COMPUTER MODELLING GROUP LTD.

2019 Financial Report

Future of Simulation

cmgl.ca

Contents

Annual General Meeting

CMG's 2019 Annual General Meeting will be held at 10:00 am on July 11, 2019

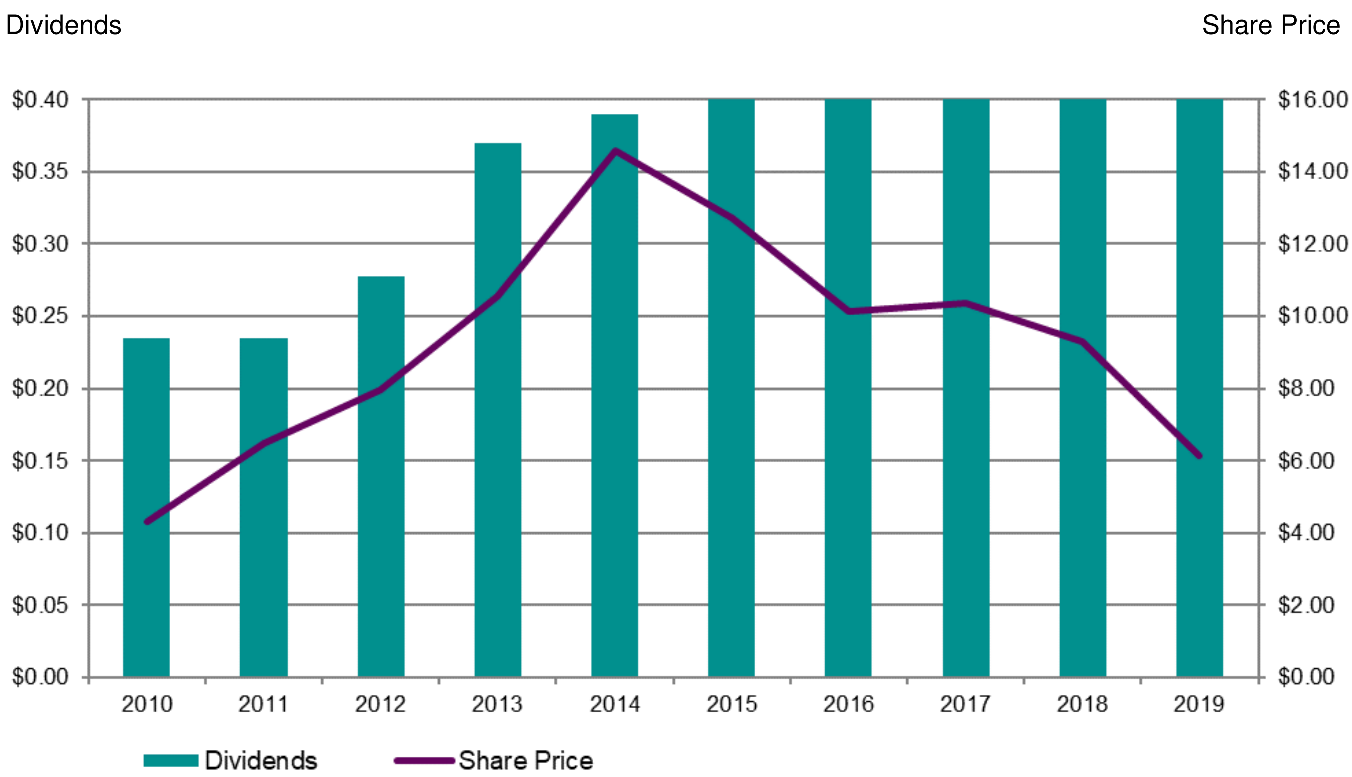
Computer Modelling Group Ltd.
3710 33 Street N.W.
Calgary, Alberta

Future of Simulation

2019 Highlights

Years ended March 31, *($ thousands, unless otherwise stated)*	**2019**	2018(1)	2017(1)	2016(1)	2015(1)
Software license revenue	**68,800**	68,843	70,234	74,974	76,836
Professional services revenue	**6,057**	5,837	4,863	5,824	8,025
Total revenue	**74,857**	74,680	75,097	80,798	84,861
Operating profit	**29,554**	28,030	33,321	36,036	41,516
Operating profit (%)	**39%**	38%	44%	45%	49%
Profit before income and other taxes	**30,890**	28,881	34,192	35,631	45,598
Income and other taxes	**8,755**	8,075	9,923	10,329	12,950
Net income for the year	**22,135**	20,806	24,269	25,302	32,648
EBITDA(2)	**31,507**	30,027	34,414	37,418	43,099
Funds flow from operations(3)	**25,593**	25,503	27,560	29,632	37,742
Weighted average shares outstanding	**80,222**	80,046	79,171	78,751	78,581
Earnings per share - basic	**0.28**	0.26	0.31	0.32	0.42
Dividends declared and paid per share	**0.40**	0.40	0.40	0.40	0.40
Funds flow from operations per share - basic(3)	**0.32**	0.32	0.35	0.38	0.48
Trading price per share at March 31	**6.15**	9.29	10.35	10.14	12.72

(1) On April 1, 2018, the Company adopted IFRS 15 *Revenue from Contracts with Customers* using the cumulative effect method, by recognizing the cumulative effect of initially applying IFRS 15 as an adjustment to the opening balance of equity at April 1, 2018. Accordingly, comparative information is not restated and continues to be reported under the previous standard.
(2) EBITDA is defined as net income before adjusting for depreciation expense, finance income, finance costs, and income and other taxes.
(3) Funds flow from operations is a non-IFRS financial measure that represents net income adjusted for depreciation expense, non-cash stock-based compensation expense, deferred tax expense (recovery) and deferred rent.



To Our Shareholders:

I am very pleased to report our fiscal 2019 results, as we exited the year with strong Q4 financial results, having achieved increases in operating profit and EBITDA of 16% and 14%, respectively, compared to Q4 of the previous fiscal year. During fiscal 2019, we maintained strong profitability with operating profit of 39% of revenue and EBITDA of 42% of revenue, demonstrating the resilience of our business model and the value of our products even in the difficult operating environment faced by the oil and gas sector. These financial results confirm our belief that reservoir simulation remains critical to the decision-making processes of oil and gas producers in optimizing production and value creation.

Financial Achievement

Supported by a strong fourth quarter, our total software revenue for fiscal 2019 remained consistent with the previous fiscal year. A decrease in annuity and maintenance revenue was offset by an increase in perpetual sales. We are very pleased to have achieved $5.0 million in perpetual sales, which represents an increase of 20% compared to the previous year.

Annuity and maintenance revenue decreased by 1% in fiscal 2019, mainly due to decreased licensing in the Canadian region. While sales in Canada continued to be under pressure throughout fiscal 2019, we were encouraged to see that Canadian annuity and maintenance revenue in Q4 of this year was comparable to Q4 of last fiscal year, which is the most consistent comparison we've seen since fiscal 2015. The United States region continued to benefit from strong activity by unconventional customers and, while we achieved growth both in the current quarter and year-to-date, the annual results in the region were negatively affected by a change in revenue recognition accounting policy, mainly related to one multi-year contract, partially offsetting the growth in revenue. While South America experienced a slight decrease in annuity and maintenance revenue this fiscal year, we saw an increase in the Eastern Hemisphere, mainly as a result of increased licensing and maintenance reactivation from an existing customer. Another positive indicator was a 2% increase in deferred revenue as we exited the year.

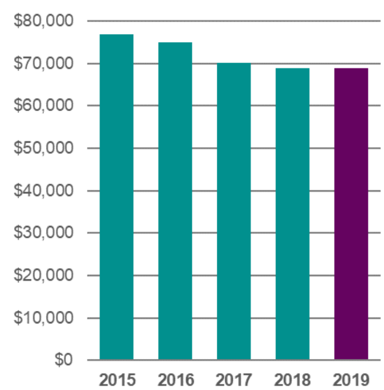
Operating expenses decreased by 3% during fiscal 2019. We are pleased with the improvement in our profitability measures in fiscal 2019, with 5% increases in both operating profit and EBITDA and an 8% increase in basic earnings per share.

During fiscal 2019, we paid dividends of $0.40 per share. CMG's Board of Directors declared a quarterly dividend of $0.10 per share to be paid on June 14, 2019, representing the 50th successive quarter of dividend payments.

We continued to maintain a strong balance sheet and closed the year with $54.3 million of cash and no debt. We further demonstrated solid liquidity by maintaining annual funds flow from operations at $0.32 per share, the same level as in the previous fiscal year. In support of our strategy of cash preservation to support the dividend, we did not buy back common shares during the year.

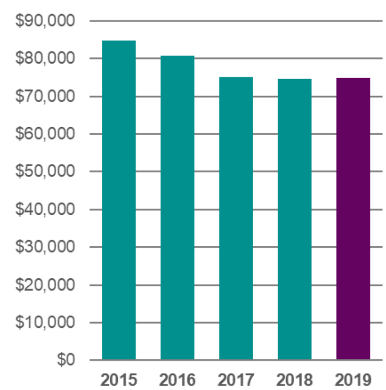
Software License Revenue

($ Thousands)



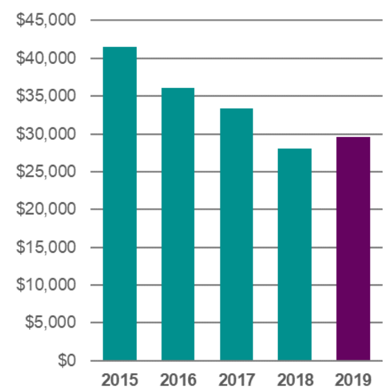
Total Revenue

($ Thousands)



Operating Profit

($ Thousands)



Regional Trends

Throughout fiscal 2019, we continued to solidify our presence in the U.S. unconventional reservoir simulation market with our industry-leading unconventional modelling workflow. We increased licensing by existing unconventional customers, as well as added a number of new customers to our base. We continue to be optimistic about the future prospects for the use of simulation and our evolving workflows applied to the U.S. shale market.

Our Canadian market segment continued to be under pressure during fiscal 2019, affected by uncertainties surrounding pipeline projects, the regulatory environment and the Western Canadian Select pricing differentials. However, we are hopeful that the Canadian market is stabilizing as evidenced by our fourth quarter results and, in the meantime, we will continue to focus on demonstrating to our customers the value of our simulation tools for optimizing their production, particularly during challenging times.

The South American market was stable throughout fiscal 2019, and we continued to grow our presence in the Eastern Hemisphere mainly by increasing license usage by our existing customers.

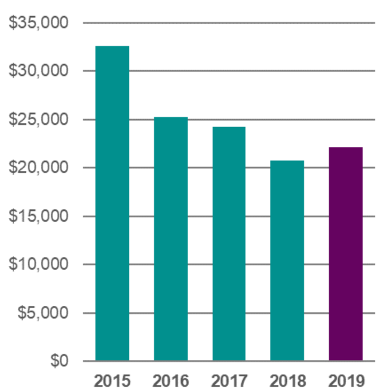
R&D Initiatives

During fiscal 2019, we invested $19.9 million in research and development, allowing us to deliver superior software technology with enhanced performance and innovative features to our customers. We implemented several performance-enhancement technologies, one of which is a new and faster solver technology, Hybrid Parallel (OpenMP combined with Message Passing Interface [MPI] technology), which allows customers to run models faster by distributing the computational workload across multiple compute nodes. This feature, currently in GEM and STARS where runtimes can be longer, allows reservoir engineers to simulate multi-million grid block models reliably and accurately, while maximizing hardware utilization.

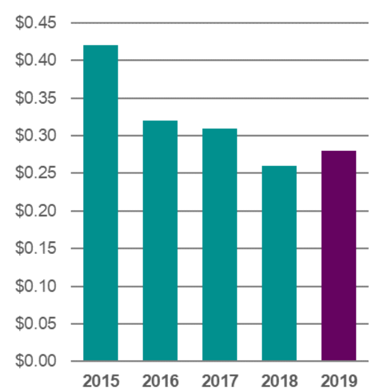
We continued to add features and improve performance of our industry-leading unconventional simulation workflows, including improving capabilities in predicting “frac-hits” when shear failure occurs on a grid block to determine the optimal well and fracture spacing. CMG’s software enables engineers to design and optimize well completions, visualize and analyze hydraulic fractures, and it is the only software suite capable of modelling and optimizing an entire life cycle of an unconventional well using one tool.

Cloud computing technology was another area of significant focus during fiscal 2019. We believe that CMG’s cloud solution represents the next revolution in technology. With low entry cost and flexibility, it allows our customers to accelerate analysis and decision-making processes while eliminating technological limitations. The cloud solution gives customers the ability to shorten time-to-decision, increase productivity and minimize infrastructure costs.

Earnings
($ Thousands)



Earnings Per Share
(Basic)



During fiscal 2019, we continued marketing and trial modelling of CoFlow, our newest product that provides a unified solution for integrated asset modelling by combining reservoir, production networks and geomechanics in one environment. The CoFlow team is working on feature development and performance improvement, while supporting prospective customers and model conversions related to potential opportunities. One of the notable accomplishments during the fiscal year was the closing in February of our first commercial contract for CoFlow for use on an onshore asset, which was followed by two more contracts, signed in March and April, with two new customers for short-term use of CoFlow on specific projects.

In February, we implemented organizational changes to further integrate the CoFlow development team into CMG's established R&D department under Dr. Long Nghiem, who was appointed as Chief Technology Officer in addition to remaining Vice President, Research and Development. CMG's commercial product suite has been under Dr. Nghiem's leadership since 1997 and his vision and technical knowledge have contributed significantly to our success to date. Dr. Nghiem will oversee CoFlow's ongoing development with an emphasis on realizing commercial opportunities.

Rob Eastick, formerly Vice President, CoFlow, took on the role of Coordinator, Production Network Technologies. Mr. Eastick saw CoFlow through a critical period as it evolved from a jointly funded R&D arrangement with Shell and Petrobras (until December 31, 2016) to a product suitable for deployment on the complex assets of CMG customers. Mr. Eastick will continue to direct development of a suite of technologies that are fundamental to CoFlow's utility. I want to thank Rob for his contributions and stewardship that enabled CMG to achieve its first commercial success beyond the original CoFlow partners.

This organizational change allows for more efficient and effective use of the resources and skills of our leadership and team members and allows for application of our proven model to CoFlow for delivering technology and value to our customers.

Closing Remarks

While the oil and gas industry is experiencing challenging times caused by price volatility, regulatory uncertainty and many other factors, we believe that CMG's technology is increasingly important to the long-term success of oil and gas producers, by helping them optimize production and increase productivity. We continue to engage with our customers and deliver tools and support to enable them to deal with such challenges and optimize the value of their assets.

As new technologies emerge, such as artificial intelligence and cloud computing, and as recovery methodologies become more complex, we will continue to innovate and deliver leading-edge technologies to our customers which will provide a foundation for our future growth and reinforce our leadership position in the simulation of advanced processes.

CMG's success wouldn't have been possible without the hard work and dedication of our entire team of employees and management to whom I am very grateful. I also wish to thank our Board of Directors for their continued support and trusted counsel. I am confident that CMG possesses the skills, talent and technologies to support our customers and, combined with fiscal prudence and our proven business model, we will continue to strengthen our position as the leading developer and supplier of reservoir simulation software while delivering value to our shareholders.

Ryan N. Schneider
President and Chief Executive Officer
May 22, 2019

Management's Discussion and Analysis

This Management's Discussion and Analysis ("MD&A") for Computer Modelling Group Ltd. ("CMG", the "Company", "we" or "our"), presented as at May 22, 2019, should be read in conjunction with the audited consolidated financial statements and related notes of the Company for the years ended March 31, 2019 and 2018. Additional information relating to CMG, including our Annual Information Form, can be found at www.sedar.com. The financial data contained herein have been prepared in accordance with International Financial Reporting Standards ("IFRS") and, unless otherwise indicated, all amounts in this report are expressed in Canadian dollars.

CORPORATE PROFILE

CMG is a computer software technology company serving the oil and gas industry. The Company is a leading supplier of advanced process reservoir modelling software with a blue chip customer base of international oil companies and technology centers in approximately 60 countries. The Company also provides professional services consisting of highly specialized support, consulting, training, and contract research activities. CMG has sales and technical support services based in Calgary, Houston, London, Dubai, Bogota and Kuala Lumpur. CMG's Common Shares are listed on the Toronto Stock Exchange ("TSX") and trade under the symbol "CMG".

VISION, BUSINESS AND STRATEGY

CMG's vision is to be the leading developer and supplier of dynamic reservoir modelling systems in the world. Early in its life CMG made the strategic decision to focus its research and development efforts on providing solutions for the simulation of difficult hydrocarbon recovery techniques, a decision that created the foundation for CMG's dominant market presence today in the simulation of advanced hydrocarbon recovery processes. CMG has demonstrated this commitment by continuously investing in research and development and working closely with its customers to develop simulation tools relevant to the challenges and opportunities they face today. This includes CoFlow, the newest generation of reservoir and production system simulation software. Our target is to develop a dynamic system that does more than optimize reservoir recovery; it will model the entire hydrocarbon reservoir system, including production systems.

Since its inception more than 40 years ago, CMG has remained focused on assisting its customers in unlocking the value of their hydrocarbon reservoirs. With petroleum production using conventional methods on the decline, the petroleum industry must use more difficult and costly advanced process extraction methods, while being faced with more governmental and regulatory requirements over environmental concerns. CMG's success can, in turn, be correlated with the oil industry becoming more reliant on the use of simulation technology due to the maturity of conventional petroleum reservoirs and the complexities of both current and emerging production processes. In addition, as producers continue to look for ways to operate efficiently by deploying technologies in their operations, we believe they will continue to seek reservoir simulation solutions to enhance production from their existing and new assets. CMG will continue to provide the most advanced reservoir simulation tools to assist companies with their reservoir planning, management and optimization.

CMG's success can specifically be attributed to a number of factors: advanced physics, ongoing enhancements to the Company's already robust product line, improved computational speed, parallel computing ability, ease of use features of the pre- and post-processor applications, cost effectiveness of the CMG solution for customers, and the knowledge base of CMG's personnel to support and advance its software.

