴⁾	\$ 1.36	\$ 1.73	(21%)	\$ 1.72	\$ 1.89	(9%)

(1) As at September 30, 2019, the Company had 293,567,824 common shares issued and outstanding (293,648,952 common shares as of October 29, 2019). As of October 29, 2019, Centerra had outstanding, 4,413,358 share options under its share option plan with exercise prices ranging from US\$2.83 per share to Cdn\$19.48 per share, with expiry dates between 2020 and 2027 and 1,238,170 restricted share units.

(2) Average for the period as reported by the London Bullion Market Association (US dollar Gold P.M. Fix Rate) and London Metal Exchange (LME).

(3) Non-GAAP measure. See discussion under “Non-GAAP Measures”.

(4) Combines streamed and unstreamed amounts.

3. Overview of Consolidated Results

Third quarter 2019 compared to Third Quarter 2018

The Company recorded a net loss of \$165.1 million in the third quarter of 2019, compared to income of \$6.0 million in the comparative prior year period. Losses in the third quarter of 2019 reflect a \$230.5 million impairment charge on the Mount Milligan mine primarily due to an adjustment to a higher cost profile and an anticipated reduction in gold recoveries; and an additional \$10 million charge to reflect the final settlement of the Strategic Agreement with the Kyrgyz Government. Excluding these charges, adjusted earnings^{NG} for the third quarter of 2019 were \$75.4 million, compared to adjusted earnings^{NG} of \$14.5 million in the comparative period. The higher adjusted earnings^{NG} are due to an increase in ounces sold at Kumtor and at Mount Milligan, as well as higher realized gold prices. The significant increase in production at Kumtor was as a result of processing higher grade ore and achieving higher recoveries. At Mount Milligan mill throughput averaged 55,727 tonnes per calendar day in the third quarter of 2019 due to increased mill availability.

Cash provided by operations was \$31.9 million in the third quarter of 2019, compared to \$37.6 million in the same prior year period. This reduction was a result of the \$62.6 million of payments made by Kumtor Gold Company upon closing the Kumtor Strategic Agreement. Excluding this payment, adjusted cash provided by operations^{NG} in the third quarter of 2019 was \$94.5 million compared to \$37.6 million for the comparative period in 2018. The increase mainly related to higher adjusted earnings^{NG}. Increased adjusted earnings^{NG} also explains the higher adjusted free cash flow (unlevered)^{NG} of \$10.1 million in the third quarter of 2019 compared to adjusted free cash flow deficit (unlevered)^{NG} of \$(24.1) million in the same prior year period.

Cash and cash equivalents at September 30, 2019 was \$80.5 million, as compared to \$151.7 million at December 31, 2018. As at September 30, 2019, the \$500 million corporate credit facility (“Centerra Revolving Term Corporate Facility” or “Corporate Facility”) remains undrawn and available in full.

The available balance on the Company’s \$150 million five-year credit project financing facility for the Öksüt Project (“OMAS Facility”) at September 30, 2019 was \$73.5 million. The undrawn amount is subject to the completion of current negotiations with the OMAS Facility lenders, contemplating a revised repayment schedule that gives consideration to the revised production profile, with first gold pour estimated for January 2020.

Safety and Environment

During the quarter Centerra achieved a number of significant Lost Time Injury Free (“LTI”) milestones including one million LTI free work hours at Mount Milligan, one year of LTI free operation at Kumtor and one million LTI free work hours at the Öksüt Project.

There were no reportable releases to the environment in the third quarter of 2019.

First Nine Months 2019 compared to First Nine Months 2018

The Company recorded a net loss of \$81.3 million in the first nine months of 2019, compared to net earnings of \$58.6 million in the same period of 2018. The first nine months of 2019 reflect the \$230.5 million impairment charge on the Mount Milligan Mine and an additional \$10 million charge on final settlement of the Strategic Agreement with the Kyrgyz Government. Excluding these costs, adjusted earnings^{NG} were \$159.2 million in the first nine months of 2019 compared to \$28.9 million in the comparative period after adjusting for a \$28.0 million gain on sale of the Company’s royalty portfolio, a \$9.4 million gain on the sale of the Altan Tsagaan Ovoo property in Mongolia and an \$8.5 million write-down of the Mongolian business unit prior to its sale. The increase in adjusted earnings^{NG} in the current nine-month period was due to increased sales

at both Kumtor and Mount Milligan. At Kumtor, the significant increase in ounces produced and sold was as a result of processing higher grade ore and achieving higher recoveries. At Mount Milligan the increased sales levels reflect more concentrate shipments, higher mill throughput, coupled with higher copper grades and recoveries and higher gold recoveries.

Cash provided by operations was \$241.6 million in the first nine months of 2019, which included the Kyrgyz Republic settlement payment of \$62.6 million. Excluding this payment, adjusted cash provided by operations^{NG} for the 2019 year-to-date was \$304.2 million compared to \$70.3 million in the comparative prior year period. The increase resulted mainly from higher sales volumes at both Kumtor and Mount Milligan and higher realized gold prices, offset by lower gold grades at Mount Milligan. Higher adjusted free cash flow (unlevered)^{NG} of \$98.2 million in the first nine months of 2019 compared to adjusted free cash flow deficit (unlevered)^{NG} of \$(129.5) million in the same prior year period was due to higher adjusted earnings^{NG}.

4. 2019 Outlook

See “Material Assumption and Risks” for material assumptions or factors used to forecast production and costs for 2019.

2019 Production and Sales Guidance

The Company is increasing its 2019 consolidated gold production guidance to 730,000-765,000 ounces which reflects an increase in gold production guidance for Kumtor to 575,000-590,000. This compares to previously issued consolidated gold production guidance of 705,000-750,000 ounces and Kumtor of 550,000-575,000 ounces. These production guidance revisions reflect better than expected performance in the first nine months of 2019. Kumtor’s production in the fourth quarter will be slightly lower than previous quarters due to a newly planned mill maintenance shutdown in the fourth quarter that was previously scheduled to occur in 2020.

There is no change from previous guidance for gold and copper production from Mount Milligan (streamed and unstreamed).

Centerra’s 2019 production is currently forecast as follows:

	Units	Kumtor	Mount Milligan ⁽¹⁾	Centerra
Gold				
Unstreamed Gold Payable Production	(Koz)	575 – 590	101 – 114	676 – 704
Streamed Gold Payable Production ⁽¹⁾	(Koz)	–	54 – 61	54 – 61
Total Gold Payable Production⁽²⁾	(Koz)	575 – 590	155 – 175	730 – 765
Copper				
Unstreamed Copper Payable Production	(Mlb)	–	53 – 61	53 – 61
Streamed Copper Payable Production ⁽¹⁾	(Mlb)	–	12 – 14	12 – 14
Total Copper Payable Production⁽³⁾	(Mlb)	–	65 – 75	65 – 75

1. Mount Milligan Streaming Arrangement entitles Royal Gold to 35% and 18.75% of gold and copper sales, respectively, from the Mount Milligan mine. Under the Mount Milligan Streaming Arrangement, Royal Gold will pay \$435 per ounce of gold delivered and 15% of the spot price per metric tonne of copper delivered.
2. Gold production assumes 82.9% recovery at Kumtor and 66.9% recovery at Mount Milligan.

3. Copper production assumes 81.6% recovery for copper at Mount Milligan.

The Company is increasing its 2019 consolidated gold sales guidance to 745,000-785,000 ounces which reflects an increase in its gold sales guidance for Kumtor to 590,000-610,000 ounces, due to the better than expected performance in the first nine months of 2019. This compares to the previously issued consolidated gold sales guidance of 705,000-750,000 ounces and Kumtor of 550,000-575,000 ounces.

2019 All-in Sustaining Unit Costs^{NG}

Centerra's 2019 all-in sustaining costs per ounce sold^{NG}, calculated on a by-product basis, are forecasted to remain unchanged from previous guidance and are as follows:

	Units	Kumtor	Mount Milligan ⁽²⁾	Centerra ⁽²⁾
Ounces sold forecast	(Koz)	590 – 610	155 – 175	745 – 785
All-in sustaining costs on a by-product basis^{(1), (2)}	(\$/oz)	\$635 - \$685	\$727 - \$821	\$713 – \$743
Revenue-based tax ⁽³⁾ and taxes ⁽³⁾	(\$/oz)	186 – 195	21 - 24	148 – 157
All-in sustaining costs on a by-product basis, including taxes ^{(1), (2), (3)}	(\$/oz)	\$821 – \$880	\$748 – \$845	\$861 – \$900
Gold - All-in sustaining costs on a co-product basis (\$/ounce) ^{(1), (2)}	(\$/oz)	\$635 - \$685	\$842 - \$950	\$722 - \$768
Copper - All-in sustaining costs on a co-product basis (\$/pound) ^{(1), (2)}	(\$/lb)	–	\$1.84 - \$2.12	\$1.84 – \$2.12

1) All-in sustaining costs per ounce sold, all-in sustaining costs per ounce sold on a by-product basis, all-in sustaining costs on a by-product basis including taxes per ounce sold and all-in sustaining costs on a co-product basis (gold and copper) on a per unit basis are non-GAAP measures and are discussed under “Non-GAAP Measures”.

2) Mount Milligan payable production and ounces sold are on a 100% basis (the Mount Milligan Streaming Arrangement entitles Royal Gold to 35% and 18.75% of gold and copper sales, respectively). Unit costs and consolidated unit costs include a credit for forecasted copper sales treated as by-product for all-in sustaining costs and all-in sustaining costs plus taxes. The copper sales are based on a copper price assumption of \$2.60 per pound sold for Centerra's 81.25% share of copper production and the remaining 18.75% of copper revenue at \$0.39 per pound (15% of spot price, assuming spot at \$2.60 per pound), representing the Mount Milligan Streaming Arrangement. Payable production for copper and gold reflects estimated metallurgical losses resulting from handling of the concentrate and payable metal deductions, subject to metal content, levied by smelters.

3) Includes revenue-based tax at Kumtor and the British Columbia mineral tax at Mount Milligan based on a forecast gold price assumption of \$1,375 per ounce sold.

4) Results in chart may not add due to rounding.

2019 Capital Spending

Centerra's 2019 guidance for capital spending, excluding capitalized stripping has been decreased to \$260 million from \$275 million as a result of a \$15 million deferral in the expected spending at the Öksüt Project in 2019 to 2020. Total project costs at the Öksüt Project remains unchanged at \$200 million, to be completed in the first half of 2020. The change in growth capital at Öksüt for 2019 to \$85 million from the previous guidance of \$100 million is due to the deferral of certain non-essential construction activities to after commissioning.

Projected capital expenditures (excluding capitalized stripping) include:

Projects (\$ millions)	2019 Sustaining Capital	2019 Growth Capital
Kumtor Mine	45	20
Mount Milligan Mine	45	-
Öksüt Project	-	85
Kemess Underground Project	-	35
Greenstone Gold Property	-	20
Other ⁽¹⁾	10	-
Consolidated Total	\$100	\$160

¹⁾ Thompson Creek Mine, Endako Mine (75% ownership), Langeloth facility and Corporate

Total capitalized stripping at Kumtor is expected to decrease to \$125 million from previous guidance of \$140 million. The cash component and non-cash components are forecasted to be \$100 million and \$25 million, respectively, from previous guidance of \$110 million and \$30 million, respectively. The decrease is primarily due to the revised stripping activity performed in cut-backs 19 and 20.

2019 Depreciation, Depletion and Amortization

Consolidated depreciation, depletion and amortization (DD&A) expense included in costs of sales expense for 2019 is forecasted to remain unchanged from the previous guidance of \$240 - \$260 million.

2019 Other Costs

Forecasted costs in 2019 for care and maintenance at the Molybdenum business unit, financing, exploration and income taxes remain unchanged from the previously issued guidance of \$13-\$15 million, \$16-18 million, \$30 million and \$3.2 - \$4.2 million, respectively.

Sensitivities

Centerra's revenues, earnings and cash flows for the remaining three months of 2019 are sensitive to changes in certain key inputs or currencies. The Company has estimated the impact of any such changes on revenues, net earnings and cash from operations.

	Change	Impact on (\$ millions)				Impact on (\$ per ounce sold)
		Costs⁽³⁾	Revenues	Cash flows	Net Earnings (after tax)	AISC⁽²⁾⁽³⁾ on by-product basis
Gold price	\$50/oz	0.8 – 1.3	6.9 – 8.1	6 – 7.1	6 – 7.1	0 – 1
Copper price	10%	0.1 – 0.2	2.5 – 4.6	2.4 – 4.4	2.4 – 4.4	4 – 5
Diesel fuel	10%	1 – 2	-	1 – 2	1 – 2	1 – 3
Kyrgyz som ⁽¹⁾	1 som	0.3 – 0.8	-	0.3 – 0.8	0.3 – 0.8	2 – 3
Turkish Lira ⁽¹⁾	1 lira	0.3 – 0.5	-	0.3 – 0.5	-	-
Canadian dollar ⁽¹⁾	10 cents	3 – 5	-	3 – 5	2 – 4	1 – 3

⁽¹⁾ Appreciation of currency against the U.S. dollar will result in higher costs and lower cash flow and earnings, depreciation of currency against the U.S. dollar results in decreased costs and increased cash flow and earnings.

⁽²⁾ Non-GAAP measure. See discussion under “Non-GAAP Measures”,

⁽³⁾ Includes capital costs and AISC is calculated over the full year ounces sold forecast

Production, cost and capital forecasts for 2019 are forward-looking information and are based on key assumptions and subject to material risk factors that could cause actual results to differ materially and which are discussed herein under the headings “Material Assumptions & Risks” and “Caution Regarding Forward-Looking Information” in this document and under the heading “Risks That Can Affect Our Business” in the Company’s 2018 Annual Information Form.

Material Assumptions and Risks

Material assumptions or factors used to forecast production and costs for the remaining three months of 2019 include the following:

- a gold price of \$1,375 per ounce, up from \$1,300 per ounce,
- a copper price of \$2.60 per pound, down from \$2.70 per pound,
- a molybdenum price of \$12 per pound, unchanged,
- exchange rates (unchanged):
 - \$1USD:\$1.30 Canadian dollar,
 - \$1USD:69.0 Kyrgyz som,
 - \$1USD:5.50 Turkish lira,
 - \$1USD:0.88 Euro,
- diesel fuel price assumption:
 - \$0.54/litre at Kumtor,
 - \$0.91/litre (CAD\$1.30/litre) at Mount Milligan.

The assumed diesel price of \$0.54/litre at Kumtor assumes that no Russian export duty will be paid on the fuel exports from Russia to the Kyrgyz Republic. Diesel fuel for Kumtor is sourced from separate Russian suppliers. The diesel fuel price assumes a price of oil of approximately \$86 per barrel. Crude oil is a component of diesel fuel purchased by the Company, such that changes in the price of Brent crude oil generally impacts diesel fuel prices. The Company established a hedging strategy to manage changes in diesel fuel prices on the cost of operations at the Kumtor mine.

Other material assumptions used in forecasting production, costs and capital forecasts for the remaining three months of 2019 are unchanged from the prior guidance disclosure of July 30, 2019.

Qualified Person & QA/QC – Production Information

The production information and other scientific and technical information presented in this document, including the production estimates were prepared in accordance with the standards of the Canadian Institute of Mining, Metallurgy and Petroleum and NI 43-101 and (except as otherwise noted) were prepared, reviewed, verified and compiled by Centerra’s geological and mining staff under the supervision of Gordon Reid, Professional Engineer and Centerra’s Vice President and Chief Operating Officer, who is the qualified person for the purpose of NI 43-101. Sample preparation, analytical techniques, laboratories used and quality assurance-quality control protocols used during the exploration drilling programs are done consistent with industry standards and independent certified assay labs are used.

5. Financial Performance

Third Quarter 2019 compared to Third Quarter 2018

Revenue increased to \$388.3 million in the third quarter of 2019 from \$259.1 million in the comparative period, as a result of 30% more gold ounces sold, 22% higher average realized gold price, 61% more copper pounds sold and 7% higher molybdenum sales as compared to 2018, partially offset by 5% lower average realized copper prices.

Gold production for the third quarter of 2019 was 205,660 ounces compared to 181,243 ounces for the same prior year period. Gold production at Kumtor was 150,305 ounces in the third quarter of 2019, 23% more than the same prior year period. The increase in ounces produced at Kumtor was a result of milling ore with higher grades (3.8 g/t compared to 3.0 g/t) partly due to accessing higher grade material earlier than the prior period, positive grade reconciliations and higher recoveries (84.8% compared to 79.0%). During the third quarter 2019, Mount Milligan produced 55,355 ounces of gold, a 6% decrease from the same prior year period as higher mill availability, throughput and copper production were offset by lower gold grades in 2019. Copper production at Mount Milligan during the third quarter of 2019 was 21.2 million pounds, 8.5 million pounds higher than the comparative prior year period, reflecting higher mill availability, higher grades and higher recoveries.

Cost of sales increased in the third quarter of 2019 to \$236.6 million compared to \$189.0 million in the same period of 2018, mainly due to higher sales volumes at both operating mines and increased depreciation, depletion and amortization. Depreciation, depletion and amortization associated with production was \$66.8 million in the third quarter of 2019 as compared to \$48.4 million in the same prior year period, driven primarily by the increase in sales volume and additional depreciation of capitalized stripping costs at Kumtor.

Centerra's all-in sustaining costs on a by-product basis per ounce of gold sold^{NG}, which excludes revenue-based tax and income tax, decreased to \$666 per ounce in the third quarter of 2019 from \$698 per ounce in the comparative prior year period due primarily to more ounces sold and higher copper credits, partially offset by higher capitalized stripping costs at Kumtor.

An impairment charge of \$230.5 million was recorded in the third quarter of 2019 on the Mount Milligan Mine reflecting the impact of a higher cost profile which will continue in the short to medium term and an anticipated reduction in gold recoveries.

Exploration expenditures in the third quarter of 2019 were \$7.6 million compared to \$7.2 million in the comparative prior year period. The increase was due to an additional \$1.4 million spent on drilling at Kemess, partially offset by slightly reduced spending at Kumtor and Mount Milligan.

Financing costs in the third quarter of 2019 were \$3.4 million compared to \$4.9 million in the comparative prior year period, reflecting the Company's repayment of the principal outstanding on its Corporate Facility.

Corporate administration costs were \$12.7 million in the third quarter of 2019, an increase of \$8.2 million compared to the same prior year period, mainly due to an increase of \$8.0 million in share-based compensation reflecting an increase in the Company's share price.

First Nine Months 2019 compared to First Nine Months 2018

Revenue increased to \$1,062.8 million in the first nine months of 2019 from \$737.8 million in the comparative prior year period, as a result of 39% more gold ounces sold, 8% higher average realized gold price, 73% more copper pounds sold and 9% higher molybdenum sales as compared to 2018.

Gold production for the first nine months of 2019 was 588,802 ounces compared to 441,189 ounces for the same prior year period. Gold production at Kumtor was 451,679 ounces in the first nine months of 2019, 47% more than the 306,467 ounces produced in the comparative period. The increase in ounces produced at Kumtor was a result of milling more ore from higher grade stockpiles (3.7g/t compared to 2.6g/t) and higher recoveries (83.0% compared to 74.3%). During the first nine months of 2019, Mount Milligan produced 137,123 ounces of gold and 53.1 million pounds of copper, 2% and 50% more than in the same period of 2018, reflecting higher mill availability and throughput, higher copper grades and higher gold recoveries, partially offset by lower gold grade.

Cost of sales increased in the first nine months of 2019 to \$698.4 million compared to \$529.2 million in the same prior year period. Cost of sales at Mount Milligan were higher due primarily to higher sales volumes and higher mining and milling costs, including higher water sourcing costs. Higher costs and volumes resulted in a 16% increase in cost of sales in the molybdenum business. Depreciation, depletion and amortization associated with production was \$180.2 million in the first nine months of 2019 as compared to \$133.2 million in the same period of 2018. The increase was due primarily to greater depreciation of capitalized stripping costs at Kumtor.

All-in sustaining costs on a by-product basis per ounce of gold sold^{NG}, which excludes revenue-based tax and income tax, decreased to \$683 per ounce in the first nine months of 2019 from \$861 per ounce in the comparative period mainly as a result of more ounces sold, higher copper credits and lower capitalized stripping costs at Kumtor, partially offset by higher administration costs.

An impairment charge of \$230.5 million was recorded in the first nine months of 2019 on the Mount Milligan Mine reflecting the impact of a higher cost profile will continue in the short to medium term and an anticipated reduction in gold recoveries.

Care and maintenance costs in the first nine months of 2019 totaled \$20.1 million compared to \$23.0 million in the comparative prior year period, due primarily to the disposal of the Mongolian business unit in 2018.

Exploration expenditures in the first nine months of 2019 were \$18.9 million, a 32% increase compared to the \$14.3 million in the same period of 2018, reflecting the increased exploration spending at Kumtor, Mount Milligan and Kemess in 2019.

Financing costs in the first nine months of 2019 were \$11.0 million compared to \$25.8 million in the comparative prior year period, reflecting the Company's repayment of its Corporate Facility, which resulted in lower interest expense, and lower financing costs and fees in 2019.

Corporate administration costs increased to \$36.1 million in the first nine months of 2019 compared \$27.9 million in the same prior year period, mainly due to an increase in share-based compensation of \$15.1 million, driven by an increase in the Company's share price, partially offset by lower professional fees and administration costs associated with the Company's 2018 acquisitions.

6. Balance Sheet Review

Capital Expenditure

\$ millions	Three months ended September 30,			Nine months ended September 30,		
	2019	2018	Change	2019	2018	Change
Consolidated:						
Sustaining capital	21.2	20.2	5%	61.8	65.0	(5%)
Capitalized stripping ⁽¹⁾	23.6	16.5	43%	62.1	102.8	(40%)
Growth capital	6.6	4.4	50%	13.1	13.8	(5%)
Öksüt Project development	23.3	13.4	73%	58.6	28.7	104%
Greenstone Gold Property capital ⁽²⁾	4.5	2.4	86%	12.2	7.6	60%
Kemess Underground Project development	11.4	11.5	(1%)	25.6	17.0	51%
Total ⁽³⁾	90.7	68.4	33%	233.3	234.9	(1%)

(1) Includes cash component of \$18.9 million and \$48.3 million in the three and nine months ended September 30, 2019 (\$12.3 million and \$77.6 million in the comparative periods of 2018, respectively).

(2) In accordance with the Company's accounting policy, the 50% share of costs paid on behalf of Premier Gold Mines Limited is capitalized as part of mineral properties in Property, Plant & Equipment.

(3) Excludes capitalized equipment leases.

Capital expenditures in the third quarter of 2019 were \$90.7 million compared to \$68.4 million in the same prior year period, primarily due to increased spending at Öksüt and increased capitalized stripping at Kumtor.

Credit Facilities

Centerra was in compliance with the terms of all of its credit facilities as at September 30, 2019.

As at September 30, 2019, the Company's \$500 million senior secured revolving credit facility has a balance of nil.

The \$150 million OMAS project financing facility ("OMAS Facility") expires on March 31, 2024 and as at September 30, 2019, had a drawn balance of \$76.5 million. As at September 30, 2019, \$6.2 million (December 31, 2018 - \$6.2 million) of deferred financing fees are being amortized over the term of the OMAS Facility.

As at September 30, 2019 the principal amount outstanding under the promissory note with Caterpillar Financial Services Limited was \$27 million.

Liquidity

The Company believes its cash on hand, cash flow from the Company's Kumtor and Mount Milligan operations and available capacity in our existing credit facilities will be sufficient to satisfy working capital needs, fund our anticipated construction and development activities and meet other liquidity requirements through to the end of 2019.

7. Market Conditions

Gold Price

During the third quarter of 2019, the spot gold price fluctuated between a low of \$1,384 per ounce and a high of \$1,553 per ounce. The average spot gold price for the third quarter was \$1,474 per ounce, an increase of 22% from the comparative prior year period (\$1,212 per ounce), and a 13% increase compared to the second quarter of 2019 (\$1,309 per ounce).

Copper Price

The average spot copper price in the third quarter of 2019 was \$2.63 per pound, a 7% decrease compared to the comparative prior year period (\$2.84 per pound) and a 5% decrease compared to the second quarter of 2019 (\$2.77 per pound).

Molybdenum Price

The average molybdenum price in the third quarter of 2019 was \$11.83 per pound, consistent with the average of the third quarter 2018, and a 2% decrease compared to the second quarter of 2019 (\$12.18 per pound).

Foreign Exchange

The Company receives its revenues through the sale of gold, copper and molybdenum in U.S. dollars. The Company has operations in Canada, including its corporate head office, the Kyrgyz Republic, Turkey and the United States.

USD to CAD

The average U.S. dollar to Canadian dollar exchange rate for the third quarter of 2019 of 1.32, strengthened when compared to the average of the second quarter of 2019 (1.34), with rates in the third quarter ranging from 1.30 to 1.33. The Canadian dollar strengthened by 3% on average against the U.S. dollar from its value at December 31, 2018. In the first nine months of 2019, 34% of the Company's total expenditures (including capital) were incurred in Canadian dollars. We maintain currency hedges (zero cost collars) on approximately 72% of our Canadian dollar exposure in the next three months.

USD to Kyrgyz Som

The average U.S. dollar to Kyrgyz som exchange rate for the third quarter of 2019 of 69.8 was the same as the average of the second quarter of 2019, with rates in the quarter ranging from 69.4 to 69.9. The Kyrgyz som displayed minimal movement against the U.S. dollar from its value at December 31, 2018. In the first nine months of 2019 15% of the Company's total expenditures (including capital) were incurred in Kyrgyz som.

USD to Turkish Lira

The average U.S. dollar to Turkish lira exchange rate for the third quarter of 2019 of 5.7, weakened when compared to the second quarter of 2019 (5.9) and consistent with the average of the third quarter of 2018 (5.7). The exchange rate ranged from 5.5 to 5.8 in the third quarter of 2019. In the first nine months of 2019 2% of the Company's total expenditures (including capital) were incurred in Turkish lira.

8. Financial Instruments

The Company seeks to manage its exposure to fluctuations in diesel fuel prices, commodity prices and foreign exchange rates by entering into derivative financial instruments from time-to-time.