CMG currently licenses reservoir simulation software to more than 600 oil and gas companies, consulting firms and research institutions in approximately 60 countries. In combination with its principal business of licensing its software, CMG also provides professional services consisting of highly specialized consulting, support, training, and funded research activities for its customers. While the generation of professional services revenue specifically tied to the provision of consulting services is not regarded as a core part of CMG's business, offering this type of service is important to CMG operationally. CMG performs a limited amount of specialized consulting services, which are typically of a highly complex and/or experimental nature. These studies provide hands-on practical knowledge, allowing CMG staff to test the boundaries of our software, and provide us the opportunity to increase software license sales to both new and existing customers. In addition, providing consulting services is important from the customer service perspective as it enables our customers to become more proficient users of CMG's software. The funded research revenue is derived from the customers who partner with CMG to assist in the development, testing and refinement of new simulation technologies.

In addition to consulting, we allocate significant resources to training, which is an instrumental part of our Company's success, as it enables our customers to become more efficient and effective users of our software. Our training is continuous in nature and it helps us in developing and maintaining long-term relationships with our customers.

CMG remains committed to advancing its technological superiority over its competition. CMG firmly believes that, to be the dominant supplier of dynamic reservoir modelling systems in the world, it must be responsive to customers' needs today and accurately predict their needs in the future.

CMG invests a significant amount of resources each year toward maintaining its technological superiority. During fiscal 2019, CMG maintained a consistent level of spending on research and development compared to the previous fiscal year (representing 27% of total revenue). The continued investment by CMG in its current product suite offering helps to ensure that its existing proven technology continues to be industry-leading. These significant levels of investment is a strategy to achieving our vision to be the leading developer and supplier of dynamic reservoir modelling systems in the world.

OVERALL PERFORMANCE

Key Performance Drivers and Capability to Deliver Results

One of the challenges the petroleum industry faces in trying to overcome barriers to production growth is the continuing need for breakthrough technologies. The facts facing the petroleum industry today are that brand new fields are increasingly difficult to find, especially on a large scale, and that there is a large number of mature fields and unconventional prospects where known petroleum reserves exist; the question is how to economically extract the petroleum reserves in place while utilizing environmentally conscious processes. These challenges have been made even more formidable by the current economic environment and the global political climate, which led to increased uncertainty regarding capital markets and commodity prices.

The emergence and efficiency of hydraulic fracturing technologies have opened the door to unconventional shale and tight hydrocarbon resources in North America at economically competitive input costs. CMG's reservoir simulation technology has a very extensive and efficient unconventional modelling workflow, which has been successful in the U.S. in simulation and modelling of reservoirs using hydraulic fracturing processes.

The petroleum industry utilizes reservoir simulation to provide both vital information and a visual interpretation on how reservoirs will behave under various recovery techniques. With this visualization and reservoir simulation modelling, reservoir professionals receive assistance in predicting the physics and chemistry of fluid flows, drilling locations, well operating conditions, risks, and best case economics of oil and gas property investment. Understanding the science of how a petroleum reservoir will react to difficult hydrocarbon recovery processes through simulation prior to spending the capital on drilling wells and injecting expensive chemicals and steam, for instance, is far less costly and risky than trying the various techniques on real wells.

In an uncertain oil price environment, producers have shifted their focus to increasing productivity while reducing operating costs. Reservoir simulation is a cost-effective and high-value tool to reduce risks, improve recovery processes, increase margins and incremental recovery.

CMG's existing product suite of software is the market leader in the simulation of difficult hydrocarbon recovery techniques. To maintain this dominant market position, CMG actively participates in research consortia that experiment with new petroleum extraction processes and technologies. CMG then incorporates the simulation of new recovery methods into its product suite and focuses on overcoming existing technological barriers to advance speed and ease of use, amongst other benefits, in its software.

During fiscal 2019, CMG's research and development team continued to deliver new features and enhancements to our products. Several performance enhancement technologies were implemented, one of which is Hybrid Parallel (OpenMP combined with Message Passing Interface [MPI] technology), which allows customers to run models faster by distributing the computational workload across multiple compute nodes. This feature, currently in GEM and STARS where runtimes can be longer, allows reservoir engineers to simulate multi-million grid block models reliably and accurately, while maximizing hardware utilization.

Advancements in cloud technology are generating a paradigm shift in modern computing and removing technological limitations faced by our customers. CMG's public cloud solution enables customers to securely access our simulators and run simulations on some of the latest and fastest hardware available in the industry, optimized for maximum efficiency and faster simulation results.

During fiscal 2019, we continued marketing and trial modelling of CoFlow, our newest product that provides a unified solution for integrated asset modelling by combining reservoir, production networks and geomechanics in one environment. The CoFlow team is working on feature development and performance improvement while supporting prospective customers and model conversions related to potential opportunities. We closed our first commercial contract for CoFlow for use on an onshore asset in February 2019, which was followed by two more contracts, signed in March and April, with two new customers for short-term use of CoFlow on specific projects.

CMG is in a very strong financial position with $34.3 million in working capital, no bank debt and a long history of generating earnings and cash from operating activities. In addition to its financial resources, CMG's real strength lies in the outstanding quality and dedication of its employees, which allows us to deliver unparalleled support and value to our customers.

Our focus will remain on licensing software to both existing and new customers and, with diversification of our geographic profile, we continue to strengthen our position in the global marketplace. Approximately 93% of our software license revenue is derived from annuity and maintenance contracts, which generally represent a recurring source of revenue. We continue to be profitable and have strong cash generation despite the ongoing economic challenges in the oil and gas industry.

For the fiscal year ended March 31, 2019, our EBITDA represented 42% of total revenue, which demonstrates our continuous ability to effectively manage corporate costs.

We continue to return value to our shareholders in the form of regular quarterly dividend payments. During the year ended March 31, 2019, we paid dividends of $0.40 per share, which is consistent with the prior fiscal year.

We are confident that our sustainable business model driven by superior technology, commitment to research and development initiatives, and customer-oriented approach will continue contributing to CMG's future success.

ANNUAL PERFORMANCE

($ thousands, unless otherwise stated)	**March 31, 2019**	March 31, 2018[(1)]	March 31, 2017[(1)]
Annuity/maintenance licenses	**63,800**	64,679	65,263
Perpetual licenses	**5,000**	4,164	4,971
Software licenses	**68,800**	68,843	70,234
Professional services	**6,057**	5,837	4,863
Total revenue	**74,857**	74,680	75,097
Operating profit	**29,554**	28,030	33,321
Operating profit (%)	**39%**	38%	44%
Net income for the year	**22,135**	20,806	24,269
EBITDA[(2)]	**31,507**	30,027	34,414
Cash dividends declared and paid	**32,090**	32,041	31,697
Funds flow from operations [(3)]	**25,593**	25,503	27,560
Total assets	**90,305**	97,990	106,725
Total shares outstanding	**80,227**	80,215	79,482
Trading price per share at March 31	**6.15**	9.29	10.35
Market capitalization at March 31	**493,396**	745,194	822,634
Per share amounts - ($/share)			
Earnings per share - basic	**0.28**	0.26	0.31
Earnings per share - diluted	**0.28**	0.26	0.31
Cash dividends declared and paid	**0.40**	0.40	0.40
Funds flow from operations per share - basic [(3)]	**0.32**	0.32	0.35

(1) On April 1, 2018, the Company adopted IFRS 15 *Revenue from Contracts with Customers* using the cumulative effect method, by recognizing the cumulative effect of initially applying IFRS 15 as an adjustment to the opening balance of equity at April 1, 2018. Accordingly, comparative information is not restated and continues to be reported under the previous standard.

(2) EBITDA is defined as net income before adjusting for depreciation expense, finance income, finance costs, and income and other taxes. See "Non-IFRS Financial Measures".

(3) Funds flow from operations is a non-IFRS financial measure that represents net income adjusted for depreciation expense, non-cash stock-based compensation expense and deferred tax expense (recovery). See "Non-IFRS Financial Measures".

Quarterly Performance

	Fiscal 2018[(1)]				**Fiscal 2019[(2)]**			
($ thousands, unless otherwise stated)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	**Q4**
Annuity/maintenance licenses	16,516	16,341	16,158	15,664	14,715	15,111	17,240	**16,734**
Perpetual licenses	1,078	290	743	2,053	326	1,172	611	**2,891**
Software licenses	17,594	16,631	16,901	17,717	15,041	16,283	17,851	**19,625**
Professional services	1,392	1,350	1,418	1,677	1,664	1,658	1,222	**1,513**
Total revenue	18,986	17,981	18,319	19,394	16,705	17,941	19,073	**21,138**
Operating profit	6,978	6,615	6,908	7,529	5,374	7,024	8,406	**8,750**
Operating profit (%)	37	37	38	39	32	39	44	**41**
Profit before income and other taxes	6,930	6,253	7,151	8,547	5,980	7,104	9,406	**8,400**
Income and other taxes	1,973	1,647	2,054	2,401	1,722	2,048	2,559	**2,426**
Net income for the period	4,957	4,606	5,097	6,146	4,258	5,056	6,847	**5,974**
EBITDA	7,447	7,090	7,400	8,090	5,837	7,505	8,915	**9,250**
Cash dividends declared and paid	7,977	8,021	8,022	8,021	8,021	8,024	8,022	**8,023**
Funds flow from operations	6,205	5,788	6,225	7,285	5,242	5,777	7,550	**7,024**
Per share amounts - ($/share)								
Earnings per share - basic	0.06	0.06	0.06	0.08	0.05	0.06	0.09	**0.07**
Earnings per share - diluted	0.06	0.06	0.06	0.08	0.05	0.06	0.09	**0.07**
Cash dividends declared and paid	0.10	0.10	0.10	0.10	0.10	0.10	0.10	**0.10**
Funds flow from operations per share - basic	0.08	0.07	0.08	0.09	0.07	0.07	0.09	**0.09**

(1) Q1, Q2, Q3 and Q4 of fiscal 2018 include $1.5 million, $1.0 million, $0.6 million, and $1.3 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.

(2) Q1, Q2, Q3 and Q4 of fiscal 2019 include $0.1 million, $0.3 million, $2.3 million and $1.8 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.

Highlights

During the year ended March 31, 2019, as compared to the previous fiscal year, CMG's:

- Net income increased by 6% and basic earnings per share increased by 8%;
- Total revenue remained consistent;
- Perpetual license revenue grew by 20%;
- Total operating expenses decreased by 3%.

During the year ended March 31, 2019, CMG:

- Achieved EBITDA of 42% of total revenue;
- Realized basic earnings per share of $0.28;
- Generated funds flow from operations of $0.32 per share;
- Declared and paid a regular dividend of $0.40 per share.

Revenue

Three months ended March 31, ($ thousands)	**2019**	2018	$ change	% change
Software license revenue	**19,625**	17,717	1,908	11%
Professional services	**1,513**	1,677	(164)	-10%
Total revenue	**21,138**	19,394	1,744	9%
Software license revenue - % of total revenue	**93%**	91%		
Professional services - % of total revenue	**7%**	9%		

Year ended March 31, ($ thousands)	**2019**	2018	$ change	% change
Software license revenue	**68,800**	68,843	(43)	0%
Professional services	**6,057**	5,837	220	4%
Total revenue	**74,857**	74,680	177	0%
Software license revenue - % of total revenue	**92%**	92%		
Professional services - % of total revenue	**8%**	8%		

CMG's revenue is comprised of software license sales, which provide the majority of the Company's revenue, and fees for professional services.

Total revenue for the three months ended March 31, 2019 increased by 9%, compared to the same period of the previous fiscal year, mainly due to an increase in software license revenue. Total revenue for the year ended March 31, 2019 remained consistent with the previous fiscal year.

Software License Revenue

Software license revenue is made up of annuity/maintenance license fees charged for the use of the Company's software products, which is generally for a term of one year or less, and perpetual software license sales, whereby the customer purchases the-then-current version of the software and has the right to use that version in perpetuity. Annuity/maintenance license fees have historically had a high renewal rate and, accordingly, provide a reliable revenue stream, while perpetual license sales are more variable and unpredictable in nature as the purchase decision and its timing fluctuate with the customers' needs and budgets. The majority of CMG's customers who have acquired perpetual software licenses subsequently purchase our maintenance package to ensure ongoing product support and access to current versions of CMG's software.

Three months ended March 31, ($ thousands)	**2019**	2018	$ change	% change
Annuity/maintenance license revenue	**16,734**	15,664	1,070	7%
Perpetual license revenue	**2,891**	2,053	838	41%
Total software license revenue	**19,625**	17,717	1,908	11%
Annuity/maintenance as a % of total software license revenue	**85%**	88%		
Perpetual as a % of total software license revenue	**15%**	12%		

Year ended March 31, ($ thousands)	**2019**	2018	$ change	% change
Annuity/maintenance license revenue	**63,800**	64,679	(879)	-1%
Perpetual license revenue	**5,000**	4,164	836	20%
Total software license revenue	**68,800**	68,843	(43)	0%
Annuity/maintenance as a % of total software license revenue	**93%**	94%		
Perpetual as a % of total software license revenue	**7%**	6%		

Total software license revenue for the three months ended March 31, 2019 increased by 11% compared the same period of the previous fiscal year, due to increases in both annuity/maintenance license revenue and perpetual license revenue. Total software license revenue for the year ended March 31, 2019 remained consistent with the previous fiscal year, as an increase in perpetual licenses revenue was offset by a decrease in annuity/maintenance license revenue.

CMG's annuity/maintenance license revenue increased by 7% during the three months ended March 31, 2019, compared to the same period of the previous fiscal year, primarily due to maintenance reactivation and increased licensing by a customer in the Eastern Hemisphere.

CMG's annuity/maintenance license revenue decreased by 1% during the year ended March 31, 2019, compared to the previous fiscal year, mainly due to lower licensing in Canada and South America, partially offset by increases in the Eastern Hemisphere and the United States.

Perpetual license revenue increased by 41% for the three months ended March 31, 2019, compared to the same period of the previous fiscal year, due to increases in the United States and the Eastern Hemisphere. On an annual basis, more perpetual sales were realized in most geographic areas, with the exception of South America, which resulted in a 20% increase in perpetual license revenue, compared to the previous fiscal year. Software licensing under perpetual sales may fluctuate significantly between periods due to the uncertainty associated with the timing and the location where sales are generated. For this reason, even though we expect to achieve a certain level of aggregate perpetual sales on an annual basis, we expect to observe fluctuations in the quarterly perpetual revenue amounts throughout the fiscal year.

We can observe from the tables below that the exchange rate between the US and Canadian dollars during the three months and year ended March 31, 2019, compared to the same periods of the previous fiscal year, had a positive impact on reported software license revenue, with the exception of annuity/maintenance license revenue for the year ended March 31, 2019.

The following table summarizes the US dollar-denominated revenue and the weighted average exchange rate at which it was converted to Canadian dollars:

Three months ended March 31, ($ thousands)		2019	2018	$ change	% change
US dollar annuity/maintenance license revenue	US$	10,050	9,752	298	3%
Weighted average conversion rate		1.332	1.280		
Canadian dollar equivalent	CDN$	13,386	12,481	905	7%
US dollar perpetual license revenue	US$	663	1,610	(947)	-59%
Weighted average conversion rate		1.364	1.275		
Canadian dollar equivalent	CDN$	904	2,053	(1,149)	-56%

Year ended March 31, ($ thousands)		2019	2018	$ change	% change
US dollar annuity/maintenance license revenue	US$	39,329	39,140	189	0%
Weighted average conversion rate		1.294	1.313		
Canadian dollar equivalent	CDN$	50,882	51,372	(490)	-1%
US dollar perpetual license revenue	US$	2,276	3,217	(941)	-29%
Weighted average conversion rate		1.324	1.294		
Canadian dollar equivalent	CDN$	3,014	4,164	(1,150)	-28%

The following table quantifies the foreign exchange impact on our software license revenue:

Three months ended March 31, ($ thousands)	2018	Incremental License Growth	Foreign Exchange Impact	2019
Annuity/maintenance license revenue	15,664	547	523	16,734
Perpetual license revenue	2,053	779	59	2,891
Total software license revenue	17,717	1,326	582	19,625

Year ended March 31 ($ thousands)	2018	Incremental License Growth	Foreign Exchange Impact	2019
Annuity/maintenance license revenue	64,679	(142)	(737)	63,800
Perpetual license revenue	4,164	768	68	5,000
Total software license revenue	68,843	626	(669)	68,800

Software Revenue by Geographic Segment

Three months ended March 31, ($ thousands)	2019	2018	$ change	% change
Annuity/maintenance license revenue				
Canada	**3,725**	3,748	(23)	-1%
United States	**4,664**	4,565	99	2%
South America	**1,924**	2,142	(218)	-10%
Eastern Hemisphere(1)	**6,421**	5,209	1,212	23%
	16,734	15,664	1,070	7%
Perpetual license revenue				
Canada	**-**	-	-	0%
United States	**582**	107	475	444%
South America	**-**	-	-	0%
Eastern Hemisphere	**2,309**	1,946	363	19%
	2,891	2,053	838	41%
Total software license revenue				
Canada	**3,725**	3,748	(23)	-1%
United States	**5,246**	4,672	574	12%
South America	**1,924**	2,142	(218)	-10%
Eastern Hemisphere	**8,730**	7,155	1,575	22%
	19,625	17,717	1,908	11%

Year ended March 31, ($ thousands)	2019	2018	$ change	% change
Annuity/maintenance license revenue				
Canada	**15,151**	16,754	(1,603)	-10%
United States	**18,620**	18,519	101	1%
South America	**8,734**	9,009	(275)	-3%
Eastern Hemisphere(1)	**21,295**	20,397	898	4%
	63,800	64,679	(879)	-1%
Perpetual license revenue				
Canada	**156**	-	156	100%
United States	**1,096**	262	834	318%
South America	**6**	394	(388)	-98%
Eastern Hemisphere	**3,742**	3,508	234	7%
	5,000	4,164	836	20%
Total software license revenue				
Canada	**15,307**	16,754	(1,447)	-9%
United States	**19,716**	18,781	935	5%
South America	**8,740**	9,403	(663)	-7%
Eastern Hemisphere	**25,037**	23,905	1,132	5%
	68,800	68,843	(43)	0%

(1) Includes Europe, Africa, Asia and Australia.

During the three months ended March 31, 2019, on a geographic basis, total software license revenue increased in the United States and the Eastern Hemisphere, partially offset by decreases in South America.

During the year ended March 31, 2019, on a geographic basis, total software license sales remained flat, as increases in the United States and the Eastern Hemisphere were offset by decreases in Canada and South America.

The Canadian market (representing 22% of total annual software license revenue) remained relatively flat for the three months ended March 31, 2019, compared to the same period of the previous fiscal year, representing the first consistent quarter-over-quarter comparison since fiscal 2015. Canada experienced a decrease of 10% in annuity/maintenance license revenue during the year ended March 31, 2019, compared to the previous fiscal year, due to reduction in licensing by some customers. There were no significant perpetual sales realized in Canada during the three months and year ended March 31, 2019 or in the comparative periods.

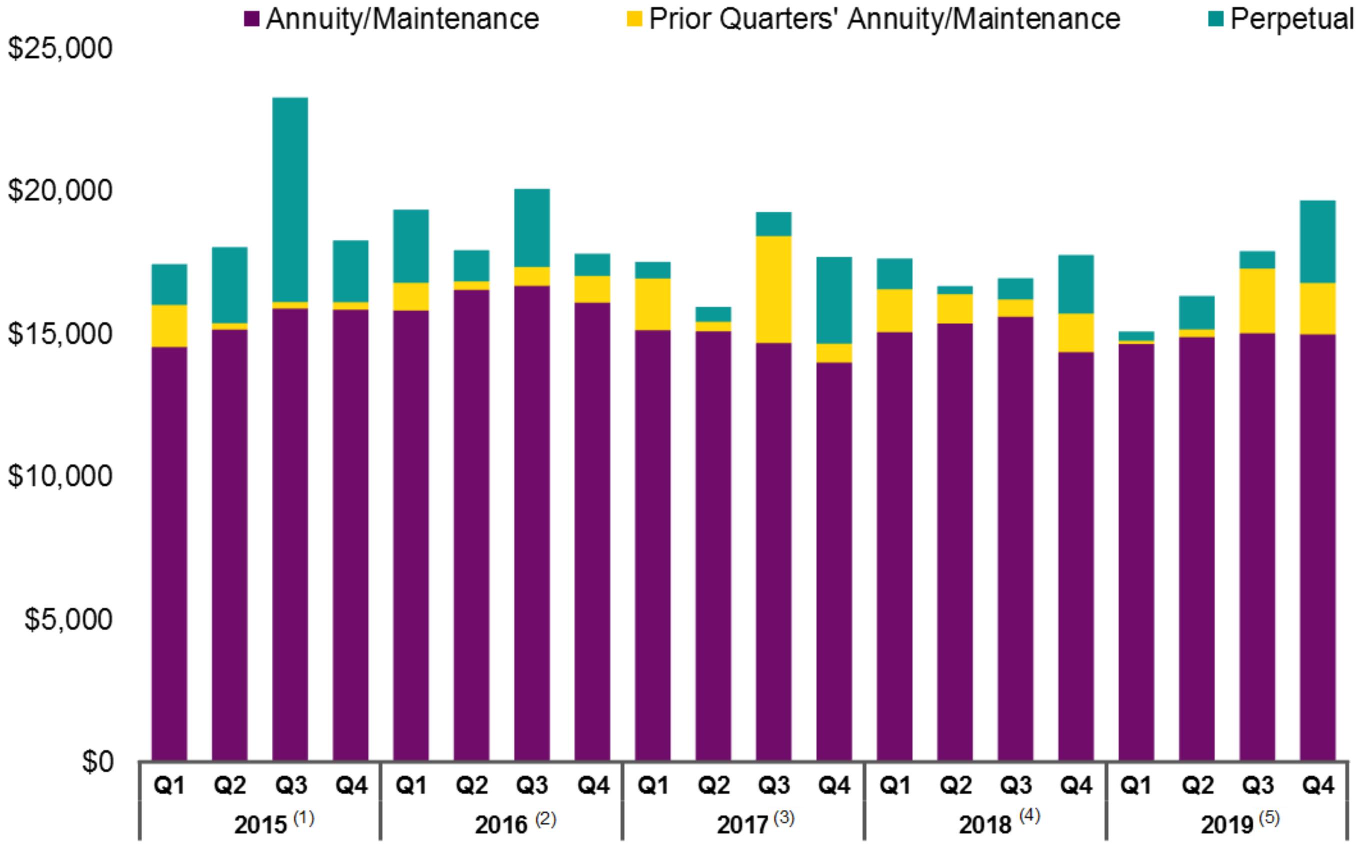
The United States market (representing 29% of total annual software license revenue) experienced increases of 2% and 1% in annuity/maintenance license revenue during the three months and year ended March 31, 2019, respectively, compared to the same periods of the previous fiscal year, due to increased licensing by new and existing customers involved in unconventional shale and tight hydrocarbon recovery processes. The increase in annuity/maintenance license revenue for the year was partially offset by the negative impact of IFRS 15 adoption. There were more perpetual sales realized in the three months and year ended March 31, 2019, compared to the same periods of the previous fiscal year, primarily contributing to the growth in total U.S. software license revenue.

South America (representing 13% of total annual software license revenue) experienced decreases of 10% and 3% in annuity/maintenance license revenue during the three months and year ended March 31, 2019, compared to the same periods of the previous fiscal year, due to maintenance reactivation on perpetual licenses included in the comparative periods. Our revenue in South America can be significantly impacted by the variability of the amounts recorded from a long-standing customer and its affiliates for whom revenue is recognized only when cash is received (see the discussion about revenue earned in the current quarter that pertains to usage of products in prior quarters below). We recognized similar amounts of revenue from this customer in the years ended March 31, 2019 and 2018. There were no significant perpetual license sales in South America during fiscal 2019.

The Eastern Hemisphere (representing 36% of total annual software license revenue) experienced increases of 23% and 4% in annuity/maintenance license revenue during the three months and year ended March 31, 2019, respectively, compared to the same periods of the previous fiscal year, mainly due to maintenance reactivation and increased licensing by a customer in the Middle East. Eastern Hemisphere perpetual revenue for the three months and year ended March 31, 2019 was higher by 19% and 7%, respectively, compared the same periods of the previous fiscal year.

As footnoted in the Quarterly Performance table, in the normal course of business CMG may complete the negotiation of certain annuity/maintenance contracts and/or fulfill revenue recognition requirements within a current quarter that includes usage of CMG's products in prior quarters. This situation particularly affects contracts negotiated with countries that face increased economic and political risks leading to the revenue recognition criteria being satisfied only at the time of the receipt of cash. The dollar magnitude of such contracts may be significant to the quarterly comparatives of our annuity/maintenance license revenue stream and, to provide a normalized comparison, we specifically identify the revenue component where revenue recognition is satisfied in the current period for products provided in previous quarters.

Quarterly Software License Revenue ($thousands)



(1) Q1, Q2, Q3 and Q4 of fiscal 2015 include $1.5 million, $0.2 million, $0.2 million, and $0.3 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.
(2) Q1, Q2, Q3 and Q4 of fiscal 2016 include $1.0 million, $0.3 million, $0.7 million, and $0.9 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.
(3) Q1, Q2, Q3 and Q4 of fiscal 2017 include $1.8 million, $0.3 million, $3.7 million, and $0.7 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.
(4) Q1, Q2, Q3 and Q4 of fiscal 2018 include $1.5 million, $1.0 million, $0.6 million, and $1.3 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.
(5) Q1, Q2, Q3 and Q4 of fiscal 2019 include $0.1 million, $0.3 million, $2.3 million, and $1.8 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.

Deferred Revenue

($ thousands)	**Fiscal 2019**	Fiscal 2018	$ change	% change
Deferred revenue at:				
Q1 (June 30)	**29,350** (4)	31,551 (1)	(2,201)	-7%
Q2 (September 30)	**23,222** (5)	23,686 (2)	(464)	-2%
Q3 (December 31)	**13,782**	17,785	(4,003)	-23%
Q4 (March 31)	**35,015** (6)	34,362 (3)	653	2%

(1) Includes current deferred revenue of $30.3 million and long-term deferred revenue of $1.3 million.
(2) Includes current deferred revenue of $23.0 million and long-term deferred revenue of $0.6 million.
(3) Includes current deferred revenue of $33.4 million and long-term deferred revenue of $1.0 million.
(4) Includes current deferred revenue of $28.8 million and long-term deferred revenue of $0.6 million.
(5) Includes current deferred revenue of $22.9 million and long-term deferred revenue of $0.3 million.
(6) Includes current deferred revenue of $34.7 million and long-term deferred revenue of $0.3 million.

CMG's deferred revenue consists primarily of amounts for pre-sold licenses. Our annuity/maintenance revenue is deferred and recognized on a straight-line basis or according to usage over the life of the related license period, which is generally one year or less. Amounts are deferred for licenses that have been provided and revenue recognition reflects the passage of time.

The above table illustrates the normal trend in the deferred revenue balance from the beginning of the calendar year (which corresponds with Q4 of our fiscal year), when most renewals occur, to the end of the calendar year (which corresponds with Q3 of our fiscal year). Our fourth quarter corresponds with the beginning of the fiscal year for most oil and gas companies, representing a time when they enter a new budget year and sign/renew their contracts.

Deferred revenue as at Q4 of fiscal 2019 increased by 2% compared to Q4 of fiscal 2018, primarily due to increased licensing in the Eastern Hemisphere.

Professional Services Revenue

Professional services revenue for the three months ended March 31, 2019 was $1.5 million, which was slightly down compared to the same period of the previous fiscal year, due to lower customer project activity levels during the quarter. On an annual basis, professional services revenue was $6.1 million, which represents an increase of 4% compared to the previous fiscal year, due to overall higher customer activity levels.

Professional services revenue consists of specialized consulting, training, and contract research activities. CMG performs consulting and contract research activities on an ongoing basis, but such activities are not considered to be a core part of our business and are primarily undertaken to increase our knowledge base and hence expand the technological abilities of our simulators in a funded manner, combined with servicing our customers' needs. In addition, these activities are undertaken to market the capabilities of our suite of software products with the ultimate objective to increase software license sales. Our experience is that consulting activities are variable in nature as both the timing and dollar magnitude of work are dependent on activities and budgets within customer companies.

Expenses

Three months ended March 31, ($ thousands)	**2019**	2018	$ change	% change
Sales, marketing and professional services	**5,216**	5,068	148	3%
Research and development	**5,280**	5,171	109	2%
General and administrative	**1,892**	1,626	266	16%
Total operating expenses	**12,388**	11,865	523	4%
Direct employee costs[1]	**9,237**	8,877	360	4%
Other corporate costs	**3,151**	2,988	163	5%
	12,388	11,865	523	4%

Year ended March 31, ($ thousands)	**2019**	2018	$ change	% change
Sales, marketing and professional services	**18,690**	19,535	(845)	-4%
Research and development	**19,893**	20,371	(478)	-2%
General and administrative	**6,720**	6,744	(24)	0%
Total operating expenses	**45,303**	46,650	(1,347)	-3%
Direct employee costs[1]	**33,481**	33,959	(478)	-1%
Other corporate costs	**11,822**	12,691	(869)	-7%
	45,303	46,650	(1,347)	-3%

(1) Includes salaries, bonuses, stock-based compensation, benefits, commissions, and professional development. See "Non-IFRS Financial Measures".

CMG's total operating expenses increased by 4% for the three months ended March 31, 2019, compared to the same period of the previous fiscal year, due to increases in both direct employee costs and other corporate costs. CMG's total operating expenses decreased by 3% for the year ended March 31, 2019, compared to the previous fiscal year, due to decreases in both direct employee costs and other corporate costs.

Direct Employee Costs

As a technology company, CMG's largest area of expenditure is its people. Approximately 74% of the total operating expenses for the year ended March 31, 2019 related to direct employee costs. Staffing levels during most of the current fiscal year were lower compared to the previous fiscal year, but increased towards year end, and at March 31, 2019, CMG's full-time equivalent staff complement was 192 employees and consultants, up from 189 full-time equivalent employees and consultants at March 31, 2018. Direct employee costs increased by 4% during the three months ended March 31, 2019, compared to the same period of the previous fiscal year, due to higher commissions and a bonus adjustment as a result of higher billings and revenue achievement during the quarter. Direct employee costs decreased by 1% during the year ended March 31, 2019, compared to the previous fiscal year, due to lower stock-based compensation and a lower headcount during the year.

Other Corporate Costs

Other corporate costs increased by 5% during the three months ended March 31, 2019, compared to the same period of the previous fiscal year, mainly as a result of increased travel for customer visits and contract negotiation and a strengthening of the US dollar compared to the Canadian dollar. Other corporate costs decreased by 7% during the year ended March 31, 2019, compared to the same period of the previous fiscal year, mainly because the comparative year included $0.6 million of non-recurring charges related to the head office move, which were incurred in the first quarter of the year.

Research and Development

Three months ended March 31, ($ thousands)	**2019**	2018	$ change	% change
Research and development (gross)	**5,513**	5,416	97	2%
SR&ED credits	**(233)**	(245)	12	-5%
Research and development	**5,280**	5,171	109	2%
Research and development as a % of total revenue	**25%**	27%		

Year ended March 31, ($ thousands)	**2019**	2018	$ change	% change
Research and development (gross)	**21,206**	21,772	(566)	-3%
SR&ED credits	**(1,313)**	(1,401)	88	-6%
Research and development	**19,893**	20,371	(478)	-2%
Research and development as a % of total revenue	**27%**	27%		

CMG maintains a belief that its strategy of growing long-term value for shareholders can only be achieved through continued investment in research and development. CMG works closely with its customers to provide solutions to complex problems related to proven and new advanced recovery processes.

The above research and development costs include $2.0 million and $7.6 million of costs for CoFlow for the three months and year ended March 31, 2019, respectively, (2018 – $2.0 million and $7.8 million, respectively). See discussion under "Commitments, Off Balance Sheet Items and Transactions with Related Parties".

Research and development costs (gross) increased slightly by 2% during the three months ended March 31, 2019, compared to the same period of the previous fiscal year. Research and development costs (gross) decreased by 3% during the year ended March 31, 2019, compared to the previous fiscal year, mainly due to non-recurring charges related to the move included in the comparative period.

SR&ED credits decreased by 5% and 6% for the three months and year ended March 31, 2019, respectively, compared to the same periods of the previous fiscal year, mainly due to a decrease in hours spent on SR&ED-eligible projects.

Research and development costs as a percentage of total revenue decreased to 25% compared to 27% for the same period of the previous fiscal year, due to higher revenue in the current quarter. Research and development costs as a percentage of total revenue was 27% for the year ended March 31, 2019, which is consistent with the previous fiscal year.

Depreciation

Three months ended March 31, ($ thousands)	**2019**	2018	$ change	% change
Depreciation of property and equipment, allocated to:				
Sales, marketing and professional services	**117**	127	(10)	-8%
Research and development	**320**	365	(45)	-12%
General and administrative	**63**	69	(6)	-9%
Total depreciation	**500**	561	(61)	-11%

Year ended March 31, ($ thousands)	**2019**	2018	$ change	% change
Depreciation of property and equipment, allocated to:				
Sales, marketing and professional services	**447**	478	(31)	-6%
Research and development	**1,272**	1,257	15	1%
General and administrative	**234**	262	(28)	-11%
Total depreciation	**1,953**	1,997	(44)	-2%

Depreciation for the three months and year ended March 31, 2019 remained consistent compared to the same periods of the previous fiscal year.

Finance Income and Costs

Three months ended March 31, ($ thousands)	**2019**	2018	$ change	% change
Interest income	**293**	257	36	14%
Net foreign exchange gain	**-**	761	(761)	-100%
Total finance income	**293**	1,018	(725)	-71%
Net foreign exchange loss	**(643)**	-	(643)	-100%
Total finance costs	**(643)**	-	(643)	-100%

Year ended March 31, ($ thousands)	2019	2018	$ change	% change
Interest income	**1,214**	905	309	34%
Net foreign exchange gain	**122**	-	122	100%
Total finance income	**1,336**	905	431	48%
Net foreign exchange loss	**-**	(54)	54	-100%
Total finance costs	**-**	(54)	54	-100%

Interest income for the three months and year ended March 31, 2019 was higher than the same periods of the previous fiscal year, due to higher interest rates.

CMG is impacted by foreign exchange fluctuations, as approximately 74% of CMG's revenue for the year ended March 31, 2019 (2018 – 77%) is denominated in US dollars, whereas only approximately 26% (2018 – 25%) of CMG's total costs are denominated in US dollars.

The following chart shows the exchange rates used to translate CMG's US dollar-denominated working capital at March 31, 2019, 2018 and 2017 and the average exchange rates used to translate income statement items during the years ended March 31, 2019, 2018 and 2017:

CDN$ to US$	At March 31	Yearly average
2017	0.7506	0.7622
2018	0.7756	0.7781
2019	**0.7483**	**0.7633**

CMG recorded a net foreign exchange loss of $0.6 million for the three months ended March 31, 2019 due to a weakening of the US dollar, which negatively affected the valuation of the US-dollar denominated portion of the Company's working capital. For the year ended March 31, 2019, a strengthening of the US dollar positively affected the valuation of the US-dollar denominated portion of the Company's working capital and resulted in a net foreign exchange gain of $0.1 million.

Income and Other Taxes

CMG's effective tax rate for the year ended March 31, 2019 is 28.3% (2018 – 28.0%), whereas the prevailing Canadian statutory tax rate is now 27.0%. This difference is primarily due to the non-tax deductibility of stock-based compensation expense.

The benefit recorded in CMG's books on the scientific research and experimental development ("SR&ED") investment tax credit program impacts deferred income taxes. The investment tax credit earned in the current fiscal year is utilized by CMG to reduce income taxes otherwise payable for the current fiscal year and the federal portion of this benefit bears an inherent tax liability as the amount of the credit is included in the subsequent year's taxable income for both federal and provincial purposes. The inherent tax liability on these investment tax credits is reflected in the year the credit is earned as a non-current deferred tax liability and then, in the following fiscal year, is transferred to income taxes payable.