The hedge positions for each of these programs as at September 30, 2019 are summarized as follows:

					As at September 30, 2019	
Program	Instrument	Unit	Average strike price	Type	Total position ⁽⁴⁾	Fair value gain (loss)(\$ ('000'))
Fuel Hedges	USLD zero-cost collars ⁽¹⁾	Barrels	\$75/\$82	Fixed	54,210	23
Fuel Hedges	Brent Crude Oil zero-cost collars ⁽¹⁾	Barrels	\$57/\$65	Fixed	54,210	(61)
Gold/Copper Hedges (Royal Gold deliverables):						
Gold Derivative Contracts	Forward contracts ⁽²⁾	Ounces	NA ⁽³⁾	Float	15,300	426
Copper Derivative Contracts	Forward contracts ⁽²⁾	Pounds	NA ⁽³⁾	Float	3.4 million	(276)
FX Hedges						
USD/CAD Derivative Contracts	Zero-cost collars ⁽²⁾	CAD	1.30/1.35	Fixed	107.2 million	(110)

(1) Under the fuel zero-cost collars, the Company retains the right to buy fuel barrels at the contract's 'ceiling' price, if the market price was to exceed this price upon contract expiration, while requiring the Company to buy fuel barrels at the 'floor' price if the market price fell below this price upon expiration. At the end of each contract there is no exchange of the underlying item and it is financially settled.

(2) Under the Royal Gold forward contracts, the Company must sell specified quantities of gold or copper, at a future market price on a specified date.

(3) Royal Gold hedging program with a market price determined on closing of the contract.

(4) Hedge positions as at end of September 2019 are due to settle by end of 2019.

Centerra does not enter into off-balance sheet arrangements with special purpose entities in the normal course of its business, nor does it have any unconsolidated affiliates.

9. Operating Mines and Facilities

Kumtor Mine

The Kumtor open pit mine, located in the Kyrgyz Republic, is one of the largest gold mines in Central Asia operated by a Western-based gold producer. It has been in production since 1997 and has produced over 12.5 million ounces of gold to September 30, 2019.

Recent Developments

In August 2019, all conditions precedent in relation to the comprehensive settlement agreement entered into with the Kyrgyz Republic ("the Kyrgyz Government") on September 11, 2017 were satisfied or waived and the Strategic Agreement closed on August 26, 2019. See "Contingencies"

Kumtor Operating Results

(\$ millions, except as noted)	Three months ended September 30,			Nine months ended September 30,		
	2019	2018	% Change	2019	2018	% Change
Financial Highlights:						
Revenue - \$ millions	234.4	142.8	64%	627.0	413.2	52%
Cost of sales (cash)	61.7	50.6	22%	170.0	137.6	24%
Cost of sales (non-cash)	50.1	36.2	38%	134.7	103.3	30%
Cost of sales (total)	111.8	86.8	29%	304.7	240.9	26%
Earnings from operations	69.8	28.3	147%	201.0	96.6	108%
Cash provided by operations	14.4	45.5	(68%)	227.1	141.4	61%
Cash provided by operations before changes in working capital ⁽¹⁾	74.4	64.1	16%	290.1	200.5	45%
Operating Highlights:						
Tonnes mined - 000s	38,731	41,559	(7%)	127,874	132,366	(3%)
Tonnes ore mined - 000s	4,748	2,759	72%	9,255	5,120	81%
Average mining grade - g/t	3.08	3.87	(20%)	2.43	2.96	(18%)
Tonnes milled - 000s	1,496	1,641	(9%)	4,647	4,880	(5%)
Average mill head grade - g/t	3.78	3.03	25%	3.66	2.63	39%
Mill Recovery - %	84.8%	79.0%	7%	83.0%	74.3%	12%
Mining costs - total (\$/t mined material)	1.32	1.26	4%	1.21	1.19	2%
Milling costs (\$/t milled material)	12.32	10.34	19%	11.57	10.55	10%
Gold produced - ounces	150,305	122,445	23%	451,679	306,467	47%
Gold sold - ounces	160,088	119,521	34%	463,663	327,060	42%
Average realized gold price ⁽¹⁾ - \$/oz sold	\$ 1,464	\$ 1,195	23%	\$ 1,352	\$ 1,263	7%
Capital Expenditures (sustaining) - cash	10.5	10.6	(1%)	30.8	31.8	(3%)
Capital Expenditures (growth) - cash	6.6	4.4	50%	13.1	13.8	(5%)
Capital Expenditures (stripping) - cash	18.9	12.3	53%	48.3	77.6	(38%)
Capital Expenditures (stripping) - non-cash	4.7	4.2	12%	13.7	25.2	(45%)
Capital expenditures (total)	40.8	31.6	29%	106.0	148.4	(29%)
Unit Costs:						
Gold - All-in sustaining costs on a by-product basis - \$/oz sold ⁽¹⁾	\$ 626	\$ 662	(5%)	\$ 581	\$ 810	(28%)
Gold - All-in sustaining costs on a by-product basis (including taxes) - \$/oz sold ⁽¹⁾	\$ 831	\$ 831	0%	\$ 771	\$ 988	(22%)

(1) Non-GAAP measure. See discussion under "Non-GAAP Measures"

Third Quarter 2019 compared to Third Quarter 2018

Financial

For the three months ended September 30, 2019, Kumtor recognized higher revenue and earnings from operations of 64% and 147%, respectively, compared to the prior period. The increase was mainly associated with more ounces sold, higher realized gold price and lower cost of sales per ounce during the period. Cash provided by operations was \$31.1 million lower in 2019 when compared to 2018 due to the \$62.6 million settlement payment made to the Kyrgyz Republic.

Production

During the third quarter of 2019, Kumtor continued mining cut-back 19 West and cut-back 20.

Total waste and ore mined in the third quarter of 2019 was 38.7 million tonnes compared to 41.6 million tonnes in the comparative prior year period, representing a decrease of 7%, mainly due to weather delays affecting trucks and shovels availability in the current period. In the third quarter of 2019, 4.7 million tonnes of ore mined were mined, a 72% increase from the prior year due to accessing high grade ore earlier in 2019 compared to 2018.

Kumtor produced 150,305 ounces of gold in the third quarter of 2019 compared to 122,445 ounces of gold in the same prior year period. The increase in the current quarter was primarily due to processing ore with higher grades from cut-backs 18 and 19 and higher recoveries, compared to processing lower grade ore

from cut-back 17 and Sarytor in the third quarter of 2018. During the third quarter of 2019, Kumtor's average mill head grade was 3.8 g/t with a recovery of 84.8% compared to 3.0 g/t and a recovery of 79.0% in 2018.

Mining costs including capitalized stripping

Mining costs, including capitalized stripping, were \$51.1 million in the third quarter of 2019, a \$2 million decrease from the comparative prior year period. Lower costs in the third quarter of 2019 includes lower diesel costs (\$3.7 million) due to lower consumption rates from lower tonnes mined and decreased haulage distance. This was offset by higher costs associated with rebuilds when compared to the same prior year period (\$1.7 million).

Milling costs

Milling costs were \$18.4 million in the third quarter of 2019 compared to \$17.0 million in the prior year period, due primarily to the increased costs of a scheduled maintenance shutdown of the SAG, Ball and Re grind mills in the third quarter of 2019.

Site Support Costs

Site support costs in the third quarter of 2019 were \$11.5 million compared to \$12.1 million in 2018, due primarily to slightly lower contractor costs and lower cost of camp supplies.

Cost of sales

Cost of sales, which include non-cash DD&A associated with the ounces sold, was \$111.8 million for the third quarter of 2019, an increase of 29% compared to the third quarter of 2018. The increase was primarily due to more ounces sold and increased depreciation of capitalized stripping.

All-in Sustaining Costs

All-in sustaining costs on a by-product basis per ounce sold^{NG}, which excludes revenue-based tax, was \$626 per ounce in the third quarter of 2019 compared to \$662 per ounce in the prior year period. The decrease was due primarily to more ounces sold.

Including revenue-based taxes, all-in sustaining costs on a by-product basis per ounce sold^{NG} was \$831 per ounce in the third quarter of 2019 compared to \$831 per ounce in the prior year period. The lower all-in sustaining costs^{NG} was offset by higher revenue-based taxes as a result of higher sales revenue achieved in the third quarter of 2019.

First Nine Months of 2019 compared to First Nine Months of 2018

Financial

Kumtor recognized 52% higher revenues and 108% higher earnings during the first nine months of 2019 when compared to the same prior year period as a result of more ounces sold and lower cost of sales per ounce during the period. Cash provided by operations was \$85.7 million higher in 2019 when compared to 2018 due to higher realized gold prices and higher ounces sold.

Production

During the first nine months of 2019, Kumtor focused on developing cut-backs 19 (East and West) and cut-back 20.

Total waste and ore mined in the first nine months of 2019 was 127.9 million tonnes compared to 132.4 million tonnes in the comparative prior year period, due primarily to weather delays affecting the truck and shovel availability in the current period.

Kumtor produced 451,679 ounces of gold in the first nine months of 2019 compared to 306,467 ounces of gold in the first nine months of 2018. The increase was due primarily to processing ore with higher grade and recovery from cut-back 18 and cut-back 19. During the first nine months of 2019, Kumtor's mill head grade was 3.7 g/t with a recovery of 83.0% in part due to processing higher grade ore and positive grade reconciliations, compared with 2.6 g/t grade and a recovery of 74.3% for the same period in 2018.

Mining Costs, including capitalized stripping

Mining costs, including capitalized stripping, were \$154.8 million in the first nine months of 2019 compared to \$157.2 million in the comparative period of 2018. Mining costs decreased slightly due to fewer tonnes mined resulting in a decrease of diesel costs (\$5.1 million) and lower blasting supplies (\$1.1 million). Diesel costs were further impacted by decreased haulage distances, partially offset by higher assay costs mainly due to an increased number of samples tested and higher costs associated with mechanical rebuilds.

Milling Costs

Milling costs were \$53.8 million in the first nine months of 2019 compared to \$49.0 million in the comparative prior period, increased due to higher carbon fine processing costs (\$1.9 million), the increased costs related to planned maintenance shutdown of the SAG, Ball, and Regrind mills, and higher grinding media and cyanide costs due to the processing of a harder ore type.

Site Support Costs:

Site support costs in the first nine months of 2019 totaled \$35.3 million compared to \$37.8 million in the comparative year, due primarily to fewer contractors on site and lower camp supply costs.

Cost of sales

Cost of sales, which include non-cash DD&A associated with the ounces sold, was \$304.7 million for the first nine months of 2019, an increase of \$63.8 million or 26% compared to the same period of 2018, due primarily to the increase in ounces sold and increased depreciation of capitalized stripping.

All-in Sustaining Costs

All-in sustaining costs on a by-product basis per ounce sold^{NG}, which excludes revenue-based tax, was \$581 per ounce in the first nine months of 2019 compared to \$810 per ounce in the same period of 2018. The decrease was mainly due primarily to more ounces of gold sold and lower capitalized stripping. The decrease in capitalized stripping resulted from accessing ore and the cessation of capitalized stripping in cut-back 19 West earlier in 2019 than we accessed ore in cut-back 18 in 2018.

Including revenue-based taxes, all-in sustaining costs on a by-product basis per ounce sold^{NG} was \$771 per ounce in the first nine months of 2019 compared to \$988 per ounce in the same period of 2018. The decrease was primarily due to lower all-in sustaining costs^{NG}, partially offset by higher revenue-based taxes resulting from increased sales revenue achieved in the first nine months of 2019.

Mount Milligan Mine

The Mount Milligan Mine is an open pit mine located in north central British Columbia, Canada producing a gold and copper concentrate. Production at Mount Milligan is subject to an arrangement with RGLD AG and Royal Gold, Inc. (together, "Royal Gold") pursuant to which Royal Gold is entitled to purchase 35% of the gold produced and 18.75% of the copper production at the Mount Milligan mine for \$435 per ounce of gold delivered and 15% of the spot price per metric tonnes of copper delivered (the "Mount Milligan Streaming Arrangement").

Recent Developments

During the quarter ended September 30, 2019 the mill throughput averaged 55,727 tonnes per calendar day (60,455 tonnes per operating day).

Water Update

As previously noted, the Company received amendments to its environmental assessment certificate to permit access to additional sources of surface water and groundwater until November 30, 2021.

During the third quarter of 2019, Mount Milligan continued to access surface water from Philip Lake 1 and Rainbow Creek until October when surface water flows diminished to levels below the levels allowed under our permits.

During the summer, surface water flows were augmented by rainier than usual weather in July and August. In addition, Mount Milligan has experienced successes in its groundwater exploration program and expects to bring such groundwater sources on-line in December 2019, subject to receipt of applicable permits which are expected in due course. The Company now expects that, with the additional groundwater wells online and prudent management of water resources through the winter period, the Company should not need to slow production in the first quarter of 2020 to conserve water. However, there can be no assurances regarding groundwater flows, fall precipitation, levels of freezing which could affect Mount Milligan's water inventory through the winter period.

In addition, the Company continues to work with relevant stakeholders to identify and evaluate water sources that will best be able to supply Mount Milligan's mill for the life-of-mine while meeting environmental and other parameters. Formal applications and government review are expected to commence later this year, and will be the subject of discussion with regulators, potentially affected Indigenous groups, local communities and other interested parties. The Company's expectation is that its updated long-term water source (or sources) should be available after November 2021 for the entire life-of-mine, although there can be no assurance that it will have adequate sources of water over the long term. See "Caution Regarding Forward-Looking Information".

Impairment

As part of our annual budget and life of mine process, it was identified that recent cost escalation relating to short and long-term water sourcing requirements, higher maintenance costs, higher than expected labour requirements, and lower mill throughput estimates, among other things, will continue in the short to medium term. This combined with lower than expected gold recoveries resulted in a trigger for an impairment test on Mount Milligan's long-lived assets.