Operating Profit and Net Income

Three months ended March 31, ($ thousands, except per share amounts)	**2019**	2018	$ change	% change
Total revenue	**21,138**	19,394	1,744	9%
Operating expenses	**(12,388)**	(11,865)	(523)	4%
Operating profit	**8,750**	7,529	1,221	16%
Operating profit as a % of total revenue	**41%**	39%		
Net income for the period	**5,974**	6,146	(172)	-3%
Net income for the period as a % of total revenue	**28%**	32%		
Basic earnings per share ($/share)	**0.07**	0.08	(0.01)	-13%

Year ended March 31, ($ thousands, except per share amounts)	**2019**	2018	$ change	% change
Total revenue	**74,857**	74,680	177	0%
Operating expenses	**(45,303)**	(46,650)	1,347	-3%
Operating profit	**29,554**	28,030	1,524	5%
Operating profit as a % of total revenue	**39%**	38%		
Net income for the period	**22,135**	20,806	1,329	6%
Net income for the period as a % of total revenue	**30%**	28%		
Basic earnings per share ($/share)	**0.28**	0.26	0.02	8%

Operating profit as a percentage of total revenue increased to 41% for the three months ended March 31, 2019, compared to 39% in the same period of the previous fiscal year, primarily due to higher revenue. Operating profit as a percentage of total revenue increased to 39% for the year ended March 31, 2019, compared to 38% in the previous fiscal year, primarily due to lower operating expenses.

Net income as a percentage of revenue decreased to 28% for the three months ended March 31, 2019, compared to 32% in the same period of the previous fiscal year. This was due to the net foreign exchange loss in the current period and higher operating expenses, partially offset by higher revenue.

Net income as a percentage of revenue increased to 30% for the year ended March 31, 2018, compared to 28% in the previous fiscal year. The decrease was primarily due to lower operating expenses in the current year.

EBITDA[1]

Three months ended March 31, ($ thousands)	2019	2018	$ change	% change
Net income for the period	**5,974**	6,146	(172)	-3%
Add (deduct):				
Depreciation	**500**	561	(61)	-11%
Finance (income) expense	**350**	(1,018)	1,368	-134%
Income and other taxes	**2,426**	2,401	25	1%
EBITDA	**9,250**	8,090	1,160	14%
EBITDA as a % of total revenue	**44%**	42%		

Year ended March 31, ($ thousands)	2019	2018	$ change	% change
Net income for the period	**22,135**	20,806	1,329	6%
Add (deduct):				
Depreciation	**1,953**	1,997	(44)	-2%
Finance (income) expense	**(1,336)**	(851)	(485)	57%
Income and other taxes	**8,755**	8,075	680	8%
EBITDA	**31,507**	30,027	1,480	5%
EBITDA as a % of total revenue	**42%**	40%		

(1) EBITDA is defined as net income before adjusting for depreciation expense, finance income, finance costs, and income and other taxes. See “Non-IFRS Financial Measures”.

EBITDA for the three months ended March 31, 2019 increased to 44% compared to 42% in the same period of the previous fiscal year, mainly due to higher revenue. EBITDA for the year ended March 31, 2019 increased to 42%, compared to 40% in the previous fiscal year, mainly due to lower operating expenses.

Liquidity and Capital Resources

Three months ended March 31, ($ thousands)	2019	2018	$ change	% change
Cash, beginning of period	**45,603**	52,823	(7,220)	-14%
Cash flow (used in) from:				
Operating activities	**16,786**	19,298	(2,512)	-13%
Financing activities	**(8,023)**	(8,021)	(2)	0%
Investing activities	**(76)**	(381)	305	80%
Cash, end of period	**54,290**	63,719	(9,429)	-15%

Year ended March 31, ($ thousands)	2019	2018	$ change	% change
Cash, beginning of period	**63,719**	63,239	480	1%
Cash flow (used in) from:				
Operating activities	**23,386**	30,530	(7,144)	-23%
Financing activities	**(32,073)**	(25,377)	(6,696)	-26%
Investing activities	**(742)**	(4,673)	3,931	84%
Cash, end of period	**54,290**	63,719	(9,429)	-15%

Operating Activities

Cash flow from operating activities decreased by $2.5 million in the three months ended March 31, 2019, compared to the same period of the previous fiscal year. This was mainly due to the negative impact of the timing difference of when sales are made and when the resulting receivables are collected and higher income tax installments, partially offset by the change in the deferred revenue balance.

Cash flow from operating activities decreased by $7.1 million in the year ended March 31, 2019, compared to the previous fiscal year. This was mainly due to the negative impact of the timing difference of when sales are made and when the resulting receivables are collected, partially offset by the change in the deferred revenue balance and higher net income.

Financing Activities

Cash used in financing activities remained flat during the three months ended March 31, 2019, compared to the same period of the previous fiscal year. Cash used in financing activities increased by $6.7 million during the year ended March 31, 2019, compared to the same period of the previous fiscal year, as there were fewer option exercises in the current fiscal year.

During the year ended March 31, 2019, CMG employees and directors exercised options to purchase 2,000 Common Shares, which resulted in cash proceeds of $17,000 (2018 – 733,000 options exercised to purchase Common Shares for cash proceeds of $6.7 million).

In the year ended March 31, 2019, CMG paid $32.1 million in dividends, representing the following quarterly dividends:

($ per share)	Q1	Q2	Q3	Q4	**2019 Total**
Total dividends declared and paid	0.10	0.10	0.10	0.10	**0.40**

In the year ended March 31, 2018, CMG paid $32.0 million in dividends, representing the following quarterly dividends:

($ per share)	Q1	Q2	Q3	Q4	**2018 Total**
Total dividends declared and paid	0.10	0.10	0.10	0.10	**0.40**

On May 22, 2019, CMG announced the payment of a quarterly dividend of $0.10 per share on CMG's Common Shares. The dividend will be paid on June 14, 2019 to shareholders of record at the close of business on June 6, 2019.

Based on our expectation of profitability and cash-generating ability, we are cautiously optimistic that the Company is well positioned to continue paying quarterly dividends.

Investing Activities

CMG's current needs for capital asset investment relate to office infrastructure costs and computer equipment, all of which are being funded internally. During the year ended March 31, 2019, CMG's capital expenditures were $0.7 million, primarily for computer equipment. CMG's capital budget for fiscal 2020 is $1.5 million.

Liquidity and Capital Resources

At March 31, 2019, CMG has $54.3 million in cash, no debt, and has access to approximately $1.1 million under a line of credit with its principal banker. The Company's primary non-operating use of cash is for dividend payments.

During the year ended March 31, 2019, 32.4 million shares of CMG's public float were traded on the TSX. As at March 31, 2019, CMG's market capitalization based upon its March 31, 2019 closing price of $6.15 was $493.4 million.

Commitments, Off Balance Sheet Items and Transactions with Related Parties

CMG, in partnership with Shell Global Solutions International B.V. (“Shell”), is the developer of CoFlow, the newest generation of reservoir and production system simulation software. Under a five-year agreement entered into by Shell and CMG on January 1, 2017, CMG is responsible for the research and development costs of CoFlow, while Shell provides a fixed fee contribution for the continuing development of the software. The Company’s revenue and costs associated with CoFlow are estimated to be $4.0 million and $8.2 million, respectively, in fiscal 2020. CMG plans to continue funding project costs from internally generated cash flows.

CMG has very little in the way of other ongoing material contractual obligations other than pre-sold licenses, which are reflected as deferred revenue on the statement of financial position, and contractual obligations for office leases, which are estimated for our fiscal years as follows: 2020 – $4.6 million; 2021 – $4.5 million; 2022 – $4.5 million; 2023 – $4.8 million; 2024 – $4.9 million; thereafter – $65.8 million.

Critical Accounting Estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. By their nature, these estimates are subject to estimation uncertainty. The effect on the financial statements of changes in such estimates in future periods could be material and would be accounted for in the period in which the estimates are revised and in any future periods affected.

Revenue recognition
Revenue consists primarily of software license fees with some fees for professional services. We recognize revenue in accordance with the current rules of IFRS. We follow specific and detailed guidelines in measuring revenue; however, certain judgments affect the application of our revenue recognition policies.

We recognize revenue upon transfer of control of products or services to customers at an amount that reflects the consideration the Company expects to receive in exchange for the products or services. In cases where collectability is not deemed probable, revenue is recognized upon receipt of cash, providing all other criteria have been met.

Contracts with customers often include promises to deliver multiple products, such as licenses and maintenance. Determining whether such bundled products and services are considered i) distinct performance obligations that should be separately recognized or ii) non-distinct and therefore should be combined with another good or service and recognized as a combined unit of accounting may require significant judgment. The determination of the standalone selling prices for distinct performance obligations can also require judgment and estimates.

The Company also applies estimates when calculating professional services revenue from certain consulting contracts as it relates to remaining labour hours required to complete the contract. Estimates are continually and routinely revised as new information becomes available. In assessing revenue recognition, judgment is also used in assessing the ability to collect the corresponding account receivable.

Functional currency
The determination of the functional currency is a matter of determining the primary economic environment in which an entity operates. IAS 21 *The Effects of Changes in Foreign Exchange Rates* sets out a number of factors to apply in making the determination of the functional currency. However, applying the factors in IAS 21 does not always result in a clear indication of functional currency. Where IAS 21 factors indicate differing functional currencies within a subsidiary, the Company uses judgment in the ultimate determination of that subsidiary’s functional currency, including an assessment of the nature of the relationship between the Company and the subsidiary. Judgment was applied in the determination of the functional currency of certain of the Company’s operating entities.

Research and development
Assumptions are made in respect to the eligibility of certain research and development projects in the calculation of SR&ED investment tax credits which are netted against the research and development costs in the statement of operations. SR&ED claims are subject to audits by relevant taxation authorities and the actual amount may change depending on the outcome of such audits.

Stock-based compensation
Assumptions and estimates are used in determining the inputs used in the Black-Scholes option pricing model, including assumptions regarding volatility, dividend yield, risk-free interest rates, forfeiture estimates and expected option lives.

Property and equipment
Estimates are used in determining useful economic lives of property and equipment for the purposes of calculating depreciation.

New Accounting Standards Adopted

IFRS 9 *Financial Instruments*

Effective April 1, 2018, the Company adopted IFRS 9 *Financial Instruments*, which sets out requirements for recognizing and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard replaces *IAS 39 Financial Instruments: Recognition and Measurement*.

IFRS 9 largely retains the existing requirements in IAS 39 for the classification and measurement of financial liabilities. However, it eliminates the previous IAS 39 categories for financial assets of held to maturity, loans and receivables and available for sale. Under IFRS 9, a financial asset is classified as measured at:

- Amortized cost;
- Fair Value through Other Comprehensive Income (“FVOCI”) – debt investment;
- FVOCI – equity investment;
- Fair Value through Profit or Loss.

The classification of financial assets under IFRS 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. Impairment of financial assets under IFRS 9 is based on an expected credit loss (“ECL”) model, rather than the incurred loss model under IAS 39. ECLs are a probability-weighted estimate of credit losses. The new impairment model applies to financial assets measured at amortized cost, contract assets and debt investments at FVOCI, but not to investment in equity instruments. Under IFRS 9, credit losses are recognized earlier than under IAS 39. There is no impact to CMG’s consolidated financial statements, as the Company’s credit losses have historically been low because most of its customers are large oil and gas companies with strong credit.

The following table shows the original measurement categories under IAS 39 and the new measurement categories under IFRS 9 for each class of the Company’s financial assets as at April 1, 2018:

Financial assets	IAS 39		IFRS 9	
	Classification	**Measurement**	**Classification**	**Measurement**
Cash	Loans and receivables	Amortized cost	Amortized cost	Amortized cost
Trade and other receivables	Loans and receivables	Amortized cost	Amortized cost	Amortized cost

The adoption of IFRS 9 did not have a material impact on the Company’s consolidated financial statements.

IFRS 15 Revenue from Contracts with Customers

On April 1, 2018, the Company adopted IFRS 15 *Revenue from Contracts with Customers*. IFRS 15 superseded previous accounting standards for revenue, including IAS 18 *Revenue* and related interpretations. IFRS 15 introduced a single model for recognizing revenue from contracts with customers. The model specifies that revenue is recognized when or as the Company transfers control of promised goods or services to a customer at the amount to which the Company expects to be entitled. Depending on certain criteria, revenue is recognized over time or at a point in time.

The details of the new significant accounting policies and the nature of the changes to previous accounting policies related to the Company's various revenue streams are set out below:

Type of product /service	Nature, timing of satisfaction of performance obligations, significant contract terms	Change in accounting policy and impact
Annuity license revenue	Annuity agreements include a term-based software license bundled with maintenance. IFRS 15 requires that the portion of the annuity agreement fee that relates to the software license should be recognized as revenue at the start of the license period, while the remainder should be recognized as maintenance revenue on a straight-line basis over the license period. However, since it is management's practice to honour customers' mid-contract requests to reduce product quantities or license term duration without a penalty and refund or credit a pro-rata share of the agreement fee, annuity license revenue cannot be recognized upfront and will instead be recognized ratably over the term of the contract. The exception to this practice is certain multi-year agreements with very specific termination clauses that significantly limit the customer's ability to reduce the license term, in which case the software license portion that relates to the non-cancellable period will be recognized upfront, at the start of that particular period of the license contract. The maintenance component of an annuity contract includes customer support and unspecified software upgrades. Maintenance license revenue is recognized on a straight-line basis over the term of the contract, as the Company satisfies its maintenance performance obligation over time. Since the Company does not sell term-based annuity licenses individually without maintenance and there is no comparable product in the market, there is no observable standalone selling price for term-based annuity licenses. The Company allocates the value of bundled annuity agreements between software licenses and maintenance using the residual approach, by subtracting the standalone selling price of a maintenance license from the total annuity agreement fee. Based on this calculation, the standalone selling price of a maintenance license represents 45% of the total annuity agreement fee, leaving 55% to be allocated to the stand-alone annuity license.	Under IAS 18, the revenue attributable to these software licenses was recognized on a straight-line basis over the license period. As such, revenue recognition on the majority of our annuity agreements will not change. The only exception are certain multi-year agreements with very specific termination clauses that significantly limit the customer's ability to reduce the license term. Under IAS 18, revenue was recognized on a straight-line basis over the license period. Under IFRS 15, the transaction price allocated to the software license is recognized upfront, at the start of the license period.
Maintenance license revenue	Maintenance agreements include customer support and unspecified software upgrades, typically for a term of one year or less. Maintenance licenses are purchased by customers who already own a perpetual license and want the additional benefit of customer support and software upgrades. Maintenance license revenue is recognized on a straight-line basis over the term of the contract, as the Company satisfies its maintenance performance obligation over time.	IFRS 15 did not have a significant impact on accounting for maintenance revenue.
Perpetual license revenue	A perpetual license grants the customer the right to use the then-current version of the software in perpetuity. Perpetual license revenue is recognized at a point in time, upon delivery of the licensed product.	IFRS 15 did not have a significant impact on accounting for perpetual licenses.
Professional services revenue	Revenue from professional services consists of consulting, training and contract research activities. Professional services revenue is recognized over time, based on hours incurred.	IFRS 15 did not have a significant impact on accounting for consulting services.

The Company has adopted IFRS 15 using the cumulative effect method, by recognizing the cumulative effect of initially applying IFRS 15 as an adjustment to the opening balance of equity at April 1, 2018. The Company recorded an increase to retained earnings of $0.7 million ($0.5 million net of tax) on April 1, 2018, due to the impact of certain term-based software licenses, as explained in the table above. Under the cumulative effect method, comparative information is not restated and continues to be reported under IAS 18 *Revenue.*

The following table summarizes the impact of adopting IFRS 15 on the Company's consolidated statement of operations and comprehensive income for the year ended March 31, 2019:

(thousands of $)	As reported	Adjustments	Balance without adoption of IFRS 15
Revenue	74,857	685	75,542
Income and other taxes	(8,755)	(185)	(8,940)
Other	(43,967)	-	(43,967)
Net and total comprehensive income	**22,135**	**500**	**22,635**

The adoption of IFRS 15 had no impact on the Company's consolidated statement of financial position at March 31, 2019. This is because the software license revenue that under IFRS 15 was recognized upfront through opening retained earnings on April 1, 2018, under IAS 18 would have been recognized into revenue by December 31, 2018.

The adoption of IFRS 15 had no impact on the Company's cash flows from operating activities.

Accounting Standards and Interpretations Issued but Not Yet Effective

IFRS 16 *Leases*

Replaces the guidance in IAS 17 *Leases* and requires the recognition of most leases on the balance sheet. IFRS 16 effectively removes the classification of leases as either finance or operating leases and treats all leases as finance leases for lessees with exemptions for short-term leases where the term is twelve months or less and for leases of low value items.

The Company will adopt the standard in its consolidated financial statements for the annual period beginning April 1, 2019 and has selected the modified retrospective transition approach. The Company has also elected to apply the optional exemptions for short-term leases and leases with a remaining term of less than twelve months at April 1, 2019. The Company estimates that the impact of the new standard on the consolidated financial statements will be as follows:

Consolidated Statement of Financial Position: IFRS 16 requires the recognition of lease liabilities and right-of-use (ROU) assets for all leases except for the optional exemptions for low-value assets and short-term leases. Upon adoption of the new standard, the Company will:

- Recognize the lease liability of approximately $43.1 million;
- Recognize the ROU assets of approximately of $38.1 million, net of reversal of deferred rent liability of $1.8 million that is not required under IFRS 16;
- Recognize the difference between the lease liability and the ROU assets of approximately $3.2 million in opening retained earnings at April 1, 2019.

Consolidated Statement of Operations and Comprehensive Income: Adoption of IFRS 16 will result in a net decrease to operating expenses due to lower rent expense, partially offset by higher depreciation expense on the recognition of ROU assets, and an increase to finance costs from the unwinding of the discounted value of the lease liability. Overall, this standard will have a negative impact of approximately $0.6 million on the Company's profit before income and other taxes for the year ending March 31, 2020.

Consolidated Statement of Cash Flows: Due to the change in the presentation of former operating lease expenses, cash provided by operating activities will increase due to lower operating expenses, partially offset by increased finance costs, which represents an operating activity for the Company. Cash used in financing activities will increase due to the addition of principal payments for former operating leases. The net impact to the Company's cash flows will be unchanged.

Outstanding Share Data

The following table represents the number of Common Shares, stock options and restricted share units outstanding:

As at May 22, 2019 (thousands)	
Common Shares	80,227
Stock options	5,103
Restricted share units(1)	236
Performance share units(1)(2)	20

(1) Upon vesting, restricted share units and performance share units can be exchanged for Common Shares of the Company or surrendered for cash.
(2) The first grant of performance share units was issued subsequent to March 31, 2019.