The Company has begun a comprehensive technical review of the Mount Milligan mine with the objective of publishing an updated NI 43-101 technical report in the coming months. The extent of any change in reserves and resources cannot be precisely determined until all of the relevant studies and modelling are completed, including studies to optimize the economics of the mine and further work to incorporate results of the Company's exploration drilling through 2019. However, based upon the work performed in connection with the impairment test, the Company's expectation is that Mount Milligan's mineral reserves and resources will be materially reduced.

The impairment test was performed using the Fair Value Less Costs of Disposal ("FVLCD") methodology. Specifically, the net asset value ("NAV") of the Mount Milligan CGU was determined based on a discounted cash flow analysis of an indicative life-of-mine ("LOM") model developed solely for impairment testing purposes. The LOM model is not a NI 43-101 technical report and it does not include the associated detailed engineering; rather, it is Management's best estimate at this point in time. The LOM model includes the estimated higher cost profile referred to above, updated grade-recovery curves for both

gold and copper, an estimate of contained gold and copper metal to be mined and processed over the LOM (not reserves), the cash flows expected to be generated over the LOM, and various other business and economic assumptions. The higher cost profile referred to above, was incorporated in the discounted cash flow analysis used in the impairment test.

In determining fair value, Management believes that an industry participant would consider the value of resources not included in the LOM model. As such, the Company also included the fair value of the estimated recoverable amount of known resources beyond the LOM model by considering the estimated cash flows per ounce generated in the LOM model.

Some gold companies trade at a market capitalization greater than the net present value (“NPV”) of their expected cash flows. Market participants describe this as a “NAV multiple”, which represents the multiple applied to the NPV to arrive at the trading price. The NAV multiple is generally understood to take account of a variety of additional value factors such as the exploration potential of the mineral property, namely the ability to find and produce more metal than what is currently included in the LOM plan or reserve and resource estimates, and the benefit of gold price optionality. As a result, the Company applied a specific NAV multiple to the NAV based on the NAV multiples observed in the market in recent periods and that Management judged to be appropriate.

The test concluded that the recoverable amount of the Mount Milligan CGU using the latest LOM model and higher cost profile was lower than its carrying value as at September 1, 2019. This resulted in an impairment charge of \$230.5 million to the Statement of Earnings, including the write-down of goodwill of \$16.1 million and long-lived assets of \$214.4 million, reducing the carrying value of the Mount Milligan CGU to \$522.6 million as at September 30, 2019.

Assumptions and Judgments

Calculating the FVLCD requires management to make estimates and assumptions with respect to future production levels and operating, capital and closure costs in the life of mine plans; continued license to operate; future metal prices; foreign exchange rates; discount rates; net asset value multiples, and the value of reserves and resources outside the LOM. Changes in any of the assumptions or estimates used in determining the fair values could impact the impairment analysis and its conclusions.

The key assumptions used in the impairment test for Mount Milligan are summarized in the table below:

	2019 Test
Gold price per oz - short-term	\$1,350
Gold price per oz - long-term	\$1,300
Copper price per lb - short-term	\$2.60-\$2.80
Copper price per lb - long-term	\$3.00
Discount rate	8%
NAV multiple	1.13

Gold prices

Management estimated gold prices through an analysis of gold forward prices and by considering the average of the most recent market commodity price forecasts from a number of recognized financial analysts.

Beyond Life of Mine

For the impairment tests, a fair value of \$111 to \$139 per ounce was included for contained ounces not used in the LOM but deemed to be mineable with a change in the economic or business environment (not resources).

Production

Management determined its indicative production profile and total life of mine production based on an updated pit shell estimate developed in the quarter.

Discount rate

A real after-tax discount rate was based on the Company's estimated weighted-average cost of capital adjusted for the risks associated with Mount Milligan's cash flow.

Reserves and Resources

As noted above, Mount Milligan has experienced higher unit operating costs than those expected by management. The higher unit costs relate to short and long-term water sourcing requirements, higher maintenance costs, higher than expected labour requirements, and lower mill throughput estimates, among other things, that are expected to continue over the short to medium term. At the same time, Mount Milligan has also experienced lower than expected gold recoveries than those previously anticipated. The Company has begun a comprehensive technical review of mining and milling operations at Mount Milligan which will include updating the mine's mineral reserve and resource estimates to incorporate all diamond drilling through 2019, the revised unit operating costs, the revised gold recovery estimate, and other technical and economic factors. The Company's objective is to publish an updated NI 43-101 technical report in the coming months. The extent of any change in mineral reserves and resources cannot be precisely determined until all of the relevant studies and modelling are completed, including studies to optimize the economics of the mine and further work to incorporate results of the Company's exploration drilling through 2019. However, based upon the work performed in connection with the impairment test, the Company's expectation is that Mount Milligan's mineral reserves and resources will be materially reduced.

Mount Milligan Operating Results

(\$ millions, except as noted)	Three months ended September 30,			Nine months ended September 30,		
	2019	2018	% Change	2019	2018	% Change
Financial Highlights:						
Gold sales	62.3	44.3	41%	156.3	108.3	44%
Copper sales	41.4	27.4	51%	108.9	65.6	66%
Total Revenues	103.7	71.7	45%	265.2	173.9	53%
Cost of sales (cash)	61.5	48.8	26%	183.6	119.5	54%
Cost of sales (non-cash)	15.9	10.4	53%	42.3	25.9	63%
Cost of sales (total)	77.4	59.2	31%	225.9	145.4	55%
(Loss) earnings from operations	(193.5)	9.6	(2115%)	(189.5)	9.9	(2023%)
Cash provided by (used in) operations	38.7	15.0	158%	76.6	2.0	3730%
Cash provided by operations before changes in working capital ⁽¹⁾	36.6	18.7	96%	65.7	33.9	94%
Operating Highlights:						
Tonnes mined - 000s	10,637	8,192	30%	29,889	24,793	21%
Tonnes ore mined - 000s	4,948	3,413	45%	11,924	9,782	22%
Tonnes milled - 000s	5,127	3,754	37%	12,431	9,803	27%
Mill Head Grade Copper (%)	0.25%	0.21%	19%	0.25%	0.21%	18%
Mill Head Grade Gold (g/t)	0.51	0.79	(36%)	0.52	0.69	(24%)
Copper Recovery - %	80.7%	78.3%	3%	81.7%	81.1%	1%
Gold Recovery - %	67.2%	62.7%	7%	67.4%	63.5%	6%
Mining costs - total (\$/t mined material)	\$ 2.03	\$ 2.40	(15%)	\$ 2.11	\$ 2.22	(5%)
Milling costs - total (\$/t milled material)	\$ 5.68	\$ 7.40	(23%)	\$ 7.00	\$ 7.53	(7%)
Concentrate Produced (dmt)	48,171	30,123	60%	117,829	79,137	49%
Payable Gold Produced (oz) ⁽³⁾	55,355	58,798	(6%)	137,123	134,722	2%
Payable Copper Produced (000's lbs) ⁽³⁾	21,229	12,704	67%	53,066	35,295	50%
Gold Sales (payable oz) ⁽³⁾	55,935	47,195	19%	147,099	112,515	31%
Copper Sales (000's payable lbs) ⁽³⁾	21,907	13,605	61%	53,129	30,779	73%
Average Realized Price - Gold (combined) - \$/oz ⁽¹⁾⁽²⁾⁽³⁾	\$ 1,114	\$ 947	18%	\$ 1,063	\$ 964	10%
Average Realized Price - Copper (combined) - \$/lb ⁽¹⁾⁽²⁾⁽³⁾	\$ 1.89	\$ 2.01	(6%)	\$ 2.04	\$ 2.13	(4%)
Capital Expenditures (sustaining) ⁽¹⁾ - cash	7.1	9.0	(20%)	26.7	32.1	(17%)
Unit Costs:						
Gold - All in Sustaining costs on a by-product basis - \$/oz sold ⁽¹⁾	557	677	(18%)	763	808	(6%)
Gold - All in Sustaining costs on a by-product basis (including taxes) - \$/oz sold ⁽¹⁾	581	695	(16%)	784	826	(5%)
Gold - All in Sustaining costs on a co-product basis - \$/oz sold ⁽¹⁾	766	716	7%	882	790	12%
Copper - All in Sustaining costs on a co-product basis - \$/pound sold ⁽¹⁾	1.36	1.73	(21%)	1.72	1.89	(9%)

⁽¹⁾ Non-GAAP measure. See discussion under "Non-GAAP Measures"

⁽²⁾ The average realized price of gold is a combination of market price paid by third parties and \$435 per ounce paid by Royal Gold, while the average realized price of copper is a combination of market price paid by third parties and 15% of the spot price per metric tonne of copper delivered paid by Royal Gold, in each case under the Mount Milligan Streaming Arrangement

⁽³⁾ Mount Milligan payable production and sales are presented on a 100% basis (the Mount Milligan Streaming Agreement entitles it to 35% and 18.75% of gold and copper sales, respectively). Under the Mount Milligan Streaming Arrangement, Royal Gold will pay \$435 per ounce of gold delivered and 15% of the spot price per metric tonne of copper delivered. Payable production for copper and gold reflects estimated metallurgical losses resulting from handling of the concentrate and payable metal deductions, subject to metal content, levied by smelters. The current payable percentage applied is approximately 95% for copper and 97.5% for gold, which may be revised on a prospective basis after a sufficient history of payable amounts is determined.

Third Quarter 2019 compared to Third Quarter 2018

Financial

Losses from operations was \$193.5 million in the third quarter of 2019 compared to earnings from operations of \$9.6 million in the prior year period, the decrease was due to a \$230.5 million impairment charge. Cash provided by operations was \$23.7 million higher in 2019 when compared to 2018 due the increase in revenue. In the third quarter of 2019, Mount Milligan recognized \$32.0 million in additional revenue when compared to the same prior year period as a result of more concentrate shipments during the period and higher gold prices, offset in part by lower copper prices.

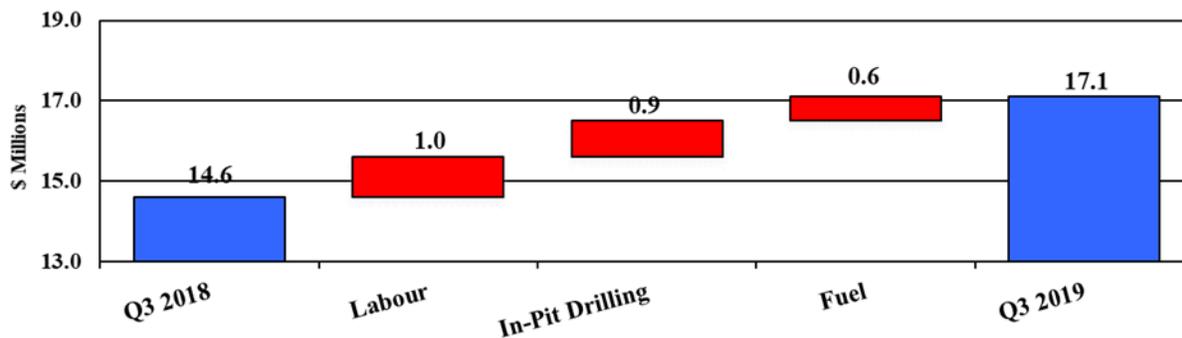
Production

During the third quarter of 2019, ore and waste mining activities were mainly in phases 3 and 4 of the main open pit. Overburden and waste rock mining continued in phase 8 of the Southern Star Pit through the third quarter of 2019 while topsoil stripping continued in the higher benches and along the perimeters of the Southern Star Pit. Total waste and ore mined in the third quarter of 2019 was 10.6 million tonnes and total material moved was 11.7 million tonnes. In the comparative quarter of 2018, total waste and ore mined was 8.2 million tonnes and total material moved was 9.1 million tonnes. Mine production averaged 127,526 tonnes per day compared to 98,543 tonnes per day in the comparative quarter of 2018. The increase primarily due to the higher availability of the mill, as well as improvements in hauling fleet productivity.

Total mill throughput was 5.1 million tonnes in the third quarter of 2019 compared to 3.8 million tonnes in the same quarter of 2018. In the current quarter, mill throughput averaged 55,727 tonnes per calendar day (60,455 tonnes per operating day), compared to 40,805 tonnes per calendar day (55,052 tonnes per operating day) in the same prior year period. The increased throughput was due to increased mill and water availability.

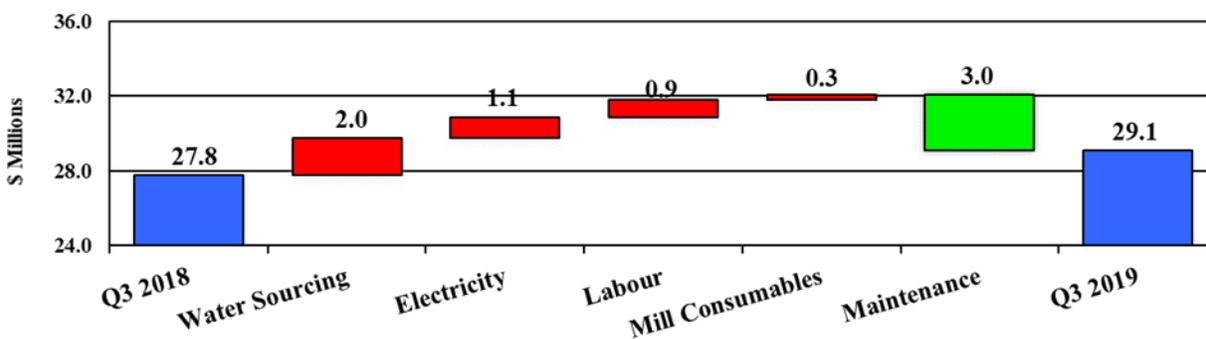
For the third quarter of 2019, 48.2 thousand tonnes of concentrate was produced, representing a 60% increase as compared to the same period of 2018. Gold production in the third quarter of 2019 was 55,355 ounces compared to 58,798 ounces in the comparative prior year period due to 36% lower gold grades. Total copper production was 21.2 million pounds in the third quarter of 2019 compared to 12.7 million pounds in the comparative prior year period, due to higher throughput and higher copper grades.