The maximum number of Common Shares that may be reserved for issuance under the Company's security-based compensation plans is limited to 10% of the issued and outstanding Common Shares. Based on this calculation, at May 22, 2019, CMG could reserve up to 8,022,000 Common Shares for issuance under its security-based compensation plans.

Business Risks

The Company has the following business risks:

Commodity Price Risk

CMG's customers are oil and gas companies and it might, therefore, be assumed that its financial results are significantly impacted by commodity prices. Low commodity prices and resulting lower cash flow in the industry could impact how customers license CMG software; one could expect sales of perpetual licenses to decrease in favour of leasing software on a term basis.

Volatility in commodity prices could have an impact on CMG's consulting business; however, this revenue stream generates less than 10% of total revenues and CMG has no current plans to significantly expand this area of business.

Credit and Liquidity Risks

Our product demand is dependent on the customers' overall spending plans, which are driven by commodity prices and the availability of capital. This risk is mitigated by having a diversified customer base with the majority of revenue being derived from larger entities which are not as affected by the market volatility or cyclical downturns in commodity prices. In addition, our diversified geographic profile helps to mitigate the effects of economic recessions and instability experienced in any particular geographic region.

The Company mitigates the collection risk by closely monitoring its accounts receivable and assessing creditworthiness of its customers. The Company has not had any significant losses to date.

In terms of liquidity, the Company held $54.3 million of cash at March 31, 2019, which more than covers its obligations, and it has approximately $1.1 million of the credit facility available for its use. The Company's cash is held with a reputable banking institution. For the described reasons, we believe that our liquidity risk is low.

Sales Variability Risk

CMG's software license revenue consists of annuity/maintenance software licensing, which is generally for a term of one year or less, and perpetual software licensing, whereby the customer purchases the-then-current version of the software and has the right to use that version in perpetuity. Software licensing under perpetual sales is a significant part of CMG's business but is more variable in nature as the purchase decision, and its timing, fluctuate with customers' needs and budgets. CMG has found that a number of customers prefer to acquire perpetual software licenses rather than leasing the software on an annual basis. The experience over the last few years is that a number of these customers are purchasing additional licenses to allow more users to access CMG technology in their operations. CMG has found that a large percentage of its customers who have acquired perpetual software licenses are subsequently purchasing maintenance licenses to ensure they have access to current CMG technology.

The variability in sales of perpetual licenses may cause significant fluctuations in the Company's quarterly and annual financial results, and these results may not meet the expectations of analysts or investors. Accordingly, the Company's past results may not be a good indication of its future performance.

CMG's customers are both domestic and international oil and gas companies, and for the year ended March 31, 2019, no customer comprised more than 10% of the Company's total revenue (year ended March 31, 2018 – one customer comprised 10.5% of total revenue).

Foreign Exchange Risk

CMG's reported results are affected by the exchange rate between the Canadian dollar and the US dollar as approximately 74% (2018 – 77%) of product revenues in fiscal 2019 were denominated in US dollars. Approximately 26% of CMG's total costs in fiscal 2019 (2018 – 25%) were denominated in US dollars, which provides a partial economic hedge against the fluctuation in currency exchange between the US and the Canadian dollar on revenues. CMG's residual revenues and costs are primarily denominated in Canadian dollars, and its policy is to convert excess US dollar cash into Canadian dollars when received.

Geopolitical Risk

CMG sells its products and services in approximately 60 countries and maintains offices in Canada, the United States, the United Kingdom, the United Arab Emirates, Colombia and Malaysia. Some of these countries have greater economic, political and social risks than North America. Some of those risks include:

- Costs associated with the use of foreign agents and contractors;
- Difficulties in collecting accounts receivable;
- Currency restrictions and exchange rate fluctuations;
- The burdens of complying with a wide variety of foreign laws;
- Changes in laws governing existing operations and contracts;
- Changes to taxation policies dramatically increasing tax costs to the Company;
- Possible social, labor, political, and economic instability;
- Economic and legal sanctions;
- Non-compliance with applicable anti-corruption and bribery laws.

Any disruption in our ability to complete a sale cycle, including disruption of travel to customers' locations to provide training and support, and the cost of reorganizing daily activities of foreign operations, could have an adverse effect on CMG's business, financial condition and operational results. CMG mitigates the potential adverse effect on sales by invoicing for the full license term in advance for the majority of software license sales and by invoicing as frequently as the contract allows for consulting and contract research services. CMG consults with tax advisors on complex tax issues and engages professional tax firms to review its tax filings in foreign jurisdictions. CMG closely monitors the business and regulatory environments of the countries in which it conducts operations to minimize the potential impact on costs and operations.

Non-compliance with applicable anti-corruption and bribery laws could subject the Company to onerous penalties and the costs of prosecution. CMG has established business practices and internal controls to minimize the potential occurrence of any irregular payments. In addition, the Company has established well-defined anti-corruption and bribery policies and procedures that each employee and contractor is required to sign indicating their compliance.

Competition Risk

Competition is a risk for CMG as it is for almost every company in every sector. The reservoir simulation software industry currently consists of two major suppliers (including CMG) and a number of small suppliers. Some of the other suppliers offer products or oil field services outside the scope of reservoir simulation. Some potential customers may prefer to deal with such multi-service suppliers, while others prefer an independent supplier, such as CMG.

Although competition is very active, CMG believes that its proven technology and the comprehensive scope of its products, combined with its international presence and recognition as a major independent supplier, provide distinct competitive advantages.

Sustaining competitive advantage is another issue, which CMG addresses by making a significant ongoing commitment to research and development spending. CMG expended $19.9 million in product research and development in its most recently completed fiscal year (2018 – $20.4 million).

The introduction by competitors of products embodying new technology and the emergence of new industry standards and practices could render CMG's products obsolete and unmarketable and could exert price pressures on existing products, which could have negative effects on the Company’s business, operating results and financial condition.

There is a significant barrier for new entrants into the reservoir simulation software industry. The cost of entry is substantial as a significant investment in research and development is required. In addition, to become a major supplier, a significant time investment is required to build up quality relationships with potential customers.

Labour Risk

The Company’s continued success is substantially dependent on the performance of its key employees and officers. The loss of the services of these personnel as well as failure to attract additional key personnel could have a negative impact upon the Company’s business, operating results and financial condition. Due to high levels of competition for qualified personnel, there can be no assurance that the Company will be successful in retaining and attracting such personnel. The Company attempts to overcome this by offering an attractive compensation package and providing an environment that provides the intellectual and professional stimulation sought by our employee group.

Intellectual Property Risk

CMG regards its software as proprietary and attempts to protect it with copyrights, trademarks and trade secret measures, including restrictions on disclosure and technical measures. Despite these precautions, it may be possible for third parties to copy CMG’s programs or aspects of its trade secrets. CMG has no patents, and existing legal and technical precautions afford only limited practical protection. CMG could incur substantial costs in protecting and enforcing its intellectual property rights. Moreover, from time to time third parties may assert patent, trademark, copyright and other intellectual property rights to technologies that are important to CMG. In such an event, CMG may be required to incur significant costs in litigating a resolution to the asserted claim. There can be no assurance that such a resolution would not require that CMG pay damages or obtain a license of a third party’s proprietary rights in order to continue licensing its products as currently offered, or, if such a license is required, that it will be available on terms acceptable to CMG.

CMG does not know of any infringement of any third party’s patent rights, copyrights, trade secrecy rights or other intellectual property disputes in the development or support of its products.

Cyber Risk

CMG is dependent on information technology (“IT”) infrastructure to process, transmit and store electronic information, to advertise, inform and train around CMG’s products and services, to manage business operations and for the functioning and/or delivery of the Company’s products and services. CMG’s IT infrastructure is composed of hardware, software, networks, data center facilities, web servers, and all related equipment required to operate. Natural disasters, energy blackouts, operating malfunction, software virus or malware, cyber security attacks, human error, employee misconduct or other sources could result in the temporary or permanent loss of any or all parts of CMG’s IT infrastructure. Any such incident or breach could create system disruptions or slowdowns. In such an event, the information stored in CMG’s IT infrastructure could be accessed, publicly disclosed, lost, or stolen, which could subject CMG to liability and cause the Company to incur significant costs to eliminate or alleviate the problem. Additionally, such occurrences could cause negative publicity and harm to CMG’s reputation. CMG mitigates such risks by ensuring the core network is not connected to the Internet, firewalling the servers that are connected to the Internet, restricting access to information through user authentication, completing frequent back-ups of data, having a disaster recovery plan in place, and conducting mandatory annual cyber security training for all employees. CMG's cyber risk oversight is conducted by the Audit Committee of the Board of Directors.

Although CMG has implemented disaster recovery plans and extensive technology security initiatives to prevent, detect and address these threats, it is virtually impossible to entirely mitigate these risks. To date, CMG has not experienced any material losses relating to cyber attacks or other information security breaches.

CMG's website collects limited user information; the website is not used for e-commerce transactions, and CMG neither receives nor retains financial information from its website users. CMG's products are not known to have any security vulnerabilities. CMG's products are engineering decision-making tools and are not employed in a cyber security (mitigation or defensive) role, as part of our customers' IT infrastructure. CMG's software releases are scanned for software viruses and malware, confirming a lack thereof, prior to delivery to customers.

Tax Liability Risk

With operations and sales in various countries, CMG is subject to taxes in several jurisdictions around the world. Significant judgment is required in determining the Company's worldwide liability for income, indirect and other taxes, as well as potential penalties and interest. Although management believes that all expenses and tax credits claimed by the Company, including research and development expenses and foreign tax credits, are reasonable, deductible and have been correctly determined, tax authorities may disagree with the treatment of items reported by the Company, the result of which could have a material adverse effect on our financial condition and results of operations. CMG mitigates these risks by staying informed of changes in tax legislation, consulting with tax advisors on complex tax issues and having professional tax firms review the Company's tax filings.

CMG conducts operations worldwide through subsidiaries in various tax jurisdictions pursuant to transfer pricing arrangements with its subsidiaries. If two or more affiliated companies are located in different countries, the tax laws or regulations of each country generally will require that transfer prices be the same as those between unrelated companies dealing at arm's length. While we believe that we operate in compliance with applicable transfer pricing laws and intend to continue to do so, a tax authority in one or more jurisdictions could challenge the validity of our related-party transfer pricing methodologies, which could result in adjustments in favor of the taxing authority. To address this risk, CMG engages local professional tax firms to review the Company's transfer pricing agreements and dealings with foreign tax authorities.

Climate Change Risk

The recent shift toward public and government support of climate change initiatives, such as emission reduction targets, clean energy standards, and alternative energy incentives and mandates, could impact the demand for hydrocarbons in Canada and around the world. CMG's customers are oil and gas companies; therefore, increasing environmental regulations could reduce oil and gas producers' cash flow by way of reduced demand, increased capital expenditures and increased operating expenses, which may not be recoverable in the marketplace. The complexity and breadth of changes in environmental regulation make it extremely difficult to predict the potential impact to CMG; however, it is reasonable to conclude that these developments and future developments in the energy sector could adversely impact the demand for CMG's products.

Disclosure Controls and Procedures and Internal Control over Financial Reporting

Management is responsible for establishing and maintaining disclosure controls and procedures ("DC&P") and internal control over financial reporting ("ICFR") as defined under National Instrument 52-109.

At March 31, 2019, the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO") concluded that the design and operation of the Company's DC&P were effective (in accordance with the COSO control framework (2013)) and that material information relating to the Company, including its subsidiaries, was made known to them and was recorded, processed, summarized and reported within the time periods specified under applicable securities legislation. Further, the CEO and the CFO concluded that the design and operation of the Company's ICFR were effective at March 31, 2019 in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. It should be noted that while the Company's CEO and CFO believe that the Company's disclosure controls and procedures and internal controls over financial reporting provide a reasonable level of assurance that they are effective, they do not expect that such controls and procedures will prevent all errors and fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

During the year ended March 31, 2019, there have been no significant changes to the Company's ICFR that have materially affected or are reasonably likely to materially affect the Company's ICFR.

Non-IFRS Financial Measures

This MD&A includes certain measures that have not been prepared in accordance with IFRS, such as "EBITDA", "direct employee costs", "other corporate costs" and "funds flow from operations". Since these measures do not have a standard meaning prescribed by IFRS, they are unlikely to be comparable to similar measures presented by other issuers. Management believes that these indicators nevertheless provide useful measures in evaluating the Company's performance.

"Direct employee costs" include salaries, bonuses, stock-based compensation, benefits, commission expenses, and professional development. "Other corporate costs" include facility-related expenses, corporate reporting, professional services, marketing and promotion, computer expenses, travel, and other office-related expenses. Direct employee costs and other corporate costs should not be considered an alternative to total operating expenses as determined in accordance with IFRS. People-related costs represent the Company's largest area of expenditure; hence, management considers highlighting separately corporate and people-related costs to be important in evaluating the quantitative impact of cost management of these two major expenditure pools. See "Expenses" heading for a reconciliation of direct employee costs and other corporate costs to total operating expenses.

"EBITDA" refers to net income before adjusting for depreciation expense, finance income, finance costs, and income and other taxes. EBITDA should not be construed as an alternative to net income as determined by IFRS. The Company believes that EBITDA is useful supplemental information as it provides an indication of the results generated by the Company's main business activities prior to consideration of how those activities are amortized, financed or taxed. See "EBITDA" heading for a reconciliation of EBITDA to net income.

"Funds flow from operations" is a non-IFRS financial measure that represents net income adjusted for certain non-cash items, such as depreciation expense, stock-based compensation expense, deferred tax expense (recovery) and deferred rent. The Company considers funds flow from operations a useful measure as it represents the cash generated during the period, regardless of the timing of collection of receivables and payment of payables, and demonstrates the Company's ability to generate the cash flow necessary to fund future growth and dividend payments. Funds flow from operations may not be comparable to similar measures presented by other companies.

Funds Flow from Operations, as Reconciled to Net Income

				Fiscal 2018				**Fiscal 2019**
($ thousands)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	**Q4**
Net income for the period	4,957	4,606	5,097	6,146	4,258	5,056	6,847	**5,974**
Non-cash items:								
Depreciation	469	475	492	561	463	481	509	**500**
Stock-based compensation	464	530	601	492	761	(29)	(19)	**441**
Deferred tax expense (recovery)	(513)	(170)	(71)	(21)	(346)	163	107	**2**
Deferred rent	828	347	106	107	106	106	106	**107**
Funds flow from operations	6,205	5,788	6,225	7,285	5,242	5,777	7,550	**7,024**

Year ended March 31, ($ thousands)	2019	2018	2017
Net income for the period	**22,135**	20,806	24,269
Non-cash items:			
Depreciation	**1,953**	1,997	1,093
Stock-based compensation	**1,154**	2,087	2,144
Deferred tax expense (recovery)	**(74)**	(775)	54
Deferred rent	**425**	1,388	-
Funds flow from operations	**25,593**	25,503	27,560

Funds Flow from Operations, as Reconciled to Net Cash Provided by Operating Activities

Funds flow from operations can also be derived by adjusting the IFRS measure Net Cash Provided by Operating Activities presented in the Company's consolidated statements of cash flows for the net change in non-cash working capital and the difference between income tax expense accrued and paid and interest income accrued and received. Accordingly, the Company has provided a second reconciliation “Adjusted Funds Flow from Operations, as Reconciled to Net Cash Provided by Operating Activities”:

	Fiscal 2018				Fiscal 2019			
($ thousands)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	**Q4**
Net cash provided by (used in) operating activities	11,132	(4,027)	4,127	19,298	4,716	277	1,607	**16,786**
Net change in non-cash working capital	(5,483)	8,906	2,532	(10,974)	202	5,135	6,374	**(10,115)**
Current income tax expense	(2,486)	(1,817)	(2,125)	(2,422)	(2,068)	(1,885)	(2,452)	**(2,424)**
Income taxes paid	3,038	2,727	1,704	1,373	2,391	2,262	2,021	**2,773**
Interest income	202	218	228	257	303	312	306	**293**
Interest received	(198)	(219)	(241)	(247)	(302)	(324)	(306)	**(289)**
Funds flow from operations	6,205	5,788	6,225	7,285	5,242	5,777	7,550	**7,024**

Year ended March 31, ($ thousands)	2019	2018	2017
Net cash provided by (used in) operating activities	**23,386**	30,530	28,845
Net change in non-cash working capital	**1,596**	(5,019)	1,229
Current income tax expense	**(8,829)**	(8,850)	(9,869)
Income taxes paid	**9,447**	8,842	7,378
Interest income	**1,214**	905	551
Interest received	**(1,221)**	(905)	(574)
Funds flow from operations	**25,593**	25,503	27,560

Forward-looking Information

Certain information included in this MD&A is forward-looking. Forward-looking information includes statements that are not statements of historical fact and which address activities, events or developments that the Company expects or anticipates will or may occur in the future, including such things as investment objectives and strategy, the development plans and status of the Company’s software development projects, the Company’s intentions, results of operations, levels of activity, future capital and other expenditures (including the amount, nature and sources of funding thereof), business prospects and opportunities, research and development timetable, and future growth and performance. When used in this MD&A,

statements to the effect that the Company or its management “believes”, “expects”, “expected”, “plans”, “may”, “will”, “projects”, “anticipates”, “estimates”, “would”, “could”, “should”, “endeavours”, “seeks”, “predicts” or “intends” or similar statements, including “potential”, “opportunity”, “target” or other variations thereof that are not statements of historical fact should be construed as forward-looking information. These statements reflect management’s current beliefs with respect to future events and are based on information currently available to management of the Company. The Company believes that the expectations reflected in such forward-looking information are reasonable, but no assurance can be given that these expectations will prove to be correct and such forward-looking information should not be unduly relied upon.