Mining Costs (Third Quarter 2019 compared to Third Quarter 2018):



Mining costs totaled \$17.1 million in the third quarter of 2019, which was \$2.5 million higher than the comparative prior year period. The increase in mining costs includes higher labour costs including a new employee health tax, higher in-pit drilling and more fuel costs due to higher consumption with more material moved.

Milling Costs (Third Quarter 2019 compared to Third Quarter 2018):



Milling costs totaled \$29.1 million in the third quarter of 2019 compared to \$27.8 million in the prior year period. The increase in milling costs was primarily due to higher mill throughput and slightly higher labour cost, partially offset by lower SAG mill and primary crusher maintenance costs.

Site support costs

Site support costs in the third quarter of 2019 totaled \$11.9 million versus \$10.9 million in the comparative prior year period, primarily due to higher royalty costs as a result of sales. This was partially offset by certain leasing costs being capitalized.

Cost of sales:

Cost of sales in the third quarter of 2019 was \$77.4 million compared to \$59.2 million in the same quarter of 2018 due to higher sales volume.

All-in Sustaining Costs:

All-in sustaining costs on a by-product basis per ounce sold^{NG}, which excludes taxes, were \$557 per ounce for the third quarter of 2019 compared to \$677 per ounce in the third quarter of 2018 due to more gold ounces sold and higher copper credits, partially offset by higher operating cost.

Including income taxes, all-in sustaining costs on a by-product basis per ounce sold^{NG} were \$581 per ounce in the third quarter of 2019 compared to \$695 per ounce in the same period of 2018.

First Nine Months 2019 compared to First Nine Months 2018

Financial:

Mount Milligan recognized \$91.3 million in higher revenues in 2019 when compared to 2018 as a result of higher gold and copper sales. The losses from operations totaled \$189.5 million during the first nine months of 2019 and was \$199.4 million lower than the same prior year period, due primarily to a \$230.5 million impairment charge and higher mining and milling costs, offset by higher sales. Cash provided by operations increased by \$78.6 million in 2019 compared to the same prior year period due a decrease in working capital levels of \$46.9 million and higher revenues.

Production:

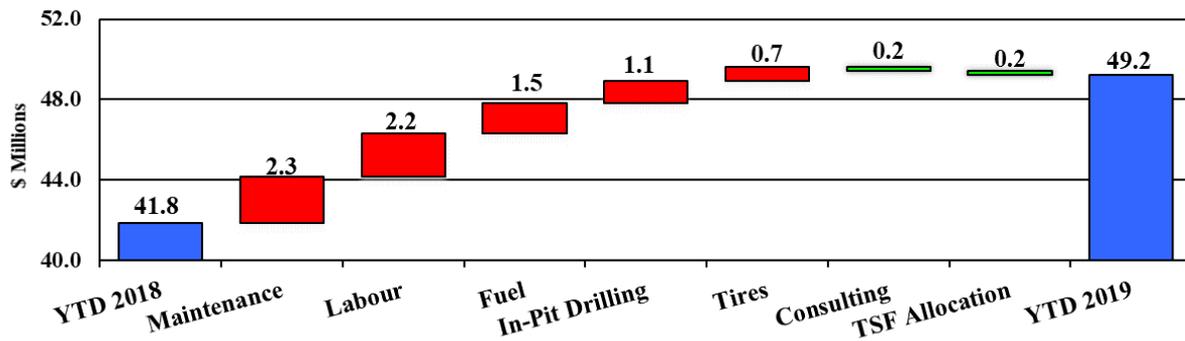
During the first nine months of 2019, ore mining was from phases 3 and 4 of the main pit, with approximately 67% of ore mined from phase 3. Waste mined during the first nine months of 2019 was primarily from phase 4 in the MBX Pit and phase 8 in the Southern Star Pit. In phase 8, mining continued to focus on developing the upper benches, including waste rock mining as well as overburden and topsoil stripping. Total waste and ore mined in the first nine months of 2019 was 29.9 million tonnes and total tonnes moved was 32.3 million. In the comparative period of 2018, total waste and ore mined was 24.8

million tonnes and lower total tonnes moved at 26.6 million tonnes. Mine production averaged 118,172 tonnes per day moved for the first nine months of 2019 while 97,457 tonnes per day was moved in the comparative period of 2018. The increase in tonnes mined and moved in 2019 were primarily due to the higher mill throughput with the increased availability of water and higher mine fleet productivity.

Total mill throughput was 12.4 million tonnes in the first nine months of 2019 compared to 9.8 million tonnes in the same period of 2018. In the first nine months of 2019, mill throughput averaged 45,535 tonnes per calendar day (50,721 tonnes per operating day), compared to 35,910 tonnes per calendar day (47,996 tonnes per operating day) in the first nine months of 2018 due to the increased water availability resulting in the mill reaching full operational capacity earlier in 2019 than 2018.

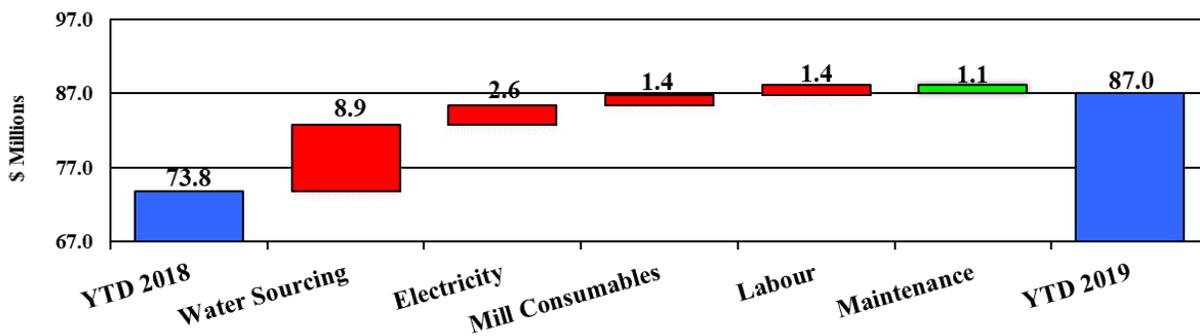
In the first nine months of 2019, 117.8 thousand tonnes of concentrate was produced, representing a 49% increase as compared to the comparative prior period, due primarily to the earlier availability of water in 2019. In the first nine months of 2019, total payable gold and copper production was 137,123 ounces and 53.1 million pounds, respectively, compared to 134,722 ounces of gold and 35.3 million pounds of copper in the first nine months of 2018.

Mining Costs (First Nine Months 2019 compared to First Nine Months 2018):



Mining costs were \$49.2 million in the first nine months of 2019, \$7.4 million higher than the comparative prior year period. The increase is due primarily to higher spending on mining fleet maintenance, labour cost inflation, including a new employee health tax and higher fuel consumption as a result of more tonnes moved.

Milling Costs (First Nine Months 2019 compared to First Nine Months 2018):



Milling costs totaled \$87.0 million in the first nine months of 2019 compared to \$73.8 million in the comparative prior year period, which included standby costs of \$10.8 million. The increase in operating

costs was mainly due to higher mill throughput, labour cost inflation and a new employee health tax, partially offset by lower maintenance costs from timing of plant technical shutdown.

Site support costs:

Site support costs (including royalties) in the first nine months of 2019 totaled \$34.5 million versus \$32.0 million in the comparative prior year period. The increase reflects higher royalty costs due to higher sales, and other costs, including labour cost inflation, partially offset by certain leasing costs being capitalized.

Cost of sales:

Cost of sales in the first nine months of 2019 was \$225.9 million compared to \$145.4 million in the same period of 2018 due to higher sales volume.

All-in Sustaining Costs:

All-in sustaining costs on a by-product basis per ounce sold^{NG}, which excludes income taxes, was \$763 per ounce for the first nine months of 2019 compared to \$808 per ounce in the comparative prior year period. The unit cost decrease was due primarily to the increase in gold ounces sold and higher copper credits, partially offset by higher operating costs.

Including income taxes, all-in sustaining costs after tax on a by-product basis per ounce sold^{NG} was \$784 per ounce for the first nine months of 2019 compared to \$826 per ounce in the first nine months of 2018.

Molybdenum Business

The molybdenum business includes two North American primary molybdenum mines that are currently on care and maintenance: the Thompson Creek Mine ("TC Mine") (mine and mill) in Idaho and the 75%-owned Endako Mine (mine, mill and roaster) in British Columbia. The molybdenum business also includes the Langeloth metallurgical roasting facility (the "Langeloth Facility") in Pennsylvania. TC Mine operates a molybdenum beneficiation circuit to treat molybdenum concentrates to supplement the concentrate feed sourced directly for the Langeloth Facility. This beneficiation process allows the Company to process high copper content molybdenum concentrate purchased from third parties, which is then transported from TC Mine to the Langeloth Facility for further processing.

The molybdenum business provides tolling treatment services for customers by converting molybdenum concentrates to molybdenum oxide powder and briquettes and ferromolybdenum products. Additionally, molybdenum concentrates are also purchased to convert to upgraded products which are then sold in the metallurgical and chemical markets.

Molybdenum Operating Results

(\$ millions, except as noted)	Three months ended September 30,			Nine months ended September 30,		
	2019	2018	% Change	2019	2018	% Change
Financial Highlights:						
Molybdenum (Mo) Sales - \$ millions	48.7	43.0	13%	164.0	144.3	14%
Tolling, Calcining and Other	1.4	1.6	(8%)	6.6	6.5	1%
Total Revenues and Other Income	50.1	44.6	12%	170.6	150.8	13%
Cost of sales - cash	46.5	41.8	11%	164.5	139.0	18%
Cost of sales - non-cash	0.9	3.5	(75%)	3.3	6.1	(46%)
Cost of Sales - Total	47.4	45.3	5%	167.8	145.1	16%
Care and Maintenance costs - Molybdenum mines	2.7	1.5	80%	10.3	6.7	54%
Loss from operations	(1.0)	(3.1)	(68%)	(10.7)	(3.7)	185%
Total capital expenditure	3.5	0.3	958%	4.3	0.8	472%
Cash provided by (used in) operations	2.1	(5.0)	(142%)	1.7	(14.7)	(112%)
Cash provided by (used in) operations, before changes in working capital ^(NG)	1.3	(0.4)	(425%)	(2.8)	2.5	(212%)
Production Highlights (000's lbs):						
Mo purchased	4,347	3,967	10%	13,056	11,926	9%
Mo roasted	3,990	4,047	(1%)	14,149	12,271	15%
Mo sold	3,641	3,409	7%	12,458	11,476	9%
Toll roasted and upgraded Mo	1,089	1,242	(12%)	4,287	4,017	7%

Third Quarter 2019 compared to Third Quarter 2018

In the third quarter of 2019 and 2018, 4.0 million pounds of molybdenum were roasted. A total of 1.1 million pounds of molybdenum were roasted under tolling arrangements during the quarter, which was 12% lower than with the same period in 2018.

Molybdenum sales in the third quarter of 2019 increased by 13% as compared to the same period of 2018, benefitting from stronger demand and higher molybdenum prices. The higher volumes had a similar impact on cost of sales in the third quarter of 2019. The average molybdenum price in the third quarter of 2019 was \$11.83 per pound compared to \$11.81 per pound in the same period of 2018.

In the third quarter of 2019, the molybdenum business provided \$1.3 million of cash from the operations before changes in working capital, net of \$2.7 million in care and maintenance spending at the two molybdenum mines. The Molybdenum business recorded a loss from operations for the third quarter of 2019 of \$1.0 million compared to \$3.1 million in the same period of 2018.

First Nine Months 2019 compared to First Nine Months 2018

In the first nine months of 2019, a total of 14.1 million pounds of molybdenum were roasted, which represents a 15% increase over the same period of 2018. A total of 4.3 million pounds of molybdenum were roasted under tolling arrangements in the first nine months of 2019 which was 7% higher than the same period of 2018.

Molybdenum sales in the first nine months of 2019 benefitted from stronger demand versus 2018, resulting in 9% more pounds sold, which also resulted in higher sales revenue and cost of sales. The average price was slightly higher in 2019 at \$11.93 per pound compared to \$11.89 per pound in the same period of 2018. In the first nine months of 2019, the molybdenum business used \$2.8 million of cash from the operations before changes in working capital^{NG}, net of \$10.3 million in care and maintenance spending at the two molybdenum mines. Total capital spending in the nine months of 2019 was \$4.3 million (\$0.8 million in the same period of 2018), which included \$3.5 million spent in the third quarter of 2019 on the sulfur tank and sulfuric acid plant. The Molybdenum business recorded loss from operations for the first nine months of 2019 of \$10.7 million compared to \$3.7 million for 2018.

The Company notes that unionized staff at its Langeloth facility went on strike on September 9, 2019 following the expiry of the site's collective agreement earlier this year. No significant disruption or impact to operations at Langeloth or deliveries to customers are expected to result from the strike.