With respect to forward-looking information contained in this MD&A, we have made assumptions regarding, among other things:

- Future software license sales
- The continued financing by and participation of the Company's CoFlow partner and it being completed in a timely manner
- Ability to enter into additional software license agreements
- Ability to continue current research and new product development
- Ability to recruit and retain qualified staff

Forward-looking information is not a guarantee of future performance and involves a number of risks and uncertainties, only some of which are described herein. Many factors could cause the Company’s actual results, performance or achievements, or future events or developments, to differ materially from those expressed or implied by the forward-looking information including, without limitation, the following factors which are discussed in greater detail in the “Business Risks” section of this MD&A:

- Economic conditions in the oil and gas industry
- Reliance on key customers
- Foreign exchange
- Economic and political risks in countries where the Company currently does or proposes to do business
- Increased competition
- Reliance on employees with specialized skills or knowledge
- Protection of proprietary rights

Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward-looking statements prove incorrect, actual results, performance or achievement may vary materially from those expressed or implied by the forward-looking information contained in this MD&A. These factors should be carefully considered and readers are cautioned not to place undue reliance on forward-looking information, which speaks only as of the date of this MD&A. All subsequent forward-looking information attributable to the Company herein is expressly qualified in its entirety by the cautionary statements contained in or referred to herein. The Company does not undertake any obligation to release publicly any revisions to forward-looking information contained in this MD&A to reflect events or circumstances that occur after the date of this MD&A or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

This Management’s Discussion and Analysis was reviewed and approved by the Audit Committee and Board of Directors and is effective as of May 22, 2019.

Management's Statement of Responsibility

Management is responsible for the accompanying consolidated financial statements and all other information contained in this Annual Report. The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards consistently applied, using management's best estimates and judgements, where appropriate. Financial information included elsewhere in this report is consistent with the consolidated financial statements.

Management maintains appropriate systems of internal control. Policies and procedures are designed to provide reasonable assurance that transactions are properly authorized, assets are safeguarded and financial records are properly maintained to provide reliable information for the preparation of consolidated financial statements.

KPMG LLP, Chartered Professional Accountants, appointed by the shareholders, have audited the consolidated financial statements in accordance with Canadian generally accepted auditing standards.

The Board of Directors, through its Audit Committee, is responsible for ensuring that management fulfills its financial reporting responsibilities. The Audit Committee reviews the financial content of the Annual Report and meets regularly with management and KPMG LLP to discuss internal controls, accounting and auditing and financial matters. The Committee reports its findings to the Board of Directors for its consideration in approving the consolidated financial statements.

SBalic

Sandra Balic, CPA, CA
Vice President, Finance and
Chief Financial Officer

Ryan N. Schneider
President and Chief Executive Officer

Calgary, Canada
May 22, 2019

Independent Auditors' Report

To the Shareholders of Computer Modelling Group Ltd.

Opinion

We have audited the consolidated financial statements of Computer Modelling Group Ltd. (the "Entity"), which comprise:

- the consolidated statements of financial position as at March 31, 2019 and March 31, 2018;
- the consolidated statements of operations and comprehensive income for the years then ended;
- the consolidated statements of changes in equity for the years then ended;
- the consolidated statements of cash flows for the years then ended;
- and notes to the consolidated financial statements, including a summary of significant accounting policies.

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated financial position of the Entity as at March 31, 2019 and March 31, 2018, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards ("IFRS").

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the "Auditors' Responsibilities for the Audit of the Financial Statements" section of our auditors' report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

Management is responsible for the other information. Other information comprises:

- the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions; and
- the information, other than the financial statements and the auditors' report thereon, included in a document entitled "2019 Financial Report".

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit and remain alert for indications that the other information appears to be materially misstated.

We obtained the other information identified above as at the date of this auditors' report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in the auditors' report.

We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.
  The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Entity to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
- Provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group Entity to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

The engagement partner on the audit resulting in this auditors' report is Kimberly J. Payne.

KPMG LLP

Chartered Professional Accountants
May 22, 2019
Calgary, Canada

Consolidated Statements of Financial Position

(thousands of Canadian $)	**March 31, 2019**	March 31, 2018*
Assets		
Current assets:		
Cash	**54,290**	63,719
Trade and other receivables (note 17(a))	**19,220**	16,272
Prepaid expenses	**1,332**	1,415
Prepaid income taxes (note 14)	**367**	-
	75,209	81,406
Property and equipment (note 7)	**14,501**	16,062
Deferred tax asset (note 14)	**595**	522
Total assets	**90,305**	97,990
Liabilities and shareholders' equity		
Current liabilities:		
Trade payables and accrued liabilities (note 8)	**6,162**	6,550
Income taxes payable (note 14)	**60**	126
Deferred revenue (note 9)	**34,653**	33,360
	40,875	40,036
Deferred revenue (note 9)	**362**	1,002
Deferred rent liability (note 6)	**1,813**	1,388
Total liabilities	**43,050**	42,426
Shareholders' equity:		
Share capital (note 15)	**79,711**	79,598
Contributed surplus	**12,808**	11,775
Deficit	**(45,264)**	(35,809)
Total shareholders' equity	**47,255**	55,564
Total liabilities and shareholders' equity	**90,305**	97,990

* The Company adopted IFRS 15 effective April 1, 2018 using the cumulative effect method. Under this method, comparative information is not restated. See note 4

Subsequent events (note 23)

See accompanying notes to consolidated financial statements.

Approved by the Board

John B. Zaozirny
Director

Robert F. M. Smith
Director

Consolidated Statements of Operations and Comprehensive Income

Years ended March 31, (thousands of Canadian $ except per share amounts)	**2019**	2018*
Revenue (note 10)	**74,857**	74,680
Operating expenses		
Sales, marketing and professional services	**18,690**	19,535
Research and development (note 11)	**19,893**	20,371
General and administrative	**6,720**	6,744
	45,303	46,650
Operating profit	**29,554**	28,030
Finance income (note 13)	**1,336**	905
Finance costs (note 13)	**-**	(54)
Profit before income and other taxes	**30,890**	28,881
Income and other taxes (note 14)	**8,755**	8,075
Net and total comprehensive income	**22,135**	20,806
Earnings Per Share		
Basic (note 15(d))	**0.28**	0.26
Diluted (note 15(d))	**0.28**	0.26

* The Company adopted IFRS 15 effective April 1, 2018 using the cumulative effect method. Under this method, comparative information is not restated. See note 4

See accompanying notes to consolidated financial statements.

Consolidated Statements of Changes in Equity

(thousands of Canadian $)	Common Share Capital	Contributed Surplus	Deficit	Total Equity
Balance, April 1, 2017	71,859	11,433	(24,574)	58,718
Total comprehensive income for the year	-	-	20,806	20,806
Dividends paid	-	-	(32,041)	(32,041)
Shares issued for cash on exercise of stock options (note 15(b))	6,664	-	-	6,664
Stock-based compensation:				
Current period expense (note 15(c))	-	1,417	-	1,417
Stock options exercised (note 15(b))	1,075	(1,075)	-	-
Balance, March 31, 2018	79,598	11,775	(35,809)	55,564
Balance, April 1, 2018	**79,598**	**11,775**	**(35,809)**	**55,564**
Impact of change in accounting policy*	**-**	**-**	**500**	**500**
Adjusted balance, April 1, 2018	**79,598**	**11,775**	**(35,309)**	**56,064**
Total comprehensive income for the period	**-**	**-**	**22,135**	**22,135**
Dividends paid	**-**	**-**	**(32,090)**	**(32,090)**
Shares issued on redemption of restricted share units (note 15(b))	**93**	**-**	**-**	**93**
Shares issued for cash on exercise of stock options (note 15(b))	**17**	**-**	**-**	**17**
Stock-based compensation:				
Current period expense (note 15(c))	**-**	**1,036**	**-**	**1,036**
Stock options exercised (note 15(b))	**3**	**(3)**	**-**	**-**
Balance, March 31, 2019	**79,711**	**12,808**	**(45,264)**	**47,255**

* The Company adopted IFRS 15 effective April 1, 2018 using the cumulative effect method. Under this method, comparative information is not restated. See note 4

See accompanying notes to consolidated financial statements.

Consolidated Statements of Cash Flows

Years ended March 31, (thousands of Canadian $)	**2019**	2018*
Operating activities		
Net income	**22,135**	20,806
Adjustments for:		
Depreciation (note 7)	**1,953**	1,997
Income and other taxes (note 14)	**8,755**	8,075
Stock-based compensation (note 15(c))	**1,154**	2,087
Interest income (note 13)	**(1,214)**	(905)
Deferred rent (note 6)	**425**	1,388
	33,208	33,448
Changes in non-cash working capital:		
Trade and other receivables	**(2,954)**	9,033
Trade payables and accrued liabilities	**(63)**	35
Prepaid expenses	**83**	(179)
Deferred revenue	**1,338**	(3,870)
Cash provided by operating activities	**31,612**	38,467
Interest received	**1,221**	905
Income taxes paid	**(9,447)**	(8,842)
Net cash provided by operating activities	**23,386**	30,530
Financing activities		
Proceeds from issue of common shares	**17**	6,664
Dividends paid	**(32,090)**	(32,041)
Net cash used in financing activities	**(32,073)**	(25,377)
Investing activities		
Property and equipment additions (note 7)	**(742)**	(4,673)
(Decrease) increase in cash	**(9,429)**	480
Cash, beginning of year	**63,719**	63,239
Cash, end of year	**54,290**	63,719

* The Company adopted IFRS 15 effective April 1, 2018 using the cumulative effect method. Under this method, comparative information is not restated. See note 4

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

Years ended March 31, 2019 and 2018.

1. Reporting Entity:

Computer Modelling Group Ltd. ("CMG") is a company domiciled in Alberta, Canada and is incorporated pursuant to the Alberta Business Corporations Act, with its Common Shares listed on the Toronto Stock Exchange under the symbol "CMG". The address of CMG's registered office is 3710 33 Street N.W., Calgary, Alberta, Canada, T2L 2M1. The consolidated financial statements as at and for the year ended March 31, 2019 comprise CMG and its subsidiaries (together referred to as the "Company"). The Company is a computer software technology company engaged in the development and licensing of reservoir simulation software. The Company also provides professional services consisting of highly specialized support, consulting, training, and contract research activities.

2. Basis of Preparation:

(a) Statement of Compliance:

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

These consolidated financial statements as at and for the year ended March 31, 2019 were authorized for issuance by the Board of Directors on May 22, 2019.

(b) Basis of Measurement:

The consolidated financial statements have been prepared on the historical cost basis, which is based on the fair value of the consideration at the time of the transaction.

(c) Functional and Presentation Currency:

The consolidated financial statements are presented in Canadian dollars, which is the Company's functional currency. All financial information presented in Canadian dollars has been rounded to the nearest thousand.

(d) Use of Estimates, Judgments and Assumptions:

The preparation of financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies, the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue, costs and expenses for the period. Estimates and underlying assumptions are based on historical experience and other assumptions that are considered reasonable in the circumstances and are reviewed on an on-going basis. Actual results may differ from such estimates and it is possible that the differences could be material. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

(i) Key judgments in applying accounting policies

The key judgments made in applying accounting policies, apart from those involving estimations (note 2(d)(ii) below), that have the most significant effect on the amounts recognized in these consolidated financial statements are as follows:

Functional currency – the determination of the functional currency is a matter of determining the primary economic environment in which an entity operates. IAS 21 *Effects of Changes in Foreign Exchange Rates* sets out a number of factors to apply in making the determination of the functional currency. However, applying the factors in IAS 21 does not always result in a clear indication of functional currency. Where IAS 21 factors indicate differing functional currencies within a subsidiary, the Company uses judgment in the ultimate determination of that subsidiary's functional currency, including an assessment of the nature of the relationship between the Company and the subsidiary. Judgment was applied in the determination of the functional currency of certain of the Company's operating entities.

Research and development – assumptions are made in respect to the eligibility of certain research and development projects in the calculation of scientific research and experimental development (“SR&ED”) investment tax credits which are netted against the research and development costs in the statement of operations and comprehensive income. SR&ED claims are subject to audits by relevant taxation authorities and the actual amount may change depending on the outcome of such audits (note 11).

Contracts with multiple products or services – contracts with customers often include promises to deliver multiple products, such as licenses and maintenance. Determining whether such bundled products and services are considered i) distinct performance obligations that should be separately recognized or ii) non-distinct and therefore should be combined with another good or service and recognized as a combined unit of accounting may require significant judgment. The determination of the standalone selling prices for distinct performance obligations can also require judgment and estimates.

The Company also applies estimates when calculating professional services revenue from certain consulting contracts as it relates to remaining labour hours required to complete the contract. Estimates are continually and routinely revised as new information becomes available. In assessing revenue recognition, judgment is also used in assessing the ability to collect the corresponding account receivable.

(ii) Estimation uncertainty

The following are the key sources of estimation uncertainty and key assumptions concerning the future, that have a significant risk of causing material adjustments to the carrying amount of assets and liabilities within the next financial year:

Stock-based compensation – assumptions and estimates are used in determining the inputs used in the Black-Scholes option pricing model, including assumptions regarding volatility, dividend yield, risk-free interest rates, forfeiture estimates and expected option lives (note 15(c)).

Property and equipment – estimates are used in determining useful economic lives of property and equipment for the purposes of calculating depreciation (note 7).

3. Significant Accounting Policies:

(a) Basis of Consolidation:

The consolidated financial statements include the accounts of CMG and its subsidiaries, all 100% owned (note 20). All inter-company transactions and balances have been eliminated on consolidation. The financial statements of the subsidiaries are prepared for the same reporting period as the parent company, using consistent accounting policies.

(b) Revenue Recognition:

Revenue is recognized upon transfer of control of products or services to customers at an amount that reflects the consideration the Company expects to receive in exchange for the products or services. The nature of the products and services from which the Company derives its revenue is described below.

Type of products /service	Nature, timing of satisfaction of performance obligations, significant contract terms
Annuity license revenue	Annuity agreements include a term-based software license bundled with maintenance. IFRS 15 *Revenue from Contracts with Customers* requires that the portion of the annuity agreement fee that relates to the software license should be recognized as revenue at the start of the license period, while the remainder should be recognized as maintenance revenue on a straight-line basis over the license period. However, since it is management’s practice to honour customers’ mid-contract requests to reduce product quantities or license term duration without a penalty and refund or credit a pro-rata share of the agreement fee, annuity license revenue cannot be recognized upfront and will instead be recognized ratably over the term of the contract. The exception to this practice is certain multi-year agreements with very specific termination clauses that significantly limit the customer’s ability to reduce the license term. For these agreements, the software license portion that relates to the non-cancellable period will be recognized upfront, at the start of that particular period of the license contract.

Type of products /service	Nature, timing of satisfaction of performance obligations, significant contract terms
	The maintenance component of an annuity contract includes customer support and unspecified software upgrades. Maintenance license revenue is recognized on a straight-line basis over the term of the contract, as the Company satisfies its maintenance performance obligation over time. Since the Company does not sell term-based annuity licenses individually without maintenance and there is no comparable product in the market, there is no observable standalone selling price for term-based annuity licenses. The Company allocates the value of bundled annuity agreements between software licenses and maintenance using the residual approach, by subtracting the standalone selling price of a maintenance license from the total annuity agreement fee. Based on this calculation, the standalone selling price of a maintenance license represents 45% of the total annuity agreement fee, leaving 55% to be allocated to the stand-alone annuity license.
Maintenance license revenue	Maintenance agreements include customer support and unspecified software upgrades, typically for a term of one year or less. Maintenance licenses are purchased by customers who already own a perpetual license and want the additional benefit of customer support and software upgrades. Maintenance license revenue is recognized on a straight-line basis over the term of the contract, as the Company satisfies its maintenance performance obligation over time.
Perpetual license revenue	A perpetual license grants the customer the right to use the then-current version of the software in perpetuity. Perpetual license revenue is recognized at a point in time, upon delivery of the licensed product.
Professional services revenue	Revenue from professional services consists of consulting, training and contract research activities. Professional services revenue is recognized over time, based on hours incurred.

Costs to obtain a contract

The Company applies the practical expedient available under IFRS 15 and does not capitalize incremental costs of obtaining contracts if the amortization period is one year or less.

(c) Cash:

Cash consists of balances held in interest-earning bank accounts.

(d) Property and Equipment:

Property and equipment are recorded at cost less accumulated depreciation. Cost includes expenditures that are directly attributable to the acquisition of the asset.

Depreciation is based on the cost of an asset and is recognized from the date the item is ready for use in the statement of operations and comprehensive income using the following annual rates and methods that are expected to amortize the cost of the property and equipment over their estimated useful lives:

Computer equipment	straight-line over 3 years
Furniture and equipment	straight-line over 5 years
Leasehold improvements	straight-line over the lease term

Any gain or loss on disposal of an item of property and equipment (calculated as the difference between the net proceeds from disposal and the carrying amount of the item) is recognized in the statement of operations and comprehensive income.

The estimated useful lives and depreciation methods are reviewed at each fiscal year-end and adjusted if appropriate.

(e) Research and Development Costs:

All costs of product research and development are expensed to operations as incurred as the impact of both technological changes and competition require the Company to continually enhance its products on an annual basis. Research and development costs are recorded net of related SR&ED investment tax credits.

(f) Finance Income and Finance Costs:

Finance income comprises interest income earned on the bank balances and is recognized as it accrues through the statement of operations and comprehensive income, using the effective interest method.

Foreign currency gains and losses are reported on a net basis as either finance income or finance cost depending on whether foreign currency movements are in a net gain or net loss position. Foreign currency gains and losses are recognized in the period in which they occur.

(g) Foreign Currency Translation:

Transactions in foreign currencies are translated to Canadian dollars, the functional currency of the Company, at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the rate of exchange prevailing at the reporting date, while non-monetary assets and liabilities that are measured in terms of historical cost are translated using the exchange rates at the dates of the transactions.

Revenues and expenses are translated at the rate of exchange in effect on the transaction dates. Realized and unrealized foreign exchange gains and losses are included in the statement of operations and comprehensive income in the period in which they occur.

(h) Income Taxes:

Income taxes comprise current and deferred tax.

Current tax is the expected tax payable or receivable based on taxable profit for the period calculated using tax rates that have been enacted or substantively enacted at the reporting date, and includes any adjustments to tax payable in respect of previous years. Taxable profit differs from profit as reported in the consolidated statement of operations and comprehensive income because of items that are taxable or deductible in other years and items that are never taxable and deductible. Prepaid income taxes and current income taxes payable are offset only when a legally enforceable right of offset exists and the prepaid income tax and tax payable arise in the same tax jurisdiction and relate to the same taxable entity.