10. Construction and Development Projects

Öksüt Project

The Öksüt Project is the Company's gold deposit situated in Turkey approximately 300 kilometres southeast of Ankara and 48 kilometres south of Kayseri, the provincial capital. The nearest administrative centre is at Develi (population 64,000) located approximately 10 kilometres north of the Project. Öksüt Madencilik Sanayi ve Ticaret Anonim Sirketi (OMAS), a wholly-owned subsidiary of the Company, owns the rights to mine and explore the Öksüt Project.

Construction Highlights – First Nine Months of 2019:

As at September 30, 2019 the Öksüt Project construction is 79% complete. The following summarizes construction activities during the third quarter and first nine months of 2019:

- The power substation has been handed over to the operation group.
- The Absorption, Desorption and Regeneration (“ADR”) plant and crusher e-house installation are complete.
- Installation of the HDPE (high density polyethylene) liner for the heap-leach area, phases 1A and 1B is now complete.
- Installation of the geomembranes for the make-up water pond and PLS pond.
- Heap leach phase 1C topsoil stripping work is complete.
- Roads and earthworks site-wide are mainly complete.
- ADR plant and gold room are mainly complete and the commissioning of the facility has commenced.
- Phase 1 of the Waste Rock Dump construction is complete.
- The primary crusher building structural steel installation is complete and commissioning of the crushing circuit is ongoing.
- Ore conveyors #1 and #2 and the radial stacker have been commissioned.

The construction project is on schedule and anticipated total project costs remain unchanged at \$200 million. The Company expects that the first gold pour from the Öksüt Project will occur in January 2020, provided permits are received in the ordinary course. First gold pour is expected to occur once the project's overall completion reaches approximately 85%; the remaining work is considered not essential for first gold pour and is expected to be completed by mid-2020.

During the third quarter and first nine months of 2019, the Company spent \$23.3 million and \$57.7 million, respectively, mainly on construction and development activities at the Öksüt Project.

Öksüt Operating highlights – First Nine Months of 2019

Mining activities commenced at the Keltepe and Güneytepe pits on August 16 and September 3, 2019, respectively, after the topsoil stripping activities were completed. Total waste and ore mined from both pits was 1.1 million tonnes at a stripping ratio of 2.99. Total contained gold ounces mined and stockpiled on surface from the Keltepe and Güneytepe pits in the third quarter of 2019 were 3,992 contained gold ounces.

Mining costs, including capitalized stripping was \$2.1 million in the first nine months of 2019, of which contractor costs represented \$1.9 million. Mining activities are performed by a third-party contractor, under supervision of Öksüt's technical team.

Kemess Underground Project:

The Kemess Project is located in north-central British Columbia, Canada, approximately 250 kilometres north of Smithers, 430 kilometres northwest of Prince George and 209 kilometres from the Mount Milligan Mine. The Kemess Project site (or “Kemess”) includes infrastructure from the past producing Kemess South Mine. There are currently no mining activities at the Kemess site and on-site activities consist of care and maintenance work and initial surface construction and development activities for the proposed Kemess Underground Project.

In the third quarter of 2019, the Company spent \$3.1 million on care and maintenance and \$0.4 million on pre-development activities. Capital expenditures were \$11.4 million which includes costs for engineering and commissioning of the water discharge system, water treatment plant and mobile equipment purchases. Comparatively, the Company spent \$5.7 million on care and maintenance activities in the third quarter of 2018, respectively. Capital expenditures for the 2018 period were \$5.9 million which included access corridor construction, materials required to start the fabrication of the water treatment plant and mobile equipment purchases.

In the first nine months of 2019, the Company spent \$9.8 million on care and maintenance and \$0.5 million on pre-development activities. Capital expenditures were \$25.6 million which includes costs for engineering and commissioning of the water discharge system, water treatment plant and mobile equipment purchases. Comparatively, the Company spent \$9.3 million and \$1.1 million on care and maintenance and pre-development activities in the first nine months of 2018, respectively. Capital expenditures for the 2018 period were \$5.9 million.

Greenstone Gold Property:

The Greenstone Gold property is located in northern Ontario, Canada approximately 275 kilometres northeast of Thunder Bay, Ontario. Centerra owns a 50% partnership interest in the Greenstone Partnership, which owns the Greenstone Gold development property, including the Hardrock deposit.

During the third quarter and first nine months of 2019, the Company spent \$9.7 million and \$24.5 million respectively (2018: \$4.9 million and \$15.0 million respectively), mainly on advancing detailed engineering on infrastructure programs, on a core and reverse circulation drilling program (completed in May), on permitting activities, on advancing the agreements with potentially affected Indigenous groups and completing an overall update on the Hardrock deposit economics. As at September 30, 2019, Centerra’s funding towards its C\$185 million commitment in the Greenstone Partnership was C\$125.0 million (\$95.6 million).

The Company notes that Premier Gold Mines Limited, our 50% joint venture partner at Greenstone, has issued a news release announcing an updated mineral resource estimate for Greenstone which was completed by G-Mining Services Inc. Centerra’s technical staff are continuing to review the updated mineral resource estimate and we expect to make further disclosure in this regard, if necessary, when we report our annual mineral reserve and resource estimates.

11. Quarterly Results – Previous Eight Quarters

Over the last eight quarters, Centerra’s results reflect the impact of increasing gold sales amidst a period of rising gold prices. Operating costs have also benefited from stabilizing diesel fuel costs and a depreciating Canadian dollar over the last eight quarters. Gold sold on a quarterly basis declined from the fourth quarter of 2017 to the second quarter in 2018, steadily increasing from the third quarter of 2018 and throughout 2019. An after-tax gain of \$21.3 million on the sale of the Company’s royalty portfolio was recorded in the second quarter of 2018. The Company recognized an increase in reclamation expenses of \$41.8 million in

the fourth quarter of 2018 mainly to record an increase in water treatment costs at the TC Mine. The third quarter of 2019 reflects the impairment of \$230.5 million recorded on the Mount Milligan Mine and the \$10 million Kyrgyz Republic settlement expense. The quarterly financial results for the last eight quarters are shown below:

\$ million, except per share data Quarterly data unaudited	2019			2018				2017
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4
Revenue	388	341	334	392	259	243	235	358
Net earnings (loss)	(165)	33	50	49	6	44	9	130
Basic earnings (loss) per share	(0.56)	0.11	0.17	0.17	0.02	0.15	0.03	0.45
Diluted earnings (loss) per share	(0.56)	0.11	0.17	0.17	0.01	0.15	0.03	0.43

12. Contingencies

The following is a summary of contingencies with respect to matters affecting the Company and its subsidiaries. Readers are cautioned that there are a number of legal and regulatory matters that are currently affecting the Company and that the following is only a brief summary of such matters. For a more complete discussion of these matters, see the Company’s news releases and its 2018 Annual Information Form and specifically the section entitled “Risks that can affect our business” therein available on SEDAR at www.sedar.com. The following summary also contains forward-looking statements and readers are referred to “Caution Regarding Forward-looking Information”.

Kyrgyz Republic

Strategic Agreement

On August 26, 2019, Centerra announced the completion of the Strategic Agreement, with all the remaining Kyrgyz legal proceedings affecting the Kumtor Project and the international arbitration proceeding at the Permanent Court of Arbitration being terminated, in accordance with the Strategic Agreement on Environmental Protection and Investment Promotion previously entered into with the Kyrgyz Government (the “Strategic Agreement”). As a result, all obligations under the Strategic Agreement, including the settlement and releases of liability as well as the obligations of Kumtor Gold Company (“KGC”) to make contributions to various environmental and social funds of the Kyrgyz Republic Government, became effective.

As previously disclosed, Centerra and its Kyrgyz subsidiaries KGC entered into the Strategic Agreement with the Kyrgyz Government on September 11, 2017. The Strategic Agreement includes, among other things:

- (i) full and final reciprocal releases and resolution of all existing arbitral and environmental claims, disputes, proceedings and court orders, and releases of the Company and its Kyrgyz subsidiaries from future claims covering the same subject matter as the existing environmental claims arising from approved mine activities;
- (ii) the agreement of KGC to:
 - a. make a one-time lump sum payment totaling \$57 million to a new, government-administered Nature Development Fund (\$50 million) following closing and to a new, government administered Cancer Care Support Fund (\$7 million) (the \$7 million to the Cancer Care Support Fund was paid in 2017);

- b. within 12 months of closing make a further one-time payment of \$3 million to the new, government administered Cancer Care Support Fund;
- c. make annual payments of \$2.7 million to the Nature Development Fund, conditional on the Government continuing to comply with its obligations under the Strategic Agreement, and
- d. accelerate its annual payments to Kumtor's Reclamation Trust Fund in the amount of \$6 million a year until the total amount contributed by KGC reaches the total estimated reclamation cost for the Kumtor Project (representing the independent assessment of Kumtor's current reclamation costs) subject to a minimum total reclamation cost of \$69 million (which is broadly in line with KGC's current estimated reclamation cost for the Kumtor Project);

On August 7, 2019, Centerra, KGC, KOC and the Kyrgyz Government announced that all conditions under the Strategic Agreement had been satisfied or waived and on August 26, 2019 announced that the remaining legal proceedings affecting the Kumtor Project, including the international arbitration proceeding at the Permanent Court of Arbitration as well as the civil claims brought by SIETS (referred to below) had been terminated.

At the request of the Kyrgyz Government, KGC committed to certain additional contributions in the Kyrgyz Republic (over and above those required under the Strategic Agreement) to strengthen its social license to operate in Kyrgyz Republic. In particular, KGC committed to:

- a \$5 million lump sum contribution to a new Kyrgyz Republic Social Partnership for Regional Development Fund (the "Regional Fund") (this contribution was made on August 28, 2019);
- a \$5 million lump sum contribution to the Regional Fund within 12 months of the Second Completion Date;
- monthly contributions to the Regional Fund equivalent to 0.4% of KGC's revenues from the Kumtor Project earned after the Second Completion Date;
- an annual contribution of \$1 million to the Kyrgyz Republic Nature Development Fund; and
- exploration expenditures of at least \$16 million at the Kumtor Project over a two-year period; the (Company expects to have spent this amount by the end of 2019).

All future contributions are conditional upon the Kyrgyz Government continuing to comply with the conditions precedent under the Strategic Agreement.

Kyrgyz Republic Claims

SIETS Claims

As noted above, SIETS has withdrawn each of their claims in connection with the completion of the Strategic Agreement and the Kyrgyz Republic Government has released Centerra and its Kyrgyz subsidiaries from any liability arising out of or in connection with the claims noted above or similar claims.

As previously disclosed, on May 25, 2016, the Bishkek Inter-District Court in the Kyrgyz Republic ruled against Kumtor Operating Company (“KOC”), Centerra’s wholly-owned subsidiary, on two claims made by the State Inspectorate Office for Environmental and Technical Safety of the Kyrgyz Republic (“SIETS”) in relation to the placement of waste rock at the Kumtor waste dumps and unrecorded wastes from Kumtor’s effluent and sewage treatment plants. The Inter-District Court awarded damages of 6,698,878,290 Kyrgyz soms (approximately \$96.3 million at current exchange rates) and 663,839 Kyrgyz soms (approximately \$9,500 at current exchange rates), respectively. On June 1, 2016, the Inter-District Court ruled against KOC on two other claims made by SIETS in relation to alleged land damage and failure to pay for water use. The Inter-District Court awarded damages of 161,840,109 Kyrgyz soms (approximately \$2.3 million) and 188,533,730 Kyrgyz soms (approximately \$2.7 million), respectively.

Kyrgyz Republic General Prosecutor’s Office Proceedings

The Company was subject to a number of other criminal proceedings commenced by the Kyrgyz Republic General Prosecutor’s Office and other Kyrgyz Republic state agencies as described below.

Criminal Investigation into Environmental Matters

In connection with the completion of the Strategic Agreement, the Kyrgyz Government has confirmed the termination of a criminal investigation which concerns the same subject matter as the SIETS claims described above.

Land Use Claim

As previously noted, KGC challenged the purported 2012 cancellation of its land use (surface) rights over the Kumtor concession areas in the Kyrgyz Republic courts as well as in its arbitration claim (described above). On August 28, 2017, the Bishkek Inter-District Court terminated the proceeding commenced by the GPO in respect of Kumtor’s land use rights over the Kumtor concession area. The Company received new land use certificates on January 24, 2019.

GPO Review of Kumtor Project Agreements

In connection with the completion of the Strategic Agreement, the Kyrgyz Republic Government has confirmed that investigation has been closed with respect to Centerra and its Kyrgyz subsidiaries.

On June 14, 2016, according to reports in the Kyrgyz Republic, the Kyrgyz Republic President instructed the GPO to investigate the legality of the agreements relating to the Kumtor Project which were entered into in 2003, 2004 and 2009. The 2009 Restated Investment Agreement and restated agreements entered into in 2019 (the “Kumtor Project Agreements”) governing the Kumtor Project which was entered into in 2009 superseded entirely the 2003 and 2004 agreements. The 2009 Restated Investment Agreement was negotiated with the Kyrgyz Government, Kyrgyzaltyn and their international advisers, and approved by all relevant Kyrgyz Republic state authorities, including the Kyrgyz Republic Parliament and any disputes under the 2009 Restated Investment Agreement are subject to resolution by international arbitration.