Deferred taxes are recognized for temporary differences between the tax and accounting bases of assets and liabilities and for the benefit of losses available to be carried forward for tax purposes to the extent that it is probable that future taxable profits will be available against which the losses can be utilized. Deferred tax assets and liabilities are measured using the enacted or substantively enacted tax rates expected to apply in the years in which temporary differences are expected to be recovered or settled. Any change to the net deferred tax assets and liabilities is included in operations in the period it occurs. Deferred tax assets and liabilities are offset only when a legally enforceable right of offset exists and the deferred tax assets and liabilities arise in the same tax jurisdiction and relate to the same taxable entity.

In determining the amount of current and deferred tax, the Company takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Company believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. New information may become available that causes the Company to change its judgement regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact tax expense in the period that such a determination is made.

(i) Investment Tax Credits:

The Company receives federal and provincial investment tax credits in Canada on qualified scientific research and experimental development expenditures incurred in each taxation year. Investment tax credits are recorded as a deduction against related expenses or capital items provided that reasonable assurance over collection of the tax credits exists.

(j) Earnings Per Share:

Basic earnings per share is computed by dividing the net income by the weighted average number of Common Shares outstanding for the period. Diluted per share amounts reflect the potential dilution that could occur if securities or other contracts to issue Common Shares were exercised or converted to Common Shares. In calculating the dilutive effect of stock options, it is assumed that proceeds received from the exercise of in-the-money stock options are used to purchase Common Shares at the average market price during the period.

(k) Stock-based Compensation:

The Company has a stock option plan, a share appreciation rights plan, a performance share unit and restricted share unit plan, and a deferred share unit plan, as described in note 15(c).

Stock options give the holder the right to purchase Common Shares and are accounted for as an equity-settled plan. The fair value of stock options is determined using the Black-Scholes valuation model as of the grant date and is expensed over the vesting period, with a corresponding increase in contributed surplus. At the end of each reporting period, the Company revises its estimate of the number of options that are expected to vest and recognizes the impact of any revision in the statement of operations and comprehensive income. When stock options are exercised, the Company records consideration received, together with amounts previously recognized in contributed surplus, as an increase in share capital.

Stock-based compensation awards that settle in cash or have the option to settle in cash or shares are accounted for as cash-settled plans. These awards are remeasured at fair value each reporting period. The expense is recognized over the vesting period, with a corresponding adjustment to liabilities, based on the Company's estimate of the number of awards that will eventually vest. When awards are surrendered for cash, the cash settlement paid reduces the outstanding liability. When awards are exercised for Common Shares, the previously recognized liability is recorded to share capital.

Fair value measurement inputs include the share price on the measurement date, the exercise price of the instrument, expected volatility (based on an evaluation of the Company's historic volatility, particularly over the historic period commensurate with the expected term), expected term of the instruments (based on historical experience and general option holder behaviour), expected dividends, and the risk-free interest rate (based on government bonds). Service and non-market performance conditions attached to the transactions are not taken into account in determining fair value.

(l) Short-term Employee Benefits:

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognized for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

(m) Financial Instruments:

Financial instruments are recognized when the Company becomes a party to the contractual provisions of the instrument. Below is a list of the Company's financial instruments, their classification and subsequent measurement:

	Classification	Measurement
Cash	Amortized cost	Amortized cost
Trade and other receivables	Amortized cost	Amortized cost
Trade payables and accrued liabilities	Other financial liabilities	Amortized cost

The Company's financial assets are initially recognized at fair value plus any directly attributable transaction costs and are subsequently measured at amortized cost using the effective interest rate method less any provision for impairment. The Company derecognizes a financial asset when the contractual rights to the cash flows from the asset have expired or are transferred to another party and the Company has transferred substantially all risks and rewards of ownership. Any gain or loss on derecognition is recognized in profit or loss.

Financial liabilities are initially recognized at fair value, represented by the amount required to be paid plus any directly attributable transaction costs, and subsequently measured at amortized cost using the effective interest method. Financial liabilities are classified as current liabilities if payment is due within a year; otherwise, they are classified as non-current liabilities. The Company derecognizes a financial liability when its contractual obligations are discharged, cancelled or expire. Any gain or loss on derecognition is recognized in profit or loss.

(n) Share Capital

Common Shares are classified as equity. Incremental costs directly attributable to the issue of Common Shares are recognized as a deduction from equity, net of any tax effects.

(o) Impairment:

(i) Receivables

Trade and other receivables are assessed for impairment at each reporting date at both a specific and collective level. All individually significant receivables are assessed for specific impairment. All individually significant receivables found not to be specifically impaired, together with receivables that are not individually significant, are collectively assessed for impairment by grouping together receivables with similar risk characteristics. In assessing collective impairment, the Company uses historical trends of the probability of default, the timing of recoveries and the amount of loss incurred, adjusted for management's judgment as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical trends. An impairment loss in respect of a financial asset measured at amortized cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate. Losses are recognized in the statement of operations and comprehensive income and reflected in an allowance account against trade and other receivables. When a subsequent event (such as the repayment by a debtor) causes the amount of impairment loss to decrease, the decrease is reversed through the statement of operations and comprehensive income.

(ii) Non-financial assets

The carrying amounts of the Company's non-financial assets, other than deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated, and any impairment loss required is recognized in the statement of operations and comprehensive income. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation, if no impairment loss had been recognized.

(p) Leases:

The Company's only lease commitments relate to its office premises, which are classified as operating leases since they do not transfer the risks and rewards of ownership to the Company. Payments made under operating leases are recognized in the statement of operations and comprehensive income on a straight-line basis over the term of the lease.

(q) Accounting Standards and Interpretations Not Yet Adopted:

IFRS 16 Leases

Replaces the guidance in IAS 17 *Leases* and requires the recognition of most leases on the balance sheet. IFRS 16 effectively removes the classification of leases as either finance or operating leases and treats all leases as finance leases for lessees with exemptions for short-term leases where the term is twelve months or less and for leases of low value items.

The Company will adopt the standard in its consolidated financial statements for the annual period beginning April 1, 2019 and has selected the modified retrospective transition approach. The Company has also elected to apply the optional exemptions for short-term leases and leases with a remaining term of less than twelve months at April 1, 2019. The Company estimates that the impact of the new standard on the consolidated financial statements will be as follows:

Consolidated Statement of Financial Position: IFRS 16 requires the recognition of lease liabilities and right-of-use (ROU) assets for all leases except for the optional exemptions for low-value assets and short-term leases. Upon adoption of the new standard, the Company will:

- Recognize the lease liability of approximately $43.1 million;
- Recognize the ROU assets of approximately $38.1 million, net of reversal of deferred rent liability of $1.8 million (see note 6) that is not required under IFRS 16;
- Recognize the difference between the lease liability and the ROU assets of approximately $3.2 million in opening retained earnings at April 1, 2019.

Consolidated Statement of Operations and Comprehensive Income: Adoption of IFRS 16 will result in a net decrease to operating expenses due to lower rent expense, partially offset by higher depreciation expense on the recognition of ROU assets, and an increase to finance costs from the unwinding of the discounted value of the lease liability. Overall, this standard will have a negative impact of approximately $0.6 million on the Company's profit before income and other taxes for the year ending March 31, 2020.

Consolidated Statement of Cash Flows: Due to the change in the presentation of former operating lease expenses, cash provided by operating activities will increase due to lower operating expenses, partially offset by increased finance costs, which represents an operating activity for the Company. Cash used in financing activities will increase due to the addition of principal payments for former operating leases. The net impact to the Company's cash flows will be unchanged.

4. Changes in Significant Accounting Policies:

IFRS 9 *Financial Instruments*

Effective April 1, 2018, the Company adopted IFRS 9 *Financial Instruments*, which sets out requirements for recognizing and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard replaces *IAS 39 Financial Instruments: Recognition and Measurement*.

IFRS 9 largely retains the existing requirements in IAS 39 for the classification and measurement of financial liabilities. However, it eliminates the previous IAS 39 categories for financial assets of held to maturity, loans and receivables and available for sale. Under IFRS 9, a financial asset is classified as measured at:

- Amortized cost;
- Fair Value through Other Comprehensive Income ("FVOCI") – debt investment;
- FVOCI – equity investment;
- Fair Value through Profit or Loss.

The classification of financial assets under IFRS 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. Impairment of financial assets under IFRS 9 is based on an expected credit loss ("ECL") model, rather than the incurred loss model under IAS 39. ECLs are a probability-weighted estimate of credit losses. The new impairment model applies to financial assets measured at amortized cost, contract assets and debt investments at FVOCI, but not to investment in equity instruments. Under IFRS 9, credit losses are recognized earlier than under IAS 39. There is no impact to CMG's consolidated financial statements, as the Company's credit losses have historically been low because most of its customers are large oil and gas companies with strong credit.

The following table shows the original measurement categories under IAS 39 and the new measurement categories under IFRS 9 for each class of the Company's financial assets as at April 1, 2018:

Financial assets	**IAS 39**		**IFRS 9**	
	Classification	**Measurement**	**Classification**	**Measurement**
Cash	Loans and receivables	Amortized cost	Amortized cost	Amortized cost
Trade and other receivables	Loans and receivables	Amortized cost	Amortized cost	Amortized cost

The adoption of IFRS 9 did not have a material impact on the Company's consolidated financial statements.

IFRS 15 *Revenue from Contracts with Customers*

On April 1, 2018, the Company adopted IFRS 15 *Revenue from Contracts with Customers*. IFRS 15 superseded previous accounting standards for revenue, including IAS 18 *Revenue* and related interpretations. IFRS 15 introduced a single model for recognizing revenue from contracts with customers. The model specifies that revenue is recognized when or as the Company transfers control of promised goods or services to a customer at the amount to which the Company expects to be entitled. Depending on certain criteria, revenue is recognized over time or at a point in time.

The changes in accounting policies in relations to the Company's various revenue streams are set out below:

Type of product /service	**Change in accounting policy and impact**
Annuity license revenue	Under IAS 18, the revenue attributable to these software licenses was recognized on a straight-line basis over the license period. There is no change in revenue recognition on annuity licenses under IFRS 15.

Type of product /service	Change in accounting policy and impact
	The only exception are certain multi-year agreements with very specific termination clauses that significantly limit the customer's ability to reduce the license term. Under IAS 18, revenue was recognized on a straight-line basis over the license period. Under IFRS 15, the transaction price allocated to the software license is recognized upfront, at the start of the license period.
Maintenance license revenue	IFRS 15 did not have a significant impact on accounting for maintenance revenue.
Perpetual license revenue	IFRS 15 did not have a significant impact on accounting for perpetual licenses.
Professional services revenue	IFRS 15 did not have a significant impact on accounting for consulting services.

The Company has adopted IFRS 15 using the cumulative effect method, by recognizing the cumulative effect of initially applying IFRS 15 as an adjustment to the opening balance of equity at April 1, 2018. The Company recorded an increase to retained earnings of $0.7 million ($0.5 million net of tax) on April 1, 2018, due to the impact of certain term-based software licenses, as explained in the table above. Under the cumulative effect method, comparative information is not restated and continues to be reported under IAS 18 *Revenue.*

The following table summarizes the impact of adopting IFRS 15 on the Company's consolidated statement of operations and comprehensive income for the year ended March 31, 2019:

(thousands of $)	As reported	Adjustments	Balance without adoption of IFRS 15
Revenue	74,857	685	75,542
Income and other taxes	(8,755)	(185)	(8,940)
Other	(43,967)	-	(43,967)
Net and total comprehensive income	**22,135**	**500**	**22,635**

The adoption of IFRS 15 had no impact on the Company's consolidated statement of financial position at March 31, 2019. This is because the software license revenue that under IFRS 15 was recognized upfront through opening retained earnings on April 1, 2018, under IAS 18 would have been recognized into revenue by December 31, 2018.

The adoption of IFRS 15 had no impact on the Company's cash flows from operating activities.

5. Segmented Information:

The Company is organized into one operating segment represented by the development and licensing of reservoir simulation software. The Company provides professional services, consisting of support, training, consulting and contract research activities, to promote the use and development of its software; however, these activities are not evaluated as a separate business segment.

Property and equipment of the Company is located in the following geographic regions (for revenue by geographic region refer to note 10):

(thousands of $)	**March 31, 2019**	March 31, 2018
Canada	**14,215**	15,733
United States	**152**	143
South America	**74**	136
Eastern Hemisphere(1)	**60**	50
	14,501	16,062

(1) Includes Europe, Africa, Asia and Australia.

6. Deferred Rent Liability:

The twenty-year lease agreement for the Company's headquarters, which commenced in fiscal 2018, contains a rent escalation clause. The Company recognizes rent expense on a straight-line basis over the lease term, in accordance with IFRS. The difference between rent expense and rent payable for the period is recorded as deferred rent within long-term liabilities in the consolidated statement of financial position.

7. Property and Equipment:

Cost (thousands of $)	**Computer Equipment**	**Furniture and Equipment**	**Leasehold Improvements**	**Total**
Balance at April 1, 2017	6,617	3,297	16,386	26,300
Additions	871	919	-	1,790
Disposals	(1,204)	(1,141)	(2,764)	(5,109)
Balance at March 31, 2018	6,284	3,075	13,622	22,981
Balance at April 1, 2018	6,284	3,075	13,622	22,981
Additions	605	-	-	605
Disposals	(171)	-	(213)	(384)
Balance at March 31, 2019	**6,718**	**3,075**	**13,409**	**23,202**

Accumulated Depreciation (thousands of $)				
Balance at April 1, 2017	(5,176)	(1,667)	(2,584)	(9,427)
Depreciation charge for the year	(755)	(547)	(695)	(1,997)
Disposals	878	1,141	2,486	4,505
Balance at March 31, 2018	(5,053)	(1,073)	(793)	(6,919)
Balance at April 1, 2018	(5,053)	(1,073)	(793)	(6,919)
Depreciation charge for the year	(747)	(532)	(674)	(1,953)
Disposals	171	-	-	171
Balance at March 31, 2019	**(5,629)**	**(1,605)**	**(1,467)**	**(8,701)**

Carrying Amounts				
At March 31, 2018	1,231	2,002	12,829	16,062
At March 31, 2019	**1,089**	**1,470**	**11,942**	**14,501**

8. Trade Payables and Accrued Liabilities:

(thousands of $)	**March 31, 2019**	March 31, 2018
Trade payables	**330**	573
Employee salaries, commissions and benefits payable	**4,167**	3,841
Accrued liabilities and other payables	**1,665**	2,136
	6,162	6,550

9. Deferred Revenue:

The following table presents changes in the deferred revenue balance for the year ended March 31, 2019:

(thousands of $)	
Balance, March 31, 2018	34,362
Adjustment on initial application of IFRS 15	(685)
Adjusted balance, April 1, 2018	33,677
Invoiced during the period, excluding amount recognized as revenue during the period	33,537
Recognition of deferred revenue included in the adjusted balance at the beginning of the period	(32,199)
Balance, March 31, 2019	35,015
Current	34,653
Long-term	362

10. Revenue:

In the following table, revenue is disaggregated by geographical segment and timing of revenue recognition:

Years ended March 31, (thousands of $)	**2019**	2018
Annuity/maintenance license revenue		
Canada	**15,151**	16,754
United States	**18,620**	18,519
South America	**8,734**	9,009
Eastern Hemisphere	**21,295**	20,397
	63,800	64,679
Perpetual license revenue		
Canada	**156**	-
United States	**1,096**	262
South America	**6**	394
Eastern Hemisphere	**3,742**	3,508
	5,000	4,164
Total software license revenue	**68,800**	68,843
Professional services		
Canada	**4,365**	4,261
United States	**405**	802
South America	**592**	253
Eastern Hemisphere	**695**	521
	6,057	5,837
Total revenue		
Canada	**19,672**	21,015
United States	**20,121**	19,583
South America	**9,332**	9,656
Eastern Hemisphere	**25,732**	24,426
	74,857	74,680

The amount of revenue recognized during the year ended March 31, 2019 from performance obligations satisfied (or partially satisfied) in previous periods is $2.8 million.

Receivables from contracts with customers were as follows:

(thousands of $)	**March 31, 2019**	April 1, 2018
Receivables (included in "Trade and other receivables")	**16,783**	15,459

In the year ended March 31, 2019, no customer comprised more than 10% of the Company's total revenue (March 31, 2018 – one customer, 10.5%).

11. Research and Development Costs:

Years ended March 31, (thousands of $)	**2019**	2018
Research and development	**21,206**	21,772
Scientific research and experimental development ("SR&ED") investment tax credits	**(1,313)**	(1,401)
	19,893	20,371

12. Personnel Expenses:

Years ended March 31, (thousands of $)	2019	2018
Salaries, commissions and short-term employee benefits	**32,007**	31,778
Stock-based compensation (note 15(c))	**1,379**	2,089
	33,386	33,867

13. Finance Income and Finance Costs:

Years ended March 31, (thousands of $)	2019	2018
Interest income	**1,214**	905
Net foreign exchange gain	**122**	-
Finance income	**1,336**	905
Net foreign exchange loss	**-**	(54)
Finance costs	**-**	(54)

14. Income and Other Taxes:

The major components of income tax expense are as follows:

Years ended March 31, (thousands of $)	2019	2018
Current year income taxes	**8,434**	8,649
Adjustment for prior year	**20**	(69)
Current income taxes	**8,454**	8,580
Deferred tax recovery	**(74)**	(775)
Foreign withholding and other taxes	**375**	270
	8,755	8,075

The provision for income and other taxes reported differs from the amount computed by applying the combined Canadian Federal and Provincial statutory rate to the profit before income and other taxes. The reasons for this difference and the related tax effects are as follows:

Years ended March 31, (thousands of $, unless otherwise stated)	2019	2018
Combined statutory tax rate	**27.00%**	27.00%
Expected income tax	**8,340**	7,798
Non-deductible costs	**301**	433
Effect of tax rates in foreign jurisdictions	**(21)**	4
Withholding taxes	**109**	32
Adjustment for prior year	**20**	(199)
Other	**6**	7
	8,755	8,075

The components of the Company's deferred tax asset are as follows:

(thousands of $)	**March 31, 2019**	March 31, 2018
SR&ED investment tax credits	**(247)**	(270)
Property and equipment	**116**	187
Deferred rent	**489**	375
Stock-based compensation liability	**237**	230
Net deferred tax asset	**595**	522

All movement in deferred tax assets and liabilities is recognized through net income of the respective period.

Prepaid income taxes and current income taxes payable have not been offset as the amounts relate to income taxes levied by different tax authorities on different taxable entities.

15. Share Capital:

(a) Authorized:

An unlimited number of Common Shares, an unlimited number of Non-Voting Shares, and an unlimited number of Preferred Shares, issuable in series.

(b) Issued:

(thousands of shares)	Common Shares
Balance, April 1, 2017	79,482
Issued for cash on exercise of stock options	733
Balance, March 31, 2018	80,215
Balance, April 1, 2018	**80,215**
Issued on redemption of restricted share units	**10**
Issued for cash on exercise of stock options	**2**
Balance, March 31, 2019	**80,227**

On May 23, 2018, the Board of Directors considered the merits of renewing the Company's shareholder rights plan on or before the third-year anniversary of shareholder approval of the plan and determined that it was in the best interest of the Company to continue to have a shareholder rights plan in place. The Board of Directors approved an amended and restated rights plan (the "Amended and Restated Rights Plan") between the Company and Computershare Trust Company of Canada. The Amended and Restated Rights Plan is similar in all respects to the existing shareholder rights plan, with the exception of certain minor amendments. The Amended and Restated Rights Plan was approved by the Company's shareholders on July 12, 2018.

(c) Stock-Based Compensation:

Stock-Based Compensation Expense

The following table summarizes stock-based compensation expense:

Years ended March 31, (thousands of $)	**2019**	2018
Equity-settled plans	**1,036**	1,417
Cash-settled plans	**343**	672
Total stock-based compensation expense	**1,379**	2,089

Liability Recognized for Stock-Based Compensation (1)

The following table summarizes liabilities for the Company's cash-settled plans, recorded within trade payables and accrued liabilities:

(thousands of $)	**March 31, 2019**	March 31, 2018
SARs	**76**	375
RSUs	**654**	376
DSUs	**145**	99
Total liability	**875**	850

(1) The intrinsic value of the vested awards at March 31, 2019 was $0.1 million.

The Company has several stock-based compensation plans, including a stock option plan, a share appreciation rights plan, a performance share unit and restricted share unit plan, and a deferred share unit plan.

The maximum number of Common Shares reserved for issuance under the Company's security-based compensation plans is limited to 10% of the issued and outstanding Common Shares. Based on this calculation, at March 31, 2019, the Company may reserve up to 8,022,000 Common Shares for issuance under its security-based compensation plans.

(i) Stock Option Plan

The Company adopted a rolling stock option plan as of July 13, 2005, which was reaffirmed by the Company's shareholders on July 13, 2017. Pursuant to the stock option plan, the maximum term of an option granted cannot exceed five years from the date of grant. The outstanding stock options vest as to 50% after the first year anniversary from date of grant and then vest as to 25% of the total options granted after each of the second and third year anniversary dates.

The following table outlines changes in stock options:

Years ended March 31, (thousands except per share amounts)		**2019**		2018
	Number of Options (thousands)	**Weighted Average Exercise Price ($/share)**	Number of Options (thousands)	Weighted Average Exercise Price ($/share)
Outstanding at beginning of period	**6,787**	**11.78**	7,204	11.69
Granted	**524**	**9.12**	910	9.33
Exercised	**(2)**	**9.78**	(733)	9.09
Forfeited/expired	**(2,201)**	**12.17**	(594)	10.27
Outstanding at end of period	**5,108**	**11.34**	6,787	11.78
Options exercisable at end of period	**3,969**	**11.92**	5,199	12.33

The range of exercise prices of stock options outstanding and exercisable at March 31, 2019 is as follows:

			Outstanding		Exercisable
Exercise Price ($/option)	Number of Options (thousands)	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price ($/option)	Number of Options (thousands)	Weighted Average Exercise Price ($/option)
6.60 to 9.20	513	4.4	9.11	2	8.96
9.21 to 9.33	858	3.4	9.33	431	9.33
9.34 to 9.78	801	2.4	9.78	603	9.78
9.79 to 12.31	1,109	1.4	12.28	1,106	12.29
12.32 to 14.97	1,827	0.4	13.02	1,827	13.02
	5,108	1.8	11.34	3,969	11.92

The fair value of stock options granted was estimated using the Black-Scholes option pricing model under the following assumptions:

Years ended March 31,	2019	2018
Fair value at grant date ($/option)	**0.83 to 1.63**	1.46 to 1.47
Share price at grant date ($/share)	**6.60 to 9.20**	9.33
Risk-free interest rate (%)	**1.77 to 2.17**	1.26 to 1.37
Estimated hold period prior to exercise (years)	**3 to 4**	3 to 4
Volatility in the price of common shares (%)	**29 to 31**	29 to 31
Dividend yield per common share (%)	**4.33 to 6.16**	4.31

(ii) Share Appreciation Rights Plan

The Company adopted a share appreciation rights plan ("SAR Plan") in November 2015. A share appreciation right ("SAR") entitles the holder to receive a cash payment equal to the difference between the stated exercise price and the market price of the Company's Common Shares on the date the SAR is exercised. The SARs are granted to executive officers and employees residing and working outside of Canada. The outstanding SARs vest as to 50% after the first year anniversary from date of grant and then vest as to 25% of the total awards granted after each of the second and third year anniversary dates. The SARs have a five-year life.

The following table outlines changes in SARs:

Years ended March 31, (thousands except per share amounts)	2019		2018	
	Number of SARs (thousands)	**Weighted Average Exercise Price ($/SAR)**	Number of SARs (thousands)	Weighted Average Exercise Price ($/SAR)
Outstanding at beginning of period	**583**	**9.50**	222	9.78
Granted	**389**	**9.20**	365	9.33
Exercised	**-**	**-**	(4)	9.78
Forfeited	**(20)**	**9.35**	-	-
Outstanding at end of period	**952**	**9.38**	583	9.50
SARs exercisable at end of period	**339**	**9.54**	107	9.78

(iii) Share Unit Plans

Performance Share Units (PSUs) and Restricted Share Units (RSUs)

The Performance Share Unit and Restricted Share Unit Plan ("PSU & RSU Plan") is open to all employees and contractors of the Company. PSUs cliff-vest at the end of three years, with the vesting multiplier ranging from 0.0 to 2.0 contingent upon achieving certain corporate performance criteria. RSUs vest annually over a three-year period. Upon vesting PSUs and RSUs can be exchanged for Common Shares of the Company or surrendered for cash. As such, the Company accounts for PSUs and RSUs as cash-settled awards and recognizes a liability for potential cash settlements.

Deferred Share Units (DSUs)

The DSU Plan was adopted in May 2017 and is limited to non-employee members of the Board of Directors. DSUs vest immediately, but are redeemable for cash only after a director ceases Board membership.

The following table summarizes the activity related to the Company's share unit plans:

Years ended March 31, (thousands)	**2019**		2018	
	RSUs	**DSUs**	RSUs	DSUs
Outstanding at beginning of period	**108**	**11**	-	-
Granted	**173**	**13**	111	11
Exercised	**(36)**	**-**	-	-
Forfeited	**(8)**	**-**	(3)	-
Outstanding at end of period	**237**	**24**	108	11

(d) Earnings Per Share:

The following table summarizes the earnings and weighted average number of Common Shares used in calculating basic and diluted earnings per share:

Year ended March 31, (thousands except per share amounts)	**2019**			2018		
	Earnings ($)	**Weighted Average Shares Outstanding**	**Earnings Per Share ($/share)**	Earnings ($)	Weighted Average Shares Outstanding	Earnings Per Share ($/share)
Basic	**22,135**	**80,222**	**0.28**	20,806	80,046	0.26
Dilutive effect of stock options		**71**			29	
Diluted	**22,135**	**80,293**	**0.28**	20,806	80,075	0.26

During the year ended March 31, 2019, 15,000 awards (2018 – 112,000 awards) were excluded from the computation of the weighted-average number of diluted shares outstanding because their effect was not dilutive.

16. Capital Management:

The Company's objectives in managing capital are to ensure sufficient liquidity to pursue its strategy of organic growth combined with strategic acquisitions and to maximize the return to its shareholders. The capital structure of the Company consists of cash, credit facilities and shareholders' equity. The Company does not have any externally imposed capital requirements and does not presently utilize any quantitative measures to monitor its capital.

The Company's policy is to pay quarterly dividends based on the Company's overall financial performance and cash flow generation. Decisions on dividend payments are made on a quarterly basis by the Board of Directors. There can be no assurance as to the amount or payment of such dividends in the future.

The Company makes adjustments to its capital structure in light of general economic conditions and the Company's working capital requirements. In order to maintain or adjust its capital structure, the Company, upon approval from its Board of Directors, may pay dividends, buy back shares or undertake other activities as deemed appropriate under the specific circumstances. The Board of Directors reviews and approves any material transactions not in the ordinary course of business.

17. Financial Instruments and Risk Management:

The Company's financial instruments consist of cash, trade and other receivables, trade payables and accrued liabilities. The carrying values of cash, trade and other receivables, trade payables and accrued liabilities approximate their fair values due to the short-term nature of these instruments.

Overview:

The Company is exposed to risks of varying degrees of significance and likelihood, which could affect its ability to achieve its strategic objectives for growth. The main objectives of the Company's risk management process are to ensure that risks are properly identified and that the capital base is adequate in relation to those risks. The principal financial risks to which the Company is exposed are described below:

(a) Credit Risk:

Credit risk is the risk of an unexpected loss if a customer or third party to a financial instrument fails to meet its contractual obligation and arises principally from the Company's trade and other receivables. The amounts reported in the statements of financial position for trade receivables are net of allowances for bad debts, estimated by the Company's management based on prior experience and their assessment of the current economic environment.

The Company's trade receivables consist primarily of balances from customers operating in the oil and gas industry, both domestically and internationally, as the Company sells its products and services in approximately 60 countries worldwide. Some of these countries have greater economic and political risk than experienced in North America, and as a result there may be greater risk associated with sales in those jurisdictions. The Company manages this risk by invoicing for the full license term in advance for the majority of software license sales and by invoicing as frequently as the contract allows for consulting and contract research services. In cases where collectability is not deemed probable, revenue is recognized upon receipt of cash, providing all other criteria have been met. Historically, the Company has not experienced any significant losses related to individual customers or groups of customers in any particular geographic area; therefore, no allowance for doubtful accounts has been established at March 31, 2019 and 2018.

As at March 31, 2019, the Company has a concentration of credit risk with 12 domestic and international customers who represent 68% of trade receivables (2018 – 13 customers; 62%).

The carrying amount of trade and other receivables represents the maximum credit exposure. The maximum exposure to credit risk at March 31, 2019 was $19.2 million (2018 – $16.3 million). The aging of trade and other receivables at the reporting date was:

(thousands of $)	**March 31, 2019**	March 31, 2018
Current	**9,016**	11,010
31-60 days	**4,787**	4,073
61-90 days	**4,576**	830
Over 90 days	**841**	359
Balance, end of year	**19,220**	16,272

The Company assesses the creditworthiness of its customers on an ongoing basis and regularly monitors the amount and age of balances outstanding. Payment terms with customers are 30 days from invoice date; however, industry practice can extend these terms. Accordingly, the Company views the credit risk on these amounts as normal for the industry.

The Company minimizes the credit risk of cash by depositing only with a reputable financial institution in highly liquid interest-bearing cash accounts.

(b) Market Risk:

Market risk is the risk that changes in market prices of the foreign exchange rates and interest rates will affect the Company's income or the value of its financial instruments.

(i) Foreign Exchange Risk

The Company operates internationally and primarily prices its products in either the Canadian or US dollar. This gives rise to exposure to market risks from changes in the foreign exchange rates between the Canadian and US dollar. Approximately 74% (2018 – 77%) of the Company's revenues for the year ended March 31, 2019 were denominated in US dollars, and at March 31, 2019, approximately US $13.3 million (2018 – US $14.6 million) of the Company's working capital was denominated in US dollars. The Company currently does not use derivative instruments to hedge its exposure to those risks, but as approximately 26% (2018 – 25%) of the Company's total costs are also denominated in US dollars, they provide a partial economic hedge against the fluctuation in this currency exchange. In addition, the Company manages levels of foreign currency held by converting excess US dollars into Canadian dollars at spot rates.

The Company's operations are exposed to currency risk on US-dollar denominated financial assets and liabilities with fluctuations in the rate recognized as foreign exchange gains or losses in the consolidated statement of operations and comprehensive income. It is estimated that a one cent change in the US dollar would result in a net change of approximately $97,000 to equity and net income for the year ended March 31, 2019. A weaker US dollar with respect to the Canadian dollar will result in a negative impact, while the reverse would result from a stronger US dollar.

(ii) Interest Rate Risk

The Company has significant cash balances and no interest-bearing debt. The Company's policy is to invest excess cash in interest-bearing deposits and/or guaranteed investment certificates issued by a reputable financial institution. The Company is exposed to interest cash flow risk from changes in interest rates on its cash balances. Based on the March 31, 2019 cash balance, each 1% change in the interest rate on the Company's cash balance would change equity and net income for the year ended March 31, 2019 by approximately $396,000.

(c) Liquidity Risk:

Liquidity risk is the risk that the Company is not able to meet its financial obligations as they fall due or can do so only at excessive cost. The Company manages liquidity risk through the management of its capital structure as outlined in note 16. The Company's growth is financed through a combination of the cash flows from operations and its cash balances on hand. Given the Company's available liquid resources as compared to the timing of the payments of its liabilities, management assesses the Company's liquidity risk to be low. The Company monitors its expenditures by preparing annual budgets that are periodically updated. At March 31, 2019, the Company has significant cash balances in excess of its obligations and approximately $0.9 million of the line of credit (note 19) available for its use.

18. Commitments:

(a) Research Commitments:

CMG, in partnership with Shell Global Solutions International B.V. ("Shell"), is the developer of CoFlow, the newest generation of reservoir and production system simulation software. Under a five-year agreement entered into by Shell and CMG on January 1, 2017, CMG is responsible for the research and development costs of CoFlow, while Shell provides a fixed fee contribution for the continuing development of the software. The Company's revenue and costs associated with CoFlow are estimated to be $4.0 million and $8.2 million, respectively, in fiscal 2020.

(b) Lease Commitments:

The Company has operating lease commitments relating to its office premises with the minimum annual lease payments as follows:

As at March 31, (thousands of $)	**2019**	2018
Less than one year	**4,582**	4,642
Between one and five years	**18,652**	18,232
More than five years	**65,779**	72,297
	89,013	95,171

The Company leases a number of properties under operating leases. During the year ended March 31, 2019, $4.9 million (2018 – $5.8 million) was recognized as an expense in the statement of operations and comprehensive income in respect of operating leases related to office premises.

19. Line Of Credit:

The Company has arranged for a $2.0 million line of credit with its principal banker, which can be drawn down by way of a demand operating credit facility or may be used to support letters of credit. As at March 31, 2019, $1.1 million (March 31, 2018 – $0.3 million) had been reserved on this line of credit for letters of credit supporting performance bonds.

20. Subsidiaries:

CMG is the beneficial owner of the entire issued share capital and controls all the votes of its subsidiaries. The principal activities of all the subsidiaries are the sale and support for the use of CMG's software licenses. Transactions between subsidiaries are eliminated on consolidation.

The following is the list of CMG's subsidiaries:

Subsidiary	Country of Incorporation
Computer Modelling Group Inc.	United States
CMG Middle East FZ LLC	Dubai, United Arab Emirates
CMG (Europe) Limited	United Kingdom

21. CoFlow Project:

During the year ended March 31, 2019, CoFlow revenue of $4.0 million was recorded to professional services revenue (year ended March 31, 2018 – $3.9 million) and CoFlow costs of $7.6 million were recorded to research and development expenses (year ended March 31, 2018 – $7.8 million).

22. Related Parties:

(a) Intercompany Transactions:

The Company has three wholly owned subsidiaries (note 20) that have intercompany transactions under the normal course of operations and are eliminated upon consolidation.

(b) Key Management Personnel Compensation:

The key management personnel of the Company are the members of the Company's executive management team and Board of Directors and control approximately 4.3% of the outstanding shares of CMG at March 31, 2019. In addition to their salaries and director fees, as applicable, directors and executive officers also participate in the Company's stock-based compensation plans (note 15(c)), which are available to almost all employees of the Company, with the exception of the DSU plan, which is only available to non-employee directors of the Company.

Key management personnel compensation comprised the following:

Years ended March 31, (thousands of $)	**2019**	2018
Salaries, bonus and employee benefits	**4,202**	4,142
Stock-based compensation	**537**	730
	4,739	4,872

23. Subsequent Events:

On May 22, 2019, the Board of Directors declared a quarterly cash dividend of $0.10 per share on its Common Shares, payable on June 14, 2019, to all shareholders of record at the close of business on June 6, 2019.

On May 221, 2019, the Board of Directors approved a grant of 20,000 PSUs. Also on May 22, 2019 the Board approved the International Employees Performance Share Unit and Restricted Share Unit Plan, which retains substantially all the terms and conditions of the PSU & RSU Plan, with the main two exceptions being that (i) it is available only to employees and consultants residing and working outside of Canada and (ii) PSUs and RSUs under this plan can be redeemed for cash only. The Board approved a grant of 8,000 International Employees PSUs on May 22, 2019.

Notes

Corporate Information

Directors

Judith J. Athaide[4]

Kenneth M. Dedeluk[5]

Christopher L. Fong[2]

Patrick R. Jamieson[3]

Peter H. Kinash[2] [4]

Ryan N. Schneider

Robert F. M. Smith[1]

John B. Zaozirny
Chairman of the Board

(1) Chair, Audit Committee
(2) Member, Audit Committee
(3) Chair, Governance Committee
(4) Member, Governance Committee
(5) Vice Chairman of the Board

Officers

Ryan N. Schneider
President and Chief Executive Officer

Sandra Balic
Vice President,
Finance and Chief Financial Officer

Jim C. Erdle
Vice President,
USA & Latin America

R. David Hicks
Vice President,
Eastern Hemisphere

Anjani Kumar
Vice President,
Engineering Solutions and Marketing

Long X. Nghiem
Vice President,
Research & Development and Chief Technology Officer

Kathy L. Krug
Corporate Secretary

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Transfer Agent

Computershare Trust Company of Canada

Stock Exchange Listing

Toronto Stock Exchange: **CMG**

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