While the completion of the Strategic Agreement has resolved the outstanding issues relating to the Kumtor Project, the ongoing contributions under the Strategic Agreement are conditional upon the Kyrgyz Government and/or Parliament not taking actions that are inconsistent with the Government’s obligations under the Strategic Agreement or Kumtor Project Agreements. Any such action could lead to new or renewed disputes with the Kyrgyz Government and could have a material adverse impact on the Company’s future cash flows, earnings, results of operations and financial condition.

Other

The Company operates in multiple countries around the world and accordingly is subject to, and pays, taxes under the various regimes in those jurisdictions in which it operates. These tax regimes are determined

under general corporate income tax and other laws of the respective jurisdiction. The Company has historically filed, and continues to file, all required tax returns and to pay the taxes reasonably determined to be due. The tax rules and regulations in many countries are complex and subject to interpretation. From time to time the Company's tax filings are subject to review and in connection with such reviews disputes can arise with the taxing authorities over the Company's interpretation of the country's tax laws. The Company records provisions for future disbursements considered probable. As at September 30, 2019, the Company did not have any material provision for claims or taxation assessments.

13. Accounting Estimates, Policies and Changes

Accounting Estimates

The preparation of the Company's consolidated financial statements in accordance with IFRS required management to make estimates and judgments that affect the amounts reported in the consolidated financial statements and accompanying notes. The critical estimates and judgments applied in the preparation of the Company's condensed consolidated interim financial statements for the three and nine months ended September 30, 2019 are consistent with those used in the Company's consolidated financial statements for the year ended December 31, 2018, with the exceptions listed in note 3 of the condensed consolidated interim financial statements.

The key sources of estimation uncertainty and judgment used in the preparation of the consolidated financial statements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities and earnings within the next financial year are outlined in detail in note 4 of the December 31, 2018 financial statements.

Recently issued but not adopted accounting guidance

Note 3 in the condensed consolidated interim financial statements for the three and nine months ended September 30, 2019 presents a list of recently issued accounting standards either adopted or not yet adopted by the Company, provides a brief description on the nature of these changes and potential impact on the Company. On January 1, 2019, the Company adopted IFRS 16, *Leases*, that revises the definition of leases and requires companies to bring most leases on-balance sheet. IFRS 16 was adopted using the modified retrospective approach which resulted with the recording of additional lease liabilities of \$21.0 million and the recording of a corresponding right-of-use asset as part of property, plant and equipment. IFRIC 23, *Uncertainty over Income Tax Treatments*, was also adopted on January 1, 2019 with minimal impact.

14. Disclosure Controls and Procedures and Internal Control Over Financial Reporting

The Company's management, including the CEO and CFO, is responsible for the design of disclosure controls and procedures ("DC&P") and internal controls over financial reporting ("ICFR"). Centerra adheres to the Committee of Sponsoring Organizations of the Treadway Commission's (COSO) revised 2013 Internal Control Framework for the design of its ICFR. There was no material change to the Company's internal controls over financial reporting that occurred during the third quarter of 2019 that has materially affected, or is reasonably likely to materially affect, the Company's internal controls over financial reporting.

The evaluation of DC&P and ICFR was carried out under the supervision of and with the participation of management, including Centerra's CEO and CFO. Based on these evaluations, the CEO and the CFO concluded that the design and operation of these DC&P and ICFR were effective throughout the third quarter of 2019.

15. Non-GAAP Measures

This document contains the following non-GAAP financial measures: all-in sustaining costs per ounce sold on a by-product basis, all-in sustaining costs per ounce sold on a by-product basis including taxes, and all-in sustaining costs per ounce sold on a co-product basis. In addition, non-GAAP financial measures include adjusted earnings, adjusted operation costs per ounce sold, average realized gold price, average realized copper price, free cash flow and adjusted free cash flow. These financial measures do not have any standardized meaning prescribed by GAAP and are therefore unlikely to be comparable to similar measures presented by other issuers, even as compared to other issuers who may be applying the World Gold Council (“WGC”) guidelines, which can be found at <http://www.gold.org>.

Management believes that the use of these non-GAAP measures will assist analysts, investors and other stakeholders of the Company in understanding the costs associated with producing gold, understanding the economics of gold mining, assessing our operating performance, our ability to generate free cash flow from current operations and to generate free cash flow on an overall Company basis, and for planning and forecasting of future periods. However, the measures do have limitations as analytical tools as they may be influenced by the point in the life cycle of a specific mine and the level of additional exploration or expenditures a company has to make to fully develop its properties. Accordingly, these non-GAAP measures should not be considered in isolation, or as a substitute for, analysis of our results as reported under GAAP.

Definitions

The following is a description of the non-GAAP measures used in this MD&A:

- *Adjusted operating costs per ounce sold* include cost of sales (cash component), regional office administration, mine standby costs, community costs related to current operations, refining fees and by-product credits.
- *All-in sustaining costs on a by-product basis per ounce sold* include adjusted operating costs, the cash component of capitalized stripping costs, corporate general and administrative expenses, accretion expenses, and sustaining capital, net of copper and silver credits. The measure incorporates costs related to sustaining production. Copper and silver credits represent the expected revenue from the sale of these metals.
- *All-in sustaining costs on a by-product basis per ounce sold including taxes*, include revenue-based tax at Kumtor and taxes (mining and income) at Mount Milligan.
- *All-in sustaining costs on a co-product basis per ounce of gold sold or per pound of copper sold*, operating costs are allocated between copper and gold based on production. To calculate the allocation of operating costs, copper production has been converted to ounces of gold equivalent using the copper production for the periods presented, as well as an average of the futures prices during the quotational pricing period for copper and gold sold from Mount Milligan. In the third quarter of 2019, 561 pounds of copper was equivalent to one ounce of gold.
- *Adjusted earnings* is calculated by adjusting net earnings (loss) as recorded in the condensed consolidated interim statements of income (loss) and comprehensive income (loss) for items not associated with ongoing operations.
- *Adjusted operating cash flow* is calculated by adjusting cash provided by operations as recorded in the condensed consolidated interim statements of statements of cash flows for items not associated with ongoing operations.
- *Average realized gold price* is calculated by dividing the different components of gold sales (including third party sales, mark to market adjustments, final pricing adjustments and the fixed amount received under the Mount Milligan Streaming Arrangement) by the number of ounces sold.
- *Average realized copper price* is calculated by dividing the different components of copper sales (including third party sales, mark to market adjustments, final pricing adjustments and the fixed amount received under the Mount Milligan Streaming Arrangement) by the number of pounds sold.
- *Free cash flow (unlevered)* is calculated as cash provided by operations less additions to property, plant and equipment.
- *Adjusted free cash flow (unlevered)* is calculated as free cash flow adjusted for items not associated with ongoing operations

Adjusted Operating Cost and All-in Sustaining Costs on a by-product basis (including and excluding taxes) per ounce of gold are non-GAAP measures and can be reconciled as follows:

(Unaudited - \$ millions, unless otherwise specified)	Three months ended September 30,						Nine months ended September 30,					
	Consolidated ⁽¹⁾		Kumtor ⁽¹⁾		Mount Milligan ⁽¹⁾		Consolidated ⁽¹⁾		Kumtor ⁽¹⁾		Mount Milligan ⁽¹⁾	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Cost of sales excluding molybdenum segment, as reported	189.2	146.0	111.8	86.8	77.4	59.2	530.6	386.3	304.7	240.9	225.9	145.4
Less: Non-cash component	66.0	47.0	50.1	36.7	15.9	10.4	177.0	129.2	134.7	103.3	42.3	25.9
Cost of sales, cash component	123.2	99.0	61.7	50.1	61.5	48.8	353.6	257.1	170.0	137.6	183.6	119.5
Adjust for:												
Regional office administration	3.0	3.4	3.0	3.4	-	-	9.0	9.7	9.0	9.7	-	-
Selling and marketing	2.0	0.9	-	-	2.0	0.9	5.7	3.1	-	-	5.7	3.1
Refining fees	1.7	1.4	1.4	1.1	0.3	0.2	4.5	3.6	3.8	3.1	0.7	0.5
By-product credits - copper	(41.4)	(27.4)	-	-	(41.4)	(27.4)	(108.9)	(65.6)	-	-	(108.9)	(65.6)
Community costs related to current operations	4.2	1.1	4.2	1.1	-	-	6.3	3.9	6.3	3.9	-	-
Adjusted Operating Costs	92.7	78.4	70.3	55.7	22.4	22.5	270.2	211.8	189.1	154.3	81.1	57.5
Corporate general administrative and other costs	12.6	5.1	-	0.0	-	0.1	35.7	23.8	-	0.1	-	0.5
Accretion expense	0.5	0.5	0.4	0.3	0.1	0.2	1.5	1.4	1.1	1.0	0.4	0.5
Capitalized stripping	18.9	12.3	18.9	12.3	-	-	48.3	77.6	48.3	77.6	-	-
Capital expenditures (sustaining)	17.6	19.9	10.5	10.6	7.1	9.1	57.5	64.5	30.8	31.8	26.7	32.3
Lease principal payments	1.5	-	-	-	1.5	-	4.0	-	-	-	4.0	-
All-in Sustaining Costs on a by-product basis	143.8	116.2	100.1	78.9	31.1	31.9	417.2	379.1	269.3	264.8	112.2	90.8
Revenue-based taxes	33.0	20.2	33.0	20.2	-	-	88.2	58.2	88.2	58.2	-	-
Income and mining taxes	1.4	0.9	-	-	1.4	0.9	3.1	7.7	-	-	3.1	2.1
All-in Sustaining Costs on a by-product basis (including taxes)	178.2	137.3	133.1	99.1	32.5	32.8	508.5	445.0	357.5	323.0	115.3	92.9
Ounces sold (000)	216.0	166.7	160.1	119.5	55.9	47.2	610.8	439.6	463.7	327.1	147.1	112.5
Adjusted Operating Costs - \$/oz sold	429	470	439	467	401	478	442	482	408	472	551	511
Gold - All-in Sustaining Costs on a by-product basis - \$/oz sold	666	698	626	662	557	677	683	861	581	810	763	808
Gold - All-in Sustaining Costs on a by-product basis (including taxes) - \$/oz sold	825	824	831	831	581	695	833	1,012	771	988	784	826
Gold - All-in Sustaining Costs on a co-product basis (before taxes) - \$/oz sold	717	709	626	662	766	716	711	858	581	810	882	790
Copper - All-in Sustaining Costs on a co-product basis (before taxes) - \$/pound sold	1.36	1.73	n/a	n/a	1.36	1.73	1.72	1.89	n/a	n/a	1.72	1.89

⁽¹⁾ Results may not add due to rounding

Adjusted earnings can be reconciled as follows:

Adjusted earnings is intended to provide investors with information about the Company's continuing income generating capabilities. This measure adjusts for the earnings impact of non-recurring items.

(\$ millions, except as noted)	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Net (loss) earnings	\$ (165.1)	\$ 6.0	\$ (81.3)	\$ 58.6
Adjust for items not associated with ongoing operations:				
Kyrgyz Republic settlement	10.0	-	10.0	-
Asset Impairment - Mount Milligan	230.5	-	230.5	-
Asset Impairment - Mongolia (net of tax)	-	8.5	-	8.5
Gain on sale of royalty portfolio	-	-	-	(28.0)
Gain on sale of ATO	-	-	-	(9.4)
Tax adjustment	-	-	-	(5.2)
AuRico Metals Inc. acquisition and integration expenses	-	-	-	4.4
Adjusted net earnings	\$ 75.4	\$ 14.5	\$ 159.2	\$ 28.9
Net (loss) earnings per share - basic	\$ (0.56)	\$ 0.02	\$ (0.28)	\$ 0.20
Net (loss) earnings per share - diluted	\$ (0.56)	\$ 0.01	\$ (0.28)	\$ 0.19
Adjusted net earnings per share - basic	\$ 0.26	\$ 0.05	\$ 0.54	\$ 0.10
Adjusted net earnings per share - diluted	\$ 0.26	\$ 0.05	\$ 0.54	\$ 0.10

Adjusted operating cashflow can be reconciled as follows:

(\$ millions, except as noted)	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Cash provided by operations	\$ 31.9	\$ 37.6	\$ 241.6	\$ 65.9
Adjust for items not associated with ongoing operations:				
Kyrgyz Republic settlement	62.6	-	62.6	-
AuRico Metals Inc. acquisition and integration expenses	-	-	-	4.4
Adjusted cash provided by operations	\$ 94.5	\$ 37.6	\$ 304.2	\$ 70.3

Free cash flow (unlevered) is calculated as follows:

(\$ millions, except as noted)	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Cash provided by operations ⁽¹⁾	\$ 31.9	\$ 37.6	\$ 241.6	\$ 65.9
Adjust for:				
Additions to property, plant and equipment (1)	(84.4)	(61.7)	(206.0)	(199.8)
Free cash flow (deficit) - unlevered	\$ (52.5)	\$ (24.1)	\$ 35.6	\$ (133.9)
Adjust for:				
Kyrgyz Republic settlement	62.6	-	62.6	-
AuRico Metals Inc. acquisition and integration expenses	-	-	-	4.4
Adjusted Free cash flow (deficit) - unlevered	\$ 10.1	\$ (24.1)	\$ 98.2	\$ (129.5)

⁽¹⁾ As presented in the Company's Consolidated Statement of Cash Flows

Average realized sales price for gold

The average realized gold price per ounce sold is calculated by dividing gold sales revenue, gross together with the final pricing adjustments and mark-to-market adjustments by the ounces sold, as shown in the table below:

<u>Average realized sales price for gold</u>	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Gold sales reconciliation (\$ millions)				
Gold sales - Kumtor	234.4	142.9	627.1	413.2
<i>Gold sales - Mt. Milligan</i>				
Gold sales related to cash portion of Royal Gold stream	8.5	7.2	22.2	17.1
Mark-to-market adjustments on sales to Royal Gold	2.6	1.2	1.2	1.9
Final adjustments on sales to Royal Gold	(3.0)	2.2	(3.1)	1.7
Total gold sales under Royal Gold stream	8.1	10.6	20.3	20.7
Gold sales to third party customers	54.1	37.3	131.5	92.6
Mark-to-market adjustments	(9.9)	(1.0)	(5.4)	(2.3)
Final pricing adjustments	10.0	(2.0)	10.1	(1.6)
Final metal adjustments	0.4	(0.5)	0.4	(0.6)
Total gold sales to third party customers	54.6	34.3	136.6	88.1
Gold sales, net of adjustments	62.7	44.9	156.9	108.8
Refining and treatment costs	(0.3)	(0.2)	(0.7)	(0.5)
Total gold sales	62.4	44.7	156.2	108.3
Total gold revenue - Consolidated	296.8	187.6	783.3	521.5
Ounces of gold sold				
Gold ounces sold - Kumtor	160,088	119,521	463,663	327,060
Ounces sold to Royal Gold - Mt. Milligan	19,541	16,374	51,223	39,291
Ounces sold to third party customers - Mt. Milligan	36,394	30,821	95,876	73,224
Total ounces sold - Consolidated	216,023	166,716	610,761	439,575
Average realized sales price for gold on a per ounce basis				
Average realized sales price - Kumtor	1,464	1,195	1,352	1,263
Average realized gold price - Royal Gold	435	435	435	435
Average realized gold price - Mark-to-market adjustments	132	74	23	47
Average realized gold price - Final pricing adjustments	(155)	137	(60)	43
Average realized gold price - Mt. Milligan - Royal Gold	412	646	399	526
Average realized gold price - Third party	1,487	1,211	1,372	1,265
Average realized gold price - Mark-to-market adjustments	(271)	(33)	(56)	(31)
Average realized gold price - Final pricing adjustments	275	(64)	105	(22)
Average realized gold price - Final metal adjustments	10	(15)	4	(8)
Average realized gold price - Mt. Milligan - Third party	1,500	1,114	1,425	1,203
Average realized gold price - Mt. Milligan - Combined	1,114	947	1,063	964
Average realized sales price for gold - Consolidated	1,374	1,125	1,282	1,186

Average realized sales price for Copper - Mount Milligan

The average realized copper price per pound is calculated by dividing copper sales revenue, gross together with the final pricing adjustments and mark-to-market adjustments per pound, as shown in the table below:

Average realized sales price for Copper - Mount Milligan	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Copper sales reconciliation (\$ millions)				
Copper sales related to cash portion of Royal Gold stream	1.6	1.1	4.1	2.7
Mark-to-market adjustments on Royal Gold stream	(0.4)	1.2	(0.3)	1.3
Final adjustments on sales to Royal Gold	0.7	(0.1)	0.1	0.1
Total coppersales under Royal Gold stream	2.0	2.1	3.9	4.0
Copper sales to third party customers	46.6	30.5	117.0	75.8
Mark-to-market adjustments	0.2	3.0	2.8	(0.2)
Final pricing adjustments	(1.9)	(4.4)	(0.5)	(4.8)
Final metal adjustments	(0.1)	0.0	(1.0)	(0.7)
Total coppersales to third party customers	44.8	29.0	118.3	70.1
Copper sales, net of adjustments	46.8	31.1	122.2	74.1
Refining and treatment costs	(5.4)	(3.7)	(13.3)	(8.4)
Copper sales	41.4	27.4	108.9	65.6
Pounds of copper sold (000's lbs)				
Pounds sold to Royal Gold	4,130	2,494	9,998	5,685
Pounds sold to third party customers	17,813	11,111	43,420	25,093
Total pounds sold	21,943	13,605	53,418	30,779
Average realized sales price for copper on a per pound basis				
Copper sales related to cash portion of Royal Gold stream	0.39	0.41	0.41	0.45
Mark-to-market adjustments on Royal Gold stream	(0.09)	0.46	(0.03)	0.22
Final pricing adjustments on Royal Gold stream	0.18	(0.05)	0.01	0.02
Average realized copper price - Royal Gold	0.48	0.82	0.39	0.69
Average realized copper price - Third party	2.61	2.74	2.69	3.02
Average realized copper price - Mark-to-market adjustments	0.01	0.27	0.07	(0.01)
Average realized copper price - Final pricing adjustments	(0.11)	(0.40)	(0.01)	(0.19)
Average realized copper price - Metal pricing adjustments	(0.01)	0.00	(0.03)	(0.03)
Average realized copper price - Third party	2.52	2.61	2.72	2.79
Average realized copper price - Combined	1.89	2.01	2.04	2.13

16. Caution Regarding Forward-Looking Information

Information contained in this document which are not statements of historical facts, and the documents incorporated by reference herein, may be "forward-looking information" for the purposes of Canadian securities laws. Such forward-looking information involves risks, uncertainties and other factors that could cause actual results, performance, prospects and opportunities to differ materially from those expressed or implied by such forward looking information. The words "believe", "expect", "anticipate", "contemplate", "plan", "intends", "continue", "budget", "estimate", "may", "will", "schedule", "understand" and similar expressions identify forward-looking information. These forward-looking statements relate to, among other things: assumptions used in the Mount Milligan impairment test, and expectations that the Kyrgyz Government will continue to comply with the terms of the Strategic Agreement; the Company's plans and timing for developing and submitting requests to implement a long term solution to the Mount Milligan water sufficiency issues, including consultations with potentially affected Indigenous groups and regulators; expectations regarding the construction progress at the Öksüt Project and timing of first gold pour; the Company's planned exploration activities for the remainder of 2019, the Company's cash at hand, working capital, future cash flows and existing credit facilities being sufficient to fund anticipated operating cash requirements and statements found under the heading "2019 Outlook", including forecast 2019 production figures and costs, capital spending (growth and sustaining) and exploration expenditures and taxes; expectations about bringing online ground water wells in December 2019 and not needing to slow production at Mount Milligan in the first quarter of 2020 to conserve water; the continuation of higher costs at Mount Milligan over the short and medium term and our expectations that the long-term recoveries at Mount Milligan will be lower than anticipated; the timing of completing a mine optimization study at Mount Milligan and possible plant expansions and for publishing

an updated NI 43-101 technical report for Mount Milligan; and our expectation that Mount Milligan's mineral reserves and resources will be materially reduced following completion of the updated NI 43-101 technical report

Forward-looking information is necessarily based upon a number of estimates and assumptions that, while considered reasonable by Centerra, are inherently subject to significant political, business, economic and competitive uncertainties and contingencies. Known and unknown factors could cause actual results to differ materially from those projected in the forward-looking information. Factors that could cause actual results or events to differ materially from current expectations include, among other things: (A) strategic, legal, planning and other risks, including: political risks associated with the Company's operations in the Kyrgyz Republic, Turkey and Canada; risks of a decision by the Kyrgyz General Prosecutor's Office, or its successor the Anti-Corruption Service of the State Committee for National Security, to re-open at any time civil or criminal proceedings against Centerra, its subsidiaries or other stakeholders; the failure of the Government to comply with its continuing obligations under the Strategic Agreement, including the requirement that it comply at all times with its obligations under the Kumtor Project Agreements, allow for the continued operation of the Kumtor Mine by KGC and KOC and not take any expropriatory action; actions by the Government or any state agency or the General Prosecutor's Office that serve to restrict or otherwise interfere with the payment of funds by KGC and KOC to Centerra; resource nationalism including the management of external stakeholder expectations; the impact of changes in, or to the more aggressive enforcement of, laws, regulations and government practices, including with respect to the environment, in the jurisdictions in which the Company operates including any delays or refusals to grant required permits and licenses, unjustified civil or criminal action against the Company, its affiliates or its current or former employees; risks that community activism may result in increased contributory demands or business interruptions; the impact of any actions taken by the Kyrgyz Government and Parliament relating to the Kumtor Project Agreements which are inconsistent with the rights of Centerra and KGC under the Kumtor Project Agreements; the risks related to other outstanding litigation affecting the Company's operations in the Kyrgyz Republic and elsewhere; the impact of the delay by relevant government agencies to provide required approvals, expertises and permits; potential impact on the Kumtor Project of investigations by Kyrgyz Republic instrumentalities; the impact of constitutional changes in Turkey; the impact of any sanctions imposed by Canada, the United States or other jurisdictions against various Russian and Turkish individuals and entities; potential defects of title in the Company's properties that are not known as of the date hereof; the inability of the Company and its subsidiaries to enforce their legal rights in certain circumstances; the presence of a significant shareholder that is a state-owned company of the Kyrgyz Republic; risks related to anti-corruption legislation; risks related to the concentration of assets in Central Asia; Centerra's future exploration and development activities not being successful; Centerra not being able to replace mineral reserves; Indigenous claims and consultative issues relating to the Company's properties which are in proximity to Indigenous communities; and potential risks related to kidnapping or acts of terrorism; (B) risks relating to financial matters, including: sensitivity of the Company's business to the volatility of gold, copper and other mineral prices, the use of provisionally-priced sales contracts for production at Mount Milligan, reliance on a few key customers for the gold-copper concentrate at Mount Milligan, use of commodity derivatives, the imprecision of the Company's mineral reserves and resources estimates and the assumptions they rely on, the accuracy of the Company's production and cost estimates, the impact of restrictive covenants in the Company's credit facilities which may, among other things, restrict the Company from pursuing certain business activities or making distributions from its subsidiaries, the Company's ability to obtain future financing, the impact of global financial conditions, the impact of currency fluctuations, the effect of market conditions on the Company's short-term investments, the Company's ability to make payments including any payments of principal and interest on the Company's debt facilities depends on the cash flow of its subsidiaries; and (C) risks related to operational matters and geotechnical issues and the Company's continued ability to successfully manage such matters, including the movement of the Davidov Glacier, waste and ice movement and continued performance of the buttress at the Kumtor Project; the occurrence of further ground movements at the Kumtor Project and mechanical availability; the risk of having sufficient water to continue operations at Mount Milligan and achieve expected mill throughput; the success of the Company's future exploration and development activities, including the financial and political risks inherent in carrying out exploration activities; inherent risks associated with the use of sodium cyanide in the mining operations; the adequacy of the Company's insurance to mitigate operational risks; mechanical breakdowns; the Company's ability to replace its mineral reserves; the occurrence of any labour unrest or disturbance and the ability of the Company to successfully re-negotiate collective agreements when required; the risk that Centerra's workforce may be exposed to widespread epidemic; seismic activity in the vicinity of the Company's properties; long lead times required for equipment and supplies given the remote location of some of the Company's operating properties; reliance on a limited number of suppliers for certain consumables, equipment and components; the Company's ability to accurately predict decommissioning and reclamation costs; the Company's

ability to attract and retain qualified personnel; competition for mineral acquisition opportunities; and risks associated with the conduct of joint ventures/partnerships; the Company's ability to manage its projects effectively and to mitigate the potential lack of availability of contractors, budget and timing overruns and project resources; risks that changes in circumstances affect the key assumptions used in, and findings of, the impairment test, including but not limited to higher than anticipated costs over the short to medium term and lower than anticipated recoveries at the Mount Milligan mine; and risks that the comprehensive technical review being conducted at Mount Milligan will materially reduce the mineral reserves and resources of Mount Milligan. See section titled "Risks that can affect our business" in the Company's most recently filed Annual Information Form available on SEDAR at www.sedar.com.

Furthermore, market price fluctuations in gold and copper, as well as increased capital or production costs or reduced recovery rates may render ore reserves containing lower grades of mineralization uneconomic and may ultimately result in a restatement of reserves. The extent to which resources may ultimately be reclassified as proven or probable reserves is dependent upon the demonstration of their profitable recovery. Economic and technological factors which may change over time always influence the evaluation of reserves or resources. Centerra has not adjusted mineral resource figures in consideration of these risks and, therefore, Centerra can give no assurances that any mineral resource estimate will ultimately be reclassified as proven and probable reserves.

Mineral resources are not mineral reserves, and do not have demonstrated economic viability, but do have reasonable prospects for economic extraction. Measured and indicated resources are sufficiently well defined to allow geological and grade continuity to be reasonably assumed and permit the application of technical and economic parameters in assessing the economic viability of the resource. Inferred resources are estimated on limited information not sufficient to verify geological and grade continuity or to allow technical and economic parameters to be applied. Inferred resources are too speculative geologically to have economic considerations applied to them to enable them to be categorized as mineral reserves. There is no certainty that mineral resources of any category can be upgraded to mineral reserves through continued exploration.

There can be no assurances that forward-looking information and statements will prove to be accurate, as many factors and future events, both known and unknown could cause actual results, performance or achievements to vary or differ materially, from the results, performance or achievements that are or may be expressed or implied by such forward-looking statements contained herein or incorporated by reference. Accordingly, all such factors should be considered carefully when making decisions with respect to Centerra, and prospective investors should not place undue reliance on forward looking information. Forward-looking information is as of October 29, 2019. Centerra assumes no obligation to update or revise forward looking information to reflect changes in assumptions, changes in circumstances or any other events affecting such forward-looking information, except as required by applicable law.